

THE RESOURCES AGENCY OF CALIFORNIA
 Department of Fish and Game

STREAM SURVEY

Date: August 15 & 20, 1973

NAME: MAACAMA CREEK COUNTY: Sonoma

STREAM SECTION: Entire FROM: Russian River TO: McDonnell Creek LENGTH: 8 mi.

TRIBUTARY TO: Russian River TWP: 9 N R: 8 W SEC: 19

OTHER NAMES: None RIVER SYSTEM: Russian River

SOURCES OF DATA: Personal Observations

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 OBSERVATIONS: On August 15 and 20, 1973, Maacama Creek was surveyed on foot and from vehicle by J. Nelson and B. Finlayson, Fish and Wildlife Seasonal Aids, from its confluence with the Russian River to [its] intersection with Bluegum Creek and McDonnell Creek (T 10 N, R 8 W, Sec 27).

LOCATION: Maacama Creek enters the Russian River one mile west from its intersection with Franz Creek, 2.5 miles south of Highway 128 on Chalk Hill Road, Sonoma County.

RELATION TO OTHER WATERS: Maacama Creek contributes winter flow to the Russian River drainage and spawning and possible nursery areas for steelhead.

GENERAL DESCRIPTION:

Watershed and Immediate Drainage: The topography of the area can be divided up into three general types:

(1) from the mouth to three miles upstream, the creek flows through a wide flat valley; (2) a two-mile [sec?] above the first flows through a heavily shaded, narrow, U-shaped canyon and (3) the remaining five miles flow through an open narrow valley. The entire watershed is covered with oak trees and grasslands being utilized [as] vineyards and cattle grazing.

Altitude: The altitude ranges from 160 feet to 360 feet.

Gradient: Averages 32 feet/mile throughout the entire length.

Width: Average 6 feet, range of 2 ft. to 15 ft.

Depth: Average of 5 inches, range of from 1 inch to 6 feet.

Flow: The intermittent summer flows varied between 1.28 cfs to less than 0.1 cfs, and ended approximately three miles above the mouth.

Velocity: Slow to rapid.

Bottom: In the lower section the stream bottom consisted of 70% fine gravel and 30% sand. [The] middle two miles consisted of 40% boulder, 40% gravel and 20% silt. The upper five miles consisted of 3% bedrock, 12% sand and silt, 50% fine gravel, 20% coarse gravel and 15% boulders.

Spawning Area: Approximately 80% of lower three miles is available for salmonid spawning. [The] middle two miles offers 10% potential spawning area. The upper five miles offers 50% potent spawning area.

Pools: Stagnant pools are present in the lower three miles during the summer; [Pools] there ranged one ft. to four ft. in depth. One-half of the remaining creek is pool area, ranging from one-half foot to six feet in depth.

Shelter: A few undercut banks and boulders in the creek provide a minimum of shelter.

Barriers: Two earth dams are located on the upper five miles and are washed away by winter flows according to the owner (see attached map). A removable wooden dam with a concrete base is located at Camp Maacama. A torn down concrete bridge was also noticed here. (See attach map).

Diversions: 15 diversions were observed along the creek, the majority of which are located the lower three miles (see attached map) and (list of diversions).

Diversions (continued):

Station Data	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5
Air temp.	75°F	76°F	62°F	72°F	84°F
Water temp.	64°F	62°F	64°F	65°F	74°F
Altitude (ft.)	200	240	240	280	360
Weather	Clear	Clear	Clear	Clear	Clear
Flow (cfs)	-	0.4	1.28	-	-

Food: Aquatic coeloptera and diptera were numerous and aquatic hemiptera were present in shaded areas.

Aquatic Plants: Algae and sedges.

Winter Conditions: In the lower section: up to 75 ft. wide and an estimated four to six feet above summer levels. In the middle two miles winter conditions appeared up to 12 ft. above summer levels. In the upper five miles flows were estimated to be about three feet above summer levels.

Pollution: Livestock grazing.

Springs: Several were noted along the creek.

FISHES PRESENT AND SUCCESS: Four juvenile steelhead were observed in the upper reaches of the creek. Sacramento squawfish are present throughout the entire stream and ranged from 3 inches to 1.5 feet in length and numbered 100/100 ft. of stream. Suckers and roach were also observed throughout the entire stream. Bluegills were observed in deep pools and were estimated at 2/100 ft. of stream.

OTHER VERTEBRATES: Frogs and turtles.

FISHING INTENSITY AND OTHER RECREATIONAL USE: Unknown.

ACCESSIBILITY: The lower section may be entered where Chalk Hill Road crosses Maacama and Franz Creek. Chalk Hill Road is accessible from Highway 128, 17 miles northwest of Calistoga, California. The middle section can be reached directly from Highway 128, while access in the upper section is available by a dirt road, 14 miles northwest of Calistoga.

OWNERSHIP: Private.

POSTED OR OPEN: 80% of area surveyed is posted.

IMPROVEMENTS: None observed other than dams noted above.

PAST STOCKING: Unknown.

