STREAM INVENTORY REPORT

Unnamed Creek

WATERSHED OVERVIEW

Refer to the map of Long Valley Creek for the location of this unnamed tributary.

This unnamed tributary is tributary to Long Valley Creek, tributary to Outlet Creek, tributary to the Mainstem Eel River, located in Mendocino County, California. Unnamed's legal description at the confluence with Long Valley Creek is T21N R14W S31. Its location is 39°38'02" N. latitude and 123°29'53" W. longitude. Unnamed is an ephemeral stream according to the USGS Laytonville 7.5 minute quadrangle. Unnamed Creek drains a watershed of approximately 0.73 square miles. Elevations range from about 1,700 feet at the mouth of the creek to 2,200 feet in the headwater areas. Mixed hardwood forest and grassland dominates the watershed. The watershed is privately owned and is managed for timber production and grazing. Vehicle access exists via Highway 101 to a private ranch road.

HABITAT INVENTORY RESULTS AND DISCUSSION

The habitat inventory of July 12, 1995, was conducted by Jeffrey Jahn and Kyra Short (WSP/AmeriCorps). The total length of the stream surveyed was 1,785 with an additional 67 feet of side channel habitat.

Flows were not measured on the Unnamed Creek.

Unnamed Creek is an F4 channel type for the entire 1,785 feet of stream surveyed. The suitability of F4 channel types for fish habitat improvement structures is described in the main body of this report.

The water temperatures recorded on the survey day July 12, 1995, ranged from 59 to 61 ° Fahrenheit. Air temperatures ranged from 63 to 69 ° Fahrenheit. This is a good water temperature range for salmonids. To make any further conclusions, temperatures would need to be monitored throughout the warm summer months, and more extensive biological sampling would need to be conducted.

Flatwater habitat types comprised 35% of the total **length** of this

survey, riffles 20%, pools 41%, and 4% was dry. The pools are relatively shallow, with only 9 of the 27 pools having a maximum depth greater than 2 feet. Primary pool criteria are discussed in the main body of this report.

Twenty-two of the 27 pool tail-outs measured had embeddedness ratings of 3 or 4. One had a 1 rating. Cobble embeddedness measured to be 25% or less, a rating of 1, is considered best for the needs of salmon and steelhead. In Unnamed Creek, sediment sources should be mapped and rated according to their potential sediment yields, and control measures should be taken.

The mean shelter rating for pools was low with a rating of 45. The shelter rating in the flatwater habitats was slightly lower at 25. A pool shelter rating of approximately 100 is desirable. The relatively small amount of cover that now exists is being provided primarily by boulders in all habitat types. Log and root wad cover structures in the pool and flatwater habitats are needed to improve both summer and winter salmonid habitat.

All of the 4 low gradient riffles fully measured had gravel or small cobble as the dominant substrate. This is generally considered good for spawning salmonids.

The mean percent canopy for the stream was 56%. This is a relatively low percentage of canopy, since 80 percent is generally considered optimum in these north coast streams.

The percentage of right and left bank covered with vegetation was moderate at 31% and 48%, respectively. In areas of stream bank erosion or where bank vegetation is not at acceptable levels, planting endemic species of coniferous and deciduous trees, in conjunction with bank stabilization, is recommended.

Steelhead were observed throughout the surveyed section of the stream.

BIOLOGICAL INVENTORY RESULTS

Steelhead were observed by the surveyors the entire length of the surveyed stream.

RECOMMENDATIONS

1) Unnamed Creek should be managed as an anadromous, natural

production stream.

2) Temperatures in this section of Unnamed Creek, as well as upstream, should be monitored to determine if they are having a deleterious effect upon juvenile salmonids. To achieve this, biological sampling is also required.

3) Where feasible, design and engineer pool enhancement structures to increase the number and depth of pools. This must be done where the banks are stable or in conjunction with stream bank armor to prevent erosion.

4) Increase woody cover in the pools and flatwater habitat units. Most of the existing cover is from boulders. Adding high quality complexity with woody cover is desirable and in some areas the material is at hand.

5) Increase the canopy on Unnamed Creek by planting willow, alder, redwood, and Douglas fir along the stream where shade canopy is not at acceptable levels. The reaches above this survey section should be inventoried and treated as well, since the water flowing here is effected from upstream. In many cases, planting will need to be coordinated to follow bank stabilization or upslope erosion control projects.

PROBLEM SITES AND LANDMARKS

The following landmarks and possible problem sites were noted. All distances are approximate and taken from the beginning of the survey reach.

0'	Begin survey at confluence with Long Valley Creek. Reach 1 is an F4 channel type.
100'	There is a spring on the left bank (LB). There is also a slide on the LB.
116'	Spring on the LB.
354'	Old stream ford.
861'	Spring on the LB.

Unnamed Tributary of Long Valley

1618' Dry tributary on the LB.

1785' End of survey. No water.