

San Francisco Bay Conservation and Development Commission

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TO: Commissioners and Alternates

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SUBJECT: **Staff Report on the Findings and Preliminary Recommendations from the Commissioner Workshop Series on Rising Sea Levels**
(For Commission consideration on May 19, 2016)

Summary and Staff Recommendation

The Commission launched a monthly workshop series in January 2016 to explore issues related to rising sea level in a collaborative environment that included Commissioners, Alternates, stakeholders and other members of the public. The goals of the workshop series and the findings from the first three workshops can be found in the background section below.

In this fourth workshop, Commissioners and Alternates will discuss the findings and preliminary recommendations that have arisen from the first three workshops. Most of the preliminary recommendations originated from the priorities identified in the third workshop and the comments, recommendations, and outcomes from all the workshops. Those recommendations include:

1. Create a regional sea level rise adaptation plan that serves as a framework for implementing future actions while allowing for immediate early actions to be developed in advance of the plan;
2. Complete multi-sector, county-scale sea level rise vulnerability assessments for all nine counties using a consistent approach such as Adapting to Rising Tides;

3. Explore new institutional arrangements, such as a regional authority, to empower the regional agencies to address the impacts of climate change together;
4. Identify and facilitate the prioritization of physical interventions to reliably protect regionally significant natural and man-made assets from flooding;
5. Change existing regulations to better allow for the consideration of rising sea level impacts in permitting and decision-making;
6. Work with others to develop an educational campaign about adapting to rising sea level aimed primarily at children; use existing classroom education models (e.g., recycling expansion and anti-smoking) and collaborate with existing partners (e.g., Exploratorium) and new ones (e.g., LEAP, Alliance for Climate Education); and
7. Develop a new Commissioner Working Group on innovative financing called Financing the Future, which would consist of Commissioners, Alternates, and external stakeholders.

The objectives for the May 19 workshop are:

1. Create a robust discussion among Commissioners and Alternates that considers public input from the first three workshops;
2. Select a number of recommendations to implement, further analyze, or develop; and,
3. Refine and clarify, as necessary, the recommended actions, and provide direction to staff regarding next steps and desired outcomes.

The staff recommends that the Commission review, refine as necessary, and adopt the staff's recommendations listed at the end of this document, direct staff to modify the actions as appropriate, and present the recommendations, actions, and plans to implement them for further consideration by the Commission and the public at future 2016 Commission Workshops.

Staff Report

Background. The Commission has been actively engaged in efforts to address rising sea level for the last five years. These efforts have included the 2011 climate change amendments to the *San Francisco Bay Plan* (Bay Plan), the initial partnership with the National Oceanic and Atmospheric Administration to develop the Adapting to Rising Tides (ART) pilot project (that became the ART Program and the ART Portfolio), the Rising Sea Level Commissioner Working Group, the Bay Fill Commissioner Working Group, and the Policies for a Rising Bay project. In some cases, BCDC has addressed the issue in ways that are very traditional to the Commission, such as the Bay Plan amendments. In other cases, such as the ART Program, the Commission's approach has been innovative and creative in the way it is addressing the issues presented by rising sea levels.

The current workshop series provides the Commission, stakeholders, and other members of the public with an opportunity to reflect upon past and current efforts to address rising sea level and to determine the best approaches for BCDC to undertake going forward. Since BCDC began working in earnest on this issue five years ago, partnerships and additional efforts have developed that provide new opportunities for collaboration. Just as important, the public has learned a great deal about global climate change and there is now consensus in the Bay Area that rising sea level is both a fact and will accelerate in the near and medium-term.

BCDC's accomplishments, including instituting new permitting analyses and recommendations, advancing the science around sea level rise mapping, better understanding the risks to tidal creeks and channels, exploring the flood reduction benefits of wetlands, and developing an approach to climate change adaptation planning, also have advanced the region's overall resilience. For these reasons, now is an opportune time for the Commission to reflect on its past actions and consider how best to address rising sea level now, including determining how BCDC can most effectively increase the region's resilience.

