

**San Pablo Bay National Wildlife Refuge  
Recreational Sport Fishing Plan**

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U.S. Fish and Wildlife Service

San Pablo Bay National Wildlife Refuge  
2100 Sears Point Road  
Sonoma CA 95476

Submitted By:  
Project Leader

Annex, Morfin 9/7/2018  
Signature Date

Concurrence:

Refuge  
Supervisor

[Signature] 9/7/2018  
Signature Date

Approved:

Regional Chief,  
National Wildlife  
Refuge System

[Signature] 9.7.18  
Signature Date

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# SAN PABLO BAY NATIONAL WILDLIFE REFUGE RECREATIONAL SPORT FISHING PLAN

## **I. Introduction**

San Pablo Bay National Wildlife Refuge (Refuge) consists of approximately 19,965 acres located along the northern edge of San Pablo Bay in northern California (Figure 1). The Refuge extends into Sonoma, Napa, and Solano Counties. The Refuge was specifically established to support migratory birds traveling along the Pacific Flyway. The Pacific Flyway is a bird migration pathway generally running from Alaska and the Aleutian Islands along the west coast of North America to Mexico and South America. This Refuge is an important wintering area for waterfowl, particularly canvasbacks (*Aythya valisineria*), scaup (*Aythya* spp.), and scoters (*Melanitta* spp.). The estuarine habitats, that habitat where fresh and sea waters intermix through a network of channels and sloughs, on the Refuge also supports endangered species including the California Ridgway's rail (*Rallus obsoletus obsoletus*) and salt marsh harvest mouse (*Reithrodontomys raviventris*). Other endangered species that use the waters of the Refuge include delta smelt (*Hypomesus transpacificus*), Chinook salmon (*Oncorhynchus tshawytscha*), steelhead (*Oncorhynchus mykiss*), green sturgeon (*Acipenser medirostris*), and the estuarine marsh habitats are nurseries for Dungeness crab (*Cancer magister*). Although a non-native species, striped bass (*Morone saxatilis*) is a popular species among anglers and the reason many people fish the Refuge.

This Recreational Sport Fishing Plan (Plan) proposes to allow recreational sport fishing in the open bay and navigable sloughs and in the Cullinan Ranch and Dickson Ranch Units of the Refuge. The Refuge has never been opened to recreational sport fishing through the Federal Register (50 CFR Part 32), however, fishing by boat has occurred on the open bay and navigable sloughs prior to and since the Refuge's establishment in 1974.

This Plan is a step-down plan from the Refuge Comprehensive Conservation Plan (CCP) of October 2011, and describes how the recreational sport fishing program will be implemented and managed on the Refuge. This Plan documents how the Refuge will provide safe, quality fishing opportunities, while minimizing conflicts with other priority wildlife-dependent recreational uses (Service Manual, 605 FW 1). The Plan will discuss the following topics: compatibility, the effect of fishing on Refuge objectives, assessment of target species, description of the existing and proposed fishing areas, avoiding biological and public conflicts, and the procedures to conduct the fishing program.

## **II. Conformance with Statutory Authorities**

National wildlife refuges are guided by the mission and goals of the National Wildlife Refuge System (Refuge System) and the purposes for which individual refuges were established, as well as other policies, laws, and international treaties. Relevant guidance includes the Refuge Recreation Act of 1962; the National Wildlife Refuge System Administration Act of 1966 (Administration Act), as amended by the National Wildlife Refuge System Improvement Act of 1997 (Improvement Act); and selected portions of the Code of Federal Regulations and Service Manual. The Refuge Recreation Act, as amended, authorized the Secretary of the Interior to administer refuges, hatcheries, and other conservation areas for recreational use when such uses do not interfere with the refuges' primary purpose.

### *2.1 Refuge System Mission and Goals*

The Administration Act, as amended by the Improvement Act, states: “The mission of the System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.”

The following Refuge System goals guide the development of comprehensive conservation plans (CCPs) and the administration, management, and growth of the Refuge System:

- € Conserve a diversity of fish, wildlife, and plants and their habitats, including species that are endangered or threatened with becoming endangered.
- € Develop and maintain a network of habitats for migratory birds, anadromous and interjurisdictional fish, and marine mammal populations that is strategically distributed and carefully managed to meet important life history needs of these species across their ranges.
- € Conserve those ecosystems, plant communities, wetlands of national or international significance, and landscapes and seascapes that are unique, rare, declining, or underrepresented in existing protection efforts.
- € Provide and enhance opportunities to participate in compatible wildlife-dependent recreation (i.e., hunting, fishing, wildlife observation and photography, environmental education, and interpretation).
- € Foster understanding and instill appreciation of the diversity and interconnectedness of fish, wildlife, and plants and their habitats.

## 2.2 *Refuge Purposes*

Lands within the Refuge System are acquired and managed under a variety of legislative acts and administrative orders and authorities. The official purpose or purposes for a refuge are specified in or derived from the law, proclamation, executive order, agreement, public land order, funding source, donation document, or administrative memorandum establishing, authorizing, or expanding a refuge, refuge unit, or refuge subunit. The purpose of a refuge is defined upon establishment or when new land is added to an existing refuge. San Pablo Bay National Wildlife Refuge was established under the authority of three Federal acts. These acts and the corresponding purposes are:

- € Migratory Bird Conservation Act (16 U.S.C.715d) - “... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.”
- € An Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes (16 U.S.C. 667b) - “... particular value in carrying out the national migratory bird management program.”
- € Endangered Species Act of 1973 (16 U.S.C. 1534) – “... to conserve (A) fish or wildlife which are listed as endangered species or threatened species.... or (B) plants ...”

