



City of Santa Barbara California

PLANNING COMMISSION STAFF REPORT

REPORT DATE: February 18, 2025
AGENDA DATE: March 13, 2025
SUBJECT: Update on Adaptation & Resilience Program and 30-Year Waterfront Adaptation Plan

TO: Planning Commission
FROM: Sustainability & Resilience Department
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I. PURPOSE

That the Planning Commission receive an update on the Adaption & Resilience program and the work program proposed for the 30-Year Waterfront Adaptation Plan.

II. SUMMARY

The Sustainability & Resilience Department’s Adaptation & Resilience Program prepares our community for climate change impacts from sea-level rise, increased rainfall and flooding, wildfire, and other hazards. The Adaptation & Resilience program team operates as a central and coordinated hub for City adaptation work efforts by leveraging partnerships throughout the City organization, other governmental agencies, and our community at large. The team also secures funding for City adaptation projects.

The 30-Year Waterfront Adaptation Plan is a key Adaptation & Resilience Program work effort that will create a practical plan that prepares the Santa Barbara Waterfront for increased storm surges, erosion, and flooding by providing solutions that preserve and enhance recreation, commerce, beach access, habitat, and critical infrastructure.

III. ADAPTATION AND RESILIENCE PROGRAM UPDATE

The Sustainability & Resilience Department was established in 2020 and shortly thereafter launched the Adaptation & Resilience program, which focuses on helping the City respond to the increasing hazard risks from climate change, including flooding, erosion, wildfire, and rising groundwater.

In 2019, City Council and the California Coastal Commission certified the City’s Coastal Land Use Plan update, which incorporated sea-level rise considerations into the Coastal Development Permit process and directed several follow-on comprehensive planning efforts, including a city-wide Sea Level Rise Adaptation Plan.

In 2021, City Council adopted a city-wide Sea-Level Rise Adaptation Plan that identified several high priority follow-on implementation projects that are critical to enhancing our community's response to existing and future coastal hazard impacts. The Plan presents a phased approach to adaptation planning where changing conditions are monitored closely and different actions are taken as certain thresholds or triggers are reached.

Since then, the Adaptation & Resilience Program has obtained over \$5 million in grant funds from the California Coastal Commission and State Coastal Conservancy to implement several of these high priority adaptation projects that address not only the impacts of sea level rise, but also other climate related hazards, such as increased stormwater flooding from changing rainfall patterns and rising surficial groundwater levels. The program's current major projects are as follows:

1. A Regional Coastal Adaptation Monitoring Program, administered by the Beach Erosion Authority for Clean Oceans and Nourishment (BEACON), which encompasses Santa Barbara and Ventura Counties. This program will inform planning and decision-making by tracking coastal hazard impacts over time and progress towards adaptation triggers. A public review draft is anticipated this spring.
2. A Wastewater and Water Systems Climate Adaptation Plan that evaluates the hazard vulnerabilities of the City's Wastewater and Water infrastructure, with a particular focus on the vulnerabilities of the wastewater collection system that already experiences capacity constraints during flooding events. This plan also satisfies Regional Water Quality Control Board permitting requirements. A public review draft is anticipated this spring.
3. A 30-Year Waterfront Adaptation Plan that will establish a near-term strategy for the City's Waterfront Area. This work effort is described further below.
4. An Airport Climate Adaptation Plan that will address the potential impacts of increased flooding due to future projected sea level rise and increased rainfall with climate change and will inform master planning efforts and drainage improvements for the airport. A public review draft of the vulnerability assessment was released this past December and adaptation strategy development is underway.
5. Stormwater modeling that includes creation of a model for a portion of the City's stormwater system, analysis of the impacts of increased rainfall intensities and high wave events, and identification of potential adaptation options and capacity improvements for the stormwater system. Project launch is anticipated this summer. The information coming out of this project will inform the need to adjust floodplain regulations to floodproof new structures to higher levels of elevation than currently required.

The Adaptation & Resilience Program is also partnering with the Community Development Department and Creeks Division to establish a new Creek Buffer Ordinance to reduce public safety risks associated with erosion and flooding, protect creek side habitats, preserve scenic beauty, enhance water quality, streamline permit application reviews, and provide clarity to applicants. Planning Commission consideration of the draft ordinance is anticipated this spring. Additionally, the Adaptation & Resilience Program is managing updates to the City's Hazard

Mitigation Program that facilitates the City's ability to obtain FEMA funding for hazard reduction projects.

