APPENDIX P

YMCA CAMP SURF NATURAL RESOURCES MANAGEMENT PLAN

YMCA Camp Surf Natural Resources Management Plan

Introduction

The YMCA of San Diego runs a youth camp called YMCA Camp Surf. The Camp has been operating for 44 years. On a sand spit alongside the Pacific Ocean and across Highway 75 from San Diego Bay, it is set in attractive, picturesque open space in intensely urban surroundings. While on U.S. Navy (Navy)-owned land, the property is located within the boundaries of the city of Coronado, except for a small southern portion in the city of Imperial Beach. It is bordered to the south by neighborhoods of the city of Imperial Beach.

YMCA Camp Surf operates on 45 acres leased for 50 years from U.S. Naval Base Coronado (NBC), whose land includes the property formerly known as the Naval Radio Receiving Facility (NRRF), now known as Silver Strand Training Complex-South (SSTC-S), on which the Camp resides. The current lease (No. N6871198RP08Q23) expires September 16, 2048. Rent fees are paid for through maintaining and enhancing the natural resources of the leased property. At the end of each year, the lessee is required to submit a report to the U.S. Navy describing work performed and expenses incurred realizing this work. Rent is renegotiated every five years. This lease was amended in 2003, and per the renewal the U.S. Navy is required to develop the natural resource management plan for the needs of the Camp, rather than the lessee, the YMCA. This is a revision of the 2002management plan developed under the lease agreement performing this function.

This Plan is a sub-plan of the Integrated Natural Resource Management Plan (INRMP) for NBC, which covers several other Naval properties in addition to SSTC-S. The purpose of this Natural Resource Management Plan for YMCA Camp Surf is to comply with federal laws regarding natural and cultural resources that are the responsibility of the Navy, and the YMCA as its lessee, as well as to provide guidance to the YMCA on managing its lands in support of its own mission as well as that of the Navy.

The Sikes Act Improvement Act of 1997 (SAIA) committed the U.S. Department of Defense (DoD) and U.S. Navy to develop INRMPs for installations like NBC. The SAIA stipulates that INRMPs (and thus this sub-plan) provide for:

- Conservation and rehabilitation of natural resources on military installations
- Sustainable, multipurpose use of the resources
- Public access to facilitate their use, subject to safety requirements and military security
- Specific natural resource goals and objectives and time frames for acting on them

Specifically, this plan is to address:

- Fish and wildlife management and land management
- Fish and wildlife habitat enhancement or modifications
- Wetlands protection, enhancement, and restoration, where necessary for support of fish, wildlife, or plants
- Sustainable use by the public of natural resources to the extent that the use is not inconsistent with needs of the fish and wildlife resources
- Public access that is necessary and appropriate for the use described above, subject to requirements necessary to ensure safety and military security
- Enforcement of natural resource laws and regulations

- No net loss in the capability of the military installation lands to support the military mission of the installation

An INRMP is an ecosystem-based plan that is to be developed in cooperation with and with the concurrence of U.S. Fish and Wildlife Service (USFWS) and the state fish and wildlife agency, in this case the California Department of Fish and Wildlife (CDFW).

Military Mission of U.S. Naval Base Coronado

The mission of NBC is to support the U.S. Pacific Fleet and other operating forces by providing "*the highest quality logistical support and quality of life services to U.S. Navy operating forces and for assigned activities and other commands as needed, and to provide the right support, at the right time, in the right amount, enabling operating forces to produce the right level of combat readiness; that is, support the Fleet, Fighter and Family*" (CNIC 2012).

Youth Mission of YMCA Camp Surf

The YMCA mission statement is, "The YMCA of San Diego County is dedicated to improving the quality of human life and to helping all people realize their fullest potential as children of God through development of the spirit, mind, and body." The focus of the organization is youth development, healthy living, and social responsibility.

Through its programs at Camp Surf, the YMCA of San Diego County seeks to help individuals:

- develop self confidence, self-respect, and an appreciation of their own worth as individuals.
- develop a faith for daily living based on Judeo-Christian teachings that they may thereby be helped in achieving their highest potential as children of God.
- grow as responsible members of their families and citizens of their communities.
- appreciate that health of mind and body is a sacred gift and that physical fitness and mental well-being are conditions to be achieved and maintained.
- to recognize the worth of all persons, and to work for interracial and inter-group understanding.
- to develop their capacities for leadership and use them responsibly in their own groups and community life.
- appreciate the beauty, diversity and interdependence of all forms of life and all resources which God has provided in this world, and to develop an ethical basis for guiding the relationships of mankind with the rest of God's natural community.

YMCA Camp Surf operates day and overnight camping experiences for youth. The camp conducts marine and coastal outdoor education for both public and private schools as well as leadership training for high school peer counseling groups.. The YMCA teaches aquatic skills, arts and crafts, archery and other sports, and outdoor education, serving about 12,000 people each year. YMCA Camp Surf is designed to serve about 15,000 people annually. Rustic cabins and centralized bath houses support overnight stays of up to 300 campers at a time. The YMCA also supports the City of Imperial Beach through school partnerships and free family events. The YMCA remains responsible for the planning and management of the site and is liable for all occurrences on the site as well as that of any contractor used in their day-to-day operations.

Site Description

Current Facilities

Much of the descriptive text in this document comes from the larger SSTC-S property, since most studies do not separate the Camp from SSTC-S in their reporting.

The following physical facilities are currently in use at the site: nine camp cabins, two staff dormitories; a waterfront center; two restroom/shower buildings; Art Jacobs' food service center; maintenance yard; Doug Walter's REEF (Recreation and Environmental Education Facility); Surf Hut; recycle/refuse lot; ropes course and climbing/repelling wall; two resident staff mobile homes; Hawaiian Village; lifeguard towers; chapel; campfire area; archery range and shed; sand volleyball courts; bouldering wall , skate ramps; parking lot; beach campsites; wildlife lagoon; marsh restoration; barrier dunes, and open fields.

Site History

The development of facilities at YMCA Camp Surf has occurred gradually. Nine beach campsites with fire rings were first built in 1970. Beach dune redevelopment has been taking place since 1989 in an attempt to encourage native dune life. The greenhouse was constructed to support the seeding of native plants at the camp. In 1972, an 11-acre wildlife lagoon was constructed by the U.S. Navy Seabees. It was designed to be filled by a brackish water well, and is intended to behave as a tidal flow out through the marsh and support the resting, feeding and breeding of local and migrating birds. Marsh restoration took place from 1970–75, and began again in 1987. The restoration plan calls for periodic flooding of the mud flats and channels, to simulate tidal flow and support and encourage the growth of marsh plants and wildlife (YMCA 1994).

Site Plans

The lease for YMCA Camp Surf requires that all plans and specifications for specific construction and installation projects be submitted to the government for approval, beginning at the preliminary design stage. No construction is to begin until the government has reviewed and approved the final plans and specifications for each project.

The YMCA's 2005 Master Plan for Camp Surf, is a sub-plan of its Strategic Plan for program and human services needs of camp programs. The Site Plan includes conceptual locations and approximate sizes of capital facility improvements in support of YMCA's goal of a safe, well-maintained, functional youth camp that demonstrates the YMCA's core values. The building program includes an aquatic safety center, galley (dining facility), program center, group restrooms, full-time staff housing, and maintenance facility to accommodate services to about 15,000 participants per year.

