

Marine Life Protection Act Initiative



SAT Evaluation of Round 2 Draft and Revised MPA Proposals: Water and Sediment Quality

Presentation to the MLPA Blue Ribbon Task Force
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SAT Water Quality Evaluation Work Group

Evaluation Scoring Methods

Slight Alteration Made to Scoring Analysis

- Two categories of marine protected areas (MPAs) were identified and analyzed
 - 1) Bay and estuary MPAs
 - 2) Coastal MPAs
- Scores were re-categorized for the following reasons:
 - Bays and estuaries are more likely to be located within stormwater discharge zones
 - Shoreline length issues
 - Bays and estuaries are components in all Round 2 MPA proposals
 - No areas of special biological significance (ASBS) in embayments



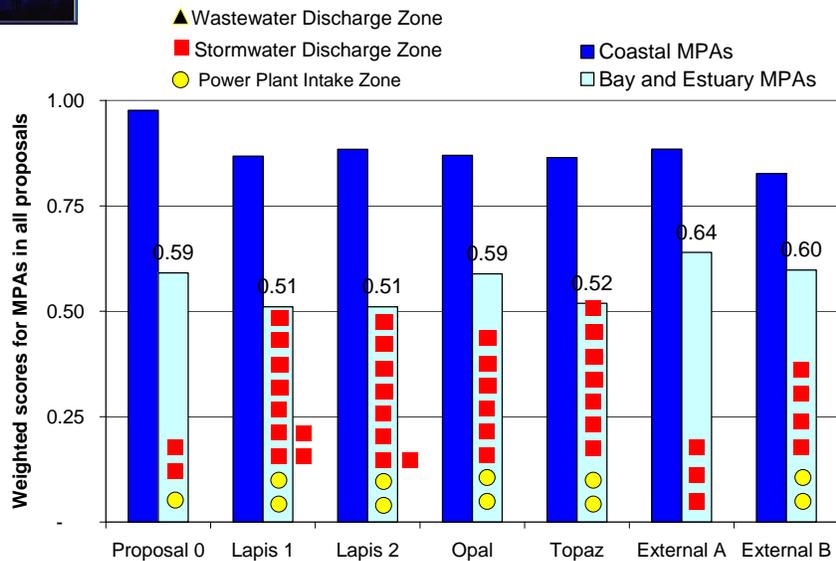
Evaluation Scoring Methods

Description of Scores

- 0.0 is the least desirable and has serious water quality concerns
- 0.75 to 1.0 considered the most desirable, with no water quality concerns
- MPAs can be free of water quality concerns and still be scored 0.75 due to not being co-locating with an ASBS
- MPAs with scores over 0.75 indicate they are co-located with an ASBS



Proposal Comparison - Bay and Estuary MPAs (Weighted Scores)



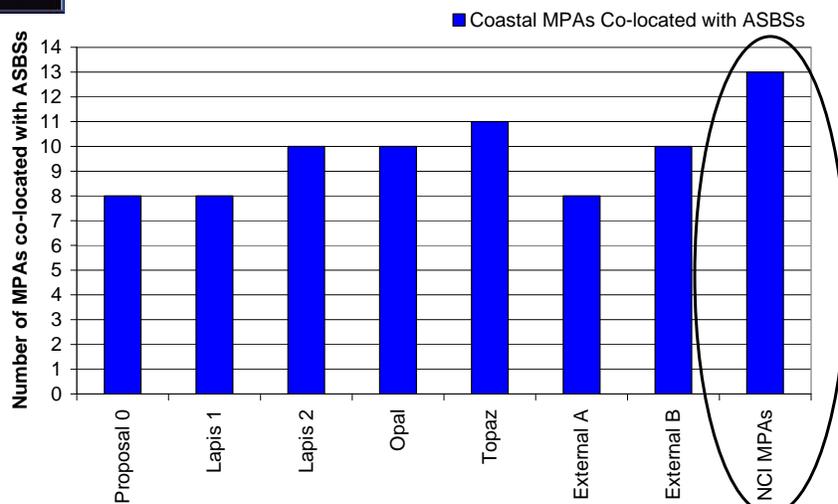


Summary of Scores for Embayments

- All proposals scored less than 0.75
 - Most included MPAs within power plant intake zones
 - All included MPAs with major stormwater impact zones
 - All proposals did have some MPAs with scores greater than 0.75
- External A had the highest score (0.64) and the fewest water quality concerns
 - External A included no power plant intakes



