CALIFORNIA DEPARTMENT OF FISH AND GAME
STREAM SURVEY

FILE FORM No.____

NAME……..Horse Creek…….....……COUNTY……..….. Mendocino……..
STREAM SECTION .....entire……FROM…..mouth.....TO....headwaters.....LENGTH..3.5 mi.….
TRIBUTARY TO……Rancheria Creek……....TWP.....13N...R...15W....SEC.....1.....
OTHER NAMES.....none known.……..RIVER SYSTEM.....Navarro River.....
SOURCES OF DATA.….personal survey…….....

EXTENT OF OBSERVATION - The entire creek from the mouth to the headwater forks and parts of the tributaries were observed on October 4, 1962 between the hours of 0900 and 1500 by S. N. Nye. The mouth to headwater forks and parts of the tributaries were covered as follows. Mouth to .9 mile upstream by truck and by foot. Stream section from .9 mile from the end of the road to the headwater forks and tributaries were 5'. This is a total stream distance of 3.5 miles.

LOCATION - Horse Creek rises due east 1/2 mile from the California Division of forestry, Cold Springs Lookout and flows southeast then east to enter Rancheria Creek 4.5 air miles west of Boonville.

RELATION TO OTHER WATERS - Horse Creek is a potentially good spawning and nursery tributary to Rancheria Creek and is in better condition than most of the other tributaries in this general area. Horse Creek contributes summer flow, some spawning and nursery area for Rancheria Creek.

GENERAL DESCRIPTION - Watershed - Horse Creek is a typical central coast transitional zone, mountainous terrain consisting of a soil made up of shale, sand, gravel, dirt, some loam, and downfall wood material and humus. This area is typical redwood with some Douglas fir which has been logged over in the pact on primary cover and again legged the second growth and still continuing logging operations, with some third growth starting to grow.

Immediate Drainage Basin - Primarily redwood, with some Douglas fir, heavily logged over past and present, with minor growth of oak, bay, a few alder, with medium amounts of brush, and a few patches of ferns growing on the wide V-shaped canyon, draining approximately 4 sq. miles. Horse Creek flows in a general southeast then easterly direction. The primary channel has been completely covered from heavy logging damage and high runoff and siltation and is fairly wide in areas, leading to a new type of incised cutting channel which becomes narrow in places then spreads out to a lens-shaped stream bed, which then meanders throughout the valley floor, being no longer a steep sided type V-shaped canyon. Stream side vegetation is extremely scarce being that the channel is open with most of the cover having been cut down during logging operations. At points during the course of downstream travel, the stream bed ranges from a minimum of 10' to a maximum of 80', actual stream bed dry area. Individual landings are up to 200' wide or more.

Altitude - Ranged from 385' to 850', usable area. Altitude taken from the topographic map.

Gradient - Slight to moderate throughout the useful area. Ranged from 3'/100' area throughout the usable fisheries value, and above that point gradient becomes rather steep.

