

THE RESOURCES AGENCY OF CALIFORNIA
California Department of Fish and Game

STREAM SURVEY

File form No. _____

Date: September 4, 1969

NAME: North Fork Schooner Gulch Creek **COUNTY:** Mendocino

STREAM SECTION: Entire **FROM:** the confluence **TO:** the headwaters **LENGTH:** 1 3/4 mi.

TRIBUTARY TO: Schooner Gulch, hence Pacific Ocean **TWP:** 12N **R:** 16W **SEC:** 29

OTHER NAMES: Unknown **RIVER SYSTEM:** Schooner Creek

SOURCES OF DATA: Personal observations of Jim Thompson and Jim Michaels.

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
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

EXTENT OF OBSERVATION : The North Fork of Schooner Gulch was surveyed on August 26, 1969, by Jim Thompson and Jim Michaels. The entire stream was surveyed on foot.

LOCATION : The North Fork of Schooner Gulch is located approximately 3¼ miles southeast from the town of Point Arena, It enters Schooner Gulch approximately ¼ mile upstream from the State Highway 1 Bridge.

RELATION TO OTHER WATERS : The North Fork is an important winter drainage, contributing high winter flows to Schooner Gulch Creek, The stream is also a major tributary to Schooner Gulch Creek during the summer months, contributing 0.14 c.f.s, at the time of the survey. Good nursery habitat was observed at the time of the survey; however, desirable spawning gravels were not observed.

GENERAL DESCRIPTION :

WATERSHED : The topography was mountainous with a vegetative cover of Redwoods, Fir, Tanbark Oak, Madrone, and various grasses. The soil in the area was extremely sandy.

IMMEDIATE DRAINAGE BASIN : North Fork Schooner Gulch drains approximately two square miles of steep canyon and mountainous terrain. The basin is a steep sided canyon discharging in a southwesterly direction. The channel was incised with a riparian cover composed of Redwoods, Fir, Alder and Sword grass. Approximately 75% of the stream was sheltered by the combination of riparian growth.

ALTITUDE : Altitude ranges from approximately 160

feet above sea level near the mouth to approximately 960 feet above sea level near the headwaters,

GRADIENT : The gradient was moderate, that is the stream was a succession of pools and riffles. The average drop of the entire stream was approximately 320 feet per mile,

WIDTH : The width ranged from approximately 6" to 15' and averaged approximately 3' in width.

DEPTH : The depth ranged from approximately 1/2" to 5' and averaged approximately 6" in depth.

FLOW : A flow taken approximately 20' upstream from the confluence with Schooner Gulch Creek was recorded at 0.14 c.f.s. Air temperature was 64°F, and water temperature was 59°F, at 1820 hours, A flow taken approximately ¾ mile upstream from the confluence with Schooner Gulch Creek was recorded at 0.15 c.f.s. Air temperature was 69°F, and water temperature was 62°F, and water temperature was 62°F, at 1245 hours. Flows were taken with the pigmy current meter.

VELOCITY : The velocity was considered to be rapid throughout the entire length of stream.

BOTTOM : The bottom was composed of approximately 45% sand and silt, 10% bed rock, 20% gravel, 15% rubble, 5% mud and 5% clay.

SPAWNING AREAS : No spawning areas were observed. There was a large amount of sand and silt in the streambed, and a lack of desirable spawning gravels.

POOLS; Pools averaged approx. 6' in width, 1 1/2' in depth, and 10' in length.

SHELTER: The abundance of shelter along this stream was one of the factors which resulted in the production of a good nursery area. Shelter was created by deep pools, logs, undercut banks, riffles, and a canopy of riparian vegetation.

BARRIERS : In the section of stream from the confluence with Schooner Gulch Creek to the Holm Timber Industries Road Culvert, a total of three 10' high log jams (two of which had logs backed up for approx. 200'), two 12' high log jams, and two sections of stream with subsurface flows (one approx. 20' in length and the other approx. 200' in length) were observed.

The Holm Timber Industry Road Culvert appeared to be a barrier. Flows from the downstream end of the culvert discharged into a riffle habitat continuing downstream for approx. 150'. The culvert was constructed of corrugated steel plating, riveted together, and was 3' in diameter. The structure was reinforced approx. every 5' of its 100' of length, by wooden crosses. The vertical columns were constructed out of 4x4, and the horizontal beams were constructed of 2x4. The reinforcing structures supporting the 3' diameter culvert appears to be a potential barrier to fish migration.

