CALIFORNIA DEPARTMENT OF FISH AND GAME
STREAM SURVEY

FILE FORM NO.....

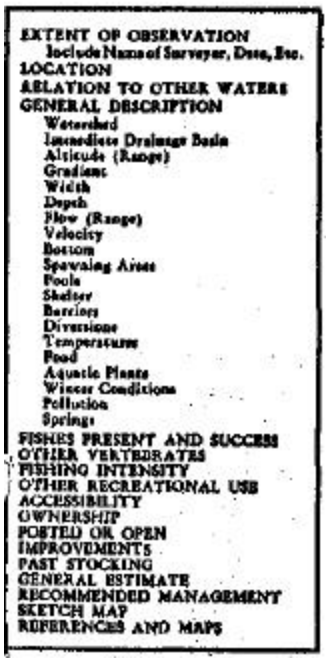
NAME... WEST BRANCH INDIAN CREEK.....COUNTY..Mendocino.....

STREAM SECTION..Partial..FROM..Lower 1.3 miles...TO confl. Indian Creek.....LENGTH.....1.8 mi....

TRIBUTARY TO.....Indian Creek.....Twp. 14N...R....14W...Sec....8.....

OTHER NAMES.....West .Branch.....RIVER SYSTEM.....Navarro River.....

SOURCES OF DATA.....Personal observation.....



EXTENT OF OBSERVATION - The lower 1.3 miles of this stream was surveyed on foot by Bob Keller and Dick Moore on August 7, 1962. Upstream limit of survey is 1/4 mile above point where Bullock Creek enters West Branch Indian Creek.

LOCATION - This stream is located approximately 2 air miles northeast of Philo, California.

RELATION TO OTHER WATERS - This stream contributes summer and winter flow to the lower Indian Creek, thence the Navarro River. At present this stream has little spawning or nursery value due to barriers present (see barrier survey map).

GENERAL DESCRIPTION - Watershed & Immediate Drainage Basin - This is a typical coast redwood deciduous association located in a V-shaped canyon. This soil is a gray-brown type soil, 2' to 4' in depth. Vegetation consists of redwood (sparse) in the canyon bottom, dense deciduous growth on the slopes and grass hilltops. This stream drains approximately 6 sq. miles flowing in a southeasterly direction through a V-shaped channel for a distance of approximately 3 miles. Stream side vegetation is scarce throughout. The absence of stream side vegetation is due to present and past logging. Present logging road running in stream or parallels the stream. Evidence of old logging road in or paralleling entire stream.

Altitude - Headwaters, 1200 ft., mouth 380 ft.

Gradient - Average 3' per 100 ft, upstream from Bullock Creek, 5' per 100' downstream from Bullock Creek, 1' per 100'. Overall gradient slight to moderate with steep sections at barriers and in the headwaters.

Width - Riffles averaged 9" ranged to 16', Pools averaged 2' ranged to 20'. Wide range in width due to between areas of intermittent flow and low velocity and areas of bedrock and log jams with high velocity.

Depth - Riffles averaged 1/2" ranged to 6". Pools averaged 10" ranged 3'.

Flow - Estimated at 1/2 cfs at Bullock Creek. Est. at 1/4 cfs at confluence of Bullock Creek. Est. 1/2 cfs at confluence of Indian Creek. Minimum summer flow not known. Maximum winter flow approximately 2′ in depth at mouth.

Velocity - Average velocity slow, ranged from sluggish and intermittent sections to rapid at log jam barriers and in headwaters.

Bottom - Estimated at 85% gravel and sand intermixed; 5% rubble, 5% boulder, 5% other. Riffle area are mainly silted gravel with some rubble. Pools mainly due to log jams with boulders, rubble and slash present. A thin layer of silt covers the entire stream. This silt believed due to heavy equipment operation in the stream this season.

