THE RESOURCES AGENCY OF CALIFORNIA Department of Fish and Game

STREAM SURVEY

NAME: ARROYO CORTE MADERA DEL PRE	ESIDIO COU	NTY: <u>N</u>	IARIN .
STREAM SECTION: FROM:_ Mouth To:_	Headwaters	LENGTH:_	3.27 miles plus trib .
TRIBUTARY TO: Richardson Bay	Twp:1N	R: 6W	SEC: 34 .
OTHER NAMES: None	RIVER SYSTEM	1: Richa	ardson Bay
SOURCES OF DATA: Personal Observation			

EXTENT OF OBSERVATION Include: Name of Surveyor, Date, Etc. 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 VERTERRATES 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 - on August 10, 1965, C.E. Culley and B.Fox spent the entire day surveying this creek by car and foot.

LOCATION - The headwaters lie in rather steep mountains just northwest of the town of Mill Valley. It passes through Mill Valley in a southeasterly direction until it empties into the northwestern portion of Richardson Bay.

RELATION TO OTHER WATERS - This stream appears to be a good spawning and nursery area for steelhead trout.

Watershed and Immediate Drainage Basin - The headwaters lie in steep, "V"-shaped canyons which have from dense to abundant vegetation cover in the form of a typical Redwood Forest. From the lower end of the headwaters to the beginning of the town of Mill Valley, the stream is located in a rather narrow, steep, valley. Redwood Forest vegetation still the typical type. The portion of the stream that passes through the town of Mill Valley is partially covered over for building construction, roads, etc., and partially open with a common amount of vegetations cover. The lower portion of the stream approximately the last 9/10 of a mile of it, is a typical slough. The vegetational cover is scarce to common, and generally consists of common weeds and marsh plants. The general direction of the stream's discharge is a southeasterly one.

Altitude - 1600 feet to sea level.

Gradient - The upper headwaters are steep, and the middle portion of the stream is generally moderate. The last mile (an approximation) is almost slight.

Width - Average width is one foot to two feet.

Depth - Average depth is 1 1/2 inches to 4 inches deep.

Flow - There are no minimum flow records for the summer months, but during my 8-10-65 survey, I noted only about 20 feet--total of the stream was dry. This 20 feet of dry streambed consisted of several scattered and short-length dry areas. Presently (8-10-65) the average flow for the stream is estimated as 1/2 to 3/4 cfs.

Velocity - Rapid (more than 1/2 feet/second).

Bottom - The middle and lower stretches of this stream generally have a bed of fine and coarse gravel with some fine and coarse rubble.

Spawning Areas - There are many excellent spawning areas in this stream. Refer to attached map.

Pools - Pools that are short, narrow, and shallow are fairly frequent. They are generally well shaded and are usually caused by the digging action of the current, undercut banks, and some sort of blockage of the flow. The average size is 4 feet to 6 feet wide, 6 feet to 20 feet long, and 3 inches to 10 inches deep.

Shelter - Shelter in the form of overhanging terrestrial plants and coarse rubble is presently good for the pools.

Barriers - None.

 $\underline{\text{Diversions}}$ - Cascade Dam in the headwaters of Old Mill Creek, 40-50 feet high and storing water for municipal drinking purposes. A year-round diversion.

<u>Temperatures</u> - Air temperature 72 degrees Farenheit. Water temperature 59 degrees Farenheit. Taken 0.4 mile downstream from the uppermost fork of Corte Madera Del Presidio Creek at 0940, August 10, 1965.

Food - Sufficient.

Aquatic Plants - Marsh plants at lower end of creek in slough portion, (Not enough to hinder fish.)

<u>Winter Conditions</u> - Not clearly indicated due to extremely dense plant growth and improvements made by streamside residents.

Pollution - None.

<u>Springs</u> - Only one observed. One half mile upstream of Cascade Dam. Not developed. FISHES PRESENT AND SUCCESS - Steelhead trout: average/100 feet-75-100; average/100 feet riffles-50-70; average/100 feet pools-80-119 (added several small pool's lengths and number of fish to equal 100 feet of pool). Only 10 were keyed out on August 25, 1965. Both anal fin ray and gill raker counts indicated all were steelhead, not silver salmon. Minimum size-1.8 inches long. Maximum size-2.8 inches long, average size-2.4 inches long. (Taken from 20 individuals measured.) Natural propagation success is good.

OTHER VERTEBRATES - One only-12 inch adult Dicamptodon ensatus (Pacific Giant Salamander). FISHING INTENSITY - Light to none. Many private homes along the immediate bank.

OTHER RECREATIONAL USES - None. Privately owned almost the entire length.

ACCESSIBILITY - Stream accessible by paralleling roads. Take Mill Valley turn-off of Highway 101, drive approximately 2 miles to the town of Mill Valley, turn-off on Corte Madera Avenue, for trip to headwaters of stream.

OWNERSHIP - Private, owned by local residents.

POSTED OR OPEN - Posted, in some areas; the land is posted, but down in the residential area, there is not any posters.

IMPROVEMENTS - None noted.

PAST STOCKING - None.

GENERAL ESTIMATE - This stream is a valuable SH stream used for spawning and nursery. **RECOMMENDED MANAGEMENT** - None.

SKETCH MAP - See attached.

REFERENCES AND MAPS - U.S.G.S. San Rafael, Quadrangle; 7.5 series (topographic).

C. E. Cully/bg-8/10/65
typed Dec. 8, 1965

