THE RESOURCES AGENCY OF CALIFORNIA California Department of Fish and Game

STREAM SURVEY

NAME: Schooner Gulch Creek			COUNTY:		Mendocino		10		
STREAM SEC	CTION: entire	FROM:	mouth	To:	approx. 1/4 1	ni. ups	tream	LENGTH	2½ mi.
				from confluence of China Gulch					
TRIBUTARY TO	D: Pacific (Ocean		Tw	P: 12N	_ R:_	16W	SEC:_	32
OTHER NAMES: unknown			RIVER SYSTEM:		Sch	Schooner Gulch Creek			
SOURCES OF D	ATA:	Persona	l observati	ion					

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

SKETCH MAP REFERENCES AND MAPS

OTHER VERTEBRATES FISHING INTENSITY OTHER RECREATIONAL USE ACCESSIBILITY OWNERSHIP POSTED OR OPEN IMPROVEMENTS PAST STOCKING GENERAL ESTIMATE RECOMMENDED MANAGEMENT

Winter Conditions Pollution Springs FISHES PRESENT AND SUCCESS

Pools:

EXTENT OF OBSERVATION: Schooner Gulch Creek was surveyed August 26, 1969. The entire survey was conducted on foot by Jim Michaels and Jim Thompson and required approx. 6 hours.

LOCATION AND RELATION TO OTHER WATERS: Schooner Gulch Creek is located approx. 31/2 miles south of the town of Pt. Arena. The drainage is relatively small, encompassing about 2 sq. miles, but has been known to support good runs of both silver salmon and steelhead. At the present time, its major importance appears to be as a spawning and nursery area for steelhead and/or native rainbow trout.

GENERAL DESCRIPTION:

Watershed: The watershed is typical of northern California coastal regions. Rocky gullies carved out of the hills and covered by a mixed forest of redwoods, firs, tanbark oak, and alder are common to this area.

Immediate Drainage Basin: Schooner Gulch Creek heads at the confluence of Hall Gulch and China Gulch, two narrow steep-sided canyons with steep gradients. It then cuts through a narrow valley to the Pacific Ocean. The flow is from east to west and the channel is incised. Streamside vegetation is abundant and includes redwoods, alders, firs, ferns, and wire grass.

Altitude: Ranges from 0 feet elevation at the mouth to about 390

feet above sea level at the confluence of Hall and China Gulches.

Gradient: The gradient of Schooner Gulch Creek is moderate with an average drop of about 195 feet per mile and is relatively constant throughout its length.

Width: Range - 3 feet to 15 feet;

average - 10 feet.

Range - 7 feet to 15 feet; - 12 feet. average

Riffles: Range - 3 feet to 12 feet;

9 feet. average -

Range - 2 inches to 5 feet; Depth:

average- 1½ feet.

Pools: Range - 1 foot to 5 feet; average - 2½ feet.

Riffles: Range - 3 inches to 1½ feet; average- 6 inches.

Flow: Estimated at 11 cubic feet per second in a survey conducted April 5, 1966. Flows measured on this survey (with a pigmy flow meter) are as follows: Station 1 (near mouth) -.547 cubic feet/sec. Station 2 (upstream from the confluence of North Fork Schooner Gulch about 300 yds) - .365 c.f.s. Station 3 (on Hall Gulch approx. 4 mile upstream from the confluence of China Gulch) - .136 c.f.s.

Velocity: Rapid downstream from the confluence of the North Fork Schooner Gulch and sluggish upstream from that point.

Bottom: Silt 15%, sand 10%, fine gravel 15%, coarse gravel 20%, fine-rubble 10%, coarse rubble 10%, boulders 10%, bedrock 5%, hardpan 5%. The pool bottoms contained a much higher percentage of sand and silt than the riffles.

Spawning Areas: Approx. 10-15% of the streambed contained potential spawning gravels for steelhead and salmon. The spawning areas are distributed throughout the stream's length where salmonids were found. (see map attached)

<u>Pools:</u> Many of the pools appeared to be a result of log jams. Others have been formed around boulders within the stream. The majority of pools were short, narrow, and deep. The average size was 12 feet wide x $2\frac{1}{2}$ feet deep x 15 feet long. The pool to riffle ratio was fair with an approx. ratio of 40% pools/60% riffles.

