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

	STREAM SURVEY	FILE FORM	No	
- 1 1 2 1			r 18. 1967	
NAME Redwood Creek	COUNTY	Mendocino.	• • • • • • • • •	
STREAM SECTIOR FROM mouthTo headwatersLENGTH4 mi.				
TRIBUTARY TO Noyo River	Twp	18NR15WS	Sec. 11	
Other Names Not known		RIVER SYSTEM NOY	o River	

SOURCES OF DATA ... Personal observation and interviews with McGuire and Schanders

EXTENT OF OBSERVATION
Lacinde Name of Surveyor, Date, Etc. LOCATION RELATION TO OTHER WATERS GENERAL DESCRIPTION Watershed Immediate Drainage Basin Altitude (Range) Gradient Width Depth Velocity Bottom Spawning Areas Pouls Shelter Temperatures Aquatic Plants
Winter Conditions
Pullution Springs FISHES PRESENT AND SUCCESS
OTHER VERTEBRATES
FISHING INTENSITY
OFFIER RECREATIONAL USE
ACCUSSIBILITY ACCLSSIBILITY
OWNERSHIP
POSTED OR OPEN
IMPROVEMENTS
PAST STOCKING
GENERAL ESTIMATE
RECOMMENDED MANAGEMENT
SKETCH MAP
REFERENCES AND MAPS

EXTENT OF OBSERVATION - Surveyed by foot from mouth at Noyo River to 0.12 mile above northeast fork in headwaters, a point marked by an old logging landing, a total distance of 4 miles. Survey made by E.R.Y. Primbs on 14 August 1966.

ICCNTION - Redwood Creek flows into the Noyo River at the Masonite Redwood Creek Road crossing of the Noyo River, which crossing is 0.12 mile on the Masonite Rd. from the junction of the Masonite Road with the Shake City Road. The junction of the Masonite Road-Shake City Road is located 0.75 mile from the Shake City Road-Irmulco Road junction on-the Shake City Roads. The Shake City Road joins the Irmulco Road 4.75 miles from the Fort Bragg-Willits Road (Highway 20) on the Irmulco Road. The Irmulco Road joins Highway 20, 6.25 miles west of Willits on Highway 20. A 9 ft. culvert under the tracks of the California Western R.R. marks the mouth of Redwood Creek.

RELATION TO OTHER WATERS - Provides the Noyo River system with 1.05 miles of excellent spawning grounds, 0.68 miles of fair spawning grounds, and 4.0 miles of good nursery area for steel-head and silver salmon.

GENERAL DESCRIPTION -

Creek flows principally from springs issuing in its headwaters southwest for 3 miles and thence south for 1.25 miles; no current logging, although Masonite owns upper area; bowlshaped valley at mouth with gentle 35° slopes and continuing to headwaters, where the valley narrows to a V-shaped canyon with steep 70° slopes; stream banks are sheer, soil-incised, 1 ft. to 12 ft. high; stream shade 40% from trees and brush: red alders, madrone, redwood, Douglas fir, willow and tan bark oak common with big leaf maple and azaleas interspersed; poison oak, western thimble berry, blackberry, thistle, horsetail, bracken fern and sword

fern provide close surface cover along stream banks.

Altitude - At mouth 400 ft. - at upper fish value 842 ft.

Gradient - 110 ft. per mile to upper fish value.

Width - Average 4 ft. with range 2 ft. to 15 ft.

Depth - Average 4 inches with range from 1 inch to 4 ft.

Flow - 0.11 c.f.s. at mouth; 0.90 c.f.s. in headwaters

Velocity - Slow at mouth; moderately rapid in headwaters

Bottom - First 0.25 mile: fine rubble 40%, coarse gravel 40%, fine gravel 20%, 1.75 mi. above first 0.25 mile; fine rubble 10%, coarse gravel 50%, fine gravel 40%, 2 mi. above first 2 mi. boulders 10%, coarse rubble 20%, fine rubble 40%, coarse gravel 20%, fine gravel 10%.

Spawning areas - First 0.25 from mouth and 2 mi. above first 2 mi.; 30% of winter bed, average 7 ft. wide, 38,808 sq. ft., excellent.

Pools - 70% of summer flow.

Shelter - Good - roots, undercut banks, rubble, debris in stream bed.

<u>Barriers</u> - Eleven moderate to large log jams, many of which caused by bank cave-ins trapping and piling debris.

