



California Marine Life Protection Act Initiative

c/o California Resources Agency
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

Methodology for Staff Evaluation of MLPA Goal 3 and SAT Evaluation of Replication in Proposed Central Coast MPA Packages *March 7, 2006*

Staff Evaluation of MLPA Goal 3 in Proposed Central Coast MPA Packages

Goal 3 of the Marine Life Protection Act (MLPA) is:

“To improve recreational, educational, and study opportunities provided by marine ecosystems that are subject to minimal human disturbance, and to manage these uses in a manner consistent with protecting biodiversity.”

MLPA Initiative staff and the Master Plan Science Advisory Team (SAT) central coast evaluation sub-team used some simple metrics to evaluate how well the proposed central coast MPA packages address goal 3 of the MLPA.

The MLPA Initiative staff evaluation of recreational opportunities focused on accessibility of different types of MPAs to the public, specifically:

- *Distance of proposed MPAs from population centers.* The number of MPAs within 0-15 and 15-50 miles of a population center (Santa Cruz, Monterey, San Luis Obispo or Santa Maria) was determined for each package.
- *Distance of proposed MPAs from major ports.* The number of MPAs within 0-5, 5-15, and 15-50 miles of a port or harbor (Santa Cruz, Moss Landing, Monterey, Morro Bay or Port San Luis) was determined for each package. The 0-5mi distance reflects potential use of MPAs by users with small craft.
- *Stakeholder input.* Input from the regional stakeholders at the Central Coast Regional Stakeholders Group meetings, as well as the proponents' rationales provided with packages, provided qualitative information on how packages and specific MPAs meet different user group needs.

The MLPA Initiative staff and SAT evaluation of educational and study opportunities focused on:

- *A SAT evaluation of replication of habitats within the study region.* The number of proposed MPAs (high protection MPAs and all MPAs) that contain each habitat was determined relative to the MLPA Master Plan Framework guidelines for replication
- *Staff evaluation of replication of habitats in SMRs.* In addition, the MLPA requires replication of all habitats in state marine reserves (SMRs) across the biogeographical

region [Fish and Game Code, Section 2857 (c)(3)]; the contribution of the central coast MPAs toward that biogeographical requirement was also evaluated.

- *Distance of proposed MPAs from major marine research institutions.* The number of MPAs within 0-15 and 15-50 miles of the University of California, Santa Cruz Long Marine Lab; Monterey Bay Aquarium Research Institute; Hopkins Marine Station; or California Polytechnic University, San Luis Obispo was determined for each package.
- *Number of established marine research monitoring sites.* The number of sites monitored by Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO), Cooperative Research and Assessment of Near-shore Ecosystems (CRANE), and Multi-Agency Rocky Intertidal Network (MARINE) within MPAs was calculated for each package.

Recreational Opportunities

Goal 3 describes recreational opportunities in “*ecosystems that are subject to minimal human disturbance*” which we chose to interpret as SMRs and high protection SMCAs; these designations of MPAs are often preferable to many non-consumptive users (such as non-consumptive divers, photographers, wildlife viewers, kayakers, etc.). However, it should be noted that for consumptive uses (recreational fishing, including shore-fishing, skiff/kayak fishing, spear-fishing, and commercial party boats), users likely prefer accessible MPAs that allow recreational fishing (state marine parks [SMPs] and many SMCAs) and are considered to offer moderate to low protection. There was also recognition by the Central Coast Regional Stakeholder Group (CCRSG) members that MPAs which restrict fishing may enhance recreational opportunities inside those MPAs for those who like to see large fish, as well as potentially benefiting recreational opportunities in adjacent open areas by providing better fishing through spillover of targeted species.

For recreational opportunities, the issues are not so much overall numbers of accessible MPAs, rather than the types of activities allowed in specific popular sites, such as the Monterey waterfront and Carmel Bay that are highly valued by many different consumptive and non-consumptive user groups.

Educational and study opportunities

The MLPA requires replication of all habitats in SMRs in each biogeographical region (the central coast is included in the Point Conception to Oregon border biogeographical region). Submarine canyon habitat is rare in state waters; the central coast has the vast majority (around 90%) of this habitat in the biogeographical region, and therefore could more easily contribute towards replication of this habitat than other study regions to the north.

Educational and study opportunities are improved by the presence of MPAs near research institutions and MPAs that include established monitoring sites.

SAT Evaluation of Replication of Habitats in Proposed Central Coast MPA Packages

The same criteria for habitat representation were used for this analysis as for the size and spacing analysis for most habitats. The exceptions were for kelp beds and submarine canyons. An MPA with any persistent kelp bed (kelp present in three of four years), no matter how small, was considered to have kelp habitat. Likewise, an MPA with any amount of canyon habitat, no matter how small, was considered to have that canyon type.

The evaluation of replication was conducted using four different groupings of MPAs: (1) state marine reserves (SMR), (2) those with high levels of protection (SMR and SMCA High), (3) those with low levels of protection (SMP-low, SMCA Moderate and SMCA Low), and (4) all MPAs together. Habitats were considered adequately replicated with a minimum of three replicate MPAs.

It should be noted that some MPAs have very small amounts of some habitats (ca. 0.5 sq. mi) but were counted in totals as being equal to MPAs with much larger areas of protected habitat. Also, some MPAs are listed as not having a particular habitat type but that might be found – with higher resolution data sets - to contain it. Significant differences among packages will more likely be found in the areas of habitat protected, and in the localities protected, rather than in number of protective MPAs defined in the fashion allowed by current habitat data.