San Francisco Bay Conservation and Development Commission
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TO: Bay Fill Policies Working Group Members

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SUBJECT: February 18, 2016 Commission Bay Fill Policies Working Group Meeting Summary

1. **Roll Call, Introductions and Approval of Agenda.** Working Group Chair, Barry Nelson called the meeting to order. Working Group members in attendance included Commissioners Jim McGrath, Sean Randolph, and Katerina Galacatos. Also in attendance: Vice Chair Anne Halsted, Anne Morkill (US Fish and Wildlife Service, Megan Marriott (US Fish and Wildlife Services), Arthur Feinstein (Citizen's Committee to Complete the Refuge), and Jack Fischetti (Bay Planning Coalition).

2. **Approval of Working Group Summary from the February 18 meeting.** The summary was approved with no corrections.

3. **San Francisco Bay Plan Policies Regarding Minor Amounts of Fill for Habitat Purposes.** Megan Marriott of the US Fish and Wildlife Service (USFWS) presented the Sonoma Creek Marsh Restoration Project and discussed the Refuge's rationale for the project, the permitting process and how the project is proceeding. The project purpose was to address the mosquito issues resulting from poor drainage, lack of hydraulic connections and low elevation of the marsh throughout the site. As part of the project, a channel would be dredged through the marsh and the sediment would be used to create a 25-acre transition zone from the adjacent levee at the back of the site to the existing marsh. During the application process, BCDC staff worked with the Refuge staff, and an agreement was reached to reduce the size of the transition zone to 10-acres, with additional high tide refugia being created through "marsh mounds' throughout other areas of the site. The remaining sediment that was dredged to create a channel through the site was used for levee maintenance on the back of the site. The result of negotiations was that the project was recommended for and approved as consistent with the Bay policies, and that the project specifically met the "minor fill" for the creation of habitat test. The project proceeded as authorized and has been complete, however, according to Meg, the Refuge managers believe the project as originally proposed.

Arthur Feinstein of the Citizen's Committee to Complete the Refuge, presented a conceptual design to create a barrier beach and lagoon system at Hunter's Point. His initial remarks included the need for ambition and foresight to implement new and different types of projects and strategies in the face of seal level rise. However, he cautioned against allowing fill

for development, as well as opening policies up to allow types of filling not related to habitat restoration or enhancement, as that could lead to harmful ecological effects.

The concept presented included using coarse grain sediments and woody debris to create a lagoon system along 20 acres of a south facing shoreline that would support aquatic vegation, and allow for natural flushing of the lagoon with tidal cycles. Over time the physical processes of wave action, tides and currents would rework the sediments and woody debris to move ashore and create a natural beach system. The site chose for the project met the physical conditions, as well has had a historic beach.

The contaminant clean up and development agreements in the area require Lennar Corporation to spend 2 million dollars to create 44-acres of wildlife habitat at Hunters Point. This funding could support a project such as the one presented, but it would be likely 10 -15 years before the project would come before the Commission.

Discussion highlights and questions from the project updates include:

a. Transition zones are the least available habitat and the most adaptable to sea level rise.
b. Consider the idea of putting berms adjacent to shorelines to reduce wave fetch and protect shorelines that would otherwise require fill.
c. The physical processes that have been interrupted from tributaries would have provided natural deltas. If sediment is added to the system, it should mimic these natural processes.
d. How do we handle the temporal trade off of existing habitats for adaption purposes in the future? May need a more gradual way of providing the sediments over time rather than build it all at once.
e. Is it an artificial distinction to allow fill in a restoration project before it is breached, but not allow it once it is breached if the elevations on site are low and in need of sediment?
f. The need to distinguish/interpret the Commission's fill policies to explain the project tradeoffs between "minimum amount of fill necessary" and "minor fill".
g. Because transition zone projects are fairly new, the amount of fill necessary to ensure the success of a project is not known. What are the biological metrics we can start using to figure out how much fill should be approved based on project goals, and is it useful to start replacing some of the legal metrics in the Commission's policies with those biological metrics? i.e. what does 30,000 cubic yards actually mean on an individual project basis? Having a hard line number in the policy makes it difficult to complete the analysis to approve the appropriate amount of fill to ensure project success.
h. Should "hard fill" be viewed differently than "soft fill"? Soft fill allows natural processes to occur, as opposed to hard fill, which may cause reflective energy effects, and create other barriers to physical or biological processes.
i. The Commission should consider changing its policies to allow a more gradual fill process. The end point of a project should allow final grading of a transition zone to be completed by tides and natural processes that were once present.

j. Changing Bay Plan policies is a great deal of work, so it would be more beneficial to focus on the larger questions, such as “what is minor fill?”, “is 30,000-cubic yards a reasonable hard line number to have in our fill policies?”, and “should we create different categories for fill projects?”, which will allow the Commission to approve different amount of fill based on the benefits of the project.

k. The issue of minor amount of fill/fill for habitat purposes needs careful consideration and is no small issue to tackle.

l. Having criteria that is based on biological metrics would be more effective than metrics based on legal requirements.

The Commissioners asked Ann Morkill, Refuge Manager what the biggest challenges the refuge is facing now? She stated that long term, the goal is to restore the baylands to marsh, but they are constrained on the land side by levees and development, which requires flood protection. The purpose of the refuge is to restore the baylands to a natural state, but resources to do so are very constrained. Regarding managed ponds, the Refuge does not have the resources to maintain them as ponds. Marshes are cheaper to maintain as they generally don’t have water control structures, etc. that require maintenance.