

September 10, 2019

Board of Supervisors
County of Ventura
800 South Victoria Avenue
Ventura, CA 93009

SUBJECT: Board of Supervisors Work Session on Sea Level Rise Impacts, Vulnerabilities, Adaptation Strategies, and Preliminary Draft Coastal Area Plan Policies and Programs (PL17-0147); Ratify the Submission of an Application for a 2019 Local Coastal Program Planning Grant and Adoption of an Accompanying Resolution; All Supervisorial Districts

RECOMMENDED ACTIONS:

1. **RECEIVE** the Planning Commission Staff Report (Exhibit 1), Sea Level Rise Vulnerability Assessment Report (Exhibit 2), Sea Level Rise Adaptation Strategies Report (Exhibit 3), and Preliminary Draft Coastal Area Plan Sea Level Rise Policies (Exhibit 7);
2. **CONDUCT** a work session that includes review and consideration of the Vulnerability Assessment Report (Exhibit 2) and the Adaptation Strategies Report (Exhibit 3), and **PROVIDE INPUT** on proposed preliminary draft sea level rise policies and programs and Board discussion topics identified in Exhibit 6;
3. **RATIFY** the submission by the Resource Management Agency (RMA) of a grant application (Exhibit 8) to the California Coastal Commission requesting \$160,070 in funding from the 2019 Local Coastal Program Planning Grant Program (LCP Planning Grant); and
4. **ADOPT** the attached Resolution (Exhibit 9) ratifying the submission of the aforementioned grant application to the California Coastal Commission on behalf of the County.

FISCAL IMPACTS/MANDATES:

Mandated:	No
Source of Funding:	California Coastal Commission and California Coastal Conservancy Local Coastal Program Grant
Funding Match Required:	Not required, but a match amount of \$184,894, primarily consisting of staff time, was provided.
Impact on Other Departments:	No Impact



On November 15, 2016, your Board authorized Planning Division staff to execute a Local Coastal Program (LCP) Planning Grant in the amount of \$225,000 with an in-kind contribution of staff time. The VC Resilient Coastal Adaptation Project (VC Resilient Project) was the result of a grant executed in March 2017. Phase 1 of this project began in March 1, 2017 and extends to September 30, 2019. Grant deliverables included the preparation of a Sea Level Rise Vulnerability Assessment Report and Map Atlas (Exhibit 2), an Adaptation Strategies Report (Exhibit 3), preliminary draft Coastal Area Plan sea level rise policies and programs (Exhibit 7), a set of public workshops in the community, and work sessions before the Planning Commission and your Board. All of the expenses and staff time from the current project were included in the Fiscal Year 2017-18, 2018-19, and 2019-20 adopted budgets.

Planning Division staff submitted another grant application to conduct Phase 2 of the VC Resilient Project, which would further analyze, adopt and certify the preliminary draft sea level rise LCP policies and programs through the Coastal Commission, inclusive of additional public engagement with community stakeholders in the Coastal Zone and public hearings of the Planning Commission, your Board, and the Coastal Commission. (The deadline to submit the grant application was September 6, 2019.) Phase 2 is described in more detail in section A of this Board letter, below. There is no fiscal impact associated with the recommended actions. If the grant is awarded, the Planning Division will return to your Board for approval to accept the grant and to request any necessary budgetary modifications.

DISCUSSION:

A. BACKGROUND

Today's work session is intended to provide an opportunity for public input, to share information on the County's sea level rise vulnerabilities, and to receive Board guidance on proposed preliminary draft sea level rise policies and programs in key topical areas. The attached Sea Level Rise Vulnerability Assessment Report and Map Atlas (Exhibit 2) in combination with the Adaptation Strategies Report (Exhibit 3) and preliminary draft Local Coastal Program (LCP) policies and programs (Exhibit 7), provide the first phase of formal planning for sea level rise in the unincorporated County. These documents do not represent a final plan, but rather are tools to begin a conversation on how best to adapt to sea level rise. These reports, draft policies and programs illustrate that over the coming decades, sea level rise-related impacts will increase in frequency and extent, with new and expanding areas of the County beginning to experience periodic coastal flooding.

