

THE RESOURCES AGENCY OF CALIFORNIA
Department Of Fish And Game

STREAM SURVEY

Date: August 13, 14, 1973

NAME: FRANZ CREEK COUNTY: Sonoma
 STREAM SECTION: Entire FROM: Mouth TO: Headwaters LENGTH: 10 miles
 TRIBUTARY TO: Maacama Creek TWP: 9 N R: 8 W SEC: 20
 OTHER NAMES: None RIVER SYSTEM: Russian River
 SOURCES OF DATA: Personal observation

- 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)
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- Spawning Areas
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- RECOMMENDED MANAGEMENT
- SKETCH MAP
- REFERENCES AND MAPS

EXTENT OF OBSERVATION - Franz Creek was surveyed on August 13 and 14, 1973 by foot and vehicle by B. Finlayson and J. Nelson, Fish and Wildlife Seasonal Aids.

LOCATION - Franz Creek enters Maacama Creek 100 feet from the Chalk Hill Road in Sonoma County, 3 miles south of the intersection of Chalk Hill Road and Highway 128.

RELATION TO OTHER WATERS - Franz Creek contributes winter flows and summer underground seepage to the Russian River.

GENERAL DESCRIPTION -

Watershed - Immediate Drainage Basin - Franz Creek drains a basin of approximately 15 square miles. The predominant vegetation throughout the area is second growth redwood, which has been either logged or burned. With the exception of the first mile, which is a flat valley, the creek flows through a slow gradient U-shaped canyon with little streamside cover. The creek becomes marshy in a few areas.

Altitude - At mouth 140 feet, headwaters 1000 feet.

Gradient - Approximately 86 ft./mile.

Width - Range: 6 ft. - 15 ft., average 10 ft.

Depth - Range 1 inch to 2 feet, average 2 inches.

Flow - The creek is intermittent throughout. About one-half of the entire stream length is dry. The flow was estimated to be less than 1/2 cfs in flowing sections.

Velocity - Slow.

Bottom - 45% rubble, 25% silt and 30% sand throughout. Some boulders were observed in the middle section of the stream.

Spawning Areas - From the mouth to one mile above the mouth, 25% of streambed is suitable for spawning. Only 10% of the remaining stream is suitable for spawning.

Pools - Stagnant pools were present throughout the entire length, and especially where the summer flow begins or ends. The pools are fed by underground seepage. The maximum depth is 5 feet.

Shelter - A small amount of shelter is provided by undercut rocks and banks.

Barriers - Two log jams and a 6-foot high falls, all passable to adult steelhead during high water, are located in the upper reaches of the creek (T 8 N, 7 W, Sec. 33, see attached map).

Diversions - Two diversions were observed 1/4 mile above the Chalk Hill Road Bridge. Both utilized 6-inch pipes with fish screens and pumps. A third diversion was noted 1/2 mile above the bridge which was removing underground water (see attached map).

<u>Temperatures</u>	<u>Station Data</u>	<u>No. 1</u>	<u>No. 2</u>	<u>No. 3</u>	<u>No. 4</u>	<u>No. 5</u>
Water temp.		75°F	71°F	63°F	64°F	68 F
Air temp.		80°F	84°F	78°F	77°F	76°F
Time		1230	1406	1500	1630	1200
Flow (cfs)		0.1	0.1	0.1	<0.1	<0.1
Location (see attached map)						
Elevation (ft.)		160	500	760	1000	440

Food - Water striders and diptera.

Aquatic Plants - Algae and sedges.

Winter Conditions - 4 to 6 feet above the summer level.

Pollution - Livestock and water from an old well was discolored and causing the water to become turbid, possibly from minerals in the well water.

Springs - None noted, but one well flowing into the stream near Station 4.

FISHES PRESENT AND SUCCESS - Sacramento squawfish were noted to 7.75 miles upstream from the mouth (size 2-5 inches), 100/100 feet of stream; roach (25/100 feet of stream) and suckers (4-7 inches - 10/100 feet of stream). Bluegills were observed from the mouth to approximately 5.75 miles upstream (2-5 inches - 50/100 feet of stream), three juvenile salmonids were observed near Station 4.

OTHER VERTEBRATES - Frogs and salamanders.

FISHING INTENSITY - Unknown.

OTHER RECREATIONAL USE - Unknown.

ACCESSIBILITY - Access from Chalk Hill Road off Highway 128, 14.5 miles north of Calistoga. Also from Franz Valley Road off Highway 128, 8 miles north of Calistoga.

OWNERSHIP - Unknown.

POSTED OR OPEN - Some areas posted against trespass.

IMPROVEMENTS - A concrete bridge base causes a falls of approximately 2 feet in height at Station 1.

PAST STOCKING -

GENERAL ESTIMATE - Franz Creek at this time offers spawning and nursery areas for steelhead only near the headwaters. The limiting factors are thought to be competition with non-game species in the lower sections, and livestock pollution throughout the stream.

RECOMMENDED MANAGEMENT - The removal of Sacramento squawfish through chemical treatment would most likely enhance the numbers of steelhead in the stream as would the removal of the log jams.

SKETCH MAP - Attached.

REFERENCES - U.S.G.S. 7.5 minute series (Healdsburg) 1955. Scale 1:24,000 and U.S.G.S. 15 minute series (Calistoga) 1943, scale 1:62,500

FRANZ CREEK
 SONOMA COUNTY
 T. 9. N. R. 8. W Sec. 20

KEY:

- == ROAD
- ~ CREEK
- POND
- ▨ MARSH
- ✕ STATION NO.
- WELL
- * LOG JAM
- ∩ FALLS

Scale:

