STREAM INVENTORY REPORT

"Gulch 19"

WATERSHED OVERVIEW

The unnamed tributary commonly known as, and herein after referred to as, Gulch 19 is a tributary to North Fork Ten Mile River. Elevations range from about 480 feet at the mouth of the creek to 2,600 feet in the headwater areas. Gulch 19's legal description at the confluence with North Fork Ten Mile River is T20N R16W S24. Its location is 39° 34'37" N. latitude and 123°34'58" W. longitude according the USGS Sherwood Peak 7.5 minute quadrangle.

HABITAT INVENTORY RESULTS

The habitat inventory of September 7 through September 8, 1995, was conducted by Diana Hines and David Lundby. The total length of stream in Gulch 19 surveyed was 5,455 feet (1.0 miles).

Flow measured at the mouth of Gulch 19 on September 13,1995 was 0.16 cubic feet per second (cfs).

Gulch 19 is comprised of one reach for the entire 5,455 feet of creek and is an F3 channel type.

Table 1 summarizes the Level II riffle, flatwater, and pool habitat types. By percent occurrence, riffles comprised 38%, flatwater 30% and pools 32% of the habitat types (Graph 1). By percent total length, riffle habitat types comprised 42%, flatwater 39% and pools 18% (Graph 2).

Eleven Level IV habitat types were identified in Gulch 19. The data are summarized in Table 2. The most frequently occurring habitat types were low gradient riffles, 24%, plunge pools, 17%, and runs, 16% (Graph 3). The most prevalent habitat types by percent total length were runs at 27%, low gradient riffles at 23% and high gradient riffles at 13% (Table 2).

Table 3 summarizes main channel, scour and backwater pools, which are Level III pool types. Scour pools were most often encountered at 53% occurrence and comprised 51% of the total length of pools in Gulch 19.

Table 4 is a summary of maximum pool depths by pool habitat types. Pools with depths of two feet or greater are considered optimal for fish habitat. In Gulch 19, 19 of the 64 pools (30%) had a depth of two feet or greater (Graph 4).

The depth of cobble embeddedness was estimated at pool tail-outs. Of the 61 pool tail-outs measured in Gulch 19, 5% had a value of 1, 8% had a value of 2, 23% had a value of 3 and 64% had a value of 4 (Graph 5).

Of the Level II habitat types, pool habitat types had the highest mean shelter rating at 58 (Table 1). Of the Level III pool types, backwater pools had the highest mean shelter rating at 95 (Table 3).

Of the 64 pools in Gulch 19, there were none formed by large woody debris (LWD).

Table 6 summarizes dominant substrate by Level IV habitat types. Of the low gradient riffles measured, 50% had gravel as the dominant substrate (Graph 6).

Mean percent closed canopy was 87%: 49% coniferous trees and 38% deciduous trees. Mean percent open was 13% (Graph 7).

Table 7 summarizes the mean percent substrate/vegetation types found along the banks of the stream. The mean percent right bank vegetated in Gulch 19 was 57% while the mean percent left bank vegetated was 59%. Coniferous trees were the dominant bank vegetation type observed in 50% of the units fully measured. Additionally, 21% of the units had deciduous trees as the dominant vegetation type. The dominant substrate composing the structure of the stream banks was sand/silt/clay, found in 38% of the units fully measured.

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:
498	Culvert at end of pool creating approximately 4' high plunge.
579	6' diameter x 62’ long culvert.
887	Channel type measured.
1537	Left bank failure measures 30' high x 40' long.
2374	Right bank tributary.
2473	Old road crossing.
3762	Channel type measured.
4032	Log jam measures 10' high x 12' wide x 25' long, mainly LWD.

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5455	End of survey. Channel splits into two tributaries, which are dry and have steep gradients. Highly entrenched channels. No fish observed for last 600 feet.

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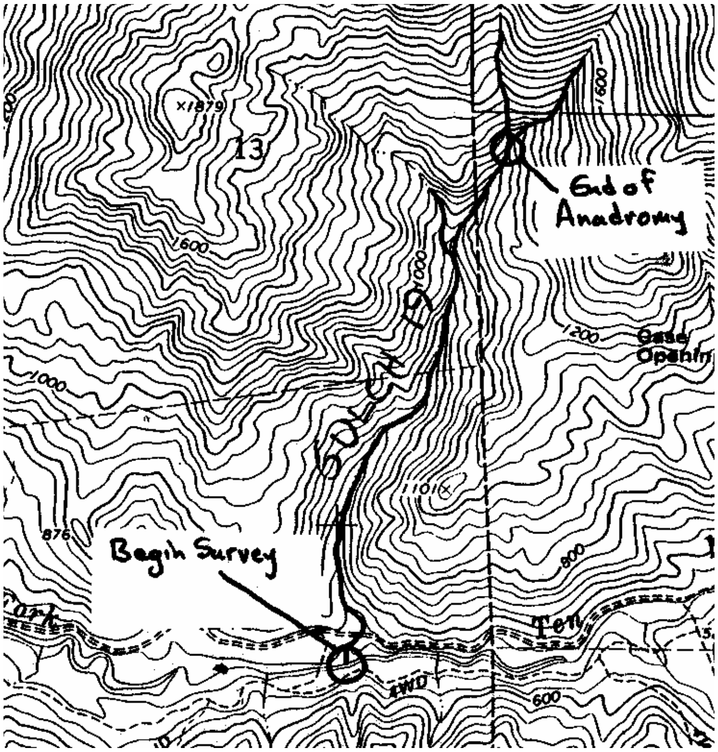
End of Anadromy
Begin Survey
13
1600
1000
876
1101
1200
800
600
4WD
Ten