

# **STREAM INVENTORY REPORT**

## **Unnamed Tributary to Dolly Varden Creek**

### WATERSHED OVERVIEW

Refer to the map of Dolly Varden Creek for the location of the unnamed tributary to Dolly Varden Creek.

The unnamed tributary is a tributary to Dolly Varden Creek, a tributary to Redwood Creek, which drains to the Pacific Ocean. It is located in Humboldt County, California. The unnamed tributary's legal description at the confluence with Redwood Creek is T08N R02E S36. Its location is 41.0433 degrees north latitude and 123.8706 degrees west longitude. The unnamed tributary is an intermittent stream according to the USGS Panther Creek 7.5 minute quadrangle. The unnamed tributary drains a watershed of approximately 1.0 square mile. Elevations range from about 740 feet at the mouth of the creek to 2,500 feet in the headwater areas. Mixed hardwood forest and mixed conifer forest dominate the watershed. The watershed is entirely privately owned and is managed for timber production. Vehicle access exists via Highway 299 to Redwood Valley Road to the Cookson Ranch Road.

### HABITAT INVENTORY RESULTS AND DISCUSSION

The habitat inventory of August 27, 2001 was conducted by J. Martin and D. Best (CCC/WSP/AmeriCorps). The total length of the stream surveyed was 210 feet.

Flow was not measured on the unnamed tributary to Dolly Varden Creek.

The water temperature recorded on the survey day August 27, 2001 was 59 degrees Fahrenheit. The air temperature was 65 degrees Fahrenheit. This is a moderate water temperature range for salmonids, but water temperature data during warm summer months are lacking. For a more complete and accurate water temperature profile, 24-hour temperatures need to be monitored throughout the warm summer months.

Based on the total length of this survey, Level II habitat units consisted of 42% pool units, 26% flatwater units, and 26% riffle units. The pools are relatively shallow, with only one of the eight pools having a maximum depth greater than two feet.

One of the eight pool tail-outs measured had an embeddedness rating of 3 or 4. Five pool tail-outs had an embeddedness rating of 1. 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 for pools was low with a rating of 37. The shelter rating in the flatwater habitats was 5. 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.

## Unnamed Tributary to Dolly Varden Creek

Seven of the eight pool tails 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 93%. This is a relatively high percentage of canopy, since 80 percent is generally considered optimum in north coast streams.

The percentage of right and left bank covered with vegetation was moderate at 94% and 91%, respectively. In areas of stream bank erosion or where bank vegetation is at unacceptable levels, planting endemic species of coniferous and deciduous trees, in conjunction with bank stabilization, is recommended.

### RECOMMENDATIONS

- 1) The unnamed tributary to Dolly Varden Creek 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.
- 4) Increase woody cover in the pools and flatwater habitat units. Most of the existing cover is from boulders. Adding high quality complexity with woody cover is desirable and in some areas the material is at hand.

### PROBLEM SITES 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    Comments:  
(ft):

---

- |      |  |
|------|--|
| 0'   | Start of survey at the confluence with Dolly Varden Creek.             |
| 119' | Log debris accumulation (LDA) measures 46' long x 25' wide x 15' high. |
| 375' | LDA measures 20' long x 25' wide x 5' high.                            |
| 546' | End of Survey. No fish observed above Habitat Unit #008.               |