

THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF FISH AND GAME

STREAM SURVEY

File form No. _____ **Date:** June 1, 1976

NAME: Frasier Creek **COUNTY:** Sonoma

STREAM SECTION: Partial **FROM:** 2¼ mi. above mouth **TO:** ¼ mile above mouth **LENGTH:** 2 miles

TRIBUTARY TO: Big Sulphur Creek **TWP:** 11N **R:** 9W **SEC:** 6

OTHER NAMES: None known. **RIVER SYSTEM:** Russian River

SOURCES OF DATA: Personal observations of Charles Pinkham and Weldon Jones, 6-1-76

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
Pools
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Diversions
Temperatures
Food
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FISHES PRESENT AND SUCCESS
OTHER VERTEBRATES
FISHING INTENSITY
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ACCESSIBILITY
OWNERSHIP
POSTED OR OPEN
IMPROVEMENTS
PAST STOCKING
GENERAL ESTIMATE
RECOMMENDED MANAGEMENT
SKETCH MAP
REFERENCES AND MAPS

EXTENT OF OBSERVATION - Frasier Creek was surveyed on foot.
RELATION TO OTHER WATERS - Frasier Creek is a minor tributary to Big Sulphur Creek providing steelhead spawning and rearing habitat.

GENERAL DESCRIPTION -

Watershed - Immediate Drainage Basin - Frasier Creek courses through a V-shaped canyon draining approximately four square miles of mountainous terrain. The upper section was very steep, cascading over waterfalls as it discharged in a southerly direction. The lower section changed it's course flowing easterly through a moderately sloping canyon. An Oak-grass, woodland type of vegetation typifies the drainage. The primary trees were black oak, live oak, madrone, and manzanita.

Altitude - Headwater, 2300 feet; confluence with Big Sulphur Creek, 700 feet.

Gradient - Headwater area about 13 feet per 100 feet of stream. Lower area five feet per 100 feet of stream.

Width - Ranged from less than one foot to over seven feet. Average four feet.

Depth - Ranged from about two inches to 2½ feet. Averaging approximately ½ foot.

Flow and Velocity - Streamflows as measured with a pygmy flow meter were as follows: State 1, Hale Ranch Road crossing, 0.02 cfs.

Station 2, confluence of first unnamed tributary, 0.14 cfs., Station 3, second unnamed tributary 0.3 cfs., station 4, unnamed tributary nearest the mouth, 0.05 cfs, station 5, Frasier Creek about ¼ mile above the mouth, 0.45 cfs.

Bottom - The streambed averaged 60% boulders, 20% rubble, 10% gravel and 10% silt and litter.

Spawning Areas - Lacking totally in all upper reaches. Approximately 10% of the entire stream appeared suitable for spawning habitat.

Pools - Generally the pools were small. The pool to riffle ratio was about 1 to 1.

Shelter - Good, the entire length of the surveyed area. Shelter was composed of undercut boulders and banks, log debris, tree roots and over hanging vegetation.

Barriers - The upper limit of fish use was a falls 15 feet high, located 1½ miles above the confluence with Big Sulphur Creek.

Diversions - None at present. However, one proposed at flow station 1. Plans are for the water to be used for geothermal drilling. After which the storage win be for stock watering purposes.

Temperatures -Air 70° - 80°F	<u>Station</u>	<u>Water Temperature (°F)</u>
	1	53
	2	56
	3	66
	4	61
	5	59

Food-Abundant, caddisfly larvae were the dominant aquatic form.

Aquatic Plants-Some algae.

Winter Conditions-Winter levels appear to be about three feet higher than the present low summer water level.

Pollution-Siltation and runoff resulting from use by livestock and wild feral pigs.

Springs-A few small seeps were found.

FISHES PRESENT AND SUCCESS-Yearling sized steelhead trout were observed in pools up to the confluence of the first unnamed tributary near flow station 2, Fish of the year sized steelhead were present in the stream up to 2/3 of a mile above the mouth.

OTHER VERTEBRATES-Frogs, lizards, Salamanders, garter snakes, racer snakes, cattle and wild feral pigs.

FISHING INTENSITY-Unknown.

OTHER RECREATIONAL USE-Unknown, however, the whole drainage has potential for the hunting of feral pigs.

ACCESSIBILITY-The Geysers Road crosses the mouth of the stream. The Hale Ranch road crosses the upper stream reaches in the headwater. Access into the headwaters is via a private road from the Pine Mountain Road.

OWNERSHIP-Private, owned by P.C. Hale, H.E. Ranch.

POSTED OR OPEN-Posted.

IMPROVEMENTS-None observed, the reduction of wild feral pig numbers would reduce their use of the stream for wallows, etc.

