CALIFORNIA DEPARTMENT OF FISH AND GAME

STREAM SURVEY

FILE FORM NO.....

NAME.....NORTH FORK NAVARRO RIVER.....COUNTY.....Mendocino.....

STREAM SECTION....FROM...Navarro River ....TO.....Headwaters.....LENGTH...18.1 mi.....

TRIBUTARY TO.....Navarro River.....Twp....15N....R....16W....Sec.....16.....

OTHER NAMES...North Branch of North Fork & Little North Fork.....RIVER SYSTEM...Navarro River

SOURCES OF DATA...Personal observation and Jack Sweeley, forester, Masonite Corp., Ukiah, California

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

EXTENT OF OBSERVATION - This stream was surveyed by Herb Adams and Richard Moore on July 11, 12, 19 & 20, 1962, This survey was conducted on foot upstream to Redwood Creek; from Redwood Creek to headwaters this stream was checked on foot. The North Fork of the Navarro River has two other names - they are the North Branch of the North Fork of the Navarro River and the Little North Fork of the Navarro River. The section known as the North Fork of the Navarro River extends from the confluence of the Navarro River upstream to the South Branch of the Navarro River. The North Branch of the Navarro River extends from the South Branch of the Navarro River upstream to John Smith Creek. The Little North Fork of the Navarro River extends from John Smith Creek upstream to the headwaters.

LOCATION - The lower section of the stream is located between Samuel Dermmick Memorial Grove State Park and the town of Navarro. The middle section parallels the Masonite industrial road and upper section parallels the secondary logging road.

RELATION TO OTHER WATERS - The North Fork of the Navarro River constitutes one of the three main drainages of the Navarro River. It provides important spawning and nursery area for steelhead and silver salmon.

GENERAL DESCRIPTION - Watershed - This drainage is located in the coastal redwood section. The lower section is located in the moderate, V-shaped valley with a stream bed having sluggish to moderate gradient. Mid section is located in a steep V-sided canyon with sluggish to moderate gradient. Upper section located in V-shaped canyon with moderate gradient excepting the extreme headwaters. Vegetation consist of redwood fir throughout with extensive stream side cover in upper section and good cover in rest of the drainage. The soil is of a light grey brown redwood forest type averaging 2' to 4' in depth with shale outcrop. The stream bed is dark grey, fine crystalline hard rock material.

Immediate Drainage Basin - This drainage basin is approximately 60 to 75 sq. miles including tributary. The flow is in a southwest direction downstream to join the main Navarro River approximately 6 miles west of Navarro, California. Main stream side vegetation in the lower section is common consisting of bay, willow and alder. The mid section is similar with the exception of approximately 3 miles between Deer Creek and John Smith Creek where stream side vegetation is scarce from the confluence of Dutch Henry Creek downstream approximately to the South Branch Navarro River. Vegetation in the headwater section downstream to Bottom Creek is dense with heavy cover in the stream bed of horsetail and razor grass.

Altitude – 80' to 1100'.

Gradient – Lower 1' per 100'. Upper section approximately 1.8'/100'.

