# STREAM INVENTORY REPORT SUBSECTION FIRST LEFT BANK TRIBUTARY TO OIL CREEK

#### WATERSHED OVERVIEW

The first left bank tributary to Oil Creek is a tributary to Oil Creek, located approximately 21,130' from Oil Creek's confluence with the Pacific Ocean. It is located in Humboldt County, California. Its legal description at the confluence with Oil Creek is T01N R03W S01. Its location is 40°30′12″ north latitude and 124°21′35″ west longitude. The first left bank tributary to Oil Creek is a blue line stream according to the USGS Ferndale and Capetown 7.5 minute quadrangles. The first left bank tributary to Oil Creek drains a watershed of approximately 0.24 square miles. Elevations range from about 200 feet at the mouth of the creek to 1,400 feet in the headwater areas. Mixed conifer forest dominates the watershed. The watershed is entirely privately owned and is managed for timber production and rangeland. Vehicle access exists via the Mattole Road.

## HABITAT INVENTORY RESULTS AND DISCUSSION

The habitat inventory of August 12, 1999, was conducted by Andrea Kudrez and Toni Beaumont (WSP/AmeriCorps). The total length of the stream surveyed was 2,184 feet.

The first left bank tributary to Oil Creek is an A4 channel type for the entire 2,184 feet of stream surveyed. A4 channels are steep, narrow, cascading, step-pool streams with high energy / debris transport associated with depositional soils and a gravel channel.

The water temperature recorded on the survey day of August 12, 1999 was 55 degrees Fahrenheit. Air temperatures ranged from 61 to 62 degrees Fahrenheit. This is a favorable water temperature for salmonids. 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 63% flatwater units, 22% riffle units, and 11% pool units (Table 1). The pools are shallow, with none of the 13 pools having a maximum depth greater than 2 feet (Table 4).

Sixty-nine percent of the pool tail-outs measured had embeddedness ratings of 3. No pool tail-outs that had a rating of 1 (Table 8). Cobble embeddedness of 25% or less, a rating of 1, is considered best for spawning salmon and steelhead. In the first left bank tributary to Oil Creek, 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 14. The shelter rating in the flatwater habitats was 15 (Table 1). 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.

Nine of the thirteen pool tail-outs measured had gravel or small cobble as the dominant substrate (Graph 1). This is generally considered good for spawning salmonids.

The mean percent canopy density for the stream was 97% (Table 8). The percentage of the right and left bank covered with vegetation was 91% and 92%, respectively (Table 7). 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**

Six sites were electrofished on August 30, 1999 in the first left bank tributary to Oil Creek. The units were sampled by Michelle Gilroy (DFG) and Chris Ramsey (WSP/AmeriCorps). The units sampled were the first six pools encountered, starting at 77 feet and ending 385 feet from the confluence with Oil Creek. Only salamanders were observed during the sampling.

#### **RECOMMENDATIONS**

- 1) The first left bank tributary to Oil Creek should be managed as an anadromous, natural production stream.
- 2) Inventory and map sources of stream bank and upslope erosion and prioritize them according to present and potential sediment yield.

## **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.

- 0' Begin survey at confluence with Oil Creek, 21,130' from the Pacific Ocean. Channel type is A4.
- 77' First electrofishing site.
- 95' Second electrofishing site.
- 142' Third electrofishing site.
- 188' Log debris accumulation, 3' long x 20' wide x 5' high, retaining 5' of sediment.

- 190' Fourth electrofishing site.
- 252' Fifth electrofishing site.
- 342' Left bank failure, 10' long x 10' high. Four logs across channel.
- 385' Sixth electrofishing site.
- 450' Left bank failure, 15' long x 15' high.
- 509' Large log lying across creek.
- 553' Right bank failure, 30' long x 30' high. Large and small woody debris in channel.
- 606' Nine foot high boulder waterfall.
- 885' Left bank failure, 15' long x 25' high, causing water flow to go subsurface.
- 932' Left bank failure, 5' long x 10' high.
- 1,181' Small and large woody debris in channel.
- 1,439' Creek forks. Main stem is the right fork.

  Left fork water temperature was 55 degrees F. High gradient. Small woody debris in channel.
- 1,590' Eight and a half foot plunge over boulders with very shallow pool at base.
- 1,734' Water goes subsurface under log debris accumulation, 6' long x 4.5' high x 15' wide, made up of two logs retaining 5' of sediment.
- 1,781' Small and large woody debris in channel.
- 2,016' Right bank tributary, 54 degrees F water temperature.
- 2,184' Ten foot high bedrock falls. End of survey.