PAST STOCKING-Unknown.

GENERAL ESTIMATE-Frasier Creek's contribution; in terms of flow, volume of water and its anadromous fishery resources is of minor importance to Big Sulphur Creek and the Russian River drainage. The stream, however, does maintain limited spawning and summer nursery area for steelhead.

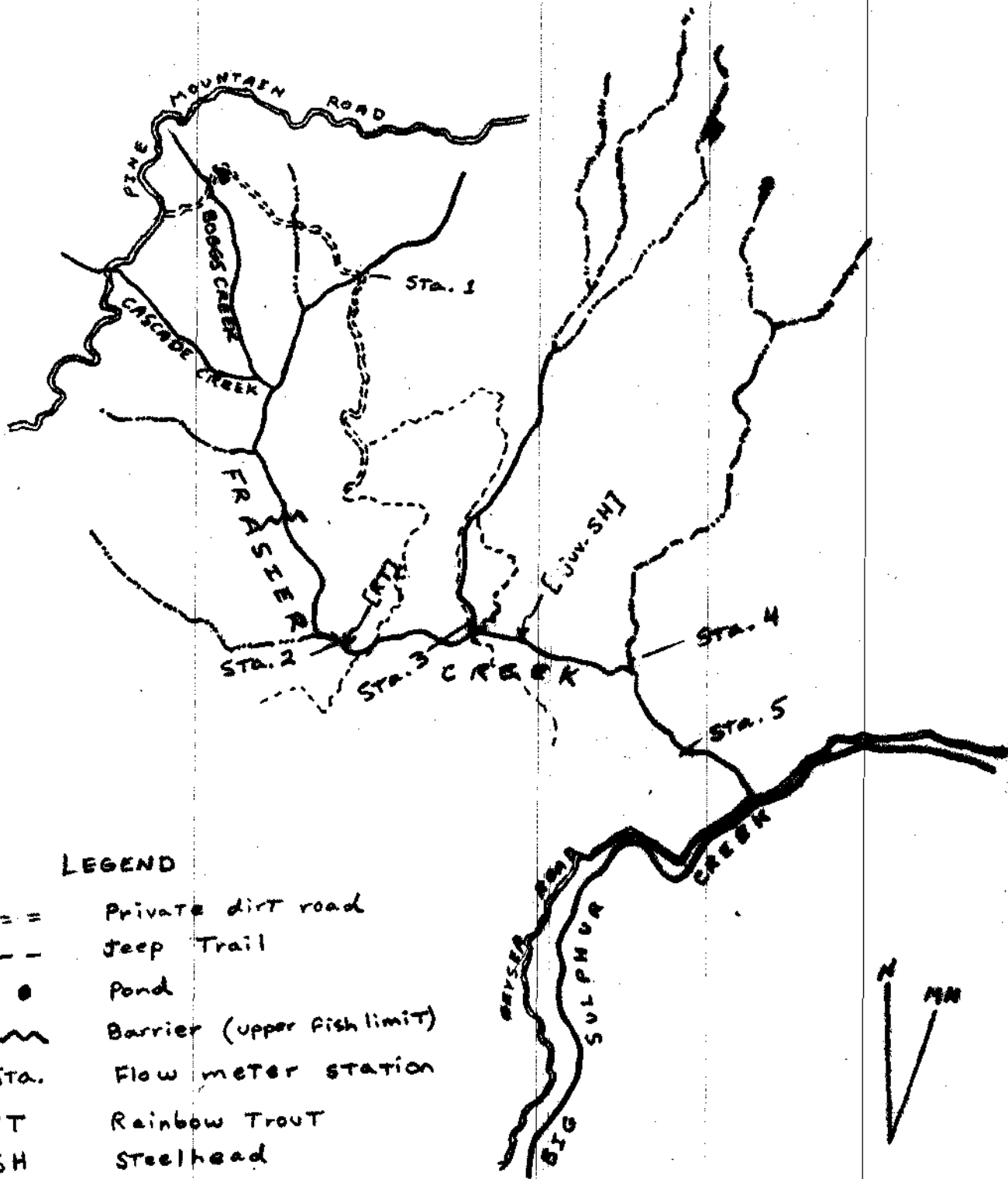
RECOMMENDED MANAGEMENT-Frasier Creek should be managed as an anadromous steelhead stream.

SKETCH MAP-See attachment.

REFERENCES AND MAPS-USGS 7½ minute series, Ast Quadrangle, 1959

FRASIER CREEK

SONOMA COUNTY



LEGEND

- ==== Private dirt road
- Jeep Trail
- Pond
- ~~~~ Barrier (upper fish limit)
- Sta. Flow meter station
- RT Rainbow Trout
- SH Steelhead

