

MSRP PROGRAM OVERVIEW



Rubberlip surfperch
(*Rhacochilus toxotes*)

Xantus's murrelet
(*Synthliboramphus hypoleucus*)

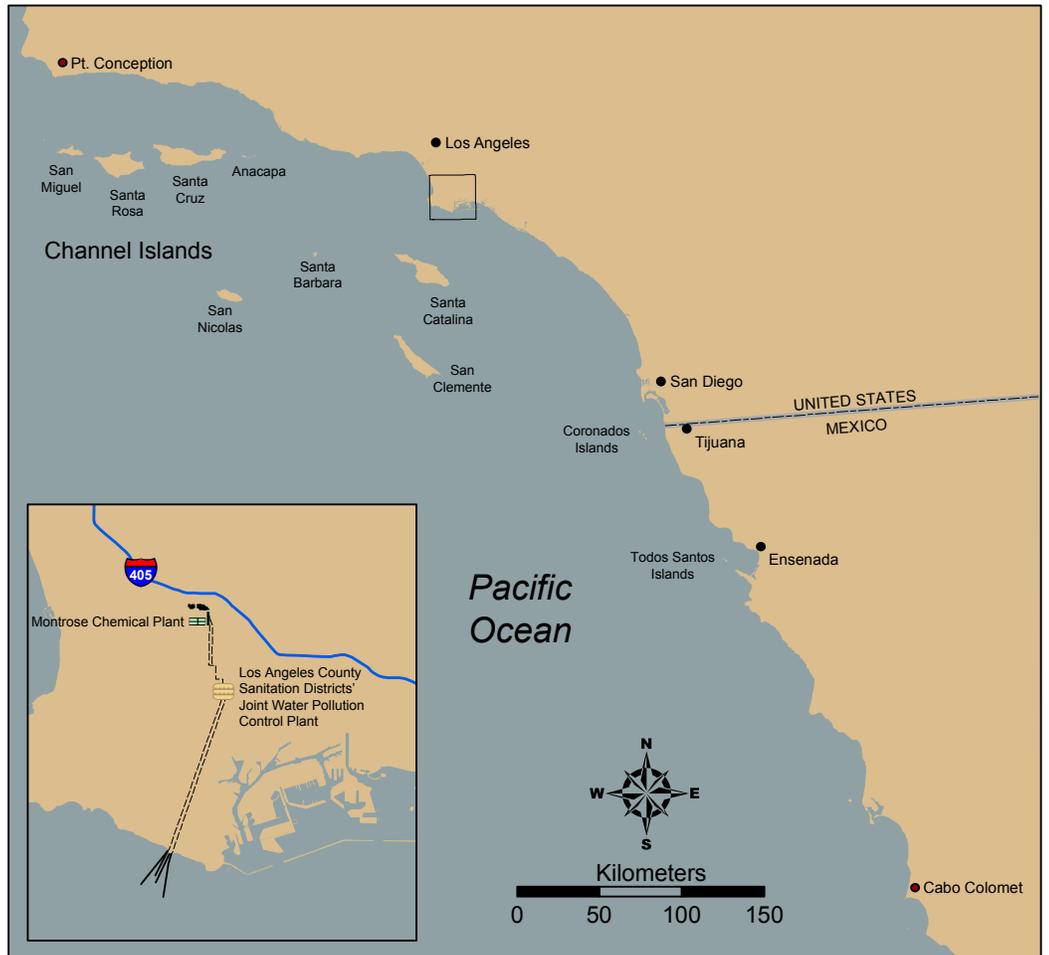
Program History

From the late 1940s to the early 1970s, millions of pounds of DDTs and PCBs were discharged from industrial sources through a wastewater outfall into the ocean near Los Angeles. Large quantities of these chemicals remain in the marine environment and continue to harm birds and impair fishing in the Southern California Bight (see map).

Throughout the U.S., DDTs in the food of bald eagles and peregrine falcons have caused these birds to lay thin-shelled eggs that desiccate or break during incubation. Bald eagles reintroduced to Catalina Island have had difficulty hatching

their eggs without human assistance. In addition, some species of seabirds in the Bight exhibited high levels of DDTs. For certain species of fish contaminated with high levels of DDTs and PCBs near Los Angeles, the State of California has issued fish consumption advisories. The State has also banned commercial fishing for white croaker near the Palos Verdes Peninsula.

The State and Federal governments initiated action against Montrose Chemical Corporation and the other polluters responsible for the injuries. In December 2001, a final settlement was signed, ending ten years of litigation.



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MSRP PROGRAM DETAILS



Peregrine falcon
(*Falco peregrinus*)



Bald eagle
(*Haliaeetus leucocephalus*)

Cleanup and Restoration

Following Superfund law, the funds are being used for two different kinds of activities:

1. The U.S. Environmental Protection Agency (EPA) and the California Department of Toxic Substances Control will use a share of the funds to reduce the exposure of people and wildlife to DDTs and PCBs. For example, these agencies are considering several remediation, or “cleanup,” options, and are conducting additional efforts to prevent commercial catch of and reduce public consumption of contaminated fish. For more information, contact EPA at (800) 231-3075.

2. The Natural Resource Trustees, through the Montrose Settlements Restoration Program (MSRP), will use approximately \$38 million to restore natural resources harmed by the DDTs and PCBs.

Who are the Natural Resource Trustees?

The Natural Resource Trustees are a group of six federal and state resource agencies that together administer the Montrose Settlements Restoration Program. These agencies are:

- National Oceanic and Atmospheric Administration;
- National Park Service;
- U.S. Fish and Wildlife Service;
- California Department of Fish and Game;
- California Department of Parks and Recreation; and
- California State Lands Commission.

