

THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF FISH AND GAME

STREAM SURVEY

File form No _____ Date: June 16, 19, 1978

NAME: HULBERT CREEK COUNTY: Sonoma

STREAM SECTION: Entire FROM: mouth To: headwaters LENGTH: 3.7 miles

TRIBUTARY TO: Russian River TWP: 8 N R: 10 W SEC: 31

OTHER NAMES: Not known RIVER SYSTEM: Russian River

SOURCES OF DATA: Personal observations of Liz Namba, Jack Lee and Andrew Florendo, Seasonal Aids

EXTENT OF OBSERVATION

Include: Name of Surveyor, Date, Etc.

LOCATION

RELATION TO OTHER WATERS

GENERAL DESCRIPTION

Watershed

Immediate Drainage Basin

Altitude (Range)

Gradient

Width

Depth

Flow (Range)

Velocity

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EXTENT OF OBSERVATION - Hulbert Creek was surveyed on June 16, 19, 1978 from car and on foot from the mouth to 1.7 mile above campsite (see sketch map).

LOCATION - Hulbert Creek is located 0.6 mile west of Guerneville on State Route 12 in Sonoma County.

RELATION TO OTHER WATERS - Hulbert Creek provides excellent spawning and nursery habitat for steelhead rainbow trout in the Russian River drainage.

GENERAL DESCRIPTION - Watershed - Hulbert Creek basin is moderately V-shaped in its headwaters and opens to a U-shape in the lower reaches. A large burn area was observed in Mission Canyon near the headwaters. Fir, oak-grassland and introduced pine characterized the upper portions of the creek while redwood, bay, willows, and some Oregon ash dominated the lower reaches. Moderate to heavy vegetation provided excellent overhead canopy throughout the lower reaches of the stream. Soil remained stable, possibly due to the lush vegetation growth.

Immediate Drainage Basin - Hulbert Creek drains approximately 5 square miles of area. The creek flows in a meandering southeast direction and discharges into the Russian River.

Altitude - At the mouth, 25 feet M.S.L. Headwaters, 300 to 1,050 feet M.S.F.

Gradient - The average gradient for the main stem was moderate to slight; 2 to 5 feet/100 feet in the upper regions and 1 to 3 feet/100 feet below Mission Canyon.

Width - The upper portions of Hulbert Creek were dry. The mid-area ranged from 2 to 15 feet wide with an average width of 5 feet. Lower Hulbert Creek ranged from 2 to 40 feet, with an average of 10 feet.

Depth - Average - 2 feet with pool areas up to 4 feet deep were numerous. Riffle areas averaged 2 inches deep.

Flow - Measurements were made with a Pygmy Flow Meter at two stations along Hulbert Creek. Station No. 1 was at Fern Way and Cazedero Road Bridge and measured 0.4 cfs. Station No. 2 was 0.1 mile above the mouth and measured 0.8 cfs. Residents indicated that, for the most part, the stream ceased flowing, retaining only a few pools during the late summer months.

Velocity - Hulbert Creek's velocity was moderate to slow, averaging 0.5 foot/second.

Bottom - Hulbert Creek appeared to have an excellent gravel bottom throughout most of the creek. Coarse gravel and fine rubble made up approximately 60% of the streambed. Fine gravel and sand composed the remaining 40%. The lower portion of the creek appeared to have an abundance of silt present. This may be due to heavy construction of roads and homes in the area.

Spawning Areas - Suitable spawning areas were common throughout the stream. Upper portions having the best areas of good, clean loose gravel. Increased siltation and presence of algae limited the spawning value of the lower portions. As much as 25% siltation was found in the lower reaches.

Pools - Pools were abundant in Hulbert Creek, approximately 75% pools to 25% riffles. Pool areas sometimes extended up to 100 feet in length with depths up to 4 feet. Most pools had undercut banks and were located near summer dams. Average size was 5 feet in length, 3 feet wide and 2 feet deep, and nearly all having adequate shelter of old tree

stumps and fallen logs.

Shelter—Excellent cover over much of the creek. Average for overhanging canopy was 75 to 90%. Heavy vegetation along the immediate stream bank and many old logs and fallen trees provided excellent shelter. Areas of the creek that passed through Guernewood Park were mostly rip-rapped or had retaining walls constructed. This eliminated much of the natural cover. The upper portion of stream near the headwaters had relatively less and poorer shelter.

