

THE RESOURCES AGENCY OF CALIFORNIA  
 Department of Fish and Game

**STREAM SURVEY**

Date: August 25, 1977

NAME: Dowdall Creek COUNTY: Sonoma

STREAM SECTION: entire FROM: Mouth TO: Headwaters LENGTH: 3.9 mi.

TRIBUTARY TO: Sonoma Creek TWP: 5N R: 6W SEC: 12

OTHER NAMES: None known RIVER SYSTEM: Sonoma Creek

SOURCES OF DATA: Personal observation and information from local residents

<b>EXTENT OF OBSERVATION</b> 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 - Dowdall Creek was surveyed by foot from mouth to headwaters by Bill Rowser and Dennis Fong on August 25, 1977.

LOCATION - The creek lies in southeastern Sonoma County, flowing through the town of El Verano. The confluence with Sonoma Creek is located west of the town of Sonoma.

RELATION TO OTHER WATERS - Dowdall Creek supplies winter flow to Sonoma Creek. Surface flow at the mouth usually ends in May or June. In the past the creek provided a small amount of steelhead spawning habitat.

GENERAL DESCRIPTION -

Watershed and Immediate Drainage Basin - Dowdall Creek flows for 3.9 miles from the foothills of the Sonoma mountains, through an open valley to Sonoma Creek. The creek drains 1.5 square miles of a combination of ranch and orchards in the first mile, residential property in the middle two miles, and open grasslands in the upper mile. Most of the lower 3 miles of streambed is lined with trees including California laurel, Pacific dogwood, toyon, buckeye, willow, maple, and various types of oak. The canopy in this area averages about 60%. Canopy in the upstream 9/10 mile averages about 25%. Other types of vegetation in the area include poison oak, anise, blackberry, and various annual grasses.

Altitude - Mouth - 65 feet M.S.L.; Headwaters - 800 feet M.S.L.

Gradient - Slight, from the mouth to 3 miles upstream, averaging less than 1'/100'. Moderate in the upper 9/10 mile 13'/100'.

Width - Average pool width was 2 feet, maximum pool width was 5 feet.

Depth - Average pool depth was 2 inches, maximum pool depth was 6 inches.

Flow and Velocity - Dry, except for pools.

Bottom - Bottom substrate (excluding organic litter which was extremely heavy in the lower two miles of the creek), from the mouth to 1 mile below the headwaters, consisted predominately of small rubble 25%, gravel 50%, and sand 20%, and small amounts of boulders, concrete under road overpasses and mud 5%. From the headwaters to 1 mile downstream the creek bed had large quantities of rubble.

Spawning areas - Potential spawning areas are currently in very poor condition due to heavy amounts of litter in the streambed. Large amounts of sand also limits spawning habitat.

Pools - Pools were observed from Orange Road to the headwaters. Pool development was poor. Average pool size was approximately 2' x 2' x 2".

Barriers - Partial and temporary barriers to fish movement consist of heavy amount of vegetation in the lower 2 miles of creekbed.

Diversion - Water is diverted from the main creek directly to Sonoma Creek through the diversion located under Riverside Drive (see sketch map). This diversion serves to lower water levels in the lower mile of the creek. No domestic or commercial water diversions were observed.

Temperatures - air and water temperatures near Orange Road at 1200, 82°F, and 78°F, respectively; 2/3 mile from the headwaters at 1300, 76°F and 63°F, respectively.

Aquatic Plants - Green algae were observed in some of the pools.

Winter conditions - High water level appeared to be approximately 2 feet above the streambed in the middle section of the creek and about 4 feet near the mouth. Rainfall averages 30 inches per year.

Pollution - Pollution consisted of domestic garbage such as cans, bottles, newspapers, and chairs. This garbage was especially prevalent near roadways.

Springs - none observed

FISHES PRESENT AND SUCCESS - No fish were observed. A local resident reported fish have not been seen since the diversion was installed. Prior to construction of the diversion, steelhead used the stream.

OTHER VERTEBRATES - Cattle, goats, western fence lizards, deer, domestic dogs, and frogs.

FISHING INTENSITY - None.

OTHER RECREATIONAL USE - Since the creekbed dries during the summer, children use the creek-bed as a play area.

ACCESSIBILITY - The mouth of Dowdall Creek is accessible from the Leveroni Ranch. The creek transverses through the town of El Verano. The main body of the creek can be reached by many roads in town. The headwaters can be reached by traveling on a gravel road which passes through Small Bridges Ranch on Carriger Road.

OWNERSHIP/POSTED OR OPEN - Ownership is private and posted.

