

THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF FISH AND GAME

STREAM SURVEY

Date: October 29, 1977

NAME: Devil Creek COUNTY: Sonoma

STREAM SECTION: Partial FROM: Mouth TO: 2.8 mile upstream LENGTH: 4 miles

TRIBUTARY TO: East Austin Creek TWP: 9N R: 11W SEC: 28

OTHER NAMES: Devils Creek-North Fork, Devils North Fork RIVER SYSTEM: Russian

SOURCES OF DATA: Personal observation

- EXTENT OF OBSERVATION
 - Include: Name of Surveyor, Date, Etc.
- LOCATION
- RELATION TO OTHER WATERS
- GENERAL DESCRIPTION
 - Watershed
 - Immediate Drainage Basin
 - Altitude (Range)
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 - Width
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 - Spawning Areas
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EXTENT OF OBSERVATION - Devil Creek was surveyed on foot from its mouth to 2.8 mile upstream, by Valli Boccone and Sally Spingla on October 19, 1977.

LOCATION - Devil Creek is located in the eastern slopes of the East Austin Creek drainage area. It flows into East Austin Creek *B* miles upstream from the confluence of East Austin Creek and Austin Creek.

RELATION TO OTHER WATERS - Devil Creek provides spawning and nursery habitat for steelhead and possibly silver salmon. The creek also provides year round flows to East Austin Creek.

GENERAL DESCRIPTION -

Watershed - Devil Creek flows through a steep, mountainous, V-shaped canyon. Evidence of past logging was observed in the upper 1.2 miles surveyed. Dominant tree species included various oaks, bay, red alder, and maple. A small number of redwoods and douglas fir were observed in the upper section. Other vegetation included fern, wild grape, various berry bushes, coyote brush, and annual grasses.

Immediate Drainage Basin - Devil Creek flows in a southwesterly direction and drains an area of approximately 3.2 square miles. The channels are generally wide and lens shaped. The area between unnamed tributary N2 and N3 is an open brush area with well developed springs. Channels are wide and the streambed contained increasing amounts of dirt, boulders. A deer camp is located 0.3 miles upstream from the mouth* Streamside vegetation was common to abundant throughout, including all the vegetation listed above.

Altitude - At the mouth, 400' MSL and at the area of the headwaters; 1600' MSL.

Gradient - The gradient was moderate throughout the area surveyed (4.3 ft/100 ft).

Width - Average 3 feet, riffles range from 2 to 4 feet and pool 4 to 10 feet.

Depth - Average 2 to 4 inches. Riffles ranged from several inches to 6 inches, pools 6 inches to 4 feet.

Flow - Flows were visually estimated at 1 cfs at the mouth and .5 cfs at unnamed tributary N3. Flows were continuous throughout the area surveyed with the exception of a 0.3 mile section located between the 1st log jam and unnamed tributary N1.

Velocity - The velocity was moderate to rapid.

Bottom - The bottom type from the mouth to unnamed tributary N2 consisted of 5% bedrock, 10% boulder, 25% large rubble, 30% small rubble, 20% gravel, and 10% silt and sand. A 400 foot section below tributary S1 had been subjected to heavy equipment work. Increased dirt, silt and bank instability has resulted. The area surveyed upstream from unnamed tributary N1 consisted of 10% bedrock, 15% boulder, 40% large rubble, 10% small rubble, 5% gravel, 25% dirt, silt and sand.

Spawning Areas - 55% of the area in the lower 0.7 miles is considered good to excellent spawning habitat. Above this area spawning habitat was scarce and available gravel was silted and compacted.

Pools - The majority of the pools were formed by boulders and depressions in the streambed. Other pools were formed by undercut banks, and bedrock. The pool to riffle ratio was 2:3.

Shelter - Shelter was provided by boulders, logs, undercut banks, and streamside vegetation. Canopy in three-fourths of the area surveyed provided 60 to 85% overhead cover.

Barriers - A log jam 0.5 miles upstream from the mouth creates a partial barrier. The log jam is located in a narrow gorge, 8 ft in height with bedload backed up 4 feet in height upstream from the logs. The upper fish limit, formed by steep gradient and unsuitable streambed, is located 0.8 miles upstream from unnamed tributary N3.

Diversions - None observed.

Temperatures - Water temperature at the mouth was 59°F.; air temperature 62°F. Above unnamed tributary N2 water temperature was 58°F. air temperature 65°F.

Aquatic Plants - A small amount of green filamentous algae was observed in shallow pools where the canopy provided less than 10% cover.

Winter Conditions - Devil Creek is subject to heavy winter runoff. High water lines were observed as high as 10 feet in the upper section surveyed.

Pollution - None observed.

Springs - Springs were well developed throughout the area surveyed.

FISHES PRESENT AND SUCCESS - California roach (15/100 ft) ranging from less than 1 inch to 3 inches and Western suckers (5/100 ft) ranging from 2 to 5 inches were observed from the mouth to 0.5 miles upstream. Four steelhead and/or resident rainbow trout, 4 to 7 inches in length, were observed from 0.7 miles upstream from the mouth to 0.4 miles upstream from unnamed tributary N-2. All fish observed appeared in good condition.

OTHER VERTEBRATES - Other vertebrates observed were frogs, and newts.

FISHING INTENSITY - Light.

OTHER RECREATIONAL USE - Private hunting club.

ACCESSIBILITY - A private dirt road crosses Devil Creek at its mouth. The road may be reached by taking the Armstrong Grove State Reserve park road through the recreational area. Refer to USGS 7½ minute Cazadero map and park headquarters for additional information (Park gate Keys) Roads passable by truck in dry months.

OWNERSHIP - Private.

POSTED OR OPEN - Private road at mouth posted.

IMPROVEMENTS - The removal of the log jam creating a partial barrier would improve fish passage and distribution. Restriction of heavy equipment in the streambed would also be beneficial.

PAST STOCKING - Unknown

GENERAL ESTIMATE & MANAGEMENT - Devil Creek provides good steelhead and possibly silver salmon spawning habitat from the mouth to 0.7 miles upstream and good to excellent nursery habitat from the mouth to 2.2 miles upstream. Silt, fill, and erosion resulting from past logging operations has greatly decreased spawning habitat and reduced the quality of nursery habitat available in the upper area. Devil Creek should be managed as a steelhead, silver salmon spawning and nursery habitat.

SKETCH MAP - Attached

REFERENCES AND MAPS - USGS, 7½ minute Cazadero quad. 1943.
Photographs also attached.[sic]

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Region 3

DEVIL CREEK

T9N, R11W, Sec. 28

