

STREAM INVENTORY REPORT

Unnamed Right Bank Tributary

WATERSHED OVERVIEW

Unnamed Right Bank Tributary is tributary to South Fork Albion, tributary to the Albion River, located in Mendocino County, California (see Map 1). Right Bank Tributary's legal description at the confluence with South Fork Albion River is T16N R16W S22. Its location is 39°13'33" north latitude and 123°38'05" west longitude. Right Bank Tributary is an ephemeral stream according to the USGS Elk 7.5 minute quadrangle. Right Bank Tributary drains a watershed of approximately 0.34 square miles. Elevations range from about 200 feet at the mouth of the creek to 1000 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 via Highway 128 west to Flynn Creek Road, through a locked gate to the mouth of South Fork Albion.

HABITAT INVENTORY RESULTS AND DISCUSSION

The habitat inventory of July 8, 1998, was conducted by Gina Capser and Kevin McKernan (CCC). The total length of the stream surveyed was 1,509 feet.

Flows were not measured on Right Bank Tributary.

Right Bank Tributary is an F4 channel type for the entire 1,509 feet of stream surveyed. The suitability of F4 channel types for fish habitat improvement structures is good for bank placed boulders; fair for weirs, single and opposing wing-deflectors, channel constrictors, and log cover; and poor for boulder clusters.

The water temperatures recorded on the survey day July 8, 1998, 1995, ranged from 57 to 59 degrees Fahrenheit. Air temperatures ranged from 65 to 69 degrees Fahrenheit. This is a good water temperature range for salmonids, but water temperatures during warm summer months are lacking. For a more complete and accurate water temperature profile 24-hour temperatures would need to be monitored throughout the warm summer months.

Based on the total **length** of this survey, Level II habitat units consisted of 58% flatwater units, 30% pool units, 11% riffle units, and 1% dry units. The pools are relatively deep, with 12 of the 21 pools having a maximum depth greater than 2 feet.

Fifteen of the 21 pool tail-outs measured had embeddedness ratings of 3 or 4. None had a 1 rating. Cobble embeddedness of 25% or less, a rating of 1, is considered best for the needs of salmon and steelhead. In Right Bank Tributary, 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 22. The shelter rating in the flatwater habitats was 5. 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.

Fifteen of the 21 pool tail-outs measured had gravel or small cobble as the dominant substrate. This is generally considered good for spawning salmonids.

The mean percent canopy density for the stream was 97%. The percentage of right and left bank covered with vegetation was moderate at 67% and 64%, 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.

BIOLOGICAL INVENTORY RESULTS

One site was electrofished on July 16, 1998, on Right Bank Tributary. The unit was sampled by Kevin McKernan (CCC) and Lisa Campbell (AmeriCorps).

The site sampled included habitat units 6-8, a series comprised of a step run, mid-channel pool and step run approximately 133 feet from the confluence with South Fork Albion. This site had an approximate length of 47 feet. The site yielded 3 coho and 1 steelhead.

RECOMMENDATIONS

- 1) Right Bank Tributary should be managed as an anadromous, natural production stream.
- 2) The limited water temperature available suggest that the maximum temperatures are in 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. Adding high quality complexity with woody cover is desirable.
- 4) Inventory and map sources of stream bank erosion and prioritize them according to present and potential sediment yield. Identified sites, should then be treated to reduce the amount of fine sediments entering the stream.
- 5) Active and potential sediment sources related to the road system need to be identified, mapped, and treated according to their potential for sediment yield to the stream and its tributaries.

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.

- 0' Begin survey at confluence with South Fork Albion.
- 133' Electrofishing site.
- 217' Two foot high jump.
- 501' Right bank erosion, 10' long x 18' high.
- 803' Log debris accumulation (LDA) 10' long x 10' wide x 4' high backing up sediment 30' long x 3' high. Water is flowing under ground. Last place salmonids were observed.
- 857' Right bank erosion, 40' long x 15' high contributing large and small woody debris and fine sediment.
- 882' LDA, with associated right bank erosion 20' long x 12' wide x 4' high forming a dry unit. LDA backing up sediment 13' long x 7' wide x 2' high.
- 1,009' LDA, 4' long x 7' wide x 4' high, not retaining sediment, not a barrier.
- 1,178' Winery Gulch enters right bank.
- 1,509' End of survey. Creek becomes dry. No fish observed above 917'. Surveyors walked and additional 400' upstream, dry channel with high gradient, numerous large debris accumulations and erosion.