

**STREAM INVENTORY REPORT
SUBSECTION
SECOND LEFT BANK TRIBUTARY TO OIL CREEK**

WATERSHED OVERVIEW

The second left bank tributary to Oil Creek is a tributary to Oil Creek located approximately 21,980' from the confluence with the Pacific Ocean. It is located in Humboldt County, California. The second left bank tributary's legal description at the confluence with Oil Creek is T01N R02W S05. Its location is 40°30'04" north latitude and 124°19'12" west longitude. The second left bank tributary is a blue line stream according to the USGS Ferndale 7.5 minute quadrangle. The second left bank tributary to Oil Creek drains a watershed of approximately 1.1 square miles. Elevations range from about 720 feet at the mouth of the creek to 2,464 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 Mayflower Ranch Road.

HABITAT INVENTORY RESULTS AND DISCUSSION

The habitat inventory of August 5, 1999, was conducted by Andrea Kudrez and Toni Beaumont (WSP/AmeriCorps). The total length of the stream surveyed was 3,086 feet.

The second left bank tributary to Oil Creek is a B2 channel type for 1,621 feet and a F4 channel type for the remaining 1,465 feet of stream surveyed. B2 channels are riffle dominated channels with boulder substrate. They have moderate entrenchment and gradient, infrequently spaced pools, very stable plan and profile, and stable banks. F4 channels are low gradient, entrenched, meandering riffle/pool channels with high width/depth ratios and gravel substrate.

The water temperatures recorded on the survey day of August 5, 1999 ranged from 56 to 59 degrees Fahrenheit. This is a good water temperature range for salmonids. Air temperatures ranged from 63 to 64 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 65% flatwater units, 23% pool units, and 12% riffle units (Table 1). The pools are relatively shallow, with 12 of the 29 pools having a maximum depth greater than 2 feet (Table 4).

Twenty-two of the 27 pool tail-outs measured had embeddedness ratings of 3 or 4. There were no pool tail-outs with a rating of 1 (Table 8). Cobble embeddedness of 25% or less, a rating of 1, is considered best for the needs of salmon and steelhead. In the second 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.

Fifteen of the 27 pool tail-outs had boulders as the dominant substrate (Graph 1). This is generally considered unsuitable for spawning salmonids.

The mean shelter rating for pools was 52. The shelter rating in the flatwater habitats was 6 (Table 1). A pool shelter rating of approximately 100 is desirable.

The mean percent canopy density for the stream was 96% (Table 8). The percentage of right and left bank covered with vegetation was moderate at 92.5% and 93.5%, 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

Five sites were electrofished on August 30, 1999 in the second left bank tributary to Oil Creek. The units were sampled by Michelle Gilroy (DFG) and Chris Ramsey (WSP/AmeriCorps).

The first site sampled was habitat unit 2, a lateral scour pool-boulder formed located approximately 20 feet from the confluence with Oil Creek. The site yielded 1 one-plus age class steelhead.

The second site was habitat unit 11, a lateral scour pool-boulder formed located approximately 612 feet above the creek mouth. The site yielded 1 one-plus and 1 two-plus age class steelhead.

The third site was habitat unit 15, a lateral scour pool-boulder formed located approximately 765 feet above the creek mouth. One two-plus age class steelhead was sampled.

The fourth site sampled was habitat unit 19, a lateral scour pool-boulder formed located approximately 950 feet above the creek mouth. The site yielded 1 one-plus age class steelhead.

The fifth site sampled was habitat unit 23, a lateral scour pool-boulder formed located approximately 1,175 feet above the creek mouth. One two-plus age class steelhead was sampled.

Surveyors walked further upstream to approximately 2,250 feet above the creek mouth and no fish were observed from the stream bank.

The following chart summarizes the electrofishing data collected:

Date	Site #	Approx.D ist. from mouth (ft.)	Hab. Unit #	Hab. Type	Reach #	Channel type	Steelhead YOY 1+ 2+		
08/30/99	1	20	2	LSBo	1	B2	0	1	0
08/30/99	2	612	11	LSBo	1	B2	0	1	1
08/30/99	3	765	15	LSBo	1	B2	0	0	1
08/30/99	4	950	19	LSBo	1	B2	0	1	0
08/30/99	5	1,175	23	LSBo	1	B2	0	0	1

RECOMMENDATIONS

- 1) The second left bank tributary to Oil 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.
- 3) 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, approximately 21,980' from the Pacific Ocean. Channel type is an B2.
- 20' First electrofishing site.
- 43' Three foot high plunge.
- 144' Five foot high plunge.
- 589' Log debris accumulation, 23' long x 40' wide x 12' high, including 20 plus trees, retaining sediment. Left bank failure, 25' long x 40' high.
- 612' Second electrofishing site.
- 765' Third electrofishing site.
- 782' 1.5' high plunge.
- 950' Fourth electrofishing site.
- 1,150' Left bank failure, 25' long x 40' high.
- 1,175' Fifth electrofishing site.
- 1,232' Left bank tributary, 56 degrees F.
- 1,386' Five foot plunge.
- 1,621' Channel type changes to F4.
- 1,680' Right bank failure, 25' long x 40' high.
- 2,622' Ephemeral right bank tributary.
- 2,682' First right bank tributary to second left bank tributary to Oil Creek, 56 degrees F. (see subsection report).
- 2,817' Trash in the creek including metal tank, refrigerator, chairs and tires.

2,956' 11' high boulder plunge with no associated pool.

3,055' Log debris accumulation, 20' long x 15' high x 25' wide retaining sediment and trash.

3,086' End of survey. Waterfall 25' high with no associated pool.