Eleven thousand two hundred acres of San Pablo Bay’s navigable sloughs, estuarine habitat, and open waters are leased from the State of California Lands Commission (SLC) and managed as National Wildlife Refuge (Figure 1). Under the existing lease with SLC, the Service is encouraged to allow “... waterfowl hunting and fishing ... unless it is determined after consultation with the State of California Department of Fish and Game (now California Department of Fish and Wildlife) that the area be closed because of the public safety, for waterfowl resource protection, or for administrative purposes.” The original lease language is based upon the historic “Public Trust” doctrine, which requires that State-owned tidelands remain open to “commerce, navigation, and

fisheries.” California State Enabling Legislation, Division 7, Chapter 1, Article 3; Section 10680 and 18685 of California Fish and Game code was also required for Fish and Game Commission and County approval. The Refuge's ultimate plans include protection and conservation of more than 20,000 acres of critical wildlife habitat in northern San Pablo Bay.

### *2.3 Refuge System Improvement Act*

The Improvement Act identified a new mission statement for the Refuge System; established six priority wildlife-dependent recreational uses (hunting, fishing, wildlife observation and photography, environmental education, and interpretation); emphasized conservation and enhancement of the quality and diversity of fish and wildlife habitat; stressed the importance of partnerships with federal and state agencies, tribes, organizations, industry, and the general public; mandated public involvement in decisions on the acquisition and management of refuges; and required, prior to acquisition of new refuge lands, identification of existing compatible wildlife-dependent uses that would be permitted to continue on an interim basis pending completion of comprehensive conservation planning.

The Improvement Act establishes the responsibilities of the Secretary of the Interior for managing and protecting the Refuge System; requires a CCP for each refuge by the year 2012; provides guidelines and directives for the administration and management of all areas in the Refuge System, including wildlife refuges, areas for the protection and conservation of fish and wildlife threatened with extinction, wildlife ranges, game ranges, wildlife management areas, and waterfowl production areas.

### *2.4 Compatibility Determination*

The Improvement Act also establishes a formal process for determining compatibility of uses. Before any uses, including wildlife-dependent recreational uses, are allowed on refuges, federal law requires that they be formally determined compatible. A compatible use is defined as a use that, in the sound professional judgment of the refuge manager, will not materially interfere with or detract from the fulfillment of the purposes of the refuge or mission of the Refuge System. Sound professional judgment is defined as a finding, determination, or decision that is consistent with the principles of sound fish and wildlife management and administration, available science and resources (e.g., funding, personnel, facilities, and other infrastructure), and applicable laws. The Service strives to provide wildlife-dependent recreational uses when compatible. If financial resources are not available to design, operate, and maintain a priority use, the refuge manager will take reasonable steps to obtain outside assistance from the state and other conservation interests.

The Service has determined that recreational sport fishing is a compatible wildlife-dependent recreational use on the Refuge (Recreational Sport Fishing Compatibility Determination (CD) 2017) and will not materially interfere with or detract from the purposes for which the Refuge was established. Stipulations within the CD to ensure compatibility include designating fishing locations; law enforcement patrols; and development of environmental education and outreach materials regarding fishing on the Refuge.

### *2.5 Compliance with Endangered Species Act*

The Service prepared an Intra-Service section 7 biological evaluation amendment to the 2011 Biological Opinion (Service File 81420-2011-F-0774-2). The Service concluded that the proposed fishing in the open bay and sloughs and on the Cullinan Ranch and Dickson Ranch

Units may affect, but is not likely to adversely affect the California Ridgway's rail or the salt marsh harvest mouse.

### 2.6 *Appropriate NEPA Documents*

The Service prepared an environmental assessment evaluating the potential impacts of fishing on the Refuge.

### **III. Statement of Objectives**

The Refuge's management goals, objectives, and strategies (CCP, Chapter 5) are designed to achieve the Refuge's purposes, which are listed in Chapter 1. According to the Refuge's Vision Statement, "the Refuge will be inclusive of all age groups, backgrounds, and skill levels by providing a variety of opportunities, including fishing, hunting, trails, interpretive signs and guided tours, and off-refuge environmental education to facilitate that connection, that belonging, that immersion." Fishing is also included as a wildlife-oriented activity listed in Goal 7: "Provide the local community and other visitors with compatible wildlife-oriented outdoor recreation opportunities to enjoy, understand, and appreciate the resources of the Refuge."

The fishing program is incorporated in the CCP objectives with the following statement (CCP Objective 7.2): "Within five years of Plan completion, expand outreach for the fishing and hunting Programs." Strategies that include fishing are: "Create and distribute a public fact sheet on fishing; expand fishing areas to others units of the Refuge, designating specific access points such as Cullinan and including pier fishing at Guadalcanal once this unit is acquired; assess opportunities to conduct a fishing day at Cullinan and at Guadalcanal once this unit is acquired; and construct boardwalk at Cullinan for pier-fishing access."