Width - Headwater section riffles averaging 8", range to 1½'. Riffles from Redwood Creek downstream to John Smith Creek average 4", range 0 to 20'. From John Smith Creek down to Deer Creek, riffles present but scarce. Riffles from South Fork Navarro River to confluence of Navarro River average 10', range 4' to 20'.
Depth - Headwaters averaged 1/" in riffles, range to 2". In midsections, riffles average 1/2" range from 0 to 1½". Confluence Navarro River, riffles average 2½", range from 1" to 3½".
Flow - No flow to intermittent flow. North Fork at confluence of John Smith Creek 1.0 cfs. Highway 128 bridge, 1.3 cfs on July 19, 1962. Summer low flow estimated at 0.5 cfs or more from confluence upstream to South Branch Navarro River and in upstream section from John Smith Creek upstream to Redwood Creek. Summer flows intermittent from South Branch Navarro River upstream to John Smith Creek and from Redwood Creek upstream headwaters. Winter flows estimated at 6" to 1' at Redwood Creek and 1½' to 3' at Highway 128 bridge.
Velocity - Sluggish throughout.
Bottom - Bottom material estimated at, sand and gravel 65%, rubble 15%. Good clean gravel 10%, other 10%. Size of gravel range up to 1", gravel larger than 1" scarce.
Spawning Areas - Combination of sand, silt approximately 80%; gravel 15%. Approximately 10% of stream bed contains good to excellent spawning gravel. Some bedrock and silt areas present. Spawning appears adequate.
Pools - Headwaters contain small, fairly deep pools resulting from log jams and rubble. Downstream pools approximately 50% of stream resulting from high winter flows and some log jams. Pool development poor in section from John Smith Creek downstream to South Bridge Navarro River.*
Shelter - Fair to good in downstream section, poor in midsection (3 miles). Shelter is good to excellent in upstream section, overhanging terrestrial branches, logs and rubble. Please see attached Barrier Map.
Temperatures - Highway 128 bridge station at 1245 hours - water 67°F., air 79°F. Deer Creek at 1500 hours - water 72° F., air 89°F. Bottom Creek station 1600 hour water 67°F., air 80°F. on July 18, 1962. Weather clear and sunny.
Food - Consists mainly of caddis fly larvae being moderately abundant throughout the stream with the exception of section from South Branch Navarro River upstream to Dutch Henry Creek.
Aquatic Plants - A brown encrusting filamentous algae is abundant throughout the drainage. Green filamentous algae scarce. Horsetail and razor grass common in downstream section. All aquatic plants scarce in midsection. Horsetail and razor grass abundant throughout streambed in headwaters section.
Winter Conditions - High water marks indicate common high winter flows at Redwood Creek between 6" and 1' high. Flow perhaps 2½' winter flow at Highway 128 bridge, ranging between 1' and 3'.
Pollution - Industrial pollution noted in the form of past logging and road building. This has resulted in heavy overburden throughout the drainage. Quality of water from Redwood Creek upstream to headwaters has blackish tint, believed to be result of excess loose bark and slash in stream from recently cleared (by burning) jams and removing remainder of jam from stream with bulldozer and other equipment. Rubble present is at least 50% covered by sand and silt.
Springs - Few to almost non-existent.
FISHES PRESENT AND SUCCESS - Station at mouth, rainbow trout steelhead 50 to 70/100'.
Silver salmon none noted; roach 200+/100'; stickleback present; suckers none noted.

*50% pool to riffle evenly scattered with exception of underground flow in some areas.

Station at Highway 128 bridge, rainbow trout steelhead 100 to 200/100', silver salmon none noted; roach 300 to 1000/100'; stickleback 1000+/100'; suckers present. Station at confluence Cook Creek rainbow trout less than 25/100'; silver salmon none noted; roach 200+/100'; stickleback 500/100'; suckers none noted. Station at confluence Redwood Creek, rainbow trout steelhead 100 or less/100'; silver salmon none noted; roach 50 to 100+/100'; stickleback none noted; suckers none noted. Confluence Bottom Creek station, rainbow trout steelhead 25-75/100'; silver salmon none noted; roach 200+/100'; stickleback 500+/100'; suckers none noted. Sizes of fish rainbow trout steelhead approximately 2¼", range 2" to 2½"; silver salmon * approximately 2½", range approximately 2" to 3". Roach averaged approximately 2½", range approximately 2" to 3½"; stickleback average approximately 2½" to 3". A few rainbow trout steelhead were noted up to approximately 7". Fish appeared active and in good shape upstream to section between Redwood Creek and Bottom Creek. Rainbow trout steelhead upstream appear less active.

OTHER INVERTEBRATES - Frogs, salamanders, snakes, coons and deer were noted.

FISHING INTENSITY - This stream is not open to angling. Fishing intensity not known.

OTHER RECREATIONAL USE - Mainly restricted to deer hunting upstream from confluence South Branch Navarro River. Camp Navarro (Boy Scouts Camp) is located a short distance downstream from the confluence of the South Branch Navarro River. Camping is permitted on Masonite property between Highway 128 and the North Fork Navarro River in the downstream section for a distance of approximately 6 miles.

ACCESSIBILITY - The lower 6 miles is accessible from Highway 128 which parallels the stream. The major portion of the mid section is accessible for approximately 17 miles via the Masonite industrial road which parallels this section of stream. The extreme headwater is accessible via secondary logging roads.

OWNERSHIP - Almost entire drainage owned by Masonite Corporation, Ukiah, California. Small isolated branch owned by Union Lumber Company, Ft. Bragg, California.

POSTED OR OPEN - This land is posted and opened to the public by permit only, obtainable from Masonite Corporation, Ukiah, California. (Note: Permit is necessary to travel on Masonite Corp. industrial road. This permit obtained from Masonite Forestry Department in Ukiah, Calif.)

IMPROVEMENTS - Only one recent improvement noted. This consisted of recent stream clearance work from Redwood Creek to extreme headwaters. This clearance is accomplished at the convenience of Masonite Corporation consisting mainly of burning the jams and removing remaining debris from stream bed.