Width - Ranged 1' to 20', for actual width of the stream bed area with an average of 3'.
Depth - Ranged 1" to 3', with an average 3" depth overall.
Flow - Ranged 1/8 cfs to 1 cfs with the average of 3/4 cfs. Flow is sluggish to rapid throughout and is intermittent behind or at some of the large landings and the larger jams which are heavily silted in.
Velocity - Considered rapid to sluggish throughout with a 2' per second travel.
Bottom - The entire stream bed and the following materials which make up the stream bed are covered with a heavy layer of silt. There are scattered bedrock, boulders, and rubble throughout the stream, but are considered scarce. Percentage breakdown of the bottom is as follows: Bedrock 1%; boulders 1%; rubble 2%, gravel 60%, sand 15%; mud 0%; organic debris 20%; and shale 1%. Gravel consist 50% fine and 50% coarse. Rubble consist of 50% fine and 50% coarse.
Spawning Areas - Spawning area in the upper limit of usable stream between Station A and B ranges from 0 to 10% per 100 yds. that is considered poor. Area between Station B and C ranges from 50 to 75% per 100 yds. and is considered fair to good. Area between Station C to the mouth ranges between 70 to 90% per 100 yds. and is considered good. There are long stretches of silted in gravel areas ranging 100 yds. or better and roughly 12' wide. All areas throughout the entire stream are heavily silted over. The gravel for the most part is loose and easily disturbed.
Pools - Ranged 7' long x 4' wide x 1' deep to 75' long x 20' wide x 3' deep with an average pool of 12' long x 8" wide x 2' deep. The upper pool area roughly is 50% pools to 50% riffles per 100 yd. sections. The middle section of the stream ranges 75% riffle area to 25% pool. The lower area ranges roughly 90% riffle area to 10% pool and is considered very poor pool development. Pools consist primarily of log jams, fallen trees, over-hanging roots and tree stumps, with a few undercut banks. The greatest majority of pools were open without shelter.
Shelter - Shelter is considered scarce throughout. The stream is overall open from extensive clearing and cutting down of trees and cover which had been near or over-hanging the stream. Shelter present is from a few boulders, but the majority by log jams, and fallen debris and slash. Very few undercut banks were present.
Barriers - See attached map for barrier locations, sizes and numbers.
Diversions - None were noted.
Temperatures - Temperatures on the date and times for this survey ranged from and as follows: air 63° F. to 68° F.; water 60° F. to 61° F.
Food - Food found in the upper area is considered scarce with only one organism per 1 square foot of observed rock area. The middle and lower sections, food is considered common with 8 to 10 organisms found per 1 sq. foot of observed rock area.
The upper area is not considered adequate for the continued nursery of fish. The middle and lower areas considered adequate for nursery considering the number of fish found in the stream. Food observed were as follows: caddis fly, stonefly, some mayfly larvae and other flying insects, and other unidentified aquatic insects.
Aquatic Plants - Algae is quite common and found throughout the stream ranging from a green to a dense black, evidently from decomposing wood material. Some horsetail and watercress were observed along the edges of silted area, and are considered scarce throughout. Some ferns were observed along the banks but are considered scarce throughout and none found in the actual stream bed.
Winter Conditions - Evidence points out a high rapid runoff with up to 8' high banks at an 80' wide section of stream.
Pollution - Only pollution found would be that of the extreme logging damage present.
Springs - Found to be quite common throughout ranging from a small drip or damp area to small flowing outcroppings. Springs are undeveloped.

FISHES PRESENT AND SUCCESS - Roach - size ranged 2" to 3"; abundance, considered common throughout. See other remarks. Success is considered good for conditions present. Condition considered good and are considered to be of natural propagation. Rainbow trout-steelhead - size ranged 2" to 3" fish for the overall average of the stream, with a few observed up to 5" in length. Trout are considered scarce for this stream. Success is considered poor; condition of fish noted were good, and are considered from natural propagation.

Other Remarks - Fish were seen up to barrier No. 9 located just above Station B on the map. Very few fish were found between Station B and C, evidently from the standpoint of very open to long riffle areas. Station C to the end of the road had more fish present in this area, and from the stream section road to mouth, less fish were observed again. The ratio of roach and rainbow trout/steelhead are as follows: 75% roach to 25% RT-SH. Only 10 five-inch RT-SH were seen. The upper area between Station B and Station C, the numbers of fish observed were 5 for average pool with 5 per 50 yds riffle area and are considered scarce. The middle area between Station C and the end of the road averaged 25 to 50 fish per 100 yds of riffle and stream area with 25 to 35 per average pool observed. The lower area between the end of the road and the mouth averaged 15 to 25 fish per 100 yards stretch
of riffle and stream with 15 to 20 fish per average pool.

OTHER VERTEBRATES - Salamanders were scarce. Frogs were found to be abundant. Squirrels, deer, coon, snakes, were found to be common throughout. Sheep very few observed.

FISHING INTENSITY - Unknown; probably light.

OTHER RECREATIONAL USE - Hunting, hiking and fishing could be considered providing open access were permitted.

