CALIFORNIA DEPARTMENT OF FISH AND GAME

STREAM SURVEY

FILE FORM No.....

NAME CAMBELL CREEK COUNTY Mendocino

STREAM SECTION..... FROM Entire TO..... LENGTH 5.3 mi.

TRIBUTARY TO South Fork of Ten Mile Twp. 19N R. 17W Sec. 14

OTHER NAMES Unknown RIVER SYSTEM Ten Mile River

SOURCES OF DATA Personal information and survey

EXTENT OF OBSERVATION - The entire creek with the exception of about one mile of extreme headwater tributaries which were too small or with a gradient being too steep to support fishlife was walked out by S. N. Nye and Herbert Adams on Sept. 7, 1961.

LOCATION - Campbell Creek rises just south of Dutchman's Knoll which is approximately 8 airline miles northeast of the town of Ft. Bragg. It flows in a meandering manner mostly westerly to enter the South Fork of Ten Mile River.

RELATION TO OTHER WATERS- This is one of the better tributaries of the South Fork of Ten Mile River which provides water, spawning and nursery area.

GENERAL DESCRIPTION - Watershed - This is a typical stream of the west side of the north coastal range. It drains an estimated 12 sq. miles. It is a typical north coastal mountainous area with transitional forest of redwood, fir, alder and willow with some oak and brush.

Immediate Drainage Basin - It is primarily a very steep and narrow V-shaped canyon running through heavily timbered area of redwood, some fir, large alders and willow with some oak and brush. In some sections it widens out into a U-shaped canyon with grassy slopes in the bottom and sides. There is a great deal of downed timber and large amounts of humus along the steep sides. The area has been heavily logged in the past years, probably 40 to 50 years ago, now showing second growth of redwood and some fir.

Altitude - 90' to 900'

Gradient - Extremely steep (7%) in the extreme headwater areas, dropping rapidly in the upper middle areas to gradual to moderate (1%) throughout the rest of the stream; average 1% to 2%. In parts of the headwater area there was no flow.

Width - Extreme headwater areas it is about 1 foot, in the lower area about 10 feet, average is about 4 feet throughout. Winter widths appear to be up to 10 feet in the upper areas, and up to 35 to 40 feet in the lower areas.

Depth - Varies from 2 inches in the upper areas up to about 24 inches in lower areas, with an overall average of 3 inches. Winter indications show 1 foot in the extreme headwaters to 10 feet in the lower areas.

Flow - Ranges from 5 gpm in lower section of the headwaters area to .3 cfs in the lower section of stream with an overall average of .3 cfs throughout the main stream. Winter conditions indicate fairly high rapid runoff.

Velocity - Ranges from slow to rapid with an overall average of slow.

Bottom - The bottom varies greatly with some bedrock, quite a bit of sand, more gravel and some rubble. The overall average of the stream would be sand and gravel.

