

San Francisco Bay Conservation and Development Commission

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TO: Rising Sea Level Working Group Members
FROM: Lawrence J. Goldzband, Executive Director (415/352-3653; larry.goldzband@bcdc.ca.gov)
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SUBJECT: July 9, 2015 Commission Rising Sea Level Working Group Meeting Summary

1. **Roll Call, Introductions and Approval of Agenda.** Rising Sea Level Working Group Commissioner Sears called the meeting to order at approximately 11:00 am. Commissioners present: Pine, Sears, Chair Wasserman and Zwissler. Also attending: Vice Chair Halsted, Leslie Alden (Marin County), Austin Perez (Bay Planning Coalition) and Len Matterman (San Francisquito Creek Joint Powers Authority).

2. **Approval of June 4, 2015 Working Group Meeting Summary.** The meeting summary was approved with no corrections or comments.

3. **Hayward Shoreline Resilience Study.** Maggie Wenger of BCDC's Adapting to Rising Tides Program (ART) presented findings and outcomes for the Hayward Shoreline Resilience Study. The full presentation can be found at <http://www.bcdc.ca.gov/RSLWG/2015-07-09RSLWGHaywardSummaryPresentationFinal.pdf>. Presentation highlights and WG discussion included:

- a. The Hayward Shoreline Resilience Study focused on vulnerable areas of the Hayward Shoreline along the eastern touchdown of the San Mateo Bridge.
 - i. Vulnerable assets include wastewater treatment and energy facilities, transportation and highway, recreation and educational facilities, marshlands, and privately owned land.
- b. Findings for the study showed that there is currently very little shoreline protection in Hayward. Shoreline protection measures include ad hoc levees and natural areas. As sea levels rise, marshes will eventually drown due to the loss of sediment supply.
- c. Jurisdictional issues pose significant challenges to shoreline resiliency due to a lack of organizational capacity as well as limited financial support for current maintenance and repairs and long-term improvements. Regional coordination will be required.
- d. When water levels reach 36-48" above mean high higher water (MHHW), the Hayward Focus Area will require a coordinated multi-benefit, landscape-scale effort for future flood protection.

- e. Types of actions to be taken to address sea level rise and shoreline resiliency.
 - i. Business as usual.
 - (1) Costly flood damage and recovery in industrial areas and on bridge approach.
 - (2) Increased flood insurance premiums.
 - (3) Loss of tidal marshes.
 - (4) Loss of Bay Trail and other recreational and educational areas.
 - ii. Traditional levees
 - (1) Utility infrastructure, Industrial and commercial lands protected.
 - (2) Tidal marshes and other recreational and educational facilities lost.
 - (3) Bay Trail could be relocated on the traditional levee.
 - iii. Horizontal levees
 - (1) Bay Institute says it's not as expensive. Funding will come from flood control districts or the Corps (\$100 million/mile).
 - (2) South Bay Salt Pond and Shoreline study will be a good case study for building horizontal levee.
 - (3) A single horizontal levee would require a year's worth of Bay dredging for beneficial reuse. The levee will eventually subside, so is overbuilding a necessary measure for this to work?
 - (4) It is clear that horizontal levees work for habitat, but it's not as clear if it will work for flood protection. Bruner Marsh, South Bay Salt Ponds and Hamilton Wetlands Restoration project will all be important experiments to see how horizontal levees address flooding.
 - iv. Room for Bay (managed retreat).
 - (1) Cost analysis for this option is would include the relocation of a \$400 million wastewater treatment plant.
 - (a) as California moves to a higher level of water recycling and reuse, waste water treatment plants will most likely change locations. Less wastewater will me going into the Bay.
 - (b) All of the private land (combined?) worth less than the wastewater plant.
 - (2) As day to day/year to year choices are made, do they support these efforts, or are choices being made going to pointless and wasted adaptation measures (more expensive for less).

4. Four Twenty Seven: Survey of Corporate Adaptation Efforts. Emilie Mazzacurati and Aleka Seville from Four Twenty Seven, a consulting firm focused on climate adaptation services, presented the results of their 2015 Corporate Adaptation Report, which can be found at http://www.bcdc.ca.gov/RSLWG/2015-07-09CorporateAdaptSurveyHighlights_SLRCommittee.pdf. Presentation highlights included:

- a. Hurricane Sandy forced 60 thousand businesses to shut down during the storm, 1/3 of which never reopened. Services that were able to remain open proved to be incredibly helpful in affected communities. This event indicated a huge lack of preparedness for such a disaster.
- b. Corporate and private businesses require a quantitative risk assessment, connecting climate data to specific business activities that could be affected during a disaster.
- c. Public/Private partnerships need to be redefined.
- d. Key challenges when discussing climate change with Private Sector:
 - i. Understanding the data and relevance.
 - ii. Communicating climate change within the organization.
 - iii. Developing adaptation strategies that also address business goals.
 - iv. Limited budgets.
 - v. The viewpoint that the regulatory sector is a risk, rather than an asset.
- e. BCDC needs to take a greater role as a leader when it comes to public/private engagement on climate change issues. Understanding how the private sector views climate change will help to find common ground, using aligned goals and priorities.
- f. Private sector identified a need for guidance when dealing with climate change. 30 % of the companies surveyed lack an adaptation plan or strategy.
- g. Bay Area regional agencies have already made efforts to engage the private sector over issues such as goods movement impacts due to climate change, which has now been addressed in most major transportation plans.
 - i. Employee movement, housing and goods movement will be big areas of concern for the private sector.