

Staff report for TWIC concerning the letter from the Hazardous Materials Commission about Sea Level Rise

On February 26, 2021 the Contra Costa County Hazardous Materials Commission Chairperson, Fred Glueck, wrote a letter to the Transportation, Water and Infrastructure committee concerning the issue of Sea Level Rise (SLR). The Commission had previously received reports on two Adapting to Rising Tides studies conducted for Contra Costa County by the Bay Conservation and Development Commission in 2016 and 2019, and a Hazardous Materials Commodity Flow Study prepared for the Contra Costa Hazardous Materials Commission. The Commission's letter outlined the Commission's concern about the impacts to public health and the environment from potential future SLR, and encouraged the Board of Supervisors to take measures to address this potential threat.

This report outlines some of the types of measures and approaches the Transportation, Water and Infrastructure committee could explore as means of addressing this potential threat. These examples are based on discussions with various agency staff and input from Hazardous Materials Commission members, and should be considered preliminary. These examples are not intended to be all-inclusive. None of these possible measures or approaches currently have sustainable funding sources or staff resources available to initiate them. Funding and staffing needs would have to be addressed before any of these measures or approaches could be implemented.

Regional Activities

Plan Bay Area – The Bay Conservation and Development Commission is facilitating an initiative to establish regional agreement on the actions necessary to protect people and the natural and built environment from rising sea levels. A leadership advisory group, made up of a diverse group of leaders from public agencies, interest groups, community-based organizations and academia are providing strategic direction in developing a Joint Platform of priority actions to address regional sea level rise adaptation. They will be holding public forums and will be having a public comment period on the next draft of their Joint Platform in May, 2021, which offers the County the opportunity to comment on this Joint Platform or co-sponsor local forums to allow for more local input.

County-wide Models

Several Counties in the Bay Area have begun county-wide efforts to address Sea Level Rise. While every county is different in terms of how they have structured these efforts, aspects of

each could serve as a model for how Contra Costa County could approach this issue, and the role the Board of Supervisors could play in that effort.

San Mateo County – San Mateo County began their efforts to address SLR in 2013 when county, state and federal elected officials convened a conference to address the countywide challenge. This led in 2015 to their Sea Change SMC initiative implemented by their Office of Sustainability with strong leadership from their Board of Supervisors, and with participation of most of the cities in the County. They conducted community engagement and a vulnerability assessment with funding from the County and the California State Coastal Conservancy. Sea Change SMC continues to conduct studies and planning efforts for the cities and agencies in San Mateo County, with strong leadership from their Board of Supervisors. On January 1, 2020 the San Mateo County Sea Level Rise Resiliency District was created at the recommendation of the City/County Association of Governments of San Mateo County. This Special District helps implement multi-jurisdictional projects throughout the County.

Marin County – Marin County's efforts to address SLR, also known as BayWAVE, began in response to strong community concern with flooding events and climate change. BayWAVE is Marin County's coordinated planning for sea level rise along the bay shoreline. Adaptation planning is led by multiple agencies, partners, and municipalities, including the county. In 2016 BayWAVE, with funding from the County and a grant from the California State Coastal Conservancy, conduct a vulnerability assessment for their bay shoreline. Since then, under the leadership of a multi-jurisdictional steering committee, some of their adaptation efforts include preparing for the next update to the Marin Multi-Jurisdictional Hazard Mitigation Plan, updates to sections of the Countywide General Plan, and on-the-ground implementation of adaptation projects on county lands in Novato, San Rafael, and Richardson Bay.

Santa Clara County – Santa Clara County has had an Office of Sustainability since 2010 funded through their general fund. In 2014, in conjunction with the cities and agencies within the County, they received a grant from the California Strategic Growth Council to conduct a county-wide climate change vulnerability assessment and adaptation planning effort called Silicon Valley 2.0. From this effort they developed a web-based decision support tool which allows users to run customized queries using regionally-specific data to model future climate change impact and the resulting financial costs. They also developed a Climate Adaptation Guidebook which provides key strategies for climate change preparedness. Recently, they received a grant from the National Fish and Wildlife Foundation to focus on the impacts of Sea Level Rise. They are bringing together the cities in the County to develop a coordinated effort to develop SLR resiliency strategies and share data.

Contra Costa Examples and Options

Local Project Examples - Several projects in Contra Costa County are examples of how the potential impacts of Sea Level Rise are being directly addressed.

