San Francisco Bay Conservation and Development Commission
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TO: Rising Sea Level Working Group Members

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SUBJECT: March 5, 2015 Commission Rising Sea Level Working Group Meeting Summary

1. **Roll Call, Introductions and Approval of Agenda.** Rising Sea Level Working Group Chair, Zack Wasserman called the meeting to order at approximately 11:00 am. Commissioners present: Chair Wasserman, and Commissioners Doherty, Gibbs,Gioia, Pine, Sears, and Zwissler, and Leslie Alden. Chair Wasserman thanked staff for their participation in the Solano County *ART On the Road* workshop and reported there were approximately 90 people in attendance, including elected officials, staff from agencies, and members of the public. Working Group members would like future presentations to not include measurements expressed in centimeters.

2. **Approval of February 5, 2015 Working Group Meeting Summary.** The meeting summary was approved with no corrections or comments. The Working Group request that the presentation from the February 5, 2015 meeting be posted to the website and mailed to Commissioners.

3. **Infrastructure Interdependencies.** Staff presented preliminary analysis of the potential for project-by-project adaptation to create sites that are disconnected from community infrastructure and institutions when floods occur. Staff outlined how hazard impacts from earthquakes, storms and eventually rising sea level can disrupt essential services, using examples of past projects or future impacts, such as:

   a. Freeways, airports, water supplies

   b. SFO can raise levees to protect airport operations, but surrounding infrastructure (101, etc.) would be affected.

   c. Phoenix Commons project - no shoreline retrofit to address rising sea level because the shoreline should be treated as a whole.

      (1) Ground floor built to accept flooding, adaptive flood management.

      (2) Analysis included risk of sea level rise in the application and in the staff recommendation.

   d. Pete's Harbor/Blue Harbor - exemplifies issue of site-by-site versus a systemic approach.

   e. Foster City – Early 1990s levee upgrade and Shoreline Protection.

f. *Shoreline Protection Policy* (amended 2011).

(1) If site is protected with a barrier, needs to integrate with current shoreline protection measures.

g. The Commission has the ability to require that neighboring applicants adhere to same measures (site-by-site).

4. **Institutional Arrangements.** Staff and the working group discussed how agencies, organizations and individuals could contribute to the preparation and implementation of a regional adaptation strategy to address rising sea level and storms.

a. Highlights to lessons learned from the ART project. Uncertainty, complexity, and resource constraints.

(1) **Uncertainty.** We don't know how long it will take for the sea to rise and by how much:

- Lack of quality data in communities doing this work.
- Longer time horizons are hard to communicate to public.
- Other hazards (wildfires, earthquakes, droughts, etc.).

Ways to Address Uncertainty:

- Each project assessment should be based on the type of use and what the outcomes might be if no adaptation for RSL is undertaken and should employ adaptive management where feasible. BCDC should ask applicants to use the highest projected levels of sea level rise projections in their risk assessments. BCDC does not have regulations in place to require this standard, but encourages applicants to use a high number when doing their risk assessment, in line with State guidance in Safeguarding California.
- Using Total water level in risk assessments helps clarify for the public the relative risks and the importance of preparing for rising sea level.
- Scientific studies have taken a very conservative approach. Best available science can give you a point in time, meanwhile things keeps changing.
- ECRB has added coastal engineers to help bring new capacity to the Board to address rising sea level in their project reviews and advice. If an applicant does not adhere to ECRB and staff recommendations, the Commission could deny the project.
- Agencies have considerable discretion to use the best available science. Providing science based guidance documents could inform project scoping processes and help project proponents and the public determine whether modifications are needed.
- Local zoning needs to be up to speed with BCDC policies.

(2) **Complexity Examples:**

- Agreement among a wide variety of different players is necessary to make a change.
- Laws are reactive, while the issues we are facing require an adaptive approach.

Addressing Complexity:

- Multi-disciplinary approach - planning, engineering, parks, water, flooding, financing mechanisms.
- More guidance from staff to look at a region of the shoreline when addressing a major project. Linkages for future impacts. Triggers or thresholds for action.
- Delicate balance - Commission needs to be aware of jurisdictional limits, but, from and educational standpoint, can put things in a broader context. However, these two should be kept separate.

5. **Future Business.**
   a. Potential joint meeting with Bay Fill Policies Working Group.
   b. Education and Visualization.
      - Suzie Moser - storytelling presentation.
      - Visualization methods to aid in decision making and to educate, e.g., Owlized/Auto Desk, Google, Occulus, etc.
      - Try and get in the audience people interested in this topic.
      - Case studies of previous projects and the visualizations used to address RSL.
   c. Briefing on Bay Restoration Authority.
   d. Keep working group apprised of conversations with MTC and ABAG.
   e. Climate justice - Disadvantaged communities impacted by SLR.
   f. NASA - flights during king tides.
   g. Bay Area Council flood report - what would be the economic effects if we had a 150 year storm today.