

THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF FISH AND GAME

STREAM SURVEY

File form No _____ Date: August 14, 1969

NAME: Green Valley Creek COUNTY: Sonoma

STREAM SECTION: Entire FROM: Headwater TO: confluence with the Russian River LENGTH: _____

TRIBUTARY TO: Russian River TWP: 8N R: 10W SEC: 25

OTHER NAMES: None known RIVER SYSTEM: Russian River

SOURCES OF DATA: Personal observations of Jim Thompson and Jim Michaels as well as information from local residents.

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
Bottom
Spawning Areas
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Temperatures
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FISHES PRESENT AND SUCCESS
OTHER VERTEBRATES
FISHING INTENSITY
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POSTED OR OPEN
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PAST STOCKING
GENERAL ESTIMATE
RECOMMENDED MANAGEMENT
SKETCH MAP
REFERENCES AND MAPS

EXTENT OF OBSERVATION - Green Valley Creek was surveyed on foot on July 7 and 8, 1969.

LOCATION - Green Valley Creek flows into the Russian River approximately 7 miles upstream from the town of Guerneville.

RELATION TO OTHER WATERS - Green Valley Creek is a major tributary to the Russian River contributing both summer and winter stream flow. Good spawning and nursery areas were observed along various sections of the stream.

GENERAL DESCRIPTION - Green Valley Creek heads in the low lying mountains between Occidental and Santa Rosa. The lower portion of the drainage courses through an open valley. Vegetation in the mountains portion of the drainage consists of redwood, oak, and bay. Vegetation within the valley consists of apple orchards and grasslands.

Immediate Drainage Basin - Green Valley Creek drains an area of about 14 square miles of terrain. The stream channel is bowl shaped. Flow is in a northerly direction. Riparian vegetation forms a canopy over about 85% of the stream. Riparian vegetation consists of alder, bay and numerous berry vines.

Altitude - Range 100 feet to 400 feet.

Gradient - Approximately 30 feet per mile.

Width - Range 1 inch to 15 feet, average 5 feet.

Depth - Range 2 inches to 9 feet. The stream was generally deeper in the lower portion of valley.

Flow - A pygmy flow meter was used to measure flow. Flow recorded at the proposed S.C.S. damsite was 0.43 cubic feet per second. Flow near the confluence of the Russian River was 0.27 c.f.s. The stream was dry in the headwater above the springs shown on the attached map.

Velocity - Stream flow was considered rapid in the headwater and sluggish throughout the valley.

Bottom - The stream bed was composed of approximately 75% gravel, 15% mud and silt and 10% bedrock.

Spawning Areas - Approximately 4.4 miles of stream bed appeared to be suitable for steelhead spawning. Areas appearing useable were located near the Highway 116 Bridge crossing and upstream from the confluence with Atascadero Creek.

Pools - Average pool dimensions were 4 feet deep x 10 feet wide x 15 feet long. Pools throughout the lower 2 miles of the valley were extremely long and deep.

Shelter - Consisted of undercut banks and logs as well as deep pools.

Barriers - One log jam considered to be a barrier was located approximately 1 mile upstream from the confluence with Purrington Creek. A road culvert forms a 4 foot barrier on a secondary tributary to Green Valley Creek located 3 miles upstream from the confluence with Purrington Creek. This culvert barrier had a fall of 4 vertical feet. Numerous small jams were observed and plotted on the sketch map.

Diversions - Eleven diversions were observed on the stream. The location and size of respective diversions was recorded on the attached sketch map.

Temperatures - Temperatures recorded at the proposed dam site were: air 81°F., water 63°F. Temperatures recorded near the Highway 116 Bridge were: air 76°F., water 75°F. Temperatures recorded near the river road were: air 76°F., water 77°F.

Food - Caddisfly larvae, mosquito larvae and snails were observed. Caddisfly larvae averaged about 2 per 10 inch rock.

Aquatic Plants - Duckweed, swordgrass, cattails and algae were observed.

Winter Conditions - High water marks and debris indicate that the stream can be expected to raise about 25 feet near its confluence with the Russian River.

Pollution - Domestic dumps were observed at various points along the stream.

Springs - Approximately 200 feet of springs were observed in the headwater area of Green Valley Creek.

FISHES PRESENT AND SUCCESS - Juvenile steelhead and/or rainbow trout, sculpin, stickleback, green sunfish, roach and squawfish. Juvenile steelhead and/or rainbow trout ranging in size from 3/4 to 1 inch numbered 50 to 60 per 100 feet of stream. Sculpin ranging in size from 1 to 3 inches were observed numbering approximately 5 per 100 feet of stream. Stickleback ranging in size from 1/2 to 1 inch were observed numbering approximately 50 per 100 feet of stream. Green sunfish ranging in size from 3 to 5 inches were observed in numbers of about 5 per 100 feet of stream. Roach ranging in size from 1/4 to 1 inch were observed numbering about 75 per 100 feet of stream. Squawfish ranging in size from 1 to 3 inches were observed in numbers of about 20 per 100 feet of stream. No non-game fish were observed upstream above the confluence with Atascadero Creek. The numbers of non-game fish appeared to increase as one moves downstream from the confluence with Atascadero Creek toward the confluence with the Russian River. The numbers of juvenile steelhead and/or rainbow trout appeared to decrease as one moved through this same area.

OTHER VERTEBRATES - Deer and cattle.

FISHING INTENSITY - The presence of numerous hook packages, bait containers and parts of fishing gear attest to moderate use of this area.

OTHER RECREATIONAL USE - Camping, swimming and picnic areas were observed.

ACCESSIBILITY - Green Valley Creek is crossed by many roads, making it easily accessible.

OWNERSHIP - Private.

POSTED OR OPEN - Most of the land appears to be posted against trespass.

IMPROVEMENTS - None observed.

PAST STOCKING - Unknown.

GENERAL ESTIMATE - Green Valley Creek is a major tributary to the Russian River, contributing both summer and winter flow. The stream contains fair to good spawning gravels located primarily in the headwater and in a 2 mile section near the Russian River. Good shelter and cool water upstream of Atascadero Creek provide a near excellent nursery area for juvenile steelhead. The stream appears to be well used by local residents for its recreational value.

RECOMMENDED MANAGEMENT - This stream should be managed as a steelhead spawning and nursery area. The 10 foot high log barrier located upstream from Purrington Creek should be removed.

SKETCH MAP - See attached map.

REFERENCES AND MAPS - U.S.G.S. Sebastopol Quad. map. 15 minute series. 1954.

GREEN VALLEY CREEK



