RECREATIONAL VALUES

OF

DIKED HISTORIC BAYLANDS

A Technical Report
by
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Conservation and Development Commission

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This technical report, by Jennifer Cherniss and Staff of the San Francisco Bay Conservation and Development Commission, was prepared as part of the Diked Historic Baylands Study. The purpose of this report is to document the recreational values of diked baylands. This technical report should be read in conjunction with the staff report entitled "Diked Historic Baylands of San Francisco Bay."

C O N T E N T S

	Page
INTRODUCTION	1
DESCRIPTION OF DIKED HISTORIC BAYLAND RECREATION AREAS	1
1. North Bay	1
2. East Bay	3
3. South Bay	4
GROUPS THAT USE DIKED HISTORIC BAYLANDS	5
DEMAND AND USE TRENDS	7
CONCLUSION	8
NOTES	9

Introduction

Diked historic baylands are a valuable regional resource because they provide inexpensive, close-to-home recreational opportunities for thousands of Bay Area citizens on 52,000 acres of open space surrounding the San Francisco Bay and add to the visual enjoyment of Bay Area residents as well as visitors.

Four thousand* acres of diked historic baylands are used for recreation and an additional 8,000 acres are designated "open space" on local general plans. All 52,000 acres serve as open space, in the sense that they provide non-urbanized areas where people can be outdoors. Although there are no exhaustive statistics of the number of people who enjoy the diked historic baylands, the information that does exist indicates that up to 100,000 people per year use the parks and refuges surrounding the Bay, and the number is increasing.

Description of Diked Historic Bayland Recreation Areas

Nine diked wetland recreation areas are scattered around San Francisco Bay (See Map A).

1. North Bay

The northernmost is John F. Kennedy Memorial Park, which is adjacent to the Napa River and operated by the City of Napa. Most of the park is landscaped and used for frisbee throwing, sunbathing, and lounging but some remains unfilled bayland.

Also in the North Bay is Lower Tubbs Island, a diked portion of the San Pablo Bay National Wildlife Refuge. The United States Fish and Wildlife Service (FWS) manages Lower Tubbs Island as part of the larger, mostly tidal, refuge. The refuge is used for passive wildlife viewing and hunting. Typical pursuits are fishing, hiking, birding, and photography. However, the area is only open to the public when prior permission is obtained and uses such as picnicking and team sports are discouraged in lieu of "wildlife-oriented" uses. Groups such as the Audubon Society and the Sierra Club frequently visit the refuge. Although the refuge currently lacks a permanent staff, the FWS also plans to organize environmental education programs and other activities in the future.

There are two recreation sites in Marin County: China Camp State Park and John McInnis County Park. China Camp provides opportunities for camping, hiking, and outdoor athletics on the upland areas adjacent to the shore. After the current reconstruction of the China Camp Interpretive Center, more nature interpretation programs focusing on wetlands are planned.

