

California MLPA Master Plan Science Advisory Team
Initial Science Questions to Consider for the
MLPA South Coast Study Region
Revised May 29, 2008

This list of initial science questions to consider for the MLPA South Coast Study Region were developed by MLPA Initiative staff and first reviewed by the MLPA Master Plan Science Advisory Team (SAT) at its April 3, 2008 meeting; additional questions were subsequently added during public comment and by staff following that meeting. These questions have undergone revisions through discussions with a SAT work group and staff. This list of initial science questions is intended to begin developing science guidance for the MLPA South Coast Study Region. These questions are not a comprehensive or final set of science questions for the MLPA South Coast Study Region.

1. How will islands in the MLPA South Coast Study Region fit into size and spacing guidelines and habitat representation?
2. What are the biogeographically relevant (species distribution breaks, ecosystems, geology, oceanography, etc) subregions in the MLPA South Coast Study Region?
 - a. Are the Channel Islands a separate biogeographic subregion and are there any further subdivisions within the Channel Islands?
3. Review the *California MLPA Master Plan for MPAs* list of species likely to benefit from MPAs and develop a list of species “likely” and “most likely” to benefit from MPAs specific to the south coast.
4. What key or unique habitats exist in the MLPA South Coast Study Region? Are there any gaps in habitat distribution that will affect size/spacing analysis?
5. How could water and sediment quality affect MPAs or the local ecosystem associated with MPAs?
 - a. How could these be considered in MPA planning or in an evaluation of MPA proposals?
6. How does habitat quality impact the effectiveness of MPAs in meeting the goals of the MLPA, particularly those habitats that may be anthropogenically influenced?
 - a. How could habitat quality be evaluated or considered in MPA planning?
7. Do artificial reefs or oil platforms provide habitat that contributes to the goals of the MLPA?
 - a. Is there adequate science to determine if and how these structures affect the local ecosystem in terms of habitat consideration or quality?
 - b. How could the regional stakeholder group consider these facilities when developing MPA proposals?
 - c. How would the SAT evaluate proposals that include these structures within an MPA?
8. What are the mariculture activities in the MLPA South Coast Study Region and what level of protection would they be assigned?
9. How do power plant, alternate energy issues (wave farms, tidal energy, or wind farms), or desalination plants affect the local ecosystem and, if habitat quality is impacted, how could the RSG consider these?
 - a. How would the SAT evaluate proposals including these facilities within an MPA?
10. What impacts do beach grooming and nourishment have on local marine communities and do beach grooming or beach nourishment affect habitat quality for local marine

communities? How could the regional stakeholder group consider beach grooming or nourishment when developing MPA proposals?

11. Does beach lighting affect local marine communities and, if so how could the regional stakeholder group consider beach lighting when developing MPA proposals?
12. How can modeling be used in the south coast MPA planning and evaluation process?
13. Can the SAT address benthic pelagic coupling issues for the south coast (similar to salmon trolling in the central and north central regions) and identify fishing activities that might have depth-related differences in impact?
14. What special status species exist in the MLPA South Coast Study Region?
15. What impact does shipping or shipping lanes have on the local ecosystem or MPA design and how could they be considered in MPA planning and evaluation?
16. Are there cumulative effects from allowing take of multiple species within a single LOP and if so how could these be addressed?

Added during public comment at the April 3, 2008 SAT meeting

17. What are the various catch and release fisheries and what LOP would be assigned to catch and release fishing?
18. What impacts occur to habitat from non-consumptive diving and what LOP would be assigned to MPAs in which non-consumptive diving takes place?

Added by staff after the April 3, 2008 SAT meeting

19. How could habitat restoration efforts (e.g. marsh restoration) be considered in planning and evaluating MPA proposals?
20. How could invasive species be considered in MPA planning and design?