PAST STOCKING - None noted.

GENERAL ESTIMATE - The North Fork of Navarro River is an important stream of the Navarro River drainage. This is a redwood fir watershed with headwater sections in deciduous brush. It has steep-sided slopes with gentle gradient in stream bed. Roads closely parallel almost entire drainage. Past logging and road building have resulted in heavy siltation of streams. Stream bed bottom consisted of approximately 65% gravel, approximately 10% of bottom is good to excellent spawning gravel. Spawning appears adequate. Fingerling rainbow trout steelhead average approximately 15 to 100/100' of stream. Some stream clearance work done by Masonite in headwaters section. Present management regulations appear adequate.

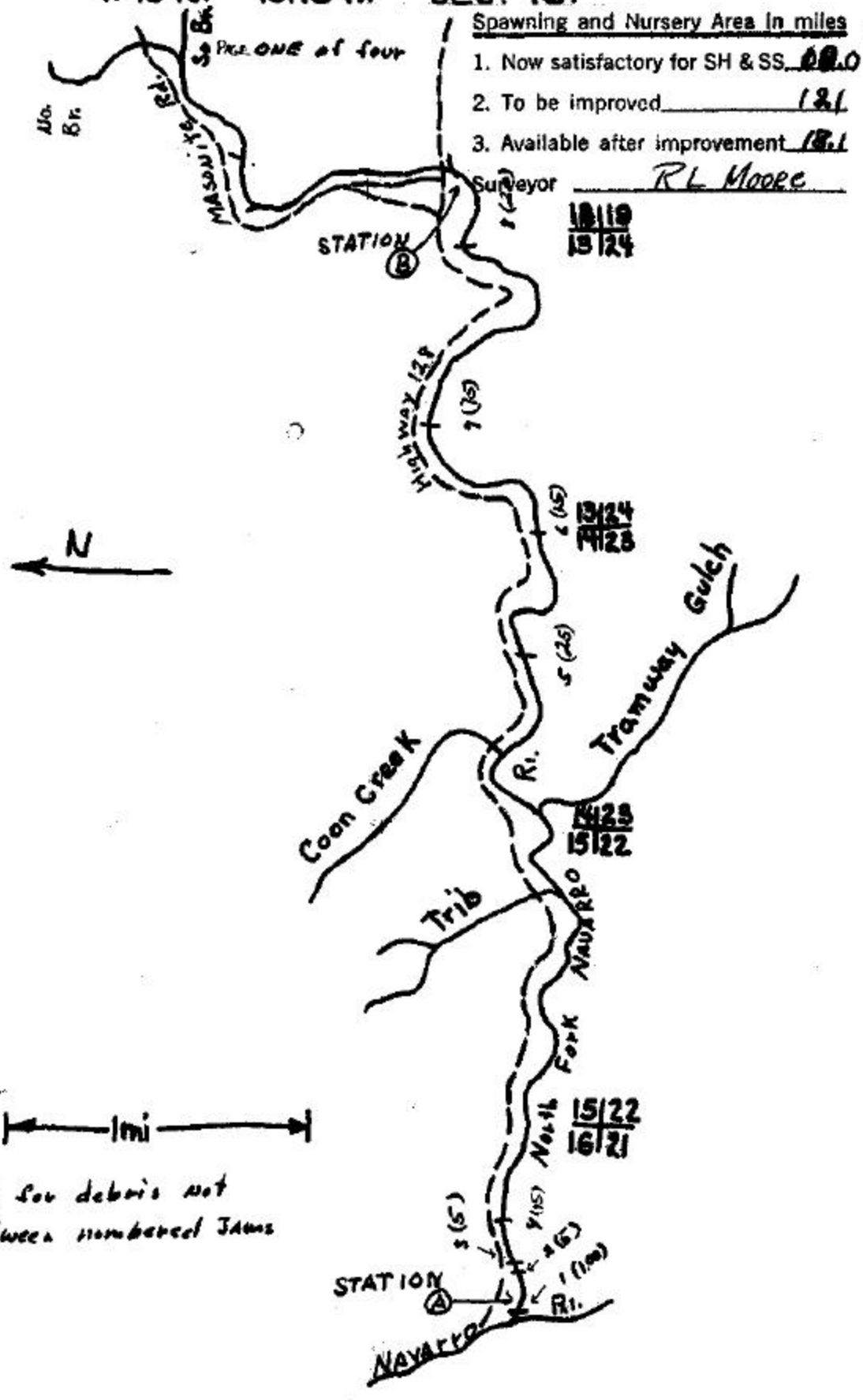
RECOMMENDED MANAGEMENT - Recommend management of this stream for rainbow trout steelhead and silver salmon spawning and nursery area. Recommend stream clearance project to remove log jams and barriers. Recommend close liaison with Masonite Corp. in management of this drainage. Recommend the following minimum for future water applications: between Redwood Creek downstream to Dutch Henry, minimum bypass of 0.5 cfs; from Highway 128 bridge downstream to confluence Navarro River,

* - No silver salmon observed. Size range estimates.

