#### STREAM INVENTORY REPORT

#### Little North Fork Ten Mile River

#### WATERSHED OVERVIEW

Little North Fork Ten Mile River is a tributary to North Fork Ten Mile River located in Mendocino County, California. Elevations range from about 280 feet at the mouth of the creek to 1,500 feet in the headwater areas. Little North Fork Ten Mile River's legal description at the confluence with North Fork Ten Mile River is T20N R17W S13. Its location is 39°35'38" N. latitude and 123°42'48" W. longitude according to the USGS Dutchman's Knoll 7.5 minute quadrangle.

#### HABITAT INVENTORY RESULTS

The habitat inventory of August 9, through August 15, 1995, was conducted by Diana Hines and David Lundby. The total length of stream surveyed was 21,422 feet (4.1 miles) including 62 feet of side channel (Table 1).

Flow measured at the mouth of Little North Fork Ten Mile River on August 4, 1995 was 2.45 cubic feet per second (cfs).

Little North Fork Ten Mile River is comprised of three reaches: Reach 1 is a C4 channel type for the first 14,578 feet, Reach 2 is a B3 channel type for the next 3,990 feet and Reach 3 is an F4 channel type for the remaining 2,854 feet of creek.

Table 1 summarizes the Level II riffle, flatwater, and pool habitat types. By percent occurrence, riffles comprised 20%, flatwater 29% and pools 51% of the habitat types (Graph 1). By percent total length, riffles comprised 15%, flatwater 41% and pools 44% (Graph 2).

Eighteen Level IV habitat types were identified in Little North Fork Ten Mile River. These data are summarized in Table 2. The most frequently occurring habitat types were low gradient riffles, 19%, mid channel pools, 18%, and both runs and step runs at 14% (Graph 3). The most prevalent habitat types by percent total length were step runs 27%, low gradient riffles 15% and mid-channel pools also at 15% (Table 2).

Table 3 summarizes main channel, scour and backwater pools, which are Level III pool types. Scour pools were most often encountered at 59% occurrence and comprised 61% 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 Little North Fork Ten Mile River, 131 of the 292 pools (45%) had a depth of two feet or greater (Graph 4).

The depth of cobble embeddedness was estimated at pool tail-outs. Of the 288 pool tail-outs measured, 0% had a value of 1, 0% had a value of 2, 17% had a value of 3 and 83% had a value of 4 (Graph 5).

Of the Level II habitat types, pool habitat types had the highest mean shelter rating at 44 (Table 1). Of the Level III pool types, scour pools had the highest mean shelter rating at 46 (Table 3).

Of the 292 pools, 40% were formed by large woody debris (LWD): 23% by logs and 17% by root wads (calculated from Table 4).

Table 6 summarizes the 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 was 90%: 39% coniferous trees and 51% 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 and left banks vegetated were each 80%. Grass was the dominant bank vegetation type observed in 34% of the units fully measured. Coniferous and deciduous trees were dominant bank vegetation types in 30% and 32% of the units fully measured. The dominant substrate composing the structure of the stream banks was sand/silt/clay, found in 89% 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:
174	Road crossing.
869	RBA site LNFT # 1.
2206	Confluence with Buckhorn Creek.
2960	Low road crossing with 3' diameter culvert.
3005	Channel type measured.
3694	Log jam measures 3' high x 20' wide x 10' long.
4660	Log jam measures 6' high x 7' wide x 15' long.

5180	Log jam measures 5' high x 28' wide x 30' long.
7706	Road crossing.
8697	Log jam measures 35' wide x 6' high x 12' long.
9361	Tributary enters on right bank.
10249	Was restored to a plunge (log) pool, but has failed - main scour is now under log.
10307	Confluence with Barlow Gulch.
10388	Undercut rootwad measures of 3' diameter x 10'long.
10619	Log jam measures 17' long x 32' wide x 5' high. Right bank failure contributing fine sediment to the channel.
10811	Right bank failure.
10859	Lots of silt.
10890	Windfalls, fir, alder and douglas fir, about 3' to 6' above creek.
11084	Slide above on left bank, contributing gravel/cobble to the channel.
11808	Confluence with Blair Creek.
12834	Hobo temperature monitor site.
12891	RBA site LNFT #2.
14474	Tributary enters on left bank.
14649	Road crossing here.
14697	Channel type measured.
15323	Tributary enters on left bank.
16193	Tributary enters on right bank.
17435	Confluence with McGuire Creek.
18476	Tributary.

18795	Channel type measured.
19071	Major windfall area, tan oaks across creek.
19679	Tributary enters on right bank.
20589	Channel is periodically choked with LWD jams and groups of small woody debris. Orange bacteria fills the channel.
20625	7' high plunge.
21422	End of survey due to end of anadromy at the Miller dam, 30' drop.

