



COUNTY OF SAN MATEO
Inter-Departmental Correspondence
Office of Sustainability



Date: March 21, 2017
Board Meeting Date: April 11, 2017
Special Notice / Hearing: None
Vote Required: Majority

To: Honorable Board of Supervisors

From: Jim Eggemeyer, Director, Office of Sustainability

Subject: Draft Sea Level Rise Vulnerability Assessment

RECOMMENDATION:

Accept this informational report regarding the County's Sea Change SMC Program and Draft Sea Level Rise Vulnerability Assessment, prepared by the Office of Sustainability.

BACKGROUND:

San Mateo County is especially vulnerable to sea level rise due to the County's unique location between the San Francisco Bay and the Pacific Coast. The County has over 100,000 people, seven of the County's nine wastewater treatment plants, and nearly 400 miles of roads at risk from 3 feet of sea level rise. If no action is taken to prepare, sea level rise could have widespread, cross-cutting, and cascading impacts on the County's critical infrastructure, habitats, transportation, health, and economy. Sea levels have already risen by about 8 inches in the San Francisco Bay since the 1900s, as measured at the San Francisco tide gauge, and are expected to rise by 5 inches to 2 feet by 2050 and 1.4 to 5.5 feet by 2100.

The Office of Sustainability has released a Draft Sea Level Rise Vulnerability Assessment (Assessment) for public review. The Assessment, funded through a grant from the California State Coastal Conservancy, analyzes how flooding and erosion due to sea level rise could affect San Mateo County. The study area includes the entire Bayshore and coast north of Half Moon Bay. The project started in June 2015 and will be completed by summer 2017. The Assessment is part of the first phase of the County's Sea Change SMC Initiative. The second part of the first phase will be the South Coast vulnerability assessment.

DISCUSSION:

Stakeholder and City Engagement: Public and stakeholder engagement has been a key tenant of the project, and County staff provided multiple opportunities for input

throughout the process. County staff worked closely with cities and other stakeholders through individual meetings and through two advisory groups: a Technical Working Group and a Policy Advisory Committee. Community members provided input through a Community Task Force. The committees all provided feedback throughout the development of the vulnerability assessment.

Staff conducted a number of outreach events and activities to raise awareness about the project countywide. Some of these activities included: development of a Sea Change website and social media campaign, distribution of monthly newsletters, a public workshop hosted by Genentech with over 200 attendees, and over 40 presentations to various community groups. In addition, the County partnered with Climate Access and Owlized to install two Look Ahead sea level rise viewers at Coyote Point. As part of this project, Dr. Susanne Moser conducted four focus groups with elected officials, city staff, and community members to learn about current perceptions of risks from sea level rise and barriers to taking action on the issue.

Prior to the release of the Draft Assessment, County staff have presented at the March City Managers meeting, had follow-up meetings with city staff, and have created an online forum for edits and comments to be submitted. After the Draft has been released, staff will hold meetings with the Technical Working Group/Policy Advisory Committee and with the Community Task Force in mid-April.

Draft Assessment Highlights:

The Assessment includes an analysis of which assets (such as highways, hospitals, parks, etc.) are at risk from three different sea level rise scenarios in each city and unincorporated area of the County as well as 30 detailed case studies on individual assets and a community. The report also includes chapters on adaptation planning and next steps. The case studies are a main portion of the report and are meant to be representative of the different types of assets in the County and to provide a template to further evaluate vulnerability. They are designed to serve as templates for jurisdictions who want to further evaluate vulnerability.

Some highlights of the Assessment include:

- Wide-spread inundation of roads, natural habitats, wastewater treatment facilities, energy infrastructure, and other valuable assets
- 7,000 acres of wetlands, 380 miles of roads, and over 100,000 people are expected to be negatively affected in the mid-term scenario (3.3 feet sea level rise with a 1% annual chance storm)
- An assessed value of approximately \$39 billion is at risk in the long-term flooding and erosion scenario (6.6 feet of sea level rise with a 1% annual chance storm)
- Wastewater treatment plants are especially vulnerable, and near-term actions to flood-proof electrical sources could increase resilience of plants

To view the complete draft report, visit <http://seachangesmc.com/current-efforts/vulnerability-assessment/>.

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Next Steps: The Sea Change SMC Initiative has three phases: 1. Assessment, 2. Resilience Planning, and 3. Implementation. The goal of the Sea Change SMC Initiative is to increase awareness and understanding of sea level rise, and increase coordination on sea level rise planning throughout the County. The final report is projected to be released in July 2017. Phase II, resilience planning, includes developing a detailed and strategic plan that strengthens coastal resiliency to flooding and erosion. Phase III will look into the implementation of projects such as elevating at-risk buildings and restoring habitats that are designed to decrease flooding. Concurrently during phases II and III, staff aims to present to each of the city councils as well as other forums to raise awareness about the report and gather support for a sea level rise collaborative and planning efforts. Staff are in the process of finalizing these additional next steps:

- Completing the vulnerability assessment for south of Half Moon Bay
- Conducting further analysis of County facilities and unincorporated areas
- Preparing a county policy on sea level rise and guidance for addressing sea level rise in County projects
- Developing an adaptation strategy for unincorporated areas and implementing pilot projects
- Providing technical assistance to cities on planning for resiliency

FISCAL IMPACT:

There is no Net County Cost.