



COUNTY OF SAN MATEO
Inter-Departmental Correspondence
County Manager



DATE: August 17, 2015
BOARD MEETING DATE: September 1, 2015
SPECIAL NOTICE/HEARING: None
VOTE REQUIRED: Majority

TO: Honorable Board of Supervisors

FROM: John L. Maltbie, County Manager

SUBJECT: Board's Response to the 2014-2015 Civil Grand Jury Report "Flooding Ahead: Planning for Sea Level Rise"

RECOMMENDATION:

Approve the Board of Supervisors' response to the 2014-2015 Civil Grand Jury Report "Flooding Ahead: Planning for Sea Level Rise."

BACKGROUND:

On June 4, 2015, the 2014-2015 San Mateo County Civil Grand Jury filed a report titled "Flooding Ahead: Planning for Sea Level Rise." The Board of Supervisors is required to submit comments on the findings and recommendations pertaining to the matters under control of the County of San Mateo within ninety days. The County's response to the report is due to the Hon. Susan I. Etezadi no later than September 3, 2015.

Acceptance of this report contributes to the Shared Vision 2025 outcome of a Collaborative Community by ensuring that all Grand Jury findings and recommendations are thoroughly reviewed by the appropriate County departments and that, when appropriate, process improvements are made to improve the quality and efficiency of services provided to the public and other agencies.

DISCUSSION:

The Grand Jury made 12 findings and seven recommendations in its report. The Board's responses follow each finding or recommendation.

Grand Jury's Findings

F1. SMC is at severe risk for flooding due to the gradual rise in sea level, projected at up to 65 inches (167 centimeters) by the year 2100. Catastrophic SLR of nearly 15 feet is a possibility this century.

Board's Response: Agree. Sea level rise (SLR) projections for the year 2100 vary significantly. As noted by the Grand Jury, a widely cited source for future sea level rise is the National Research Council's 2012 report entitled "*Sea Level Rise for the Coasts of California, Oregon and Washington: Past Present and Future*" which projects SLR of up to 65 inches (167 centimeters) by 2100. A study written by James Hansen, NASA's former lead climate scientist, and 16 co-authors, and published on July 23, 2015, concludes that glaciers in Greenland and Antarctica will melt 10 times faster than previous consensus estimates, resulting in SLR of at least 10 feet in as little as 50 years. At a SLR conference held in San Mateo on December 9, 2013, SLR expert John Englander stated that 15 feet of SLR is possible depending on the calving of the Antarctic ice sheet.

F2. SLR is a threat countywide, including the upland areas. All residents depend on public infrastructure, especially wastewater treatment plants. Also, a significant portion of the countywide property tax base is within the area threatened by SLR.

Board's Response: Agree. The County is currently conducting a vulnerability assessment that examines how SLR will affect specific points of critical infrastructure across the County. The vulnerability assessment stakeholder groups include representatives from all cities because the impacts of sea level rise will be felt throughout the County, not just where flooding occurs.

F3. Although many local officials are now familiar with and concerned about the threat of SLR, there is inadequate public awareness of SLR's potential impacts on this county.

Board's Response: Agree, and both local officials and the general public would benefit from more information about the effects of SLR on the County. The County is currently taking steps to increase awareness about the effects of sea level rise through various public outreach initiatives including the development of a website entitled "*Sea Change San Mateo County*" (see: <http://seachangesmc.com>).

F4. Levees, including their financing, are currently the responsibility of each individual city or special agency with jurisdiction along streams, bay, and coast (the County is responsible for unincorporated areas).

Board's Response: Agree.

F5. Flood risk is based on topography, not political boundaries. The safety of properties in one jurisdiction often depends on levee projects undertaken by another jurisdiction.

Board's Response: Agree. In many cases waterways form county and city boundaries, and as a result the watersheds and floodplains created by those waterways affect areas in multiple jurisdictions. Moreover, sea level rise does not respect jurisdictional lines as rising seas may simply circumvent one jurisdiction's actions and increase the risk facing its neighbors.

