California Marine Life Protection Act Initiative
What is a "Network" of MPAs?
June 22, 2007

The Legislature found that there was a need to reexamine and redesign California's system of MPAs to increase its effectiveness at protecting the state's marine life, habitat, and ecosystems. The MLPA specifically provides for the protection of ecosystems and ecosystem functions through the use of a statewide system of MPAs.

The following text is excerpted directly from the *California Marine Life Protection Act Master Plan for Marine Protected Areas* (April 2007) and is intended to provide a quick reference to the definition of and guidance when considering a statewide "network" of marine protected areas. Additionally, the MLPA Master Plan Science Advisory Team provided guidance on MPA network design. This guidance can also be found in the master plan.

MPA Networks

One of the goals of the Marine Life Protection Program calls for improving and managing the state's MPAs as a network, to the extent possible. Although neither statute nor legislative history defines "network," the ordinary dictionary usage contemplates *interconnectedness* as a characteristic of the term. The first finding of the MLPA highlights the fact that California's MPAs "were established on a piecemeal basis rather than according to a coherent plan" [Fish and Game Code Section 2851(a)]. The term "reserve network" has been defined as a group of reserves which is designed to meet objectives that single reserves cannot achieve on their own (Roberts and Hawkins, 2000[1]). In general this definition may infer some direct or indirect connection of MPAs through the dispersal of adult, juvenile, and/or larval organisms or other biological interactions. In most cases, larval and juvenile dispersal rates are not known and oceanography or ocean current patterns may be combined with larval biology to help determine connectivity.

Portions of the overall network will likely differ in each region of the state. The MLPA also requires that the network as a whole meet the various goals and guidelines set forth by the law and contemplates the adaptive management of that network [Fish and Game Code Section 2857(c)(5)]. In order to meet those goals a strict interpretation of an ecological network across the entire state, based on biological connectivity, may not be possible.

As stated above, the MLPA also requires that MPAs be managed as a network, to the extent possible. This implies a coordinated system of MPAs. MPAs might be linked through biological function as in the case of adult and juvenile movement or larval transport. MPAs managed as a network might also be linked by administrative function. The important aspects of this interpretation are that MPAs are linked by common goals and a comprehensive management and monitoring plan, and that they protect areas with a wide variety of representative habitat as required by the MLPA. MPAs should be based on the same guiding principles, design criteria, and processes for implementation. In this case, a statewide network could be one that

[1] Roberts, C.M. and J.P Hawkins. 2000. Fully-protected marine reserves: a guide. WWF Endangered Seas Campaign. Washington, DC and Environment Department, University of York, York YO10 5DD, UK.

has connections through design, funding, process, and management. At a minimum, the master plan should insure that the statewide network of MPAs reflects a consistent approach to design, funding and management. The desired outcome would include components of both biological connectivity and administrative function to the extent each are practicable and supported by available science.

Because of the long-term approach of the MLPA Initiative, the statewide network of MPAs called for by the MLPA will be developed in phases, region by region. Within each region, components of the statewide network will be designed consistent with the MLPA and with regional goals and objectives. Each component ultimately will be presented as a series of options, developed in a regional process involving a regional stakeholder group and a sub-group of the science team. Each will include a preferred alternative identified by the Department and delivered to the Commission. Another application of phasing may be an incremental implementation of a portion of the statewide MPA network within a single region. This type of phasing could allow for the completion of baseline surveys or the time necessary to secure additional funding for enforcement and management. Final proposals should include an explanation of the timing of implementation.