STREAM INVENTORY REPORT SUBSECTION

Unnamed Tributary One to Dewarren Creek

WATERSHED OVERVIEW

The unnamed tributary is a tributary to Dewarren Creek, a tributary to North Fork Noyo River, a tributary to the Noyo River, located in Mendocino County, California (Map 1). The unnamed tributary's legal description at the confluence with Dewarren Creek is T19N R15W S29. Its location is 39°29'00" north latitude and 123°33'15" west longitude. Unnamed tributary is an ephemeral stream according to the USGS Northspur 7.5 minute quadrangle. The unnamed tributary drains a watershed of approximately 1.0 square miles. Elevations range from about 700 feet at the mouth of the creek to 1200 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 via Irmulco Road (six miles west of Willits) off Highway 20.

HABITAT INVENTORY RESULTS AND DISCUSSION

The habitat inventory of September 23, 1999, was conducted by Toni Beaumont and Christine Ramsey (WSP/AmeriCorps). The total length of the stream surveyed was 1,275 feet.

Stream flow was not measured in the unnamed tributary.

The unnamed tributary is a B4 channel type for the 1,275 feet of stream surveyed. B4 channels are riffle dominated channels with gravel substrate. They have moderate entrenchment and gradient, infrequently spaced pools, very stable plan and profile, and stable banks.

The water temperatures recorded on the survey day of September 23, 1999, ranged from 54 to 56 degrees Fahrenheit. This is a good water temperature range for salmonids. Air temperatures ranged from 56 to 69 degrees Fahrenheit. 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 41% pool units, 39% flatwater units, and 15% riffle units. Fifteen percent of the pools had a maximum depth between two and four feet.

Seven of the 26 pool tail-outs measured had an embeddedness rating of 2. One of the pool tailouts measured had an embeddedness rating of 3. Eighteen pool tail-outs had an embeddedness rating of 5. Cobble embeddedness of 25% or less, a rating of 1, is considered best for the needs of salmon and steelhead. In the unnamed tributary, sediment sources should be mapped and rated according to their potential sediment yields, and control measures should be taken.

The mean shelter rating in the flatwater habitats was 5. The mean shelter rating for pools was 6. A pool shelter rating of approximately 100 is desirable. Log and root wad cover structure in the pool and flatwater habitats would enhance both summer and winter salmonid habitat.

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Eighty-one percent of the pool tail-outs measured had gravel as the dominant substrate, while 15.4% had small cobble as the dominant substrate. Eighty-one percent of the gravel dominated pool tail-outs were unsuitable for salmon and steelhead due to the small size of the gravel. The mean percent canopy density for the stream was 92%. The percentage of right and left bank covered with vegetation was 76% and 75%, 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.

BIOLOGICAL INVENTORY RESULTS

No sites were electrofished due to low stream flow.

RECOMMENDATIONS

- 1) The unnamed tributary should be managed as an anadromous, natural production stream.
- 2) The limited water temperature available suggest that the maximum temperatures are within the acceptable range for juvenile salmonids. To establish more complete and meaningful temperature regime information, 24-hour monitoring during the July and August temperature extreme period should be performed for 3 to 5 years.
- 3) Active and potential sediment sources related to the road system need to be identified, mapped, and treated according to their potential for sediment yield to the stream and its tributaries.

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 Dewarren Creek.
97'	"Fish 96" flag.
129'	Log debris accumulation, 20' long x 10' wide x 5' high, containing 20 pieces of small woody debris.
139'	Ephemeral tributary enters from right bank.
361'	Five pieces of large woody debris located at 3 foot high plunge.

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440'	Old road on right bank.
468'	Seven foot plunge.
547'	Two foot plunge. Three pieces of large woody debris.
598'	Overhanging vegetation.
625'	Ephemeral tributary enters from right bank.
749'	Four foot plunge.
764'	Ephemeral tributary enters from right bank.
956'	Five foot plunge.
1,054'	Ephemeral tributary enters from left bank.
1,129'	Old road.
1,220'	Ephemeral tributary enters from left bank.
1,275'	End of survey due to dry channel.