The Master Plan delineates goals to improve the camp by constructing new buildings that will provide year-round facilities to campers, staff, and other guests. Construction would be contingent on YMCA donations, and would only take place on existing disturbed areas. The eight planned facilities, their square footage, and their new utility requirements are:

- *Aquatic Safety center* (8000 square foot [sq ft] facility; main sewer line must be extended 320 ft; 1000 ft of larger gas line; 400 ft new electrical service)
- *Dining facility* (6000 sq ft facility)
- *Administrative center* (2000 sq ft facility; 300 ft of underground electric, gas, and sewer)
- *Retreat lodges* (6000 sq ft total facilities; 1000 ft underground electric, gas, sewer, and water)
- *Camper lodges* (3000 sq ft total facilities; 1000 ft underground gas line)

- *Group restrooms* (1200 sq ft each, unclear how many total facilities; 100 ft underground gas line; 200 ft underground sewer and water)
- *Staff housing* (4800 sq ft total facilities)
- *Maintenance facility* (10,000 sq ft total: 2000 sq ft indoors and an 8000 sq ft yard; 100 ft underground electric, sewer, gas and water)

The Master Plan leaves native wetlands and undeveloped habitat as is.

Cultural Resources

Cultural resources include prehistoric, historic, and architectural resources. The resources may be sites, structures, buildings, or objects. Places that have been important in maintaining the identity of a community for more than 50 years are called traditional cultural places or properties (TCPs), and they fall under the heading of cultural resources.

YMCA Camp Surf contains known, and possibly some unknown cultural resources. Current U.S. Navy cultural resource policy dictates that locations of cultural resources on its properties not be disclosed in public documents.

Natural Resources

Topography and Soils

Topography at YMCA Camp Surf ranges from approximately 10 ft above sea level to 35 ft above sea level. Small, shallow, depressions occur in various locations across the site, where seasonal wetlands and waterfowl habitats are formed during winter months.

SSTC-S is located on the Pleistocene Bay Point Formation. It is composed of marine, lagoonal, and non-marine, poorly consolidated fine sand and medium-grained, fossiliferous sandstone. The beachfront portions of the facility are composed of unconsolidated sand and silt from longshore drifts and alluvial discharge from major stream courses.

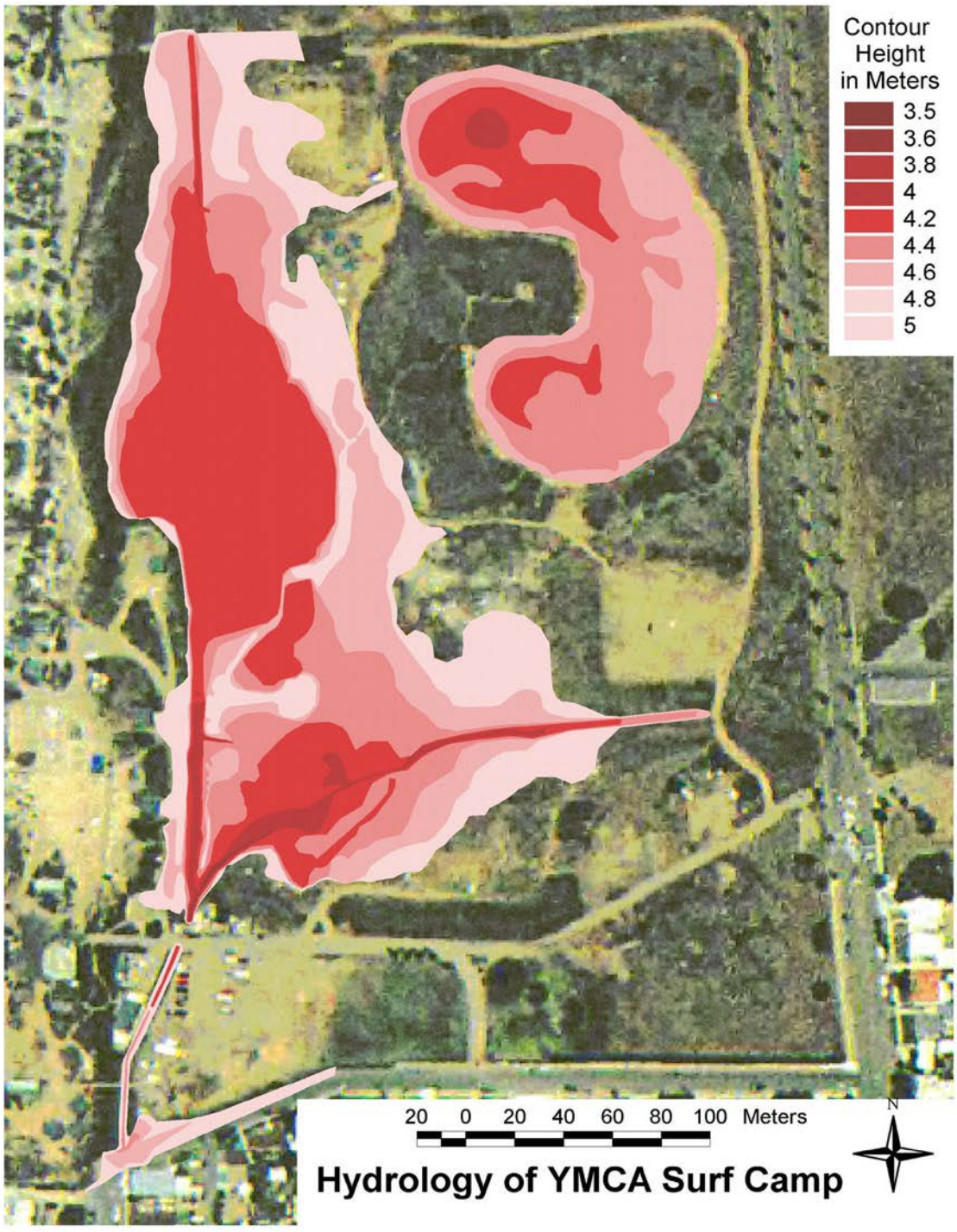
The soils on SSTC-S are primarily old beach dunes and sandy marine sediments weathered from ferruginous (iron-rich) sandstone and alluvium. Specific soil types found at SSTC-S are Coastal beaches (78 acres [ac]), Marina loamy coarse sand (303 ac), Huerhuero loam (136 ac), and Huerhuero-Urban land complex (7 ac). Map 3-1 in the NBC INRMP shows the soil types present.

Hydrology

A portion of the YMCA Camp Surf experiences flooding from stormwater at the north end of Carnation Avenue and Seacoast Drive, as well as from SSTC-S to the north. A large amount of water annually pools during winter storms. Two pools in particular hold fresh water at this time and are used by many migrating birds. Certain of these pools was originally excavated to manage the flows of a 100-year flood. A series of trenches divert water from Imperial Beach and other parts of SSTC-S to these pools. In 2001, one part of this area remained flooded throughout the year, suggesting that an underground source of water had been tapped. This water was pumped out to the ocean so the flooding did not back up into nearby homes. In September of 2001, this water was pumped to the ocean at a rate of 15,000 gal/hr, more than had been observed in at least

the previous eight years (Thompson, *pers. comm*). This summer freshwater flow was determined to be a broken pipe at SSTC-S, originating north of the YMCA Camp Surf fenceline.