Spawning Area - Appear limited to scarce. Mainly composed of fine gravel intermixed with sand. Spawning areas heavily silted in due to recent logging. Poor spawning less than 10%, good spawning gravel less than 2%.
Pools - Appear scarce composed mainly of log jam pools averaged 2' wide and 10" deep and occur less than 1/4 of the stream area. Scarcity of pools believed to silted condition of stream.
Shelter - Poor. Limited to log jam areas. Silted areas offered little shelter. Stream side devoid of overhanging terrestrial plants due to recent and past logging. (If present log jams are removed in the future, this stream would have little or no shelter.)
Barriers - Several barriers are present. This stream is not accessible to anadromous fish due to barriers. Six complete harriers composed of bedrock boulders and logs were located (see barrier survey, Navarro River 1962).
Diversions - A temporary diversion was located at Bullock Creek. It consisted of a hole in the stream bed from which watering trucks could be loaded.
Temperatures - At confluence of Bullock Creek, water 60° F., air 75° F. at 1515 at confluence of Indian Creek water 62° F., air 61° F. at 1615 hours. Temperatures taken on August 7, 1962 with weather having high overcast and an occasional drizzle.
Food - Consisted of caddis fly larvae, dragon fly and mayfly nymph. Food organisms appear fairly sluggish.
Aquatic Plants - This stream noticeable for the lack of aquatic plants. Aquatic plants scarce to nonexistent.
Winter Conditions - Appear moderate. Depth of flow at Indian Creek estimated at 2 cfs.
Pollution - Silted condition of stream due to recent logging and logging road parallel or in stream bed.
Springs – Scarce. Few springs were noted due to summer survey.
FISHES PRESENT AND SUCCESS - Rainbow trout steelhead appears scarce throughout stream. SH-RE averaged 10 to 25 per 100' in scattered pool-riffle areas. Sizes ranged from 2" to 7" with one or two 6" or 7" fish in every pool of adequate size. Fishes present above barrier believed to be resident rainbow trout. Some roach present downstream from barrier. Roach fewer than 200/100' of stream,
OTHER VERTEBRATES - Frogs, salamander, snake, coon and deer are present.
FISHING INTENSITY - Stream side trail and scarcity of debris from anglers indicate light fishing intensity.
OTHER RECREATIONAL USE - Deer hunting is the only probable other recreational use at present.
ACCESSIBILITY - Inquire in Philo for road access to this area. West Branch and Bullock Creek accessible via Whipple Ranch road with 4-wheel drive during dry weather. Driving time from Ukiah 1 hour; from San Francisco 3½ hours.
OWNERSHIP -
POSTED OR OPEN - Entire stream posted to trespass by private owners.
IMPROVEMENTS - Upper 1/2 section of stream in need of improvement. Logging this season has resulted in debris in the stream. Jams present have been reached but not removed. Old log landings are still in stream.
PAST STOCKING - Not known.
GENERAL ESTIMATE - Fisheries value of this stream is limited by barriers and silted condition. Upstream barrier to anadromous fish approximately 150 ft. from confluence of Indian Creek, Several larger barriers, one exceeding 7 ft. are located upstream from first barrier, Entice stream survey is silted with over-burden and has very scarce shelter. Fish present above barriers believed to be resident rainbow trout. Logging of the 1962 season has left slash in stream bed. In the upper 1/2 section of West Branch, these do not constitute barriers.

RECOMMENDED MANAGEMENT - It is recommended that barriers not be removed from this stream. It is recommended that this stream be managed as a resident trout stream (recommend planting resident trout above barrier falls, 750 ft. upstream from West Branch on Bullock Creek). Recommend proper authorities contact persons responsible for logging damage on this stream for 1962 season.
SKETCH MAP - See attached.
REFERENCES AND MAPS - USGS Boonville quadrangle 15-minute series 1959.

Richard Moore/cd 10-4-62

West Branch of Indian Creek.

T. 14 N. R14W Sec. 8

(Add 20% for debris not indicated between numbered jams.

1. 35'
2. 30'
3. 40'
4. 48
5. 45
6. 70
7. 55
8. 600' road down stream
9. 60'
10. 65
11. 65
12. 7
13. 25' x 6 x 2 50% void (log culvert)
14. 15' x 10 x 4 95% void.
15. 20 x 15 x 4 80% void (silted logs)
16.
17. 70' (log jam breached this season by someone) still in streambed.
18. 10' plus 180 feet of old streambed filled with debris. New "dry" channel bulldozed around jam
19. 30' silted.
20. 60 x 40 x 2 20% void.
21. 125' x 35 x 10 85% void (drop 30' silted)
22. Barriers series of jams & falls. Falls height are 4', 12', 3½', & 7' barrier 150 x ~~12 x 15~~ 12 to 15% drop. 125 x 45' x 18' 80% void.
23. 35' silted
24. 60' x 40 x 5 slide and jam.
25. 15 x 10 x 5 silted.
26. 15 x 30 x 7 80%
27. 40 x 50 x 12 50% void silted.
28. 70 x 40 x 4 95% void.
29. 70'
30. 35' silted. partial barrier.
31. 70 x 50 x 2 99% Void

WEST BRANCH of Indian Creek.