The workshop series has been designed to assist the Commission with this work; its objectives have been to:

1. Bring issues identified by the *Rising Sea Level* and *Bay Fill Commissioner Working Groups*, the *Policies for a Rising Bay project*, the *Adapting to Rising Tides Program*, and five years of regulatory practice using the Commission's *Climate Change Bay Plan Amendments* to the full Commission and a broader range of participants;
2. Accelerate BCDC's efforts to determine the directions it should take to address more quickly the challenges resulting from rising sea level, both independently and with others;
3. Establish a series of actions in both the short- and medium-term to hasten Bay Area adaptation to rising sea level; and,
4. Engage in new or expanded coordination, collaboration, and partnership to advance adaptation locally and regionally.

Presentations, summaries, and material from each workshop are available at <http://www.bcdc.ca.gov/workshops.html>. Below is a summary of each of the workshops:

BCDC Public Workshop 1. The first workshop in the Commissioner workshop series was held on January 21 and focused on the *San Francisco Bay Plan's* 2011 Climate Change Policies. The workshop's primary objective was to review BCDC's climate change policies with Commissioners, Alternates, staff, stakeholders, and the public. The workshop began with a presentation of the climate change policies and an analysis of several recent projects to which the staff and the Commission applied the policies. After the presentation, all participants were seated together at tables to discuss and answer a series of questions designed to identify significant issues and themes related to the climate change policies. The discussion resulted in four primary issues:

1. BCDC's jurisdiction and authority;
2. the project-by-project approach that results from applying the current climate change policies to individual projects;
3. the balance of risk, innovation, and adaptive management; and,
4. the regional approach to resilience.

BCDC Public Workshop 2. The second workshop in the Commissioner workshop series continued some of the themes raised in the first workshop, primarily the regional approach to resilience and the challenges presented by the project-by-project regulatory process. The workshop, held on March 3, began with a staff presentation of regional issues, regional actions and BCDC's current approach to regional resilience, including the Adapting to Rising Tides Program. After the presentation, all participants gathered around tables and engaged in an exercise to identify the types of regional issues that need to be addressed and regional actions necessary to reduce local and regional vulnerabilities to rising sea level. The actions that were identified at the tables fell into the following categories:

1. Assessments to Perform;
2. Funding;
3. Data Gathering and Sharing;
4. Plans and Policies;
5. Education and Outreach; and,
6. Physical Solutions and Advocacy.

BCDC Workshop 3. The third workshop, held on April 7, concentrated on prioritizing the regional actions recommended by the participants at the second workshop. The workshop started with a staff presentation and included the following objectives:

1. Provide an opportunity to identify and prioritize regional actions, particularly those that BCDC could either lead or support; and,
2. Discuss how to make the actions more effective to ensure adaptation will provide multiple benefits to communities, the economy, and the environment.

After the presentation, participants were asked to vote on a broad set of regional actions presented in an open house format. Workshop participants were encouraged to revise the actions or add additional actions before voting for *three* they wanted discussed further. Participants then broke into seven groups that each discussed one of the actions that had received the most votes. At the end of the discussion period the table groups reported back on the following questions:

1. What was the action you discussed?
2. How important is it for the region to advance this action?
3. What recommendations do you have to make the action stronger?
4. Who could lead this action?
5. Does the lead have the authority and resources to implement this action?

The actions that were selected and discussed at the tables were:

1. Create a regional sea level rise adaptation plan that serves as a framework for implementing future actions while allowing for immediate early actions to be developed in advance of the plan. (20 votes)
2. Complete multi-sector, county-scale sea level rise vulnerability assessments for all 9 counties using a consistent approach such as Adapting to Rising Tides. (18 votes)
3. Explore new institutional arrangements, such as a regional authority, to empower the regional agencies to address the impacts of climate change together. (15 votes)
4. Identify and facilitate the prioritization of physical interventions to reliably protect regionally significant natural and man-made assets from flooding. (10 votes)
5. Identify and fund a regional data repository to collect and share data to guide sea level rise strategies and actions. (10 votes)
6. Develop regional regulatory system to discourage new development that is not resilient along the shoreline for those areas below estimated elevations of sea level rise. (8 votes). This action was written in to the open house by a workshop participant.
7. Change existing regulations to better allow for the consideration of sea level rise impacts in permitting and decision-making. (8 votes)

The recommendations presented below include most of the actions that were generated during the small group discussions and the group report-backs. These recommendations will be further discussed during at the fourth workshop.