Although a comprehensive LCP update to address sea level rise is beyond the scope of this phase of the VC Resilient Project, the purpose of this project is to develop preliminary draft policies as a step forward in actively planning for sea level rise to protect coastal resources and to minimize future impacts to residents, businesses, and visitors. Before the project commenced in 2017, Planning Division staff reached out to Channel Islands Harbor Department staff to develop the scope of the vulnerability assessment. As the

Harbor Department is not technically located within the boundaries of the County's LCP, Harbor staff declined to participate. Additionally, at that time the Channel Islands Harbor was included in the City of Oxnard's sea level rise planning effort, which included an analysis of sea level rise hazards.¹ Nonetheless, the Adaptation Strategies Report prepared by the Planning Division includes some analysis of the harbor's vulnerabilities because they will impact the unincorporated Silverstrand and Hollywood Beach neighborhoods.

It is worth noting other County sea level rise-related planning efforts such as the 2040 General Plan Update and the FEMA Flood Insurance Rate Map revisions. These are separate projects and are not analyzed or included with this project, although coordination among RMA and Public Works Agency project teams has occurred to ensure that any draft sea level rise regulations will be compatible. Under the proposed Climate Action Plan for the 2040 General Plan Update, the County would adopt climate change reduction targets. Stemming climate change emissions today will provide a positive step toward reducing the primary cause of sea level rise, but emissions reductions alone are not likely to completely reverse rising seas. Figure 3 in the Planning Commission Staff Report (Exhibit 1) shows that the rate of sea level rise is scientifically projected to increase on a logarithmic trend, and this trend will continue (to various extents) with or without planned reductions in climate change emissions.

This letter supports the County's 2019 State Legislative Agenda and Platform on the topic of sea level rise, which directs the County to support legislation that advocates for a consistent and regional approach to the multi-jurisdictional issue. The County also supports the allocation of State funding to address and mitigate the impacts of sea level rise to protect our coastal resources, communities, and the Navy Base.

For common understanding by your Board, County staff, community stakeholders in our coastal zone and the general public, it is important to clarify the following key terms used throughout this Board letter:

Sea Level Rise: Increasing tide heights caused by the thermal expansion of warming ocean and melting of land ice as the earth warms. It is one of the most obvious manifestations of the trend of climate change. The effects of sea level rise combined with large coastal storms (i.e., 1 percent annual chance storm) will increasingly become an immediate and real threat to private and public properties, lives, livelihoods, transportation, economies, and the environment in Ventura County.

Coastal Armor: Referenced as "armor" in this letter, these are shoreline protective devices such as seawalls, rock revetments, breakwaters, and other construction that alters natural shoreline processes. Approximately 18 miles of these devices are

¹ *A Sea Level Rise Atlas for the City of Oxnard*, Oxnard Planning Division, Rincon Consultants, Revell Coastal, Everest International, April, 2016.

located along the north and south coasts of the unincorporated area, making Ventura County one of the most armored jurisdictions in California.²

Sea Level Rise Adaptation Strategies: An adaptation strategy aims to increase a community's resilience to sea level rise. It is a framework for managing future climate risk and prioritizing and coordinating action. It offers the potential of reducing future economic, environmental and social costs. Adaptation strategies range in scale from project to programmatic approaches, and in most instances additional planning and funding will be needed for implementation. Some strategies may fall in the permitting category of repair and maintenance, while others would require a discretionary permit. Most "pilot projects" would require funding for feasibility studies, future permits, construction, and ongoing maintenance and monitoring.

Approaches to Sea Level Rise Adaptation: Coastal adaptation generally falls into three main categories: protect, accommodate, or retreat. There are also the options of doing nothing or hybridizing these strategies over time.

Protect: Protection strategies employ temporary or permanent flood barriers to defend development (or other resources) in its current location without changes to the development itself. Protection strategies can be divided into "gray" and "green" defensive measures, and then further divided into "hard" and "soft" measures. A "gray" or "hard" approach is usually an engineered structure that can be positioned either alongshore (such as a seawall, revetment, or offshore breakwater) or cross-shore (such as a groin or harbor jetty). Cross-shore structures tend to trap sand and widen the beach up coast of the structure. A "gray-soft" protection approach may be to nourish beaches by importing sand, while a "green-soft" approach may be to restore sand dunes.

Accommodate: These strategies employ methods that modify existing development or design new development standards to decrease hazard risks and therefore increase resilience to the impacts of sea level rise. On an individual project scale, accommodation strategies include actions such as elevating structures, performing structure retrofits, using materials to increase the strength of development to handle additional wave impacts, building structures that can easily be moved and relocated, or using additional setback distances to account for acceleration of erosion. On a community scale, accommodation strategies requiring the above-mentioned types of actions could be integrated into land use plans, zoning ordinances, and strategic planning documents.