Map F-1 shows hydrology of YMCA Camp Surf.



Map F-1. Hydrology of YMCA Camp Surf.

Habitats and Communities

This section describes the habitats, and some of the inhabitants, of the communities found within YMCA Camp Surf. Most of the information was taken from the Natural Resources Inventory completed in 2001 and 2002 (US DoN 2004) and the San Diego Bay Integrated Natural Resources Management Plan (USDoN SWDIV 2000). Plant communities for Camp Surf are also described in Chapter 6 of the NBC INRMP.

Salt Marsh

Salt marsh, the driest intertidal habitat, occurs in the upper intertidal zone above the mudflats. Since the climate is semi-arid, uninterrupted tidal circulation is important as the source for water, nutrients, and oxygen (Macdonald *et al.*1990).

Urban development has severely reduced salt marsh habitat which now only remains in south San Diego Bay and in significant acreage on Naval Outlying Landing Field (NOLF) Imperial Beach property at the Tijuana Estuary. Salt marsh previously existed at the mouths of seven bay drainages. Baywide, approximately 88% of salt marsh habitat has been lost, and this plant community is considered to be scarce in southern California as a whole. Estimates of loss of salt marsh habitat in Southern California range 75– 90% (Zedler 1996).

Today, the primary marsh complex is on the eastern shores of south Bay at the Sweetwater Marsh National Wildlife Refuge. SSTC-S supports about 57 acres of salt marsh overall, however, portions of the marsh at SSTC-S no longer function as marsh land since they are no longer tidally influenced. Over 13 acres are found throughout the central portion of YMCA Camp Surf. Marshes support the federally and state endangered salt marsh bird's beak *(Cordylanthus maritimus maritimus)*.

A number of marine fish inhabit the salt marshes. Topsmelt (*Atherinops affinis*), arrow goby (*Clevelandia ios*), California killifish (*Fundulus parvipinnis*) and longjaw mudsucker (*Gillichthys mirabilis*) are expected due to their prevalence at the Sweetwater Marsh (Johnson 1999). Young round stingray (*Urlolphus halleri*) and California halibut (*Paralichthys californicus*) also are expected. Two exotic fishes, also present, could become a nuisance, the yellowfin goby (*Acanthogobius flavimanus*), which probably arrived in ship bilge water, and the sailfin molly (*Poecilia latipinna*), likely introduced through the aquarium trade (Boyer *et al.*1996a).

Upland Transition Marsh

Over seven acres of upland transition habitat is found along the eastern side of YMCA Camp Surf. The upland transition zone is not a distinct community in and of itself, but represents a gradient between the upper marsh and coastal scrub community (Zedler *et al.* 1992). The lower end of the gradient is characterized by glasswort (*Salicornia sp.*), salt grass (*Distichlis spicata*), shoregrass (*Monanthochloe littoralis*), alkali heath *(Frankenia grandifolia)*, and alkali weed *(Cressa truxillensis)*, while the upper part of the gradient is characterized by Australian salt bush *(Atriplex semibaccata)*, California buckwheat *(Eriogonum fasciculatum)*, laurel sumac *(Rhus laurina)*, lemonadeberry *(Rhus integrifolia)* and sage *(Salvia* and *Artemisia* species) (Zedler *et al.*1992; Holland and Keil 1995).

A well-functioning salt marsh habitat provides nesting, feeding, and a high-water escape area for many species of birds, as well as food and cover for fish and invertebrates. Birds that depend on the marsh are concentrated on parcels that retain such features. The California state endangered Belding's savannah sparrow (*Passerculus sandwhichensis beldingi*) and the federally endangered light-footed clapper rail (*Rallus longirostris levipes*) depend upon the salt marsh habitat.

The health of a salt marsh can be affected by the loss of plant cover or density, or changes in plant composition towards species that tolerate brackish or fresh water. The presence of nonnative plants within the salt marsh could indicate reduced salinity levels, as could the presence of native upland plants.

Photo F-1. Wetland at YMCA Camp Surf, Silver Strand Training Complex-South, 2001.

Freshwater Marsh and Riparian

SSTC-S contains over five acres of freshwater marsh. Freshwater marshes are nontidal. They are generally contiguous with the upland side of the salt marshes and are occupied by southern cattail *(Typha domingensis),* mulefat *(Baccharis salicifolia),* and prairie bulrush *(Scirpus robustus).* These areas appear to be somewhat brackish on SSTC-S (US DoN 1998). Freshwater marshes and riparian areas adjacent to salt marshes have been severely impacted by development and reduced runoff from rivers and creeks.

Sandy Beaches and Southern Foredunes

Plants of the coastal strand habitats, such as along the beaches and dunes YMCA Camp Surf's shores, are typically well adapted to the sandy soils that occur there. Many have deep taproots, enabling them to reach fresh water deeper in the soils.

Foredunes are situated closest to the seashore and therefore more subject to the greatest amount of salt stress, wind and wave action. Approximately three acres of foredune community occur at YMCA Camp Surf. Typical foredune species are red sand verbena (*Abronia maritima*), Watson salt bush (*Atriplex watsonii),* and sea rocket (*Cakile maritima).* Plant species diversity tends to increase with distance from the beach, with less salt tolerant species becoming more abundant (Holland and Keil 1995).

Native plant cover is especially important to these habitats because it stabilizes the shifting substrate, which in turn protects the landward habitats from sea storms. The native dune plants such as beach evening primrose (*Camissonia cheiranthifolia*), sand verbena, and beach-bur (*Ambrosia chamissonis*) occur along bayside portions of Silver Strand State Beach and dunes at SSTC-S. Some native species declined following human impacts, while several exotics, such as hottentot fig (*Carpobrotus edulis*), sea rocket, and Australian saltbush invaded. The dunes at YMCA Camp Surf have a cover of approximately 50% of hottentot fig.

Nuttall's lotus (*Lotus nuttallianus*), a sensitive species (CNPS List 1B) is present in the dunes at SSTC-S, but has not yet been mapped for YMCA Camp Surf. Other sensitive plant and animal species of limited distribution that inhabit dune and beach areas of the Bay, and could be potentially present on the dunes at YMCA Camp Surf include: coast woolly-heads (*Nemacaulis denudata denudata*), coast horned lizard (*Phrynosoma coronatum blainvillei*), globose dune beetle (*Coelus globosus*), San Diego black-tailed jackrabbit (*Lepus californicus*), and coast horned lark (*Eremophila alpestris*). Dunes also provide habitat for the

silvery legless lizard (*Anniella nigra argentea =Anniella pulchra pulchra*), which has been reported historically at SSTC-S.

