

California Marine Life Protection Act Initiative

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**To: John Laird, Secretary, California Natural Resources Agency
Charlton Bonham, Director, California Department of Fish and Game
Michael Mantell, Managing Partner, Resources Legacy Fund Foundation**

From: Ken Wiseman, Executive Director, Marine Life Protection Act Initiative

Date: October 3, 2011

Re: Options for Implementing the Marine Life Protection Act in the San Francisco Bay Study Region

Overview

The San Francisco Bay Study Region (SFSR) is the fifth and final study region in which planning might be conducted to redesign the state's marine protected areas consistent with the California Marine Life Protection Act (MLPA). Preparing an options report is consistent with the memorandum of understanding your three organizations initiated to govern the MLPA Initiative; this report was commissioned by the MLPA Blue Ribbon Task Force (BRTF) and prepared by MLPA Initiative contractors.

The attached options report identifies a range of options for how, if at all, to approach MLPA planning in the SFSR. The report provides background information on the unique setting of the SFSR, identifies existing bay projects, and considers lessons learned from previous MLPA planning processes. Also attached is a projected budget and budget narrative for the various options, and responses to scientific questions related to the SFSR and the potential role of MPAs.

Options for Consideration

The options report presents six process design options that can be approached individually or as a series of steps, beginning at Option Zero (no process) and moving toward Option Five (comprehensive MLPA Initiative-type planning process). Some options, but not all, include the development of MPA proposals; those that do not include an MPA planning component call for information collection and data analysis, which lays a foundation for potential future MPA planning.

Each suggested option includes a description, rationale, how options differ from existing San Francisco Bay planning efforts, and key considerations. Each option is based on a basic process design, which includes who might conduct the work, and staff and tools that would be helpful or necessary to support the process. The included options are:

- **Option Zero: No Process and No Change to Existing MPAs**
- **Option One: Collect and Compile Existing Information** – To provide a foundation for a future regional MPA planning process. Information would be compiled and publicly accessible.

- **Option Two: Analyze Existing Information and Enhance Communication** – Synthesizing the collected information and revising MLPA science guidelines to reflect the unique setting of the SFSR.
- **Option Three: Conduct MPA Planning Process with Self-Organized Groups** – MPA Planning and proposal development without MLPA Initiative-type staff support.
- **Option Four: Conduct MPA Planning Process that Integrates Elements of Existing Processes and Programs** – Traditional MLPA Initiative framework (including a regional stakeholder group) that incorporates key elements of and groups involved with existing San Francisco Bay planning processes.
- **Option Five: Conduct MLPA Initiative-type MPA Planning Process** – an MLPA Initiative-type planning process including developing new information socioeconomic impacts of MPA proposals to inform the process.

Projected Budget

The projected budget for each option is based on the budgets from previous MLPA Initiative study regions. Option 5 calls for the most comprehensive MPA planning process and thus would require the highest level of resources and budget. A detailed budget for each option and narrative is attached.

Option	Projected Budget
Option 0	0
Option 1	\$126,000
Option 2	\$581,000
Option 3	\$2,261,000
Option 4	\$2,926,000
Option 5	\$3,367,000

MPA Science for the SFSR

The MLPA Initiative convened a work group composed of MLPA Master Plan Science Advisory Team members and scientists with expertise in the San Francisco Bay. The responses to the science questions developed by the work group complements the Options Report and addresses six elements:

1. **SFSR Boundaries.** The current boundaries of the SFSR are defined in the MLPA Master Plan as San Francisco Bay between the Carquinez Bridge and the Golden Gate Bridge (including the south bay), below mean high tide. These boundaries were largely determined by management considerations, and not necessarily ecological aspects, such as, tidal influence, salinity, and biological communities that should also be considered.
2. **Preliminary List of Key and Unique Habitats.** The work group identified eight potential 'key' habitats to target for inclusion in MPAs, including: sandy beach, rocky shore, soft bottom, subtidal habitat, rock subtidal, shellfish bed, seagrass bed, tidal

marsh, and tidal flats; and three habitat categories that warrant further consideration, macroalgal beds, hypersaline ponds, and artificial structures.

- 3. Meeting MLPA Ecosystem Goals.** MPAs are an important tool that may supplement existing management efforts. MPAs may:
- Add an umbrella of permanency and consistency to existing regulations and unifying management efforts pursued by numerous agencies and municipalities;
 - Ameliorate cumulative impacts of multiple stressors, by restricting extractive activities in sensitive areas;
 - Provide an effective framework for focusing on conservation of bay-wide biodiversity, the health of ecosystems, and the interactions within and between ecosystems through the protection of habitats and biological communities;
 - Provide an important avenue for communication and outreach about ecosystem health and threats in the bay; and
 - Provide incentives for preservation of ecosystem services, including the role of tidal marshes in buffering shorelines against sea level rise.

Thus, MPAs in the SFSR are likely to achieve the goals of the MLPA and contribute valuably to the statewide network, but need to be carefully coordinated with numerous existing planning, management, and restoration efforts.

- 4. Contribution to Statewide Network of Including San Francisco Bay.** San Francisco Bay supports a wide array of estuarine, marine, and anadromous species at various points in their life cycle. A variety of commercially and recreationally harvested species that are commonly associated with the open coast, use habitats within the bay as nursery or breeding habitats, including Pacific herring, California halibut, starry flounder and other flatfishes, salmon, and Dungeness crab.
- 5. Applying Existing MPA Design Guidelines to the SFSR.** Four MPA design guidelines were used throughout the MLPA Initiative planning process in the previous open coast study regions: 1) habitat representation, 2) habitat replication, 3) MPA size, and 4) MPA (habitat) spacing. The work group describes each one and how it could be applied or modified to reflect the unique aspects of the SFSR.
- 6. Key Species Likely to Benefit from MPAs.** MPAs may provide direct benefits to estuarine species that spend a significant amount of their life cycle in the bay and are fished commercially or recreationally or subject to other human disturbance (i.e. dredging or construction). MPAs may offer only indirect benefits to organisms that only use the bay for part of their life cycle and are not vulnerable to fishing or other extractive activities (i.e. juvenile Dungeness crab).

Moving Forward

Thank you for the opportunity to offer these suggestions for ways in which an MPA planning process could be approached in San Francisco Bay. We stand ready to assist in whatever way would be most helpful.