Managed Retreat: This strategy would relocate or remove sensitive assets, such as homes and major roadways, from at-risk areas and limit the construction of new development in vulnerable areas. This approach is not an evacuation, but rather a strategic means to remove the most vulnerable development and infrastructure from harm's way while maintaining coastal resources and public access for future generations. This option is recommended for open space and parklands. It would

² Table 8.1, "Comparison of Length of Armor by County in 1971 versus 1998," *California Beach Restoration Study*, Department of Boating and Waterways and State Coastal Conservancy, 2002.

be more difficult in application to developed areas. Managed retreat is commonly considered a long-term solution supported by the California Coastal Commission, California Natural Resources Agency, and the California Ocean Protection Council.

Coastal Vulnerabilities to Sea Level Rise

Findings from the Ventura County Vulnerability Assessment Report are summarized in the attached Planning Commission Staff Report (Exhibit 1). Much of the existing built environment along the County's coast is vulnerable, including both public and private properties. Public land owners include local, state, and federal agencies, such as California State Parks and Naval Base Ventura County. Private land includes both residential neighborhoods and commercial properties, most of which were initially developed in the decades following World War II. The most significant evaluated impacts are predicted to occur by the year 2100, when the effects of approximately 58 inches of sea level rise combined with 1 percent annual chance storms could temporarily disrupt and damage the coast. Specific local impacts identified in the Vulnerability Assessment Report are listed below. These impacts are scientifically predicted to occur if nothing is done to prepare or adapt to sea level rise before 2100.

North Coast

- The shoreline armor on the North Coast is overtopped, first at Hobson Beach Park then at various residential communities, along the Rincon Parkway, and at Faria Beach Park;
- At Rincon Point, residences and the small estuary are flooded by coastal storms and the creek outflow;
- The first row of houses located inland of Highway 101 in La Conchita are exposed; and
- Narrow beaches and coves are flooded and likely to be eroded.

Central Coast

- At Hollywood Beach, storm waves combined with rising tides overtop the beach and flow through the developed areas of the peninsula;
- Nearly all of the Silverstrand Beach neighborhood is inundated;
- A tsunami evacuation route, and the only egress road for the Silverstrand community, near Hobie Beach at Channel Islands Harbor, could be flooded for 12 or more hours; and
- Along the Santa Clara River, fluvial river flooding caused by rain events could mix with rising tides and flood agricultural areas inland of McGrath State Park, a slant-drilling oil facility, oil and water wells, and the McGrath Lake area.

South Coast

- The Calleguas Creek and Revolon Slough area may become extensively flooded, and agriculture, the Country Sunshine mobile home park, and commercial facilities along Pacific Coast Highway could be flooded by the Revolon Slough;

- Agriculture near Ormond Beach could be flooded due to erosion and coastal storm waves;
- In the Solromar community, homes on pilings and residences behind shoreline armor could be flooded by large waves today and will become more vulnerable over time;
- Stretches of exposure of Pacific Coast Highway to sea level rise impacts on the South Coast increase to over 10 miles;
- The day use facilities and parking at Sycamore Cove in Point Mugu State Park could be flooded and shelter trees for Western monarch butterfly roost sites could be increasingly exposed; and
- Narrow beaches and coves are flooded and likely to be eroded.

Ventura County has a long history of coastal erosion and river flooding. These hazards will be exacerbated by the rising tides and the increased frequency and intensity of coastal storms. Future adaptation planning would need to address immediate coastal hazards, as well as the mid-term and long-term threats of sea level rise. Potential adaptation strategies that could reduce the currently predicted impacts are described in the attached Adaptation Strategies Report (Exhibit 3).

Sea Level Rise Planning

There is no one-size-fits-all approach to sea level rise planning. The complex and evolving nature of sea level rise demands an iterative and collaborative approach to increasing community resilience. Ideally, this iterative approach would be flexible and responsive to changing conditions and science. This includes identifying thresholds that are monitored over time and, when exceeded, result in the implementation of pre-planned actions. Over time, adaptation strategies that are adequate for low or moderate sea level rise will need to be supplemented by new strategies that will address increased levels of sea level rise. In addition, strategic partnerships and collaboration with local and regional stakeholders will be needed because sea level rise is a regional issue that extends beyond jurisdictional boundaries.