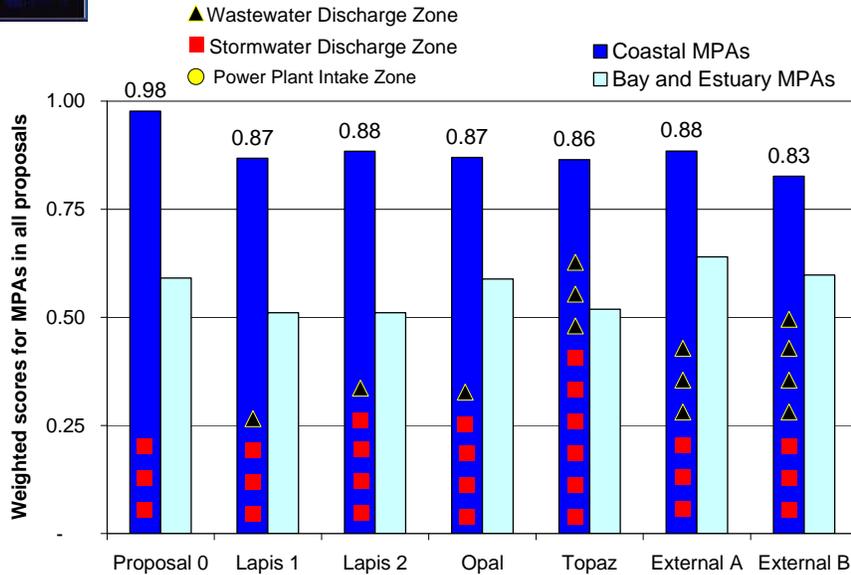
ASBS Co-Location, Coastal MPAs



*The Northern Channel Island (NCI) MPAs have been excluded from each proposal above and are represented as stand alone MPAs on the graph



Proposal Comparison - Coastal MPAs (Weighted Scores)

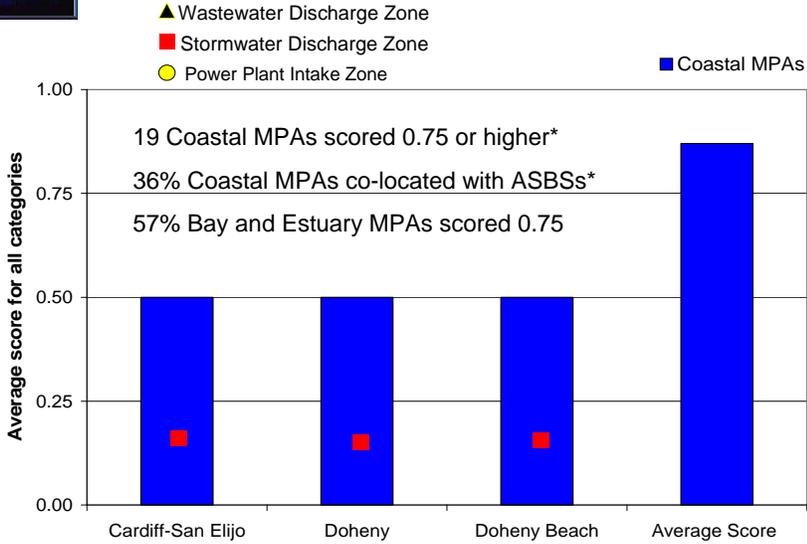


Coastal MPAs

- Coastal MPAs are any MPAs not in embayments
 - Include island MPAs not within embayments
- Northern Channel Islands equally represented in all proposals and therefore eliminated from further evaluation of coastal MPAs
- Highest score received was for existing MPAs - Proposal 0
- All submitted proposals scored at or above 0.83 for coastal MPAs
 - External A and Lapis 2 scored the highest (0.88)
 - There were no proposals with coastal MPAs in power plant intake zones



