Room 3000, Ferry Building San Francisco, California 94111 April 16, 1964

> Mr. John Prather Sonoma County Planning Department County Administration Building Santa Rosa, California

Dear Mr. Prather:

On March 23, 1964, Mr. Gil Thomson and Mr. Jack Robinson of this Office met with you and Mr. King to discuss fish and wildlife resources of the Petaluma River and San Pablo Bay within Sonoma County.

It is our understanding that your Department is drafting a coordinated development plan for Petaluma River and San Pablo Bay. In conjunction with this plan, you indicated a desire to receive from us information relative to fish and wildlife resources of the area, with emphasis on specific areas of great importance. We have also included some infor-mation relating to water quality.

Mr. Thomson and Mr. Robinson indicated that the Department would furnish you with such information about the middle of April. The following is the current information we have on the fish and wildlife resources of Petaluma River and San Pablo Bay lying within Sonoma County.

## FISHERIES

## Petaluma River

The tidewater area of Petaluma River contains striped bass of all sizes the year around. This locale provides these fish a feeding and nursery area. The bass probably do not spawn in Petaluma River, due to lack of fresh water, a spawning requirement.

The striped bass fishery in the River can be classified as good bass fishing at certain times of the year. The Department of Fish and Game has not made a survey of the fishing effort in the Petaluma River. However, it can be estimated from past surveys of the striped bass fishery that approximately tea thousand to twenty thousand angler days a year are spent fish-

FISHERIES (Continued)
Petaluma River (continued)

ing for striped bass in the River. The fishery is both a boat and shore fishery. Therefore, angler access to the River is essential, and should be provided for at strategic points.

Other species of fish that are caught incidentally in the River are topsmelt, jacksmelt, and starry flounders.

# San Pablo Bay

The area of San Pablo Bay falling within Sonoma County contains many forms of aquatic life. The majority of the area is relatively shallow and little angling occurs. These shallow water areas produce several species of clams, crab, and shrimp. Also found in the tidal flats of the Bay are many species of bottom-dwelling worms. These organisms are important food items in the diet of the striped bass and other species inhabiting the Bay.

White and green sturgeon are common in San Pablo Bay. In fact, this Bay supports the largest sturgeon population in the State.

In 1955 and 1956 the Department of Fish and Game conducted a study in the Bay to estimate the adult population of sturgeon. It was estimated that the adult population over forty inches in length numbered about eleven thousand fish.

Sturgeon are mainly caught incidentally by anglers fishing for striped bass. However, they are a highly prized fish because of their large size.

## WILDLIFE

The San Francisco Bay, with its surrounding marshes and mud flats, is highly important for over a million waterfowl and shorebirds. A good example of the value of this water environment is illustrated by the presence of canvasback ducks. These birds are an important species in the Pacific Flyway, end at one time or another, during the winter period, most of the entire west coast canvasback population spends some time on the Bay and its marshes as winter visitors. The import of this habitat becomes apparent only when we recognize that these birds are of national and international importance. The survival of the waterfowl on Bay waters means flights may continue on to Mexico. Return flights can go northward through the States of Oregon and Washington to nesting grounds in Canada and • Alaska.

While we may wisely utilize the migrating waterfowl coming to this area, we are also obligated to our neighboring states and countries, to protect this resource for the future.

## WILDLIFE (Continued)

Over the years, San Francisco Bay has been subjected to considerable misuse. Wildlife environment has been destroyed by filling and pollution. Poor water quality has actually destroyed the capacity of some Bay waters to produce food for wildlife. All important wildlife areas that remain need protection.

San Pablo Bay, Petaluma Creek, and adjacent marshes continue to support extensive bird populations of water associated birds. These areas remain an important segment of the Bay complex; and we believe they should be preserved.

Recently the Department of fish and Game and the U.S. Fish and Wildlife Service cooperatively evaluated areas of the Bay for fish and wildlife. Petaluma Marshes and the marshlands and tideflats along the San Pablo Bay were included in areas regarded as extremely important to both fish and wildlife.

The canvasback duck is only one of many species using the areas. It has only been singled out because the population has been alarmingly low the past few years, and the North Bay Area is of utmost importance to its survival. Other species of waterfowl, shorebirds, and waders help make up the important and interesting wildlife resource of the Bay.

Some figures that may give an indication of the 1964 use along the Sonoma County shoreline in San Pablo Bay are given in the following tables:

I
TUBBS ISLAND LEVEE
(Midshipman Point to Mouth of Sonoma Creek)

	February 18, 1964	March 17, 1964	April 3, 1964
Canvasback	1,500	4,500	2,050
Scaup	800	300	100
Ruddy duck	100		
Bufflehead	100		
Shoveller	450	800	45
Pintail	200	100	
Baldpate	100		
Teal	100	300	40
Mallards	50		12
Coots	100	100	200
Least Sandpiper			31,000
Avocet			400
Long-billed curlew			2,900
Unidentified shorebirds	8,300	31,000	14,100
Egrets			11
Terns			240

WILDLIFE (Continued)

II BLACK POINT

	February 18, 1964	March 17, 1964	April 3, 1964
Canvasback	300	900	1,850
Scaup	450	200	510
Ruddy duck	100		
Bufflehead	50		
Shoveller	100	200	30
Pintail	500	100	
Teal		100	20
Coots	50	50	10
Long-billed curlews			150
Unidentified shorebird	S		800
Terns	100	1,000	50

Good water quality is necessary for the protection of aquatic life. Our Department works closely with the Regional Water Pollution Control Board, and submits to them recommendations for water quality of receiving waters. A typical recommendation would be as follows:

- a. A minimum dissolved oxygen concentration of not less than 5 parts per million.
- b. A pH range of not less than 6.5 nor more than 8.5.
- c. A prohibition against the formation of bottom deposits.
- d. A limitation on dissolved sulphides not to exceed 0.1 parts per million.
- e. A prohibition against the discharge of any materials in concentrations deleterious to fish or other aquatic life.

#### WILDLIFE

We are enclosing two reports covering the fish and wildlife resources and habitat in the San Francisco Bay Area. One report by the Department of Fish and Game is entitled "An Historical Review of the Fish and Wildlife Resources of the San Francisco Bay Area" by John E. Skinner. The other report is by the U.S. Fish and Wildlife Service and is entitled "Fish and Wildlife Habitat in Relation to Reclamation of Tidelands and Marches in San Francisco Bay Area" I am sure you will find these reports most interesting and very helpful in your planning for overall use of the Petaluma River and San Pablo Bay Areas.

#### RECOMMENDATIONS

In your final plan we would like to see the following items incorporated. It is recommended that:

RECOMMENDATIONS (Continued)

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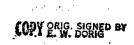
- 1. Water quality be maintained as outlined above.
- 2. The marsh areas of the Petaluma River be reserved as a waterfowl refuge. The U.S. Fish and Wildlife Service appears to be interested in acquiring the marsh areas for such a refuge.
- 3. Public access for both shore fishing and boat access be guaranteed to the Petaluma River at strategic points along the River.
- 4. The County establish a bulkhead line at the high tide level along the San Pablo Bay waterfront. Therefore, no filling or alteration of habitat would occur in the marsh and water areas of the Bay.

I am very impressed with the interest you have shown for the fish and wildlife resources.

We will look forward to receiving and reviewing your overall plan for development of the Petaluma River and San Pablo Bay.

Sincerely,

Willard Greenwald Regional Manager Region 3



By: E.W. Dorig
Acting

Attachments (sic)

JBR:hn

bc: Sonoma County Council of Sportsmen

bc: Captain Lee C. Shea (2)

bc: Mr. W. E. Jones