#### STREAM INVENTORY REPORT SUBSECTION

## **Unnamed Tributary to North Fork Hayworth Creek**

#### WATERSHED OVERVIEW

Unnamed Tributary to North Fork Hayfork Creek is a tributary to North Fork Hayworth Creek, a tributary to the North Fork Noyo River, a tributary to the Noyo River, located in Mendocino County, California (Map 1). The legal description of Unnamed Tributary at the confluence with North Fork Hayworth Creek is T19N R15W S14. Its location is 39°29′37″ north latitude and 123°30′0″ west longitude. Unnamed Tributary is an ephemeral stream according to the USGS Northspur 7.5 minute quadrangle. This tributary to North Fork Hayworth Creek drains a watershed of approximately 0.2 square miles. Elevations range from approximately 1,020 feet at the mouth of the creek to 2,500 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 Highway 20 to Irmulco Road (approximately 6 miles west of Willits), a private road leading to Mendocino Redwoods Company land.

## HABITAT INVENTORY RESULTS AND DISCUSSION

The habitat inventory of July 27, 1999, was conducted by Ethan Jankowski and Toni Beaumont (WSP/AmeriCorps). The total length of the stream surveyed was 1,114 feet.

Stream flow was not measured in Unnamed Tributary.

Unnamed Tributary is a B3 channel type for the 1,114 feet of the stream surveyed. The suitability of B3 channel types for fish habitat improvement structures is as follows: excellent for plunge weirs, boulder clusters, and bank placed boulders, single and opposing wing-deflectors, and log cover.

The water temperatures recorded on the survey day of July 27, 1999 ranged from 55 to 56 degrees Fahrenheit. This is a good water temperature range for salmonids. Air temperatures ranged from 62 to 63 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 85% riffle units and 15% pool units. Two of the 9 pools encountered had a maximum depth between two and three feet.

Two of the 9 pool tail-outs measured had an embeddedness rating of 2. Five of the 9 pool tail-outs measured had an embeddedness rating of 3. There was one embeddedness rating of 4 and one of 5. Cobble embeddedness of 25% or less, a rating of 1, is considered best for the needs of salmonid spawners. In Unnamed Tributary, sediment sources should be mapped and rated according to their potential sediment yields, and control measures should be taken.

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Sixty-seven percent of the 9 pool tail-outs measured had large cobble, boulders, or bedrock as the dominant substrate, while 33% were dominated by gravel or small cobble.

The mean shelter rating for pools was 45. A pool shelter rating of approximately 100 is desirable.

The mean percent canopy density for the stream was 96%. The percentage of right and left bank covered with vegetation was 59% and 63%, 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**

Electrofishing was not conducted in Unnamed Tributary due to low stream flow.

## **RECOMMENDATIONS**

- 1) Unnamed Tributary to North Fork Hayworth Creek should be managed as an anadromous, natural production stream.
- 2) The limited water temperature available suggests 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 the confluence with North Fork Hayworth Creek. Channel type is a B3.                  |
| 459'     | Log debris accumulation, 30 feet long x 20 feet wide x 10 feet high, retaining gravel and large wood. |
| 653'     | Log debris accumulation retaining gravel and fine sediment.   |

# **Unnamed Tributary to North Fork Hayworth Creek**

| 882'   | Unnamed high gradient tributary enters from right bank; 56 degrees Fahrenheit water temperature. |
|--------|--|
| 896'   | Three foot plunge.   |
| 1,001' | Log debris accumulation, 12 feet long x 12 feet wide x 6 feet high.                              |
| 1,101' | Unnamed high gradient tributary enters from right bank; 56 degrees Fahrenheit water temperature. |
| 1,114' | End of survey. Approximately 45 percent gradient.  |

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