Recommend minimum of 0.5 cfs, or entire flow, whichever is less.
SKETCH MAP - See attached.
REFERENCES AND MAPS - USGS Booneville and Navarro quads 1943; USGS Booneville and Navarro quads 7½ minute copy 1959; Masonite Corp. map 1943.

Richard Moore/cd 8-29-62

North Fork Navarro River
T. 15 N. R. 16 W. SEC. 16.



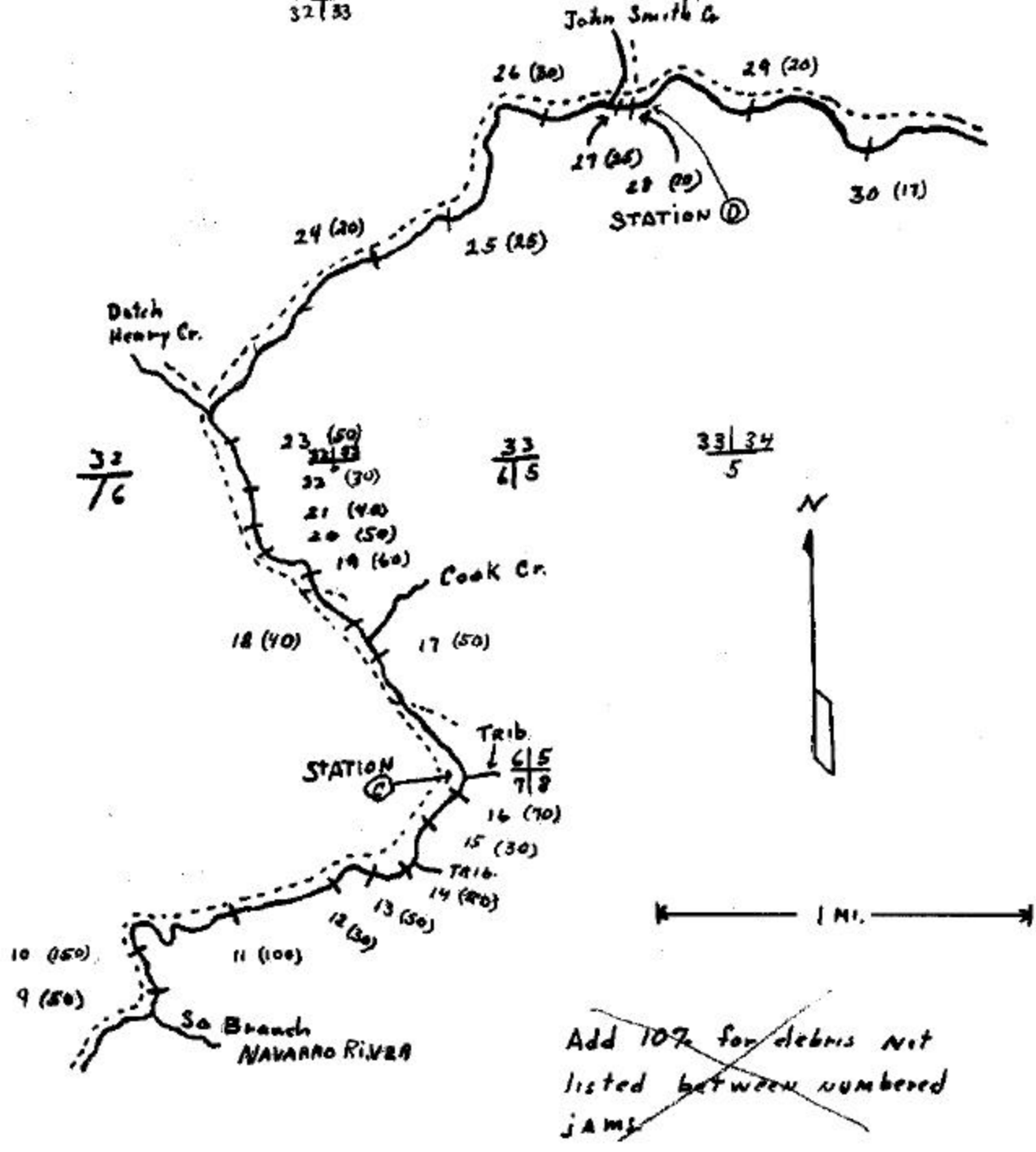
NORTH FORK NAVARRO RIVER

T 15 N R 15 W Sec. 7

PAGE TWO OF FOUR

29 | 28
32 | 33

28 | 27
33 | 34

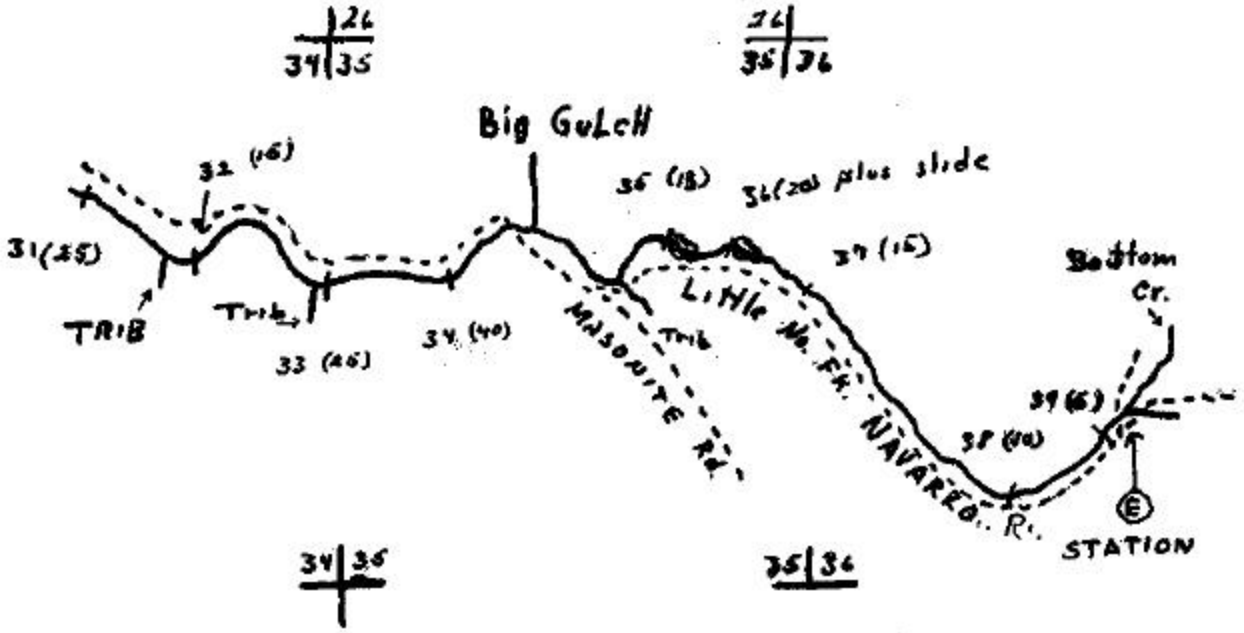


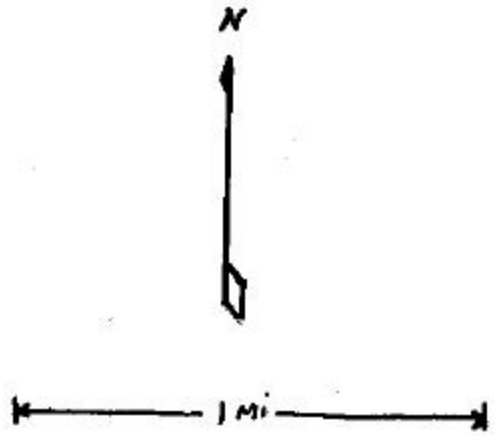
Add 10% for debris not listed between numbered jams

