

### Chapter 3

#### THE ALAMEDA COUNTY FLOOD CONTROL DISTRICT SEASONAL WETLANDS IN UNION CITY:

#### A QUESTION OF ACTION

Alex Battaglia

#### Introduction

The south San Francisco Bay and its margins are characterized by shallow water, reduced tidal flushing, broad tidal flats, extensive salt evaporation ponds and small pockets of seasonal wetland. The seasonal wetlands are found along the rim of the Bay and are distinguished by flooding in the winter and desiccation in the summer. Migratory waterfowl and shorebirds prefer these wetlands for resting and feeding, and rare and endangered birds and mammals are found in them as well, yet these wetlands are disappearing. It is estimated that 77 percent of the privately-owned seasonal wetland in Alameda County, south of and including the Oakland Airport, has been disturbed or destroyed since 1983 (Kelly, 1986, pers. comm.).

The Alameda County Flood Control District (ACFCD) owns 600 acres of land in west Union City approximately four miles from the Bay (Figure 1), 380 acres of which are seasonal wetland. ACFCD's primary function is storm water management, and it uses parts of this seasonal wetland area as storm water flood basins. ACFCD also plans to use some of its wetland for the dumping of dredge spoils; this proposal, if implemented, would affect habitat values at the dump site.

Some land stewardship agency with experience in management for habitat values should administer the land in Union City along with ACFCD. If this was done, the land could provide a valuable combination of recreational, educational and utilitarian functions. It could serve as a park or a preserve year-round and continue to offer flood protection during major storm periods. Future maintenance of the land's habitat values would be assured. Nearby Coyote Hills is successfully managed as a combined park and flood basin area by EBRPD and ACFCD; a clearly applicable precedent has been set.

The purpose of this paper is to highlight the biological and legal reasons why ACFCD's land should be made into a park or a preserve that could continue to operate as a flood basin area. The proposal, if adopted, would benefit not only people; it would also protect a wide range of plant and animal species that depend on the rapidly disappearing seasonal wetland habitat.

#### Sources of Information

The biological information presented in this paper is based on several prior studies. A report by Harvey and others (1977) outlines the unique functions of seasonal wetlands in the Bay Area, lists the

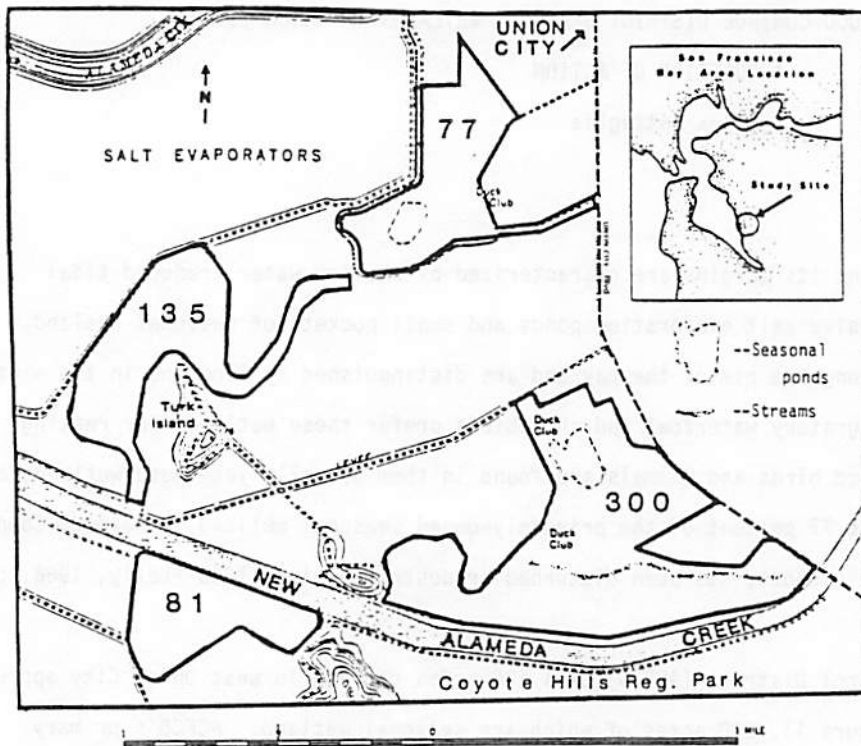


Figure 1. Location and Acreages of Alameda County Flood Control District Lands in Union City. Sources: Miller, 1986; Base Map from Newark, California Quadrangle, 7.5 Minute Series (USGS).

