

THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF FISH AND GAME

STREAM SURVEY

Date: 2/15/66

NAME: Icaria Creek COUNTY: Sonoma
 STREAM SECTION: FROM: 101 Hwy u/s 3 1/2 mile TO: [sic] LENGTH: 3 1/2 miles
 TRIBUTARY TO: Russian River (See map) TWP: R: SEC:
 OTHER NAMES: Not known RIVER SYSTEM: Russian
 SOURCES OF DATA: Local residents, warden and personal observations.

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| 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 |
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EXTENT OF OBSERVATION - February 7, 1966, between the hours of 1100 to 1730 by G. K. Brackett on foot and car.

RELATION TO OTHER WATERS - Important spawning and nursery area for steelhead and resident RT. Contributes summer flows. Supports a small run of SH trout.

GENERAL DESCRIPTION - Watershed - Topography is moderately steep to rolling hills throughout. Vegetation is oak, brush combination, mostly open grasslands for range animals. Soil is deep, rocky, brownish-red in color.

Immediate Drainage Basin - 25 to 30 sq. miles. "U" shaped canyon type basin, open valley. Stream drains from the west to the east. Channel incised shaped - very pronounced throughout. Streamside vegetation, willow, berry, poison oak, alder oak in abundance.

Altitude - Mouth-280', headwaters-700'.

Gradient - Approximately 120' per mile-slight to moderate in gradient.

Width - Pools: average 8", range 4 to 24"; riffles: average 3", range 1 to 6".

Flow - At time of survey, measured with pygmy meter - 75 cfs at 101 culvert; 1.5 cfs at unnamed tributary (see map) and 15 cfs at NW Fork Icaria Creek. High water mark for this year 3 1/2 feet above existing water level observed at 101 culvert. See map for summer flow picture.

Velocity - Rapid throughout, winter flows, sluggish during summer flows.

Bottom - Generally good spawning gravels throughout. N.W. Fork, first half of three quarters of a mile very poor for spawning. Average bottom composition: Bedrock 1 per cent, boulders 4 per cent, coarse rubble 8 per cent, fine rubble 22 per cent, course gravel 30 per cent, fine gravel 25 per cent, sand 5 per cent, silt 5 per cent.

Spawning Areas - See attached map. Approximately 6 miles of good spawning area available. Of this and estimated 40 per cent can be utilized successfully. At upper end of drainage good spawning area available. Of this spawning gravels in excellent condition-loose and the preferable size for SH trout.

Pools - Good frequency, 60 per cent of stream area in form of pools caused by digging action and gradient of stream. Size, average-(length x width x depth) 10' X 8' X 8", range -4' X 2" X 4" and 20' X 15' X 3'. Good depth and shelter for fish.

Shelter - Excellent throughout - cutbanks, vegetation, boulders.

Barriers - And Upstream limits to fish migration: Highway 101 box culvert - 315 feet long, poor and upstream limits gradient and water shallow (measured average 6 inches at 75 cfs) velocity measured 9 ft/sec. - possible barrier to anadromous fish migration. Was installed 3 years ago. Soil conservation concrete bank erosion and diversion any channel (see location on map) - dimensions - 10' wide by 15' long, sl[sic] of 1 to 4', water cascades down concrete like spillway. Man-made channel on NW fork, approximately 1/2 mile u/s from confluence with Sw Fork, series of bedrock cascading falls as high as 3% feet; four counted. Cartwrights Dam (see location on map) approximately 40 to 50 feet high - 10 acres in size, was spilling at time of survey - spillway of natural bedrock, steep falls, vertical drop - 35 feet.

Diversions - None observed.

Temperatures - No measurements.

Food - No observations.

Aquatic Plants - Not observed.

Winter Conditions - See explanation under "flows".

Pollution - None noted.

Springs - Wrong time of year to observe.

FISHES PRESENT AND SUCCESS - Steelhead, resident rainbow population present. Four yearling or older 4 to 6 inches in size steelhead and on rainbow trout seined as well as one western roach. In unnamed tributary were dam proposed estimated 5 fish per 100 feet of stream for first .5 miles. Nothing known about abundance in remaining stream area. Water was too high and turbid to make observation. Reports from local residence say fishing for rainbows through July good. No observations or information on present success of game and non-game fish species.