The Refuge will develop and manage the recreational sport fishing program based on the following Service quality criteria (Service Manual, 605, FW1):

- Promote safety of participants, other visitors, and facilities
- Promote compliance with applicable laws and regulations and responsible behavior
- Minimize or eliminate conflict with fish and wildlife population or habitat goals or objectives in an approved plan
- Minimize conflicts with other compatible wildlife-dependent recreation
- Minimize conflicts with neighboring landowners
- Promote accessibility and availability to a broad spectrum of the American people
- Promote resource stewardship and conservation
- Promote public understanding and increase public appreciation of America's natural resources and our role in managing and conserving these resources
- Provide reliable/reasonable opportunities to experience wildlife
- Use facilities that are accessible to people and blend into the natural setting
- Use visitor satisfaction to help define and evaluate programs

The recreational sport fishing program will be conducted in a safe and cost-effective manner. This Plan was developed to provide safe fishing opportunities, while minimizing conflicts with other priority wildlife-dependent recreational uses. Fishing will be permitted in accordance with state and federal regulations to ensure the program will not interfere with the conservation of fish and wildlife and their habitats. Therefore, fishing on the Refuge complies with state regulations, the Administration Act as amended by the Improvement Act, and the Refuge Recreation Act.

#### **IV. Assessment**

##### **A. Are wildlife populations present in numbers sufficient to sustain optimum population levels for priority refuge objectives other than fishing?**

Yes, wildlife populations are present in sufficient numbers for priority Refuge objectives for wildlife management, and for the other priority wildlife-dependent recreational uses (i.e., wildlife observation and photography, environmental education, and interpretation). The Refuge adopts California Ocean Sport Fishing Regulations for the San Francisco Bay District. These regulations can be found on line:

(<https://www.wildlife.ca.gov/Fishing/Ocean/Regulations/Fishing-Map/SF-Bay>)

Additionally, booklets are available for down-load, or at California Department of Fish and Wildlife (CDFW) Offices. Regulations change from year to year requiring anglers to review creel limits and rules annually. CDFW manages the catch using data collected and analyzed from a variety of sources including population surveys, trawling, netting, electrofishing, creel census, and take report cards. The State Game Commission sets limits based and implications from the analyses (See Section V, Part C, Species to be Taken).

The Refuge is evaluated to determine the best public use strategy for providing high quality wildlife-dependent public use opportunities. These available waters include 8,000 acres of the State Lands Commission lands managed as refuge, excluding tidal marsh habitats. Opening Cullinan Ranch and Dickson Ranch Units to fishing will add 1,766 acres.

##### **B. Is there competition for habitat between target species and other wildlife?**

Possibly, while each species occupies a unique niche, only a finite amount of space is available to satisfy various habitat requirements of water, food, cover, breeding, and resting areas. However, over 39% of the sport fish found in San Francisco and San Pablo Bays are found elsewhere along the California coast.

##### **C. Are there unacceptable levels of predation by target species on other wildlife?**

An east coast and Gulf coast species, striped bass (*Morone saxatilis*) were introduced to the San Francisco Bay Delta in 1879 when roughly 130 yearlings were transported by train from Navesink River, New Jersey (<https://chesapeakebay.noaa.gov/fish-facts/striped-bass>). Striped bass are known to prey on juvenile stages of Chinook salmon (*Oncorhynchus tshawytscha*) which is a sport fish and federally listed species. Additionally, striped bass prey upon the federally listed delta smelt (*Hypomesus transpacificus*) which is not a sport fish, however, the species is also affected by habitat loss or alteration. Numerous studies have investigated the effects of striped bass on the Bay Delta ecosystem and most conclude that striped bass are known predators, however, their effect is still not clear (Nobriga and Feyrer, 2008).

## V. Description of Fishing Program

### A. Areas of the Refuge that support populations of the target species.

Using the Recreational Fisheries Information Network which consolidates information from CDFW surveys, and cross checking this data with fishing websites, a species list is provided in Table 1 of fish caught within San Francisco and San Pablo Bays. Although not a comprehensive list, habitat for many of these sport fish occurs on the refuge as open water, shallow bay, tidal slough channels, and rocky intertidal. Descriptions of Refuge habitats, and associated plant and wildlife species are described below and in further detail in Chapter 3 of the Final CCP (U.S. Fish and Wildlife Service 2011).

#### Habitats

Habitats on the Refuge that support fish include shallow open bay water and channels, tidal flat, tidal marsh, muted tidal marsh, and tidally restored diked baylands (e.g., Cullinan Ranch and Dickson Ranch Units), which is presently dominated by open water. This Plan is proposing to open the open bay and navigable sloughs and two units consisting of tidally-restored diked baylands (Cullinan Ranch and Dickson Ranch Units) of the Refuge. However, these two units will eventually revert back to tidal salt marsh habitat as they were over a hundred years earlier in roughly 20 to 60 years. The following habitats provide habitat for fish.

#### *Shallow bay water and channels*

Shallow bays and channels are characterized as the bottom being entirely between 18 feet below mean lower-low water and mean higher-high water. Shallow bays and channels are important for many invertebrates, fish, and waterbirds. This rich environment is an especially productive feeding area for many fish, including Pacific herring (*Clupea pallasii*), Sacramento splittail (*Pogonichthys macrolepidotus*), northern anchovy (*Engraulis mordax*), and jacksmelt (*Atherinopsis californiensis*). Shallow bays and channels are also an important migratory corridor for anadromous fishes such as Chinook salmon, steelhead, and green sturgeon (*Acipenser medirostris*). A few of the many bird species that occur in this habitat include western grebe (*Aechmophorus occidentalis*), American wigeon (*Anas americana*), canvasback, Forster's tern (*Sterna forsteri*), and least tern (*Sterna antillarum*). Vegetation is limited to algal species and eelgrass (*Zostera marina*), an important plant species found in this habitat providing cover and harboring some food resources.

