



Resource Group Definitions

Biological Uses Resource Groups

Coral Reef (Temperate)	Presence of cold water corals (shallow or deepwater)
Coral Reef (Tropical)	Presence of tropical coral reef
Marine Mammal Breeding area	Presence of breeding and birthing marine mammals, e.g. Ano Nuevo (elephant seals)
Turtle nesting area	Presence of sea turtle nesting within protected area boundary
Sea grass habitat	Presence of seagrasses, (flowering plants from one of four plant families (Posidoniaceae, Zosteraceae, Hydrocharitaceae, or Cymodoceaceae) which grow in marine, fully-saline environments.)
Nursery grounds	Presence of juvenile species that use a habitat as a nursery, e.g. mangrove forests (coral reef species)
Essential fish habitat (EFH) conservation area	Site exists within an existing EFH conservation area as defined by MPAI
Endangered Species (ESA listed)	Endangered species (ESA listed)
Kelp and Algae	Presence of kelp forest habitat
Oyster/Shellfish beds	Presence of shellfish beds e.g. oyster reefs, mussel beds
Fish spawning area	Presence of spawning fish during part or all of the year e.g. grunion
Marine mammal haulout	Presence of marine mammal haul out areas that are used for resting, breeding and birthing
Bird nesting habitat	Mention of the presence of nesting birds specifically; existence of traditional nesting habitat e.g. wetland habitat is not enough
Bird migratory area	Specific mention of migrating birds (as defined in species bins) or of existence of habitat specifically mentioned as a migration stop over

Habitat Resource Groups

Barrier Islands	Presence of barrier islands, typically dynamic accumulations of sand along coastal areas
Beach	Presence of beach or sandy/ rock shore habitat up to mean high highwater
CMECS (Neritic)	Marine waters; Depth between 30m and continental shelf break (~200m) S>30 year round (35)
CMECS (Estuary)	Coastal waters; Partially enclosed 25-50% ("semi-enclosed"), or even enclosed; Freshwater input during at least part of the year
CMECS (Fresh Water Influenced)	Coastal waters; Not enclosed; Freshwater input during at least part of the year
CMECS (Nearshore Marine)	Coastal waters and bottom; Depth<30m (from land margin to -30m); Salinity >30 during more than 10 months/y
CMECS (Oceanic)	Marine waters; Depth above the continental shelf break (150/300 -->1000+m); Sufficiently distant from land
Coral Reef	Presence of areas that are dominated by biota associated with the structures created by hermatypic (reef-building) corals. This includes biology defined through hermatypic corals, and other biota that contribute to reef building, such as calcareous algae.
Headland	Presence of a narrow area of land jutting out into a sea
Hydrothermal Vents/ Cold Seeps	Mention of some type of ocean fissure in the sea floor that gives rise to chemosynthetic organisms
Islands	Presence of a land mass surrounded by water further than 3 miles from the coast
Kelp Forest	Presence of a Kelp Forest (Water Surrounding Stipe and Blades)
Mangrove Forests	Mention of Mangrove Forest within site boundaries
Oceanographic Fronts	Mention of a front oceanic events, Linear features formed at the conjunction of two or more water masses with different properties. Also known as a "front."
Oceanographic Gyres	Mention of a gyre oceanic event, A large system of rotating ocean currents resulting from prevailing wind forcing, buoyancy forcing, and Coriolis acceleration; it occurs at the ocean basin scale.
Rivers/Streams	Presence of a freshwater input such as a flowing river within site boundaries
Rock Intertidal	Presence of areas of the Marine Nearshore Subsystem between mean lower low water (MLLW) and the maximum shoreward extent of tidal inundation, the extreme high water of spring tides.