Hottentot Fig

While not normally described as a community, portions of YMCA Camp Surf are so dominated by hottentot fig that it must be treated separately. Hottentot fig, a kind of iceplant, is a very invasive species that is sometimes planted for erosion control and on freeways. It was recommended for planting in the 1950s at SSTC-S for erosion control, and since then has grown rapidly to displace native plants (Williams and Williams 1984) and the animals that depend upon them. It provides little food or habitat for native insects, including the sensitive native dune beetles (Nagano, *pers. comm.*, cited in Zedler; Snover 1992). Dune beetles and other native insects are less abundant under exotic vegetation, possibly because temperatures tend to be cooler, which may slow insect development (Snover 1992). About 130 acres of hottentot fig, in practically a monoculture, occur in the abandoned foundations of SSTC-S; at YMCA Camp Surf, over three acres occur in solid patches throughout the property. Executive Order 13112, "Invasive Species", requires executive agencies to restrict the introduction of exotic organisms into natural ecosystems. It establishes federal agency responsibilities for the identification and management of invasive species.

Wetlands

Wetlands provide many vital ecological functions and support a high diversity of resident and migratory wildlife species. Wetlands filter nutrients and sediments and are among the most impacted habitats in the world. Some important functions include water quality enhancement, flood control, nutrient cycling, sediment capture, groundwater recharge, and providing corridors for wildlife. In addition, freshwater marshes on NBC are essential to migrating birds and vernal pools are home to the endangered San Diego fairy shrimp (*Branchinecta sandiegoensis)*. Saltwater habitats also provide important foraging habitat for birds, including California least terns (*Sterna antillarum brownii*) and peregrine falcons (*Falco peregrinus anatum*), and provide nurseries for many fish and aquatic invertebrates.

Current management of wetlands at the Camp includes:

- A wetland delineation performed for all of SSTC-S (US DoN 2004)
- All personnel and children at YMCA Camp Surf are restricted from entering the wetland areas
- Management of wetlands generally accomplished through the site approval process and fencing, scheduling, or other controls to avoid impacts during vulnerable periods
- Stormwater flows into the channel routinely pumped out to the ocean

Rare Plants

The salt marsh bird's beak is known to occur at SSTC-S and a 1998 report (RECON 1998) discusses this plant's distribution, pollinators, seed set, and general population health based on field work done in the mid-1990s. Two colonies of salt marsh bird's beak are located within the salt marsh habitat on the northern edge of YMCA Camp Surf. In 1995, one colony consisted of eight plants and the other of approximately 500 plants. More recent sensitive plant surveys were conducted at Camp Surf in 2011 in which 389 individuals of salt marsh bird's beak occurred in the northwestern corner (US DoN 2012). Populations of this plant vary with rainfall and have varied from 389 to 1,240 individuals between 2009 and 2011 at Camp Surf (US DoN 2012).

Coast woolly-heads *(Nemacaulis denudata* var. *denudata*) and Nuttall's lotus (*Lotus nuttallianus*), plants ranked by the California Native Plant Society (CNPS) as 1B.2 and 1B.1 respectively, have the potential to

occur within Camp Surf. Southwestern spiny rush *(Juncus acutus* ssp. *leopoldii)* (Photo F-2), CNPS rank 4.2 may be found in the marsh areas, and red sand verbena (*Abronia maritima*) , also CNPS rank 4.2 species, may be found in the dunes areas of Camp Surf.

Photo F-2. Southwestern spiny rush.

Salt marsh bird's beak: Federal and State Endangered

Photo F-3. Salt marsh bird's beak.

Salt marsh bird's beak (*Cordylanthus maritimus maritimus*) is a federally and state endangered species that is found in the saline and alkaline habitats of the high salt marsh (Hickman 1993; California Native Plant Society [CNPS]1994). It is also listed as Category lB by the CNPS, which makes it mandatory for full consideration in environmental documents related to the California Environmental Quality Act (CEQA), and usually includes National Environmental Policy Act (NEPA) analysis. Its location within the salt marsh also protects it through legislation applying to wetlands, the Clean Water Act (CWA).

Salt marsh bird's beak inhabits a narrow elevation range in coastal salt marshes. It inhabits a narrow elevation range in coastal salt marshes coinciding with the upper limit of high spring tide, blooming from May to October (CNPS 1994). Its abundance can vary significantly from year to year, possibly related to fluctuations in annual rainfall. Entire colonies have disappeared and reappeared two years later at Tijuana Estuary (Pacific Estuarine Research Laboratory 1996).

The INRMP for San Diego Bay (USDoN SWIV 2000) summarized several specific management concerns for the salt marsh bird's beak in the Bay area, many of which are relevant to Camp Surf:

- There is a severe loss of salt marsh habitat in San Diego Bay, and little means to get it back that are not excessively expensive.
- Remaining populations are isolated and subject to sudden decline due to drought.
- There is a lack of linkage between the salt marsh and upland habitat for pollinators.
- There is uncertain long-term persistence of salt marsh bird's beak populations that have been planted for mitigation projects (Zedler 1996).
- The USFWS adopted a recovery plan for salt marsh bird's beak in 1984, calling for the establishment and persistence of 12 populations prior to downlisting the species to a threatened status (USFWS 1984).

Fifty years ago, the species was found in 18 southern California coastal marshes and was characterized as a "frequent" inhabitant of those in San Diego County (Purer 1942). Today, very few populations of this plant remain in the U.S.Camp guests are restricted from entering the area at YMCA Camp Surf, though no signs or fences are placed around the population.

Management Concerns

- There are many environmental laws and regulations with which the U.S. Navy must comply as a federal landowner. This compliance can be complex and conflictual. YMCA needs specific guidance on management of its leased lands without requiring knowledge of this legal context or nuances of management requirements. The U.S. Navy, on the other hand, requires assurance that its legal compliance obligations are being met, and that no laws are violated.
- Camp Surf is a small but essential unit of a much larger set of related coastal properties owned and operated by NBC along the San Diego Bay coast and Tijuana Estuary. Management of the property must be consistent with the context of the larger operational and management objectives of these properties. This situation requires up-to-date, clear, and well-defined lines of communication between the Navy and YMCA.
- The openness of the beach at YMCA Camp Surf facilitates access to the property; trespassing is an ongoing problem. Security of camp participants is extremely important and has necessitated the construction of a fence on the ocean side of the property.
- The Camp has had long-term, ongoing concerns about beach closures related to sewage spills in the Tijuana Estuary. In 1993, this problem resulted in 207 days of beach closure, and campers were transported to other beaches. However, the negative publicity resulted in a loss of $18,000 from cancelled contracts from year-round groups plus an unknown amount from groups that did not follow up on the Camp's marketing contacts (YMCA 1994).
- Salt marsh bird's beak, one of only two natural locations in San Diego County, is protected under federal law. While the two colonies at YMCA Camp Surf appear to be stable, they are subject to harm or loss

from catastrophe such as disease, insect outbreak, loss of pollinators from upland areas, or an errant construction operation.

- Ponds and marshes on YMCA Camp Surf are essential to migrating birds and provide nurseries for many fish and aquatic invertebrates. Under U.S. Navy policy (OPNAVINST 5090.1B), there shall be "no net loss" of wetland habitat. Jurisdictional waters of the U.S. and wetlands require permits for ground disturbing activities and possible mitigation. Questions about site-specific impacts must be addressed with the USACOE. Jurisdictional wetland delineations are mandatory and should be performed at each installation to show which wetlands or water bodies are subject to regulatory jurisdiction under Section 404 of the CWA.