#### *Tidal flat*

The majority of the Refuge is made up of tidal flat habitat. Tidal flats primarily consist of mudflats occurring from below mean lower-low water to mean tide level and supports less than 10 percent cover of vascular vegetation, other than eelgrass. These expanses of fine-grained silts and clay support an extensive community of diatoms, worms, and shellfish, as well as algal flora, including green algae, red algae, and sea lettuce. Eelgrass can also be a component of mudflats. This habitat type also supports feeding shorebirds and at high tide, seabirds.

#### *Tidal marsh*

Tidal marsh, also known as salt marsh, is a vegetated wetland that is subject to the tidal and

salinity influences of the Pacific Ocean. Tidal marsh typically occurs between mean sea level and mean higher-high water. Marsh pans are typical features of extensive, well-developed tidal marshes. These are natural ponds that form in the marsh plain. These ponds are usually less than one foot in depth, and fill with tidal water only during very high tides. Tidal salt marsh is generally dominated by Pacific cordgrass (*Spartina foliosa*) and pickleweed. Pacific cordgrass is usually the dominant species on broad tidal mudflats that fringe tidal marsh plains. In middle tidal salt marsh, at elevations near and above mean high water, Pacific cordgrass yields to pickleweed. Additional plant species on tidal marsh plains include fat hen (*Atriplex triangularis*), marsh-rosemary (*Limonium californicum*), alkali heath (*Frankenia salina*), jaumea (*Jaumea carnosa*), and gumplant (*Grindelia* spp.).

#### *Muted tidal marsh*

Muted tidal marsh is a subset of tidal marsh that occurs on the Refuge. Muted tidal marsh areas contain impediments to full tidal action such as internal berms and culverts. These impediments mute or dampen the tides, which can result in lower tidal marsh elevations and alter tidal marsh plant communities.

In the North Bay, tidal marshes support gobies, sculpins, and threespine stickleback (*Gasterosteus aculeatus*) (Goals Project 1999). Birds common to tidal marsh of the Refuge include northern harrier (*Circus cyaneus*), California Ridgway's rail, California black rail, salt marsh common yellowthroat (*Geothlypis trichas sinuosa*), and San Pablo song sparrow (*Melospiza melodia samuelis*) and many species of shorebirds and waterfowl. Small mammal species that rely primarily on tidal marsh include salt marsh wandering shrew (*Sorex vagrans haliocoetes*), Suisun shrew (*Sorex ornatus sinuosis*), and salt marsh harvest mouse.

#### *Tidally restored diked baylands*

Diked baylands are areas of historical tidal marshes that have been isolated from tidal influence by dikes or levees for agriculture. They were dried out and commonly farmed for oat hay for decades causing these units to subside, or sink below sea level.

Many of these baylands are slowly being restored to tidal influence by breaching the levees. Because these units are subsided, the dominant habitat is open water, which will eventually accumulate sediment to create tidal marsh. However, this process will take several decades and the open water habitat will likely remain for the next 20 to 30 years. The Cullinan Ranch and Dickson Ranch Units are considered tidally restored diked baylands. These two units provide habitat for both waterfowl and shorebirds in addition to many fish species that occur in the bay.

## **B. Areas to be opened to fishing.**

### *Fishing Program Background Information*

Recreational sport fishing is a historic activity that occurred prior to the Refuge's establishment in 1974. Fishing is regulated by CDFW under the California Saltwater Sport Fishing Regulations which is published yearly.

### Refuge Fishing Area Descriptions

#### *Open Bay and Navigable Sloughs*

Unless posted in the field, the open bay and all tidal areas in the Refuge are open to fishing. Fishing in tidal areas is open seven days a week, and only up to the high water line (USFWS 2009). A Refuge Permit is not needed for fishing in these areas.

#### *Dickson Ranch Unit of Sears Point*

Sears Point is a 2,327-acre parcel located between the Sonoma Baylands Unit and Tolay Creek in Sonoma County. The Dickson Ranch Unit is a 970-acre parcel of Sears Point located south of Highway 37 (Figures 1 and 2). Historically, the Dickson Ranch Unit was tidal marsh habitat before being diked off and drained in the late 1800s to provide farmland for oat and hay. Sonoma Land Trust purchased the land in 2004 with the intention of reverting the land to tidal marsh. The unit was breached to the bay in October 2015 and added to the Refuge in May 2016. Currently, the Dickson Ranch Unit is open water to mudflat depending on the tides. At a negative tide, the unit is predominantly mudflat and at a higher tide the unit may be up to 5 feet deep in some areas. In general, water depths likely oscillate between 1 and 4 feet deep depending on the tide. The restoration project was designed so that daily tidal circulation will bring in sediment to raise the bottom elevation of the unit to create tidal marsh habitat. However, this process could take 20-30 years. In the meantime, the open water provides habitat for many species of fish including California halibut, shiner perch, and striped bass.

