THE RESOURCES AGENCY OF CALIFORNIA

CALIFORNIA DEPARTMENT OF FISH AND GAME

STREAM SURVEY

File form No _____ Date: _____.

Name Buckeye Creek, North Fork County Sonoma .

Stream Section Entire From Headwaters To Mouth Length 5 mi. .

Tributary To Buckeye Creek Twp 10N R 13W Sec 31 .

Other Names Not Known River system Gualala .

Sources of Data personal observation .

EXTENT OF OBSERVATION -- Creek was surveyed from headwaters to mouth on foot,a distance of 5 miles by B. Fox and W. Quinn on 9/15/64.

LOCATION -- Mouth of stream is approximately 4 miles northwest of Annapolis on Kelley Logging Road.

RELATION TO OTHER WATERS -- Creek is an important tributary to Buckeye Creek furnishing summer and winter flows and under optimum conditions could be an important spawning area.

GENERAL DESCRIPTION:

Watershed and Immediate Drainage Basin -- Watershed is a relatively shallow limited drainage, U-shaped basin. Primary cover of redwood, fir with a sprinkling of deciduous trees, alder and some brush. Soil is rocky loam. Osser and Roy Creeks are tributaries to North Fork Buckeye Creek.

Altitude -- At mouth 360 ft. At headwaters 800 ft.

Gradient -- Slight, 85 ft. per mile.

Width -- 2 ft. to 20 ft. Average 6 ft.

Depth -- 1 inch to 2 ft. Average 2 inches.

Flow -- 1/3 cfs summer flow at mouth. 100 cfs winter flow estimated. 8 ft. high watermarks observed.

Velocity -- Mostly sluggish, stagnant in places.

Bottom -- First mile from headwaters downstream 50 percent bedrock and boulders, 25 percent coarse rubble, 10 percent gravel, 15 percent sand and silt. The lower 4 miles consist of 80 percent coarse gravel and fine gravel, 5 percent bedrock, 15 percent sand and silt.

Spawning Areas -- Remote pockets in first mile downstream from headwaters, the lower 4 miles i practically a continuous spawning bed, average 50 ft. wide with relatively loose gravel.

Pools -- Poor, no deep pools. Pools are shallow, wide and long. The pool ripple ratio is 25 percent pool, 75 percent ripple.

Shelter -- Poor with infrequent logs, furnishing only shelter available.

Barriers -- Opposite the mouth of Osser Creek, is a disused broken down logging bridge creating a barrier 6 ft. high by 50 ft. wide by 50 ft. deep. It is not a total barrier and is located 1-1/2 mile below the stream headwaters. There are no other barriers in the stream, there are infrequent logs from old logging in the stream.
Diversions -- None in operation. Evidence that water trucks had drawn water from stream was observed.
Temperatures -- At 1000 hours on 9/15/64 under a clear sky, water temperature was 58 degrees, air temperature was 67 degrees 1/2 mile downstream from headwaters. At 1245 hours on 9/15/64 under a clear sky water temperature was 64 degrees, air temperature was 76 degrees 1/2 mile upstream from mouth of Creek.
Food -- Poor consisting of mayfly larvae and pupae, less than 20 per sq. ft. and a few surface insects observed.
Aquatic Plants -- Heavy algae blooms, other plants rare.
Winter Conditions -- Heavy winter flows obvious from widths of channel bed and good condition gravel.
Pollution -- None noted.
Springs -- Observed two minor seeps only.
FISHES PRESENT AND SUCCESS -- Stream population is 99 percent roach, 1 percent salmonids. Observed six 8 inch RG small groups of SH, 2 three inch SS, one 3 inch skulpin. Roach are present throughout length of stream. Steelhead observed were 1 to 3 inches, average 2 inches. Condition fair, propagation poor.
OTHER VERTEBRATES -- Frogs, salamanders, turtles, snakes.
FISHING INTENSITY -- Not known.
OTHER RECREATIONAL USES -- Not known.
ACCESSIBILITY -- Two wheel drive road to within 1/2 mile of headwaters and to mouth, and closely paralleling road from mouth one mile upstream. Area is reached via Kelley Logging Road north of Annapolis.
OWNERSHIP -- Private.
POSTED OR OPEN -- Posted.
IMPROVEMENTS -- Planting cover along banks of stream and removing one large partial barrier in upper portion of stream.
PAST STOCKING -- Not known.
GENERAL ESTIMATE -- Stream is good, spawning area but poor nursery area. In wetter years, nursery might be improved. Lack of cover and poor pool ripple ratio difficult to correct. Food chain might improve in wetter years. Water is currently sluggish and warm. It is possible that log jams and current extensive destructive logging on Buckeye Creek below inhibit passage of spawning salmonids up to North Fork Buckeye. No logging currently on North Fork Buckeye and only one partial barrier present 1-1/2 miles below headwaters.
RECOMMENDED MANAGEMENT -- Continued managing as SH-SS stream. Enforce existing laws to correct destructive logging in Buckeye Creek. Investigate possibilities of planting streamside cover in portions of lower three miles of stream. Remove barrier near mouth of Osser Creek.
SKETCH MAP -- See attached. (sic)
REFERENCES AND MAPS -- Ornbaum Quadrangle, U.S. Geological Survey Map, 15 minute series, 1960

W Quinn/vq 9-16-64