

THE RESOURCES AGENCY OF CALIFORNIA  
Department of Fish and Game

**STREAM SURVEY**

Date: April 1 and 7, 1977

NAME: WILSON CREEK COUNTY: Sonoma

STREAM SECTION: Entire FROM: Mouth TO: Headwaters LENGTH: 1.43 miles

TRIBUTARY TO: Hooker Creek TWP: 6 N R: 6 W SEC: 27 (projected)

OTHER NAMES: None known RIVER SYSTEM: Sonoma Creek

SOURCES OF DATA: Personal observations

<b>EXTENT OF OBSERVATION</b> Include: Name of Surveyor, Date, Etc.
<b>LOCATION</b>
<b>RELATION TO OTHER WATERS</b>
<b>GENERAL DESCRIPTION</b>
Watershed
Immediate Drainage Basin
Altitude (Range)
Gradient
Width
Depth
Flow (Range)
Velocity
Bottom
Spawning Areas
Pools
Shelter
Barriers
Diversions
Temperatures
Food
Aquatic Plants
Winter Conditions
Pollution
Springs
FISHES PRESENT AND SUCCESS
OTHER VERTEBRATES
FISHING INTENSITY
OTHER RECREATIONAL USE
ACCESSIBILITY
OWNERSHIP
POSTED OR OPEN
IMPROVEMENTS
PAST STOCKING
GENERAL ESTIMATE
RECOMMENDED MANAGEMENT
SKETCH MAP
REFERENCES AND MAPS

EXTENT OF OBSERVATION - Wilson Creek was surveyed on foot by Sally Spingla, Laboratory Assistant, and Jane Webb, Seasonal Aid. Wilson Creek south of Madrone Road was surveyed on April 1st; north of Madrone Road was surveyed on April 7th, 1977.

LOCATION - The mouth of Wilson Creek enters Hooker Creek approximately 2 mile southeast of the town of Glen Ellen.

RELATION TO OTHER WATERS - Wilson Creek is a small tributary to Hooker Creek.

GENERAL DESCRIPTION -

Watershed - Wilson Creek flows through land that is primarily used for viticulture. The remaining natural vegetation consists of the oaks, willows, alders, buckeyes, ash and elderberry trees which grow along Wilson Creek. The riparian vegetation also includes wild roses, blackberry bushes, and poison oak. Soil is a sandy-adobe matrix with small river stones (1/2" to 2" diameter).

Immediate Drainage Basin - Wilson Creek drains approximately 1.2 square miles and is 1.43 miles long. There are 6.3 miles of tributaries which include Whitman and Butler Creeks and a small unnamed ephemeral tributary near the headwaters (E-1 on sketch map). The channel is V-shaped near the mouth with 20-foot banks. Near the headwaters it is relatively flat to U-shaped. The origin of Wilson Creek was obscured by plowing.

Altitude - Headwaters, 290 feet MSL; mouth, 160 feet MSL.

Gradient - Gentle, averaging 1.6 feet per 100 feet.

Width - Range, 2 to 10 feet, average 3 feet.

Depth - Range, 0.17 to 2 feet, average 2 feet.

Flow - See attached sketch map for stations. Station 1 : 0.1 cfs

(near the mouth). Station 3 : 0.09 cfs (in the headwater).

Velocity - Sluggish, less than 0.5 feet/sec.

Bottom - The streambed bottom consists of a light-colored clay or sandstone covered with leaf litter from adjacent trees. Rocks, 4 - 5 inches in diameter, were scattered along the bottom. No gravel was observed along Wilson Creek.

Spawning Areas - None were observed.

Pools - Shallow, isolated pools, 0.17 to 2 feet deep, were located between the mouth of Wilson Creek and Madrone Road. They were separated by an average of 50 feet of dry clay bedrock that was covered with moss and leaf litter. The length of pools ranged from 4 to 20 feet and averaged 5 feet wide.

Shelter - There were no overhanging banks. The only shelter was provided by overhanging riparian vegetation. The canopy provided by trees ranged from 50 - 90%.

Barriers - The mouth of Hooker Creek was strewn with boulders (1 - 1 1/2 feet diameter) from adjacent rip-rapping of south bank. This boulder strewn area may not prevent access by fish to Wilson or Hooker Creeks during winter flows.

Diversions - None observed. Two reservoirs, located within 1/4 mile of the headwaters, were noted. The upper reservoir was estimated to hold less than one acre-foot. The

Lower, smaller reservoir was shallow and almost completely overgrown with watercress.

Temperatures - (See attached sketch map for stations.) Station 1; water temperature 58 F, air temperature 68 F at 1130 hours; Station 2; water 50 F, air 67 F at 1100 hours; Station 3; water 58 F, air 68 F at 1500 hours.

Food - Mosquito larvae were found in an isolated pool at Station 2. The water was brown and filled with decomposed leaf litter.

Aquatic Plants - Duckweed was abundant on the surface of pools. Watercress grew around the periphery of shallow areas. Annual grasses, rushes, horsetails and cattails were growing in damp areas of the streambed. Filamentous green algae was abundant in pools that were exposed to sunlight.

Winter Conditions - Not known.

Pollution - Wilson Creek flows through an area where barnyards and septic tanks are evident by the odor (East of Highway 12).

Springs - The stream originates from a spring which had been plowed over and provided only dampness above the upper reservoir.

FISHES PRESENT AND SUCCESS - None were observed.

OTHER VERTEBRATES - None were observed.

FISHING INTENSITY - None.

OTHER RECREATIONAL USE - None.

ACCESSIBILITY - The mouth of Wilson Creek can be reached by a private dirt road south from Madrone Road, or by walking down to Sonoma Creek near the bridge at Madrone Road, thence to Hooker Creek. Wilson Creek runs beneath Madrone Road and Highway 12. East of Highway 12, it is accessible, by private roads, to the headwater.

OWNERSHIP - All land bounding Wilson Creek is privately owned and under cultivation.

PAST STOCKING - None known.

GENERAL ESTIMATE - Wilson Creek does not provide spawning habitat for adult steelhead, but may be useful as rearing habitat when normal flows keep the stream running. (Rainfall has been below normal for two winters.)

RECOMMENDED MANAGEMENT - Wilson Creek does not warrant management for steelhead, but may contribute winter flows to Hooker Creek and Sonoma Creek, and should be managed for this purpose.

SKETCH MAP - Attached.

REFERENCES AND MAPS - USGS 7.5' series quad maps for Glen Ellen and Sonoma, Calif.

Jane Webb  
Seasonal Aid  
Region 3

# Wilson Creek, Sonoma County