IV. 30-YEAR WATERFRONT PLAN WORK PROGRAM

City Council approved a \$1,330,000 contract with Stantec Consulting Services, Inc to draft a 30-Year Waterfront Adaptation Plan for the Waterfront area of the City that spans from Leadbetter Beach to the Clarke Estate. This contract is completely funded by grants provided by the California Coastal Commission and State Coastal Conservancy.

The 30-Year Waterfront Adaptation Plan will provide solutions to address the coastal hazard impacts that the Waterfront has experienced during major coastal storm events, such as flooding, structure damage, storm surge, sand deposition, and erosion, which are anticipated to get worse with even small amounts of sea-level rise. The 30-Year Waterfront Adaptation Plan will move the needle from planning to on-the-ground projects that will create a more resilient future for our community. The Plan will also implement a high priority recommendation from the 2021 Sea-Level Rise Adaptation Plan to develop near-term actions that will enhance our community's resilience to climate change and sea-level rise in this portion of the City.

The 30-Year Waterfront Adaptation Plan focuses on a 30-year time horizon because there is a high level of scientific consensus about the anticipated amount of sea-level rise during this period and it reflects a manageable horizon for infrastructure planning. Additionally, 30-years reflects a timeframe during which significant increases in storm damage risks in the Waterfront area are likely, but before largescale alterations of the Waterfront area (such as installation of levees, continuous seawalls, groundwater pumping, or relocation of structures) could be needed to address largescale flooding impacts north of Cabrillo Boulevard from sea level rise.

Key elements of the Plan will include:

- A refined hazard definition and updated exposure analysis that incorporates wave run-up, geomorphology, dredging, sediment management, and groundwater rise.
- Vulnerability profiles and graphics that support community engagement, with an interactive, bilingual hazards map.
- An analysis of adaptation options for major assets along the Waterfront that considers feasibility, effectiveness, costs, the unique characteristics of the Waterfront area, the City's vision for access and connectivity, and regulatory framework. Particular attention will be paid to the Harbor Commercial Area and Harbor West Parking Lot areas that have experienced frequent flooding and storm surge during the last few winters.
- A design for an enhanced bicycle path connection between the Harbor Commercial Area and Leadbetter Beach that improves safety for all users and supports the adaptation strategy.
- A Harbor breakwater and groins analysis that assesses the feasibility and costs of raising and potential modifications to these existing protective structures.
- State and regulatory agency coordination and consultation.

- Bilingual, interactive, and engaging community outreach.
- Conceptual designs for key recommended adaptation projects.

The work effort is being managed by the Sustainability & Resilience Department, in collaboration with the City Attorney, Community Development, Parks & Recreation, Public Works, Sustainability & Resilience, and Waterfront Departments.

This multi-year work effort was kicked off in September 2024 and initial outreach, technical assessment, and modeling work is underway. The Harbor Commission received a presentation on the project scope of work in November and a similar presentation to the Parks & Recreation Commission is scheduled for this May.

A brief community-wide survey was launched on February 10th to assess our community's priorities, preferences, sentiments, and ideas to better our Waterfront. This streamlined survey will be used to guide the scope and considerations for the adaptation options that will build to the ultimate adaptation strategy for the Waterfront area.

The next Planning Commission review of this work effort is anticipated this fall, when updated modeling results and a vulnerability assessment are released for community review.

Planning commission consideration of a recommendation on the draft Plan is anticipated late 2026, prior to City Council consideration in early 2027. Following City Council adoption, the 30-Year Waterfront Adaptation Plan will be submitted to the Coastal Commission for Certification.

V. POLICY CONSISTENCY

The City's Adaptation & Resilience Program and associated work efforts, including the 30-Year Waterfront Adaptation Plan, advance goals contained in the City's General Plan, Local Coastal Program, Climate Action Plan, and Sea Level Rise Adaptation Plan to better understand vulnerabilities to existing and future hazards and enhance our community's resiliency to climate change impacts.

VI. NEXT STEPS

Staff anticipate regularly engaging the Planning Commission for key Adaptation & Resilience Program work efforts to review major deliverables, help guide strategy development, support community engagement, and ultimately make recommendations to City Council on draft plans.