#### *Cullinan Ranch Unit*

Cullinan Ranch is a 1,595-acre parcel located in Solano and Napa Counties (Figures 1 and 3). South and Dutchman Slough bound this unit from the north, while Highway 37 bounds the property to the south. The unit is bound by Guadalcanal Village from the east and CDFW Pond 1 from the west. Historically, Cullinan Ranch was part of a network of tidal marshes and sloughs along the Napa River. The first permanent dikes were constructed in the early 1900s, and more were added in the 1940s to prevent flooding and isolate the ranch as reclaimed wetland. Cullinan Ranch was farmed (primarily for oat and hay) into the 1980s. In 1987, several conservation groups defeated the proposed development of Cullinan Ranch into a residential marina community. The refuge acquired Cullinan Ranch in 1991 and in January 2015, approximately 1,200 acres of the unit was breached to tidal waters. Currently, the Cullinan Ranch Unit is open water with varying depths depending on the tides. In general, water depths likely oscillate between 1 and 4 feet deep depending on the tide. The project is designed so that daily tidal circulation will bring in sediment to raise the bottom elevation of the unit to create tidal marsh habitat. However, this process could take 20-30 years.

### **C. Species to be taken, fishing periods, fishing access**

#### Target Species

Historically, San Francisco and San Pablo Bays were fringed with extensive estuarine salt marsh habitat. Estuaries function as nursery habitat for several species of fish and crustaceans that grow and become target species in the recreational sport fishery. Although, not a comprehensive list, Table 1 provides species commonly caught in the San Pablo Bay to include waters of the Refuge. The Refuge will follow the daily possession limits established by CDFW regulations (<https://www.wildlife.ca.gov/Fishing/Ocean/Regulations/Fishing-Map/SF-Bay>).

### *Fishing Periods*

Fishing is available on the Refuge year-round and seven days a week and anglers will need to maintain a valid fishing license. Unless otherwise posted, fishing regulations will follow the CDFW Ocean Sport Fishing Regulations for the San Francisco Bay District (<https://www.wildlife.ca.gov/Fishing/Ocean/Regulations/Fishing-Map/SF-Bay>). These regulations occasionally change and/or are updated a few times within the year.

### *Fishing Access*

Fishing by boat is allowed seven days a week in the open bay and navigable sloughs within the Refuge. Motorized boating is accommodated through boat launches in the City of Vallejo, Blackpoint Boat Launch and Hudeman Slough. No motorized boat ramp facilities or docking will be available within the Refuge. Boats will be allowed to travel within the sloughs and open Bay without speed limitation, but will be required to minimize speed while in the Cullinan Ranch and Dickson Ranch Units to reduce erosive effects of waves to the shorelines and levees as well as to minimize disturbance to wildlife in the area.

At Cullinan Ranch Unit, a non-motorized boat launch facility (floating dock) was constructed near the existing CDFW parking lot to allow access onto the Refuge by canoes, kayaks and other human-powered watercraft. Regulations pertaining to boating in Cullinan Ranch Unit and maps of the adjoining sloughs are available at a kiosk located near the parking lot. A 1,600ft portion of the west side of Cullinan Ranch Unit will have shoreline access established for fishing to accompany the fishing pier at this location.

At Dickson Ranch Unit, a non-motorized boat ramp was constructed to allow access onto the Refuge by canoes, kayaks and other human-powered watercraft. However this ramp is best used during higher tides. Regulations pertaining to boating in the Dickson Ranch Unit and maps of the adjacent areas are available at a kiosk located near the new parking lot off Reclamation Road.

Refuges are open from legal sunrise to legal sunset, and fishing will be conducted using a pole and line or rod and reel.

### **D. Justification for the permit, if one is required**

No permits are required to fish on the Refuge, however, a valid fishing license issued by the state of California is required.

### **E. Consultation and Coordination with the State.**

Surveys conducted by CDFW, determines the daily possession limits for species of fish caught. These limits are detailed in the Ocean Sport Fishing Regulations for the San Francisco Bay District (<https://www.wildlife.ca.gov/Fishing/Ocean/Regulations/Fishing-Map/SF-Bay>). These limits may change a few times within any given year. Both the Service and CDFW participate in enforcing applicable Federal and State laws pertaining to fishing regulations.

### **F. Law Enforcement**

Enforcement of Refuge violations normally associated with management of the Refuge is the responsibility of Federal Wildlife Officers. Fishing is allowed on the Refuge in accordance

with State regulations. These regulations can be found in the CDFW Ocean Sport Fishing Regulations for the San Francisco Bay District (<https://www.wildlife.ca.gov/Fishing/Ocean/Regulations/Fishing-Map/SF-Bay>).

Law enforcement would continue to be provided by Federal Wildlife Officers staff stationed at San Francisco Bay National Wildlife Refuge Complex in Fremont, and CDFW wardens. Refuge staff and Federal Wildlife Officers will work cooperatively with local law enforcement officers and CDFW wardens to enforce CFR, State, and Refuge-specific regulations to provide a quality experience for all visitors.

The Refuge does not have any check-in stations. An important method of managing a fishing program is keeping the angler well informed. The following methods are used to manage and enforce the fishing program and regulations:

- Refuge boundaries will be clearly posted;
- Refuge law enforcement staff may randomly check anglers for compliance with Federal and State Laws, as well as Refuge-specific regulations pertinent to fishing, including compatibility stipulations;
- Refuge law enforcement will coordinate with CDFW wardens and other law enforcement agencies;
- Information will be made available at the Refuge headquarters and website; and
- Refuge manager and staff will be available to communicate with anglers.

#### **G. Funding and Staffing Requirements**

Existing funds and staff are currently adequate to offer the fishing program to the public. There are no fees associated with fishing on the refuge. Staffing activities includes law enforcement, sign posting, updating the website, and responding to public inquiries. It is anticipated that funding would continue to be sufficient to continue the fishing program at the Refuge in the future.