plants and animals that are found in them and provides data on the locations in the Bay Area where rare and endangered species can be found. Ornduff (1974) summarizes the types of plants that grow in the seasonal wetlands of California. J.D. Pressler (1973) describes the plants found in nearby Coyote Hills Regional Park; these are very similar to those found on ACFCD's land.

The specific information found in this paper on ACFCD and its land in Union City was received through personal communications. Paul Kelly and Roger Campbell provided general information on ACFCD's functions and its land. Paul Kelly also provided data on endangered species found on the land. Dr. Howard Cogswell, Karen Miller and Terri Pencovic shared information on plant distribution and bird populations at the sites. Terri Pencovic also supplied legal information that pertains to the study area.

#### Methodology

After obtaining plant, bird and mammal data through library research and personal communication, more data were gathered by traveling to the study site and taking field notes on plant distribution. This involved driving along the levees which run through the area, stopping every 100 yards and then observing the predominant species in that location. These data were used to map the different plant

communities on ACFCO's land and to determine if any areas have been degraded. Knowledge of the plant communities and the rare and endangered species present allowed determination of environmental regulations which apply to the study site. These lines of evidence provided a basis for proposing that ACFCO convert the site into a park or a preserve that also operates as a series of flood basins.

Results

The migratory waterfowl, marsh birds and shorebirds which have been sighted on ACFCO's land are listed in Table 1. The areas where the endangered salt marsh harvest mouse (Reithrodontomys raviventris)

Marsh Birds	Waterfowl	Shorebirds	Other Waterbirds
Pied Billed Grebe	Mallard	American White Pelican	Least Tern*
American Bittern	Gadwall	Double Crested Cormorant	Forster's Tern
Great Egret	Northern Pintail	American Avocet	
	Cinnamon Teal	Blacknecked Stilt	
	Ruddy Duck	Semipalmated Plover	
	Northern Shoveler	Black-bellied Plover	
	American Widgeon	Marbled Godwit	
	Ring Necked Duck	Whimbrel	
	Bufflehead	Greater Yellowlegs	
	Sora*		

\* Rare Visitor

Table 1. Migratory Water Birds Found in the Study Area.

Sources: Cogswell, 1986; Pencovic, 1986.

has been found are shown in Figure 2 (Kelly, 1986, pers. comm.; Harvey, 1977). The site where ACFCO has proposed the dump dredge spoils is shown in this figure as well (Kelly, 1986, pers. comm.). The plant communities found on the ACFCO land are mapped in Figure 3. The salt marshland is dominated by pickleweed (Salicornia virginica), cordgrass (Spartina foliosa), and saltgrass (Distichlis spicata), whereas the riparian areas contain several willow species (Salix), box elder (Acer negundo californicum) and sycamore (Platanus racemosa). The agricultural areas, where cabbage is grown, are also shown along with two sites which are distinguished by bald spots. These two parcels are termed degraded, this term being used to describe those lands which had vegetation that has since been removed or disturbed by machinery.