Management Recommendations

The U.S. Navy is responsible for compliance with a wide range of federal laws and regulations regarding natural and cultural resources. These are summarized in the NBC INRMP, and are addressed in full there. For a number of subject areas, no recommendations specific to YMCA Camp Surf are made. General guidelines on approaches can be found in Chapter 6 of the NBC INRMP, and are briefly described here. The following includes the most relevant of those general recommendations, plus others that are specific to YMCA Camp Surf.

Soil Erosion Prevention and Control

Objective: Protect the natural and beneficial functions of YMCA Camp Surf's soil resources.

- Soil conservation shall be considered in all site feasibility studies and project planning, design and construction. Appropriate conservation work and associated funding shall be included in project proposals and construction contracts and specifications.
- Generate and ensure incorporation of innovative Best Management Practices (BMPs) in the preliminary design of construction and maintenance activities involving ground disturbance.

  Keep a record of the most effective BMPs for use in NEPA planning and mitigations.

  Use the specific guidance for selecting BMPs as presented in the *San Diego County Water Authority's General Conditions and Standard Specifications*, and other proven techniques, with the following strategy: minimize site disturbance; stabilize site disturbance; protect slopes and channels; control site perimeter; control internal erosion; and after construction, add source-control BMPs and treatment-control BMPs.

- EO 11989 "Off-Road Vehicles on Public Lands" provides for closing of areas to use where soil, wildlife, or other resources are adversely affected.
- Provide overall management guidelines for routine maintenance activities while preventing erosion and protecting sensitive natural and cultural resources.

  The first priority shall be to prevent, through proper planning, losses of environmental values due to impacts to soils, watersheds, habitats or species.

  Mitigate for unavoidable impacts to sensitive species.

- Stabilize disturbed sites with appropriate native erosion control plants or protective materials.
- Regularly monitor storm runoff and its effect on particularly vulnerable areas such as steep slopes.

Water Resource Management

Objective: Protect water resources from excessive runoff and pollution. Maximize the value gained from water resources for multiple, beneficial uses.

- Recycle grey water (used water from sinks and showers) into the low wetland area for wildlife habitat enhancement. Contact the San Diego County health officials to find out what restrictions apply in the use of grey water. Contact the University of California Cooperative Extension Service office (County Farm Advisor) for information on grey water's effect on plants. Look into restricting soaps and shampoos that will be used in grey water bound drains to biodegradable ones.
- Recontour channel so stormwater provides maximum benefit to wildlife. Obtain a USACOE permit for this work. Do this in coordination with the Navy so that an agreement with USFWS is established for the expected enhancement. Participate in San Diego Bay water quality monitoring and community projects.

Habitat and Ecosystem Management

Plant Communities

Objective: Conserve the native plant communities to support biodiversity and ecosystem health.

- Continue to document the baseline condition and change in YMCA Camp Surf's natural resources to benefit the Navy's need to establish credit for impacts to resources throughout its coastal properties, emphasizing the upland transition areas.
- Survey and re-map plant communities, possibly in conjunction with rare plant surveys, every five years. Keep an updated plant list and map of plant communities and sensitive plant locations.
- For all sources and types of invasive exotics, EO 13112 "Invasive Species" of February 1999 assigned responsibilities to federal agencies to prevent the introduction and spread of and to provide control of invasive species, plant or animal, aquatic or terrestrial. In response to this EO, the Pentagon's acquisitions chief has directed the military services to incorporate invasive species prevention measures into existing operational and transportation policies, as well as into INRMPs and pest management plans.
- Manage resources so that non-natives are discouraged and natives are encouraged. See Attachment 1 for a photographic guide to the most problematic weeds occurring on YMCA Camp Surf and the following *Invasive Weed Management* Section for more detail.
- Use overall plant, soil, and moisture of soils as primary monitoring indicators to evaluate the need for adjustments to management. Watch for increases in erosion and/or the presence of numerous dead or dying plants.
- Prevent unnecessary damage or disturbance to native plant communities.

  Prevent ground-disturbing activities especially in areas supporting sensitive species.

  Actively control erosion in areas supporting native plant communities.

Wetland/Riparian Management

Objective: Protect the natural and beneficial functions of YMCA Camp Surf's riparian vegetation, wetlands and other waters. Wetlands shall be managed to ensure no net loss of area, function, or value.

- A current inventory of wetlands shall be maintained and net changes monitored annually (USDoD 4715.DD-R 1996).
- Maintain a current inventory of wetlands and monitor net changes annually (USDoD 4715.DD-R 1996). Monitor wetland community plant species composition and relative cover on an annual basis to ensure no net loss in structure or function.
- Protect the natural ecological integrity, structure, and functional values of wetlands.

- Activities in jurisdictional wetlands must be requested through NBC biologists. This includes any movement or deposition of soil.
- Prohibit dumping, filling or other contamination of wetlands or waters. Filling or excavation requires a permit from USACOE.
- Prohibit practices which increase sedimentation of wetlands, or change of water flow without consultation of NBC biologists.

- Enhance populations of wildlife and plants dependent on wetlands (OPNAVINST 5090.1B CH-2). Establish a schedule of annual effort at invasive species control, with priority target species based on the threat to sensitive habitats and species, and cost-effectiveness of control.

- Control the spread and introduction of invasive plant species in wetland habitats (Section 4.3.3 Invasive Weed Control, NBC INRMP), especially tamarisk and giant reed.
- Provide special protection consideration to wetlands which harbor sensitive species first.

Habitat Enhancement

Objective: Protect and enhance YMCA Camp Surf's existing resources.

- Continue to document the baseline condition of Camp Surf's natural resources.
- Educate camp personnel and visitors about sensitive species and what activities may or may not be conducted in order to protect these species.

Ensure that no YMCA activities violate any laws or guidance, such as the ESA or CWA, that apply to federal agencies. Ensure Camp managers are familiar with and comply with the NBC site approval process (Attachment 3).

Invasive Weed Management

Objective: Control the spread and introduction of invasive plant species with priority on those areas with the greatest potential for sensitive species occurrences or habitat degradation, and restore locations to native habitat, when feasible.

- EO 13112 directs federal agencies to control invasive species, whether they be plant or animal, aquatic or terrestrial. The federal Noxious Weed Act of 1974 (7 USC. 2801) establishes control and eradication of noxious weeds and regulates them in interstate and foreign commerce. Finally, DoD INSTR 4715.3 says that management measures for the removal or control of exotic species shall be included in installation INRMPs, when applicable.
- Eradicate hottentot fig and replant with natives.
- Implement mapping, monitoring, and prioritization programs as needed. Identify new infestations of invasive species as they become known and map all infestations of invasive plants every three years to gauge the effectiveness of control efforts or record species' rate of spread.
- Prioritize treatment areas based on known aggressiveness of the invasive, extent of the infestation, and the threat risk to native plants and animals.

- Use Attachment 1 to identify the most abundant and potentially problematic species.
- Initially target the following species for control: hottentot fig, giant reed, and pampas grass. Efforts to control giant reed should begin in the fall/winter outside of the breeding season for birds, and at a time when the weed species are in non-growth phases more susceptible to herbicide application.