One of the core components of sea level rise planning is to identify potential flooding risks and to plan for this based on the best available science. While the scientific community and state policymakers have high certainty that sea level rise will occur, there is less certainty regarding the precise amount and timing of sea level rise. To address this, a series of probabilistic sea level rise projections were published by the California Ocean Protection Council and the California Natural Resources Agency in the *2018 State of California Sea Level Rise Guidance* (State Guidance). These sea level rise predictions do not include extreme tides or coastal storms, which would add to temporary flooding.

The State Guidance directs coastal jurisdictions to utilize different projected sea level rise amounts based upon the proposed development type. For example, the State Guidance directs jurisdictions to use a lower amount of projected sea level rise for shorter-term, lower consequence development such as an unpaved trail; a medium-high projection for

commercial or residential development; and an extreme projection for critical infrastructure like bridges, where the consequences for underestimating the risk would be more severe. The precautionary approach espoused in the State Guidance stems from the importance of keeping development safe from coastal hazards and protecting coastal resources, consistent with the Coastal Act. It also recognizes that the potential fiscal, social, and critical service consequences associated with underestimating sea level rise hazards could be very high.

Planning Division staff considered the probabilities of the projections in the State Guidance together with the Vulnerability Assessment Report findings, and recommends use of the State Guidance when determining sea level rise projections to be applied to the design of new structures. The practical application of these projections will take place when an application for new coastal development located within a Coastal Hazards Screening Area (the draft boundary of this area is included in Exhibit 7) is proposed. Submittal of a Coastal Hazards Report would be required. The details of this report have not yet been determined at this stage of the project. Generally, it would include technical analyses that are already required for new discretionary coastal development, such as wave run-up studies, evaluation of beach erosion impacts, and delineation of the mean high tide line. To address sea level rise in the design of the new structure, these analyses would integrate sea level rise projections. Proposed structures would then be sited and designed to address both current and future sea level rise hazards.

For example, the “medium-high” sea level rise projection would require new residential or commercial structures sited along the coast to be designed to avoid or accommodate up to 6.6 feet of sea level rise by 2100. For critical infrastructure, such as a bridge that is planned to last over 100 years, the state recommends using the “H++ extreme scenario”, which would require siting and design for 13.7 feet of sea level rise. Comparatively, using a lower “medium” projection (which has a higher likelihood of occurring than the H++ extreme projection or the medium-high projection) would require siting and design for 4.1 feet of sea level rise for residential/commercial development (assuming 80 years anticipated life) and designing for 4.9 feet of sea level rise for critical infrastructure (assuming 100 years anticipated life). The proposed policies in Exhibit 7 reflect the State Guidance, although your Board may direct staff to utilize a different approach for projecting the amount of sea level rise.

Work Session Discussion Topics

As noted above, the intent of this first phase of the VC Resilient Project was to provide a foundation for developing preliminary sea level rise policies and programs and to set the stage for future adaptation planning. There are avoidable impacts of sea level rise that can be anticipated and planned for. To help address these, preliminary draft Coastal Area Plan policies and programs are provided in Exhibit 7. Generally, the intent of these preliminary policies is to begin to address the identified vulnerabilities summarized above by ensuring that new development is designed to be more resilient to sea level rise. A consistent approach to sea level rise planning during the authorization of discretionary projects is desirable.

Preliminary draft programs are also included in Exhibit 7 for consideration and feedback by your Board. Proactive programs to conserve natural resources, public access, and the County's beaches will also be needed as the sea level rises.

The preliminary draft policies and programs provided in Exhibit 7 represent an initial set of LCP policies and programs, developed by Planning Division staff with engagement from Coastal Commission staff, that meet the requirements of the current LCP grant. This is not a final or all-inclusive list. Rather, there are outstanding policies and programs that require further refinement and discussion with Coastal Commission staff before bringing them forward. As Planning Division staff works through some of these broader issues, the policies and programs shown in Exhibit 7 are likely to be refined and edited, and policies may be added or removed.

Key topical items for discussion at this work session are provided in Exhibit 6 and described in more detail below. Input on these two discussion issues by your Board will assist Planning Division staff, in collaboration with other County agencies, to develop a policy framework for addressing sea level rise from a regulatory standpoint.

Discussion Topic 1: Approach to Coastal Armor Devices

A pressing local issue is the state's suggested approach to coastal armor protective devices such as rock revetments and seawalls.³ Historically, many jurisdictions, including the County, Caltrans, and State Parks, have used shoreline armoring to protect roadways and recreational areas. The unincorporated area contains about 18 miles of coastal armor with many narrow beaches.

