## STREAM INVENTORY REPORT

## Unnamed Tributary to Coyote Creek

## WATERSHED OVERVIEW

The unnamed tributary is a tributary to Coyote Creek, a tributary to Redwood Creek, which drains to the Pacific Ocean. It is located in Humboldt County, California (Map 1). The unnamed tributary's legal description at the confluence with Coyote Creek is T08N R02E S02. Its location is 41.1170 degrees north latitude and 123.9083 degrees west longitude. The unnamed tributary is an intermittent stream according to the USGS Panther Creek 7.5 minute quadrangle. The unnamed tributary drains a watershed of approximately 1.7 square miles. Elevations range from about 600 feet at the mouth of the creek to 2,000 feet in the headwater areas. Mixed conifer forest dominates the watershed. The watershed is entirely privately owned and is managed for timber production. Vehicle access exists through private via the Old K\&K road.

## HABITAT INVENTORY RESULTS AND DISCUSSION

The habitat inventory of June 21 through June 29, 2001 was conducted by Justin Martin and Devin Best (WSP/AmeriCorps). The total length of the stream surveyed was 2,106 feet.

Flow was not measured on the unnamed tributary to Coyote Creek.
The unnamed tributary is an A3 channel type for 2,106 feet of stream surveyed. A3 channels are generally not suitable for fish habitat improvement projects.

The water temperatures recorded on the survey days June 21 through June 29, 2001 ranged from 54 to 57 degrees Fahrenheit. Air temperatures ranged from 57 to 68 degrees Fahrenheit. For a more complete and accurate water temperature profile, 24 -hour temperatures need to be monitored throughout the warm summer months.

Based on the total length of this survey, Level II habitat units consisted of $48 \%$ pool units, $35 \%$ riffle units, and $17 \%$ flatwater units. The pools are relatively shallow, with only eight of the 26 pools having a maximum depth greater than two feet.

Nineteen of the 26 pool tail-outs measured had an embeddedness rating of 1 . Two of the 26 pool tail-outs measured had embeddedness ratings of 3 or 4 . Cobble embeddedness of $25 \%$ or less, a rating of 1 , is considered best for the needs of salmon and steelhead.

The mean shelter rating for pools was 66 . The shelter rating in the flatwater habitats was 27 . 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.

Sixteen of the 26 pool tail-outs measured had gravel or small cobble as the dominant substrate. This is generally considered good for spawning salmonids.

## Unnamed Tributary to Coyote Creek

The mean percent canopy density for the stream was $96 \%$. The percentage of right and left bank covered with vegetation was $92 \%$ and $96 \%$, respectively. In areas of stream bank erosion or where bank vegetation is at unacceptable levels, planting endemic species of coniferous and deciduous trees, in conjunction with bank stabilization, is recommended.

## RECOMMENDATIONS

1) Unnamed tributary should be managed as an anadromous, natural production stream.
2) The limited water temperature available suggest that the maximum temperatures are within the acceptable range for juvenile salmonids. To establish more complete and meaningful temperature regime information, 24-hour monitoring during the July and August temperature extreme period should be performed for 3 to 5 years.
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.

## 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 Comments:
(ft):

0' Start of survey at confluence with Redwood Creek. The channel type is an A3.
202 Log debris accumulation (LDA) covering most of wetted channel.
1,304' LDA measures approximately $35^{\prime}$ long.

2,106 End of survey. Four to five foot cascade followed by short run, then a seven to eight foot cascade into a one to two foot deep pool. Pool may get five feet deep in high flows due to bedrock/boulders in pool tail out.