■ Control invasives at YMCA Camp Surf and replace with native cover to comply with invasive species laws and assist in the conservation of native dune endemics.

- Appropriate methods for weed control are: hand pulling, grubbing, and mowing. The use of herbicides may be the most appropriate course of action for some invasions, but its use, along with anything not mentioned above, will need to be discussed with the NBC Botanist.
- Provide reports of removal efforts so they may be tracked.
- Restoration and construction plans should include contingencies for removing invasives as they appear and for implementing new control measures as they become available.
- Coordinate timing of control of invasives near the property boundary with adjacent landowners and managers to achieve maximum control and minimize cross-boundary reinvasions. Teaming with other agencies (e.g. state, county) often greatly increases the likelihood of receiving grant monies to control exotics.
- Control programs and removal projects should cause the least possible disturbance to native species and communities.
- Remove exotic plant species on sand dunes using methods that protect sensitive species that may occur there but that are currently undocumented.
- Control exotic plants in the upland transition community; especially iceplant.

■ The use of herbicides must be approved by the NBC botanist and be reports submitted via the Navy Online Pesticide Reporting System (NOPRS). All applicators shall have a qualified applicator certification / license to apply pesticides in the State in which they will apply the pesticides. See Attachment 2 for NOPRS information.

Landscape and Grounds Maintenance

Objective: Improve the visual and aesthetic environment for both campers and staff at YMCA Camp Surf, while avoiding the introduction of invasive exotic species, decreasing water use, improving drought tolerance of plant communities, and maintaining the integrity and character of cultural resources.

■ All landscaping must be approved by NBC botanist and wildlife biologist. Large trees including palms may not be suitable due to predator impacts on protected birds. A landscaping plant list is provided in Appendix H of the NBC INRMP. New landscaping should consist mainly of locally-adapted native species, drought-tolerant and historically appropriate species, combined with rock mulches and boulders. In addition, the overall landscaping effect should be consistent with the surrounding plant communities.

■ To the extent practical, NBC must use regionally native plants for landscaping and other beneficial water conservation techniques. If native plants are not available or do not suit the project objective, the NBC Botanist may grant permission for the use of drought-tolerant, fire resistant, non-native or other special purpose species.

- Federal agencies are restricted in the use of exotic (non-native) plant species in any landscape and erosion control measures, as indicated by EO 13112.
- Care should be used in the renovation of existing landscape areas to ensure that non-native plants in the landscape do not have the propensity to escape into and threaten the native plant habitat.
- Plants may also be selected for their value to wildlife as a food source, where practicable, but not near camp eating areas.
- Consult with the San Diego County Cooperative Extension Farm Advisor, Resource Conservation District, or local landscape contractors and nurseries about soil amendments needed for poor planting soils.
- Use small trees and shrubs to block all undesirable views, noise, and lights and provide privacy. Plant windbreaks are for wind deflection, dust control and noise suppression. All planting must be approved by the NBC Botanist and wildlife biologist.
- New lawns are discouraged except where functionally essential. Lawns require frequent watering; however, existing lawns can be maintained at "survival" level with careful measuring and scheduling of irrigation. Lawns should be restricted to: family housing, recreation fields, and children's playgrounds. Replacing turf with native and drought tolerant plants in combination with rocks or gravel over bare areas will save large amounts of water, can be done in a very aesthetically pleasing manner, and can equal turf in terms of dust control.
- Ensure mowing, use of rodenticides, and other grounds keeping practices are consistent with USFWS Biological Opinions, terms of USACOE permits, mitigation obligations agreed to in EISs, other legal agreements, and natural resource management plans. Ensure that these requirements are communicated to grounds keeping staff. Rodenticide use must be approved by NBC wildlife biologist and reported in the NOPRS system (Attachment 2).
- Apply herbicides on an as-needed basis only. Herbicide use must be approved by NBC wildlife botanist and reported in the NOPRS system (Attachment 2).

- In keeping with federal standards, U.S. Navy policy (DoN 1994) requires minimizing disturbance to native habitats and using integrated pest management practices, xeriscape landscaping, and recycled water in arid environments.
- Minimize water use, maintenance, and fertilizers wherever possible through efficient irrigation systems, drought-tolerant plants, and effective plant establishment techniques.

- Water between midnight and 7 a.m.
- Set runtimes during periods of less wind velocity, usually dusk until dawn.
- Lengthen the irrigation interval between irrigations and increase the amount of water at each irrigation to promote deep rooted turf. Deep watering once a week is preferable to more frequent, shallow watering which promotes surface rooting.
- Monitor plant health and appearance and adjust controllers to minimum water levels.

- Substitute plant material with non-vegetative groundcovers, where suitable. Encourage use of mulches, decomposed granites, and other high quality paving materials for areas of high use or prominence. Use mulches to reduce evapotranspiration and control weeds. Prohibit the substitution of existing plant materials with asphalt, plain concrete or barren soil.

Neotropical Migratory Birds

Objective: Conserve viable habitat for migratory and resident birds that use YMCA Camp Surf for stopover resting, feeding, and nesting. This includes the removal of exotic species which may detrimentally affect native bird species.

- The Migratory Bird Treaty Act is an international agreement between the U.S., Canada and Mexico that protects designated species of birds. All birds are protected under the Act, with some exceptions. The MBTA controls the taking of these birds, their nests, eggs, parts or products. Violations of the MBTA can result to fines up to $2,000 or two (2) years imprisonment.
- Conduct baseline inventories to determine which birds are using the property. Comply with the MBTA for migratory and resident birds during tree trimming, pruning, or removal. The MBTA protects all migratory birds with the following local exceptions: rock pigeons, Eurasian collared-dove, European starlings, and house sparrows.
- If a project has the potential to affect nesting birds or nesting substrate (including annually recurring nesting trees), a qualified biologist from NBC shall be contacted to determine if there will be any violations of the MBTA.
- Projects should be phased to avoid disturbing nesting birds. Most birds in San Diego typically nest between 15 February and 15 September. Birds can nest in buildings, trees, shrubs, and on the ground.
- All projects, scopes of works, contracts, and agreements associated with construction and/or vegetation manipulations or removal should have the following language: "If a contractor identifies any bird within the contract area that appears to be attempting to build a nest, utilizing a nest, or laying eggs, the contractor must immediately notify the Contracting Officer (include number here) or Project Manager (include number here). If nesting birds or eggs are encountered, the contractor must phase the work to avoid disturbing the birds so the contract can be completed within stated time scheduled and within the contract price. The contractor cannot take action to remove the bird or the nest from the area which is being used. This action must be conducted or authorized by a qualified biologist of the federal government."

Sensitive Species

Objective: Provide for the conservation of sensitive species at optimum levels as a proactive strategy to help prevent future federal listings. Strive at all times for more complete and consensual understanding among stakeholders of the YMCA Camp Surf's regional role in species conservation.

Salt marsh bird's beak

Objective: Seek ways to contribute to the recovery of the salt marsh bird's beak population on YMCA Camp Surf through development of cooperative, ecosystem management-based strategies.

