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Marine Life Protection Act Initiative



Levels of Protection in the MLPA North Coast Study Region

Presentation to the MLPA Master Plan Science Advisory Team
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Chapter 3: Levels of Protection

Chapter 3 changes for review and approval:

- **New LOPs proposed for several uses** (based on additional review of uses proposed by tribes and tribal communities)
- **Explanatory text for all LOPs listed in the following tables**
- **Addition of new text to clarify the conceptual framework for assigning LOPs**
- **Appendix C** (detailed answers to decision tree in table format) **will be ready for approval at next SAT meeting.**

Levels of Protection: North Coast

Level of Protection	MPA Types	Activities Associated with this Protection Level
Very high	SMR	No take
High	SMCA SMP	Salmon and other pelagic finfish ¹ (H&L or troll in waters >50m depth); pelagic finfish¹ except salmon (spearfishing); coastal pelagic finfish² (H&L, round-haul net, dip net, <u>cast net, hand</u>); Pacific lamprey (H&L, hand, spear, bow and arrow, dip net); eulachon (dip net); non-living shells (hand)
Mod-high	SMCA SMP	Dungeness crab (trap, hoop-net, diving, <u>hand</u>); salmon and other pelagic finfish¹ (troll in water <50m depth); surf and night smelts (dip-net, a-frame net, cast net); sharks, skates, and rays (spear, harpoon, bow and arrow in non-estuarine waters); trout except steelhead rainbow trout (H&L); California halibut, flounders, soles, turbot, and sanddabs (spearfishing); market squid (<u>H&L, round-haul net, dip net, cast net, hand</u>)

¹ The grouping "pelagic finfish" includes: northern anchovy (*Engraulis mordax*), barracudas (*Sphyraena* spp.), billfishes* (family *Istiophoridae*), dolphinfish (*Coryphaena hippurus*), Pacific herring (*Clupea pallasii*), jack mackerel (*Trachurus symmetricus*), Pacific mackerel (*Scomber japonicus*), salmon (*Oncorhynchus* spp.), Pacific sardine (*Sardinops sagax*), blue shark (*Prionace glauca*), salmon shark (*Lamna ditropis*), shortfin mako shark (*Isurus oxyrinchus*), thresher sharks (*Alopias* spp.), swordfish (*Xiphias gladius*), tunas (family *Scombridae*), and yellowtail (*Seriola lalandi*). *Marlin is not allowed for commercial take.

² The grouping "coastal pelagic finfish" includes: Northern anchovy (*Engraulis mordax*), Pacific herring (*Clupea pallasii*), jack mackerel (*Trachurus symmetricus*), Pacific mackerel (*Scomber japonicus*), and Pacific sardine (*Sardinops sagax*).

Underlined text indicates newly assigned LOPs.