<u>Shelter:</u> Good fish shelter was available throughout the stream's length in the form of cut-banks, boulders, excellent canopy cover, and logs.

Barriers: No complete barriers were observed at the time of this survey. A large log jam located near the mouth has been partially burned out to allow some fish to move upstream. A tremendous amount of new material from a recent logging operation has been deposited in the streambed between Hall Gulch and Shinglemill Gulch and is likely to cause a big problem when winter rains come. The flow of water is almost completely obscured from view in a 1 mile section due to this material. No fish were seen in this area or upstream from this area. Many log jams from past logging operations were observed throughout the length of the streambed and are potential barriers.

Diversions: None observed.

 $\underline{\text{Food:}}$ Abundant caddisfly larvae, snails, and free swimming aquatic insects were observed.

Aquatic Plants: Filamentous green algae were common.

 $\underline{\text{Temperatures:}}$ Station 1 (near mouth) - air temp. 57°F, water temp. 56°F; time 0800 hours.

- Station 2 (near confluence of the No. Fk. Schooner Gulch) air temp. 64°F, water temp. 59°F; time 1840 hours.
- Station 3 ($\frac{1}{4}$ mile upstream from confluence of China Gulch) air temp. 72° F, water temp. 60° F; time 1355 hours.
- Station 4 (about 2/3 mile upstream from the confluence of No. Fk. Schooner Gulch) air temp. 66° F, water temp. 58° F; time 1530 hours.

 $\underline{\text{Winter Conditions:}}$ Evidence of high water as indicated by debris hung up in riparian vegetation indicated flows 6 to 7 feet above the present water level. $\underline{\text{Pollution:}}$ None observed.

<u>Springs:</u> Three springs were observed along with numerous areas where seepage occurred and are noted on the attached map.

FISHES PRESENT AND SUCCESS: Steelhead and/or rainbow trout and sticklebacks were observed. The sticklebacks ranged from 34 " to 1 inch in length and were only observed downstream from the confluence of the No. Fork Schooner Gulch and in the North Fork itself. Numbers averaged 20 to 30 per 100 feet of stream. No salmonids were observed within or upstream from the logging operations (see attached map). Salmonid populations increased from about 30/100 feet of stream to 150 to 200/100 ft. of stream In the vicinity of the No. Fork. Schooner Gulch. From this point downstream to the mouth, the population again decreases to about 20 fish/100 feet of stream. Size range of salmonids was 2 inches to 6 inches with an average of $2\frac{1}{2}$ to 3 inches.

OTHER VERTEBRATES: Frogs, salamanders, and deer were observed.

FISHING INTENSITY: No evidence of fishing pressure was observed, but was estimated to be light.

OTHER RECREATIONAL USES: Some evidence of camping was observed.

ACCESSIBILITY: Schooner Gulch Creek is crossed by Highway 1 near the mouth. Some dirt logging roads are located in the headwater areas.

 $\underline{\text{OWNERSHIP:}}$ Most of the stream is located on private land (Holm Timber Industries). POSTED OR OPEN: Most of the stream was posted.

PAST STOCKING: None known.

GENERAL ESTIMATE AND RECOMMENDED MANAGEMENT: At one time Schooner Gulch Creek was noted for its silver salmon and steelhead runs. No salmon were observed at this time but steelhead and/ or rainbow trout were present in good numbers. The numerous log jams should be removed to provide easier access for migrating fish. Excellent riparian cover helps keep water temperatures down and provide shelter, while springs insure a good year round flow.

SKETCH MAP: See attached (enlarged 3 times from U.S.G.S. 15' series map).
REFERENCE MAPS: 15' series U.S.G.S. map - Pt. Arena Quadrangle - 1960.
SUBMITTED BY: Jim Thompson

SCHOONER GULCH CREEN