OTHER VERTEBRATES - Observed deer and quail, cattle, horses and sheep.

FISHING INTENSITY - Light-see notes under fish species present. [(for RT)]

OTHER RECREATIONAL USE - Hunting.

ACCESSIBILITY - County roads throughout. See map.

OWNERSHIP - All privately owned. Good portion of upper drainage owned by Cartwright Ranch. Land divided into many (8 to 12) property owners.

POSTED OR OPEN - Most of stream open to public for fishing.

IMPROVEMENTS - Highway 101 culvert should be watched. Fish migration should be observed. If this presents barrier then baffles and new type entrance should be worked out to improve or prevent blockage to fish migration.

PAST STOCKING - Not known. It's believed that nothing has been planted by the Department.

GENERAL ESTIMATE - This is recognized as an important steelhead and resident rainbow trout stream. It is used as a spawning and nursery area. Six miles of stream are available for spawning purposes and 2 miles for summer nursery purposes. No major natural limiting conditions were recognized at the time of the survey. No estimates on success in terms of fish utilization are presently known. No improvements would be necessary to help increase production potentials.

RECOMMENDED MANAGEMENT -

1. Should be managed under existing natural conditions (steelhead and resident rainbow trout stream).
2. Continue to observe effect of Highway 101 culvert on anadromous fish migration.
3. Summer minimum flows should be determined and included in management plan.
4. Water Diversion activities should be evaluated for their effects on the summer fishery.
5. Department should continue to recognize that the Cartwright dam is an important source of summer flows.

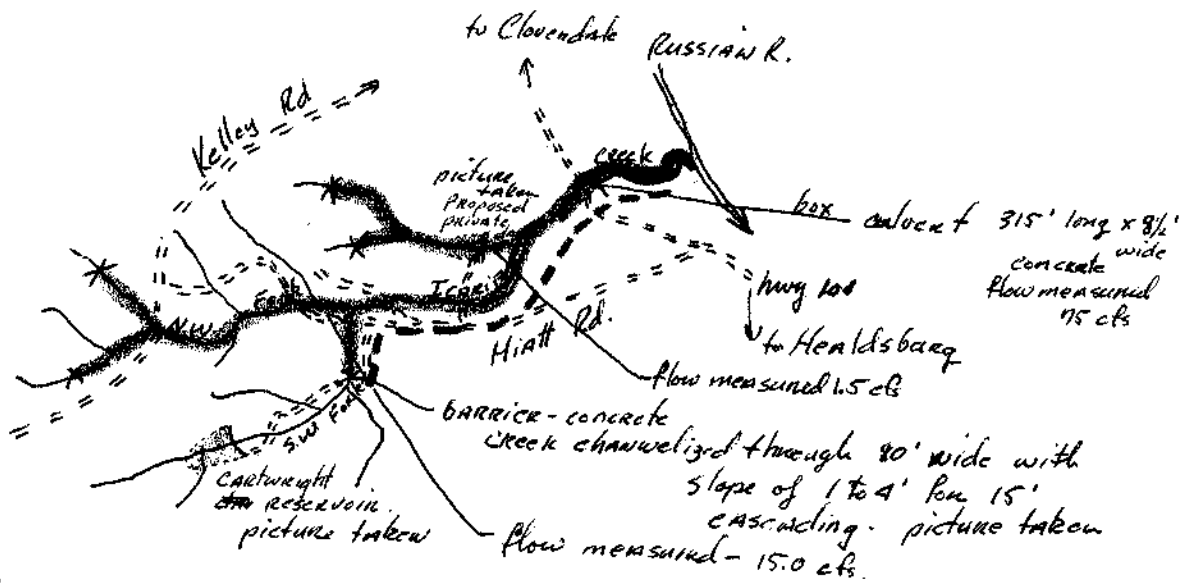


G. K. Brackett
F&G Seasonal Aid
Region 3

Icacia Creek
trib to Russian R.
Sonoma Co.

Statistics

Miles Stream available - spawning - 6
 - nursery - 2; (summer low)
 Miles Stream that could be
 feasibly improved
 (brought into production) - 0



Key:

- Stream
- ▬ Stream available for anadromous fish spawning
- x Upstream limits
- === Roads
- summer flows and nursery area

