

**CALIFORNIA DEPARTMENT OF FISH AND GAME
STREAM SURVEY**

FILE FORM No _____

NAME MUSTARD GULCH COUNTY Mendocino

STREAM SECTION entire FROM headwaters TO confluence LENGTH 1 3/4 mi.

TRIBUTARY TO Navarro River TWP 15N R 16W SEC 16

OTHER NAMES unknown RIVER SYSTEM Navarro

SOURCES OF DATA Personal observation

- 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
- Water 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 entire gulch from its headwaters to the mouth, a distance of 1-3/4 miles was walked out by Seasonal Aid Doug Stuart on September 26, 1962.

LOCATION - Mustard Gulch crosses under Route 128, four miles west of the town of Navarro.

RELATION TO OTHER WATERS - This is a very small, unimportant tributary providing a winter flow.

GENERAL DESCRIPTION - Watershed & Immediate Drainage Basin - Mustard Gulch is a wide, steep-sided, U-shaped valley with redwood, fir and ferns in the lower area with heavy dense grasses and clover in the upper area. Upper area comprises the upper half of this stream. The soil is detritus, dirt 10% and sand 40% humus 50%. Shade covers 70% of this stream. Mustard Gulch is located in the coastal redwood of Mendocino County. Altitude - 50' at its confluence with the Navarro River and 100' one mile from the confluence.

Gradient - Considered mild for 95% of the stream. The extreme last few yards of the stream descends an almost vertical rock hillside.

Width - Ranged 0 to 125'; average feet in one foot of swamp area is located near the mouth is the widest point with many small channels in this area. Winter flow average width is estimated to be 3'.

Depth - Intermittent on this date, ranges from 0 to 3"; averaged 2".

It is deeper at its headwaters and at the mouth during the summer months. Estimated winter average at 2' deep.

Flow - Presently 1/4 cfs throughout the entire stream. Estimated winter flow to be 6 cfs maximum.

Velocity - Sluggish throughout. Estimated winter flows slow to rapid.

Bottom - The bottom is composed primarily of fine gravel 90% and a mixture of organic debris and silt 10%.

Spawning Areas - Relatively scarce. Estimate less than 5% of this stream is suitable due to the size of the gravel.

Pools - Pool development is considered good; approximately 40% pools, 60% riffles. Pools size averaged 6' long x 1' wide x 2" deep. Configuration is long and narrow, most common in the upper section and are caused by silted in debris.

Shelter - Good, most abundant in lower areas in the swamp area. Grasses cover 60% of the stream. The other 40% is shelter from vegetation well above the water level. The brush along the stream is extremely dense*

Barriers - Swamp area at the mouth is felt to be an upstream migratory barrier.

Diversions - None observed.

Temperatures - Water around noon on Sept. 26, 1962 were 59° F. to 60° F.; air was from 77° F. to 78° F.

Food - Mosquitos, small insects and other common in the stream food material were considered scarce, less than 15% of the entire stream contained adequate food supply.

Aquatic Plants - Watercress, ^{saw tooth} ~~softtooth~~ grasses, horsetails and clover abound.

Pollution - None observed.

Springs - None observed.

FISHES PRESENT AND SUCCESS - None observed.

OTHER VERTEBRATES - Deer and racoon.

ACCESSIBILITY - Mustard Gulch passes under Highway 128, four miles west of the town of Navarro. Immediate access is by foot only via an obsolete jeep trail.

POSTED OR OPEN - Posted no trespass by Masonite Lumber Company.

GENERAL ESTIMATE - This tributary appears to be a very poor spawning, nursery and resident salmonid stream. Its -primary function is to provide a winter flow.

RECOMMENDED MANAGEMENT - Allow Mustard Gulch to be managed as a water contribution to the Navarro River drainage.

SKETCH MAP - See attached.

REFERENCES AND MAPS - U.S. Army Corps of Engineers, 15-minute series, Navarro Quadrangle topographic, 1943. Considered fair to good.

