

CALIFORNIA DEPARTMENT OF FISH AND GAME

**STREAM SURVEY**

FILE FORM NO.....

NAME: FAY CREEK COUNTY: SONOMA

.5 miles

STREAM SECTION: Entire FROM: Mouth TO: above Ryan Ranch LENGTH: 1.8 mi.

TRIBUTARY TO: Salmon Creek TWP: 6N R: 10W SEC: 19

OTHER NAMES: Not known RIVER SYSTEM: Salmon Creek

SOURCES OF DATA: Personal observation and personal interview with local ranchers and loggers.

<b>EXTENT OF OBSERVATION</b> Include: Name of Surveyor, Date, Etc
<b>LOCATION</b>
<b>RELATION TO OTHER WATERS</b>
<b>GENERAL DESCRIPTION</b>
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** - Fay Creek surveyed on foot from mouth at Salmon Creek to .5 miles above Ryan Ranch, which borders Fay Creek 1.3 miles from mouth, a total distance of 1.8 miles, on 4 August 1965 by E.R.J. Primbs.

**LOCATION** - Fay Creek flows into Salmon Creek at a point approximately 50 yards south of the bridge crossing of Fay Creek by Salmon Creek Road, a bridge marked by a junction of paved roads, the bridge being approximately 2.5 miles west of Bodega on the Salmon Creek Road.

**RELATION TO OTHER WATERS** - Contributes unpolluted winter and summer flow to Salmon Creek and extends SH-SS spawning grounds of Salmon Creek system by 1.5 miles.

**GENERAL DESCRIPTION**

**Watershed and Immediate Drainage Basin** - Size: 2.9 square miles; Fay Creek flows in summer from springs issuing throughout its drainage 2.7 miles southwest and thence 1.3 miles approximately due south; no current logging, only woodcutting by Ed Gleason, Bodega; old logging operation in headwaters region; Chenoweth Mills, Bodega, logged near Ryan Ranch in spring 1965; small future logging operations planned (few hundred feet of timber). Section 1 (from mouth to logging road crossing at Chenoweth cut) 45 degree gentle slopes of narrow valley; incised stream channel 12-30 feet wide with soil and root banks 2-14 feet high; shade 70 per cent; red alder dominant, but also present are California laurel, western mountain ash, black willow, Douglas fir,

blackberry vine, and fern; poison oak vine and shrub abundant; Section 2 (from logging road upstream .4 miles) 60 degree V-shaped canyon; precipitous and narrow bedrock-boulder stream channel; shade 5 per cent; Douglas fir, California laurel, poison oak present; summer flow underground 40 per cent.

**Altitude** - At mouth 50 feet; at upper fish value 160 feet.

**Gradient** - 73 feet per mile to upper fish value.

**Width** - Average 6 feet with range from 2 feet to 24 feet.

**Depth** - Average 9 inches with range from 2 inches to 4 feet.

**Flow** - .5 cfs at mouth; .2 cfs at Ryan Ranch Bridge; .2 cfs at logging road bridge at Chenoweth Cut.

**Velocity** - Slow.

**Bottom** - Section 1 (from mouth to Ryan Ranch) coarse gravel 20 per cent, fine gravel 50 per cent sand 30 per cent. Section 2 (from Ryan Ranch to logging road bridge) coarse rubble 25 per cent, fine rubble 35 per cent, coarse gravel 20 per cent, fine gravel 10 per cent, sand 10 per cent. Section 3 (from logging road bridge upstream .4 miles) bedrock 10 per cent, boulders 50 per cent, coarse rubble 20 per cent, fine rubble 10 per cent, coarse gravel per cent, fine gravel 5 per cent.

**Spawning Areas** - Section 1 (from mouth to Ryan Ranch) 70 per cent of winter bed (27,720 square feet), excellent. Section 2 (from Ryan Ranch to logging road bridge) 30 per cent

of winter bed (900 square feet), good. Above upper fish value point (above logging road bridge, 1.5 miles from mouth), spawning gravel negligible.