### **VI. Measures Taken to Avoid Conflicts with Other Management Objectives**

#### *A. Biological Conflicts*

Biological conflicts will be minimized by the following:

1. To protect habitat for endangered California Ridgway's rail and salt marsh harvest mouse, no traveling will be allowed over salt marsh habitat to access Refuge water for fishing.
2. Law enforcement presence will help minimize excessive catch of species and other infractions (habitat damage, littering, etc.).
3. A Section 7 consultation on the Final CCP/EIS (U.S. Fish and Wildlife Service 2011) which includes fishing was completed to determine effects of the CCP on threatened and endangered species.

#### *B. Public Use Conflicts*

Conflicts between fishing and other public uses will be minimized by the following:

1. Information about the Refuge fishing program will be provided through signs, kiosks, brochures, and the Refuge's website ([http://www.fws.gov/refuge/San\\_Pablo\\_Bay/activities.html](http://www.fws.gov/refuge/San_Pablo_Bay/activities.html))

### *C. Administrative Conflicts*

No administrative conflicts with the fishing program are apparent at this time. As the program expands, conflicts associated with the cost of the program may arise. Refuge management sets priorities, allowing staff sufficient time to administer the fishing program. Currently, the Refuge shares two full-time Refuge Officers with the rest of the six other refuge on the San Francisco Bay NWR Complex. Additional assistance is provided by CDFW game wardens, when deemed necessary.

## **VII. Conduct of the Fishing Program**

Listed below are refuge-specific regulations that pertain to San Pablo Bay NWR as of the date of this plan. These regulations may be modified as conditions change or if refuge expansion continues/occurs.

### *A. Refuge-Specific Fishing Regulations*

We allow fishing on the refuge in accordance with State and Federal regulations.

1. The refuge is only open from legal dawn to legal dusk.
2. Unless posted in the field and/or noted below, we only allow fishing in the open waters of San Pablo Bay and navigable sloughs; the Cullinan Ranch Unit; and the Dickson Ranch Unit.
3. Fishing is to be done from a watercraft or designated land-based areas. Walking through or over marsh vegetation will be prohibited.
4. Launching of boats and access to the Bay or sloughs from Refuge property is prohibited unless in designated boat launch sites. Cullinan Ranch Unit and Dickson Ranch Unit launch sites are for human-powered craft only.
5. All fishing equipment must be removed from the refuge daily.
6. Fishing will be conducted using a pole and line or rod and reel. Bow fishing and gigging will be prohibited.

### *B. Anticipated Public Reaction to the Fishing Program*

Recreational sport fish is a historic recreational activity that has occurred prior to the Refuge's establishment and is an activity that has been ongoing since the Refuge was created. Fishing opportunities have increased with tidal marsh restorations at Cullinan Ranch and Dickson Ranch Units. Contact with anglers on the Refuge has found they are grateful to have the access and opportunity to fish. During the scoping comment periods and public scoping sessions for the CCP, no comments were brought up about the Refuge's proposed fishing program.

### *C. Angler Application and Registration Procedures (if applicable)*

No Refuge-specific permit or registration is needed. There will not be check-in stations or any "sign-in/sign-out" process. A valid California fishing license will be required.

### *D. Media Selection for Announcing and Publicizing the Fishing Program*

The Refuge has a standard list of local media contacts for news releases. The Service will use the Refuge's website, kiosks, brochures, and flyers to provide current and accurate information regarding the Refuge's sport fishing program. Fishing is allowed on the Refuge in accordance with

State regulations. These regulations can be found in the CDFW Ocean Sport Fishing Regulations for the San Francisco Bay District (<https://www.wildlife.ca.gov/Fishing/Ocean/Regulations/Fishing-Map/SF-Bay>). These regulations should be reviewed periodically as creel limits may change during the year.

#### *E. General Requirements*

General information regarding fishing and other wildlife-dependent public uses can be obtained at San Pablo Bay NWR office at 2100 Sears Point Road, Sonoma CA 95476 or by calling (707) 769-4200. Information, maps, and directions will be available at: [https://www.fws.gov/refuge/san\\_pablo\\_bay/](https://www.fws.gov/refuge/san_pablo_bay/).

#### *F. Angler Requirements*

##### **Age**

- The State of California requires any person who is 16 years of age or older to possess a valid sport fishing license when taking any fish or shell fish.

**Fishing Education** – No education requirement will be needed to fish on the Refuge. However, anglers should make themselves aware of fishing regulations which can be found in the CDFW Ocean Sport Fishing Regulations for the San Francisco Bay District (<https://www.wildlife.ca.gov/Fishing/Ocean/Regulations/Fishing-Map/SF-Bay>). These regulations should be reviewed periodically as creel limits may change during the year.

**Equipment** - The Refuge will permit the use of legal fishing rods with reels and will not allow the use of nets of any kind except those used to retrieve a caught fish on the end of a line. No other capture appliances or equipment will be allowed.

**Fires on the refuge** – No fires are permitted on the refuge.

### **VIII. Compatibility Determination**

Recreational sport fishing and all associated program activities proposed in this plan are expected to be found compatible with purposes of the refuge.