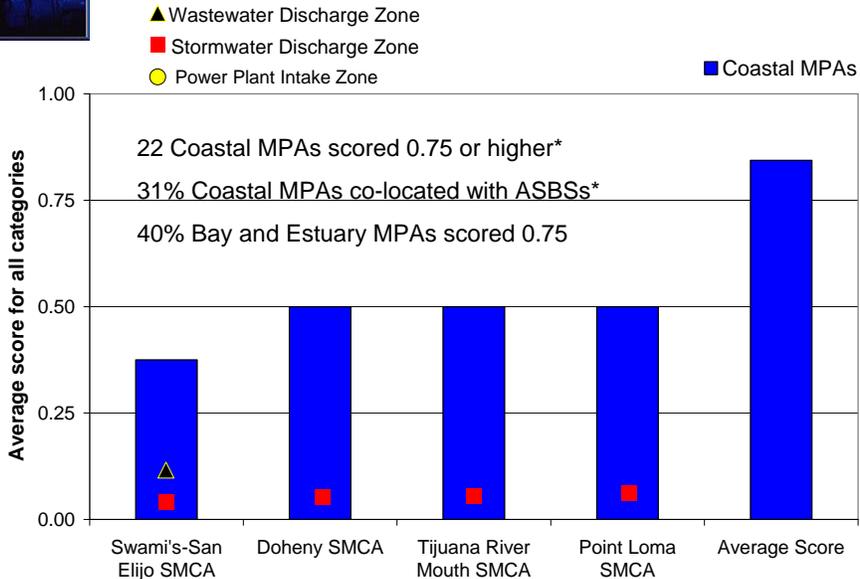
Proposal 0 (existing coastal MPAs)



*Excludes NCI MPAs



Lapis 1 Coastal MPAs



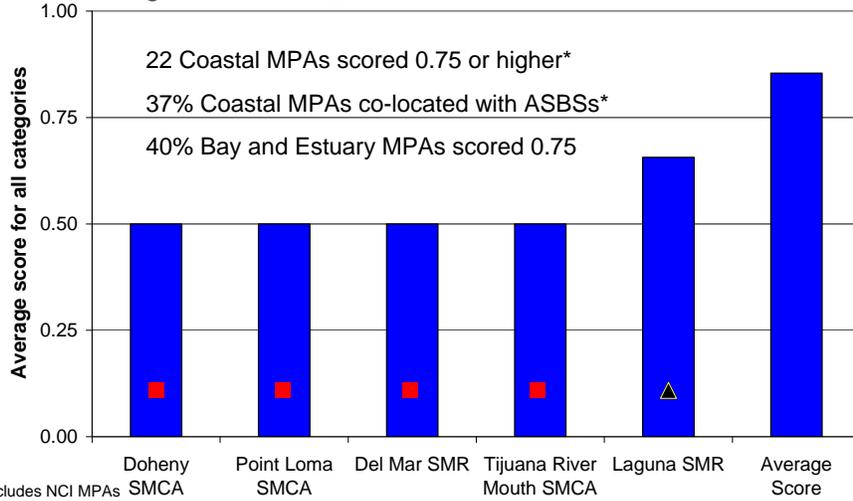
*Excludes NCI MPAs



Lapis 2 Coastal MPAs

- ▲ Wastewater Discharge Zone
- Stormwater Discharge Zone
- Power Plant Intake Zone

