



United States Department of the Interior
Fish and Wildlife Service
San Diego National Wildlife Refuge Complex
2722-D Loker Avenue West
Carlsbad, California 92008

Memorandum

December 4, 2002

To: Acting Manager, California and Nevada Operations, Region 1, U.S. Fish and Wildlife Service, Sacramento, California

From: San Diego National Wildlife Refuge Complex, Carlsbad, California

Subject: Request for Fire Management Plan Exemption, Seal Beach National Wildlife Refuge

**Seal Beach National Wildlife Refuge
Request for Fire Management Plan Exemption**

When approved, this document will exempt Seal Beach National Wildlife Refuge from developing a Fire Management Plan. U.S. Fish and Wildlife Service policy requires that all refuges with burnable vegetation develop a Fire Management Plan (620 DM 1). The Project Leader/Refuge Manager believes that this refuge contains no burnable vegetation, or essentially no burnable vegetation due to fuels conditions that will prevent ignition and fire spread. Therefore, a Fire Management Plan for this refuge is not required.

Justification:

We believe that the Seal Beach NWR should be exempt from the requirement to write a Fire Management Plan for the following reasons:

- Virtual lack of burnable vegetation
- Lack of ignition sources
- No reason or plans to do prescribed burning
- A long history of having no wild fires
- Refuge incorporated into Naval Weapons Station Fire Management Program

The Seal Beach NWR consists of a salt water marsh located in the Anaheim Bay estuary along the southern California bight, approximately 3 miles south of the City of Long Beach. About 745 acres of the Refuge's 923 acres are subject to regular, unobstructed tidal influences, creating a salt marsh environs that includes about 560 acres of salt marsh vegetation, 60 acres of mud flats regularly exposed at lower tides, and 115 acres of tidal channels and open water. The remaining 178 acres are mostly distributed over the Refuge as narrow swaths of vegetation and bare ground located immediately adjacent to the wetlands, above the mean high tide elevation. The

narrowness and isolation of upland areas and marine-influenced weather have resulted in limited vegetative growth, mostly dominated by grasses and sparse annual forbs. The upland vegetation community along the edges of the salt marsh appear to be limited to the salt-laden clayey soil. Common plants found in these strips often include elements from the salt marsh, particularly pickleweed (*Salicornia virginica* and *S. subterminalis*) and the higher marsh grasses, along with *Bassia hyssopifolia*, *Gasoul nodiflorum*, *Gasoul crystallinum*, and Australian saltbush (*Atriplex semibaccata*). Further from the Refuge edge, regular perturbation of the land by discing and mowing has led to the proliferation of weedy introduced plants along the road edges, including tumbleweed (*Salsola iberica*), mustards (*Brassica* spp.), and, most abundant in terms of total cover and distribution, annual grasses. The grasses include ripgutgrass (*Bromus diandrus*), foxtail chess (*Bromus rubens*), soft chess (*Bromus mollis*), barleys (*Hordeum* spp.), fescues (*Festuca* spp.), and wild oats (*Avena* spp.). Additional species of regular occurrence include telegraph weed (*Heterotheca grandiflora*), sow-thistle (*Sonchus oleraceus*), sweet-clovers (*Melilotus indicus* and *M. albus*), filaree (*Erodium cicutarium*), wild radish (*Raphanus sativus*), milk thistle (*Silybum marianum*), pigweed (*Chenopodium album*), curly dock (*Rumex crispus*), and London-rocket (*Sysymbrium irio*). A small number of native species, other than the salt marsh elements, are conspicuous for their local abundance, stature, or color. These natives include mulefat (*Baccharis emoyri*), lupin (*Lupinus* spp.), and fiddleneck (*Amsinkia intermedia*).

Fuels are non-continuous due to paved and dirt roads; temperatures are relatively low with an average daily temperature of 65 degrees F., and the Refuge is frequently bathed in fog throughout the year. Average annual rainfall is about 12 inches mostly occurring in the November to April time frame. Along the coast this period is characterized by fog and low clouds. Vegetation growth occurs primarily during this season, and during this time the annual plant growth on the upland strips is substantial, but too moist to be burnable. During the summer, fog and low clouds are a regular morning phenomenon, often persisting until mid-afternoon, and contribute to keeping the air temperature mild in summer. In May through July, the annual plants dry up with the lack of rainfall. This is the time when fuels would be most flammable; however, the prevailing weather conditions cause the fine and noncontinuous fuels to be very moist. The warmest, driest period of the year occurs August through early November when occasional strong, dry, gusty wind storms known locally as Santa Ana winds come from the inland deserts and are a regular autumn phenomenon. By this time most of the fuels have been mown as part of fuel control program on the Naval Weapons Station Seal Beach and blown away.

The Refuge is co-located on the 5000-acre Naval Weapons Station Seal Beach. The U.S. Fish and Wildlife Service administers the Refuge as a "management overlay." The Navy facility is responsible for storing and handling ordnance for the U.S. Navy's Pacific Fleet. Both structural and wildland fire management is administered by a civilian fire department which is located on the base. Fire prevention is a dominant safety concern on the Station. All ordnance storage and handling activity occurs on the eastern 4/5 of the Station; the western 1/5 is used for administrative and other miscellaneous functions. A major road separates the two portions of the Station. In order to reduce fire hazards to the minimum, the Navy administers agricultural leases covering much of the ordnance/handling areas. These leases result in maintaining the open space lands on the Station in some stage of cultivation, significantly reducing fuels potential. The Station's Fire Department is strategically located on the Station, operates two 10,000 gallon tankers, and is manned 24 hours a day, 7 days a week. The Department conducts routine monthly fire prevention inspections, confines smoking to limited specified locations (off Refuge), maintains a water grid system of hydrants covering the entire base, and allows no open flames or

“hot work” (eg. Bar-B-Q, welding) without prior inspections and permit. Ruderal vegetation along road sides, including on the Refuge, is cut by a contractor at regular intervals.

Public access to the Refuge is substantially curtailed by the Navy, limited to the last Saturday of each month and a few additional “clean-up” days during the year. There is virtually no trespass, so there is little chance of a human-ignited fire. There is no reason nor plans to conduct any prescribed fire.

Prepared: _____
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Date _____

Concurred: _____
Pam Ensley, Regional Fire Management Coordinator
Pacific Region, U.S. Fish and Wildlife Service
Date _____

Approved: _____
Steve Thompson, Manager
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Date _____