



2024 SECRETARY OF THE NAVY ENVIRONMENTAL AWARD NATURAL RESOURCES CONSERVATION SMALL INSTALLATION



INTRODUCTION

Naval Base Point Loma (NBPL) is located in San Diego, California and consists of three main campuses totaling approximately 1,900 acres: NBPL Peninsula; NBPL Harbor Drive, and NBPL Old Town, along with numerous separate special areas located throughout San Diego County. Tenant commands are units located on an installation but not within the Commander, Navy Installations Command (CNIC) chain of command. NBPL has over 60 tenant commands with more than 124 unique facilities, and approximately 18,000 military and civilian personnel. The major tenants on the NBPL facilities include: Commander, U.S. THIRD FLEET, Naval Information Warfare Systems Command, Naval Information Warfare Center (NIWC) Pacific, Submarine Squadron Eleven, Portsmouth Naval Shipyard DET San Diego, Surface Combat Systems Training Command, Tactical Training Group Pacific, and Military Sealift Command Pacific.

NBPL contains approximately five miles of coastline, with distinct watersheds on both the San Diego Bay and Pacific Ocean sides due to its unique topography. The rugged terrain on NBPL is divided by several drainages and canyons with slopes ranging from 40 to 75 percent. There are over seven hundred acres of natural habitat at NBPL, with 84% of the land cover type comprised of maritime succulent scrub, Diegan coastal sage scrub, southern maritime chaparral, and southern coastal bluff scrub. The remaining 16% is comprised of southern foredunes, Torrey pine forest, eucalyptus woodland, and ruderal vegetation. Found within the Diegan coastal sage scrub is the federally endangered plant, Orcutt's Spineflower (*Chorizanthe orcuttiana*), that has been actively managed at NBPL for over a decade and is thriving.

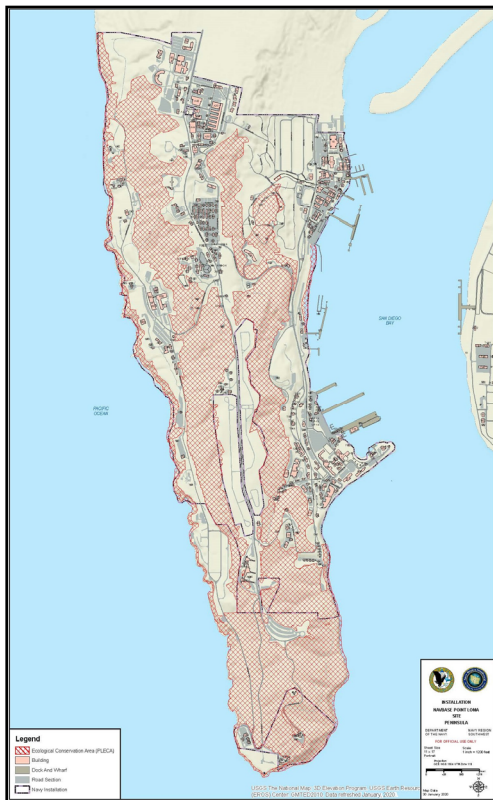
NBPL's mission is to sustain and serve the fleet, enable the warfighter, protect our resources and support Navy sailors and families by providing the highest quality services and support across a dispersed footprint. The NBPL Commanding Officer's (CO) leadership is vital to the success of the environmental programs on NBPL. The CO provides guidance and oversight to ensure environmental integration with the military mission, and management direction to the Public Works Officer (PWO) and Installation Environmental Program Director (IEPD). The IEPD reports to the PWO and CO, and manages the NBPL Public Works Office's Environmental Division (EV). The EV's mission is to provide the NBPL CO and tenant commands with the environmental subject matter expertise necessary to ensure compliance with local, state, and federal environmental requirements, while meeting the mission.

NATURAL RESOURCES PROGRAM BACKGROUND

The primary goal of the NBPL Natural Resources program is to provide no net loss to the military mission by managing natural resources in an adaptive ecosystem-based approach that supports biological integrity and compatibility with military operations. The NBPL Natural Resources team includes: Commander Navy Region Southwest (CNRSW) Natural Resources Program Manager, Shannon Shea, overseeing the natural resources program; Integrated Natural

Resources Management Plan Coordinator, Cece Dahlstrom, providing technical support; and NBPL Installation Biologist, Melissa Stepek, offering day-to-day installation support. The NBPL Integrated Natural Resources Management Plan (INRMP) was developed and implemented to serve as a guide for the management and stewardship of all natural resources present on NBPL, while ensuring the successful accomplishment of the military mission.

The 2019 NBPL INRMP is compliant and currently under review for update by the fall of 2024 with funding from cooperative agreement N62473-20-D-0023. The annual INRMP metrics review is currently underway and will be completed at the end of October 2023. INRMP projects have been implemented as funds have become available. Bat surveys were completed in June 2023 as part of a FY19 cooperative agreement (N62473-19-2-0024, includes Mods). Funding and work from a FY21 cooperative agreement (N62473-18-2-0010) studying Orcutt's Spineflower wrapped up in 2023, but a new cooperative agreement (N62473-23-2-0008) was awarded in June 2023 to continue the population monitoring and research of this federally endangered plant at NBPL.



In 1995, NBPL partnered with Point Loma peninsula landowners, the United States Coast Guard, Department of Veterans Affairs, City of San Diego, and United States Fish and Wildlife Service (USFWS), for cooperative natural resources management of the peninsula. That partnership created what is now known as the Point Loma Ecological Conservation Area (PLECA). The PLECA includes approximately 668 acres and is the core of natural resource management on the peninsula. The PLECA's primary objectives are to: identify and evaluate sensitive biological communities; ensure the long-term viability of those communities; develop a management plan to assure the long-term protection and perpetuation of these sensitive biological communities; and allow PLECA partners to accomplish their diverse missions.