In the one mile of stream upstream from the culvert, one 15' high by 200' long log jam, one 5' high by 40' long log jam, two 10' log jams, and one 25' long jam were observed. Smaller log jams too numerous to count, were also observed. A 5' bed rock fall, located approx. 1/2 mile upstream from the culvert, was observed. No fish were observed upstream from this fall, A 10' bed rock fall was observed approx. 3/4 mile upstream from the culvert. A series of chutes and small 3' falls, along with numerous small log jams, were observed approx. one mile upstream from the culvert.

DIVERSIONS : A 2" diameter inactive diversion structure was observed approx. 10' upstream from the culvert.

TEMPERATURES : Temperatures taken of North Fork Schooner Gulch Creek at the mouth were: air temp.--64°F, water temp.--59°F at 1820 hours. Temperatures taken approx. 100' downstream from the culvert were: air temp.--69°F, water temp.--62°F, at 1245 hours. Temperatures taken approx. 1/2 mile upstream from the culvert were: air temp. 69° F, water temp.--58°F, at 1100 hours. The cool water temperatures were also a factor producing good steelhead nursery areas.

FOOD : Food was considered to be abundant, especially in the variety of insects. Caddisfly larvae were observed in numbers of approx. 15 per 10' rock. Stone-fly larvae were observed in numbers of approx. 5 per 10' rock. Aquatic snails were observed in numbers of 5-10 per sq. foot of stream. Free swimming aquatic insects were observed in numbers as high as 10-15 per cu. ft. in various sections of the North Fork Schooner Gulch Creek. This abundance of food also contributed to the good steelhead nursery habitat previously mentioned.

AQUATIC PLANTS : Bull-rush, sword grass, horsetail and filamentous algae were observed at the time of the survey.

WINTER CONDITIONS : High water marks, observed near the confluence with Schooner Gulch Creek, indicated the stream rose approx. 7' in depth and filled a channel approx. 15-20' in width during winter conditions.

POLLUTION : No pollution was observed at the time of the survey.

SPRINGS : One mineral spring located approx. 100' downstream from the culvert was observed. One spring located approx. 1/2 mile upstream from the culvert was also observed. Both of these springs discharge only minor seepage.

FISH PRESENT AND SUCCESS : Steelhead and Rainbow trout range in size from 3/4" to 4" and average 1 1/4" in total length. They inhabit the stream in numbers of approx. 50 per 100' of stream from mouth to culvert. Steelhead/Rainbow trout inhabit the 1/2 mile section of stream upstream from the culvert. They average approx. 2-2 1/2" in total length and numbered approx. 15 to 30 per 100' of stream. Sticklebacks were observed, ranging in size from approx. 3/4" to 2" and averaging 1" total length. They numbered approx. 5 per 100' of stream from mouth to culvert.

FISHING INTENSITY : No evidence of fishing was observed at the time of the survey.

OTHER RECREATIONAL USE : No other recreational uses were observed.

ACCESSIBILITY : The North Fork Schooner Gulch was accessible near the mouth by State Highway 1. The stream was paralleled by Schooner Gulch Road, from which small logging roads and skid roads lead to the stream. The Holm Timber Industry Road crosses the stream approx. one mile from the confluence of the North Fork with Schooner Gulch Creek.

OWNERSHIP : The entire stream appears to be privately owned.

POSTED OR OPEN : The land bordering the stream was posted against hunting and trespass. IMPROVEMENTS : A stream clearance program would be a great value to fish production by making easier access for salmonids.

PAST STOCKING : Unknown.

GENERAL ESTIMATE : The North Fork of Schooner Gulch Creek is a major tributary to Schooner Gulch Creek, contributing both summer and winter flows. All of the watershed of the stream observed appeared to have been logged within the past 10 or 15 years with the exception of a ¼ mile section immediately upstream from the confluence with Schooner Gulch Creek, which may have been logged 50 to 75 years ago. The past logging operations, along with road constructions, have created log jams, and contributed to the heavy siltation and turbidity of the stream. Fish had easy access to only ¼ mile of the stream at the time of the survey, although steelhead/rainbow trout were observed inhabiting approx. 1¼ miles of stream. No desirable spawning gravels were observed at the time of the survey; however, cool temperatures, abundant shelter and large quantities of food attributed to good nursery areas.

