

# STREAM INVENTORY REPORT

## Patsy Creek

### WATERSHED OVERVIEW

Patsy Creek is a tributary to North Fork Ten Mile River, located in Mendocino County, California. Elevations range from approximately 500 feet at the mouth of the creek to 1,600 feet in the headwater areas. Patsy Creek's legal description at the confluence with North Fork Ten Mile River is T20N R15W S18. Its location is 39°34'50" N. latitude and 123°34'20" W. longitude, according to the USGS Sherwood Peak 7.5 minute quadrangle.

### HABITAT INVENTORY RESULTS

The habitat inventory of September 11 through September 13, 1995, was conducted by Diana Hines, David Lundby and Dave Wright. The total length of stream in Patsy Creek surveyed was 8,009 feet (1.5 miles) (Table 1).

Flow measured at the mouth of Patsy Creek on September 13, 1995 was 0.22 cubic feet per second (cfs).

Patsy Creek is an F3 channel type for the entire stream surveyed.

Table 1 summarizes the Level II riffle, flatwater, and pool habitat types. By percent occurrence, riffles comprised 35%, flatwater 34% and pools 30% of the habitat types (Graph 1). By percent total length, riffles comprised 33%, flatwater 45 % and pools 19% (Graph 2).

Twelve Level IV habitat types were identified in Patsy Creek. The data are summarized in Table 2. The most frequently occurring habitat types were low gradient riffles, 30%, mid-channel pools, 20%, and runs, 19% (Graph 3). The most prevalent habitat types by percent total length were step runs at 30%, followed by low gradient riffles at 28%, and runs at 15%.

Table 3 summarizes main channel, scour and backwater pools, which are Level III pool types. Main channel pools were most often encountered at 67% and comprised 66% 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 this habitat. In Patsy Creek, 22 of the 70 pools (31%) had a depth of two feet or greater (Graph 4).

The depth of cobble embeddedness was estimated at pool tail-outs. Of the 71 pool tail-outs measured, 11% had a value of 1, 24% had a value of 2, 11% had a value of 3 and 54% had a value of 4 (Graph 5).

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Of the Level II pool habitat types, pools had the highest mean shelter rating at 73 (Table 1). Of the Level III pool types, main channel pools had the highest mean shelter rating at 78 (Table 3).

Of the 70 pools, 7% were formed by large woody debris (LWD): 3% by logs and 4% by root wads (calculated from Table 4).

Table 6 summarizes the dominant substrate by Level IV habitat types. Both gravel and boulders occurred 33% each as the dominant substrate types in the low gradient riffles fully measured (Graph 6).

Mean percent closed canopy was 91%: 38% coniferous trees and 53% deciduous trees. Mean percent open was 9% (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 75% while the mean percent left bank vegetated was 81%. Deciduous trees were the dominant bank vegetation type observed in 53% of the units fully measured. Additionally, 36% of the units had coniferous trees as the dominant bank vegetation, including downed trees, logs, and root wads. The dominant substrate comprising the structure of the stream banks consisted of cobble/gravel, found in 47% 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:

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305	Road over this unit with wooden bridge.
1422	Channel type measured.
3916	Right bank tributary.
4932	Left bank tributary.
5561	Log jam measures 10' high x 8' wide x 15' long.
5683	Log jam measures 12' high x 30' wide x 40' long, mainly LWD.

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- 6105 Left bank failure measures 25' high x 30' long.
- 6435 Fish observed.
- 6704 Log jam measures 14' high x 25' wide x 12' long, both LWD and small woody debris.
- 7344 Log jam.
- 7715 Left bank tributary.
- 7996 Cascade has slope of approximately 23%.
- 8009 End of survey. Pool ends in a boulder-bedrock cascade with a slope of 30%. Cascade continues for approximately 280'. No fish observed in last 800'.

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