

California MLPA Master Plan Science Advisory Team
Draft Work Group Response to a Science Question Posed at the
February 21, 2008 Meeting of the NCCRSG
Revised March 12, 2008

The following is a draft response of the MLPA Master Plan Science Advisory Team (SAT) to a question posed at the MLPA North Central Coast Regional Stakeholder Group (NCCRSG) meeting on February 21, 2008. This draft response was prepared by a work group of the SAT.

1. Please comment on possible benefits of MPAs to gray whales, harbor porpoise, and humpback whales. Specifically, considering nursery and foraging areas.

Draft SAT response: Harbor porpoise forage primarily on small schooling fish, rockfish, flatfish and squid; they occur nearshore out to 40 fathoms but range widely and likely would benefit from a network of protected areas, rather than from one single MPA. The assumption is that a network of MPAs would benefit coastal ecosystems which in turn would benefit many species indirectly. They do not have a specific nursery area but they do give birth in the region.

Humpback whales do not give birth in the region but do forage in the region. They forage on small schooling fish and krill. As with harbor porpoise, they forage widely in the region and might benefit from a network of protected areas, rather than from one single MPA. The assumption is that a network of MPAs would benefit the coastal ecosystems which, in turn, would benefit many species indirectly. Humpback whales often forage around the Farallon Islands and Cordell Bank, as do many seabirds and other marine mammals, which might be a more site-specific benefit to humpback whales.

Gray whales may benefit from MPAs in several ways. Although they are a far ranging species, gray whales linger in areas along their migratory route including at places where they feed, such as Drakes Bay and the Russian River mouth. When they are with calves, gray whales migrate more slowly and very close to shore. An MPA could provide an added level of protection if there is a reduction in the number of boats or amount of gear in the water where the whales linger; the less noise and activity in the water, the more likely they will linger in an area because they are sensitive to disturbance. Gray whales feed on invertebrates in the bottom sediment and around eelgrass and kelp. If eelgrass beds and kelp beds are protected, there may be more food available at specific locations such as Tomales Bay, around Bodega Head, and along the Sonoma Coast. An MPA designation may increase the amount of forage for whales at sites, although we cannot give specific examples of this occurring in other areas.