## CALIFORNIA DEPARTMENT OF FISH AND GAME STREAM SURVEY

File form No Date:
NAME: EAST BRANCH RUSSIAN GULCH CREEK COUNTY: SONOMA
STREAM SECTION: Entire FROM: Mouth TO: Headwaters LENGTH: 3.2 miles
TRIBUTARY TO: Russian Gulch TWP: 7 N R: 12 W SEC: 2
OTHER NAMES: South Fork Russian Gulch RIVER SYSTEM: Russian Gulch
SOURCES OF DATA: Personal observation and personal interview with local ranchers.

EXTENT OF OBSERVATION Include: Name of Surveyor, Date, Etc OCATION 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 - East Branch Russian Gulch surveyed on foot from headwaters at DeVoe Ranch to confluence of tributaries--first north and second south (see attached map) a distance of two miles, on 23 July 1965 by E. R. J. Primbs and surveyed on foot from mouth to confluence of tributaries first north and second south, a distance of 1.2 miles, on 27 July 1965 by E. R. J. Primbs.

LOCATION - East Branch Russian Gulch flows into Russian Gulch at a point approximately .4 mile north on Black's Ranch-Russian Gulch Road, a gated, dirt logging road, veering downhill where it joins Highway #1 approximately 2.9 miles on Highway #1 north of Jenner.

RELATION TO OTHER WATERS - Contributes winter and summer flow to Russian Gulch Creek and extends SH-SS spawning grounds of Russian Gulch system by 2.3 miles and SH-SS nursery grounds of same system by 1.9 miles. GENERAL DESCRIPTION -

<u>Watershed and Immediate Drainage Basin</u> - Size: 3.2 square miles; East Branch Russian Gulch flows from springs near DeVoe and Baker Ranches approximately due west: first north tributary flowing south from slopes of Ross Mountain contributes significant summer flow; no current logging: logged out between 1950-60; section 1 (from mouth to second bedrock falls) 60 degree U-shaped canyon; stable, shallow-

wide stream channel with boulder-gravel banks; shade 35 per cent; red alder dominant, redwood scarce; coverage confined primarily to stream channel with grass on summits; fern and moss on stream banks. Section 2 (second bedrock falls to north-south tributaries confluence) shallow, 25 feet wide stream channel; vegetation scarce: 15 per cent shade, primarily from red alder. Section 3 (north-south tributaries confluence to junction of Baker and DeVoe gorges and first north tributary) steep 65 degree V-shaped canyon; stream channel varying from narrow in size nursery areas to shallow wide spawning areas; redwood dominant: 70 per cent shade from redwood, tan bark oak and California laurel. Altitude - At mouth 50 feet, at upstream fish limit 475 feet. Gradient - 163 feet per mile. Width - Average 5 feet with range from two feet to 12 feet. Depth - Average 4 inches with range from two inches to six feet. Flow - 1.0 cfs., 100 feet upstream from mouth; 1.0 cfs. 100 feet below confluence of first north-second south tributaries; 0.6 cfs. 100 feet above confluence of first north-second south tributaries; 0.6 cfs. at upper fish limit on first north tributary; 0.2 cfs. at junction of Baker and DeVoe gorges.

Velocity - Gentle to moderately rapid.

<u>Bottom</u> - Section 1 (from mouth to bedrock falls) boulders 20 per cent, coarse rubble 15 per cent, fine rubble 25 per cent, coarse gravel 20 per cent, fine gravel 15 per cent, sand 5 per cent. Section 2 (from bedrock falls to first north-second south tributary confluence) coarse rubble 20 per cent, fine rubble 25 per cent, coarse gravel 25 per cent, fine gravel 20 per cent, and sand 10 per cent. Section 3 (first north tributary) boulders 20 per cent, coarse rubble 15 per cent, fine rubble 15 per cent, coarse gravel 25 per cent, fine gravel 15 per cent, sand 10 per cent. Section 4 (north-south tributaries confluence to junction of Baker and DeVoe gorges) boulders 10 per cent, coarse rubble 30 per cent, fine rubble 25 per cent, coarse gravel 20 per cent, fine gravel 15 per cent.

<u>Spawning Areas</u> - Section 1 (mouth to bedrock falls) 30 per cent (1800 square feet) fair. Section 2 (bedrock falls to first north-second south tributary confluence) 60 per cent (10,500 square feet) good. Section 3 (north-south tributaries confluence to junction of Baker and DeVoe gorges and first north tributary) 30 per cent (6,300 square feet) fair to excellent.

