NAMEBig River	COUNTY.	Mendocino	
TRIBUTARY TO. Pacific Ocean	17N	R	29
OTHER NAMES. None	-		
SOURCES OF DATA. Personal observations			
DOURCED OF DATA		, <b></b>	•••••

EXTENT OF OBSERVATION Include Name of Surveyor, Date, Etc.		
LOCATION RELATION TO OTHER WATERS GENERAL DESCRIPTION Watershed Immediate Drainage Basin Altitude (Range) Gradient Width Depth_	Extent of observation- On July 27, 1959, James Morehouse and Stan Nye partly walked and partly drove this River upstream from a large, wooded dam, about one mile above Valentine Creek (T17N, R14W, Sec. 3) to the extreme headwaters.	
Flow (Range) Velocity Bottom Spawning Areas Pools Shelter Barriers Diversions Temperatures	Location - This River heads on the North coastal mountain slopes just south of Irene Peak ( T17N,R14W, section 11) and flows south and then westerly to the Pacific Ocean near the town of Mendocino.	
Food Aquatic Plants Winter Conditions Pollution	Relation to Other Waters - This is one of the most important north coast rivers for silver salmon and steelhead trout production.	
Springs FISHES PRESENT AND SUCCESS OTHER VERTEBRATES FISHING INTENSITY OTHER RECREATIONAL USE ACCESSIBILITY OWNERSHIP POSTED OR OPEN	<u>Watershed</u> - The entire watershed is typical coast or redwood, Douglas, fir forest. A large portion of this watershed has been damaged by extensive and improper logging methods.	
IMPROVEMENTS PAST STOCKING GENERAL ESTIMATE RECOMMENDED MANAGEMENT SKETCH MAP REFERENCES AND MAPS NAME OF DAM	Immediate Drainage Basin - The extreme headwaters flow through steep, brush covered slopes. The lower two miles gradually enters the redwood forest. A large part of this upper drainage basin is	
NAME OF DAM OWNERSHIP DATE OF CONSTRUCTION TYPE OF DAM	denuded of forest cover. It is felt that this is the result of poor logging methods.	
HIE OF DAM HEIGHT OF DAM SPILLWAY (Type, Size, Discharge) OTHER OUTLETS (Type, Size, Etc.) FISHWAYS	Gradient - Very slight in the lower $2/3$ to moderate in the upper $1/3$ and steel in the remaining headwaters.	
SCREENS USE OF WATER	<u>Width-</u> 1ft. to 3ft Average 2ft.	
Depth - 1 inch to 4 inches - Average 2 inches.		
Flow - 0.5 cfs. To 2 G.P.M average 0.3 cfs.		

Velocity - Rapid throughout.

Bottom - Mostly sand - gravel; some gravel - sand, and areas of bedrock and boulders near the extreme headwaters.

Spawning Areas - Mostly poor to fair with a few areas approaching good.

- Pools Uncommon in the lower half, becoming more common in the upper half. 8ft long 4ft wide 8in deep to 20ft long 8ft wide 2ft deep average 10ft long 4ft wide 10in deep.
- Shelter The lower 2/3 was very open, with only undercut bank and log jams for cover. The upper 1/3 of this river area is more contained and large boulders and some riparian growth afford fair shelter.

Barriers - Many (see attached sheet for location and size).

Diversions - None seen.

<u>Temperatures</u> -  $80^{\circ}$  F. in the lower area to  $78^{\circ}$  in the upper area.  $70^{\circ}$  in extreme headwaters.

 $\underline{Food}$  - Common in the lower half to abundant above. Adult midges, caddis fly and other unidentified insect larva were seen.

Aquatic Plants - None other than algae.

<u>Winter Conditions</u> - This is not a scoured riverbed and the stream banks show no evidence of flooding. It is felt that the winter conditions are fairly mild.

Pollution - None seen other than logging.

Springs - Common in headwaters and drainage basins.