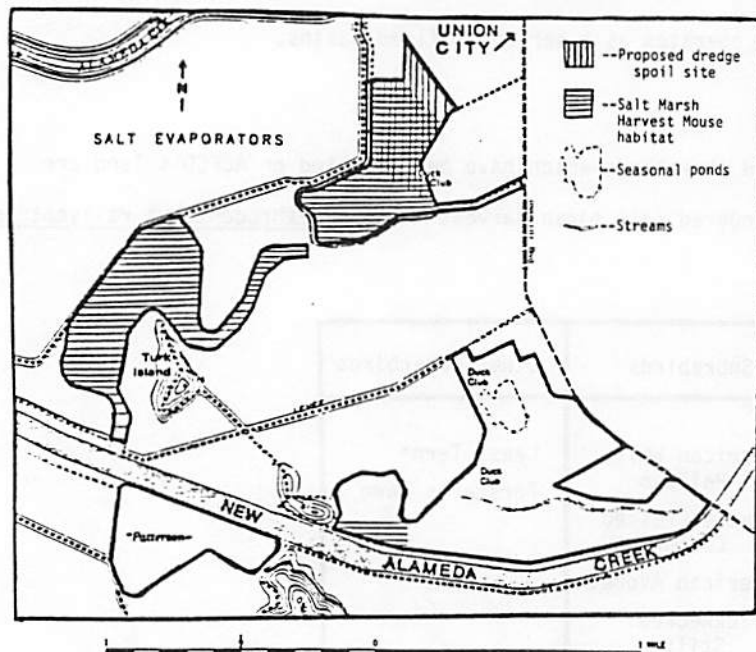


Figure 2. Salt Marsh Harvest Mouse Habitat and Proposed Dredge Spoil Site.

Sources: Kelly, 1986; Harvey, 1977; Base Map from Newark, California Quadrangle, 7.5 Minute Series (USGS).

### Discussion

Salt marshland makes up 65 percent of ACFCO's land in Union City (Miller, 1986, pers. comm.). ACFCO uses these salt marsh areas as flood basins (Campbell, 1986, pers. comm.). This practice has several useful functions. It saves taxpayer expenses by utilizing a natural storage area for storm waters that does not need to be maintained. It helps create a higher freshwater table in the ground since the storm water stands in the basins for extended periods of time. This improves the salinity barrier for the wells on ACFCO's land (Kelly, 1986, pers. comm.). Finally, flooding aids in the assimilation of pollutants by the marshland that would otherwise flow straight into San Francisco Bay. This is because polluted water is cleansed as it sits in the basins (Harvey, 1977).

Though much of ACFCO's Union City land is healthy, there are two sites which are characterized by bald spots where vegetation has been cleared. These are shown as degraded on Figure 3. The Patterson parcel was disked by the Alameda County Mosquito Abatement District. ACFCO does not know how the other area was damaged, but speculates that it was abandoned after being used as a cropland (Campbell, 1986, pers. comm.). It is also possible that the condition of this site is a result of unauthorized filling or grading which may have been due to coordination problems within ACFCO (Kelly, 1986, pers. comm.).

At the present time, ACFCO has plans to dump dredge spoils on the same area where the salt marsh harvest mouse has been found (Figure 2). The dredge spoils are the mud and silt that are taken from

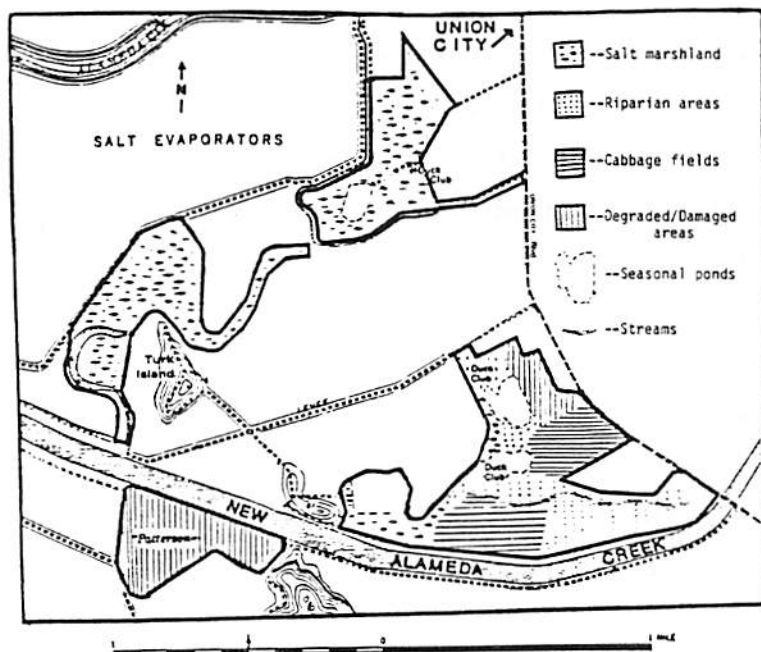


Figure 3. Plant Communities and Degraded Areas.

