



Silver Strand Training Complex

ENVIRONMENTAL IMPACT STATEMENT

Threatened and Endangered Species

The U.S. Navy has prepared a Draft Environmental Impact Statement (EIS) to analyze the potential environmental effects of ongoing and proposed Naval activities within the Navy's Silver Strand Training Complex (SSTC) and southern nearshore area of Naval Air Station North Island. Effects on biological resources from the Navy's Proposed Action and alternatives are analyzed in the Draft EIS.

BACKGROUND

Defending the United States and protecting military personnel requires rigorous, real-life training in the air, on land and at sea. SSTC provides a unique environment for this essential training. At the same time, the Navy is an active participant in protecting the environment and has taken proactive steps to minimize the effects of its activities on environmental resources, including threatened and endangered species.

The Navy has and continues to support conservation and species and habitat management programs at SSTC. The California least tern and the western snowy plover are two examples of the success of these programs. Since the 1980s, Delta North and Delta South, specific areas within SSTC, have been set aside for these species for nesting. Over the years, the conservation programs have had great success, and bird populations have vastly increased. This success has led to the migration of birds from the bayside beaches to the Pacific Ocean training beaches. The Navy never intended to set aside these training beaches for bird nesting because they were needed for training. This proliferation of nests presents challenges for the Navy to be able to conduct training in the future.

Additional species, such as the San Diego fairy shrimp and east Pacific green sea turtle are present in or around SSTC and are also actively protected by the Navy.

THE CALIFORNIA LEAST TERN AND WESTERN SNOWY PLOVER

California Least Tern

California least terns are migratory birds, arriving in California in the spring of each year to nest on sandy beaches. The California least tern was federally listed as an endangered species in 1970 because of loss of nesting habitat in conjunction with increased loss of foraging areas, human disturbance and predation.

After a period of apparent instability in the 1980s, the population has been increasing since 1992. The San Diego Bay-wide breeding numbers experienced a substantial increase from 141 pairs in 1991 to between 1,813 to 2,038 pairs in 2008. Today, there is an estimated 7,000 breeding pairs range-wide.



Western Snowy Plover

The Pacific coast populations of the western snowy plover consist of both migrants and year-round residents. Western snowy plovers were federally listed as threatened in 1993. Habitat loss and disturbance along the Pacific coast is largely responsible for the reduction in their population since the 1880s.

The population suffered a significant decline between 1977 and 1989, and a small decline between 2004 and 2005, probably due to an outbreak in avian disease. However, since 1991, there has been an overall increase in the western snowy plover population. The U.S. Fish and Wildlife Service estimates that since 2004, there are between 1,500 and 2,000 western snowy plovers on the California coast.



California least terns and western snowy plovers lay their eggs in shallow depressions in the sand. While the eggs and chicks are sand-colored to protect them from predators, this coloring makes them more vulnerable to accidental disturbance from human activity. The Navy has established protocols and collaborations to protect these vulnerable nests and chicks.

The location, training environment and terrain of the Silver Strand Training Complex provide unique and unduplicated training opportunities, particularly for amphibious, special warfare and mine countermeasure training activities. At the same time, the Navy is committed to protecting the land and sea resources under its management and works every day to minimize the effects of training activities on the environment. The Navy, starting with the California least tern at Naval Air Station North Island, has been funding and managing an adaptive conservation program since the late 1970s for threatened and endangered species and their habitat.

ONGOING SPECIES PROTECTION AND CONSERVATION PROGRAMS

The Navy has taken proactive steps in resource management and spends more than half a million dollars annually on California least tern and western snowy plover protection. The Navy strives to adapt and improve its management practices based on California least tern and western snowy plover data each year. Current management practices are detailed below.

Predator Management and Control

Predators not federally threatened or endangered are controlled by the Navy at California least tern and western snowy plover nesting sites. On Navy property, cameras are used to monitor least tern colonies for predators. The Navy implements a variety of controls for predators, such as live traps, relocation of predators and insect control. Additionally, the Navy frequently covers snowy plover nests with mini-enclosures for protection against predators.

Maintenance of Nesting Sites

California least terns and western snowy plovers require sandy, flat areas with little to no vegetation for nesting. The Navy maintains such sandy areas in locations designated for these birds to nest by adding and grading the sand and weeding or mowing nesting areas as appropriate. Kelp and other marine vegetation are maintained for foraging habitat for the western snowy plover. Other management practices consist of beach cleanups, wrack line (the high water mark where driftwood, shells, jellyfish, kelp and debris are deposited) maintenance, and placement of tern decoys that attract California least terns to nest in safer areas within SSTC.

Nest Relocation

To reduce conflicts with training, nests may be moved small distances. If relocation is necessary, nests are moved into the most suitable habitat that is closest to the current nest location.

Scheduling and Communication of Training Area Protocols

By working closely with Navy biologists and botanists and having clear protocols, training activities are scheduled outside of nesting areas and vernal pools to the extent consistent with effective, realistic training and conservation measures.

Signage and Education

Informational signs are used to inform the public of California least tern and western snowy plover nesting locations. These signs are used to educate the public on the birds and ultimately discourage disturbance in the area. Furthermore, public awareness campaigns and enforcement are used to discourage recreational activities in nesting areas.

Nest Substrate Enhancement

The Navy maintains and enhances nest substrate in areas set aside as habitat by removing non-native plants. Maintenance and planting of some native plants is also necessary to provide dune stabilization and encourage nesting.

Monitoring for Effects and Adaptive Management

Biological monitoring for the California least tern and western snowy plover during the breeding season is performed by qualified and trained experts at all nesting sites. Additional biological studies, such as the California least tern foraging study, provides information on feeding patterns. Monitoring includes the locations of nests, number of eggs, egg hatching dates, reared bird release dates, and banding of both adult and chick least terns and plovers. This effort provides necessary information to analyze the effectiveness of the current adaptive management program.

Caring for Injured or Sick Birds

The Navy has formed cooperative relationships with outside organizations and government agencies to maximize conservation efforts. The Navy has partnered with Project Wildlife to help care for injured or sick birds at SSTC. Project Wildlife and Sea World help hatch and rear relocated chicks and eggs, when needed and feasible.

Nesting Deterrence through Habitat Modification

The Navy will continue to modify beach areas in its highest training use areas to make them unattractive to nesting birds. Modifications of beach areas include creating small sand hills within the training area.

Marking and Avoidance Measures

Avoidance measures for military personnel include avoidance of some nesting habitats and marking western snowy plover nests and buffer zones. Activities on the beaches are often scheduled in the areas with the fewest number of nests when such scheduling does not interfere with the training realism.

ADDITIONAL FEDERALLY LISTED SPECIES

San Diego Fairy Shrimp

The San Diego fairy shrimp was federally listed as endangered in 1997. These shrimp live their entire lives in vernal pools (temporary pools of water caused by rain events). The fairy shrimp, a key food source for other vernal pool species, is endangered due to habitat loss and degradation. The Navy has established management practices that include restricting personnel from vernal pool sites when wet, and prohibiting vehicular traffic to protect shrimp living in the vernal pools.

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The U.S. Navy complies with the Endangered Species Act, the Migratory Bird Treaty Act and other environmental laws designed to protect threatened and endangered species and their habitat.

East Pacific Green Turtle

The east Pacific green turtle is a federally endangered species. The east Pacific green turtle has been sited in the San Diego Bay, but beaches in the area are not considered suitable for nesting. Prior to conducting underwater detonation activities, personnel watch for sea turtles. Detonations will be halted if sea turtles are sighted in the safety buffer.