Barriers—The log jam 0.8 mile above the Fernway/Old Cazadero Road bridge (see map) [sic] measured approximately 5 feet high and 30 feet long; the log had a diameter of 3 feet. In heavier flows it may catch debris and become a complete barrier. The logging bridge 0.5 mile above the campsite (see map) is built atop a concrete sill with a 5-foot drop and was noted as a potential barrier. Summer dams were quite numerous along the lower portions of the creek. Most were constructed of rocks and gravel with 3 dams of considerable size (see map) [sic]. With adequate winter flows these dams are not expected to become barriers.

Diversions—Only one diversion was seen on the creek, a large plastic pipe with a 7-inch diameter, positioned partially underground 0.5 mile below the campsite (see map).

Temperatures—Main stem 0.3 mile above campsite—air 80°F., water 66°F., time 1230 hours. At tributary 0.4 mile below upper survey limit—air 80°F., water 68°F., time 1330. Main stem 0.1 mile below campsite—air 74°F., water 60°F., time 1100 hours. At tributary 0.5 mile west of Fernway/Old Cazadero Road bridge—air 80°F., water 73°F., time 1419 hours, Main stem 0.4 mile below Fernway/Old Cazadero Road bridge—air 74°F., water 70°F. surface, 64 F bottom, time 1400 hours. Stream flow measurement Station 1 at Fernway/Old Cazadero Road bridge—air 78°F., water 62°F., time 1500 hours. Streamflow measurement Station 2 at Old Monte Rio Road/Highway 12 bridge—air 75°F., water 64°F., time 1330 hours.

Aquatic Plants—Algae abundant in open areas, grew thick in lower portions of the creek. Dense horsetail and nettle grew along stream bank in the Mission Canyon area.

Food—Appeared adequate for fishlife.

Winter Flows—High winter flows are estimated for Hulbert Creek. Scour marks along the stream indicated the stream rises 5 to 6 feet above the streambed.

Pollution—Much of the lower portion of the stream was heavily silted and littered with garbage, toys and old grass and tree cuttings. This obviously originates with the residents in the developed area.

Springs—Many springs were observed throughout the stream.

FISHES PRESENT AND SUCCESS—Steelhead rainbow trout juveniles, averaging 2 inches, were most abundant. Above the developed area fish numbered 100 - 200/100 feet. The portion of the stream that runs through Guernewood Park still maintained a relatively good population, averaging 20 - 50 fish/100 feet. Below Fernway/Old Cazadero Road bridge numbers decreased to approximately 10 - 20 fish/100 feet. From the Old Cazadero Road/Cherry Lane Bridge to the mouth the numbers greatly decreased to less than 10 fish/100 feet. This decrease may be due to the increased algae growth and siltation. The fewer pools and shelter present as well as heavy recreational use by local residents may also contribute to the decreased numbers of fish. Silver salmon are reported to have used this stream prior to the drought of 1966-67.

OTHER VERTEBRATES—Garter snakes were common and deer and raccoon tracks were common along the stream bank.

FISHING INTENSITY—Not known.

OTHER RECREATIONAL USE—Summer dams provided small pools for swimming.

ACCESSIBILITY—From State Route 12 onto Old Monte Rio Road. There are a few private roads including Fernway and old logging road (see sketch map attached). [sic]

OWNERSHIP—Private.

IMPROVEMENTS—The lower 2 miles of stream through Guernewood Park needs to be cleared of litter and silt. The log jams and potential barrier mentioned should be removed or altered for fish passage.

PAST STOCKING—Not known.

GENERAL ESTIMATE—Hulbert Creek proved to be a valuable steelhead nursery stream supporting adequate gravel and cover with cool temperatures. Limitations on the lower portions were siltation and algae growth. Litter was a considerable downstream problem, also. Overall,

the major limitation appeared to be one of limited streamflow.

RECOMMENDED MANAGEMENT - Hulbert Creek should be managed for silver salmon and steelhead as a spawning and nursery stream. The stream should be protected from further development. Overall destruction of habitat must be controlled. Further water development leading to reduced flow should be avoided.

SKETCH MAP - Attached. [sic]

REFERENCES AND MAPS - U.S.G.S. topographic map Cazadero quad. 7.5 minute series, 1943.
Duncan Mills quad. 7.5 minute series 1942 - 1943.

Liz Namba
Seasonal Aid