STREAM INVENTORY REPORT

UNNAMED TRIBUTARY A

WATERSHED OVERVIEW

Refer to the map of South Fork Noyo River for the location of Unnamed Tributary A.

Unnamed Tributary A is tributary to South Fork Noyo River, tributary to Noyo River, located in Mendocino County, California. Unnamed Tributary A's legal description at the confluence with South Fork Noyo River is T17N R16W S04. Its location is 39°22'08" N. latitude and 123°39'28" W. longitude. Unnamed Tributary A is an ephemeral stream according to the USGS Mathison Peak and Noyo Hill 7.5 minute quadrangles. Unnamed Tributary A drains a watershed of approximately 0.6 square miles. Summer base runoff is approximately 0.03 cubic feet per second (cfs) at the mouth. Elevations range from about 190 feet at the mouth of the creek to 900 feet in the headwater areas. Redwood and Douglas fir forest dominates the watershed. The watershed is located within Jackson Demonstration State Forest and is managed for timber production. Foot access is available from California Division of Forestry Road 300, approximately one-eighth mile northwest from Parlin Fork Conservation Camp, by crossing the South Fork Noyo River to the mouth of Unnamed Tributary A.

HABITAT INVENTORY RESULTS AND DISCUSSION

The habitat inventory of October 3, 1995, was conducted by Kyle Young and Jeffrey Jahn (WSP/AmeriCorps). The total length of the stream surveyed was 915 feet.

Flow was measured at the bottom of the survey reach with a Marsh-McBirney Model 2000 flowmeter at 0.03 cfs on October 3, 1995.

Unnamed Tributary A is an F4 channel type for the entire 915 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 temperature recorded on the survey day October 3, 1995, was 54 degrees Fahrenheit. Air temperatures ranged from 69 to 71 degrees Fahrenheit. This is a very good water temperature 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 28% of the total **length** of this survey, riffles 30%, and pools 39%. The pools are relatively shallow, with only 4 of the 21 pools having a maximum depth greater than 2 feet. Primary pool criteria are discussed in the main body of this report.

Four of the 18 pool tail-outs measured had embeddedness ratings of 3 or 4. Four 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 Tributary A, 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 37. The shelter rating in the flatwater habitats was lower at 13. A pool shelter rating of approximately 100 is desirable. 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 three low gradient riffles measured had gravel as the dominant substrate. This is generally considered good for spawning salmonids.

The mean percent canopy for the stream was 98%. This is a relatively high 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 70% and 69%, 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.

Coho were observed in the lower biological inventory site, and steelhead were sampled or observed throughout the surveyed reach. No fish were sampled above the surveyed reach, suggesting that the log and debris accumulation 915 feet above the confluence is the current end of access for anadromous fish.

BIOLOGICAL INVENTORY RESULTS

Two sites were electrofished on October 3, 1995, in Unnamed Tributary A. The units were sampled by Kyle Young and Jeffrey Jahn (WSP/AmeriCorps).

The first site sampled was habitat units 9-13, two pools, two

riffles, and a glide 91 feet from the confluence with South Fork Noyo River. This site had an approximate length of 61 feet. The site yielded one 0+ coho and one 0+ steelhead.

The second site was habitat unit 41 through beyond the end of the surveyed reach, a series of pools, runs, and riffles 679 feet above the creek mouth. This site had a length of approximately 426 feet. One 1+ steelhead was sampled below the debris accumulation at 915 feet.

RECOMMENDATIONS

1) Unnamed Tributary A should be managed as an anadromous, natural production stream.

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

3) 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.

4) Inventory and map sources of stream bank erosion and prioritize them according to present and potential sediment yield. Identified sites, like the site at 802', should then be treated to reduce the amount of fine sediments entering the stream.

5) There are several log debris accumulations present on Unnamed Tributary A that are retaining large quantities of fine sediment. The modification of these debris accumulations is desirable, but must be done carefully, over time, to avoid excessive sediment loading in downstream reaches.

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 South Fork Noyo River. Channel type is F4.

688' Log and debris accumulation (LDA) 8' high x 20' wide x

22' long retaining sediment 6' deep at base.

802' Right bank erosion 6' high x 25' long contributing gravel and fines.

915' LDA 4' high x 20' wide x 15' long retaining sediment 4' deep at base. Probable barrier. End of survey.