# UNITED STATES - DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

# PHYSICAL AND BIOLOGICAL STREAM SURVEY REPORT

DATE 05. JULY 1977 SURVEYOR M. HENRY

Nan	MEIndian Creek	Cou	NTYMendocino	
STA	TIONBLM Section	To		IILES)
TRIBUTARY TONavarro RiverLocation (STREAM MOUTH).TWP14N R13WSec18				
RIVER SYSTEMNavarro RiverSURVEYORM. Henry, BLM Ukiah				
	Stream width (average) 3 ft. today, 12 ft. when SH spawn			
,	Turbidity (visibility in feet) 5-10 ft (in clear range)			
-	Temperature: air 73° F, Water 55° F	Time 1045	Flow 0.5 cfs	
	Substrate for section length			
	250 yds² good gravel			
	93 yds² marginal gravel			
	343 total yds² of gravel			
	310 yds² of average 4' deep pools			
	895 yds² of rubble			
	1548 yds² Total substrate area for this .3 mile section of stream			
	Fish species			
	Steelhead/Rainbow trout - 7" average size, 6-50/100'			
	30% of section in pools			
	Moderate gradient (1.0 to 2.5 %)			
	50% average stream area shaded			
	Streamside cover type is HERB, and 2nd Growth			
	Barriers, of the log jam type, require correction, as they are NOT all deemed PASSABLE			

# COMMENTS - INDIAN CREEK, MENDOCINO COUNTY

## ACCESS

Access to the BLM section is on a private road at Soda Spring on the Boonville-Ukiah road. Floyd Johnson of Boonville has access to the area and lock combinations. Jack June, a local forestry consultant, accompanied me on this survey. He has lived in the area for over 20 years and does controlled turning in this drainage. He is very concerned about the fishes of Indian Creek and wanted to show me some log jams which prevent fish passage.

#### DRAINAGE DESCRIPTION

The BLM section is located on the Palmer Estate, which is managed as a sheep grazing ranch. Logging of Douglas Fir was done in this drainage in the past. It appeared the logging was done in the late 40's.

#### STREAM CONDITIONS

The section of Indian Creek surveyed has a moderate stream gradient which passable to migrating fish, except for stream obstructions. Four major log jams were observed in the 1 mile of stream surveyed. The largest jam is located just upstream of the BLM section. Large amounts of debris and sediment have built up behind the jam (see photos).

The riffle to pool ratio, in the BLM section is 6:1 and becomes 1:1 near the start of the survey. Pools were seen to 4' in depth.

The stream shade is 50% and the water temperature was 55°F at 10:45 AM. in the BLM section. Water Cress (Rorippa) is the common aquatic plant found in the creek and along the banks.

Aquatic insects were found in good numbers throughout the surveyed section. Mayflies, Stoneflies, water pennies, and snails were observed in this creek.

An average stream section in the BLM area is composed of coarse rubble 40% good gravels 20%, boulders to 2.5' 30%, and fine materials 10%.

#### **FISHERIES**

Steelhead/Rainbow Trout to 7" were observed above the major log jams in numbers to 50/100 feet.

### RECOMMENDED MANAGEMENT

Removing the log jams would provide approximately 4.2 additional miles of spawning grounds for anadromous fish.

## **SUMMARY**

- 1. Water temperature 55°F
- 2. Four log jams in 1 mile surveyed
- 3. 20% of stream good gravels
- 4. Log jams block 4.2 miles of spawning and rearing grounds

Survey Date: 5 July, 1977 Surveyor: K. Henry