State agencies such as the Coastal Commission and the Ocean Protection Council have published policy guidance concluding that protective shoreline armor negatively impacts public beaches by increasing erosion. They have drawn a nexus, or a correlation, between the prevalence of shoreline armor and the loss of public beaches. If left alone, the existing armor will lead to local beach erosion, and more armoring is equated with further erosion. The County's Vulnerability Assessment Report (Exhibit 2) incorporates this guidance and explains that if the coast continues to be armored to protect development, adjacent public beaches will be eroded and more frequently inundated, leading to the loss of coastal access and recreational resources. The economic impact of beach loss was also evaluated, showing that shrinking beaches will decrease tourism and future coastal park revenues. In addition, beach-reliant plant and animal species, such as California grunion, will be impacted by habitat loss.

However, many beach-front residents need shoreline armor to protect their structures from hazards: more than two-thirds of these existing homes were constructed more than

³ *California Coastal Commission Sea Level Rise Policy Guidance*, adopted August 12, 2015, *California Coastal Commission Coastal Adaptation Planning Guidance: Residential Development*, March 2018 and the *State of California Sea Level Rise Guidance, 2018 Update* all recommend prioritizing protection of coastal habitats and public access through natural solutions for shoreline protection, including managed retreat.

40 years ago, before the Coastal Act was enacted. Transportation agencies such as Caltrans generally cite the high fiscal costs to remove or realign roadways for retreat, and the infeasibility of relocation in some regions. For example, there are no apparent cost-effective alternatives for retreat of the Pacific Coast Highway and Highway 101 on the North and South Coasts of Ventura County.

While both Planning Division staff and Coastal Commission staff agree there is value in many short- and mid-term adaptation strategies that could help sustain beaches, such as sediment retention and sand dune restoration, the Planning Division needs policy guidance from your Board before a long-term planning approach for coastal armor can be included in the LCP. Given the amount of existing armor in the unincorporated area, there is no other city or county in California that would be more affected by the state's recommended approaches to require removal of sections of armor. Removal would increase exposure of the adjacent armor sections to coastal storms, coastal erosion, and to sea level rise. Resulting damages could cascade in a domino effect that more rapidly erodes the existing system of devices. Currently, the configuration of armor devices without many gaps provides a line of defense against storms and sea level rise. This protection provides a valuable service for residents and the public by protecting property and transportation corridors and other public infrastructure along the County's North and South Coast areas. If segments of this integrated system of protection are required to be removed, it could threaten the viability of these existing developed areas.

Planning Division staff considered the state's approach to managed retreat, which is a long-term strategy, and suggests a focus on short- and mid-term strategies that are likely to be sufficient through the early phases of sea level rise. This would allow for more time to develop local adaptation plans specific to local conditions, explore hybrid solutions, and allow for potential legal implications to be considered and further evaluated at the local, regional and statewide level. To this end, Planning Division staff suggests a "no new coastal armor for new development" policy approach that is consistent with current County practices and section 30235 of the Coastal Act (the Coastal Act is contained in the Public Resources Code). This policy approach would require that:

- 1) New coastal development or substantial redevelopment (when more than 50 percent of the structure is replaced) would be designed and constructed without reliance on seawalls or other armor (Exhibit 7, preliminary draft policies 8, 24, and 33);
- 2) Although new development and substantial redevelopment will be designed to be resilient to sea level rise, any existing armor on a site with new development or substantial redevelopment could remain in place and could be repaired and maintained pursuant to the County's Coastal Zoning Ordinance, but could not be enlarged or extended (Exhibit 7, preliminary draft policies 25 and 29); and
- 3) Existing residential or commercial structures would continue to be provided a permit pathway to modify existing armor protecting these structures. Replacement and armor upgrades to improve resiliency to sea level rise would be allowed to protect

such existing structures but would require a detailed coastal hazards analysis and would have to be designed to minimize environmental impacts.

Staff believes this policy framework would set a more reasonable baseline for future adaptation planning. Its implementation should include notifications to coastal landowners that projects involving new development, including demolition and redevelopment of structures on shoreline lots, would not be entitled to install new coastal armor. Emergency protection measures, such as shoreline protective devices, rocks, and other materials used for protection during emergency conditions, that are considered temporary and are not permanent structures would also continue to be allowed pursuant to the Coastal Act and this policy framework. Finally, mandatory real estate disclosures are included as a preliminary draft policy. These would inform prospective buyers that the property is located within a coastal hazards screening area and to contact Planning Division staff with questions about constructing new seawalls or maintaining existing seawalls and armor.

