

STREAM INVENTORY REPORT

O'Conner Gulch

WATERSHED OVERVIEW

O'Conner Gulch is a tributary to North Fork Ten Mile River. Elevations range from about 200 feet at the mouth of the creek to 1800 feet in the headwater areas. O'Conner Gulch's legal description at the confluence with North Fork Ten Mile River is T20N R16W S08. Its location is 39° 36' 13" N. latitude and 123° 39' 42" W. longitude, according to the USGS Dutchman's Knoll 7.5 minute quadrangle.

HABITAT INVENTORY RESULTS

The habitat inventory of September 5, 1995 was conducted by Diana Hines and David Lundby. The total length of stream in O'Conner Gulch surveyed was 3,488 feet (0.66 miles) (Table 1).

Flow measured at the mouth of O'Conner Gulch on September 13, 1995 was 0.25 cubic feet per second (cfs).

O'Conner Gulch is a B4 channel type for the entire 3,488 feet of stream surveyed.

Table 1 summarizes the Level II riffle, flatwater, and pool habitat types. By percent occurrence, riffles comprised 33%, flatwater 29% and pools 35% of the habitat types in O'Conner Gulch (Graph 1). By percent total length, riffles comprised 28%, flatwater 59% and pools 12% (Graph 2).

Seven Level IV habitat types were identified in O'Conner Gulch. The data are summarized in Table 2. The most frequently occurring habitat types were low gradient riffles, 28%, step runs, 24%, and plunge pools, 20% (Graph 3). The most prevalent habitat types by percent total length were step runs at 56%, low gradient riffles at 25%, and plunge pools 8% (Table 2).

Table 3 summarizes main channel, scour and backwater pools which are Level III pool types. Scour pools were most often encountered at 55% occurrence and comprised 63% of the total length of pools in O'Conner Gulch.

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 O'Conner Gulch, 10 of the 29 pools (34%) had a depth of two feet or greater (Graph 4).

The depth of cobble embeddedness was estimated at pool tail-outs. Of the 29 pool tail-outs measured, 0% had a value of 1, 10% had a value of 2, 17% had a value of 3 and 72% had a value of 4 (Graph 5).

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Of the Level II habitat types, riffle habitat types had the highest mean shelter rating at 76 (Table 1). Of the Level III pool types, scour pools had the highest mean shelter rating at 94 (Table 3).

Of the 29 pools in O'Conner Gulch, none were formed by large woody debris (LWD).

Table 6 summarizes dominant substrate by Level IV habitat types. Of the low gradient riffles measured, 67% had gravel as the dominant substrate Graph 6).

Mean percent closed canopy was 99%: 23% coniferous trees and 76% deciduous trees. Mean percent open was 1% (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 O'Conner Gulch was 43% while the mean percent left bank vegetated was 44%. Deciduous trees were the dominant bank vegetation type observed in 54% of the units fully measured. Additionally, coniferous trees were the dominant bank vegetation type in 39% of units fully measured. The dominant substrate composing the structure of the stream banks was cobble/gravel, found in 43% 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:
299	Culvert with plunge of 7' dropping into end of pool; fish barrier, however, culvert to be replaced with bridge in 1995.
410	Culvert has 6' circumference and is approximately 101' long.
745	Channel type measured.
1955	Tributary enters on right bank.
3015	Right bank failure measures 15' high x 40' long.
3169	Slope is approximately 10%.
3488	End of survey. Channel splits into two even tributaries that are highly entrenched and lacking in suitable spawning habitat. Slope approaching 10% or higher. Channel type done measured.

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