#1 (12'L, 18"W), #3 (18'L, 18'W, 12'H), #4 (24'L, 18'W, 6'H), #5 (60'L, 30'W, 8'H), #9 (24'L, 30'W, 6'H).

<u>Diversions</u> - None observed.

Temperatures - Measured maximum: at old mill site: 1600, 8/14/66. Air 87°, water 82°; (SIC) weather fair, wind 5 m.p.h.; altitude 640 ft.

 $\underline{\text{Food}}$  - Type: stone fly nymphs, may fly nymphs, caddis fly larvae, dragon fly nymphs.

Abundance - All numerous, although the caddis fly larvae (Ockrotrickia) appear to be a new generation.

<u>Aquatic plants</u> - Liverworts, moss, algae, and iron bacteria, all spotted in occurrence.

<u>Winter conditions</u> - Favorable for spawning, 2'-5' maximum above summer levels.

<u>Pollution - None noted</u>

Springs - Most confined to headwaters, but two observed below headwater area.

## Fishes present and success

## 1. Silver salmon and steelhead

The following fish were netted, identified, and examined before release in representative samples:

-	-	Size		
	Actual count	Range	Average	<u>Condition</u>
Salmon Steelhead	112 495	1½" - 2½" 1½" - 7"	2-Y' 2"	heavy bodied Well proportioned
Total	607			

## 2. Other fish netted and identified

Three-spine stickleback: Actual count-13.

The stream is currently producing an estimated 3,700 silver salmon and 16,500 steelhead, both populations being under optimum for spawning and exceeding optimum for nursery. Summer mortality should be low.

Other vertebrates (aquatic) - Yellow-legged frogs, California newts, water snakes. Fishing intensity - Not known

Other recreational use - None observed

Accessibility - Accessible from mouth to point 2.75 miles upstream from mouth by good streamside road, the Masonite Redwood Creek Rd., which joins the Shake City Rd. 0.75 mile northeast of the junction of the Shake City Rd. with the Irmulco Rd. on the Shake City Rd. a junction marked by various signs "Risch", "Camp St. Albert", "North Spur", "Willard" and others. This junction is 4.75 miles northwest on the Irmulco Rd. of the junction of the Irmulco Rd. with the Fort Bragg-Willits Rd. (Highway 20). The Irmulco Rd. joins the Fort Bragg-Willits Rd. 6.25 miles west of Willits on the Fort Bragg-Willits Rd., a junction also marked by signs "Camp St. Albert", "North Spur", "Nystron's", and others.

A locked gate is on the Masonite Rd. at the RR crossing of the Masonite Rd. (keys are held by Masonite and Mary Maker, So. San Francisco). Access without a key can be had either by entering across a railroad spur just east of the gate and thence thru an unlocked gate, or by way of Schander's road, which may require a 4-wheel drive. The Masonite Rd. above the point 2.75 miles upstream from mouth is washed out and is passable only by foot to the headwaters.

Ownership - Maker's, So. San Francisco, in area of mouth (1100 acres); remaining portion by Masonite.

Posted or Open - Posted

<u>Improvements</u> - Clearance of 11 moderate to large log jams, a total distance of clearance of 3.25 miles, from mouth to northeast fork in headwaters.

Post Stocking - Not known

General Estimate - Redwood Creek is a valuable spawning ground and nursery area in a large river system for both silver salmon and steelhead, the steelhead, however, being significantly more numerous than the salmon. The full potential of the stream has not been realized, because of current serious log jam barriers, which undoubtedly have handicapped movement of both adults and parr. Thus, the low summer flow, the food limitations, and the warm waters temperatures from lack of stream cover do not favor enlargement of the current nursery populations, a restriction which could be avoided by facilitating parr summer passage to the Noyo River proper. The boulders and rubble in the area above the old mill stabilizes the spawning gravels. This boulder-rubble area is currently producing large numbers of both salmon and steelhead and could produce more if the adults were given more easy access. The parr that are currently utilizing Redwood Creek for nursery do not appear stressed, and a low summer mortality is expected.

Recommended Management - Redwood Creek should be managed for steelhead and silver salmon spawning and nursery. The 11 moderate to large log jam barriers should be removed to improve adult and parr traffic in stream. Sketch Map - See attached.

Reference and Maps - (1) N.S.G.S. (Willits 1961) 15 series. (2) Jackson State Forest Map, California Division of Forestry, (1964) 1/31,680 scale.

Edward R. J. Primbs

