

CALIFORNIA DEPARTMENT OF FISH AND GAME
STREAM SURVEY

File form No.

NAME: GRAHAM CREEK COUNTY: Sonoma
 STREAM SECTION: FROM: Partial - mouth TO: headwaters LENGTH: 2 mi.
 TRIBUTARY TO: Sonoma Creek TWP: 6N R: 6W SEC: 16
 OTHER NAMES: unknown RIVER SYSTEM: none
 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)
- 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 - This tributary was walked out from the mouth to a point 2 miles upstream on Dec. 4, 1959 by John S. Day.
LOCATION - Heads in a rugged mountainous terrain due ~~north~~ of Sonoma Mts. and west of Glen Ellen. Flows in a north-easterly direction and enters Sonoma Creek 2 miles west of Glen Ellen
RELATION TO OTHER WATERS - At present this stream is of minor importance as a spawning and nursery grounds as a tributary to Sonoma Creek for spawning of anadromous fishes.

GENERAL DESCRIPTION: Watershed & Immediate Drainage Basin - From the uppermost part surveyed, the stream flows downstream through a deeply incised narrow canyon for approx. 1/4 mile. This area is well wooded principally with redwood, and minor stands of redwood. ?
 From the 1/4 mile mark the stream continues to flow through a less incised stream channel downstream through a fairly wide canyon with a cover of hardwoods and minor stands of conifers to its confluence with Sonoma Creek. Private homes and summer cottages border the stream from the mouth upstream to a point approx. 1-1/2 miles. There is considerable debris in the upper 1/4 mile section. Below this point debris is of minor importance except for large numbers of beer cans and whiskey bottles littering the stream 1/2 mile up the road crossing.

Altitude -

Gradient - Fairly steep in upper 1/4 mile section, moderately steep from the mouth to a point 1 1/2 miles upstream.

Width - Average 4 ft. (2-8 ft.).

Depth - Average 3 inches (1 in. - 5 ft.).

Flow - Estimated .13 cfs to 1/2 cfs. [*this date.*]

Velocity - Fairly rapid throughout.

Bottom - Principally rocks averaging 6 in. in diameter with lesser amounts of smaller gravel and sand. This bottom condition exist throughout the entire section surveyed.

Spawning Areas - Generally fair. Spawning areas were spread throughout the entire section with few considered to be excellent in quality. Small amounts of pea gravel were present with considerable amounts of gravel approximately 3 inches in diameter.

Pools - Fair to poor throughout entire section principally because of the fairly steep gradient.

Shelter - Fair in the form of under cut banks and boulders. The stream is well shaded with fairly dense stands of hardwood and conifer lining the bank.

Barriers - See attached.

Barriers -

1. Wood vertical flash board water diversion dam approx. 5' in height - complete barrier.
2. Log jam gravel and sanded in 25' x 15' x 5'. 50% void - partial barrier
3. 50 ft. tree and roots - partial barrier.
4. Concrete water diversion dam approx. 10 ft. in height - complete barrier
5. Rock water diversion dam with a 6' long lip built of 2 x 12s on down stream side of dam approx. 4' in height. Complete barrier.
6. Log jam - 12' x 6' x 4' - 90% void - partial barrier.
7. Log jam - sand and graveled in - 5' x 20' x 10' - 96% void - partial barrier.
8. Semi-natural barrier log jam - 20' x 5' x 4' - 96% void - partial barrier.
9. Masonry water diversion dam approx. 3½' in height, partial barrier.
10. Log jam - gravel water diversion dam - approx. 4' in height - partial barrier 30' x 10' x 6' - 95% void.
11. Log jam - 15' x 15' x 4' - 80% void - partial barrier
12. Log jam - 90' x 30' x 6' - 90% void - partial barrier.
13. Log - 12' long x 18" in diameter - partial barrier.
14. Natural rock barrier - 8' in height - complete barrier.

Diversions - Ten water diversions were observed. See attached barrier list.

Temperatures - Water 46 °F., air 50° F. at 10:30. Probably range in the 60's throughout the summer.

Food - Native insect and larvae appeared in abundance.

Aquatic Plants - None observed.

Winter Conditions - This tributary sustains a moderately heavy winter runoff.

Pollution - None observed except small amounts of garbage in lower area.

Springs - Three springs were observed in upper 1/4 mile section.

FISHES PRESENT AND SUCCESS - Rainbow trout ranging from 2-8" were observed; however they were extremely few in number and unidentified cottid was present also. These were also few in number. Success seems to be poor, probably due to fishing pressure and low extreme flows during the summer. No fishes were observed in upper 1/4 mile section.

OTHER VERTEBRATES - Frogs and salamanders were observed throughout the entire section; however, these were also few in number.

FISHING INTENSITY - Reported to be slight during the early months of the trout season.

OTHER RECREATIONAL USE - Picnicking.

ACCESSIBILITY - This tributary is accessible by paved and dirt road which parallels the creek upstream approx. 1.5 miles. The road is known as the Sonoma Mt. Road when it leaves the Bennett Valley road approx. 2 miles west of Glen Ellen. The Sonoma Mt. road is paved. Private dirt road branch off the Sonoma Mt. road and parallels the stream upstream for approx. 1/2 mile. The upper area may be reached by taking a private road off Sonoma Mt. Road approx, 1½ miles upstream. This road will take one into the headwaters section. The extreme headwaters section is accessible by foot.

OWNERSHIP - Privately owned.

POSTED OR OPEN - The major portion of the stream surveyed is posted by the many landowners located along the stream.

IMPROVEMENTS - None observed.

PAST STOCKING - Not known.

GENERAL ESTIMATE - This tributary in its present condition contributes very little to the fishery of Sonoma Creek. This is basically due to the complete barriers formed on the stream by water users at present. The only area available to steelhead spawning is the lower 1/4 mile. Above this area are numerous natural barriers, log barriers and water diversion barriers. If fishways were constructed over the water diversion barriers and the few natural barriers and log jam barriers removed, it is felt that this stream would contribute considerably to the steelhead runs of Sonoma Creek. Also, if water users would release larger amounts of water during the critical summer months downstream, this would enhance the nursery area for steelhead. The summer trout fishery in the upper mile is considered to be poor principally because of low water flows and angling pressure. At one time probably this stream was an excellent steelhead spawning and nursery area but due to the large number of water users on this stream this stream has declined to a stream of minor importance.

RECOMMENDED MANAGEMENT - It is recommended that water users be made to comply with the fish and game code and construct fishways over their water diversion dams. In conjunction with the water diversion owners constructing fishways over their dams, the Department should remove the log jams and natural barriers to the upstream 1/4 mile point. Whether there is sufficient water in the summer time to sustain young steelhead is unknown at this time but it is felt that the water diverters should be made to comply with the fish and game code and construct fishways. After the entire 1-3/4 section has been made accessible to steelhead, it is recommended that the Department plant yearling steelhead in the stream to try and initiate a run.

SKETCH MAP - See attached.

REFERENCES AND MAPS - CDF Sonoma County map 1956.

J.S. Day
J. S. Day/cd

