THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF FISH AND GAME

STREAM SURVEY

NAME: FRASIER CREEK **COUNTY:** Sonoma

STREAM SECTION: Partial **FROM:** Confluence of Big Sulphur Creek **TO:** Approx. 2 mi. **LENGTH:** 2 mi.

TRIBUTARY TO: Big Sulphur Creek, hence Russian River **TWP:** 11N **R:** 9W **SEC:** 6

OTHER NAMES: Unknown **RIVER SYSTEM:** Russian River

SOURCES OF DATA: Personal observations of Bruce Thomson and Jim Michaels

EXTENT OF OBSERVATION - The stream was surveyed on foot on August 9th, 1968.

RELATION TO OTHER WATERS – Frasier Creek is a minor tributary to Big Sulphur Creek, contributing both summer and winter flow. The stream contains fair spawning and good nursery area for steelhead.

GENERAL DESCRIPTION - (AND IMMEDIATE DRAINAGE BASIN) Frazier Creek drains approximately 4 square miles of mountainous terrain to the North of Big Sulphur Creek. The stream flows through a V-shaped canyon discharging in a southeast direction. The vegetative cover is primarily oak, with scattered grass clearings. Streamside vegetation is composed primarily of oak, alder, and bay. Approximately ¾ of the stream is covered by an overhead vegetative canopy. Soil in the drainage was considered rocky.

Altitude – Ranges from approximately 800 feet near the confluence of Big Sulphur Creek to about 2,000 feet in the headwaters.

Gradient – Approximately 10 feet per 100 feet of stream.

Width – The average width was about 4 feet and ranged from 1 foot to about 9 feet.

Depth – The average depth was about 6 inches and ranged from 1 inch to 3 feet.

Flow – A flow of 0.66 c.f.s. was recorded in Frazier Creek ¼ mile upstream from the confluence of Big Sulphur Creek, A flow of 0.54 c.f.s. was recorded near the headwater. Both of these flows were obtained by the float method.

Velocity – Stream flow was generally rapid throughout the surveyed section.

Bottom – 50% boulders, 25% gravel, 15% rubble, 5% sand, and 5% silt.

Spawning Areas – Approximately 20% of the stream appeared suitable for steelhead spawning.

Pools – Average 6 feet by 4 feet by 2 feet deep. Generally short and narrow. [sic] frequency is approximately 25% pools and 75% ripples.

Shelter – Composed primarily of undercut banks, boulders and small [sic] log debris.

Barriers – A series of small falls was found 1½ miles upstream from Big Sulphur Creek. The falls were generally believed to be passable to steelhead. However, no fish were found in the waters upstream.

Diversions – None observed.

Temperatures – Air temperature 77°F. Water temperature 65°F. (near Big Sulphur Creek at 11:30 am, temperatures recorded near the falls — Air; 70°F. Water: 63°F.

Food – Caddisfly larvae were found in numbers of about 20 per square foot of stream. Dragonfly larvae ware found in numbers of about 5 per square foot of stream.

Aquatic Plants – Small amounts of algae were observed throughout the surveyed area.

Winter Conditions – The winter high water mark was observed about 3 feet above the present stream flow level.

Pollution – None observed.

Springs – None observed.
FISHES PRESENT AND SUCCESS – Juvenile salmonids (RT-SH) averaging 3 inches and ranging from 2 inches to 6 inches in size were found in numbers of approximately 75 per 100 feet of stream. Suckers averaging 4 inches and ranging from 1 inch to 6 inches in size, were found in numbers of about 5 per 100 feet of stream. Suckers were observed only in the first ¼ mile of stream. All fish appeared to be in good condition.
OTHER VERTEBRATES – Snakes, frogs and salamanders.
FISHING INTENSITY – None observed.
ACCESSIBILITY – Frazier Creek is crossed by The Geysers Road.
OWNERSHIP – Private.
POSTED OR OPEN – The stream is posted against trespass and hunting.
IMPROVEMENTS – None observed.
PAST STOCKING – Unknown.
GENERAL ESTIMATE – Frazier Creek is a small tributary to Big Sulphur Creek, contributing about 10% of the summer stream flow in Big Sulphur Creek at their confluence. About 20% of the stream contains gravel suitable for steelhead spawning. The stream contains good nursery area.
RECOMMENDED MANAGEMENT – Frazier Creek should be managed as a steelhead spawning and nursery area.
REFERENCES AND MAPS – USGS - 15 minute series, Chelseyville Quadrangle-1959.

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SKETCH MAP
FRASIER CREEK