NORTH FORK NAVARRO RIVER

T 15 N R 15 W Sec 7

PAGE THREE OF FOUR





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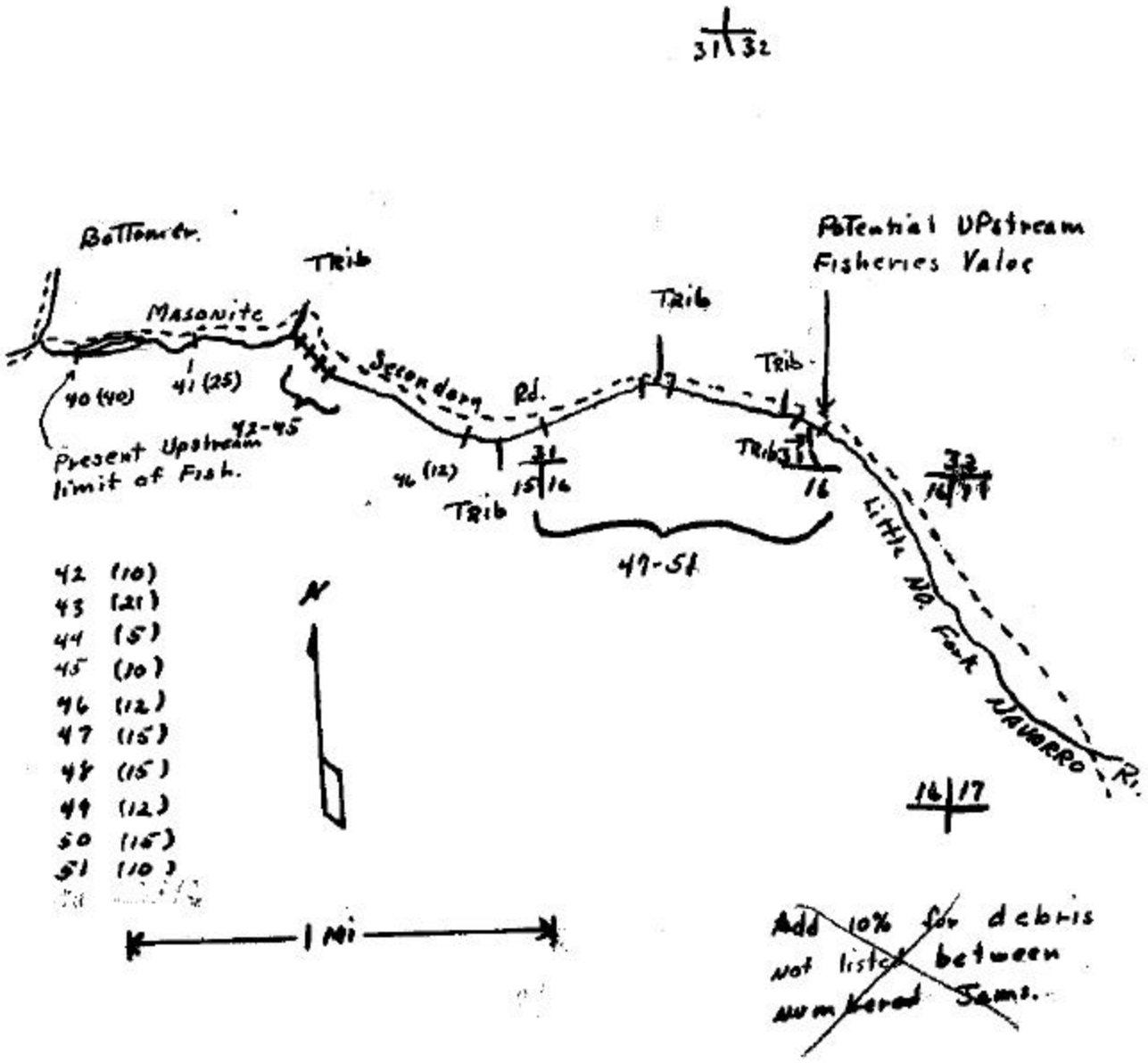
NORTH FORK NAVARRO RIVER

T 15 N R 9 W Sec. 7

PAGE FOUR of FOUR



NAME OF WATER No. FK Navarro River.

Station #4 at Confluence of Redwood Creek. Little cover. Upstream log clearance.

Rt-SH 50-100/100

SS none

Roach 200+/100

Stickleback Many

Suckers ?

Masonite has cleared upstream from this area. One slide from roadbed into stream. One semi stagnant pool in front of bedrock-log ~~jam~~ silted jam.

Water conditions grey-dark (bacterial? result of leaching bark.

Station #5 Confluence Bottom Creek.

Intermittent flow

Heavy Overburden

Stream Barrier upstream from Confluence approximately 200 yds.

62790 6-52 1M SPO

Calif. Dept. of Fish & Game

T16N, R16W Field Form

SUPPLEMENTARY SURVEY Sec 16

NAME OF WATER No. FK Navarro Ri. COUNTY Mendocino.

DATE 17 July 1962 TRIB. TO Navarro River

General Estimate (Continued.)