- North Richmond Horizontal Levee and Shoreline Access project – As a follow-up to work done through a North Richmond Shoreline Visioning process and the Resilient by Design Challenge, Contra Costa County Supervisor John Gioia has taken the lead in bringing together key stakeholders, including the West County Wastewater District, to advance the concept of creating a horizontal levee and shoreline public access in North Richmond. The San Francisco Estuary Partnership (SFEP) is helping to facilitate and support this effort and move it towards implementation. SFEP is working alongside local partner The Watershed Project to move some other key adaptation and green infrastructure ideas forward in and around the project area. The horizontal levee would minimize flooding in North Richmond, protect critical infrastructure and enable marsh growth in an ecologically rich part of the Bay. SFEP is helping to facilitate a Stakeholder Working Group that includes representatives from the West County Wastewater District, City of Richmond, Contra Costa County Flood Control District, East Bay Parks District, Chevron, and Republic Services, among others. The project goal is to reach consensus on the alignment and height of the horizontal levee and identify the resources to fund and finance the construction of the levee and other associated projects in the area. Funding from the West County Wastewater District and a grant from the San Francisco Bay Restoration Authority is supporting this planning effort.
- Lower Walnut Creek Restoration Project – This project was begun to address sedimentation in the Walnut Creek flood control channel. The Contra Costa Flood Control District partnered with the Army Corp of Engineers to reevaluate the operation of the channel and transform it into a more sustainable facility. From 2004 through 2012, District and Corps staff worked closely together to plan and design a project that would meet local needs as well as Corps standards. On June 10, 2014, President Obama signed legislation that turned over to the local sponsor (aka "deauthorized" from the 1960s federal project) the most downstream four miles of Pacheco and Walnut Creek. Now that this part of the creek is under local control, planning efforts continue. The result of this planning is the Lower Walnut Creek Restoration project. This project incorporated Sea Level Rise considerations and resiliency into the design of the project as a co-benefit.

Fund other local projects – A range of grant programs exist that can fund projects to address the potential impacts of SLR, such as adaptation measures for the “pinch points” discussed in

the Commodity flow study conducted by the Contra Costa County Hazardous Materials Programs in 2019. The following are just examples and are not necessarily a complete list.

- California Ocean Protection Council funding to for costal projects that benefit communities entitled to environmental justice communities and improve water quality.
- Cal OES/FEMA Hazard Mitigation Assistance programs intended to reduce natural hazard impacts to life and property.
- EPA Environmental Justice Grants. The U.S. Environmental Protection Agency (EPA) has announced the availability of up to \$6 million in grant funding under the Environmental Justice Collaborative Problem-Solving Cooperative Agreement Program and the Environmental Justice Small Grants program.
- National Fish and Wildlife Foundation National Coastal Resilience fund grants to enhance costal communities' natural defenses against severe weather and flooding
- San Francisco Bay Restoration Authority grants. The Authority is particularly interested in supporting projects that address equity and include benefits to economically disadvantaged communities through meaningful community engagement.

Convene a Workshop or Forum – The County could convene a workshop or forum to bring together local jurisdictions, agencies, businesses, landholders the railroads, non-profit organizations, community groups and other stakeholders to discuss the current knowledge and data gaps concerning local Sea Level Rise projections and potential impacts, local efforts currently underway to address the impacts of Sea Level Rise, and possible local and county-wide approaches to develop adaptation strategies to address the impacts of Sea Level Rise. The results of the two Adapting to Rising Tides studies conducted by the Bay Conservation and Development Commission for Contra Costa County could serve as the starting point for this discussion.

Create a local public/private partnership - The County could explore the formation of a public-private partnership to develop solutions to address the potential impacts from Sea Level Rise. The County could engage the railroads, other local jurisdictions, public agencies, local non-profit and community groups, public and private landholders along the shoreline, other businesses impacted directly or indirectly by Sea Level Rise, and the general public. The County could engage residents and community groups in Disadvantaged Communities, which are mostly located along the Contra Costa shoreline, and which will bear a disproportionately high burden from the impacts of Sea Level Rise. In 2019, a graduate student team from the UC Berkeley Goldman School of Public Policy developed options the County could pursue to fund and implement the findings from the Adapting to Rising Tides studies. The Goldman School team recommended the County start by forming a working group of government entities, property owners, and other stakeholders.

Benchmark Best Practices – The County could review projects and practices already being conducted in the County to establish Best Practices for future efforts. The Bay Conservation and Development Commission is developing a guide/road map for how to move forward with implementing SLR adaptation measures by local government. This guide is scheduled to be completed in the summer of 2021 and should be a valuable tool to support efforts to evaluate local projects.

Evaluate County Policies and Practices – The County could evaluate its policies and practices for land use development, public works and transportation projects, economic development, hazardous materials management, flood control and other activities to determine if they adequately account for and address the potential impacts of SLR. These efforts could be part of the current update to the County’s General Plan or could be conducted independently of that effort.

Develop a Sea Level Rise Resolution – The Board of Supervisors adopted a Climate Emergency Resolution on September 22, 2020. This resolution acknowledged that rising global temperatures will cause sea levels to rise (up to six feet or more by year 2100 under certain scenarios) and resolved to establish an interdepartmental task force of all Department heads to implement the County’s Climate Action plan and identify additional actions, policies, and programs the County can undertake to reduce and adapt to the impacts of a changing climate. The resolution did not identify any specific actions to be taken to address Sea Level Rise. Building on this resolution, the County could adopt a resolution specifically acknowledging the local threats posed by Sea Level Rise and identify specific measures to address them.