

**WALKER CREEK**

From Mouth to Headwaters

Forsythe Creek

No other names known.

Personal observation.

**MENDOCINO**

5 miles.

T. 17 N. R. 13 W. Sec. 21

Russian River System

EXTENT OF OBSERVATION - Walker Creek surveyed on foot and from vehicle from, the mouth to the headwaters, about 5 miles, on June 28, 1972 by Steven C. Durkee and Robert R. Klamt.

LOCATION - Walker Creek flows into Forsythe Creek in the Northwest quarter of Section 21, T. 17 N., R. 13 W.

RELATION TO OTHER WATERS - Walker Creek contributes summer and winter flows to the Forsythe Creek system and extends the SH spawning and nursery grounds approximately 1½ miles.

GENERAL DESCRIPTION

Watershed and Immediate Drainage Basin - Walker Creek drains a basin of about 8½ square miles of mixed redwood forest, oak grassland, and cultivated fields. The creek is divided into two parts in terms of steelhead access. The lower section, of about 1½ miles, flows through a wide valley, at present used for irrigated pasture. With a gradient of 15 feet, per mile the stream is meandering, however winter flow seems to have been sufficient to keep the bed in fair shape with a gravel base. Walker Dam, 1½ miles upstream from the mouth, forms an effective barrier to steelhead passage and removes from our consideration the upper portion of the stream above this point.

Altitude - At mouth, 1260; at dam, 1280; at headwaters, 1920.

Gradient - Overall, 132 ft/mile Lower section, 15ft/mile.

Width - Average, 5 ft.; range from 2 to 15 feet.

Depth - Average, 3 in.; range from 1 to 18 inches.

Flow - At mouth, less than ¼ cfs.; just below dam, about ¾ cfs.

Velocity - Sluggish in lower section and moderately rapid in upper.

Bottom - At mouth: golf ball-sized - ¼, pea and marble-sized - ½, sand and silt - ¼. At a point 1½ miles upstream: baseball and golf ball-sized - ½, marble-sized - ¼, sand and silt - ¼.

Spawning Areas - Below dam about 50%.

Pools - Pool to riffle ratio - 2:1.

Shelter - Undercut banks and logs.

Barriers - a) 11 areas of litter. b) 1 compact log jam. c) One 40-foot high dam (Walker Dam).

Diversions - One summer dam six feet high, with a sump to maintain a head of water for an irrigation pump on shore. This sump returned water that was seeping through the dam to the impounded portion, and effectively dried up the stream for about 150 yards below the dam.

<u>Temperatures</u>	<u>- Air T.</u>	<u>Water T.</u>	<u>Weather</u>	<u>Altitude</u>	<u>Time</u>
At Mouth	69°F.	62°F.	Clear	1260	0915
1½ miles upstream	75°F.	64°F.	Clear	1280	1000

Food - Caddisfly, mayfly, stonefly, diptera, and beetle larvae.

Aquatic Plants - Juncus, Equisetum, Nutgrass, liverwort, and algae.

Winter Conditions - 2 to 5 feet above summer level.

Pollution - Cattle grazing near the stream.

Springs - Few noted.

FISHES PRESENT AND SUCCESS - Bluegill, Roach.

OTHER VERTEBRATES - Frogs, tadpoles, salamanders, turtles.

FISHING INTENSITY - Unknown.

OTHER RECREATIONAL USES - Boating on Walker Lake.

ACCESSIBILITY - Accessible from road branching off streets in Walker Valley.

OWNERSHIP - Golden Rule Church Association.

POSTED OR OPEN - Posted.

IMPROVEMENTS - None.

GENERAL ESTIMATE - Walker Creek offers only 1½ miles of stream suitable for Steelhead use. Within this area intermittent summer flows appear to diminish nursery value. The major problem for Steelhead in Walker Creek is the dam 1½ miles upstream from the mouth. This dam is acting as an effective Steelhead barrier, restricting upstream fish use to native species.

RECOMMENDED MANAGEMENT - Release of impounded water to Maintain sufficient summer flows for successful Steelhead rearing and further investigation of diversion mentioned above.

SKETCH MAP - Attached.

REFERENCES - U.S.G.S. 15 minute series (Willits Quad.) 1961. Scale - 1:62500