

# SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION

50 California Street • Suite 2600 • San Francisco, California 94111 • (415) 352-3600 • Fax: (415) 352-3606 • www.bcdc.ca.gov

December 10, 2010

**TO:** Commissioners and Alternates

**FROM:** Will Travis, Executive Director (415/352-3653 travis@bcdc.ca.gov)  
Joseph LaClair, Chief Planner (415/352-3656 joel@bcdc.ca.gov)

**SUBJECT: Staff Report on Policy Alternatives for Bay Plan Amendment No. 1-08  
Concerning Climate Change**  
(For Commission consideration on December 16, 2010)

## Summary and Recommendation

This staff report summarizes a range of possible approaches for addressing comments and issues raised during the public hearings on Bay Plan amendment No. 1-08 regarding climate change. Because the public comment period on the proposed amendments has been extended until December 17, 2010, it is premature for the Commission to make final decisions on any of the possible approaches. Instead, the staff recommends that the Commission consider the alternatives and provide the staff with general advice for dealing with the alternate approaches.

## Staff Report

**Background.** The staff released its third preliminary recommendation for Bay Plan Amendment No. 1-08 regarding climate change on September 3, 2010. The Commission held six public hearings on the staff's recommendation and closed the public hearing on December 2, 2010, but extended the hearing for the submission of written comments until December 17, 2010. Thus far during the public comment period, the Commission has received over 1,000 letters and over 75 speakers have addressed the Commission with their comments on staff's proposal. A few similar approaches for addressing some of the public's concerns are emerging in a number of the comments received. The staff believes it would be beneficial for the Commission to consider and discuss some of these possible approaches to determine whether there is general consensus on the Commission in favor of one approach over another.

**Risk Assessments.** Climate change policy #1 in the staff's third preliminary recommendation calls for the preparation of risk assessments for planning shoreline area and designing larger projects within the Commission's permit jurisdiction.

**Language in September 3, 2010 Staff Recommendation.** *When planning shoreline areas or designing larger shoreline projects, a risk assessment should be prepared, based on the estimated 100-year flood elevations that take future sea level rise into account. A range of sea level rise projections*



Making San Francisco Bay Better

for mid-century and end of century, including at least one high estimate that is based on the best science-based projections currently available, should be used in the risk assessment.

### **Possible Alternative Approaches**

1. The policy direction in the language could be retained, with any appropriate language modifications.
2. The language could be refined and narrowed so that it would apply only to certain types of large projects.
3. The language could be eliminated so that a risk assessment is not required.

**Regional Strategy.** Climate change policy #5 in the staff's third preliminary recommendation calls for the preparation of a regional adaptation strategy to address sea level rise.

**Language in September 3, 2010 Staff Recommendation.** *The Commission, in collaboration with the Joint Policy Committee, other regional, state and federal agencies, local governments, and the general public, should formulate a regional sea level rise adaptation strategy for protecting critical developed shoreline areas and natural ecosystems, enhancing the resilience of Bay and shoreline systems and increasing their adaptive capacity. The strategy should incorporate an adaptive management approach, be updated regularly to reflect changing conditions and information, and include maps of shoreline areas that are vulnerable to flooding based on projections of future sea level rise and shoreline flooding. The maps should be prepared and regularly updated in consultation with government agencies with authority over flood protection.*

*The regional strategy should determine where existing development should be protected and infill development encouraged, where new development should be permitted, where existing development should eventually be removed to allow the Bay to migrate inland.*

*The goals of the strategy should be to:*

- a. *advance regional public safety and prosperity by protecting most existing shoreline development, especially development that provides regionally significant benefits and by protecting infrastructure that is critical to public health or the region's economy, such as airports, ports, regional transportation, wastewater treatment facilities, major parks, recreational areas and trails;*
- b. *enhance the Bay ecosystem (e.g., Bay habitats, fish, wildlife and other aquatic organisms) by identifying both developed and undeveloped areas where tidal wetlands and tidal flats can migrate landward; assuring adequate volumes of sediment for marsh accretion; identifying priority conservation areas that should be considered for acquisition, preservation or enhancement; developing and planning for flood protection; and maintaining sufficient transitional habitat and upland buffer areas around tidal wetlands;*
- c. *integrate the protection of existing and future shoreline development with the enhancement of the Bay ecosystem, such as by using feasible shoreline protection measures that incorporate natural Bay habitat for flood control and erosion prevention;*
- d. *encourage innovative approaches to sea level rise adaptation;*
- e. *identify a framework for integrating the adaptation responses of multiple government agencies;*
- f. *integrate regional mitigation measures designed to reduce greenhouse gas emissions with regional adaptation measures designed to address the unavoidable impacts of climate change;*
- g. *advance regional sustainability, encourage infill development and job creation, and provide*

- diverse housing served by transit;*
- h. address any existing contamination and the implications of the contamination on water quality;*
  - i. support research that provides information useful for planning and policy development on the impacts of climate change on the Bay, particularly those related to shoreline flooding;*
  - j. identify actions to prepare and implement the strategy, including any needed changes in law; and*
  - k. identify mechanisms to provide information, tools, and financial resources so local governments can integrate regional climate change adaptation planning into local community design processes.*

#### **Possible Alternative Approaches**

1. The policy direction in the language could be retained to call for a regional strategy that would meet the goals recommended by the staff, with any appropriate language modifications.
2. The language could be refined to call for a regional strategy without identifying the goals of the strategy.
3. The language could be eliminated so that a regional strategy is not recommended.

**Interim Development Policy.** Climate change policy #6 in the staff's third preliminary recommendation proposes that development in low-lying areas within the Commission's jurisdiction be limited to a broad list of project types.

**Language in September 3, 2010 Staff Recommendation.** *Until a regional sea level rise adaptation strategy can be completed, when planning or regulating new development in areas vulnerable to future shoreline flooding, new projects should be limited to:*

- a. minor repairs of existing facilities or small projects that do not increase risks to public safety;*
- b. transportation facilities, public utilities or other critical infrastructure that is necessary for the continued viability of existing development;*
- c. infill development within existing urbanized areas that contain development and infrastructure of such high value that the areas will likely be protected whether or not the infill takes place;*
- d. redevelopment that will remediate existing environmental degradation or contamination, particularly on closed military bases, if the redevelopment will (1) provide significant regional benefits and meet regional goals by concentrating employment or housing near adequate transit service sufficient to serve the project, and (2) include the following elements: (i) an adaptation strategy for dealing with rising sea level and shoreline flooding with definitive goals and an adaptive management plan for addressing key uncertainties for the life of the project; (ii) measures that will achieve resilience and sustainability in all elements of the project; (iii) a permanent financial strategy that will guarantee the general public will not be burdened with the cost of protecting the project from any sea level rise or storm damage in the future; or;*
- e. projects or uses that are interim or temporary in nature where the use or structures: (1) can be easily removed or relocated to higher ground; (2) can be amortized within a period before removal or relocation of the proposed use is required; and (3) will not require shoreline protection during the life of the project.*
- f. public parks, natural resource restoration or environmental enhancement projects.*

#### **Possible Alternative Approaches**

1. The policy direction in the language could be retained to limit development to the types of projects identified, with any appropriate language modifications.

2. The language could be revised to call for a case-by-case evaluation of each proposed project based on a set of criteria, with a list of the types of projects that would be acceptable.
3. The language could be revised to call for a case-by-case evaluation of each proposed project based on a set of criteria, but without any list of the types of projects that would be acceptable.
4. The language could be deleted so there would be no additional criteria for evaluating proposed projects in areas vulnerable to flooding.