Levels of Protection: North Coast

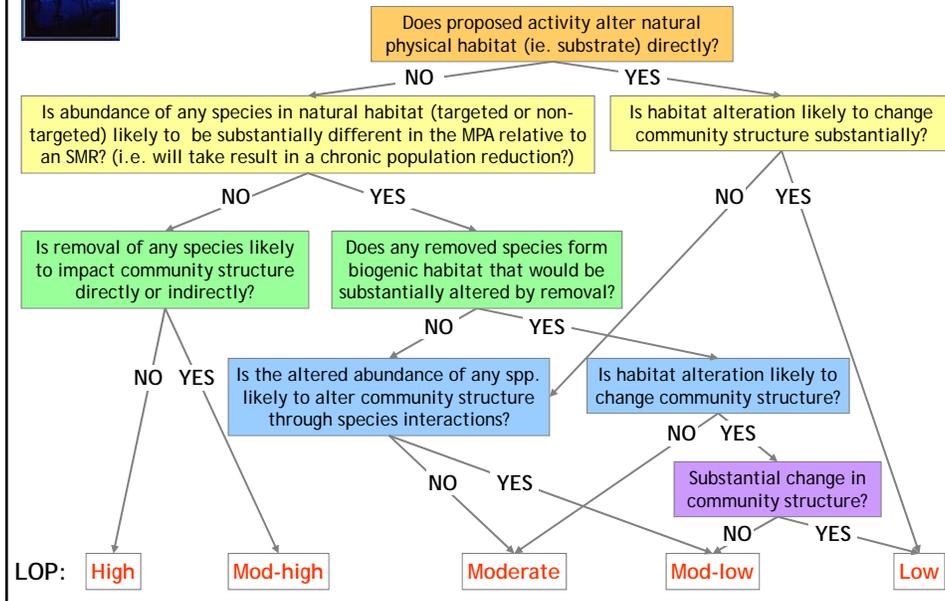
Level of Protection	MPA Types	Activities Associated with this Protection Level
Moderate	SMCA SMP	Redtail surfperch (H&L from shore); surfperch (H&L from shore); California halibut, flounders, soles, turbot, and sanddabs (H&L); coonstripe shrimp and spot prawn (trap); clams (intertidal hand); noril/laver and sea lettuce³ (intertidal hand); salmon and other pelagic finfish¹ (H&L in waters <50m depth); white sturgeon (H&L); sharks, skates, and rays (H&L)
Mod-low	SMCA SMP	Pacific halibut (H&L); rockfishes, lingcod and other greenlings, cabezon and other sculpins, California moray eels, wolf eels and monkeyface and rock pricklebacks (H&L, spearfishing, trap, hand, bow and arrow); red abalone (free-diving); urchin (diving); surfperch (H&L); shiner surfperch (H&L, dip net, cast net); unspecified finfish (H&L, spearfishing); sharks, skates, and rays (H&L, spear, harpoon, bow and arrow in estuarine waters); limpets and turban snails (hand); octopus (H&L, hand); crabs (trap, hoop net, hand); Turkish towel and Mendocino grapestone⁴ (intertidal hand);
Low	SMCA SMP	Rock scallop (diving); mussels (hand); bull kelp (hand); ghost shrimp (hand); sea palm (intertidal hand); canopy-forming algae⁵ (intertidal hand); native oysters (hand); shrimps (hand); unspecified marine invertebrates (hand); unspecified marine algae (hand)

³ *Porphyra* spp. (Nori, Laver) and *Ulva* spp. (Sea Lettuce).

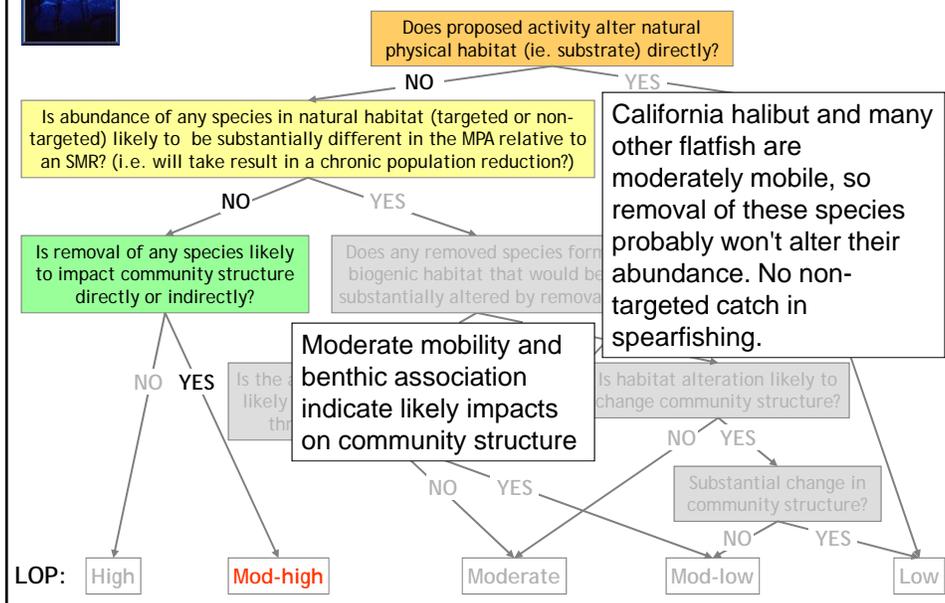
⁴ *Chondrocanthus/Gigartina exasperata* (Turkish Towel) and *Mastocarpus* spp. (Mendocino Grapestone).