- Section 7a1 of the ESA states that all federal agencies shall utilize their authorities in furtherance of the purposes of the ESA by carrying out programs for the conservation of endangered species and threatened species. "Conservation" is defined in the ESA as "to use...all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this [ESA] are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regular taking."
- Develop with USFWS and others a regional approach to managing and conserving the salt marsh ecosystem and habitat needed to sustain the species. Seek clear and effective conservation strategies that completely integrate the biological needs across the species range with local land use and training needs. Meet at least annually to oversee implementation and prioritize projects. Use the cooperative strategy as an important tool expediting Section 7 consultations and development of MOUs.
- Improve knowledge of the species' requirements and determine the population size needed for long-term persistence of salt marsh bird's beak (Zedler 1996).
- Promote adaptive practices to attain success in restoring population.
- Consider the following techniques to establish a self-sustaining, functional population when required for mitigation.
  - Due to its narrow regeneration niche, very specific habitat requirements for salt marsh bird's beak must be used for successful establishment (Zedler 1993).
  - Ensure pollination by providing adjacent uplands that include alternate hosts for the species' pollinators (Zedler 1993).
  - If necessary, restore natural processes that supply nutrients to the high marsh (Zedler 1996).
  - Sustain the natural salinity regime (Zedler 1996).
  - Allow natural disturbances that create small-scale open patches in the high salt marsh canopy in order to support natural succession and biodiversity dynamics in the marsh (Zedler 1996).
  - Have well separated sites available for growing salt marsh bird's beak so disturbances that might wipe out one colony would not occur throughout the transplanting location (Zedler 1996).
  - Mitigation performance standards should not only be based on the size of each colony, but should also include an estimate of seed production (Zedler 1996).
- Monitor the population at YMCA Camp Surf and evaluate potential threats to its habitat including invasive weeds and erosion concerns.
- Establish signs or otherwise restrict inadvertent entry and disturbance of the area supporting this population.

Wildlife Population Management

Objective: Inventory, monitor, and protect wildlife populations, focusing on sensitive species or endemics that occur or potentially occur at YMCA Camp Surf.

- USDoDINST 4715.3, dated May 1996, states that natural resources management shall be managed to support and be consistent with the military mission, while protecting and enhancing those resources for multiple use, sustainable yield, and biological integrity.
- Conduct wildlife surveys to develop a baseline species list for all taxonomic groups. Survey for fairy shrimp in pooled areas identified in RECON's 2002 wetland delineation (USDoN 2004).
- Survey for the globose dune beetle.
- Develop an insect collection for the property, being careful not to impact small populations.
- Partner with San Diego Audubon Society volunteers to help identify birds using the property.

Animal Damage Control

Objective: Establish awareness and prevention protocols for controlling wildlife damage and infection from contagious wildlife diseases.

- Indoors.

  Keep a clean work environment, especially kitchen facilities. Keep food covered in rodent-proof containers.

  Keep a tight-fitting lid on garbage, keep pet food inside and discard uneaten pet food at the end of the day.

  Set and keep spring-loaded rodent traps. Set traps near baseboards because rodents tend to run along walls and in tight spaces rather than out in the open.

  Set EPA-approved rodenticide with bait under plywood or plastic shelter along baseboards. These are sometimes known as "covered bait stations." Follow product use instructions carefully, since rodenticides are poisonous to pets and people, too. Rodenticide application must be approved by the Installation and applied by qualified personnel. Rodenticide use must be reported on the Navy Online Pesticide Reporting System (NOPRS). See Attachment 2 for more information.

  Seal all entry holes 1/4 inch wide or wider with lath screen or lath metal, cement, wire screening or other patching materials, inside and out.

- Outdoors.

  Use metal flashing around the base of wooden, earthen or adobe structures, if any, to provide a strong metal barrier. Install so that the flashing reaches 12 inches above the ground and six inches down into the ground.

  If possible, locate woodpiles, if any, and garbage cans 100 feet or more from buildings and elevate to eliminate possible nesting sites.

Cultural Resource Management

- EO 11503, "Protection and Enhancement of the Cultural Environment," directs federal agencies to take a leadership role in preserving, restoring and maintaining historic and cultural environments. All cultural resources must be located and inventoried.

Objective: Provide for the protection of archaeological resources.

- Avoid disturbance to cultural resources. Continue to use the site approval process to accomplish this strategy. (Site Approval Form, Attachment 3).
- While in the planning stages of any project that could create a ground disturbance, contact Alex Bethke (Alexander.bethke@navy.mil) to determine if it could conflict with any known cultural sites.

- Contact the NBC Cultural Resources Program for more information regarding cultural history of the property for use in educational programs.

Conservation Awareness

Objective: Develop a program to educate camp participants about conservation and to teach them about YMCA Camp Surf's natural resources.

- Integrate invasive species management into the conservation education program and utilize campers to help with removing hottentot fig.
- Develop a program on animal track recognition to teach students about what animals are using the property.
- Develop a compass orienteering course.

Access, Safety and Security

Objective: To promote a safe and secure environment for camp staff and participants as well as to allow access to the property for the purpose of other Navy or Camp requirements.

- Establish well defined protocols for accessing the property.
- Maintain the fences.
- Coordinate with the Navy on security concerns to make the property more secure for campers and staff.

Communicating with and Reporting to NBC

Objective: Accomplish the NBC and YMCA Camp Surf's missions through communication of land management activities at the property.

- Ensure that no YMCA activities violate any laws or guidance, such as the ESA or CWA, which apply to federal agencies. Ensure Camp managers are familiar with and comply with the NBC site approval process.
- Schedule annual meetings with NBC to establish project priorities for the upcoming year.
- Devise a system for recording and reporting to NBC changes in habitat condition.

Record Keeping and Reporting

- Maintain a list of areas that non-natives have been removed from that includes removal methods, quantity and species removed.
- Maintain a record of all proactive land management, property improvements, or education projects that take place in the future.

When to Contact NBC:

- Contact NBC when:

- conducting ground disturbing activities (e.g. digging holes, making fires), or
- making land management decisions (e.g. exotic plant removal, herbicide application, choosing plants for landscaping that are not found on the list in Appendix H).

Who to Contact at NBC

- Contact NBC wildlife biologist, Tiffany Shepherd at (619) 545-3703, or NBC botanist, Bryan Munson at (619) 545-7186.

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Attachment 1

YMCA Camp Surf Exotic Plants and Control Methods

The vegetated areas of YMCA Camp Surf are heavily encroached by weeds. We have used the California Exotic Pest Plant (CalEPPC) system to prioritize which weeds are most critical to remove first. This list has been compiled to use as a tool to aid land managers in deciding how to prioritize eradication programs for exotic plants. It was made based on information submitted by botanists, land managers, and researchers throughout the state. It categorizes exotic plants as such:

List A: Most Invasive Wildland Pest Plants; documented as aggressive invaders that displace natives and disrupt natural habitats. Includes two sub-lists:

- List A-1: Widespread pests that are invasive in more than 3 Jepson regions
- List A-2: Regional pests invasive in 3 or fewer Jepson regions.

List B: Wildland Pest Plants of Lesser Invasiveness; invasive pest plants that spread less rapidly and cause a lesser degree of habitat disruption; may be wide-spread or regional.

Red Alert: Pest plants with potential to spread explosively; infestations currently small or localized. If found, alert CalEPPC, County Agricultural Commissioner or California Department of Food and Agriculture.