Rocky Reefs	Presence of rocky reef in the Marine Nearshore Subsystem includes all waters and bottom extending from the supratidal zone at the coastal land margin to the 30 meter (m) depth contour.
Sand Dunes	Presence of An active accumulation of sand formed by wind or wave action with some elevation occurring on a beach or further inland within site boundaries.
Sea Grass	Mention of seagrass meadow (comprised of flowering plants from one of four plant families (Posidoniaceae, Zosteraceae, Hydrocharitaceae, or Cymodoceaceae) which grow in marine, fully-saline environments.)
Seamounts/Pinnacles	Presence of an elevation of the seafloor, 1000 m or higher. Seamounts are made by extrusion of lavas piped upward in stages from sources within the Earth's mantle to vents on the seafloor. If it is flat-topped it would be called a guyot. Seamounts may be discrete, arranged in a linear or random grouping, or connected at their bases and aligned along a ridge or rise.
Submarine Canyons	Existence of submarine canyon habitat within site boundaries. A valley in the seafloor formed by fracture or by erosional processes.
Transition Zones	Presence of layers in the ocean that create a barrier allowing little water movement between zones
Upwelling Zones	Mention of upwelling region (Upwardly directed current resulting from the divergence of water masses or from movement of surface water away from the coast.) within site boundaries or expressly affects the site
Wetlands/MudFlats	Presence of wetland (Wetlands characterized by erect, rooted, emergent herbaceous hydrophytes, excluding mosses and lichens where vegetation is present for most of the growing season in most years; usually dominated by perennial plants.) within site boundaries.
Species Resource Groups	
Fish (Coastal Pelagic)	Any mention of fish that live predominantly in the upper levels of the coastal ocean, e.g. sardines, mackerels,
Fish (Groundfish West Coast)	Any mention of fish that predominantly live on or near the bottom of the sea e.g. flatfish, some rockfish species, skates (see PFMC for details http://www.pcouncil.org/groundfish/background/)
Fish (Demersal East Coast)	Any mention of fish that predominantly live on or near the bottom of the sea e.g. flatfish, skates
Birds (Waterfowl)	Any mention of birds that derive most of the energy from the freshwater aquatic environment e.g. ducks
Birds (Other)	Any mention of birds that are not captured by waterfowl, estuarine, seabird e.g. raptors
Deepwater Species	Any mention of fish species that live sub- 200 m depth
Fish (Freshwater Demersal)	Any mention of fish that predominantly live on or near the bottom of the great lakes e.g. flatfish, skates
Fish (Estuarine/Coastal Marine)	Any mention of fish that live predominantly in estuarine, or freshwater coastal marsh or brackish water e.g. killifish
Fish (Freshwater Pelagic)	Any mention of fish that live predominantly in the upper levels of the great lakes, e.g. trouts
Fish (Anadromous)	Any mention of fish that spawn in fresh water but spend the majority of their life in the ocean e.g. salmon, trout, sturgeon
Fish (Highly Migratory Marine Species)	Any mention of fish that migrate across ocean basins e.g. sharks, billfish
Rocky Intertidal (Algae)	Any mention of turf algae, kelps and other forms of seaweeds that inhabit the intertidal
Coastal Marine Reptile	Any mention of marine reptiles not covered by sea turtle definition, e.g. sea snakes, marine lizards
Hydrothermal Vent Species	Existence of hydrothermal vent ecosystem and associated vent chemosynthetic fauna
Marine Mammals (Sirenia)	Any mention of marine mammals from the order sirenia e.g. dugongs, manatees
Benthic Algae	Any mention of turf algae, kelps and other forms of seaweeds that are predominantly subtidal species
Birds (Estuarine/Coastal)	Any mention of birds that derive most of the energy from coastal or wetland environment e.g. whimbrels, sandpipers, clapper rails
Birds (Seabird)	Any mention of birds that derive most of the energy from the offshore marine environment e.g. cormorants, petrels, seagulls
Marine Mammals (Cetaceans)	Any mention of marine mammals from the order cetacea e.g. whales, dolphins

Rocky Intertidal Invertebrates (Mobile/Sessile)	Any mention of any invertebrates that predominantly inhabit the intertidal region
Marine Mammals (Pinnipeds)	Any mention of marine mammals from the order pinnipeda e.g. seals, sea lions
Marine Mammals (Fissipeds)	Any mention of marine mammals from the order fissipeda e.g. sea otter, polar bears
Fish (Reef fish, tropical)	Any mention of fish that live predominantly on or near coral reefs e.g. moray eels, damselfish, parrotfish
Sea Turtle	Any mention of sea turtles from the order chelonia and testudines e.g., hawksbill, green, leatherback
Benthic Invertebrates (mobile and sessile)	Any mention of any invertebrates that predominantly inhabit the subtidal benthos