RECOMMENDED MANAGEMENT : The North Fork Schooner Gulch Creek should be managed as a steelhead/rainbow trout and possibly silver salmon production stream. A program of stream clearance for the removal of log jams, which would provide easier access for upstream salmonid migrants, could possibly increase fish production in this stream.

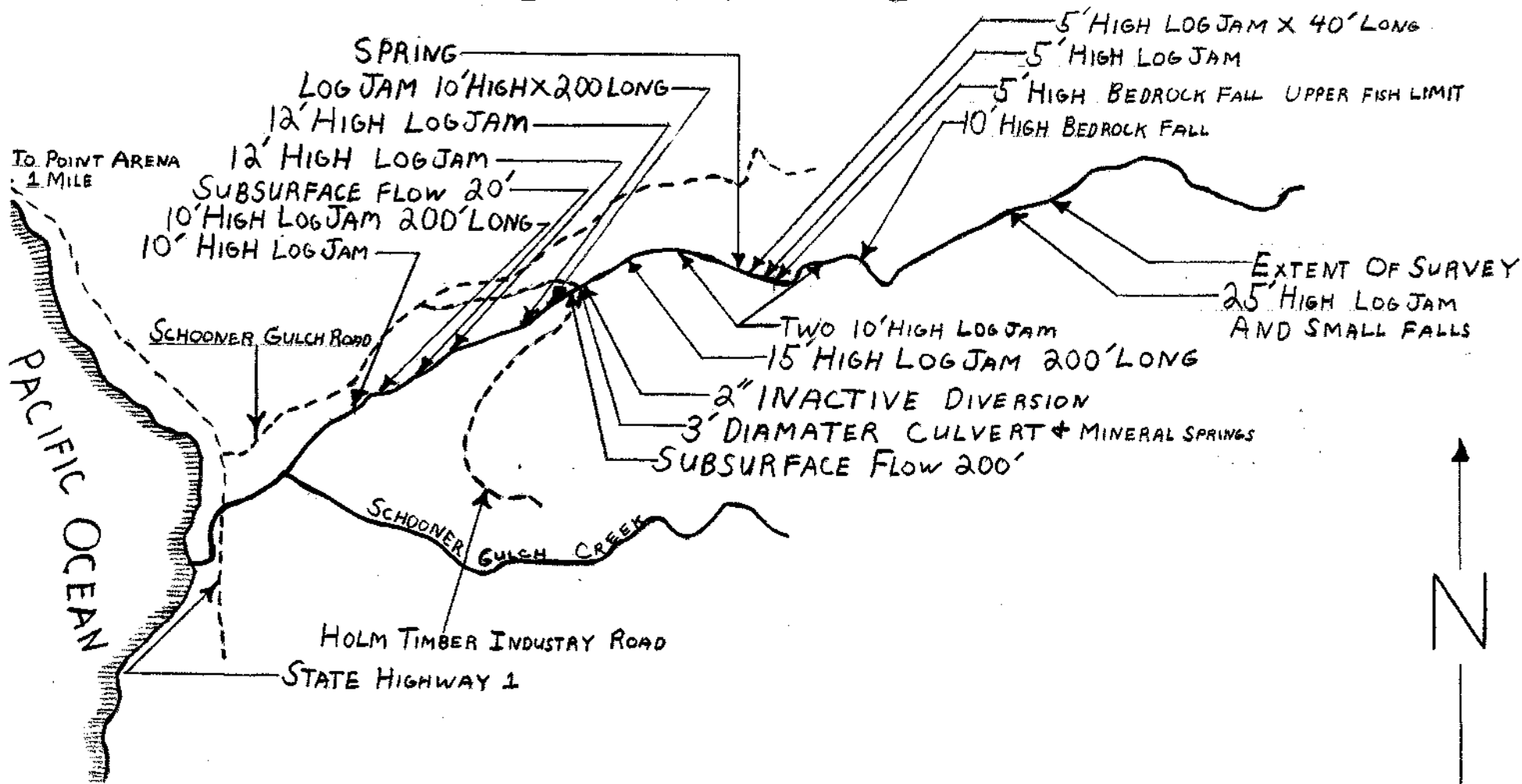
SKETCH MAP : Attached.

REFERENCES AND MAPS : USGS Point Arena 15 minute series--1963.

AUTHOR : Jim Michaels

cc File
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Yountville (2)
Warden Koenig

SCHOONER GULCH CREEK NORTH FORK



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 SCALE IN MILES