James Crowdus/cd 1-29-63

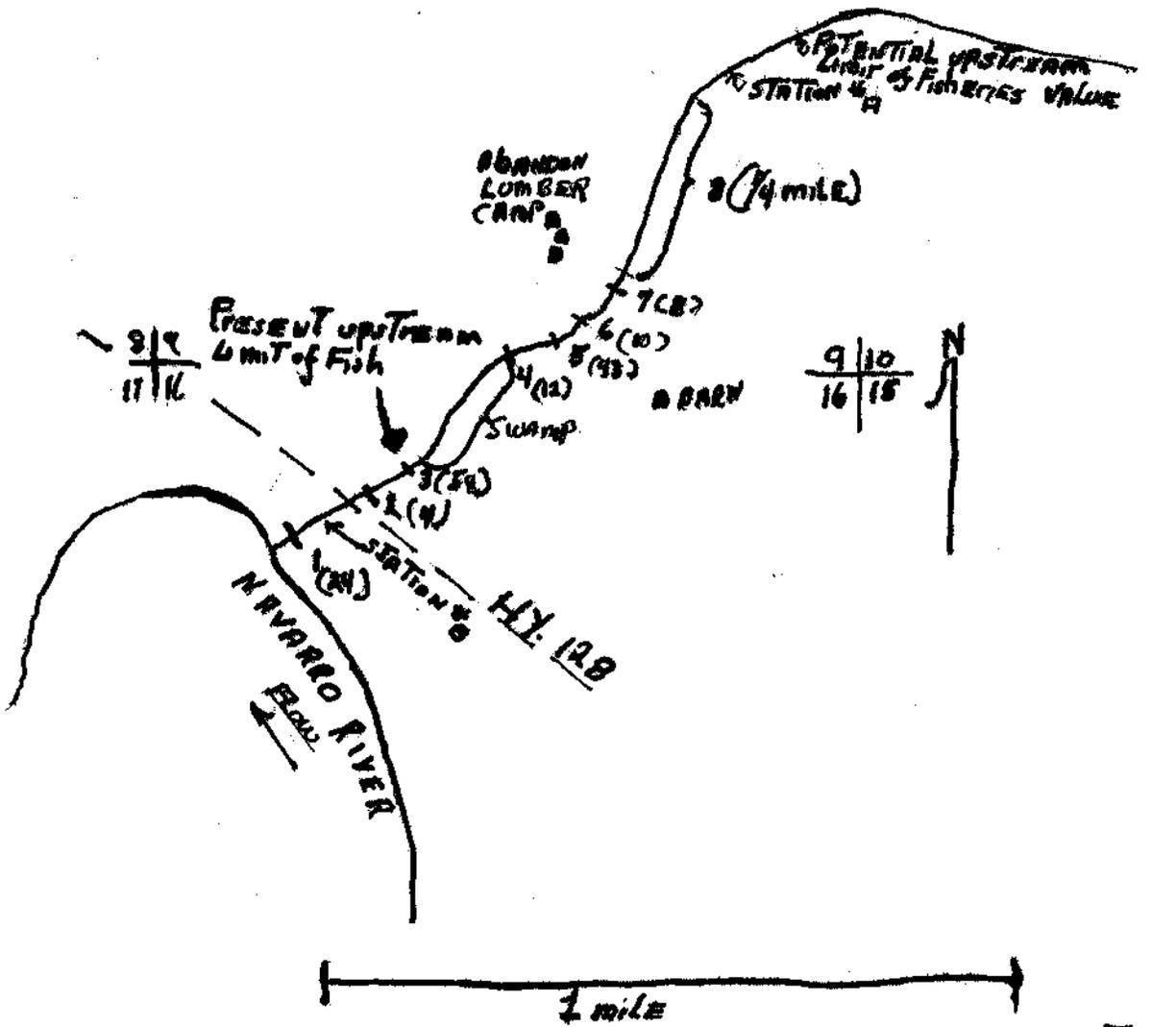
Mustard Gulch

T15 N, R16 W, SEC. 16

5	4
8	9

Spawning and Nursery Area in miles

1. Now satisfactory for SH & SS 0
 2. To be improved 1 MILE
 3. Available after improvement 1 MILE
- Surveyor J. CROWDS



ADD 10% FOR DEBRIS NOT LISTED BETWEEN NUMBERED JAMS