STREAM SURVEY

FILE FORM No.....

)/	Date September 28, 1967
NAME Marble Gulch Creek	Date September 28, 1967
STREAM SECTION entire FROM mouth	To end fish value LENGTH 1.5 mi
TRIBUTARY TO North Fork Noyo River	Twp. 18N R. 15W Sec. 9
OTHER NAMES None known	RIVER SYSTEM NOYO RIVER
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 llow (Range) Velocity Bottom Spawning Areas Pouls Shelter Barriers Diversie Temperatures Food Aquatic Plants Winter Condition Springs
FISHES PRESENT AND SUCCESS
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EXTENT OF OBSERVATION -Marble Gulch was surveyed August 16, 1966.

The entire section was done on foot and required about one-half a day. Surveyor: Brian Edie

LOCATION AND RELATION TO OTHER WATERS - The mouth of Marble Gulch is located one mile from the mouth of the North Fork of the Noyo River. It is an important tributary to Worth Fork contributing to the summer flow, increasing the available nursery area of the river system, and adding tremendously to the spawning area during the fall.

GENERAL DESCRIPTION

<u>Watershed</u> - Low steepsided hills covered primarily with redwood. Also present are tan bark oak, huckleberry, and alders.

<u>Immediate drainage basin</u> - The stream drains approximately 2.5 sq. mi. of land. The stream runs almost due south through a V-shaped canyon. The stream channel is bowl shaped for the summer bed, but incised when considering the winter condition. Vegetation is very abundant along the shore above the high water mark. Species present are redwood, tan bark oak, huckleberry, alder, sword fern, bracken fern, horsetails, madrone and Douglas fir.

<u>Altitude</u> - Mouth - 320 ft., end fish value - 480 ft.

Gradient - 104/ft. mi.

Width - Station 1 - Avg. width pools 8 ft., range 4 ft.-12 ft.

(Avg. for Section 1), riffles 6 ft., range 4 ft.-8 ft. Station 2 - pools 5 ft., range 2 ft. ft. (Avg. for Section 2) - riffles 3 ft., range 1 ft - 4 ft.

Depth Station 1 - pools 2 ft., range.5 ft. - 6 ft., riffles 1 inch, range 1 in.-3 in.

Station 2 - pools 1 ft., range .5ft.-2.5 ft., riffles 1 inch, range 1 -in3. in.

Fbw - Station 1 - .20 c.f.s.; station 2 - flow intermittant; no accurate value available.

Velocity - Station 1 - sluggish. Station 2 - sluggish.

Bottom - Station 1 - fine rubble 25%, coarse rubble 25%, coarse gravel 20%, bedrock 20%, silt and sand 10%. Station 2 - coarse gravel 30%, fine gravel 30%, sand and silt 20%,

<u>Spawning areas</u> -Good spawning area exists along the entire length of the stream from the mouth to the end of the fish value, for steelhead and silver salmon.

Pools - Pool frequency in the stream is excellent. Pools are caused by the digging action of the current, logs in the stream, bedrock and boulders, and undercut banks. Generally they a long, narrow and deep, Avg. size 15 ft.020 ft. long, 4 ft. wide, and 2 ft. deep.

Shelter - Shelter in the stream is only fair. Some pools have adequate shelter, but a number

are very bare. Most shelter is due to under cut banks and boulders in the stream.

<u>Barrier</u> - 13 barriers were located on the stream, 12 were strictly log jams while the last was a washed out bridge, also of logs,

Of the thirteen, six were major barriers:

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#3 - 30 ft. x 20 ft. x 5 ft.
                                #7 - 25 ft. x 20 ft. x 10 ft.
#4 - 40 ft. x 20 ft. x 5 ft.
                               #8 - 50 ft. x 15 ft. x 10 ft.
#6 - 15 ft. x 10 ft. x 5 ft.
                               #9- 7 ft. x 20 ft. x 5 ft.
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Most of wood in jams was material previously removed from the stream, which had been washed back in. Jams are a serious barrier to fish passage, few fish of the year were observed above them.

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

Temperatures - Station 1 - Air 66°, H20 60°, 1030 hr. Station 2 - air 66°, **H₂O 60^o** - 1200 hrs.

Food - Food is fairly abundant.

Aquatic plants - Little algae is present, some mosses. Horsetails and grasses on banks. Iron bacteria heavy in stream especially above fish value. Winter conditions - Winter flow is fairly high; winter depth 3 ft., velocity rapid.

Pollution - None noted

Springs- None of significant size, all well back from stream.

FISHES PRESENT AND SUCCESS. - Steelhead and silver salmon are present in the stream. Salmon are abundant in the lower portions of the stream (120/100 ft.). and range in size from 2 inches - 5 inches the average being about 3% inch. Steelhead were not abundant (15/100 ft.), but were mainly 2 and 3 yr. old fish sizes being 4 in.-7% in. These fish might be considered resident trout, and were found much farther up in the stream than the salmon.

OTHER VERTEBRATES - Frogs and newts were abundant in the stream.

FISHING INTENSITY -Fishing is light as the stream is closed during the summer and the area is relatively inaccessible during the winter.

OTHER RECREATIONAL USE - Some hunting in area, no other use known.

ACCESSIBILITY - Highway 20 to Irmulco Road. Irmulco Road to North Fork. Road north from North Spur to bridge just north of gate to Marble Gulch Ranch. Bridge crosses stream. Also road through Marble Creek Ranch up stream.

OWNERSHIP Uppermost headwaters - Union Lumber Company. Rest of stream - Father Hopper.

POSTED OR OPEN - All watershed closed.

IMPROVEMENTS- Jams need to be removed again. They are serious barriers to fish passage.

PAST STOCKING - Not known

GENERAL ESTMATE- The stream has good potential value for both steelhead and salmon that is not being utilized at present. Good gravels are present, and although summer flow is small there is some nursery value. More shelter for the fish might be

PECOMMENDED MANAGEMENT - Habitat improvement for silver salmon and steelhead. SKETCH MAP - Attached

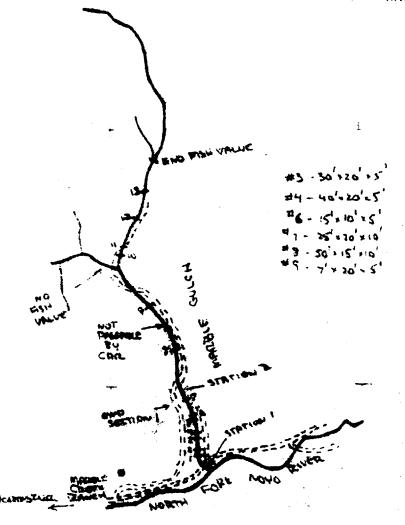
REFERENCES - Division of Forestry map for Jackson State Forest, 1964.

STREAM CLASSIFICATION - II.

MILES NOW ACCESSIBLE .!

MILES TO BE IMPROVED - !.4

TOTAL MILES - !.5



MARBLE GULCH CREEK
SCALE 1:24,000

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