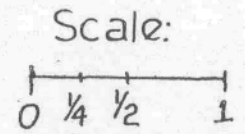
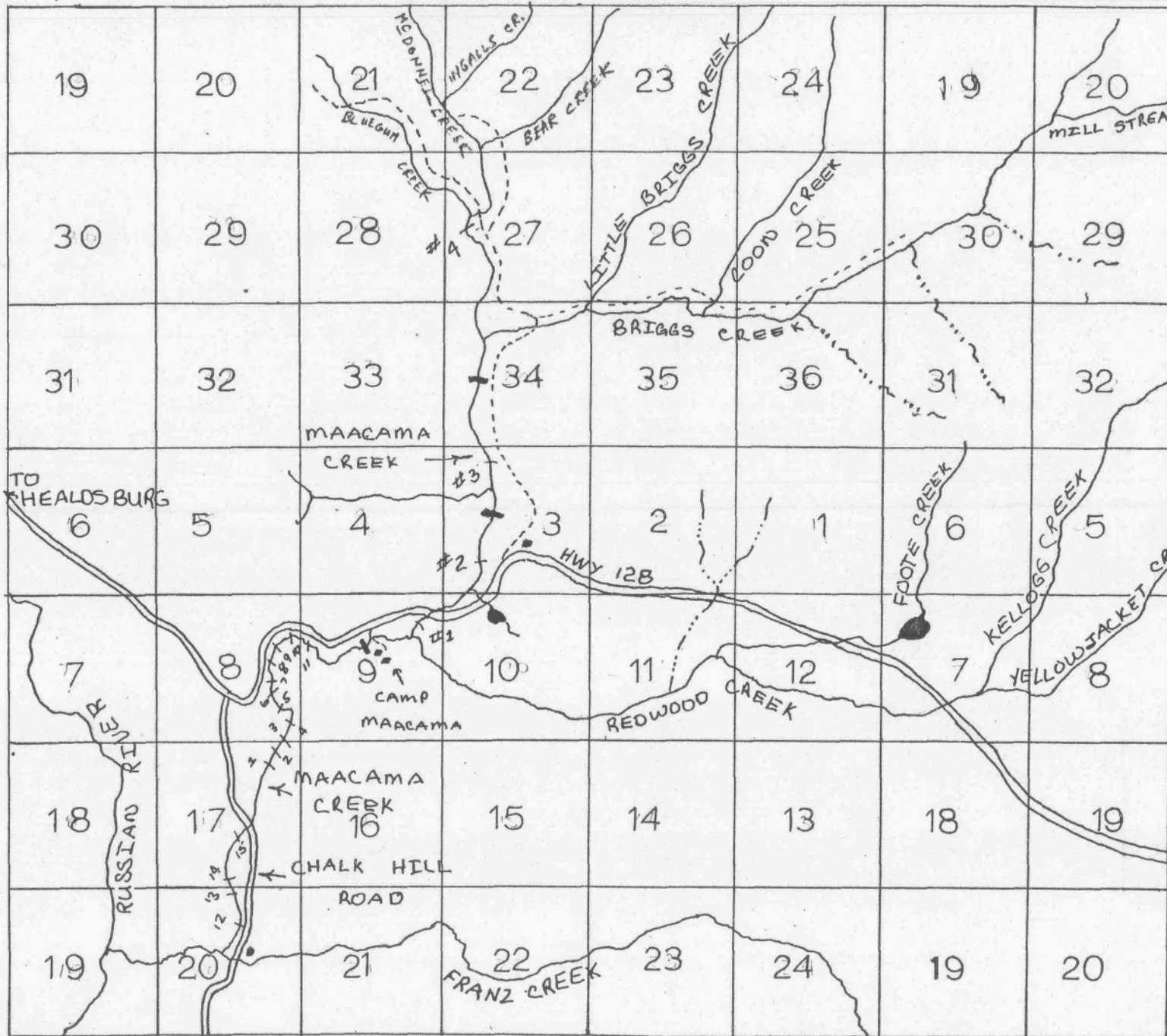
GENERAL ESTIMATE: The lower section offers excellent spawning gravels, but little nursery habitat. Upstream reaches offer less spawning area, marginal nursery habitat, and are heavily infested with non-game fish species.

RECOMMENDED MANAGEMENT: The planting of shade trees would greatly increase the potential of the upper section.

SKETCH MAP: Attached.

REFERENCES: U.S.G.S. 7.5 minute series (Mt. St. Helena) 1959, Scale 1:24,000.

MAACAMA CREEK
SONOMA COUNTY
T. 9 N. R. 8 W. Sec. 19



- Key:
- paved rd
 - dirt rd.
 - creek
 - pond
 - dam
 - station no.
 - diversion
 - building

TO CALISTOGA

SUPPLEMENTARY SURVEY

NAME OF WATER MAACAMA CE. COUNTY SONOMA

DATE 8/20 TRIB. TO RUSSTAR RIVER

- 1) Diu 2" pipe
cement sump / TOP CE. DRY
- 2) Diu 2" pipe
- 3) Diu 4" pipe
- 4) Diu 2" pipe COURSE COVERING
- 5) Diu 5" pipe SCREEN
- 6) Diu 3" pipe "
- 7) Diu 3" pipe NO
- 8) Diu 5" pipe SCREEN
- 9) Diu 2" pipe SUMP
- 10) Diu 3" pipe SCREEN
- 11) Diu 4" pipe IN SUMP
- 12) 3" pipe
- 13) 6" plastic pipe, good
screening.
- 14) same as 13.
- 15) 4" galvanized pipe

NAME OF SURVEYOR

FG 726