Proposed Recommendations for Commission Consideration. Based on the comments, recommendations, and outcomes from the first three workshops, as well as other work that the Commission has undertaken, staff has identified five large-scale recommendations that the Commission could take to advance its works to address rising sea level, each of which contains at least two specific actions to be implemented. These recommendations are primarily based on the actions that were advanced in the third workshop, several have been modified based on other work that BCDC has conducted, and some are based on input from all three workshops.

1. Create a regional sea level rise adaptation plan that serves as a framework for implementing future actions, while allowing for immediate early actions to be developed in advance of the plan

Possible actions:

- Create a Regional Adaptation Plan (RAP) based on the Regional Transportation Plan (RTP) approach that would prioritize adaptation actions; the RAP would be led by BCDC and supported by a regional working group/steering committee
- Form and lead a regional working group/steering committee
- Participate in or lead a comprehensive discussion about, and help promote, new viable, innovative financing options for different types of projects, perhaps through implementing a new Commissioner Working Group on innovative financing called “Financing the Future,” which would consist of Commissioners, Alternates and external stakeholders
- Create a real-time measurement dashboard that includes visual depictions of the progress toward regional resilience

2. Complete multi-sector, county-scale sea level rise vulnerability assessments for all nine counties using a consistent approach such as Adapting to Rising Tides

Possible actions:

- Use existing vulnerability analyses as base information, either ART or other assessments
- Combine this action with Action #1 to build the information necessary for the success of the RAP, including adaptation actions
- Develop a financing plan to complete ART within three years

3. Explore new institutional arrangements, such as a regional authority, to empower the regional agencies to address the impacts of climate change together

Possible actions:

- Focus instead on supporting and promoting local and regional cooperation and coordination that builds upon the Regional Adaptation Plan described in (I) above
- Use the 2017 Sustainable Communities Strategy (SCS) update to further a Bay Area-wide policy discussion on adaptation and use the 2021 SCS to fully vet a regional rising sea level adaptation framework
- Work with others to develop a regional educational campaign about adapting to rising sea level aimed primarily at children; use existing classic education models (e.g., recycling expansion and anti-smoking) and collaborate with existing partners (e.g., Exploratorium) and new ones (e.g., LEAP, Alliance for Climate Education)
- Work with others to develop an education and outreach approach to educate the public about sea level rise and the regional assets at risk

4. Identify and facilitate the prioritization of physical interventions to reliably protect regionally significant natural and man-made assets from flooding

Possible actions:

- Identify the types of projects that are likely to be successful and scalable based on case studies (e.g., ART Hayward Resilience Study, ART Transportation Study, ART Oakland/Alameda Resilience Study) and/or ongoing pilot projects to help tell a compelling story
- Help build a Bay Area-wide consensus to beneficially reuse a vast majority of dredged materials to increase the viability of nature-based adaptation projects, and carry this forward to the state and federal levels
- Establish an Adaptation Review Board to provide expertise and review of applications proposing innovative green shoreline solutions
- Support the State Coastal Conservancy in initiating a Green Shoreline Infrastructure help desk that connects project proponents, local jurisdictions and BCDC and other agency staff with technical experts to help design, build, maintain and adapt green infrastructure projects and help implement the Baylands Ecosystem Goals Habitat Update around the shoreline

5. **Change existing regulations to more fully consider rising sea level impacts in permitting and decision-making**

Possible actions:

- Complete the ongoing *Policies for a Rising Bay* project, which analyzes fill policies in light of rising sea level
- Change BCDC's permit application to require information on the potential impacts of a project on its adjoining properties
- Develop a comprehensive multi-agency permit application and approval process for projects that place fill in the Bay to increase the region's resilience, starting with nature-based adaptation solutions (based on the success of the Dredged Materials Management Office (DMMO))
- Discuss possible amendments to the McAteer-Petris Act and BCDC regulations regarding the definition and use of "fill"

Staff Recommendation

The staff recommends that the Commission review, refine as necessary, and adopt the above Recommendations, direct staff to modify the actions as appropriate, and present the recommendations, actions, and plans to implement them for further consideration by the Commission and the public at future 2016 Commission Workshops.