WHAT ARE DDTs AND PCBs?

DDTs and PCBs are toxic mixtures of chemicals that are very slow to break down in the environment. The chemicals can accumulate in plants and animals and move through the food web to become more concentrated in higher predators. Human health problems associated with increased exposure to DDTs and PCBs include cancer and liver disease.

DDTs are a mixture of six related chemicals. DDT was once one of the most widely used pesticides in the world, and one of the largest DDT factories was located in Torrance, CA. EPA banned the use of DDT in 1972.

PCBs are a group of 209 related oil-like chemicals first manufactured in 1929. These chemicals, found to be good insulators and stable when exposed to heat and pressure, had many different industrial uses, including making paints, transformer coolants, and hydraulic fluids. EPA banned the manufacture of PCBs in 1979.



DDT, once considered a miracle chemical, was banned by the US EPA in 1973.



MSRP RESTORATION PROJECT SUMMARIES

Construct artificial reefs and fishing access improvements. Suitable sites to construct reefs that would displace the highly contaminated fish which occupy existing soft-bottom habitats with reef and water-column-feeding fish that are lower in DDTs and PCBs are still being determined. This project also includes facility improvements to encourage fishing in areas where habitat manipulation is performed, as well as provisions for monitoring fish on and around the reefs to determine project effectiveness and direct subsequent MSRP reef actions.

Provide public information to restore lost fishing services. MSRP is increasing fishing services by developing and distributing reliable fish contamination information that enables the fishing public to make informed choices about where and for which species to fish. This project builds on efforts initiated by EPA's Fish Contamination Education Collaborative. In 2007, MSRP funded two fishing educational projects titled "Fun Fishing Program" developed by SEA Lab and "What's in Your Catch?-Implementing Practices for Safe Fish Consumption" developed by the Cabrillo Marine Aquarium.

Restore full tidal exchange wetlands. Wetland and/or estuarine habitats serve as nursery habitats for commonly caught coastal fish species. Funding to restore subtidal habitat in one of the few remaining wetland acres in Huntington Beach and Orange county was provided in 2007 and restoration has begun.

Augment funds for implementing Marine Protected Areas in California. Two projects that supplement existing management and monitoring activities within the recently created Channel

Islands Marine Protected Areas (MPAs) to ensure they provide the best possible basis for further implementations of MPA networks throughout California were initiated in 2007. Future MSRP funds could be used for monitoring sub-tidal fish and groundfish, deep-water surveys, or the enforcement of MPA restrictions.

Restore Bald Eagles to the Channel Islands. The Channel Islands Bald Eagle Feasibility Study was initiated in 2002 and is still ongoing. The bald eagles that have been released on the Channel Islands have been showing signs of successful reproduction with the hatching of two chicks in 2006 and one in 2007 without the aid of biologists. This is the first time bald eagle chicks have hatched on the Channel Islands unaided by humans in over 50 years! Intensive monitoring of the eagles and contaminant analysis of eagle blood and eggs will continue in 2008.

Monitor the recovery of peregrine falcons on the Channel Islands. Previous restoration efforts conducted by other organizations have successfully aided in the recovery of peregrine falcons on the Channel Islands, and the number of breeding pairs is steadily increasing. In 2007 biologists discovered the first three chicks that had hatched on Santa Barbara Island without human aid in over 50 years. MSRP has conducted two comprehensive recovery monitoring projects of peregrines in the Channel Islands since 2004. Monitoring includes collecting information on nesting falcons and their reproductive success. Levels of DDT and PCBs are being measured in peregrine egg and blood samples.



Peregrine falcon
(*Falco peregrinus*)

Kelp Forest
(*Macrocystis pyrifera*)



California scorpionfish
(*Scorpaena guttata*)



Brown pelican
(*Pelecanus occidentalis*)

Restore seabirds to San Miguel Island.

San Miguel Island and its associated islets, Prince Island and Castle Rock, support regionally important and diverse seabird colonies, including one-third of the breeding seabirds in the Channel Islands. This project will enhance critical seabird nesting habitat by eradicating the introduced black rat and preventing future rodent introductions.

Restore alcids to Santa Barbara Island.

Santa Barbara Island supports California's largest colony of state-threatened Xantus's murrelets, and once supported a sizable population of Cassin's auklets. Planting of native vegetation has begun at this site providing improved nesting habitat. This project will also facilitate recovery of these birds by using social attraction.

Restore seabirds to San Nicolas Island.

Cats were first introduced to San Nicolas Island in the 1800s, and negative impacts from feral cats on island fauna, including seabirds, have been documented. The goal of this project is to eliminate feral cats and increase seabird colonies on the island by expanding U.S. Navy control efforts using methods that pose the least possible risk to the native state threatened island fox.

Restore seabirds to Scorpion and Orizaba Rocks. Located off of Santa Cruz Island, these rocks are important nesting islands for burrow-nesting seabirds in California. Planting of native vegetation has begun providing improved nesting habitat. Social attraction and reductions in human disturbance include future restoration projects at this site.

Restore seabirds to Baja California Pacific Islands (Coronado and Todos Santos Islands). These island groups historically supported many important colonies of seabirds, including Cassin's auklets, Xantus's murrelets, and California brown pelicans. Recent successful removals

of introduced species from the islands have created opportunities to enhance the recovery of these seabirds within the Southern California Bight. Restoration actions will include social attraction, nest box installation, light shielding, and human disturbance reduction.