

STREAM SURVEY

DATE: February 15, 1990

NAME: Edwards Creek

COUNTY: Mendocino County

STREAM SECTION (Partial): Survey began at the headwaters adjacent to Hwy 128 and ended at the mouth at the at the confluence of Russian River.

LENGTH: Approx. 3 1/4 miles

TRIBUTARY TO: Russian River

SURVEY PARTY: Weldon Jones and Elisabeth Mizuno

EXTENT OF OBSERVATION: Stream section was surveyed February 15, 1990.

RELATION TO OTHER WATERS: Edwards Creek drains into the Russian River north of Cloverdale.

GENERAL DESCRIPTION:

WATERSHED: Edwards Creek drains a rectangular area of about 4 square miles off the west slope of the coastal mountain range into the Russian River system.

IMMEDIATE DRAINAGE BASIN: The headwater east of Hwy 128 flows through a V-shaped canyon with moderate canopy of fir, madrone, oak, and bay. Also along the stream and adjacent hills were oak grasslands. Downstream of the highway, the stream appears to drop in grade over "steps" as it passes through a rocky canyon. Bedrock was exposed in areas along the canyon. Along the banks were bay, western maple, black oak, buckeye, and a redwood grove (primarily on the west side of stream). Outside the inner canyon were oak grasslands. The lower drainage was a flat gravelly valley. The lower portion of this stream was bordered by vineyards down to the confluence of the Russian River.

ALTITUDE: Approx. 1,120 feet at Hwy 128 down to approx. 400 feet.

GRADIENT: 220 feet per mile.

WIDTH: Average width of stream was about 7 feet. The widths ranged from 2 to 30 feet.

DEPTH: Average depth of stream was about 10 inches.
Depths ranged from 3 inches to 48 feet.

FLOW: Flow ranged from an estimated 1/3 to 1 cfs.

VELOCITY: Velocity was generally rapid throughout except at falls and constricted areas within the canyon.

BOTTOM: The upper section of the stream near Hwy 128 consisted mostly of sand, gravel, and rubble. In the rocky canyon area, the bottom consisted mostly of rubble, boulders, and bedrock with some sand and gravel in pools behind rocks and barriers. The lower section consisted mostly of gravel, rubble, and boulders with some sand.

SPAWNING AREAS: There was a good spawning area (25%) in the upper canyon area, but no fish were seen. In the lower section, 1 steelhead redd was observed at the west end of the valley. Near the railroad crossing another redd was observed and also a larger redd in rubble size substrate.

POOLS: In the upper section above the canyon, pools 3 feet in depth dominated the section. Throughout the canyon area, pools were well developed amongst the rocks and bedrock. In the lower-section, below the railroad crossing were pools up to 30 feet in length and 4 feet deep.

SHELTER: Most of the stream had good cover consisting mostly of canopy, overhanging vegetation, and objective cover. There was very little by undercut banks.

BARRIERS: In the canyon area, a large slide was observed in the redwood grove area and a log jam was also present. Also an old dam was found that contributed to a 7 foot high vertical fall, but no fish were observed above or below the barrier.

DIVERSIONS: None observed, however the concrete dam with 3/4 inch pipe attached, located in the canyon, may have provided water for early settlers in the area.

TEMPERATURES: At 1129 hours, temperature was: air 44°F and water 40°F
Weather was cloudy and cool with rain off and on during last hour of the survey.

FOOD: Stonefly and mayfly larvae were present, as were water striders.

AQUATIC PLANTS: Bunch grass lined the channel in certain areas near Hwy 128 and the lower area.

WINTER CONDITIONS: At Hwy 128, scour line indicates the stream rises 3 vertical feet.

POLLUTION: Trash and debris washed down from Hwy 128 was observed along much of the upper sections. Warden Morgan apprehended a vehicle discharging sewage into the drainage from Hwy 128 on January 8, 1990. No evidence of the sewage was observed at the time of the survey. In the lower section, there was some pieces of fence and a stripped vehicle along the bank.

SPRINGS: An occasional ephemeral tributary.

FISHES PRESENT AND SUCCESS: 1 juvenile steelhead/rainbow trout and numerous roach were observed in pools in the lower section. Three redds presumed from adult steelhead were observed in the lower area. The overall success level appeared to be low, however fish observations are not easily conducted during the winter periods and further surveys may be necessary during the summer months.

OTHER VERTEBRATES: Western newt was observed in the section near Hwy 128. Numerous deer and raccoon tracks were observed along the surveyed area.

FISHING INTENSITY: No indication of fishing along the stream.

OTHER RECREATIONAL USE: Possibly deer hunting.

ACCESSIBILITY: Mainly accessible by foot, but there was a jeep trail and an unimproved dirt road that parallels sections of the stream.

OWNERSHIP: Private ownership, at least 4 owners were contacted for permission to access the drainage.

POSTED OR OPEN: Although no signs were seen, it is assumed to be posted.

IMPROVEMENTS: None observed.

PAST STOCKING: Unknown.

GENERAL ESTIMATE: The section of stream surveyed has the characteristics of being a viable stream, but only the lower portion of the stream was being utilized by fish. The upper section, including the canyon area, has good spawning areas and holding pools. It was expected that fish would be found in the area, despite the barriers, none were found.

In the lower section, there were areas for spawning and rearing, but the most western end of the valley had no overhanging vegetation that would keep water temperatures down, therefore making it less suitable for fish. The last 1/2 mile of the stream seems to be the most suitable for spawning and rearing of fish, which is exemplified by the presence of redds and non-game fish.

Recommend the stream continue to be managed as a steelhead spawning and rearing area. The lower end also has potential as a chinook spawning and it is expected these fish may utilize the area when Warm Springs Hatchery enhancement plans are completed.

It is further recommended that juvenile steelhead standing crop be determined during the late summer period as a measure of productivity of this Russian River tributary.

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