ACCESSIBILITY - From Highway 128 at Boonville, proceed 5.45 miles on Mt. View Road (past Boonville High school) and continue across Rancheria Creek bridge called Lambert Bridge where the gauging station is located , onto a dirt road with a cable. The cable is down at this time. Turn right on this road called Craig Hill Road and proceed 2.5 miles paralleling Rancheria Creek downstream to Horse Creek. A side road proceeds up to a point .9 mile and becomes washed out at this point. Access for the rest of the stream is considered easy walking except for some of the side tributaries where so much down material make it rough.

OWNERSHIP - The following owners are listed as gathered from Mendocino County Tax Recorder's Office, by James Crowdus. 1. Chansler - Western Oil, 4549 West Produce Avenue, West Los Angeles. 2. Homer, Homes A. and Margaret L. Charles, Boonville, California. 3. Rockport Lumber Company , Western Headquarters, 240 Van Ness Avenue, San Francisco. 4. Crofoot Lumber Co., Route 1, Box 625-B, Ukiah, California. 5. Marion Prather, Box 127 Philo, California . Posted signs for this entire area ware signed Charles Lumber Company.

POSTED OR OPEN - The entire area is well posted.

IMPROVEMENTS - No improvements were observed, in fact, it would be just the opposite with only damage observed.

PAST STOCKING - The past stocking record of Horse Creek is unknown to the surveyor, and regional files were not available at this time for record.

GENERAL ESTIMATE - Horse Creek and its tributaries have received heavy logging damage from old time logging in the late 1800 and early 1900 and more recently as evidenced by the finding of a newspaper at one of the upper landings dated May, 1961. All tributaries have received extensive damage so as to result in their being of no fishery value. The main stream has received fairly extensive logging damage, but is not as bad off as some of the other tributaries to Rancheria Creek in this area,

considering the amount of logging accomplished recently.

1. The logging damage causing log jams, slash, debris, and barriers along with heavy siltation estimated at up to 15" deep from original stream bed in many places, limits the value of this stream for anadromous fish utilization.

2. The existing conditions are not really suitable for any type of fish. Roach are in predominance of the fishes present, and still there are not the number of fish one would expect for the available spawning area along with pools present throughout the stream.

3. Logging damage is the only special problem observed or present at this time.

4. Horse Creek is probably being utilized as well as possible for present conditions

5. There is no present stocking program.

6. Present angling regulations appear adequate. Present laws reference poor logging practices are definitely not adequate to result in the damage present and it appears evident that no follow-up at this time has been made by the agency responsible. Loggers appear to have little or no regard for laws now on the books in reference to stream damage and appear to feel that they are not doing anything wrong even when they completely wreck a stream.

7. The overall observation of this stream shows too few pools in relation to the long riffles at gravel areas, which have resulted from heavy logging damage causing long and large silted in areas behind jams.

RECOMMENDED MANAGEMENT - 1. At present there is very little management can be done on this stream, considering the condition of Horse Creek. 2. Future management should be as follows: a. Remove all logging damage possible and allow stream to clean out and return to a natural spawning and nursery stream for anadromous fish, b. At this time no rough fish control or introduction of forage fish is thought or would be deemed necessary. c. The law enforcement agency responsible for follow up of logging damage should go in and contact loggers and owners to insure that the stream is cleaned up and to prevent further disregard of regulations concerning logging operations in and around the stream. d. Upon completion of extensive clean-up and washing out of silted in material, a re-stocking program could be and should be initiated. Silver salmon and rainbow trout-steelhead yearling fish should be stocked in equal numbers of not less than 1,000 each per stream. 3. A minimum water requirement to maintain a good spawning as well as good nursery area through the summer and fall periods should be not less than 1 cfs.

SKETCH MAP - See attached.

REFERENCES & MAPS - USGS 15-minute series, Boonville quadrangle.

