CALIFORNIA DEPARTMENT OF FISH AND GAME

STREAM SURVEY

FILE FORM

NO.....

NAME...South Branch North Fork Indian Creek......County....Mendocino..... STREAM SECTION...Entire...FROM...Headwater to junction w/ Indian Creek...LENGTH..6½ mi. TRIBUTARY TO.....Indian Creek......Twp...14N.....R14W.....Sec...14..... OTHER NAMES......None known.....RIVER SYSTEM...Navarro River..... SOURCES OF DATA....Personal observation and information from landowner..... EXTENT OF OBSERVATION - Walked out from the headwater to the EXTENT OF OBSERVATION Include: Name of Surveyor, Date, Etc. confluence with Indian Creek, a distance of 6 ¹/₂m iles by Herbert Adams LOCATION RELATION TO OTHER WATERS and Douglas Stewart on August 7 & 10, 1962. GENERAL DESCRIPTION LOCATION - The north fork arises 6 air miles east of Booneville and 8 air Watershed Immediate Drainage Basin miles southeast of Ukiah. Altitude (Range) Gradient RELATION TO OTHER WATERS - This is one of the major spawning and Width Depth nursery tributaries to Indian Creek. Flow (Range) Velocity GENERAL DESCRIPTION - Watershed & Immediate Drainage Basin -Bottom Spawning Areas This stream lies in the eastern portion of the coastal redwood belt. It has Pools Shelter a grey powdery gravel type soil with steep V-shaped canyon walls in the Barriers Diversions upper 4 mile section. The lower 2 ¹/₂miles has U-shaped canyon walls. Temperatures Food Aquatic Plants The predominant vegetation in the upper 3 miles is bay or pepperwood Winter Conditions with some oak. The lower 3 ^{1/2}miles is predominantly Douglas fir and Pollution Springs FISHES PRESENT AND SUCCESS oak. There is excellent shade in the upper 4 miles of stream produced by OTHER VERTEBRATES FISHING INTENSITY these trees and log jams. The ower 2 ¹/₂miles has fair to good shade OTHER RECREATIONAL USE ACCESSIBILITY OWNERSHIP POSTED OR OPEN produced by mostly log jams. This stream flows in a westerly direction IMPROVEMENTS and drains 12 sq. mi. PAST STOCKING GENERAL ESTIMATE Altitude – The altitude at the headwaters 6 ¹/₂miles upstream from the RECOMMENDED MANAGEMENT confluence with Indian Creek is 1200 ft. and the altitude at the SKETCH MAP REFERENCES AND MAPS confluence with Indian Creek is 780 ft. Gradient – This stream has a moderate gradient throughout with a 420-ft. drop in the 6 ¹/₂mi le area with a 70-ft. drop per mile of stream.

<u>Width</u> – Width of this stream ranged from 3 ft. in the headwater section to 15 ft. in the lower section with average 3 ft. to 10 ft. in the pool section with an average of 6 ft.

<u>Depth</u> – This stream ranges from 1 in. to 12 in. with an average of 6 in. in the riffle section; range from 1 in. to 48 in. and average of 18 in. in the pools.

<u>Flow</u> – An estimated $\frac{1}{4}$ cfs in the headwater, $\frac{1}{2}$ cfs in the midsection and 1 cfs in the lower section, taken by the float method.

<u>Velocity</u> – Slow in the headwaters to rapid in the mid and lower section.

<u>Bottom</u> – 80% of this stream has good loose usable spawning gravel from 1 to 3 inches in diameter throughout the entire length. 10% was boulder predominantly noted in the mid and lower section, 5% rubble throughout and 5% silt throughout. The pool bottom consisted mostly of gravel with some rubble.

<u>Spawning Areas</u> – 80% of this stream contain good loose spawning gravel from 1 to 3 in. in diameter throughout. Pools also contain mostly gravel throughout. However, most of the good loose spawning gravel is located in the upper 4 miles of stream.

<u>Pools</u> – 80% riffle and 20% pools. Pools range from 2 ft. to 10 ft. wide, 6 in. to 48 in. deep and 5 ft. to 20 ft. long with an average of 6 ft. wide, 30 in. deep and 12 ft. long.

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<u>Shelter</u> - There is good shelter throughout in the form of bay trees and log jams in the upper and mid sections with some fir and log jams and some undercut banks in the lower section.

<u>Barriers</u> - There are two natural rock falls probable barriers. The first of these two falls is located 4 miles upstream from the junction with Indian Creek. It is the higher of the two. It is 20 ft. high with 45 degree angle. The second of the two falls is located 5 miles upstream from the junction with Indian Creek. It is 8 ft. high with a 90 degree angle.

Diversions - None observed.