### **REFERENCES**

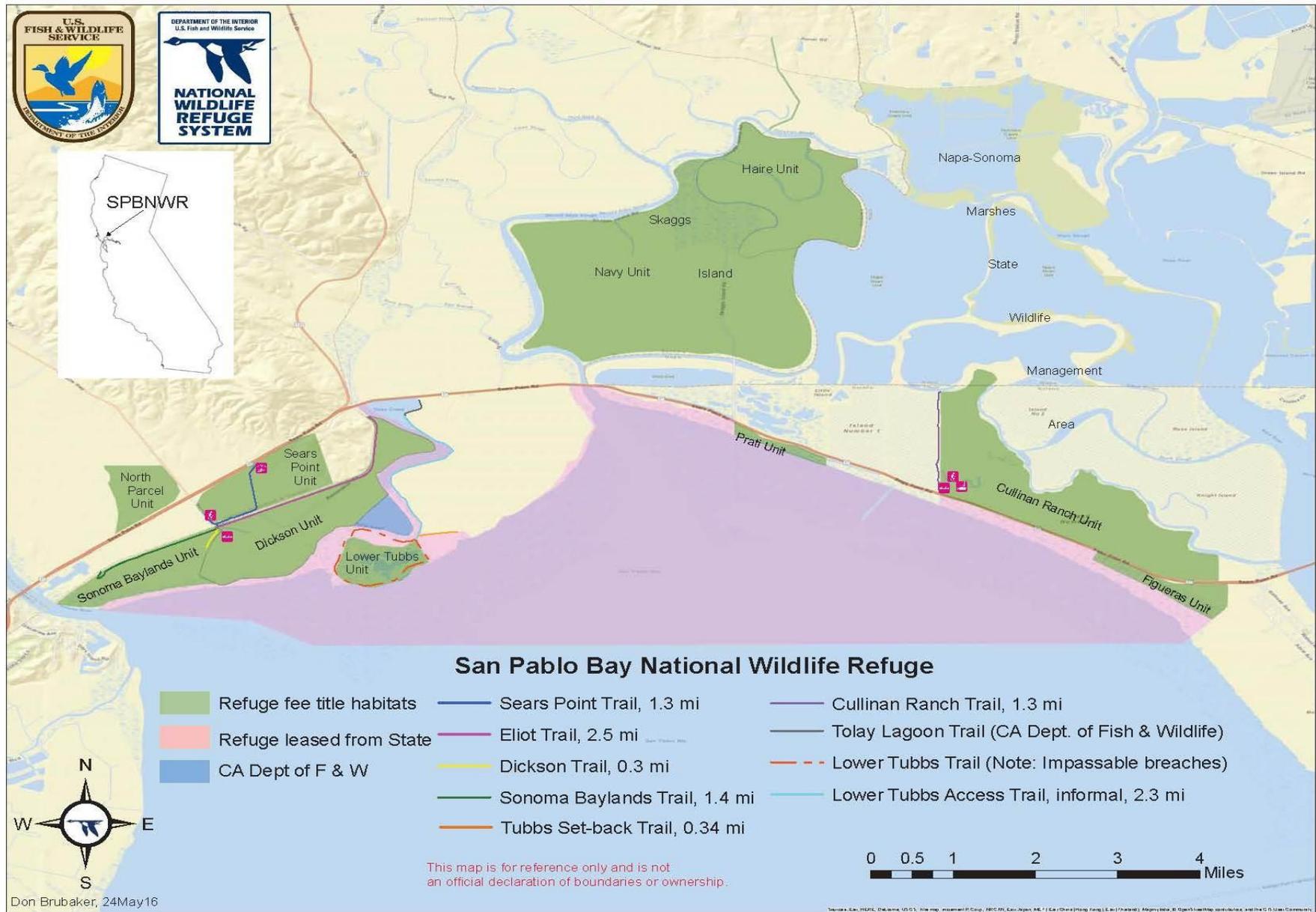
U.S. Fish and Wildlife Service. 2011. San Pablo Bay National Wildlife Refuge comprehensive conservation plan and environmental assessment. U.S. Fish and Wildlife Service, Pacific Southwest Region.

U.S. Fish and Wildlife Service. 2017. Compatibility determination for recreational sport fishing on the San Pablo Bay National Wildlife Refuge. U.S. Fish and Wildlife Service, Southwest Region.

**Table 1.** Recreational sport fish commonly caught in San Francisco and San Pablo Bays. San Pablo Bay National Wildlife Refuge has species habitat and amenities to support anglers for these fish.

<b>Common Name</b>	<b>Scientific Name</b>	<b>Habitat</b>	<b>Catch Locations</b>	<b>Habitat/Locations on Refuge</b>
Barred Surfperch	<i>Amphistichus argenteus</i>	Surf zone; shallow rocky shores	Shores and piers	Rocky shoreline off Tubbs Tolay Trail
Bat Ray	<i>Myliobatis californica</i>	Shallow sandy environment	Open shallow water	Tidally-restored diked baylands such as Cullinan & Dickson Ranch Units
Cabezon	<i>Scorpaenichthys marmoratus</i>	Shallow rocky shores; kelp beds	Shores	Rocky shoreline off Tubbs Tolay Trail
California Halibut	<i>Paralichthys californicus</i>	Shallow sandy environment	Open shallow water	Tidally-restored diked baylands such as Cullinan & Dickson Ranch Units
Jacksmelt	<i>Atherinopsis californiensis</i>	Shallow bay waters	Shores and piers	Cullinan Ranch pier and shore
Leopard Shark	<i>Triakis semifasciata</i>	Sandy beaches; bays	Open waters	Open bay waters of Refuge
Shiner Perch	<i>Cymatogaster aggregata</i>	Eelgrass beds, pilings of wharfs and piers	Shore and piers	Cullinan Ranch pier and shore
Silver Surfperch	<i>Hyperprosopon ellipticum</i>	Surf zone; shallow rocky shores	Shore and piers	Cullinan Ranch pier and shore
Striped Bass*	<i>Morone saxatilis</i>	Bay and Delta environments	Shore and piers	Cullinan Ranch pier and shore
White Sturgeon	<i>Acipenser transmontanus</i>	Brackish waters in sloughs	Sloughs	Tollay Creek and Sonoma Creek Sloughs

