

STREAM SURVEY - TWO-LOG CREEK

NAME OF STREAM - Two-log Creek

COUNTY - Mendocino

STREAM SECTION - From mouth of Two-log Creek (T17N, R16W, S23) to line dividing R15W and R16W on U.S.G.S. Comptche quadrangle (15' series, 1960).

LENGTH - 3 miles surveyed.

TRIBUTARY TO - Big River at T17N, R15W, S23.

OTHER NAMES - None known.

RIVER SYSTEM - Big River

SOURCE OF DATA - Personal observation.

EXTENT OF OBSERVATION - Surveyed on June 20, 1966. Four hours spent walking out stream by John L. Thomas, Fishery Biologist II.

RELATION TO OTHER WATERS - This stream is important as a spawning and nursery area for steelhead. It is an important tributary of Big River adding additional water to the main river and contributing cooler summer flows to Big River.

#### GENERAL DESCRIPTION

are WATERSHED - The lower and raid-portions of Two-log Creek alluvial flats brought about by a sluice dam constructed near the headwaters at a point dividing R15W from R16W. This dam was constructed in 1875 for use in transporting logs in the main stream down river to the town of Mendocino. The dam was abondoned by the 1900's;

however, the stream still shows signs of its presence. As a result of the dams presence the stream bed is not-steep sided. Vegetation is fairly sparce due to recent logging of second growth redwood in

the area. The soil appears to be the Hugo series. Parent material is sedimentary rock. The surface soil is a light grey brown loam, and the subsoil is a light yellow brown loam and clay mixture. Sand alluvium has covered this soil in the mid and lower portions of the stream, and has been stablized by redwood tree roots .

IMMEDIATE DRAINAGE BASIN - 6 1/4 miles. Basin is "U" shaped canyon. The stream discharges in a SSW direction with side tributaries going in a general east to west, or west to east direction. The stream channel is lense-shaped from the mouth to line dividing S13 and S14 of T17N, R16W. From this point upstream channel becomes more narrow and is bowl-shaped and in some areas incised. Stream-aide vegetation is mainly redwood and Douglas fir. Alder, tan oak and madrone are also present in lesser quantities. The majority

of the vegetation is along the first one mile of stream above the mouth. Above this point the stream is sparcey covered with trees. some logging is presently going on near the mouth, and trees as

small as 6" in diameter are being cut to thin out the second growth

ALTITUDE - At mouth 120'; At headwaters 600 '.

GRADIENT - The first 1 mile above stream mouth the gradient -80'/mile; the next 1 1/2 miles above this point the gradient = 60'/ mile; the next two-thirds-of-a-mile above this area the gradient - 120'/ mile; the last two-thirds-of-a-mile (or headwaters) the gradient is 240'/mile. The drainage as a whole would have a slight gradient, except for the headwaters and side tributaries which would be moderate to steep in gradient.

WIDTH - Pools average five feet wide; riffles average 4 feet wide.

DEPTH - Pools average two feet deep; riffles average five inches deep.

FLOW - Flow estimated during time of survey was 3 cfs. Normal winter flows unknown due to excessively high winter flows during 1965.

VELOCITY - Sluggish; Less than 1/2 ft./sec.

BOTTOM - Pools from S14 downstream are composed of mostly fine gravel with some coarse gravel. The center of the pools are generally covered over with sand. Pools in S13 and upstream are generally covered with more fine gravel and less sand. Riffle areas are generally fine gravel with a little coarse gravel.

POOLS - Pools are generally long and narrow in S14 on down to the mouth. In this area a normal pool would be 2' deep, 5' wide, and 75 to 100' long. In S13 and upstream the pools become shorter and are usually less than 20' long. Pools are caused by redwood stumps located beside the stream, a few logs in the stream, water action in natural bends of the stream, and a few large rocks. There are also a few log jams, but at present they are not barriers. Pool areas would be considered from poor to good; that is, in general there appears to be more shallow riffle area than pool area.

SHELTER - Shelter would be considered fair. Hiding places are usually under undercut banks. Other shelter present is tree stumps along the stream, log jams, single logs in the stream, a few large rocks, and some overhanging terrestrial plants.

BARRIERS - None observed. There are a few log jams but at present they are not barriers. Noel Olsen, a Forest Manager for the Union Lumber Company, was supervising the thinning of trees near the mouth of Two-log Creek. He mentioned that the stream would be cleaned when they finished logging in the area. There appeared to be only two log jams near the mouth of the creek. At this time they are not a problem to fish passage.

DIVERSIONS - None noted.

TEMPERATURES - Time 1300. Big River above the mouth of Two-log Creek - 65°F. Two-log Creek just above its entrance into Big River -60°F.

FOOD - Caddis fly larvae is the aquatic most abundant. Some Diptera larvae also present. The aquatic food supply appears to be poor. Fry and yearlings seem to depend mainly on flying insects, they go after anything that hits the water. Mosquitoes are common in the shaded areas. The general overall food pattern appears poor to fair.

AQUATIC PLANTS - Algae blooms are common in the shallow water areas exposed to the sun. These blooms are common to abundant in all exposed shallow areas.

WINTER CONDITIONS - Unknown due to abnormally high water the winter of 1955.

POLLUTION - Logging and road building in the past caused some damage. The stream is now in the process of recovering. The water in the upper portions of the stream has a brownish coloring similar to that found in log ponds. However, the fish in the area seem to tolerate this condition. Probably the main pollution is aesthetic--that is, the area just doesn't look to good.

SPRINGS - None observed.