<u>Temperatures</u> - Taken on August 7, 1962 at 1000 at the headwater were: water 51° F., air 62° F. Taken 1 mile downstream from headwater at 1130 on August 7, 1962 were: water 61° F., air 64° F., taken at the mouth at 1330 on August 10, 1962: water 71° F. air 85° F.

<u>Aquatic Plants</u> - The only aquatic plants noted were in the first mile in the headwater section consisting of horsetail grass and fern.

Food - Adequate in the form of caddis and mayfly larvae.

<u>Winter Conditions</u> - Apparently mild, very little sign of either scouring or erosion throughout the stream. Water levels in the winter apparently are not too high because of the amount of debris noted on the stream bank.

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

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

FISHES PRESENT AND SUCCESS - Steelhead and/or rainbow trout were present. Size range 2" to 8" with average of 4". Abundance - 50 to 100/100 ft. of stream throughout. Success good, condition good, natural propagation good. The predominant amount of fish were observed in the pools section. The amount of fish per 100 ft. of stream was consistent throughout.

OTHER VERTEBRATES - Frogs were noted in the stream and deer were noted in the stream canyon walls.

FISHING INTENSITY - None observed.

OTHER RECREATIONAL USE - Possible deer hunting.

ACCESSIBILITY - The mouth of the stream is accessible via Ukiah-Booneville Road travelling west to Highway 128, a distance of 19 miles. Travel north passing through Booneville 4 miles to Conn Creek turning right at the north end of Conn Creek bridge. Travel east 5 miles top of ridge and forks of road, taking left fork with a locked wooden gate. This gate is locked by Judge Tindall of Booneville. Continue east to gate for 3 miles approximately 1 ½ hours driving time from Ukiah. This road can be travelled by conventional car or pick-up in summer time only, a 4-wheel drive is required in the winter time. The headwater section of the stream is accessible via Ukiah-Booneville Road to the Robinson Creek road turning right on Robinson Creek road at the first bridge approximately 5 miles west of Ukiah travelling up Robinson Creek road 5 miles to the Stanbaugh ranch to locked gate. Acquire key from owner. Continue through gate for 8 miles to shack located on west side of stream. Road continues on downstream for approximately 1 mile. This road is a 4-wheel drive vehicle road in both summer and winter.

OWNERSHIP - See ownership map attached.

POSTED OR OPEN - Posted by landowner. Also see ownership map attached.

IMPROVEMENTS - The entire 6 $\frac{1}{2}$ miles of stream to be improved by removing log jams and the two possible barriers.

PAST STOCKING - None known.

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GENERAL ESTIMATE - The South Branch of North Fork Indian Creek constitutes a good spawning and nursery area for steelhead and/or rainbow trout. This stream is located in the easternmost portion of the redwood coastal belt. The bay and/or pepperwood and oak in the upper 2 miles of stream contribute good cover. Fir and oak in the lower 2 1/2 miles of stream also contribute good cover. The upper 4 miles of stream contain the highest percentage of spawning gravels now being utilized by steelhead and/or rainbow trout. However, good spawning gravel is located throughout the stream bed. Steelhead and/or rainbow trout were observed throughout the entire length of stream surveyed. The predominant amount of fish were observed in the pool area. Some also were observed in the riffle areas. There are many log jams in the stream throughout the entire length. There are two natural rock falls probable barriers; however, fish were present above the falls. The fish above these falls are thought to be resident fish. The higher of these two falls is located 4 miles upstream from the confluence with Indian Creek. It is 20 ft. high with a 45-degree angle. A pool 5 ft. wide and 5 ft. long and 6 ft. deep is located 10 ft. from this fall. The second of the 2 falls is located 5 miles of stream from the confluence with Indian Creek. It is 8 ft. high with a 90-degree angle.

RECOMMENDED MANAGEMENT - This stream should be managed as a steelhead and/or rainbow trout spawning and nursery stream. Removal of log jams and the two possible barriers should enhance a larger steelhead and/or rainbow trout population. These two possible barriers should be checked during winter run of fish to observe if fish can get over them and utilize the stream above. Any log jam removal above these two barriers would hinge on whether or not fish can get over it.

NAMES AND ACCURACY OF MAP - U.S. Dept. of Interior Geological Survey, Booneville quadrangle 15-minute series topographic printed 1959. Masonite Corporation, Ukiah, California property and topographic map War Dept. 1943. U.S. Dept. of Interior Geological Survey 7½ -minute series topographic Booneville quadrangle 1962.

SKETCH MAP - See attached.

OTHER REFERENCES AND MAPS - Judge June was referred to on the headwater sections of the South Branch North Fork of Indian Creek. Judge Tindall was referred to for the lower section. Both Judge June and Judge Tindall reside in Booneville. Information can be obtained from them also.

Herbert Adams /cd 9-4-62

SOUTH BRANCH NORTH FORK INDIAN CREEK