F6. Currently, no countywide agency exists to provide planning, facilitate coordination

among jurisdictions, or to assist with securing funding for existing flood control projects. The same is true for future SLR-related projects.

Board's Response: Agree. As the Grand Jury noted, there is coordination among local governments in specific geographical areas, such as the areas controlled by the San Mateo County Flood Control District and the area controlled by the San Francisquito Creek Joint Powers Authority; however, there is currently no entity with countywide responsibility or powers related to flood control or SLR.

F7. To the Grand Jury's knowledge, no local jurisdiction has adopted SLR projections or maps for specific local land use planning purposes. No consistent SLR projection has been adopted countywide by the County and cities.

Board's Response: Agree. The County is similarly unaware if other jurisdictions have made such efforts. However, the County is currently conducting a vulnerability assessment that will include SLR projections and maps.

F8. There is a recognized need for a countywide approach to SLR planning and coordination among jurisdictions.

Board's Response: The County agrees that SLR requires a countywide approach and close coordination. The County has discussed the need for such a countywide approach with a number of city managers and elected officials.

F9. Several city managers and others interviewed did not support having a new countywide organization assume direct control of levee projects at this time.

Board's Response: The County cannot agree nor disagree with this finding, as it is unaware of the positions of those interviewed.

F10. The County and cities can address SLR in their General Plans and Climate Action Plans, can map the threat, and can adopt relevant policies.

Board's Response: Agree to the extent that these actions are ways for the County to address SLR, but whether the County can or will take on these actions is subject to funding and the political process. As noted in the Grand Jury's report, there is no dedicated SLR-specific funding stream to finance SLR-related studies or projects at this time. The County has adopted an Energy Efficiency Climate Action Plan (EECAP) and a San Mateo County Climate Action Plan Vulnerability Assessment, the latter of which examined SLR and other climate change impacts to the county.

F11. Many actions to address SLR are within the authority of regional, State, and federal agencies.

Board's Response: Agree. The County believes that State, regional and/or federal funding will be needed to address SLR given the magnitude of the adaptation efforts that will be required. State, regional and federal agencies also play a critical role in the

regulatory permitting of any SLR protection measures.

F12. By acting now, SMC may be able to reduce future costs by integrating SLR-related projects with other programmed levee projects, and by using land use planning measures to mitigate future exposure to SLR.

Board's Response: Agree

Grand Jury's Recommendations

R1. The County, each city in the county and relevant local special agencies should conduct a public education effort to increase awareness of SLR and its potential effects on this county.

Board's Response: This recommendation is currently being implemented by the County. The County (through Supervisor Dave Pine's office and the Office of Sustainability), together with the offices of Congresswoman Jackie Speier and Assemblymember Rich Gordon, have convened three countywide conferences on SLR. In addition, one of the key tasks in the work program for the County's new Climate Resiliency Specialist includes community engagement and outreach. Examples of specific upcoming outreach efforts include collaborating with the California King Tides project, presenting at a Sustainable San Mateo County workshop on sea level rise, and utilizing County communication channels like the County website, social media, and mailing lists. The County has just launched a dedicated SLR website entitled "*Sea Change San Mateo County*" (see: <http://seachangesmc.com>) which features updates on the County's vulnerability assessment study that is currently in progress, links to SLR resources, and event updates.

R2. The County, each city in the county and relevant local special agencies should identify a single organization, such as a new joint powers authority or an expanded SMC Flood Control District, to undertake countywide SLR planning. It should be structured to ensure that:

- The organization is countywide in scope
- The organization is able to focus on SLR
- Both the County and cities (and possibly relevant local agencies) are able to participate in the organization's decision-making
- The organization is sustainably funded

Board's Response: The County, through Supervisor Dave Pine's office and the Office of Sustainability (OOS), has taken the lead in coordinating sea level rise efforts across the County. The County's SLR related initiatives include the following:

- Together with the office of Congresswoman Speier and Assemblymember Gordon, the County has held three public forums to raise awareness of SLR and solicit input from cities and other stakeholders.
- In May of 2015, the County hired a new Climate Resiliency Specialist to coordinate its SLR planning and outreach efforts.