<u>Pools</u> - 45 per cent of stream: caused by digging action of current, boulders, and logs.

Shelter - Good: undercut banks, boulders and logs.

<u>Barriers</u> - Partial-No. 1-11 log jams from mouth to junction of Baker and DeVoe gorges (upper fish limit). No. 2--1 boulder and log jam: .6 mile upstream from mouth. No. 3-1 boulder and bedrock falls, 60 feet high, 45 degree slope, with steps two feet to five feet high: .5 mile upstream from mouth. No. 4-6 log jams on first north tributary. No. 5--1 landslide on first north tributary.

Diversions - None.

<u>Temperatures</u> - Maximum at 100 feet below first north-second south tributaries confluence at 1430 on 23 July: air 69 degrees Farenheit, water 69 degrees Farenheit; weather: fair; wind 1 to 3 miles per hour; altitude 300 feet.

Food - Caddisfly larvae: 40 to 50 per square foot; stonefly nymph: 10 to 15 per square foot. Other insects not identified.

<u>Aquatic Plants</u> - Section 1 (from mouth to bedrock falls) moss. Section 2 (from bedrock falls to first north-second south tributary confluence) considerable algae.

Winter Conditions - Four to five feet above summer minimum.

Pollution - None observed.

<u>Springs</u> - A large spring at Baker Ranch at headwaters; several small springs in gorge at (sic)ot of DeVoe Ranch.

FISHES PRESENT AND SUCCESS - Section 1: (from mouth to bedrock falls) SH (2 inches to 3 inches size): 100 per 100 feet; SS (2 inches to 3 inches size): 25 per 100 feet; sculpin (3 inches size): only one seen. Section 2: (from bedrock falls to first north-second south tributaries confluence) SH-SS: (3 inches sire) 10 per 100 feet; RT: one, eight inches; five, five inches seen. Section 3: (from first north-second south tributaries confluence to junction of Baker and DeVoe gorges) SH-SS: (2 inches to 3 inches size) 50 per 100 feet. RT: 5 inches to 7 inches size-10 seen. Section 4: (first north tributary) SH-SS: (2 inches to 3 inches size) 100 per 100 feet.

OTHER VERTEBRATES - Frogs, garter snakes, newts.

FISHING INTENSITY - Black and DeVoe report light fishing.

OTHER RECREATIONAL USES - Some hunting of deer.

ACCESSIBILITY - Accessible at mouth .4 mile north on George Black's Ranch, Russian Gulch Road, a gated, dirt logging road, veering downhill where it joins Highway #1 approximately 2.9 miles on Highway #1 north of Jenner.

(Key to gate at Black's Ranch 1.6 miles on Sea View Road which joins Highway #1-4.4 miles north of Jenner.) Accessible at headwaters at DeVoe Ranch, 4.5 miles on DeVoe Ranch Road which joins Highway #1 in Jenner.

OWNERSHIP - Sonoma Coast Associates and George Charles Ranch. POSTED OR OPEN - Posted, but DeVoe, owner of DeVoe Ranch, stated that Sonoma Coast Associates enforces closure loosely. IMPROVEMENTS - No. 1-Removal of 12 log jams from mouth to junction of Baker and DeVoe gorges (upper fish limit), 2.3 miles. No. 2-Removal of 6 log jams and one landslide on first north tributary (.6 mile). No. 3-Reforestation of stream channel from bedrock falls to first north-second south tributary (.7 mile). PAST STOCKING - Not known.

GENERAL ESTIMATE - East Branch Russian Gulch Creek has extensive spawning and nursery areas and is being currently utilized and populated by silver salmon, steelhead, and rainbow trout. The log jams present are not extensive, but do handicap fish movement and favor a rainbow trout population. A serious problem is lack of vegetation, and thus shade in a significantly large stretch of stream, the lack of shade favoring increase of water temperature, reduced oxygen content, and growth of algae. The lack of vegetation is holding the population below what the stream could have supported had the area not been logged.

RECOMMENDED MANAGEMENT - East Branch Russian Gulch Creek should be managed for silver salmon and steelhead spawning and nursery. The barriers could be removed to improve traffic and reforestation in stream channel should be considered to improve habitat.

SKETCH MAP - See attached.

REFERENCES AND MAPS - No. 1-U.S.G.S. (Arched Rock and Duncan Mills) 7 1/2 minute series (1943). No. 2--Division of Forestry Map (Sonoma Ranger Unit) (1956).

Edward R. J. Primbs/bg-7/28/65

Typed November 24, 1965

## East Branch Russian Gulch Creek