While the Planning Commission did not review the preliminary policies and programs in Exhibit 7 because they were scheduled to be developed after the work session, the Commission generally supported the use of hybrid adaptation strategies that would not require armor removal in the near-term. Such a strategy could include adding cross-shore structures to trap sand and widen the beach up-coast of the structure, and beach nourishment activities.

Discussion Topic 2: Establishing Date of “Existing” Development For Armoring Policies

Section 30235 of the Coastal Act states, in pertinent part:

“Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply.”

The meaning of the term “existing structures” in section 30235 of the Coastal Act can be, and has been, interpreted differently by the Coastal Commission over the years. The core question is *existing as of when?* Recently, in the context of commenting on jurisdictions’ draft LCP amendments for sea level rise, Coastal Commission staff has interpreted “existing structures” to mean those existing when the Coastal Act took effect on January 1, 1977. However, Coastal Commission staff has not uniformly interpreted “existing” this way.

In commenting on the County’s preliminary draft sea level rise policies regarding coastal armoring, Coastal Commission staff interpreted “existing structures” as those existing as

of the 1977 date. However, using this interpretive framework could render existing armor protecting development built over the past 40 years (approximately one-third of all existing shoreline development) as nonconforming structures. This could make the armor structures – which were already approved through a coastal development permit – ineligible for replacement or modification (although repair and maintenance would continue to be allowed pursuant to the County's LCP). Without a pathway to allow replacement or modification to existing armor, these structures would eventually be overtopped by sea level rise, damaged beyond repair, or removed in order to implement the state's preferred adaptation strategy of managed retreat. The underlying principle is that managed retreat would create space for the resumption of natural coastal processes and allow for the continued existence of beaches and public access, one of the primary tenants of the Coastal Act. Theoretically, if shoreline development is removed or relocated, more space would exist for beach migration to higher backshore elevations.

Planning Division staff recommends the future certification date of the County's sea level rise LCP amendments be the date as of which then-existing structures are deemed "existing" for the LCP's coastal armoring policies. If drafted and applied in this way, the LCP would provide a pathway for owners of existing commercial and residential structures to modify and replace their existing armor protection. However, the proposed LCP policies would not allow new armor devices to be constructed to protect new or substantially redeveloped structures, except for emergency purposes.

Next Steps: 2019 LCP Planning Grant Application for Phase 2

Planning Division staff recommends that the County apply for an LCP Planning Grant to complete Phase 2 of the VC Resilient Project. As described in the Fiscal Impacts/Mandates section above, the first phase of this project included the Vulnerability Assessment Report, Adaptation Strategies Report, public workshops, and preliminary draft sea level rise policies.

The next phase of the VC Resilient Project would include more detailed technical analysis of adaptation strategies by County staff, a review of legal implications, additional public outreach with stakeholders in the coastal zone, public hearings, certification of LCP policies and programs by the Coastal Commission, a comprehensive update to the Hazards section of the LCP, the addition of climate action policies from the County's General Plan, and further refinement of language for the Coastal Hazards Report and proposed real estate disclosures. An additional round of public outreach is also proposed to educate and involve stakeholders that are socially vulnerable and/or may visit the coast for recreational purposes but who do not live in the coastal zone. Exhibit 10 summarizes outstanding policy topics that were not included in the preliminary draft policies and programs shown in Exhibit 7, but would need to be resolved if Phase 2 is undertaken.

The County's Coastal Area Plan and the Coastal Zoning Ordinance together constitute the "Local Coastal Program" (LCP) for the unincorporated area's coastal zone. The primary goal of the LCP is to ensure that the local government's land use regulations implement the Coastal Act at the local level. During the current effort to develop sea level rise policies and programs, it was determined that a comprehensive update to the Hazards section of the Coastal Area Plan is warranted. Sea level rise is inexorably linked

to other coastal hazards such as beach and bluff erosion, river flooding, and tsunamis. The existing policies addressing these issues in the LCP, as well as those addressing earthquakes, are approaching 40 years in age and should be comprehensively revised in conjunction with the sea level rise updates. The Coastal Area Plan also repeats most hazards policies in respective North, Central and South Coast Subarea sections. If authorized, the next round of Coastal Area Plan amendments would reduce repetition and consolidate all of these hazards policies within a new section specifically tailored to hazards and sea level rise.

