

THE RESOURCES AGENCY OF CALIFORNIA
Department of Fish and Game

STREAM SURVEY

Date: June 15 and 28, 1976

NAME: ARROYO SECO CREEK COUNTY: Sonoma
 STREAM SECTION: Partial FROM: mouth TO: private reservoir on the main branch LENGTH: 7.4 miles Main stem- Right Fork—3.8
 TRIBUTARY TO: Schell Creek TWP: 5 N R: 5 W SEC: 32 miles
 OTHER NAMES: Unknown RIVER SYSTEM: Sonoma Creek
 SOURCES OF DATA: Personal observations of Charles Pinkham, Seasonal Aid

- EXTENT OF OBSERVATION
- Include: Name of Surveyor, Date, Etc.
- LOCATION
- RELATION TO OTHER WATERS
- GENERAL DESCRIPTION
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- Immediate Drainage Basin
- Altitude (Range)
- Gradient
- Width
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- Spawning Areas
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EXTENT OF OBSERVATION - The main branch to Buena Vista Winery and the right fork were spot checked on June 15, 1976. The main stem above the winery, up to the dam, was surveyed on foot by C. Pinkham, June 28, 1976.

RELATION TO OTHER WATERS - Arroyo Seco Creek is one of the two largest tributaries to Schell Creek.

GENERAL DESCRIPTION -
 Watershed and Immediate Drainage Basin - This drainage is located southeast of Sonoma, encompasses 11.4 square miles, and drains in a southwesterly direction to enter Schell Creek. Section 1 (mouth to Buena Vista Winery): U-shaped stream channel meanders southerly through flat grazeland in the Sonoma Valley. Little vegetation exists within or outside the streambed. Oak, bay, willow, and buckeye predominate in the vegetated portions, while many domesticated species such as eucalyptus and walnut are also present. Section 2 (Right Fork): A narrow, V-shaped channel heading in fairly steep, mountainous terrain, the creek discharges southerly alongside Lovall Valley Road, thence westerly to Buena Vista Winery. Surrounding streamside vegetation is chaparral except for the lower 0.2 mile where riparian vegetation was present. Generally, little or no shade is provided. Section 3 (main branch and Left Fork upstream from Hacienda Wine Cellars): A V-shaped stream channel courses southerly through a moderately sloping mountainous terrain. A lush riparian-type of vegetation covers this stream section.

Altitude - Headwaters of Right Fork, 1100 feet. Headwaters of main stem, 1300 feet. Headwaters of Left Fork, 1260 feet. Mouth about 10 feet.

Gradient - Gradient in the headwaters region of all tributaries was moderate averaging about 11 feet per 100 feet of stream. The slope in the lower section was nearly flat, averaging less than one foot per 100 feet of stream.

Width - Stagnant potholes in Section 1 ranged from 4 to 8 feet wide, and averaged 6 feet; riffles in Section 2 ranged 3 to 6 feet wide, and averaged 5 feet.

Depth - Stagnant pools in Section 1 ranged from a few inches to a maximum of 2 feet. Riffles in the lower 0.2 mile stretch in Section 2 ranged from a few inches to a maximum of 1 foot.

Flow and Velocity - Less than 1/10 cfs in Section 2 and non-existent in the other stream sections.

Bottom - Streambed composition in Section 1 ranged from 100% sand and silt at the mouth, to 50% at the upper end. This sand and silt is believed attributed to poor land use practices on adjacent sandy loam soils. The remaining constituents in the upper reaches of Section 1 averaged 10% boulder, 30% rubble, and 10% gravel. Generally, the channel in Section 2 appeared as little more than an irrigation ditch with a smooth bedrock bottom and silty sides. The bottom composition averaged 40% boulder-size bedrock, 20% rubble, 10% gravel, and 30% silt. In Section 3 the streambed averaged 50% boulder, 20% rubble, and 30% decomposed granite in the form of gravel and sand.

Spawning Areas - Potential spawning areas for salmonids are present to a limited extent in the lower reaches of Sections 2 and 3.

Pools - Small, slow-flowing pools up to 5 feet wide and 1 1/2 feet deep were observed in the Right Fork (Section 2) near Buena Vista Winery. The pool to riffle ratio in this area was about 2:3. Pools present in other areas were intermittent.

Shelter - Generally, the amount of shelter present in Sections 1 and 2 was poor. In Section 3 the overhanging vegetative canopy was adequate. In this section approximately 60% of the stream was shaded.

Barriers - A dam, estimated to be 30 feet high, supporting a reservoir of unknown storage capacity was found on the main stem approximately 1/10 mile upstream from the confluence with the Left Fork. This dam is a complete barrier to fish passage.

Diversions - A disconnected, screened, 6-inch pipe was located at the confluence of Harat[?] Creek. Another diversion was located near the Buena Vista Winery. Neither of these two diversions were in use.

Temperatures - Hyde-Burndale Road crossing: Air 73 F, water 61 F. Lovall Valley Road crossing: Air 85 F, water 71 F. Buena Vista Winery: Air 88 F, water 66 F.

Food - A small number of aquatic dipterans were observed in the Right Fork directly upstream from Buena Vista Winery.

Aquatic Plants - Algae was present in the flowing portions of the stream.

Winter Conditions - The winter high flow line appeared to be about 10 feet above the streambed.

Pollution - The lower section of the stream was adversely impacted by livestock, domestic waste, and agricultural runoff.

Springs - None observed.

FISHES PRESENT AND SUCCESS - One dead rainbow trout, 5 inches long, was found 1 1/2 miles upstream from the mouth. Stickleback were also present in the same pool. No other fish were found during the survey. The Winery Operations Supervisor reported that steelhead utilized the stream up to five years ago, but low summer flows since have prevented further use.

OTHER VERTEBRATES - Jack rabbits, tadpoles and salamanders.

FISHING INTENSITY - Unknown.

OTHER RECREATIONAL USE - Unknown.

ACCESSIBILITY - The creek is accessible via many state and county road crossings. The confluence of the main and Left Forks can be reached by a dirt road through a locked gate. The road is privately owned by Hacienda Wine Cellars from whom permission was obtained to gain access.

OWNERSHIP - Arroyo Seco Creek is bounded on all sides by privately owned land.

POSTED OR OPEN - The dirt road owned by Hacienda Wine Cellars was posted.

IMPROVEMENTS - None observed.

PAST STOCKING - None known.

GENERAL ESTIMATE - Although Arroyo Seco Creek is experiencing a drought at this time, it is doubtful that its contribution will add very much to the anadromous fishery of the Sonoma Creek drainage.

RECOMMENDED MANAGEMENT - Manage the stream for its wetted aquatic habitat as it provides for amphibians and other wildlife.

SKETCH MAP - See attached.

REFERENCES AND MAPS - USGS 7 1/2 minute series, Sonoma and Sears Point Quadrangles, 1951.