IMPROVEMENTS - None recommended

PAST STOCKING - None known

GENERAL ESTIMATE - The creek currently has little value as nursery or spawning habitat for fish. Summer water volumes appear to be critical and lacking. The quality and quantity of possible spawning areas is also poor.

RECOMMENDED MANAGEMENT - Dowdall Creek should be managed as a source of winter flow to Sonoma Creek.

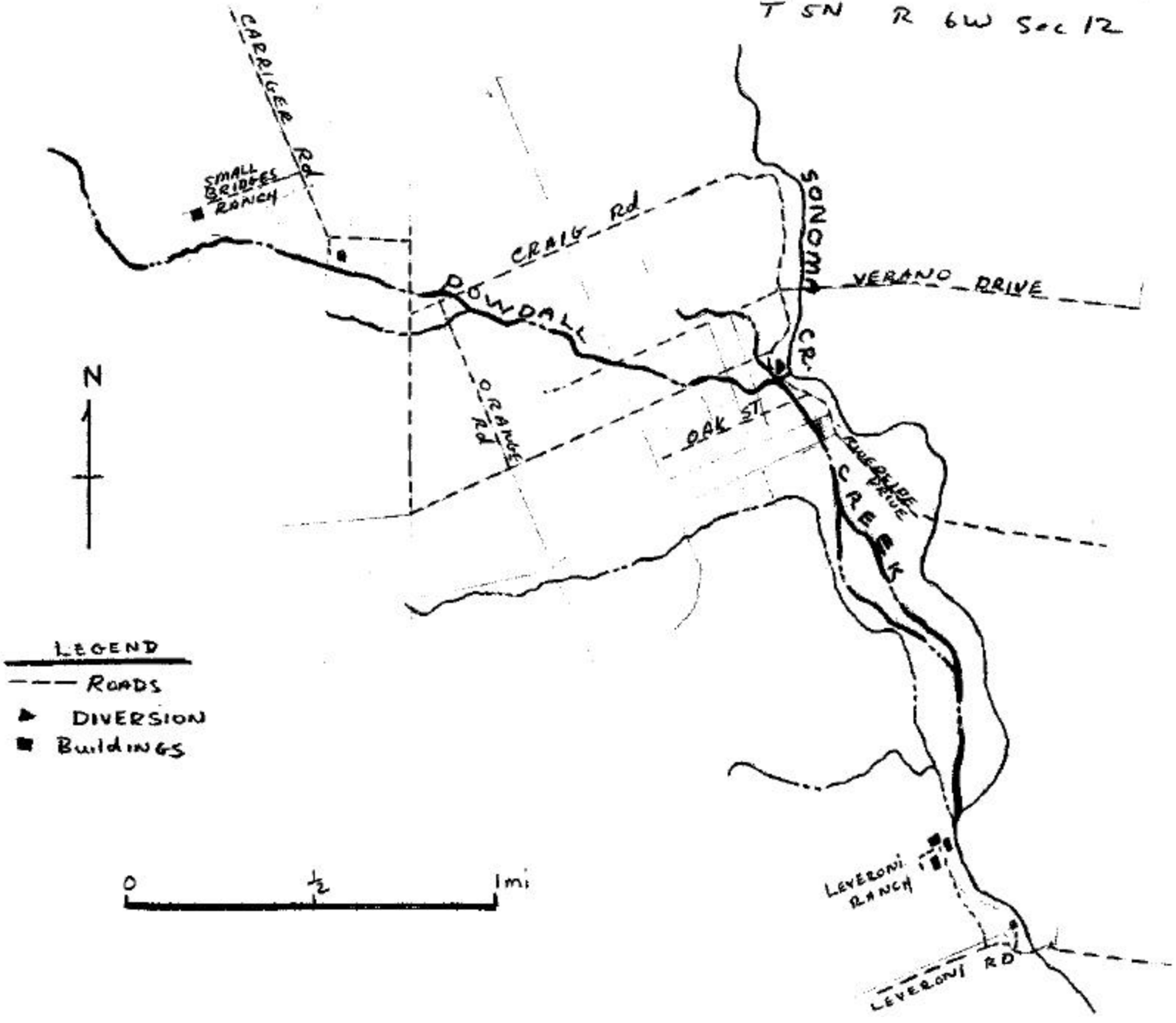
SKETCH MAP - attached

REFERENCES AND MAPS - U.S.G.S. Sonoma, California and Glen Ellen, California, 1951. 7.5 minute series.

Weldon E. Jones  
Assistant Fishery Biologist  
Region 3

WEJ/klc

DOWDALL CREEK  
T 5N R 6W Sec 12



- LEGEND**
- ROADS
  - ▲ DIVERSION
  - BUILDINGS