In addition to the tasks described above, Phase 2 of the VC Resilient Project would include the formation of a County interagency sea level rise and coastal hazards working group that would meet bimonthly for one year. The intent would be to review County vulnerabilities to County assets as coastal storms increase in frequency and the sea level rises, and to review and recommend potential adaptation projects/priorities for your Board's consideration. The group would also review and comment on selected LCP policies and regulations that cross over to other agencies, such as policies related to elevating new development, bluff development, and seawalls, and policies that would impact county-owned and operated facilities. This interagency working group would be comprised of staff from the following agencies: Resource Management Agency, Public Works Agency, General Services Agency-Parks, Agricultural Commissioner's Office, Harbor Department, County Executive Office Sustainability Office, and the Sheriff's Office of Emergency Services.

The total estimated project cost is approximately \$239,000. The requested grant would be for approximately \$160,070 and does not require a cash match, though the County's application would not be competitive without one. Awardees from the previous grant cycle committed a cash match of between 31 and 68 percent, and the County previously provided a 45 percent match for the LCP Planning Grant that funded the project that is before your Board today. An in-kind contribution is desirable; therefore, a County match of about 33 percent, or \$78,930, is proposed for this grant. The match would be used for staff time, including time to complete final certification hearings that may extend beyond the timing of the grant schedule.⁴ This in-kind match would be included in the RMA Planning Division's Fiscal Year 2019-20 budget (as a mid-year budget adjustment) and the Fiscal Year 2020-21 budget.

The earliest possible meeting at which LCP Planning Grant awards will be considered by the Coastal Commission would be in November 2019. It is expected that projects awarded these grants will be initiated in early 2020 and occur over a two-year period to the grant expiration date, which is March 31, 2022. Should the County be awarded an LCP Phase 2 Planning Grant, staff would return to your Board for approval and acceptance of the grant, or acceptance would be included in the 2020 Mid-Year Budget Report. Revenues and appropriations related to this grant would be incorporated into the Planning Division's adopted budgets for FY 2019-20 and FY 2020-21 and would be allocated over the next

⁴ Coastal Act section 30517 allows the Commission to extend the 60-day time limit for the Commission to take action on a proposed LCP amendment, for a period not to exceed one year.

two fiscal years for final preparation, adoption and certification of sea level rise and hazard LCP amendments. The LCP Planning Grant program announcement is attached as Exhibit 8 with further information.

B. PLANNING COMMISSION WORK SESSION

A work session was conducted with the Planning Commission on March 7, 2019. The Vulnerability Assessment Report and a draft version of the Adaptation Strategies Report were the primary topics of this public hearing. Sea level rise science, State Guidance, project methods, economic impacts and other key findings were described in the Staff Report (Exhibit 1) and before the Commission. Dr. David Revell, the project consultant and a practicing coastal geomorphologist, assisted with the presentation and answered technical questions. The work session concluded with three discussion topics and public comments. The preliminary draft sea level rise policies and programs were not presented to the Planning Commission because the grant called for them to be drafted after the work session where public input was received on the two reports.

The three topic areas presented for consideration by the Commission are discussed below. Since it was a work session format, the Planning Commissioners did not vote on these items.

- **Discussion Topic #1: Apply a *Retreat or Protect Approach* to Sea Level Rise?**
Using the Rincon Parkway as a hypothetical example, this topic described that sediment retention and beach nourishment are viable near- to mid-term solutions to protect the existing County-operated RV camping area and narrow beaches from sea level rise, but that in the long term, a decision will be needed regarding whether to protect or relocate the County's overnight RV parking area on Old Pacific Coast highway along the Rincon Parkway.

The Commissioners generally thought that the RV camping should be protected and maintained and should remain open for as long as feasible. One Commissioner desired more technical analysis regarding the costs and benefits of all of the adaptation measures. There are cost estimates of dune construction, stormwater system improvements, small-footprint seawalls, and cobble-based groins in Appendix B of the Adaptation Strategies Report, but funding to evaluate the costs for all of the adaptation strategies identified was not included within the scope of this project.

- **Discussion Topic #2: Approaches to Adaptation.** This topic revolved around whether next steps in sea level rise adaptation planning should include the formation of a technical advisory committee consisting of representatives of various County agencies and, if so, whether the committee should focus first on County-owned facilities under its jurisdiction or take a leadership role and coordinate regional adaptation projects among various stakeholders and neighboring jurisdictions.

