

THE RESOURCES AGENCY OF CALIFORNIA
Department of Fish and Game

STREAM SURVEY

File form. No.....

Date: _____

NAME: Petaluma Creek COUNTY: SonomaSTREAM SECTION: partial FROM: upstream limit of tidal influence TO: headwaters LENGTH: 8 milesTRIBUTARY TO: San Francisco Bay ...TWP: 3N R: 6W SEC: 10Other Names: Petaluma River ..River system: Petaluma CreekSources of Data: Personal observation**EXTENT OF OBSERVATION**

Include: Name of Surveyor, Date

LOCATION

RELATION TO OTHER WATERS

GENERAL DESCRIPTION

Watershed

Immediate Drainage Basin

Altitude (Range)

Gradient

Width

Depth

Flow (Range)

Velocity

Bottom

Spawning Areas

Pools

Shelter

Barriers

Diversions

Temperatures

Food

Aquatic Plants

Winter Conditions

Pollution

Springs

FISHES PRESENT AND SUCCESS

OTHER VERTEBRATES

FISHING INTENSITY

OTHER RECREATIONAL USE

ACCESSIBILITY

OWNERSHIP

POSTED OR OPEN

IMPROVEMENTS

PAST STOCKING

GENERAL ESTIMATE

RECOMMENDED MANAGEMENT

SKETCH MAP

REFERENCES AND MAPS

EXTENT OF OBSERVATION - Surveyed on July 18, 1968 by Bruce Thomson and Jim Michaels by car with frequent stops for clear and closer observation on foot.

RELATION TO OTHER WATERS - Contributes winter stream flow to San Francisco Bay. The stream is relatively unimportant as a spawning and nursery area for salmon and steelhead.

GENERAL DESCRIPTION

Watershed - The stream is located in rolling hills to the northwest of S. F. Bay. Soil is of an adobe type. Vegetative cover is restricted primarily to small pockets of bay, and grasslands.

Immediate Drainage Basin - The stream itself drains about 5 square miles but is fed by other streams draining an area of about 100 square miles in size. This stream is found in a broad V-shaped valley and discharges towards the south. The channel is bowl-shaped and streamside vegetation is generally absent.

Altitude - 0 to 250 feet.

Gradient - Slight gradient of 75 feet per mile.

Width - Average - 5 feet, range 0-12 feet where water is present.

Depth - Range 0-4 feet and averages one foot.

Flow - Intermittent.

Velocity - Sluggish.

Bottom - 10% fine gravel, 30% sand, 60% mud and silt. The bottom of pools has generally sand and silt.

Spawning Areas - Poor for most fish because of the presence of large quantities of vines. Two bluegill were observed spawning in mud.

Pools - No pools were observed above the confluence with Willow Brook Creek. Two pools downstream from this confluence averaged 15 ft. long by 25 ft. wide by 2½ feet deep.

Shelter - Shelter below the confluence with Willow Brook Creek consist of undercut banks 50%, and low overhanging willows 50%.

Barriers - Where Jewett Road crosses the stream there is a large culvert pipe four feet above the streambed.

Diversions - None observed.

Temperatures - At 1430 the air temperature was 92°F., and the water temperature was 72°F.

Food - About 1 mosquito larvae was observed per square foot of pool surface area.

Aquatic Plants - 25% of the shoreline along the pools was lined with cattails. Duckweed and Green Algae are found in 50% of the pools.

Winter conditions - Debris and high water lines along the stream indicate winter flows 15 feet wide and averaging 3 feet in depth can be expected.

Pollution - Debris (manure) from cattle farming was observed in the upper reaches of the Stream.

Springs - One spring 1/4 mile north of Pepper Road provides ½ mile of .011 cfs flow, which seeps into the ground.

FISHES PRESENT AND SUCCESS - Observed 2 bluegills spawning north of the bridge where Petaluma Blvd. crosses the creek. Stickleback were also observed, 2 per square foot of pools bottom area. Mosquito fish were observed at 1 per 2 square feet of pool area. Sticklebacks averaged 1 inch in length and ranged from ½ to 2 inches long.

OTHER VERTEBRATES - Frogs and tadpoles were present in all pools.

FISHING INTENSITY - None observed.

OTHER RECREATIONAL USES - None observed.

ACCESSIBILITY - Petaluma Boulevard parallels the stream within the city limits to the headwater.

OWNERSHIP - Private.

POSTED OR OPEN - Not posted but believed to be closed to the public.

IMPROVEMENTS - None observed.

PAST STOCKING - Not known.

GENERAL ESTIMATE - Because of low summer flows, this stream is of poor fishery value.

RECOMMENDED MANAGEMENT - None recommended.

REFERENCES AND MAPS - None recommended.

SKETCH MAP - See attached map.