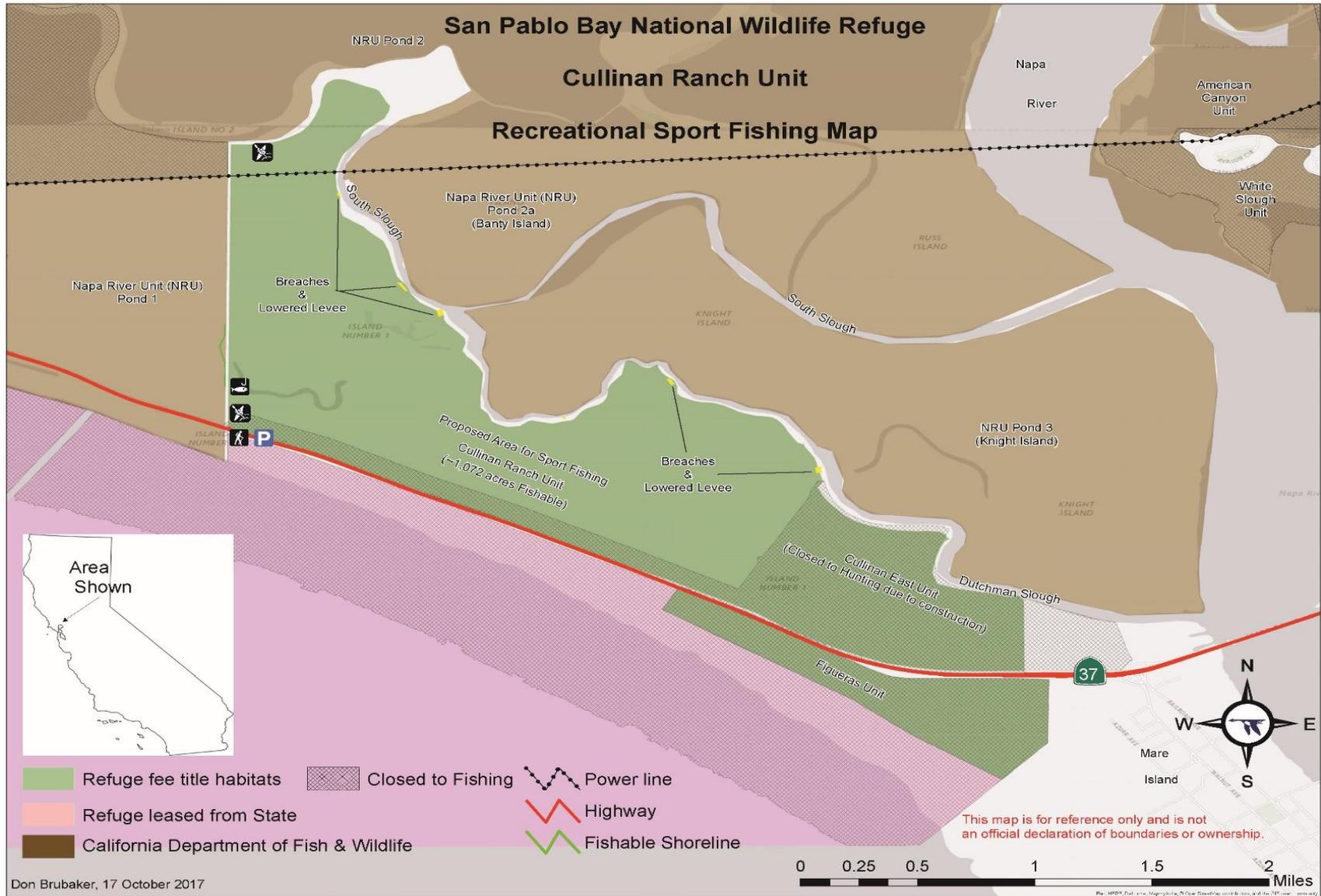
\* Non-native invasive species



**Figure 1.** The 19,970 acre San Pablo Bay National Wildlife Refuge situated on the top end of San Pablo Bay. Opening both Cullinan Ranch and Dickson Ranch Units to recreational sport fishing is being propose in this plan. This action would increase current recreational sport fishing by over 2,100 acres. Recreational Sport Fishing Plan, San Pablo Bay NWR, October 2017.



**Figure 2.** Portion of Dickson Ranch Unit of San Pablo Bay NWR proposed for opening to sport fishing. Shaded areas are closed to fishing as they are salt marsh habitat or future habitat. Recreational Sport Fishing Plan, San Pablo Bay NWR, October 2017.



**Figure 3.** Portion of Cullinan Ranch Unit of San Pablo Bay NWR proposed for opening to sport fishing. Shaded areas are closed to fishing because they are salt marsh habitat or future habitat. The breaches in the levee provide boat access to the unit. Recreational Sport Fishing Plan, San Pablo Bay NWR, October 2017.