Masonite Corp. has been clearing jams from the Little North Fork upstream from Redwood Creek at their convenience. This involves burning jams, then removing remainder with bulldozers. when convienent.

Recommended Management:

1. Manage as a Rt-SH SS spawning and Nursery Stream.

2. Conduct a barrier and Jam removal program on this drainage

3. Work in conjunction with Private owners mainly Masonite Corp on Management of this drainage.

NAME OF SURVEYOR R L Moore

NAME OF WATER No. FK. Navarro River.

Additional Information on Survey Stations.

Station # 1. Confluence of Navarro River

Gradient: Approximately 0.5/100'
Riffles depth average 2" deep Range 1-4"
Width average 3-4'

Cover Good, - overhanging Bay Alder Tan Oak.
Fish, - Rt-SH Approx 100'/100'
SS None noted.
This section appears good as a spawning and Nursery area for Rt-SH; SS spawned in Flynn Creek present but scarce.

Station #2 at Hwy 128 Bridge 1-mile west of Navarro, Calif.

Streambed - Fair to good spawning gravel much silt intermixed; Rt-SH approximately 100-200/100' Roach and Stickleback abundant. Suckers present; SS None seen.

NAME OF WATER No. FK Navarro River

Station #2 (Continued) -

Station #3 Cook Creek - Deer Creek Confluence
Intermittent flow mostly underground between pools. Rt-SH few 25-75/100'
Many Roach stickleback; No SSalmon.

Heavy Overburden in streambed up to 20' to 50' wide, possibly 10-15' deep. Dead Redwood on margin of stream Little or no shelter on streamside.

Station #3 Alternate John Smith Creek.
Similar to Station #2 stream not as wide some bedrock however little resultant rubble.

Fish Similar to Station #2

NAME OF STREAM North Fork Navarro River

REMARKS—GENERAL ESTIMATE—RECOMMENDED MANAGEMENT

This stream is known by 3 different names in 3 different sections. From Navarro River to So Branch of the North Fork This stream is ① North Fork Navarro Ri. From - So. Branch Navarro Ri. upstream to John Smith Creek it is known as North Branch of North Fork Navarro River. From John Smith Creek upstream to headwaters this stream is the Little North Fork of the North Fork Navarro River. (Consult Navarro & Boonville Quads, (USGS. 1959 – 7½ min)

General Estimate:

This stream is an important part of the entire Navarro River Drainage. This is a Redwood-Fir Watershed with head waters section in deciduous brush. Steep sided slope with gentle gradient to streambed. Roads closely parallel entire stream. Masonite Corp road and past Logging practices have resulted in a heavy overburden of boulders inter mixed and almost cemented with gravel. Both boulders & Gravel and mixed with sand. Boulders are at least ½ covered by sand. Overburden results in intermittent flow in many areas Noticable one near mouth of Bottom Creek near Headwaters and between Dutch Henry Creek and Camp Navarro (Boy Scout) in Mid Section. This mid section has a margin of drowned Redwood trees as result of raised streambed. A distance of approximately 3 miles

Continued on Supplement Survey

NAME OF SURVEYOR R L Moore.

68964 12-59 1M ① GPO

T 15 N, R 16 W, Sec 16

Field Form

California Department of Fish and Game

STREAM SURVEY

NAME OF STREAM No. FK. NAVARRO Ri. CO. Mendocino.

DATE 12 July 1962 EXTENT OBSER. from Headwaters downstream on foot by Herb Adams Dick Moore Bob Killam Doug Stewart.

TRIB. TO NAVARRO RIVER

RELATION TO OTHER WATERS Enters Navarro River at Sammual Dermmick Memorial Grove (Calif. State)

WATERSHED AND IMMED. DRAINAGE BASIN (Type: Terrain; Soil; Cultivation; Vegetation; Shade)

Coastal Redwood-Fir Vegetation Eroaded V shaped Canyon of Old Klamath Plateau. Velocity slow Soil from decomposed shale & Metamophic origin No cultivation

WIDTH to 100'ft in logged parts of head waters 40' through section downstream from head waters

DEPTH Riffle. Average 1½" ; Range 0 to 6" Pools Average 6" ; Range 0 to 8"

FLOW Intermittent ; Confluence Estemated flow at 1.3 cfs. Confluence Cook Creek 0.8 cfs ; Deer Creek unmeasured; John Smith Cr. 1.0 cfs; Bottom Cr 0.3 cfs.

VELOCITY No flow to 2 ft. per Second. slow to sluggish.