Some Commissioners supported multi-lateral efforts to address sea level rise. There was emphasis on the need to include the Public Works Agency to lead strategies involving construction and engineered solutions. In response to this

comment, the formation of a County agency sea level rise working group is proposed.

- **Discussion Topic #3: Storm Hazards and Sea Level Rise Monitoring.** Comparatively, this was a more detailed topic that attempted to describe and emphasize that not one single sea level rise adaptation strategy works for all areas or through varying amounts of sea level rise. Monitoring and thresholds for action can be planned and used to define when to begin, or “trigger,” another phase of sea level rise adaptation.

The Commissioners generally suggested use of low-cost monitoring methods and acknowledged the specific need to monitor natural resources such as sensitive species and their habitats. Draft program 7 in Exhibit 7 would support coordination with natural resource agencies to develop adaptation projects that could include monitoring sensitive species. The Planning Division would be unlikely to monitor plants and animals over an extended period of time.

There were no public comments submitted prior to the work session. There were 10 public speakers. Half of the speakers were residents that live along the coast; two were interested in the project from perspectives that generally support climate change mitigation and adaptation; one represented the Naval Base Ventura County at Point Mugu; one represented the Surfrider Foundation; and one represented the Beach Erosion Authority for Clean Oceans and the Environment (BEACON). Since there was no formal proposal, there was also no formal record of support or opposition, and it was generally a constructive dialogue that weighed the opportunities and constraints of various methods available to facilitate sea level rise adaptation. There was general support among speakers for a hybrid approach that combines sediment retention, beach nourishment, and armoring that is consistent in design and includes features that minimize impacts.

C. PUBLIC COMMENTS

Public comments that were received during the preparation of this Board letter are included in Exhibit 12. Prior to the Planning Commission work session, written comments were received and were used to revise the Vulnerability Assessment Report. These comments resulted in some changes that are described in Section B.2 of the Planning Commission Staff Report (Exhibit 1).

Following the Planning Commission work session there was a 30-day public review and comment period for the draft Adaptation Strategies Report. Three comment letters were received (Exhibit 11). The Surfrider Foundation letter expressed support for efforts to focus on specific adaptation projects, similar to the Surfer’s Point Managed Shoreline Retreat project in the City of Ventura. It also supported monitoring, identification of planning thresholds, ongoing coordination, and efforts to identify areas that may be appropriate for managed retreat and other areas that should be protected from sea level rise. The other two letters were from a coastal beachfront resident and the Coalition to Save the Rincon. While there were some suggested edits that were incorporated into revisions to the Adaptation Strategies Report, these letters generally emphasized that the

existing coastal armoring provides a service that protects private development, State highways, and underlying utilities. The coastal beachfront residents generally oppose a regulatory approach that would require managed retreat on private lands.

D. PUBLIC NOTICE

This work session was publicly noticed in the *Ventura County Star* on August 31, 2019. In addition, an e-mail notification was sent to the County's interested parties list for coastal amendments (approximately 600 contacts) and the meeting was publicized on the Planning Division website.

This letter was reviewed by the County Executive Office, the Auditor-Controller's Office, and County Counsel's Office. If you have any questions concerning the information above, please contact Aaron Engstrom, Case Planner, at (805) 654-2936 or Aaron.Engstrom@ventura.org. You may also contact Tricia Maier, Long Range Planning Manager, at (805) 654-2464 or via e-mail at Tricia.Maier@ventura.org.



DAVE WARD, Director
Ventura County Planning Division

EXHIBITS:

- Exhibit 1: Planning Commission Staff Report
- Exhibit 2: Sea Level Rise Vulnerability Assessment Report with Map Atlas (Appendix A)
- Exhibit 3: Sea Level Rise Adaptation Strategies Report
- Exhibit 4: Coastal Planning Subareas Map
- Exhibit 5: Frequently Asked Questions
- Exhibit 6: Board of Supervisors Work Session Discussion Topics
- Exhibit 7: Preliminary Draft Coastal Area Plan Policies
- Exhibit 8: California Coastal Commission LCP Planning Grant Announcement and Application Instructions
- Exhibit 9: A Resolution of the Ventura County Board of Supervisors Ratifying an Application for LCP Planning Grant Funds
- Exhibit 10: Summary of Proposed Phase 2 VC Resilient Topics
- Exhibit 11: Public Comment Letters Regarding the Public Review Draft Sea Level Rise Adaptation Report
- Exhibit 12: Public Comments Regarding the Board of Supervisors Work Session