THE RESOURCES AGENCY OF CALIFORNIA Department Of Fish And Game

STREAM SURVEY

NAME: Mill Creek COUNTY Mendocino .

STREAM SECTION: entire FROM Mailliard Redwoods State Park To mouth a distance of five miles LENGTH: 8½ mi .

TRIBUTARY TO Garcia River TWP 12N R: 13W SEC 7

OTHER NAMES None known RIVER SYSTEM Garcia .

SOURCES OF DATA Personal observation -- G. A. Miller

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 Shelter 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 $\underline{\text{EXTENT}}$ OF OBSERVATION - Drove the stream from the eastern boundary of Mailliard Redwoods State Park to Redwood Creek (1-3/4 miles) and walked from mouth of Redwood Creek to the Garcia River, 29 August 1967, 1130-1330.

LOCATION - Heads in Ornbaun Valley and runs generally westward until Mailliard Redwoods State park. There it turns north for about a mile, then west (1-1/2 mile) and finally south to the Garcia River (2-1/2 miles). It enters the Garcia approximately three air miles west of Mailliard Redwoods State park.

RELATION TO OTHER WATERS - Although a long stream, Mill Creek contributes only 1.5 cfs. At the mouth (29 August 1967). Fisheries value stops below a 25 yard log jam about two miles upstream from the mouth. This jam is presently preceded upstream by 4 mile of dry streambed. It is a minor contributor to both summer flows and spawning/nursery area.

GENERAL DESCRIPTION-Watershed and Immediate Drainage

Basin - The fisheries portion of Mill Creek is the
lower two miles. It lies in a U-shaped valley that is
covered with fairly good soil. The valley contains a
medium growth of Redwood, Douglas fir, bay, alder and
madrone trees in association with the usual shrubs and
annual plants. This portion of the stream flows
generally south.

Altitude -Heads: 1280 ft., mouth: 880 ft.

<u>Gradient</u> - Average: Approximately 60 ft. per mile. Ranges from 150 ft. per mile to 50 ft. per mile.

Width - Ave: 3 ft.; range: 1 ft.-8 ft.

Depth - Ave: 4 in.; range: 2-72"

Flow - At mouth 1.5 cfs. Ave. 1.0 cfs.

<u>Velocity</u> - Rapid in most portions but sluggish in pools and wide portions. <u>Bottom</u> - Underlying bedrock, exposed in some areas, mostly covered with gravel, sand and silt.

Spawning Areas - In approximately $\frac{1}{4}$ of total stream area. With higher water these areas will increase, since much of the exposed, dry banks (within 6 ft. of the stream) is composed of good spawning sized gravel.

 $\underline{\text{Pools}}$ - Few, mostly small ave: 5 ft. x 8 ft. x 2 ft. deep. Most were in bedrock or along rock banks.

 $\underline{\text{Shelter}}$ - From logs, undercuts in bedrock and boulders. Very little from stream side vegetation.

<u>Barriers</u> - No absolute barriers in lower 2 miles. Some small log jams were observed but these did not hinder upstream-downstream movement of fish. Diversions - None seen.

Temperatures - Mouth 1320; air $80^{\circ}F$; water $73^{\circ}F$; clear and 10 mph breeze. Food - Abundant caddis worms and stonefly larvae, approximately 2 dozen on 12 inch square rock.

Aquatic Plants - Filamentous green algae throughout stream sometimes clogging

Winter Conditions - Relatively severe. Estimated depth at peak runoff is 4 ft., width 6-10 ft.

Pollution - None seen

Springs - A few, very small springs noted, almost no contribution to flow. FISHES PRESENT AND SUCCESS - SH-RT in lower 2 miles mostly juvenile fish ranging from 1"-5", ave. $2\frac{1}{2}$ inches. Some adults (RT) no doubt residents washed down from upstream portion ranged from 6"-9". In fisheries section SH-RT averaged 45 per 100 ft. of stream. Also western suckers (Catostomus accidentalis) in lower 2 miles found in pools averaged 6-14 inches approximately 10-15 per average pool.

OTHER VERTEBRATES - Frogs, California newts, water snakes.

FISHING INTENSITY - Unknown.

OTHER RECREATIONAL USES - None known

ACCESSIBILITY - Upper 4 miles paralleled by Signal Ridge Road through Ornbaun Valley. A logging road formerly ran along the lower three miles but it has deteriorated through lack of repair.

OWNERSHIP - Upper 5 miles Mailliard Ranch, lower 2 miles Hollow Tree Lumber Company.

POSTED OR OPEN - Posted

IMPROVEMENTS - None observed. Removal of small log jams in lower 2 miles would allow easier movement of fish upstream in the fisheries portion. Removal of the 25 yard log jam presently upper limit of fisheries value could open more area to spawning fish.

PAST STOCKING - None known

GENERAL ESTIMATE - The lower 2 miles of Mill Creek presently serves as a good spawning and nursery stream for SH-RT. Very few improvements are needed. The portion above the large log jam mentioned and Redwood Creek could also be used as a spawning area. There are some portions that are presently dry, however, the gravel is good for spawning in higher water.

RECOMMENDED MANAGEMENT - Removal of small log jams in the lower 2 miles is recommended. If the large 25 yard log jam 2 miles upstream from the mouth were removed the fisheries value might be extended. However, a large amount of gravel and rubble would be deposited downstream if this were done. The portion of the stream from Redwood Creek to the headwaters is extremely intermittent but could also serve to a small degree as a spawning and nursery area in higher water.

SKETCH MAP - Attached

REFERENCES AND MAPS - USGS Quad - Ornbaun Valley, 1960

Gerald Holman Assistant Fishery Biologist Region 3