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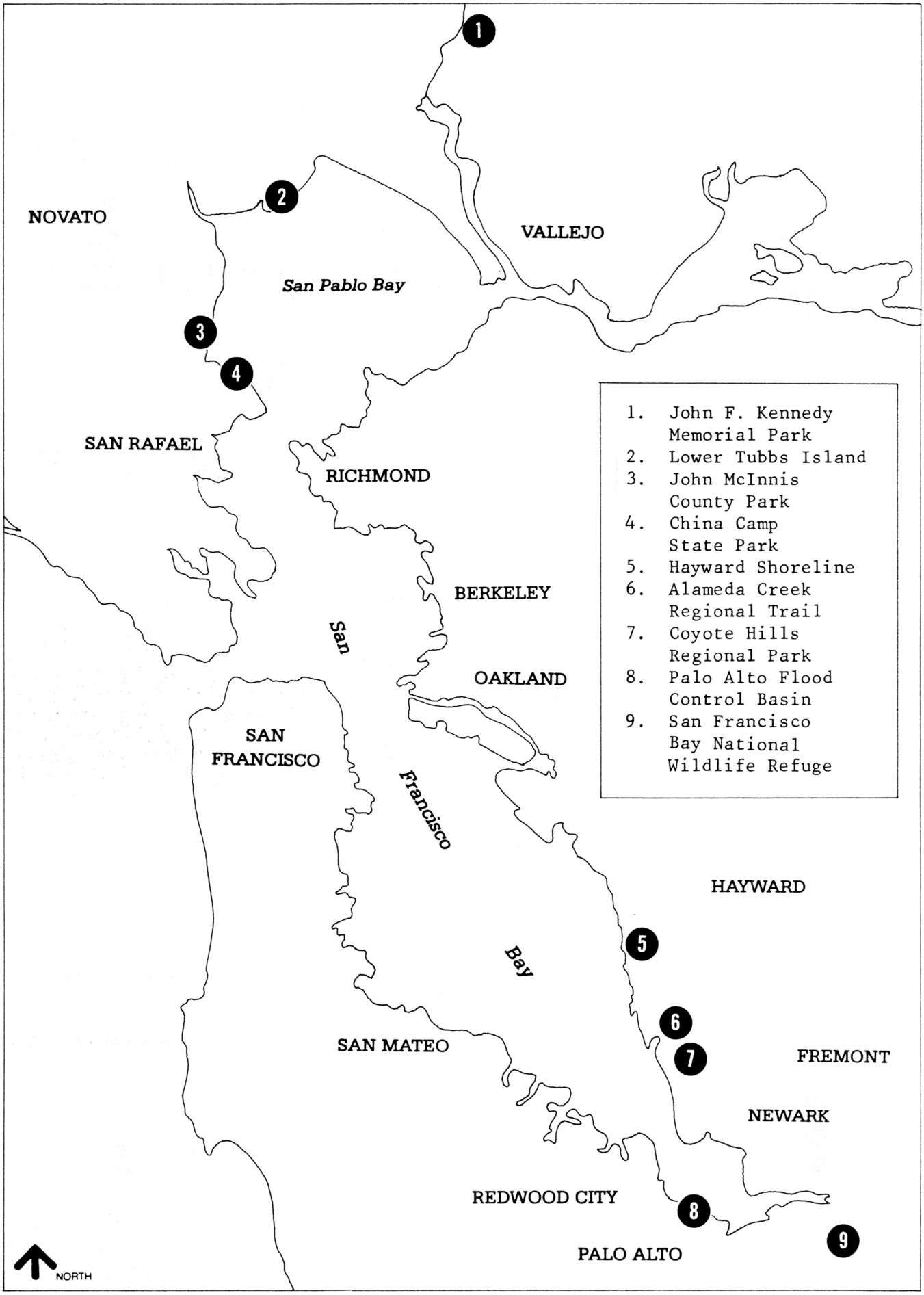
* This figure includes Palo Alto flood control lands also managed for recreation. Excluding those lands, the total is 3,839 acres.



San Francisco Bay Conservation and Development Commission

Map A

DIKED HISTORIC BAYLAND RECREATION AREAS

A total of 163,000 people visited China Camp in the 1979-1980 operating year; reported attendance has grown since 1977 at an average annual rate of 15 percent.1/

John McInnis County Park in Marin County includes a 176 acre historic bayland site. According to Brian Wittenkeller at Marin County Parks and Recreation, the lowland portion sustains "quite a bit" of use for general athletics, calisthenics, exercise workouts, jogging, running on the dikes, and birdwatching.

2. East Bay

Citizens and local governments in the East Bay have taken a particular interest in making their shoreline available for passive recreation and nature study, especially in the Hayward-Fremont area. Over the past ten years they have provided the impetus to preserve many acres of diked and tidal bayland for these uses.

Of all the diked historic bayland sites, Coyote Hills Regional Park in Alameda County takes maximum advantage of its marshland features. The East Bay Regional Park District (EBRPD) operates an interpretive center on the site and manages an extensive freshwater marsh. Attendance since 1976 at the center has increased from 9,500 to 33,100 people per year, with a typical increase of 10% each year.2/ School classes provide the greatest percentage of recorded users; families compose the bulk of the remainder. It should be noted that these numbers do not include "passive" use of the park by people not engaged in the center's activities.

Programs at the center, including a display of Ohlone Indian culture and artifacts, draw many school groups each year which might not otherwise be directly exposed to wetland resources. Park activities have included lectures, demonstrations, slide shows, boat tours, fishing derbies, challenge hikes, and tule crafts. The park also provides picnic areas. The following is a 1980 estimate of Coyote Hills recreational use:3/

Bicyclists	8,506
Hikers	9,842
Picnickers	5,479
Joggers	3,988
Horseback riders	3,100
Overnight campers	580
Birdwatchers	1,586
TOTAL	33,081

The freshwater marsh at Coyote Hills is a prime example of the successful mix of recreation use with wildlife use, made possible by innovative design. A raised boardwalk allows photographers, birdwatchers, and

those simply strolling to observe the wildlife in a freshwater marsh setting. Islands in the marsh have been maintained for waterfowl use with minimal disturbance from visitors.