Cultural Marine Resource Groups

Archaeological site: Aircraft	Existence of historical site of downed aircraft, e.g. warplanes, dirigibles
Archaeological site: Prehistoric	Existence of archaeological significant sites, i.e. native American middens, burial sites,
Archaeological site: Shipwreck	Presence of sunken ship
Floating/ docked historic vessel	Specific mention of a floating historic vessel
Historical structure/ site	Presence of historically significant structure, e.g. whalers cabin, light houses
Site of ceremonial activities	There may be a site of ceremonial activities which may not necessarily be traditional. As native peoples try to revitalize their cultures, some ceremonies and activities may become culturally important even though they are not ancestral (e.g., the building of new community centers, or annual canoe journeys which become ceremonial and/or significant to the continuation of the culture).
Site of cultural significance	There may be a site of [historic] cultural significance that is or should be protected in an MPA, which is not necessarily a place where traditional or ceremonial activities occur or have occurred -- it may have restricted access because of its significance.
Site of traditional activities	There may be a site of traditional activities which are not ceremonial activities, such as fishing, gathering, etc. Not all of these sites will necessarily be a formal usual and accustomed place either.
Traditional cultural property	Traditional Cultural Property: this is a term of art that comes from a National Register [of Historic Places] Bulletin (http://www.nps.gov/nr/publications/bulletins/nrb38/), and therefore has defined criteria for identification and evaluation. If one exists in an MPA, it should be documented, or at least known by the manager, as it's a formal category that's gaining precedent (e.g., in the Cape Wind proceedings: http://www.doi.gov/news/doinews/upload/Fact-Sheet-Cape-Wind-with-SOL-edits-04-28-10.pdf).
Tribal uses and accustomed areas	This is also a term of art that refers to fishing and gathering rights and territories laid out in treaties (e.g: http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1179&context=libraryscience). If one exists in an MPA, it should also be documented or at least known by the manager.

Data Storage Bins: Legal authorities (Programmatic Authority)

Programmatic authority	Heading refers to the ultimate source of the power that has been used to create relevant MPA e.g. CA Marine Life Protection act, National Park Service Organic act, National Marine Sanctuaries act CA Marine Life Protection act,
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Data Storage Bins: Legal authorities (Management Type)

Management type	Heading refers to the site definition of the MPA, i.e. what it's labeled by the programmatic authority, e.g. Aquatic Reserve, Marine Conservation Area, National Wildlife Refuge
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Resource Group: Legal authorities (Code reference)	
Legal code Reference	Specific code relating to the definition of management type e.g. In a state water quality protection area, point source waste and thermal dischargers shall be prohibited or limited by special conditions. Nonpoint source pollution shall be controlled to the extent practicable. No other use is restricted.
Resource Group: Legal authorities (Management Activities)	
Biological monitoring program	Presence of biological monitoring program that have met the MPAC '5' criteria of a monitoring program.
Physical ocean monitoring program	Presence of physical ocean monitoring program that have met the MPAC '5' criteria of a monitoring program.
Interpretive signage	Presence of interpretive signage referencing the site, it's natural resources or history
Science center/ museum	Presence of a science center/ museum that has a primary focus of informing people about the MPA. (center does not have to be situated in MPA)
Tours/ docents	Presence of tour facilities or staffed by docents that will provide tours or help manage the site
Volunteer programs	Presence of volunteer programs such as volunteer led monitoring programs, e.g. BeachCOMBERS (Monterey Bay National Marine Sanctuary)
Resource Group: Legal authorities (Prohibited uses)	
Species extraction/ disturbance	Existence within legal code or regulations, the prohibition of species extraction/ disturbance.
Habitat disturbance/ removal	Existence within legal code or regulations, the prohibition of habitat disturbance/ removal
n/a	No regulations explicitly specified
Resource Group: Legal authorities (Notes)	
Any additional site related information that may be pertinent to the entry.	