STREAM INVENTORY REPORT

"McGuire Creek"

WATERSHED OVERVIEW

The unnamed tributary commonly know as, and herein after referred to as, McGuire Creek is a tributary to Little North Fork Ten Mile River. Elevations range from 280 feet at the mouth of the creek to 1,800 feet in the headwater areas. McGuire Creek's legal description at the confluence with the Little North Fork Ten Mile River is T20N R17W S02. Its location is 39°37'9"N. latitude and 123°42'54"W. longitude according to the USGS Dutchman's Knoll 7.5 minute quadrangle.

HABITAT INVENTORY RESULTS

The habitat inventory of August 3, 1995 through August 8, 1995, was conducted by Diana Hines and David Lundby. The total length of stream surveyed was 9,870 feet (1.9 miles) including 19 feet of side channel (Table 1).

Flow measured at the mouth of McGuire Creek on August 4, 1995 was 0.66 cubic feet per second (cfs).

McGuire Creek is comprised of three reaches: Reach 1 is a B3 channel type for the first 3,591 feet, Reach 2 is a D4 channel type for the next 1,622 feet, and Reach 3 is a B4 channel type for the remaining 4,657 feet of creek.

Table 1 summarizes the Level II riffle, flatwater, and pool habitat types. By percent occurrence, riffles comprised 25%, flatwater 30% and pools 40%, of the habitat types in McGuire Creek (Graph 1). By percent total length, riffles comprised 15%, flatwater 56%, and pools 16% (Graph 2).

Twelve Level IV habitat types were identified in McGuire Creek. These data are summarized in Table 2. The most frequently occurring habitat types were mid-channel pools and low gradient riffles, both at 22%, as well as step runs at 19% (Graph 3). The most prevalent habitat types by percent total length were step runs at 50%, dry units at 13% and low gradient riffles at 12%.

Table 3 summarizes main channel, scour and backwater pools, which are Level III pool types. Main channel pools were most often encountered at 56% occurrence and comprised 57% of the total length of pools.

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 McGuire Creek, 23 of the 101 pools (23%) had a depth of two feet or greater (Graph 4).

The depth of cobble embeddedness was estimated at pool tail-outs. Of the 97 pool tail-outs measured, 0% had a value of 1, 0% had a value of 2, 15% had a value of 3 and 85% had a value of 4 (Graph 5).

Of the Level II habitat types, pool habitat types had the highest mean shelter rating at 42 (Table 1). Of the Level III pool types, main channel pools had the highest mean shelter rating at 49 (Table 3).

Of the 101 pools, 10% were formed by large woody debris (LWD): 8% by logs and 2% by root wads (calculated from Table 4).

Table 6 summarizes dominant substrate by Level IV habitat types. Of the low gradient riffles measured, 100% had gravel as the dominant substrate (Graph 6).

Mean percent closed canopy for McGuire Creek was 90%: 47% coniferous trees and 43% deciduous trees. Mean percent open was 10% (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 66% while the mean percent left bank vegetated was 59%. Coniferous trees were the dominant bank vegetation type observed in 44% of the units surveyed. Additionally, 19% of the units had deciduous trees as the dominant bank vegetation type. The dominant substrate composing the structure of the stream banks consisted of sand/silt/clay, found in 94% 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:
1309	Bridge crossing.
3184	Tributary enters on left bank.
5141	Tributary enters on right bank.
7272	Two large log redwood jams over beginning of unit.
7799	Log jam measures 40’ long x 6' high x 12' wide.
8535	Log jam consisting of conifers.

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9247	Tributary enters on right bank.
9643	Tributary enters on left bank.
9889	End of survey. Cascade slope approx. 15%, ending in a 15' drop, channel type approaching A3, no fish observed for last 1000'. No suitable spawning habitat observed; highly embedded with little canopy cover.

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