North of Coyote Hills, along the Alameda Flood Control Channel, is the Alameda Creek Regional Trail. The trail runs atop levees bordering nearly 1,000 acres of diked historic baylands between the Bay and Marsh Road. The trail is owned by the Alameda County Flood Control District and managed by the EBRPD, and is heavily used by bicyclists, hikers, joggers, and equestrians. In 1980, use of the Alameda Creek Regional Trail was estimated as follows:4/

Bicyclists	3,052
Joggers	4,281
Hikers	6,866
Horsemen	233
Fisherman	960
Picnickers	660
Bird Watchers	750
TOTAL	16,802

Also in the East Bay is the Hayward Shoreline, a stretch of bayfront in Alameda County from the mouth of San Lorenzo Creek to Johnson Landing. This general area includes 898 acres of diked historic bayland, and is being improved as a recreational open space and wildlife area. The Hayward Area Recreation and Park District (HARD) is also developing this area for public use and the Sulphur Creek Nature Center (administered by HARD) leads occasional field trips there. From September 1977 to April 1981, the Nature Center served approximately 600 persons in interpretive programs along the Hayward shoreline. Of this total about 25% were adults and the remaining 75% were children in elementary school. In addition to this organized use, hikers, bicyclists, birdwatchers, and photographers explore the area, although it is not officially open to unrestricted public access.

3. South Bay

Two popular bayland sites extensively used for nature interpretation are located in the South Bay.

The Palo Alto Flood Control Basin in Santa Clara County consists of over 600 acres of diked land between Mayfield Slough and Charleston Slough. The nearby Palo Alto Baylands Interpretive Center conducts nature walks on this site each Saturday and Sunday, and organizes bike rides on the levee surrounding the basin. This levee serves as a three-mile trail and is frequently used by recreational bicyclists and joggers.

The southern portion of the San Francisco Bay National Wildlife Refuge is located in Alviso, Santa Clara County, and overlooks 552 acres of diked wetland. The Environmental Education Center here has been open since August 1979, and is already established as an important and popular nature study resource. The Center features informative displays of marsh ecology and general environmental topics. It is equipped with classrooms and the interpretive staff provides programs for visiting groups. For these environmental education programs, the Center makes extensive use of the surrounding New Chicago Marsh as a natural display case. Between September 1979 and March 1981, 276 organized groups, including schools, Scouts, and the Audubon Society, took advantage of this program. As of March 1981, the total number of people in groups served since the Center opened was 8,921. In addition, the Center has records of drop-in visitors who stop while visiting the Alviso wetland for bird watching, hiking, bicycling, boating, photography, and other activities. During the first few months after the Center opened in 1979, 145 drop-ins were recorded. By 1980, this number has grown to 2,309; during the winter months of 1981, 766 people had aready used the marsh. 5/ These number do not include the many unscheduled visitors who come when the Center itself is not open or who visit the marsh without stopping at the Center.

In addition to use in the nine designated and managed recreation areas, many people undoubtedly use the other undeveloped historic baylands for activities similar to those occurring in parks and wildlife refuges. And nearly everyone enjoys the views of bayland open marshes from Bay Area roads, freeways, and hillsides.

Groups that Use Diked Historic Baylands

A variety of people of all ages use the diked baylands. Many do so because of an affiliation with a group or for educational purposes. Regardless of their particular focus, all those contacted in an informal survey enthusiastically expressed interest in the open space and natural preserve aspects of baylands. The following is a summary of the use each group makes of the baylands.

Nature Explorations is a mid-Peninsula agency offering programs that combine environmental education with recreation. Participants in these programs make about two trips each year to diked historic bayland areas at Alviso, Coyote Hills, and the Palo Alto Baylands.

In the Santa Clara Valley, the California Native Plant Society conducts occasional field trips to encourage appreciation of local flora. They have visited such areas as the Palo Alto Baylands, Alviso, and Petaluma River Marsh. These trips each average 20-25 participants.

The Marine Ecological Institute (MEI) conducts marshland expeditions by boat several times a year. The MEI boats frequently tour Redwood Creek,

which borders several hundred acres of diked bayland. Between July 1979 and March 1980, a total of 1,530 people participated in Redwood Creek trips. Since 1979, four MEI groups have also visited Coyote Hills Regional Park.

All over the Bay Area, bicyclists have discovered that levees surrounding historic baylands provide safe, scenic touring paths. Most recreational cycling is done on an individual basis, but there are a few organized bike groups in the region. The Western Wheelers Bicycle Club has scheduled rides on Bay dike paths at least four times a year for the past five years.

The five Bay Area regional Sierra Club chapters often organize hikes visiting outdoor areas, including local sites that are in historic baylands, but definitive records were not available.

Another group that leads regular outings in San Francisco Bay wetlands is the Golden Gate Audubon Society, the largest of all Audubon chapters. Their guided birding expeditions provide recreation opportunities for participants of varied ages, including seniors. Outings average 15-20 participants. In 1980, about seven Golden Gate Audubon groups visited sites located on former baylands, including two visits to Coyote Hills Regional Park.

