

DATE: March 7, 2014

TO: Bolinas Lagoon Advisory Council and Interested Parties

FROM: James Raives, Senior Open Space Planner

RE: Conclusions and Recommendations of the Bolinas Lagoon Restoration Project Design Review Group (DRG)

The San Francisco Bay Joint Venture sponsored a panel of scientific experts to evaluate the recommendations of the 2008 *Bolinas Lagoon Restoration Project, Recommendations for Restoration and Management* (also known as the Locally Preferred Plan (LPP)). Marin County Parks hired one of the participants, Dr. Peter Baye, to draft a summary of the meeting. Although the panel confirmed that the LPP remains the guiding document for restoration planning purposes, it identified evolving scientific issues that affect project designs and priorities. The discussion below describes DRG's primary recommendations and conclusions.

The important new perspectives that emerged from the meeting are as follows:

- Accelerated sea level rise replaces previous concerns over the loss of tidal prism as the overriding impact to the lagoon's ecosystem structure and function.
- In the context of sea level rise, sediment can be an important asset to the lagoon.
- Accommodation room for the lagoon to migrate inland as sea level rises is necessary for the long-term health and stability of Bolinas Lagoon.
- Bolinas Lagoon's barrier spit and tidal inlet are essential components of its evolution and response to sea level rise.

The DRG also made the following general recommendations:

- Revised conceptual models of Bolinas Lagoon should be developed to guide ecosystem planning, project prioritization, public education, and project re-evaluation.
- Planning for various sea level rise and storm surge scenarios should be incorporated into the restoration project.
- Armoring is a liability for lagoon resilience and adaptation to rising sea level.

Finally, the DRG made the following project and area specific recommendations:

- There was consensus that maintaining the channelization of Pine Gulch Creek was detrimental to the long-term evolution of the lagoon.
- The Pine Gulch Creek delta and its floodplain are essential for the future rising lagoon edges and may provide area for habitat to shift and evolve as sea levels rise.
- There was no consensus about whether the Pine Gulch Creek delta is a liability to the lagoon's resilience to sea level rise.
- The Lewis and Wilkins Gulches (the area known as the "Y") is another highly important zone for lagoon accommodation space, tidal marsh and floodplain migration, and sediment management opportunities in response to sea level rise.
- The drainages of the eastern shore of Bolinas Lagoon are also important to accommodate the lagoon's inland migration.
- The DRG noted that Marin County and the Golden Gate National Recreation Area are evaluating potential alternatives to address flooding along Easkoot Creek through a separate process.