## THE RESOURCES AGENCY OF CALIFORNIA DEPARTMENT OF FISH AND GAME

## **STREAM SURVEY**

	Date: March 6,. 1968_								
NAME: Garcia River				COUNTY: Mendocino					
STREAM SECTION	: entire	FROM:	South Fork	To <u>: 1</u>	neadwaters		LENG	ГН: <u>25 п</u>	niles
TRIBUTARY TO:	Pacific Ocean			Twp:	13 N	R:	17 W	Sec:	34
OTHER NAMES:	None known			RIVER	SYSTEM:		Garcia		
SOURCES OF DATA:	Personal Oh	servation l	ov I. M. Johns	son and G. A. I	Miller				

EXTENT OF OBSERVATION
Include: Name of Surveyor, Date, Etc.
LOCATION
RELATION TO OTHER WATERS

RELATION TO OTHER WATER 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

PAST STOCKING
GENERAL ESTIMATE
RECOMMENDED MANAGEMENT
SKETCH MAP

REFERENCES AND MAPS

EXTENT OF OBSERVATION - Walked and drove from one mile below headwaters to the South Fork at various times between 15 August 1967 and 8 September 1967.

LOCATION - Mouth T13N, R17W, Section 34. Heads approximately five miles southwest of the Ornbaun Valley and 20 miles east of the town of Point Arena.

RELATION TO OTHER WATERS - Contributor to Pacific Ocean, medium size for Mendocino County. Medium contribution as a spawning and nursery stream.

GENERAL DESCRIPTION:

Watershed & Immediate Drainage Basin - The river runs generally westward in a U-shaped valley. The valley is covered with redwood, Douglas fir, alder, oak, tanbark oak, maple and various associated shrubs. The soil ranges from rich humus to poor rocky. Stream side vegetation is mostly alder which grows along 25% of the stream.

Altitude - Heads approximately 1300 ft. mouth at sea

<u>Gradient</u> - Relatively slight averaging 75 ft. per mile. <u>Width</u> - In portion surveyed averaged 8 ft. ranged from 4-15 ft.

Depth - Average 8-10 inches, ranged from 4-60 inches.

 $\underline{\text{Flow}}$  - 20 cfs  $1\frac{1}{2}$  miles upstream of mouth of South Fork decreased progressively upstream.

Velocity - Moderately rapid throughout in wide places almost sluggish.

Bottom - Mostly rubble and gravel, in pools sand, silt and organic matter.

<u>Spawning Areas</u> - Very little in this portion of the river flow is too great in winter to allow successful spawning.

<u>Pools</u> - Poor pool development in river, pools observed were from boulders or logs and were generally sluggish. Average pool 6x15x4 ft.

Shelter - From logs, boulders and streamside vegetation.

<u>Barriers</u> - One temporary gravel dam about 8 ft. high a mile upstream from Hollow Tree Mill D it will wash down in higher water. None others seen.

Diversions - None observed

Temperatures - 1½ miles upstream from mouth of South Fork. Air 75°F, water 68°F, 1300 on 8 September 1967. Weather - Clear and calm.

<u>Food</u> - Caddis, stonefly, mayfly, mosquito, hellgrammites, dragonfly larvae and adults. Also insects from streamside vegetation.

<u>Aquatic Plants</u> - Filamentous green algae and horsetail, algae in sluggish portions of the river.

<u>Winter Conditions</u> - River increases to approximately 10 times summer width and five times summer depth.

Pollution - None seen

Springs - None observed

FISHES PRESENT AND SUCCESS - SH-RT throughout the river. Average size 3 inches, ranged from 1-9 inches. Approximately 35 fish per 100 ft. Also western suckers (Catostomus occidentalis) present in all parts of the river, mainly in pools and sluggish portions, average pool had 15-20 fish of average size 6-8 inches.

OTHER VERTEBRATES - Frogs, California newts, watersnakes, snapping turtles.

FISHING INTENSITY - Unknown

OTHER RECREATIONAL USES - Unknown

ACCESSIBILITY - Majority of this portion of the river is accessible from Hollow Tree Lumber Company logging roads. Some portions are accessible on foot only.

OWNERSHIP - Hollow Tree Lumber, Holmes Lumber and private ranches.

POSTED OR OPEN - Posted

IMPROVEMENTS - None seen. Greater control of logging in surrounding area. PAST STOCKING - None known

GENERAL ESTIMATE - The Garcia River has lost much of its ability to serve as a spawning and nursery stream. This is undoubtedly due to the logging in the area. Since the small tributaries have been damaged, the Garcia has also been damaged. We found no silver salmon in the river above the Smith Fork nor in any of the tributaries in this area which would lead one to believe these fish are no longer able to sustain themselves in the Garcia System.

RECOMMENDED MANAGEMENT - Control of logging in the area and extensive reforestation watershed would favorably improve the Garcia River. Debris removal on the tributaries would curb any further deposits along the banks of the Garcia. Although they do not seriously compete with the migratory fish control of western suckers would be appreciate by the local town residents.

SKETCH MAP - Attached

REFERENCES AND MAPS - USGS Quads Point Arena and Ornbaun Valley 1960.

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