Spawning Areas - Fair throughout but scattered with some areas being larger than other areas; poor in the headwater section, but varying from fair to good in the middle and lower sections. Some areas would average 50% to 75% per 100 yards, while others would only average 15% per 100 yards. In some sections there were no spawning gravels available.
Pools - Common to abundant throughout, averaging 3 *to* 5 pools per 100 yards and were formed by bedrock, undercut banks, tree stumps, fallen logs, and log jams. Pools would vary from 2' x 5' x 1' deep to 20' x 60' x 5' deep with an average of 5' x 15' x 2' deep.
Shelter - Considered excellent throughout, with stream growth as well as stream side growth (stream growth indicates alders and other trees growing right directly in stream bed), undercut banks, log jams and roots.
Barriers - No definite barriers were observed. However, in the extreme headwater section, the steep gradient and low stream flows form the upper limits of fishery value at present and therefore, might be considered as a barrier.
Diversions - The only diversion observed was an old 300 gpm pump with Briggs-Stratton engine which was inoperative and located about .2 mile upstream from the mouth.
Temperatures - Air temperature ranged from 61º F. to 69º F. throughout the day with an overall average of 65º F. Water temperatures were a constant 54º F. throughout the main stream. In the only good side tributary it was 57º F.
Food - Common throughout with caddis fly and mayfly larvae with some stonefly and other unidentified aquatic insects.
Winter Conditions - Evidently mild with little sign of either high scouring or erosion. Winter water runoff would be high and rapid. See width, depth and flow for winter indications.
Pollution -The only indication of possible pollution was the presence of an iron oxide combined with bacteria and/or algae which formed the heavy, thick, orangey growth in the water. This was more predominant throughout the middle section of the stream, covering almost all sections approximately 50 yards to 75 yards long.
Aquatic Plants - Bulrush, grass (water grasses) and weeds with heavy concentrations of thistles and nettles and some ferns throughout the stream.
Springs - Considered common throughout with very little flow coming from them.
FISHES PRESENT AND SUCCESS - Only 2 species of fish were observed. They were steelhead from 1" to l-1/2" to 6" in length, ranging from 10 to 15 per pool. The steelhead success, condition and natural propagation is considered good. The silver salmon present ranged from 2" to 4" in length, with 10 to 15 per pool and success, condition and natural propagation were considered good. Silver salmon represented an estimated 4%, of the fish population in this stream. Some fish were observed in the intermittent pools but were scarce while fish were common in upper and lower areas.
OTHERVERTEBRATES - Frogs and salamanders were common throughout the stream. Other large vertebrates consisted of deer, sheep and bear.
FISHING INTENSITY - Unknown but from signs seen, it is estimated that there is probably fishing for salmon and steelhead adults in the fall and winter but very little fishing in the summer.
OTHER RECREATIONAL USE - Fishing and hunting would be the only recreational use.
ACCESSIBILITY - Campbell Creek is accessible by foot either from the mouth, or by dropping off the ridge into the headwaters where access is very steep and almost straight down in spots. Access to the main creek would be 5 miles north on Highway 1, from Pudding Creek bridge at Ft. Bragg to Little Valley Road. Turn right 2 miles

to Hyman ranch house and gate, continue one mile across the South Fork of Ten Mile River through gate and turn left on dirt road. It is about .4 mile to the mouth of Campbell Creek. The other access would be by continuing on road along the South Fork up to the jeep trail. Go approximately 3.5 miles to 4 miles along this jeep trail to the headwaters area where you drop off the ridge on foot. This jeep trail leaves the South Fork of Ten Mile Creek road not far past the South Fork Recreation Club.

OWNERSHIP - Owned by Mrs. Luz at the lower end of the stream near the mouth; the rest is by the Aborigine Lumber Company.

POSTED OR OPEN - The entire area is posted.

IMPROVEMENTS - No improvements were observed.

PAST STOCKING - Unknown.

GENERAL ESTIMATE - Campbell Creek is in a very poor condition as are very many of the streams this year due to low water and low rainfall. Campbell Creek has received heavy damage from past logging which probably occurred from 50 to 60 years ago, or more. There are old trails and an old railroad bed with trestles alongside and built directly in the creek. Much of the logging debris and damage in this creek is from broken down trestles and trestle beams which have collected miscellaneous logging debris coming down the stream. The creek is heavily grown over with alders, willows, brush, thistles, thorn bushes and nettles growing along the creek. The creek is intermittent in flow throughout the middle section. The only tributary of any value is listed as Tributary A, in the accompanying map. It has only 5 gpm flow and no fish observed in this tributary. Overall access is fairly difficult in some parts with fair walking in others. It is necessary to crawl through, over and/or under log jams, overgrown material, trees, fallen trees and to cut your way through the brush. Campbell Creek has very good possibilities if it is cleaned out.

RECOMMENDED MANAGEMENT - It is recommended that this stream be cleaned out entirely from the mouth to the upper and extreme headwaters (to upper headwater so dislodged material does not come down to cause more jams). Clean out all of the alders, willows and brush throughout the main stream bed and clean out the North Fork or Tributary A on the map (Section 17). This will enhance and open up many of the remaining areas to fishlife and increase spawning and nursery areas. titer clean-up, Campbell Creek could be managed for anadromous fish as a spawning and nursery area, producing a great deal more fish than what was observed at this time.

SKETCH MAP - Attached.

REFERENCES & MAPS - Personal data and survey, assisted by local ranchers in the area who offered suggestions on accessibility and possible condition of the stream.
Maps used: (1) Union Lumber Co. 1945; (2) Calif. Div. Forestry, Mendocino County, north half, 1948; (3) USGS 15-minute series, Branscomb Quad., 1951. It should be noted that these maps differ in road as well as stream markings and access.
Accuracy of the map is thereby questioned, although we have tentatively used the USGS map with more reliability than some of the other maps.

S. Nye/cd