Berkeley Outreach Recreation Program (BORP) offers challenging and innovative recreation programs for the physically disabled. The BORP Wilderness Project provides guided outdoor experiences for disabled individuals, with the goal of encouraging independent access to the wilderness. While many of the Wilderness Project trips take place at inland parks and rivers, BORP has also visited the Coyote Hills Regional Park. Diked historic baylands that have been developed for general public access are also usually accessible to the handicapped. Most such areas are easy to move around in because of their relatively low and even elevations. Disabled persons are especially eager to find local wilderness sites to visit, since nearby locations are easier to reach. It was determined from interviews with BORP staff that the main reason more diked wetland sites are not visited is simply that they are not well known.

Many other organizations visit historic baylands only infrequently but share in their appreciation nonetheless. For example, the Committee for Green Foothills seldom takes field trips, but have toured diked bayland sites on occasion. The Marin Wildlife Center in Marin County leads field trips which often take advantage of local wetlands. Marin Adventures provides programs for "adventure education" in the natural sciences. Among their trips are visits to China Camp State Park, Lower Tubbs Island, and the Palo Alto Baylands.

Hunters also use the diked historic baylands. Diked wetlands support waterfowl populations, and hunters sometimes use the levees themselves for cover. Although site-specific records have not been kept on hunting use, duck blinds and evidence of duck or gun clubs are located on 604 acres of the sites within this study in Alameda, Santa Clara, and Sonoma Counties. The Leslie

Salt Company leases some land to duck clubs, and two such areas are included in BCDC's study. In addition to the Leslie lands, at least two other tracts in private ownership are managed as gun clubs.

Hunting was formerly an important recreational activity in South San Francisco Bay, but has diminished because of the conversion of former marshlands to urban uses and by the temporary restriction by FWS of hunting on the South Bay Refuge. The South Bay Refuge now contains only two areas where hunting is permitted, but the FWS hopes to increase this in the future.

Micky Bernstein of the California Waterfowl Association estimated that between 500-1,500 hunters per year use the baylands south of the San Mateo Bridge. In the North Bay, duck clubs operate on several tidal wetland islands, especially in the Napa Marsh; diked baylands in this area might also be used by hunters.

Diked historic baylands themselves are not used for fishing, but dikes surrounding these areas provide access to fishing sites. Larry Green, an outdoor sports writer familiar with fishing in the Bay Area, cited the Napa and Petaluma River marshes as popular fishing spots. Some of the diked baylands in these North Bay areas flood during the rainy season, adding to fish habitats by increasing water area and sustaining food sources for fish.

South of Dutchman Slough in Solano County, the California Department of Fish and Game has easement rights to levees bordering the Cullinan property, a diked historic bayland in private ownership. Bank fishing along Dutchman Slough is permitted but is inaccessible except by boat. Proposed public access along the levee from Highway 37 is yet to be approved due to safety considerations.

Demand and Use Trends

Studies of the entire Bay Area by Stanford Research Institute show that the passive pursuits, such as hiking, nature walks, and picnicking, are the most popular recreational activities in the Bay Area, accounting for more than half of the total recreation demand. 6/ In their San Francisco Baylands study, the Bureau of Outdoor Recreation concluded that demand increases at a faster rate than population when water-related areas close to metropolitan complexes are opened. In 1965, an estimated 135,000 person days were spent hunting; 370,000 in wildlife observation, photography, and similar activities; and 3,200,000 in sport fishing on San Francisco Bay sites both in and out of the study area. With energy costs curtailing long-distance travel, and a tremendous increase in interest for environmental education and nature appreciation, more pressure is expected on open spaces and recreation facilities, such as the diked historic baylands, that are close to population centers.

Conclusion

The diked historic baylands serve families, individuals, clubs, schools, and an unusual variety of age-groups, ranging from young school children to elder citizens. The baylands serve not only the agile but the handicapped; the passive bird watchers, plant lovers, and students; and the active bicyclists, horsemen, joggers, and hunters. Close proximity to urban areas provides a unique opportunity for observation of nature within a major metropolitan region, and demand for this opportunity has been steadily increasing.

Preservation of the diked historic baylands can be beneficial to the public because they provide an important, much needed, close at hand recreation opportunity as well as enhance the scenic quality of San Francisco Bay.

N O T E S

1/ Larry Paynter, California Department of Parks and Recreation, 1981, personal communication.

2/ East Bay Regional Park District, 1975-1980. Annual Reports. EBRPD, Oakland, California.

3/ Charles Johnson in East Bay Regional Park District, 1980. Annual Report. EBRPD, Oakland, California.

4/ Joe Mendoza, in East Bay Regional Park District, 1980. Annual Report. EBRPD, Oakland, California.

5/ San Francisco Bay National Wildlife Refuge Environmental Education Center, "Environmental Education Center Use: September 1979-March 1981." Unpublished information.

6/ Southern California Laboratories of Stanford Research Institute, 1965. Recreation and Parks Study Part I. SRI Project No. 1-5179