S. N. Nye/cd 1-25-63

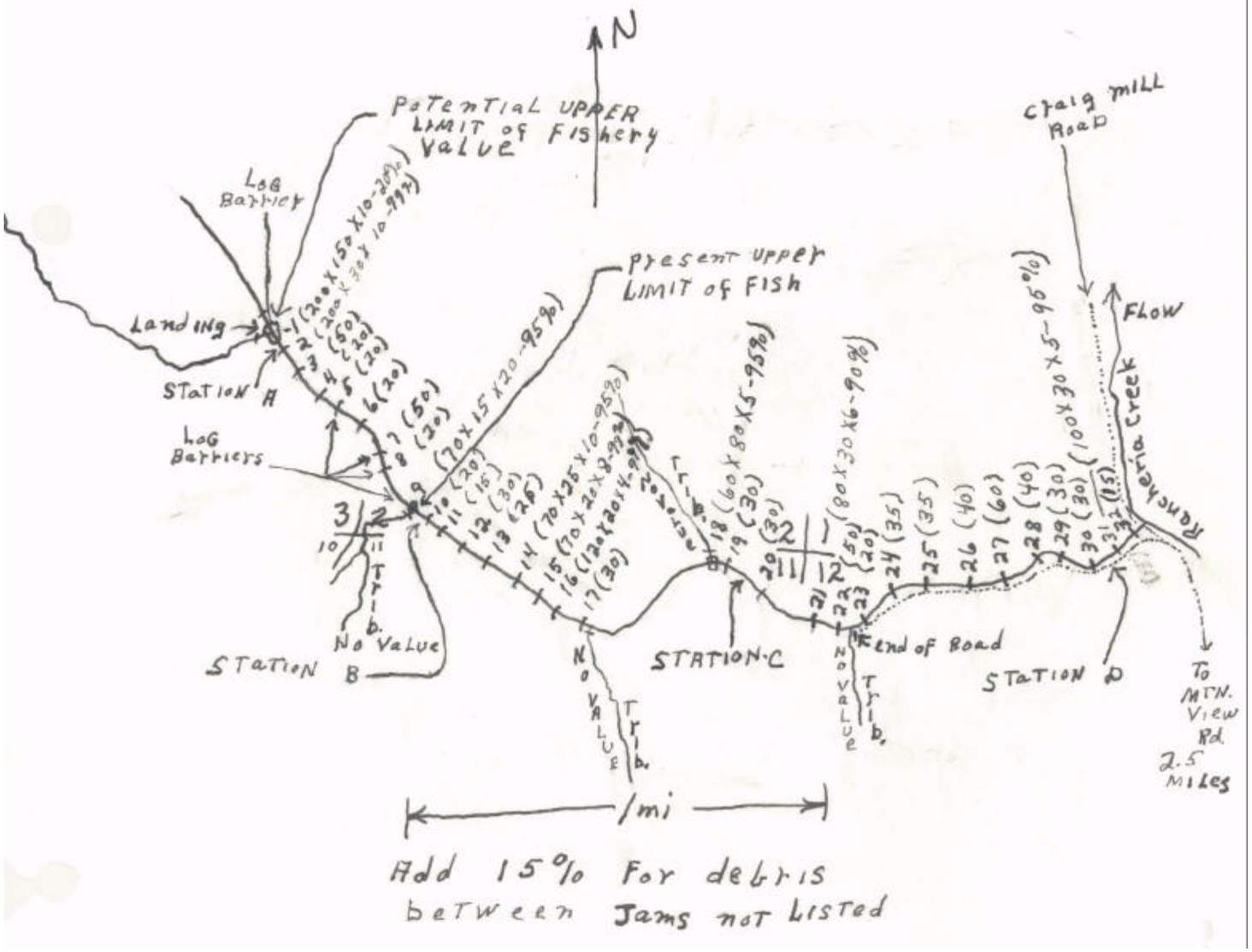
Horse Creek

T14N. R15W. S.1

Spawning and Nursery Area in miles

1. Now satisfactory for SH & SS 0
2. To be improved 2.6
3. Available after improvement 2.6

Surveyor Nye



Add 15% For debris between Jams not Listed