

**STREAM SURVEY**

FILE FORM No., .....

Date September 27, 1967

NAME..... Duffy Gulch . . . . . COUNTY Mendocino.....

STREAM SECTION entire FROM mouth ...To . . . headwaters Length 1-3/4 mi.

TRIBUTARY TO Noyo..River \_\_\_\_\_ Twp 18N R 16W..Sec..12

OTHER NAMES .. Not known..... RIVER SYSTEM..Noyo River.....

SOURCES OF DATA...Personal observation and interviews with Dennis Tavaris Union Lumber

EXTENT OF OBSERVATION - Surveyed by foot from mouth at Noyo River to point 0.25 mi. above northeast fork in headwaters, a point marked by remnants of cabin between branches of fork, a total distance of 1.75 miles. Because of transportation to mouth by railroad speeder, survey time was limited to 3 hrs. This time restriction limited the obtaining of data. Survey made by E. R. J. Primbs on 26 August 1966.

LOCATION - Duffy Gulch Creek flows into the Noyo River at a concrete culvert crossing of Duffy Gulch by the California Western Railroad at Alpine. Alpine is 16.25 miles east of the Fort Bragg station on the California Western Railroad line. The nearest auto access to the mouth is at Marwedel Boy's Camp, a point 1.5 miles southeast of the mouth on the railroad line,

RELATION TO OTHER WATERS - Provides the Noyo River system with 1.05 mi. of good spawning grounds and 1.75 miles of fair nursery area.

GENERAL DESCRIPTION -

Watershed and Immediate Drainage Basin - Size: 2.50 sq. mi.; Duffy Gulch Creek flows from springs issuing from Ramsey Ridge southeast; no current logging, but owned by Union Lumber Co., V-shaped canyon with steep 60' slopes; stream channel 10 ft.-30 ft. wide, average 24 ft. in width; stream shade is 95%, primarily from trees and narrow canyon effect; redwood pre-dominant with few red alder, tan bark oak, and big leaf maple trees; sword fern common on surface, which is generally free from growth.

- 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

Altitude - At mouth 240 ft., at upper fish value 560 ft.

Gradient - 213 ft. per mile to upper fish value.

Width - Average 4 ft. with range from 1 ft. to 9 ft.

Depth - Average 4 inches with range from 2 inches to 3 ft.

Flow - 0.40 c.f.s. at mouth; 0.50 c.f.s. at northeast fork in headwaters.

Velocity - Rapid

Bottom - Boulders 10%, fine rubble 30%, coarse gravel 40%, fine gravel 20%.

Spawning areas - 70% of winter bed, average 6 ft. wide (31,680 sq. ft.) good.

Pools - Summer flow primarily riffles; pool area 30%.

Shelter - Fair: rubble.

Barriers - 11 small to moderate log and debris jams; logs are from old logging operation, debris is from decay of old railroad bed and natural destruction of old cabins along stream bed. Jam #1 - 8'L, 30'W, 10'H; jam #3 - 10'L, 30'W, 8'H.

Diversions - None observed

Temperatures - Measured maximum at northeast fork in headwaters. 1200 8/26/66; air 64', water 55, weather fair, wind 5 m.p.h., altitude 560 ft.

Duffy Gulch -Mendocino County

Food - Insects, - Two general of caddis fly larvae (Leptocella and Limnephilus); stonefly and mayfly nymphs. Abundance - Caddis fly larvae numerous; stonefly and mayfly nymphs scarce.

Aquatic plants - Moss

Winter conditions - Suitable for spawning: 2 ft. - 3 ft. maximum rise .

Pollution - None observed

springs - Only one observed at northeast fork in headwaters.

FISHES PRESENT AND SUCCESS -

1. Silver salmon and steelhead

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

	<u>Actual count</u>	<u>Size</u> <u>Range</u>	<u>Average</u>	<u>Condition</u>
Salmon	41	1½"-2½"	1-3/4"	Slow growth
Steelhead	<u>21</u>	1½"-2½"	1-1/2"	Slow growth

Total 62

2. Other Fish Netted and Identified - None

Because of time limitations, the sample taken is too small for basing a reliable estimate of total production. However, the stream is below optimum for spawning and nursery. The summer mortality should be low.

OTHER AQUATIC VERTEBRATES - Yellow legged frogs.

FISHING INTENSITY - Not known

OTHER RECREATIONAL USE - Campground at mouth

ACCESSIBILITY - Accessible at mouth by California Western Railroad, 16.25 miles east of the Fort Bragg station. The nearest auto access to the mouth is at Marwedel Boy's Camp, a point 1.50 miles southeast of the mouth on the railroad line.

OWNERSHIP - Union Lumber Co.

POSTED OR OPEN - Open

IMPROVEMENTS - Clearance of 11 small to moderate log and debris jams from mouth to northeast fork in headwaters, a total distance of 1.50 miles.

PAST STOCKING - Not known

GENERAL ESTIMATE - Duffy Gulch Creek has minor value for spawning and nursery of both steelhead and silver salmon. The current fish production is low, reduced considerably by the james formed from logs and debris, the latter arising from decay of an old railroad bed along the stream and from natural destruction of old cabins situated on the banks. The water temperature is low, the water highly oxidized, and the food ample for the current population, all factors suggesting a low summer mortality.

RECOMMENDED MANAGEMENT - Duffy Gulch Creek should be managed for silver salmon and steelhead spawning and nursery. The eleven log jams should be cleared to facilitate adult and parr passage.

SKETCH MAP - See attached

REFERENCE AND MAPS

1. U.S.G.S. (Comptche, 1960) 15' series.
2. Jackson State Forest Map, California Division of Forestry (1965); scale 1/31,680