

STREAM INVENTORY REPORT

“Gulch 8”

WATERSHED OVERVIEW

The unnamed tributary, commonly known as, and herein after referred to as, Gulch 8 is a tributary to North Fork Ten Mile River. Elevations range from about 360 feet at the mouth of the creek to 2,200 feet in the headwater areas. Gulch 8's legal description at the confluence with North Fork Ten Mile River is T20N R16W S15. Its location is 39° 35'40" N. latitude and 123°36'38" W. longitude according to the USGS Dutchmans Knoll 7.5 minute quadrangle.

HABITAT INVENTORY RESULTS

The habitat inventory of September 6 through September 7, 1995, was conducted by Diana Hines and David Lundby. The total length of stream in Gulch 8 surveyed was 5,455 feet (1.0 miles).

Flow measured at the mouth of Gulch 8 on September 13, 1995 was 0.96 cubic feet per second (cfs).

Gulch 8 is a B3 channel type for the entire stream surveyed.

Table 1 summarizes the Level II riffle, flatwater, and pool habitat types. By percent occurrence, riffles comprised 33%, flatwater 25% and pools 41% of the habitat types (Graph 1). Of the total survey length, riffles comprised 27%, flatwater 48% and pools 23% (Graph 2).

Fourteen Level IV habitat types were identified in Gulch 8. The data are summarized in Table 2. The most frequently occurring habitat types were mid-channel pools, 27%, low gradient riffles, 25%, and step runs, 18% (Graph 3). The most prevalent habitat types by percent total length were step runs, 44%, low gradient riffles, 22%, and mid-channel pools, 16% (Table 2).

Table 3 summarizes main channel, scour and backwater pools, which are Level III pool types. Main channel pools were most often encountered at 69% occurrence and comprised 76% of the total length of pools in Gulch 8.

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 8, 24 of the 61 pools (39%) had a depth of two feet or greater (Graph 4).

The depth of cobble embeddedness was estimated at pool tail-outs. Of the 58 pool tail-outs measured in Gulch 8, 3% had a value of 1, 31% had a value of 2, 29% had a value of 3 and 36% had a value of 4 (Graph 5).

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Of the Level II habitat types, pool habitat types had the highest mean shelter rating at 63 (Table 1). Of the Level III pool type, scour pools had the highest mean shelter rating at 98 (Table 3).

Of the 61 pools in Gulch 8, 4% were formed by large woody debris (LWD): 2% by logs and 2% by root wads (calculated from Table 4).

Table 6 summarizes dominant substrate for Level IV habitat types. Gravel, small cobble and boulders all occurred equally as the dominant substrate in the low gradient riffles measured at 33% each (Graph 6).

Mean percent closed canopy for Gulch 8 was 86%: 35% coniferous trees and 51% deciduous trees. Mean percent open was 14% (Graph 7).

Table 7 summarizes the mean percent substrate/vegetation types found along the banks of the stream. The mean percent right bank vegetated was 50% while the mean percent left bank vegetated was 49%. Deciduous trees were the dominant bank vegetation type observed in 43% of the fully measured. Additionally, 26% of the units had coniferous trees as the dominant bank vegetation type. The dominant substrate composing the structure of the stream banks was cobble/gravel, found in 35% 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:
813	Channel type measured.
3436	Creek splits here - 1/4 and 3/4. The small fork is highly entrenched, with three possible fish barriers in about 500', no fish observed in 1000', slope generally 6%, 10-12% in places- no spawning habitat.
4629	Left bank failure measures 35' long x 40' high, contributing fine sediment to the channel.
5214	Culvert with 8' diameter under road crossing, 40' long.
5356	Possible fish barrier.
5370	Approximately 7' high plunge at end of pool. Possible fish barrier.

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5455 End of survey. Channel splits at end of cascade into two tributaries. Cascade continues further on east tributary with slope of approximately 12% or higher with a 12' waterfall in portion of cascade. No fish were observed. Channel approaching A2 channel type. West tributary also has cascade with slope of 15%, also approaching A2 channel type.

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