BOTTOM. (Bedrock, Boulder, Rubble, Gravel, Sand, Mud, Silt, Organic Debris)

Sand 30%; Gravel - 20 - 30%; 10% good to excellent gravel Bedrock 10% Silt & Grand 15%

SPAWNING AREAS Good to Fair Gravel 30 40% of Stream Good Spawning 20 30% ~~Excellent~~ Excellent Spawning 5-10%. Spawning Gravel intermixed with sand.

POOLS Fair to good. Ave. 20 X 15 X 6" deep Up to 100' X 50' X 8½' deep development fair to good, high waterflow plus jams. few Bedrock Rubble.

SHELTER Fair to Good throughout. logs herbage some Rubble & undercut banks

NAME OF STREAM North Fork Navarro River.

BARRIERS AND DIVERSIONS No direct diversions. Boy Camp Navarro (Boy Scout) possibly have well.

For barriers see Navarro River Barrier Survey Map.

[illegible]o Caddis fly larva, Mayfly nymphs. Food fair. Rubble 1/2 to 3/4 covered with sand and overburden from parallel road.

STATION DATA

S[illegible]ONS	No. A	No. B	No. C
Location of Station	Confluence Navarro Ri.	d/s Hwy 128 Bridge	Deer Creek Cr. Bridge
Width	Riffle Ave 6' Max [illegible] Pool Ave 10' [illegible]	Riffle Ave 10' Pool Ave 15'	no flow
Depth	Riffle Ave Ave 1" Pool 8"	Riffle 1 1/2" Pool 6"	Pools 10' wide Ave 8" deep
Bottom	silted Gravel	Course Gravel-silt	Silted Rubble Gr.
Spawn. Area	poor	good	poor
Flow	Est float 1.3	Est float 6.0	Intermittent
Velocity	T C R (S)	T C R (S)	~~T C R S~~ None none
Stream Condition	clear	clear	clear
Water Temp.		67°	72°
Air Temp.		79°	83°
Time and Date		1245 July 26	1300 July 26
Weather	clear sun	clear sun	clear sun
Altitude			

STATIONS	No. D	No. E	No. 6
Location of Station	Confluence of John Henry Cr.	Confluence Bottom Cr	
Width	width Ave 6' pools	Pools to 12'	
Depth	Riffle 1 1/2" pools ave 7"	Pools [illegible] 4"	
Bottom	Gravel, silt Rub.	Silt Rubble	
Spawn. Area	good	fair	
Flow	1.0 cfs	Intermittent	
Velocity	T C R (S)	T C R (S)	T C R S
Stream Condition	clear	clear	
Water Temp.	68°	67°	
Air Temp.	80°	80°	
Time and Date			
Weather	clear sunny	clear sun	
Altitude			

NAME OF STREAM North Fork Navarro Road.

FISH PRESENT: Species RT-SH; SS; Suckers; Roach Stickleback

Size RT-SH Average 2" Range 1 1/2 to 7 or 8" SS Average 2 1/4"

Abundance RT-SH Headwaters 50 to 100/100' Main River 200+

Success Fair to Good nursery for RT-SH; SS ? possibly poor

Condition lively active

Nat. Propagation

Other Remarks RT-SH appear less active upstream from Redwood Creek and between Dutch Henry and Camp Navarro. Roach abundant upstream to Bottom Creek 200+ per 100' of stream. SS in vicinity Dutch Henry Creek Ave. 2 1/4", Range 2" to 3" scarce. Suckers present at least at Hwy 128 appear scarce. Stickleback overspawned abundant in sunny pool areas.

FISHING INTENSITY: This stream is closed to fishing. It is maintained as a SH-SS spawning and nursery area.

ACCESSIBILITY AND REMARKS ON ROUTE (Road or Trail, Mileage and Time)

Accessable from Confluence to Soda Cr via State Hwy 128. Accessable from Soda Cr to Redwood Cr via Masonite Road, Masonite Corp. Ukiah (Pass needed). Accessable from Redwood Creek to Headwaters via Locked Masonite secondary Road.

ADDITIONAL DATA (Aquatic Plants, Winter Conditions, Pollution, Springs, Other Vertebrates, Other Recreational Use, Ownership, Posted or Open, Past Stocking, Other Names, Names and Accuracy of Maps, Sketch Map, Photograph, Other References.)

Tules present in sluggish areas upstream from bedrock areas or jams. Pollution in stream present but appears mild. upstream from Redwood Creek. Result of Bark & slash in stream. Springs few and scarce. RT-SH observed near polluted area appear in good shape.

Maps USGS Navarro & Boonville Quads. MW 3 15 min (1959 7.5 min temp)
Masonite Corp. 1943