Sources: Field Work, 1985-1986; Miller, 1986; Base Map from Newark, California Quadrangle, 7.5 Minute Series (USGS).

New Alameda Creek to keep the channel at a particular depth (Campbell, 1986, pers. comm.). Dumping the spoils involves burying the plants and animals underneath and also exposing them to heavy metals (Jenkins, 1984). The Endangered Species Act protects the area where dumping is planned and prevents any other action that threatens it, so ACFCD cannot dump at this site. ACFCD should dump dredge spoils on areas that are already degraded instead of on areas with better habitat values.

Another law that will affect ACFCD's future land management options is the Food Security Act of 1985 (PL#99-198). It affects ACFCD since the agency leases what was once seasonal wetland to cabbage growers (Figure 3). The Sod and Swamp Buster provision within the bill states that if the owner of a wetland leases a part of his land for agriculture he must develop a plan by 1990 to preserve a different part of his wetland in order to continue leasing for this purpose (Pencovic, 1986, pers. comm.). In other words, ACFCD will have to set aside a percentage of its seasonal wetland as a preserve if it wants to continue leasing.

To summarize, the biological and legal reasons why ACFCD should be encouraged to convert its land into a park or a preserve that also operates as a flood basin area are twofold: (1) the Endangered Species Act in fact prevents ACFCD from utilizing the proposed dredge spoil sites for that purpose, and (2) the Food Security Act of 1985 will place an ultimatum on ACFCD's lease to the cabbage farmers.

Recommendations

The public needs to inform ACFCD and the U.S. Army Corps of Engineers that it feels the Union City land would make a valuable preserve area and that the Endangered Species Act and the Food Security Act apply to it. Concerned citizens need to point out to the two agencies and to local legislators that the land could be a rich source of education and recreation which would offer activities such as bird watching, guided nature walks, photography, hiking, and horseback riding while still operating as a flood basin area in the winter. What happens to ACFCD's land and the plants, birds and mammals that live there may ultimately depend on such public input.

REFERENCES CITED

- Campbell, Roger, Maintenance Engineer, Alameda County Flood Control Water District. Personal communication, 5/16/86.
- Cogswell, Dr. Howard, Ornithologist, Audubon Society. Personal communication, 1/15/86.
- Harvey, H.T., H.L. Mason, R. Gill, T.W. Wooster, 1977. The marshes of San Francisco Bay: Their attributes and values; Unpublished report for San Francisco Bay Conservation and Development Commission, 156pp.
- Jenkins, S.A., J.A. Baylord, D.L. Inman, 1984. Operating and maintaining tidal lagoons and estuaries; Unpublished report for the Geography Branch of the Office of Naval Research, Contract #N0014-76-C-0631, 20pp.
- Kelly, Paul, Wildlife Biologist, California Department of Fish and Game. Personal communications, 10/85 - 4/86.
- Miller, Karen, Wildlife Biologist, U.S. Fish and Wildlife Service. Personal communications, 10/85 - 1/86.
- Ornduff, R., 1974. Introduction to California plant life; Berkeley, University of California Press, 152pp.
- Pencovic, Terri, Wildlife Biologist, U.S. Fish and Wildlife Service. Personal communications, 2/3/86 and 2/17/86.
- Pressler, J.D., 1973. Landscape modification through time: The Coyote Hills, Alameda County, California; Unpublished master's thesis for the California State University - Hayward, Geology Department, 102pp.