Fishes Present and Success - RT/SH trout were common through. lin to 6in in length. Average 2 - ½ in. Success seems to be satisfactory. No other fish were seen.

<u>Other Vertebrates</u> - Western newts, small frogs, and yellow - lined garter snakes were often seen. Many deer were seen.

<u>Accessibility</u> - A private road comes into this upper Big River from Baechel Creek road.

Ownership - This entire area of Big River is privately owned and posted.

Improvements - None seen.

<u>General Estimate</u> - It is felt that this are has undergone severe damage due to improper logging practices, primarily in the loss of riparian cover and the removal of forest from the immediate drainage basin. However, the large numbers of trout seen suggests that the area is still suitable for salmonids. Because of the barrier-dam at the lower end of the surveyed area, it is felt that these trout are a resident population. It is believed that the "Johnson Dam" located at the mouth of Rice Creek, is actually the large, wooden, flush dam below Rice Creek on Big River.

<u>Recommended Management</u> - The most important management would be to control logging practices and prevent further damage to the river. Otherwise, only normal steelhead spawning and nursery stream management is required.

<u>References</u>- Maps and sketch map: Bob Elwell's report on the aerial survey on this area was very helpful. The forestry map, south-half of Mendocino County, 1948, was the only map consulted, and the sketch map was taken from this.

Altitude - Fishing intensity, other recreational use and past stocking are not known.

Big River Con (Valentine Creek to Headwaters) Conty: Mendocino TIZN RIZW Sec 29 N Irene Peak 2 13 Numbers = Barriers Letters = Stations Rice Cr. williams Ranch Sale : 2"= 2 mi

## Barriers and Log Jams

- An old flush dam located about one mile above the mouth of Valentine Creek. 120ft long, 40ft high, complete barrier 14ft drop in streambed.
- Log jam located at the base of the upstream side of #1.
  90ft long, 20ft wide, 15ft high, void area 92%.
- Log jam located .1 mile upstream from #1. 75ft long, 50ft wide, 3ft high, void area 50%.
- Log jam debris located .3 mile upstream from #1. 90ft wide, 35ft long, 15ft high, 70% voided area.
- 5. Log jam debris located .4 mile upstream from #1. 85ft long, 40 ft wide, 7ft high, 65% void.
- Log jam located .1 mile upstream from #5. 40ft long, 30ft wide, 7ft high, 40% void.
- 7. From #6 to mouth of Rice Creek. .1 mile scattered debris and slash no estimate.
- Log jam just above mouth of Rice Creek.
  30ft long, 35ft wide, 7ft high, 65% void.
- 9. Immediately above #8, four average logs jam (cut logs).
- Log jam .1 mile upstream from Rice Creek.
  100ft long, 30ft wide, 6ft high, 96% void.
- Log jam .2 mile above Rice Creek.
  30ft long, 20ft wide, 4ft high, 50% void.
- 12. Log jam barrier .4 mile above Rice Creek silted in. 35ft long, 35ft wide, 6ft high, 90%void. Difference in streambed level - 4 to 5ft.
- 13. Boulder log jam barrier located .3 mile upstream from #12. 8ft long, 29ft wide, 6ft high, 50% void. Difference in streambed level 4ft. 40% boulder 10% log.
- 14. Log and dirt filled jam and barrier -creek crossing located .2 mile up from #13. No culvert - difference in stream bed level - 5ft.

The area from this point on up to the "U" turn of the road away from the creek, a distance of 1.6 miles, was covered by truck. This area consists of intermittent log slash, debris and accumulation of materials in and around the creek bed.

## Barriers and Log Jams (continued)

At the point where the road leaves the creek, an old logging landing over the creek is filled in with large logs, slash, debris, and silt. One hundred feet below this point, the stream gradient becomes very steep, and leads into a "V" type canyon filled with large boulders. Two hundred feet above the log landing is a natural rock falls, 12ft high. It is believed that the rest of this stream is of no fisheries value.