



MLPA Initiative, Blue Ribbon Task Force
c/o California Resources Agency
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

December 6, 2007

Re: Requested Comment on Provisional North Central Coast Regional Goals & Objectives in respect of MPA Monitoring

Dear Hon. Mayor Golding and Blue Ribbon Task Force Members:

At the November 19-20, 2007 meeting in San Rafael, I was asked by the Blue Ribbon Task Force to review and provide comments on the Provisional North Central Coast Regional Goals and Objectives, as adopted by the North Central Coast Regional Stakeholder Group on October 16, 2007, in respect of monitoring of MPAs. This document is respectfully submitted in response to that request, on behalf of the Marine Protected Areas Monitoring Enterprise.

As the Blue Ribbon Task Force is well aware, the Marine Life Protection Act requires monitoring to facilitate adaptive management of MPAs and ensure they meet their stated goals [Section 2853 (c)(3)]. A critical step in the development of monitoring and evaluation programs for MPAs and network components, as discussed in the MLPA Master Plan for MPAs, is identifying regional goals and objectives. Thus the provisional North Central Coast goals and objectives are an important step towards subsequent development of effective monitoring, as they provide, in general terms, broad performance targets against which the regional MPAs can be assessed¹.

For the purposes of monitoring, one of the most important factors is the availability of MPAs which are as protected as possible from human disturbance, including all forms of fishing and, to the extent possible, pollution and other disturbances. The very highly protected marine reserves provide the best opportunities to understand ecosystem structure, function, and trends in a comparatively undisturbed state, and the means to evaluate less highly protected sites.

Ideally, from a monitoring perspective, these very highly protected sites – “marine reserves”, in California terminology – would be distributed across representative habitats, depth ranges and biogeographic regions, and designed to meet scientific guidelines for size and placement. These very highly protected marine reserves would then be used to evaluate the performance of sites that are less highly protected – State Marine Conservation Areas, or SMCAs, for example. Given that there is far more scientific uncertainty on the benefits of partially protected conservation areas, coupling these areas with nearby marine reserves is critical to evaluating their effectiveness at meeting the goals of the MLPA. Without adequate very highly protected marine reserves, it will be difficult or impossible to evaluate the effectiveness of less highly protected sites, or to measure the ecosystem impacts of different types of fishing, or to separate the impacts of different human-caused and natural changes to ecosystems.

¹ Monitoring will of course require development of a feasible and efficient set of specific indicators to assess progress against the goals and objectives.

Ideally, from a monitoring and measurement standpoint, as different MPA array options are considered for the North Central Coast, care will be taken to ensure adequate very highly protected MPAs are established, and that, to the extent possible, the regional array is designed to facilitate testing of the effectiveness of different management measures and to answer other pressing questions. For example, it is clearly of interest to many stakeholders to assess the extent to which MPAs allowing different kinds of fishing are effective in meeting MPA goals and objectives. Different possible regional MPA array configurations will be more or less likely to facilitate answering this question. For example, if nearly all deep water MPAs are SMCAs that allow fishing for pelagic species, there is no way to evaluate if these conservation areas provide substantially less protection than marine reserves; adequate deep water marine reserves would be required for comparison. In contrast, a regional array designed with the appropriate combination of marine reserves and less highly protected sites would be very helpful in evaluating the comparative effectiveness of the different protection levels.

These considerations could be reflected in the design considerations for the North Central Coast MPA array. This could be framed as general guidance, such as:

“To the extent possible, optimize the design of the MPA array to facilitate answering of management questions identified as high priorities, such as the comparative effectiveness of MPAs with different protection levels in meeting regional goals.”

This could of course be made more specific, if desired, such as by stating explicitly that the MPA array should be optimized to evaluate the effectiveness of “very high”, “high” and “moderate high” protection levels in meeting goals and objectives.

Alternatively, the design guidance could be more specific about how this optimization might be achieved, as follows:

“To the extent possible, ensure MPAs of different protection levels are located in similar habitats and depths, adjacent or in otherwise comparable locations, to marine life reserves, in order to best evaluate the effectiveness of different protection levels in meeting regional goals.”

Again, this could be tailored to be more specific, depending on the agreed priorities of the arrays and the management options or protections levels to be evaluated.

Finally, in response to the specific proposal by the Regional Stakeholder Group that objective 2 (“Include areas with diverse habitat types in close proximity to each other”) under Goal 1 (“To protect the natural diversity and abundance of marine life, and the structure, function, and integrity of marine ecosystems”) be moved to design considerations, this too offers an opportunity for testing through MPA array design and monitoring. It is commonly suggested that protecting areas of diverse habitat types in close proximity to one another not only can increase MPA efficiency, but can also be important in protecting ontogenetic (developmental) and other ecological linkages among habitat types, as, for example, organisms move among habitat types at different stages of their life cycles.

I hope these comments are helpful and would be happy to provide additional information if requested.

Yours truly,



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