FISHES PRESENT AND SUCCESS - Steelhead yearlings (4 - 6") and fry (1 1/4 - 2") are present in the stream as far as Hwy. 20. There are about 100 - 150 fry/ 100 feet of stream section at this time to a point about 200 yards below Hwy. 20. From here to Hwy. 20 the population begins to thin out until there appears to be only one fish/pool in the stream adjacent to the Hwy. In some of the deeper pools there are from 2 to 5 yearlings. Most pools have only one or no yearlings. Spawning success is very good.

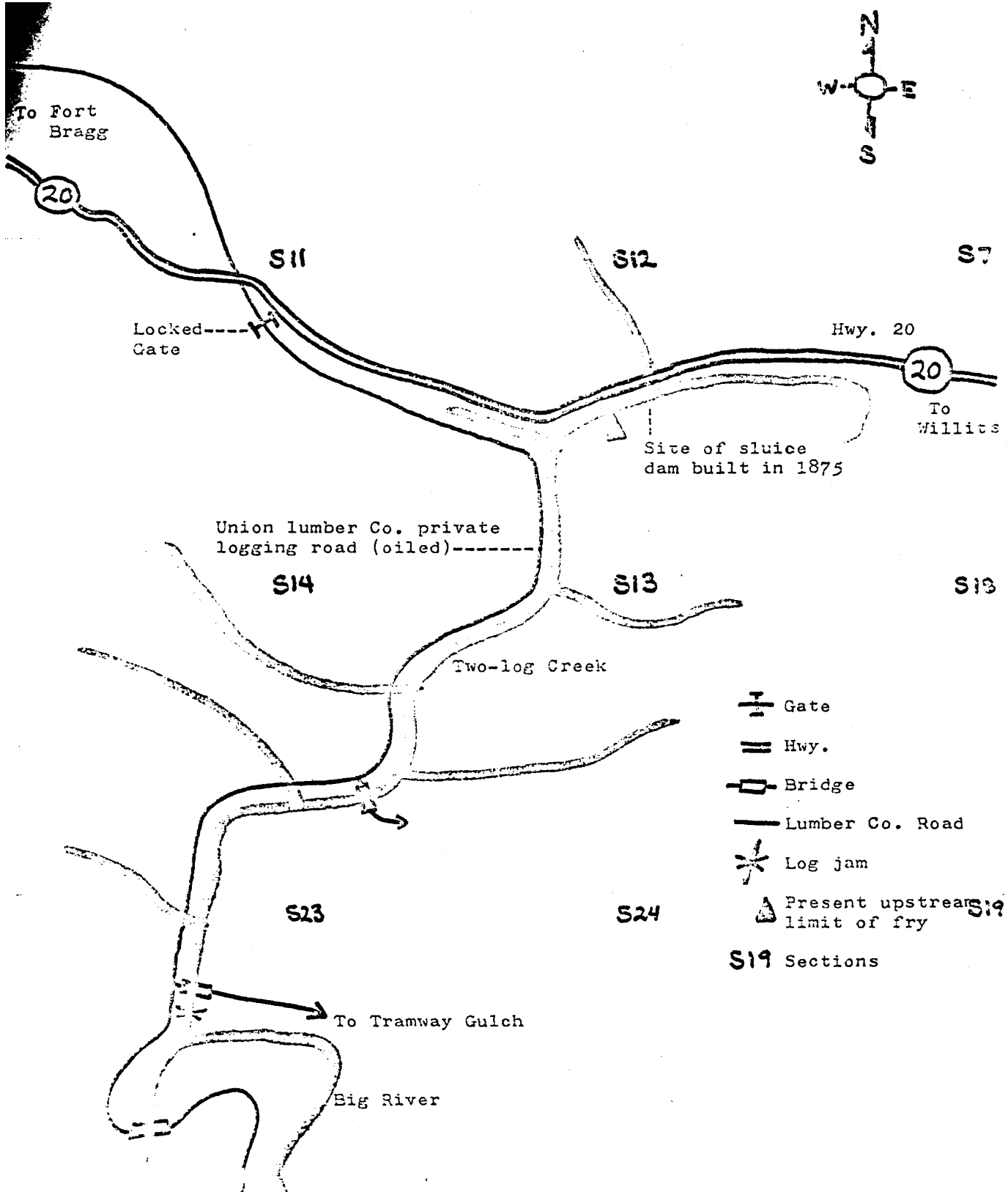
FISHING INTENSITY- Very light.

OTHER RECREATIONAL USE - Deer hunting.

ACCESSIBILITY - Headwaters accessible from Hwy. 20. A private logging road behind a locked gate parallels the entire stream. The key to the gate may be obtained from the Union Lumber Co.; Fort Bragg, Calif. Most local residents have keys to all gates in the area. The private road entrance begins on Hwy. 20 near BM 338 in T17N, R16W, NE 1/4 of the NE 1/4 of S11--Comptche quadrangle, 15' series (1960). This road does not appear on this map since it was constructed in 1961-52.

OWNERSHIP - Private, Union Lumber Co., Fort Bragg.

POSTED OR OPEN - Stream not posted; however, private logging road is closed to public use.



To Fort Bragg

20

S11

S12

S7

Locked Gate

Hwy. 20

20

To Willits

Site of sluice dam built in 1875

Union Lumber Co. private logging road (oiled)

S14

S13

S19

Two-log Creek

Gate

Hwy.

Bridge

Lumber Co. Road

Log jam

Present upstream limit of fry

S19 Sections

S23

S24

To Tramway Gulch

Big River