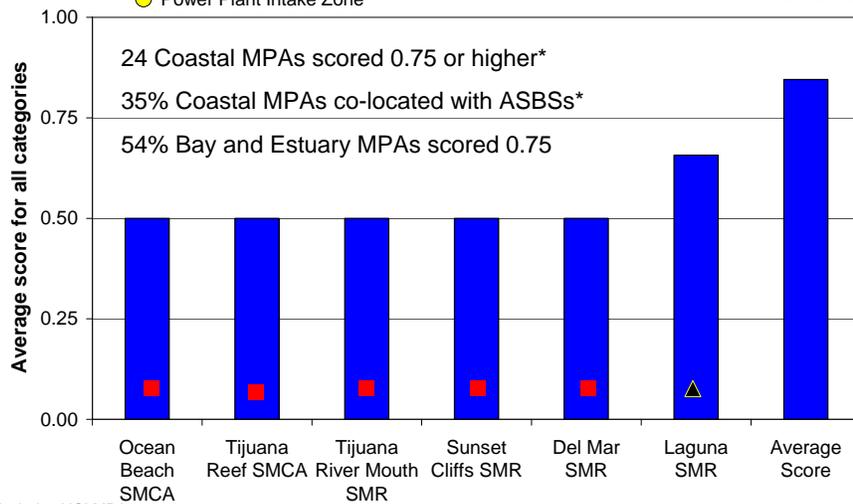
■ Coastal MPAs



Opal Coastal MPAs

- ▲ Wastewater Discharge Zone
- Stormwater Discharge Zone
- Power Plant Intake Zone

■ Coastal MPAs

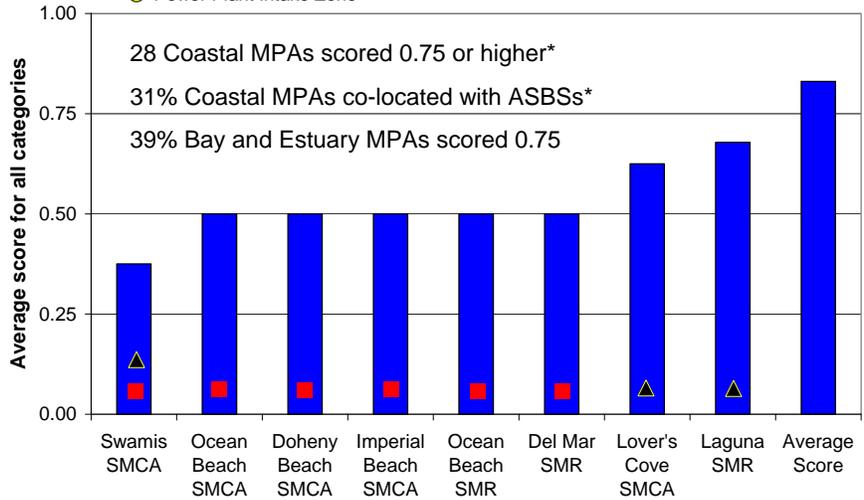




Topaz Coastal MPAs

- ▲ Wastewater Discharge Zone
- Stormwater Discharge Zone
- Power Plant Intake Zone

