## THE RESOURCES AGENCY OF CALIFORNIA Department of Fish and Game

## STREAM SURVEY

NAME Rolling Brook COUNTY Mendocino

STREAM SECTION Entire FROM Air Force Pump Station To Mouth Length 3 ½ miles

TRIBUTARY TO Garcia River Twp. 12N R. 16W. Sec. 24.

OTHER NAMES None known RIVER SYSTEM. Garcia

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
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REFERENCES AND MAPS

EXTENT OF OBSERVATION - 10 August 1967, 0930-1200, walked from Air Force pumping station downstream to mouth, a distance of approximately  $2\frac{1}{2}$  miles.

 $\underline{\text{LOCATION}}$  - Mouth Twp. 12N, R 16W, Sec. 24. Approximately 6 miles east and 2 miles south of Pt. Arena (town).

RELATION TO OTHER WATERS - Fair sized tributary to Garcia River. Contributes 1.5 c.f.s. at mouth into Garcia (10 Aug. 67).

Fisheries value includes only 3/4 mile upstream from the mouth, above that the gradient is too steep for any fish to ascend.

## GENERAL DESCRIPTION

<u>Watershed and Immediate Drainage Basin</u> - Basin contains redwood, Douglas fir, bay, madrone and alder trees with associated shrubs. The upper 2-3/4 miles of the canyon is V-shaped with thin rocky soil whereas the lower 3/4 of a mile is U shaped with better humus soil. Three small springs were noted along the stream but failed to contribute appreciably to the flow. Streamside vegetation ranges from very little in wide areas to relatively abundant in places where the stream is narrow.

<u>Altitudes</u> - (Range) Heads, approximately 1,760 ft.; mouth, tidewater.

Gradient - Lower 3/4 mile approximately 300 ft. per mile.

Width - Average 3 ft., range 2-8 ft.

Depth - Average 6"-10", range 3" - 60".

Flow - 1.5 c.f.s. at mouth; range, 1.0 - 3.5 c.f.s. (est.).

Velocity - Rapid lower 3/4 mile

Bottom - Rubble, gravel and sand lower 3/4 mile

Spawning areas - Lower 3/4 mile good gravel at least 50% of the streambed.

Pools - Lower 3/4 approximately 20% of streambed consists of small pools 4 ft. x 6-8 ft. x 24-36 inches deep.

Shelter - Fair in lower 3/4 mile under logs, boulders and undercuts, little from Streamside vegetation.

<u>Barriers</u> - Lower 3/4 mile no absolute barriers were observed, some small log jams were noted.

Diversions - Head waters Air Force pumping station believed to be for emergency only. Pipe approximately 4 inches diameter.

Temperatures - Air 68°F, water 57°F at 1200. Weather: Clear and calm.

 $\underline{\text{Food}}$  - Abundant caddis fly larvae on rubble and gravel approximately 10 per fist-size rock. Also adults present.

Aquatic plants - Large amounts of filamentous green algae in open portions of lower 3/4 mile. Some small clumps of brown algae were noted.

Winter conditions - Quite heavy runoff indicated by debris along banks up to 4 ft.

higher than present level. Also bed will probably increase by 3 fold in lower 3/4 mile. Pollution - None observed

 $\underline{\operatorname{Springs}}$  - Three small springs noted along stream but were minor in their contribution to the flow.

FISHES PRESENT AND SUCCESS - Lower 3/4 mile small SH-RT noted with increasing frequency toward mouth, (Estimate approximately 25 per 100 ft.)

OTHER VERTEBRATES - Frogs all along stream

FISHING INTENSITY - Unknown

OTHER RECREATIONAL USE - None known

ACCESSIBILITY - By logging road at mouth and by private, locked road from Air Force pumping station off of Eureka Hill Road. (Key from A.F. Station).

OWNERSHIP - Holmes Lumber Co.

POSTED OR OPEN - Posted

IMPROVEMENTS - None observed. Suggest that removal of debris in lower 3/4 mile would open up more areas to spawning and that removal of debris from portions upstream from there would reduce amount of debris that might be moved downstream this winter.

GENERAL ESTIMATE - The lower 3/4 mile of this stream is now a very good spawning and nursery stream. There is adequate spawning area and shelter in pools for the fish. The upper 2-3/4 miles is useless for fisheries due to the high gradient (approximately 700 ft. per mile) and many barriers (falls and log jams). The major problem with this stream would be control of debris from the upper portion. This could damage the lower portion. Two new areas of logging along the stream were seen. These will no doubt contribute to the debris already present.

<u>RECOMMENDED MANAGEMENT</u> - This stream should be retained as a fisheries stream for salmon and steelhead. Removal of the small log jams would facilitate passage in the lower 3/4 mile. Removal of debris above this point would insure a clear streambed for the future.

SKETCH MAP - Attached

REFERENCES AND MAPS - U.S.G.S. Point Arena Quad 1960

G. A. Miller

