



2019 Secretary of Defense Environmental Awards Environmental Restoration, Installation Award

Each year since 1962, the Secretary of Defense (SecDef) has honored installations, teams, and individuals for outstanding conservation achievements, innovative environmental practices, and partnerships that improve quality of life and promote efficiencies without compromising the Department of Defense's (DoD's) mission success. The 2019 SecDef Environmental Awards cycle encompasses an achievement period from October 1, 2016 through September 30, 2018 (Fiscal Years (FY) 2017-2018). A diverse panel of 58 judges with relevant expertise representing Federal and state agencies, academia, and the private sector evaluated all nominees to select one winner for each of the nine categories that cover six subject areas: natural resources conservation, environmental quality, sustainability, environmental restoration, cultural resources management, and environmental excellence in weapon system acquisition.

About the Environmental Restoration, Installation Award

The Environmental Restoration, Installation award recognizes efforts to protect human health and the environment by cleaning up identified DoD sites in a timely, cost-efficient, and responsive manner. Restoring these sites impacted by past defense practices protects military personnel and the public from potential environmental health and safety hazards. The 2019 winner of the Environmental Restoration, Installation award is *Naval Base Ventura County, California*.

About Naval Base Ventura County, California

Naval Base Ventura County (NBVC) is located along the Pacific coastline in southwestern Ventura County, adjacent to the cities of Oxnard and Camarillo. Three major operating facilities comprise NBVC: Point Mugu (4,500 acres), Port Hueneme (1,600 acres), and San Nicolas Island (13,370 acres). The installation also maintains operations at remote sites including San Miguel Island, Santa Cruz Island, Fort Hunter Liggett, and Laguna Peak. Although slightly less than 30,000 acres in total size, NBVC includes some of the highest quality habitat in the state including the largest remaining coastal salt marsh estuary in Southern California. Within the installation, San Miguel Island and San Nicolas Island are the first and second most densely populated seal and sea lion breeding colonies in North America, hosting more than 250,000 animals between the islands during breeding season. The installation manages and sustains more than 2,200 acres of wetlands, 57.5 miles of coastline, 3,400 acres of dunes, over 1,100 prehistoric archeological sites, and 12 federally endangered species. Staff provide airfield, seaport, and base support services to fleet operating forces and shore activities. The Naval base houses over 80 tenant commands and departments that employ more than 20,060 military and civilian personnel who support diverse DoD missions. These tenant commands support both Fleet and Fighter, including three warfare centers: Naval Air Warfare Center Weapons Division; Naval Surface Warfare Center Port Hueneme Division; and Naval Facilities Engineering and Expeditionary Warfare Center.



Marine mammal breeding colonies dominate the coastlines of Naval Base Ventura County's (NBVC) San Nicolas and San Miguel Islands. More than 250,000 California sea lions and northern elephant seals populate these shores to breed, the densest marine mammal colony in North America. The NBVC Environmental Restoration Program is committed to protecting this habitat.

Major Accomplishments in FY 2017-2018

- The installation executed two accelerated environmental restoration projects during the award period to restore mission capability that was adversely affected by chemical munitions training items during World War II. The installation cleaned up chemical agent identification sets (CAIS) at Point Mugu that prevented continued use of the former Gas Mask Training Area (GMTA) site. Overall, these projects returned 30 acres of land for future mission use and provided \$9.9 million in cost savings compared to the original project estimate.
- The installation used adaptive management techniques to rework their restoration strategy and achieve final cleanup of a 4,500-foot-long methyl tertiary butyl ether (MTBE) groundwater plume from a leaking gas station at NBVC Port Hueneme. Personnel at NBVC completed the cleanup 22 years ahead of the most optimistic schedule and saved \$5.5 million compared to original project estimates.
- Staff at NBVC used a purpose built mobile chemical agent containment hood at the GMTA site after discovering CAIS kits during excavation work in the middle of the military family housing area at Point Mugu. This containment hood reduced the exclusion zone diameter from 1,000 feet to zero feet, allowing hundreds of military families to remain in their homes during the 18-month long remediation project. Additionally, site personnel did not require any supplemental respiratory or skin protective equipment when working around the containment hood.
- In FY18, NBVC partnered with the Calleguas Creek Watershed Committee to renew a Memorandum of Agreement for 10 more years to address regional surface water contamination from the 343 square mile watershed that flows into the Pacific Ocean. All partners, including NBVC, perform total maximum daily loading compliance monitoring of the entire watershed, which has generated estimated future cost savings of \$10.2 million over the next 20 years at Point Mugu Installation Restoration Site 11, the Mugu Lagoon.
- The installation used an innovative in-situ chemical oxidation remediation technology at Point Mugu Site Underground Storage Tank 24. This technology left site contamination levels below cleanup goals, and NBVC achieved site closure for this groundwater plume.
- The installation consulted with the California regulatory community to establish techniques to restore degraded land into thriving synthetic wetlands.



The NBVC Environmental Restoration Program developed an innovative mobile chemical agent containment hood at the former Gas Mask Training Area to remediate chemical agent identification sets containing phosgene, chloropicrin, mustard gas, and lewisite. Using this negative pressure device protects residents in nearby military family housing and workers at the site.



The NBVC Environmental Restoration Program developed a groundbreaking method to restore degraded land into thriving wetlands. Unique to this process, staff crafted synthetic wetland sediment by mixing substandard soil with compost and biochar, a charcoal soil amendment. The NBVC Environmental Restoration Program leverages the synthetic wetland acreage in the NBVC wetlands mitigation bank to support future mission requirements.