Need More Information: Plants for which current information does not adequately describe nature of threat to wildlands, distribution or invasiveness. Further information is requested from knowledgeable observers.

Annual Grasses: A preliminary list of annual grasses, abundant and widespread in California, that pose significant threats to wildlands.

List A-1

Priority One - Hottentot fig (Carpobrotus chilensis)

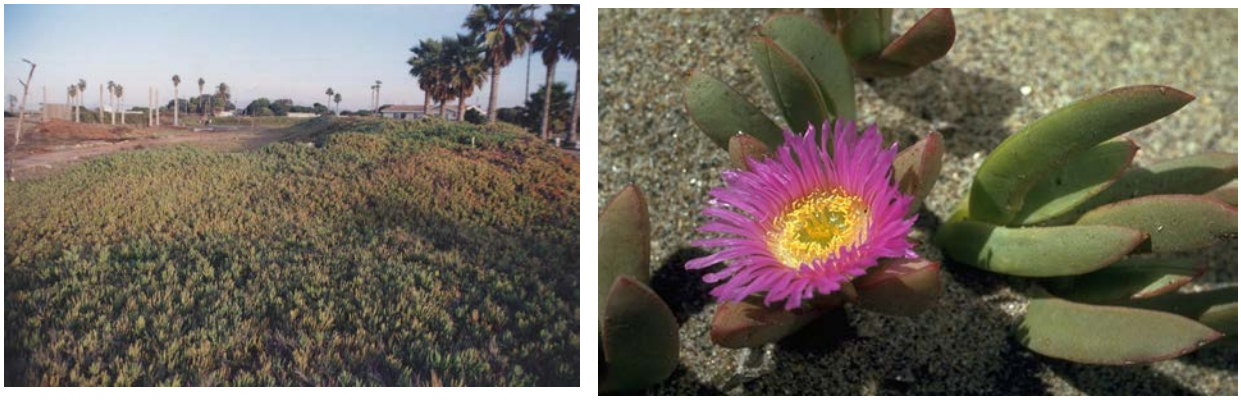

Photo F-4. a) Hottentot fig encroachment at YMCA Camp Surf. b) Hottentot fig. Photo courtesy of Robert Potts,California Academy of Sciences.

There is a major problem on YMCA Camp Surf with hottentot fig, also known as iceplant, which excludes native plants and wildlife from their natural position in the ecosystem. The Camp is already taking steps to control it, but more eradication is needed. Perhaps more campers could become involved in hand pulling if it were incorporated into the educational curriculum.

Control Methods

Efforts should first be focused in the native habitat areas over developed areas. Of the native habitats, dunes and wetlands are the most impacted by this plant and so should receive highest priority. The plant should be pulled by hand, then piled to dry before being hauled away. The cleared areas should then be revegetated using native plants, preferably plants whose seeds or cuttings have been collected on site and grown in the Camp Surf native plant nursery. In the foredune area, red-sand verbena should be planted in place of hottentot fig. Contact the NBC Botanist to discuss which species to plant in other areas.

Priority Two - Giant reed (Arundo donax)

Photo F-5. Giant reed. Photo courtesy of J.E. and Bonnie McClellan, California Academy of Sciences.

While currently there is little giant reed on the YMCA Camp Surf property, it can spread rapidly in moist environments. It grows densely, excluding native wildlife from access to riparian areas. It should be eradicated before it becomes well established.

Control Methods

Hand digging is probably the most appropriate method of giant reed removal for YMCA Camp Surf, as the infestation is still small. Removing rootstocks by hand digging is slow, but is a sure way of destroying giant reed, which reprouts from its rhizome. It is most easily done after a rain when the soil is loose. Diggers must be extremely careful and thorough, because every piece of root that breaks off and remains in the soil may produce a new plant. Place the plants in a pile after removal and burn them. Hand pulling may be used in combination with an herbicide application like Roundup if approved by the NBC Botanist.

Priority Three - Pampas grass (Cortaderia jubata)

Photo F-6. Pampas grass.

Control Methods

Pampas grass is an aggressive invader often spreading from gardens and landscaped areas. It can be controlled by digging, and if permitted by the NBC Botanist, applying Gallant or Roundup in a five second burst to the center of the plant.

Priority Four - Saltcedar (Tamarix parviflora)

Photo F-7. Saltcedar.

The one individual saltcedar tree known from the property has been removed recently, but it remains on this list because it is an aggressive invasive to watch for. It was removed mechanically by digging the entire plant out. This method would be effective in the future for limited infestations. Application of an herbicide such as Roundup could be discussed with the NBC Botanist.

List B

Priority Five -- Brazilian pepper (Schinus terebinthifolius)

Photo F-8. Brazilian pepper tree. Photo courtesy of Joseph M. Tomaso, California Academy of Sciences.

Control Methods

There are several Brazilian pepper trees growing on the southeastern corner of the property. They can re-sprout from the roots if all the plant matter is not removed; applying a root-absorbed herbicide is thought to be the most effective method of eradication. A Nature Conservancy publication recommends using a basal spot application of Hyvar orVelpar, but this work was done in the southeastern United States. Check with the UC Cooperative Extension Service before the herbicide application to see what is recommended for this area. Girdling the tree is a possible alternative to digging or spraying.

Noxious annuals: Malta starthistle (Centaurea melitensis) and Black mustard (Brassica nigra)

Photo F-9. a) Malta starthistle. b) Black mustard. Photos courtesy Br. Alfred Brousseau, St. Mary'sCollege.

Control Methods

Malta starthistle and black mustard should be controlled by timing weed wacking or mowing to take place before seeds are set. This will need to continue occurring each year for several years until the soil seed bank is depleted before results are seen.

Lower priority: Sea-rocket (Cakile maritima)

Photo F-10. Sea-rocket. Photo courtesy of James B. Gratiot.

Occurs mainly on the dunes at YMCA Camp Surf, and is a low priority for controlling because it apparently interferes little with the growth and success of natives. However, it is exotic, and should be eradicated as other higher-priority weeds are pursued.

Attachment 2

Instructions for pesticide application

- YMCA Camp Surf shall have a qualified applicator certification / license to apply pesticides in the State in which they will apply the pesticides, herbicides, or rodenticides. Certification / licensing shall include the Core category and all categories that apply to the type of work that they will be doing. All pesticides, herbicides, and rodenticides applied at Camp Surf shall be approved for use by the installation and the NAVFAC regional pest management consultant and used in accordance with all Federal, State, and local regulations and the installation Integrated Pest Management Plan.

- PEST MANAGEMENT REPORTS: Camp Surf shall provide a monthly pest management report to the installation Integrated Pest Management Coordinator during the period that pesticides (including herbicides and rodenticides) are being applied. This report shall consist of daily pesticide application reports submitted via the Navy Online Pesticide Reporting System (NOPRS). Contact Mike Medina, (619) 532-1157, michael.j.medina1@navy.mil, for obtaining an account and access to NOPRS.

Attachment 3

Site Approval Form

- Contact NBC planning office for most recent Site Approval Request (SAR) form.
  Patrick McCay
  (619) 767-7261
  patrick.mccay@navy.mil