- The County has partnered with the California Coastal Conservancy to conduct a sea level rise vulnerability assessment study that will identify and assess the community assets and natural resources that will be most affected by SLR and storm events along the San Mateo County bayshore and coastline from Half Moon Bay north. This study is now underway and is scheduled to be completed in May 2016.
- The County, in partnership with the cities of San Bruno, South San Francisco, Colma, and the San Francisco International Airport, completed a detailed SLR study of the shoreline area northwest of the airport where the San Bruno and Colma creeks enter the San Francisco Bay.
- The County has played a coordinating role in connection with the release of the Federal Emergency Management Agency's new draft flood maps.
- The County has applied for a National Oceanographic and Atmospheric Administration (NOAA) Regional Coastal Resilience grant to develop a sea level rise and flood risk reduction plan for three watersheds (Colma, San Bruno and Millbrae Creeks), and to raise awareness and capacity to address sea level rise in these watersheds among key stakeholders.

The Grand Jury's recommendation to identify a single organization to undertake countywide SLR planning requires further analysis. The Board agrees that a coordinated, countywide approach is needed for SLR planning and to build on the County's SLR effort to date. The attributes for such an organization listed in the Grand Jury's recommendations seem appropriate.

The County has been in discussions with the cities and relevant local special agencies to identify the best organizational structure for addressing SLR, and will continue to participate in these discussions in the future. These discussions and decisions will take into account the recommendations of the Grand Jury. The County continues to explore the Grand Jury's idea to expand the authority of the existing Flood Control District to include sea level rise efforts in addition to its current flood control duties, but these discussions are ongoing. The County suggests that the organization be staffed by or have access to the engineering staff of the County and the cities and utilize existing resources to the extent possible.

The County also suggests that the County, the cities, the Flood Control District, and C/CAG set a deadline of December 2015 to form a stakeholder committee that will study the Grand Jury's recommendations for a countywide organization and make a recommendation as to the form of a potential countywide SLR organization.

R3. The organization's responsibilities should include:

- Adopt consistent SLR projections for use in levee planning countywide
- Conduct and/or evaluate vulnerability assessments
- Provide a forum for inter-jurisdictional coordination and exchange of information related to SLR
- Undertake grant applications for SLR-related planning and projects
- Facilitate raising funds on a countywide basis for SLR-related projects, to be

- passed through to agencies with direct responsibility for project construction
- Monitor actual SLR over time and any changes in SLR projections, based upon the latest federal, State, or regional government reports and scientific studies
- Through the CEQA environmental review process, comment on major new developments proposed in the SLR floodplain
- Advocate on behalf of the member jurisdictions with federal, State, and regional agencies regarding SLR issues
- Assist the County and cities in public awareness efforts, as described in R1

Board's Response: This recommendation will require further analysis (see Board's Response to R2 above), but overall the list of the organization's proposed responsibilities seems reasonable. Currently, the OOS and Climate Resiliency Specialist provide centralized support to cities around SLR planning and many of these responsibilities listed above are being fulfilled by the OOS. For example, the OOS is currently conducting a countywide sea level rise vulnerability assessment, funded by a California State Coastal Conservancy grant. Additionally, the OOS has helped convene multiple meetings that have provided valuable forums for inter-jurisdictional coordination and the exchange of information related to SLR. Meeting attendees have included a diversity of stakeholders such as cities, regulatory agencies, and the business community. Information provided by these attendees has helped shape the scope of work for the vulnerability assessment and identify shortcomings in current SLR maps. After the vulnerability assessment is completed, the County's Climate Resiliency Specialist will help facilitate SLR-related projects with cities, including securing funds. The Climate Resiliency Specialist will also advocate on SLR-issues with relevant government agencies and engage in public education as described in the Board's Response to R1.