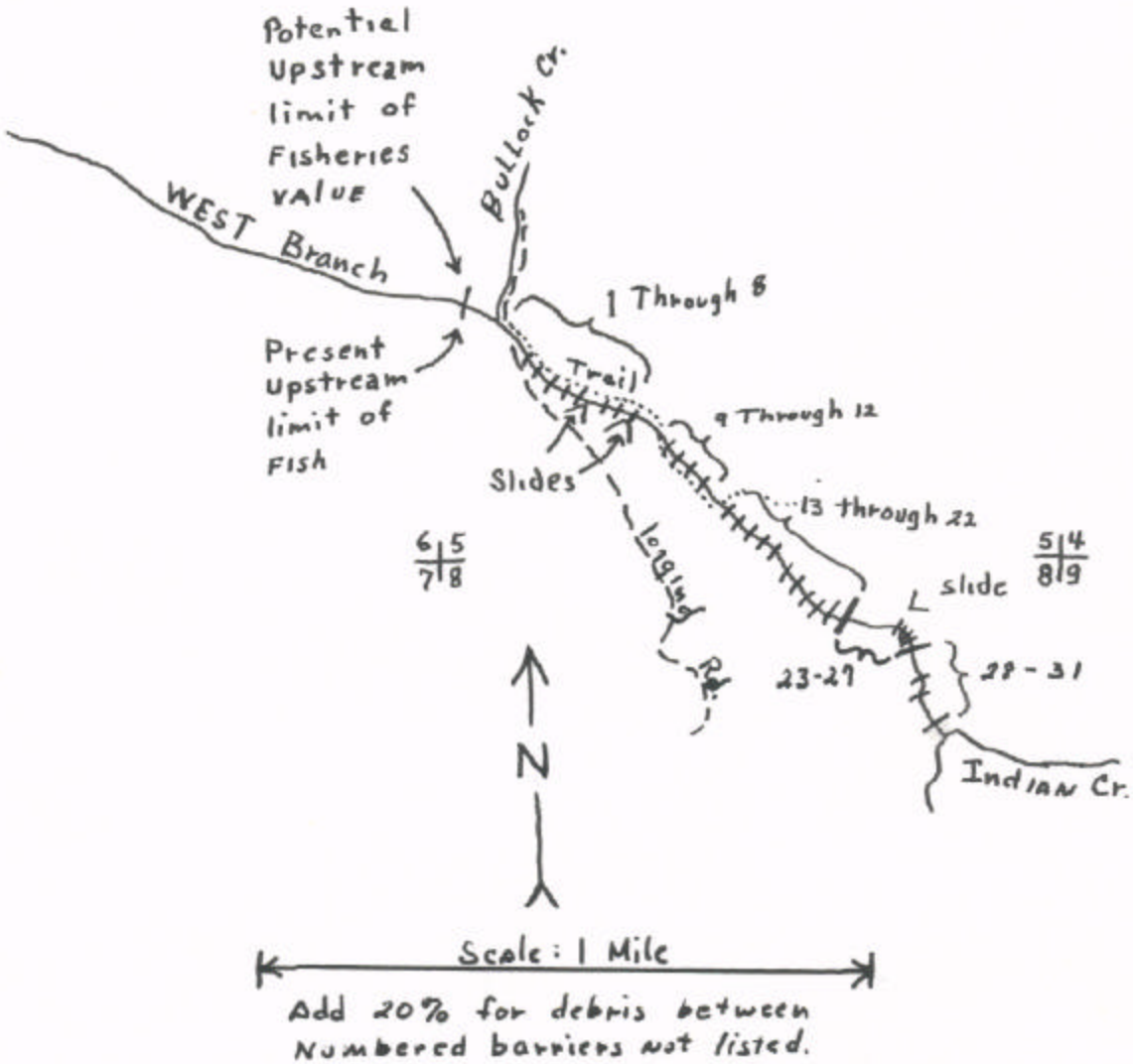
T14N R14W Sec. 17

Spawning and Nursery Area in miles

1. Now satisfactory for SH & SS 0
2. To be improved 1.3
3. Available after improvement 1.3

Surveyor R L Moore

$\frac{31|32}{6|5}$



$\frac{6|5}{7|8}$

$\frac{5|4}{8|9}$

Add 20% for debris between Numbered barriers not listed.