■ Coastal MPAs



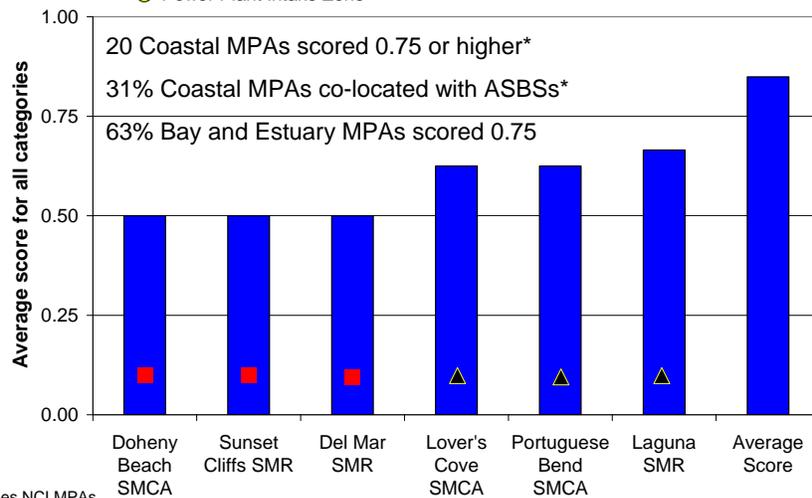
*Excludes NCI MPAs



External A Coastal MPAs

- ▲ Wastewater Discharge Zone
- Stormwater Discharge Zone
- Power Plant Intake Zone

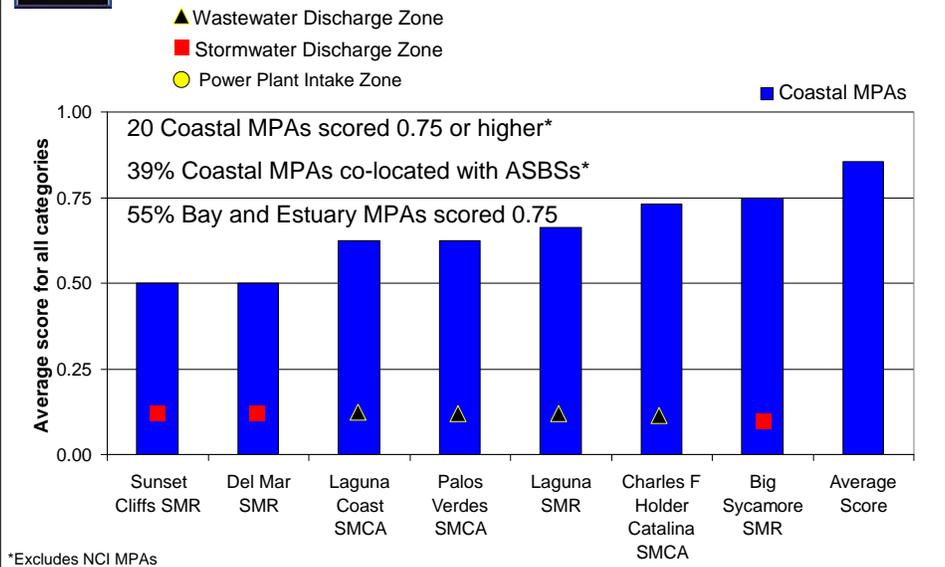
■ Coastal MPAs



*Excludes NCI MPAs



External B Coastal MPAs



Round 2 Summary

- Overall coastal MPAs scored higher than bays and estuary MPAs
- All proposals avoided Los Angeles Harbor and the SONGS power plant intake zone
- Where possible, the SCRSG and external proposals could improve their scores by reducing the number of coastal MPAs that are placed in stormwater or wastewater discharge zones
- *Water quality evaluations are not mandated by the MLPA, and should therefore be considered secondary to other MPA design guidelines. Water quality considerations should be incorporated if other guidelines and criteria have been met.*



Palos Verdes Shelf Guidance

The SAT has identified two additional areas that are undesirable for MPA placement due to degraded water quality:

- Area near the White Point outfall as described in the Palos Verdes shelf supplemental guidance document¹ (legacy contaminants and ongoing and planned EPA fieldwork and mitigation activities)
- Area from Portuguese Bend Cove to White Point as described in the Palos Verdes shelf supplemental guidance document (turbidity and sedimentation)

¹See Draft Recommendations for Evaluating Water and Sediment Quality Along the Palos Verdes Shelf – Supplemental Guidance to the Draft Recommendations for Considering Water Quality and Marine Protected Areas in the MLPA South Coast Study Region. Draft revised June 16, 2009



Palos Verdes Shelf Guidance