R4. The County, cities and two relevant local special agencies should consider expanding the role of the organization beyond SLR to include planning and coordination of efforts to address existing flooding problems along the Bay, coast, and creeks that are subject to tidal action. It may be cost-effective to integrate SLR protection with other levee-improvement programs.

The County and cities may also consider expanding the role of the new organization to include potentially compatible functions such as the National Pollution Discharge Elimination System (NPDES), currently managed by C/CAG, and the new (2014) State requirements for local sustainable groundwater planning.

Board's Response: This recommendation requires further analysis – see Board's Response to R2 above. This recommendation would require agreement among stakeholders, including the cities, C/CAG, and other agencies before proceeding.

The County believes that the primary purpose of the organization should be to defend the County against sea level rise and flooding due to storm events. SLR and flood control are interrelated as flooding from fluvial (freshwater) sources is linked to tidal conditions that affect creeks and storm drains near the shoreline of the Bay and the Pacific Ocean.

The County also agrees that it may be cost-effective to integrate SLR protection with other levee-improvement programs. For example, the Foster City levees project that is now being planned to address the Federal Emergency Management Agency's requirements for flood protection presents an opportunity to also incorporate future SLR. A possible approach is to construct these levees with "adaptive capacity" so that their height can be more easily increased in the future.

The County believes that NPDES and groundwater management are potential functions that a comprehensive water management agency could undertake in the future, together with SLR and flood control, as all of these issues are interrelated. However, NPDES is currently managed by the City/County Association of Governments and the cities, and various agencies and cities are already addressing groundwater issues. The County would not want a discussion of the NPDES and groundwater management to delay the creation or expansion of an entity focused on flood protection and sea level rise.

R5. The organization—its administration, staffing, and program expenses—should be funded on a sustainable basis by:

- Member contributions
- Contributions solicited from parties threatened by SLR, including corporations and agencies that operate public facilities such as wastewater treatment plants
- Grants solicited from available potential sources such as the California Climate Resilience Account
- Reducing administrative costs by contracting for services with the County or another agency

Board's Response: This recommendation requires further analysis – see Board's Response to R2 above. The County has been in discussions with the cities and relevant local special agencies to identify the best approach going forward, and will continue to participate in these discussions in the future. These discussions and decisions will take into account these recommendations with regard to funding of the organization.

R6. The County and each city should amend its General Plan, as needed, to address the risk for SLR. The Safety Element should include a map of any areas vulnerable to SLR, as determined by measurements in the countywide Vulnerability Assessment [R3]. Further, it should identify policies that apply to areas threatened by SLR.

Board's Response: The County has implemented this recommendation through its Energy Efficiency Climate Action Plan (EECAP). The EECAP was developed and adopted as a Sustainability Element in the County's General Plan. Along with the EECAP, there is a San Mateo County Climate Action Plan Climate Change Vulnerability Assessment that identifies sea level rise as a significant climate change impact. After the current sea level rise vulnerability assessment is completed, there will be additional opportunities to update the General Plan with the latest data and analysis on risk for SLR.

R7. The County, cities, and relevant local special agencies, through their representatives

on regional agencies, membership in state associations, lobbyists, and elected State and federal legislators, should pursue SLR-related issues with government bodies outside SMC.

Board's Response: This recommendation has been implemented, and will continue to be implemented as the County's SLR efforts progress. Since 2013, Supervisor Dave Pine has collaborated with elected representatives at both the state and federal level on SLR issues, including California Assemblyman Rich Gordon and Congresswoman Jackie Speier. Supervisor Pine also serves on the Board of the San Francisco Bay Conservation and Development Commission and the San Francisco Bay Restoration Authority. He has been an advocate for addressing SLR throughout the Bay Area. In addition, Supervisor Pine, the Department of Public Works Director, and the Climate Resiliency Specialist are participating in CHARG, a Bay-wide effort to coordinate SLR planning across jurisdictions. Over time, the County's Climate Resiliency Specialist will also interact with government bodies outside San Mateo County on advocacy around SLR planning.

FISCAL IMPACT:

There is no net fiscal impact associated with accepting this report.