

# STREAM INVENTORY REPORT

## Second Right Bank Tributary to Two Log Creek

### WATERSHED OVERVIEW

Second right bank tributary to Two Log Creek is tributary to Two Log Creek, tributary to Big River, located in Mendocino County, California (Map 1). Second right bank tributary to Two Log Creek's legal description at the confluence with Two Log Creek is T17N R16W S12. Its location is 39°20'57" north latitude and 123°35'14" west longitude. Second right bank tributary to Two Log Creek is an ephemeral stream according to the USGS Comptche 7.5 minute quadrangle. Second right bank tributary to Two Log Creek drains a watershed of approximately .24 square miles. Summer base runoff is approximately 0.15 cubic feet per second (cfs) at the mouth. Elevations range from about 320 feet at the mouth of the creek to 620 feet in the headwater areas. Mixed conifer forest dominates the watershed. The watershed is entirely privately owned and is managed for timber production. Vehicle access exists to Two Log Creek via Highway 20 on a logging road at the 14 mile marker.

### HABITAT INVENTORY RESULTS AND DISCUSSION

The habitat inventory of July 7, 1998 was conducted by Andrew MacMillan(CCC) and Paul Retherford (WSP/AmeriCorps). The total length of the stream surveyed was 929 feet.

Flow was measured at the bottom of the survey reach with a Marsh-McBirney Model 2000 flowmeter at 0.15 cfs on July 2, 1998.

Second right bank tributary to Two Log Creek is a G4 channel type for the entire 929 feet of stream surveyed. The suitability of G4 channel types for fish habitat improvement structures is good for bank-placed boulders; fair for plunge weirs, opposing wing-deflectors and log cover; and poor for boulder clusters and single wing deflectors.

The water temperature recorded on the survey day July 7, 1998, was 56 degrees Fahrenheit. Air temperatures ranged from 70 to 74 degrees Fahrenheit. This is a good water temperature range for salmonids, but water temperatures during warm summer months are lacking. For a more complete and accurate water temperature profile 24-hour temperatures would need to be monitored throughout the warm summer months.

Based on the total **length** of this survey, Level II habitat units consisted of 11% culvert unit, 44% flatwater units, 27% riffle units, and 18 pool units. The pools are relatively shallow, with only 3 of the 11 pools having a maximum depth greater than 2 feet.

Nine of the 11 pool tail-outs measured had embeddedness ratings of 3 or 4. Cobble embeddedness of 25% or less, a rating of 1, is considered best for the needs of salmon and steelhead. In Second right bank tributary to Two Log Creek, sediment sources should be mapped and rated according to their potential sediment yields, and control measures should be taken.

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The mean shelter rating for pools was 58. The shelter rating in the flatwater habitats was 60. A pool shelter rating of approximately 100 is desirable. Log and root wad cover structures in the pool and flatwater habitats are needed to improve both summer and winter salmonid habitat.

Nine of the 11 pool tail-outs measured had gravel or small cobble as the dominant substrate. This is generally considered good for spawning salmonids.

The mean percent canopy density for the stream was 80%. The percentage of right and left bank covered with vegetation was low at 41% and 50%, respectively. In areas of stream bank erosion or where bank vegetation is not at acceptable levels, planting endemic species of coniferous and deciduous trees, in conjunction with bank stabilization, is recommended.

### RECOMMENDATIONS

- 1) Second right bank tributary to Two Log Creek should be managed as an anadromous, natural production stream.

### COMMENTS AND LANDMARKS

The following landmarks and possible problem sites were noted. All distances are approximate and taken from the beginning of the survey reach.

Position

(ft):	Comments:
0'	Begin survey at confluence with Two Log Creek.
11'	Six foot jump.
44'	Highway 20 culvert 6 foot diameter with rust line at 1 foot.
161'	Old road crossing.
679'	Log debris accumulation, 10' long x 10' wide x 3' high, retaining 3' of sediment.
782'	Eight foot jump at end of pool with many roots.
929'	End of survey after very steep section choked with large and small woody debris. Additional 1000' upstream observed with no fish sightings.

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