⁵ The grouping "canopy-forming algae" includes the following harvested groups: *Alaria* spp. (Wakame), *Lessoniopsis littoralis* (Ocean Ribbons), *Laminaria* spp. (Kombu), *Saccharina/Hedophyllum sessile* ('Sweet' Kombu), *Egregia menziesii* (Feather Boa), and *Fucus* spp. (Bladder wrack or Rockweed).

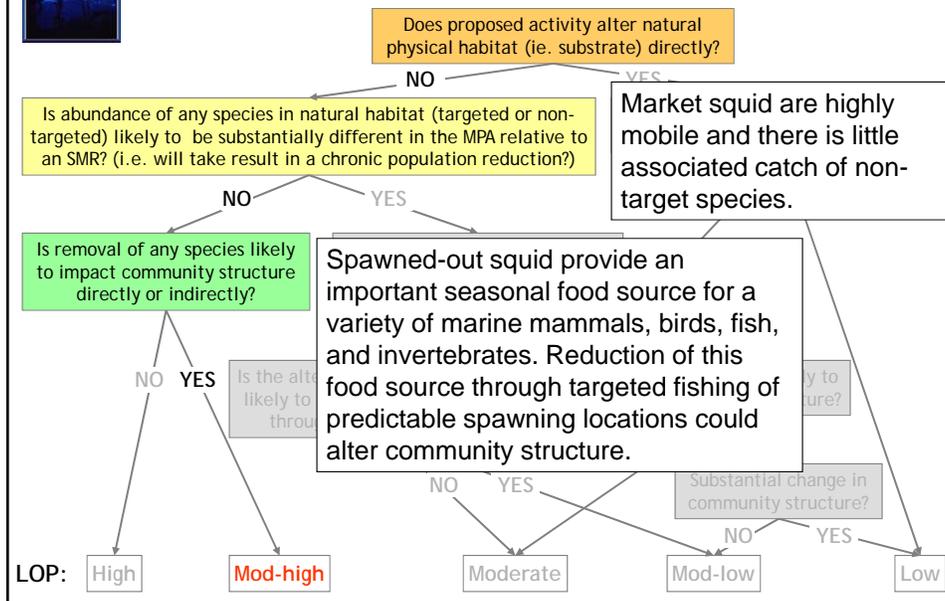
Conceptual Model for Determining LOP



LOP: Flatfish by Spearfishing



LOP: Market Squid by Various Methods



New Text: LOP Conceptual Framework

It is important to note that LOPs are based on the potential impacts of a proposed activity, and do not predict the status of any fishery or the abundance of any organism. With wise management or minimal harvest levels, the realized impacts of harvest activities on the marine ecosystem may be substantially lower than those assessed by the LOP. Because the magnitude and spatial distribution of harvest within MPAs is not regulated and unpredictable in the future, LOPs are not based on existing patterns or magnitude of take. Instead, LOPs assess the certainty that an MPA will achieve the goals of the MLPA *regardless* of the spatial distribution and magnitude of take. An MPA that has been assigned a high LOP is likely to contain marine communities that resemble those in an unharvested ecosystem (i.e. no take area), even if allowed activities are intense within the MPA. MPAs with lower LOPs (especially those below moderate-high) are less likely to contain marine communities that resemble those in an unharvested ecosystem, especially if harvest activities are intense within the MPA. The lower the LOP, the greater the risk that activities allowed within the MPA could compromise the MPA's ability to achieve the goals of the MLPA.



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