The Natural Resources team actively manages two federally listed species and have observed a sustained increase in population numbers as a result of proactive management and compatibility with military readiness. These are the Coastal California Gnatcatcher (*Poliopitila californica californica*) and Orcutt's Spineflower. The Natural Resources team also manages special status species, including the Great Blue Heron (*Ardea herodias*), Shaw's Agave (*Agave shawii*), and Cooper's Rein Orchid (*Platanthera cooperi*). NBPL coordinates with the USFWS to ensure that impacts of in-water activities at NBPL that may affect California Least Tern (*Sterna antillarum browni*) foraging, are minimized. Management includes not only species-specific protocol surveys, but also heavily involves the removal of and reducing the spread of invasive plant species to maintain the biological integrity of our ecosystems. When ecosystems are functioning with native composition and diversity, all plants and animals within can thrive. This

activities. This integration assists in the development of testing scenarios, identifies gaps in technology, and allows for more rapid introduction and use of these systems by the Fleet.

To balance the priority of military readiness with conservation of a federally protected species, a Biological Opinion (2022-0070527-S7-F) was issued on May 25, 2023, with Conservation Measures established to avoid and minimize potential adverse effects to CAGN while maintaining military readiness. The Biological Opinion was the natural resource backbone of the Environmental Assessment review document for these actions. This Biological Opinion serves as a strong example of how military training and sensitive natural resources can successfully coexist and thrive.

ORCUTT'S SPINEFLOWER

Orcutt's Spineflower is a small, herbaceous annual found within openings in chaparral and coastal sage scrub communities, on sandy soils developed from eroded coastal bluffs. Occurrences of this species throughout San Diego County are few, mostly due to urbanization. NBPL currently supports nearly all extant populations of this species. As such, annual monitoring and habitat enhancement (through invasive species removal) is a priority of the Natural Resources team. Leading researchers from TTU have partnered with NBPL under a Memorandum of Understanding (MOU) to manage and study Orcutt's Spineflower. During this partnership, this species has been managed and studied so well on NBPL that its populations have steadily increased.



Kauer et al. (2020) investigated three Orcutt's Spineflower populations on NBPL on eastern and western slopes to identify what factors most strongly influence germination and plant fitness over multiple years. They were able to determine that plants on east-facing slopes showed larger population sizes and higher plant fitness, due to the microclimate variables of cooler air and soil temperature, and higher soil moisture. From 2020 through 2022, TTU researchers collaborated with NBPL, City of San Diego, and California State Parks to collect leaf tissue samples from all of the Orcutt's Spineflower populations in San Diego County to examine genetic diversity among populations. The genetic analyses are ongoing and NBPL is waiting for the findings. All of the work that has been done and is ongoing enables the Natural Resources team to better understand the reproductive and habitat requirements for Orcutt's Spineflower. The large population sizes on NBPL are contributing to an extensive seed bank to ensure the longevity and viability of this species. Work on NBPL is helping this species to thrive and ultimately may lead to recovery. The continued management of Orcutt's Spineflower on NBPL is another successful example of how a sensitive species can thrive in balance with the priority of military training and readiness.

ACACIA REMOVAL

In February 2020, an MOU was finalized between CNRSW and the Zoological Society of San Diego to establish standards, geographical areas, and conditions for the SDZWA Department of Horticulture to harvest non-native acacia at NBPL. Acacia is a highly invasive plant species that is prolific on NBPL. The 2018 Vegetation Management Plan specifically ranks acacia as one of

the top four invasive priority plant species to eradicate at NBPL. This priority ranking of acacia means that this species is present in large infestations, overtakes and excludes native vegetation, and is difficult to control.

NBPL's work with the SDZWA is mutually beneficial as it fosters partnership opportunities with the San Diego community. The removal of a priority invasive plant species from NBPL is cost effective for the Navy, and NBPL's limited natural resource funds are able to be allocated to other programs on the peninsula, such as Orcutt's Spineflower habitat restoration or sensitive species surveys. SDZWA in turn lowers its herbivorous animal care costs. The Natural Resources team collaborates effectively with NBPL's Facilities Managers to remove acacia in areas where vegetation removal is necessary due to military training needs, fire safety, or installation security management (ex. along fence lines).



ACCOMPLISHMENT SYNOPSIS

The goal of NBPL's INRMP is to provide no net loss to the military mission by managing natural resources in an adaptive ecosystem-based approach that supports biological integrity and compatibility with military operations. This award narrative highlights four areas where the Natural Resources team at NBPL has demonstrated their successful management of species and habitat conservation in balance with maintaining military readiness. The coastal California Gnatcatcher and Orcutt's Spineflower are two federally protected species at NBPL that are actively monitored and managed. Both of these species are thriving while military training and testing is increasing at NBPL in order to meet the statutory responsibilities of the Navy to train and maintain combat-ready forces. Partnerships and engagement with community members and organizations, such as the SDZWA, SDNHM, TTU, and being good neighbors with the Point Loma surrounding community, are an integral part of maintaining the biological integrity of NBPL's native habitats and species. NBPL is a peninsula, but it is not an island and management of its biological resources extends beyond its boundaries and is continually ongoing. NBPL strives to be exceptional stewards of its natural resources balanced with supporting military training and strong readiness.