**Pools** - 80 per cent of summer flow, caused primarily by digging action of current and gravel deposits. Pool area reduced considerably in winter.

**Shelter** - Undercut banks, exposed roots (20 per cent of stream).

**Barriers** - Partial. 1. 9 small log jams, numbered 1-9 on attached map. 2. 2/deposits, number 10 and number 12 on attached map, caused by Chenoweth logging operations, spring 1965. 3. One logging road bridge, number 11 on attached map, put in by Chenoweth, spring 1965.

**Diversions** - One spring at Ryan Ranch Bridge for watering cattle.

**Temperatures** - Maximum at Ryan Ranch Bridge at 1400 on 4 August 1965: air 69 degrees Fahrenheit; water 63 degrees Fahrenheit; weather: fair; no wind; altitude: 100 feet.

**Food** - Scarce, apparently because of general absence of summer riffle area: stonefly nymph: 3/square foot; caddis fly larvae in boulder area only: 10 per square foot.

**Aquatic Plants** - Moss and algae.

**Winter Conditions** - Mr. Roff at Ryan Ranch said winter level above summer's by about 3 feet: confirmed by natural signs.

**Pollution** - None noted.

**Springs** - Four springs observed in 1.8 miles: one contributing .05 cfs.

**FISHES PRESENT AND SUCCESS** - 1. SS (average 2 inches size) 150 per 100 feet. 2. SH (average 2 inches size) 100/100 feet. 3. Three-spine stickleback. 1 inch to 2 inches size-- 18 caught and identified. Of 149 fingerlings caught and identified, 85 were SS, 64 were SH. It was (sic) impression that the par (sic) were in general smaller in size than normal: This observation in accord with the scarcity of food as reported above.

**OTHER VERTEBRATES** - Frogs, garter snakes.

**FISHING INTENSITY** - Not known.

**OTHER RECREATIONAL USES** - Deer hunting

**ACCESSIBILITY** - Accessible at mouth to .5 miles west of Bodega on the Salmon Creek Road. A bridge at a junction of paved road marked this location. At this point the Ryan-Stecker Ranches' paved road leaves Salmon Creek Road and parallels Fay Creek to the Ryan Ranch. At the lower barn of the Ryan Ranch a ranch and logging dirt road begins and parallels the stream to the Chenoweth logging operation of the spring of 1965.

**OWNERSHIP** - 1. West of Fay Creek to the Stecker Ranch Bridge: F. Stecker. 2. West of Fay Creek to the Chenoweth cut: W. J. Ryan. 3. East of Fay Creek to Chenoweth cut: Joseph Schaeffer (not a resident: in New York). 4. Above Chenoweth cut: Dr. Van Alstyne (a dentist).

**POSTED OR OPEN** - Posted and enforced. Open to hunting to a private hunting club, according to Mr. Raff.

**IMPROVEMENTS** - Removal of 11 small log jams and/accumulations and one rock-stump logging road bridge (1.6 miles).

**PAST STOCKING** - Not known.

**GENERAL ESTIMATE** - Fay Creek has excellent spawning gravel, abundantly distributed, and the extremely large summer population of the parr of SS and SH attest to the fact that the gravel is being greatly utilized, as do the reports from local residents (Ruff, Gleason and Chenoweth). However, because of the scarcity of food observed, which is reflected in the sub-normal size of the parr, Fay Creek is not equally satisfactory as a nursery area. Contributing to the scarcity of the food is the character of the summer stream: almost continuous pools and slow velocity, both qualities not inviting deposition of insect eggs. It must be mentioned, on the other hand, that summer water temperature is favorable, because of good vegetation coverage, numerous springs, and climate of area. The logging damage is relatively light, but perhaps serious because it decreases a summer velocity which is slow by nature of the stream. The old logging damage above the upper fish value is well anchored by boulders and does not affect summer conditions.

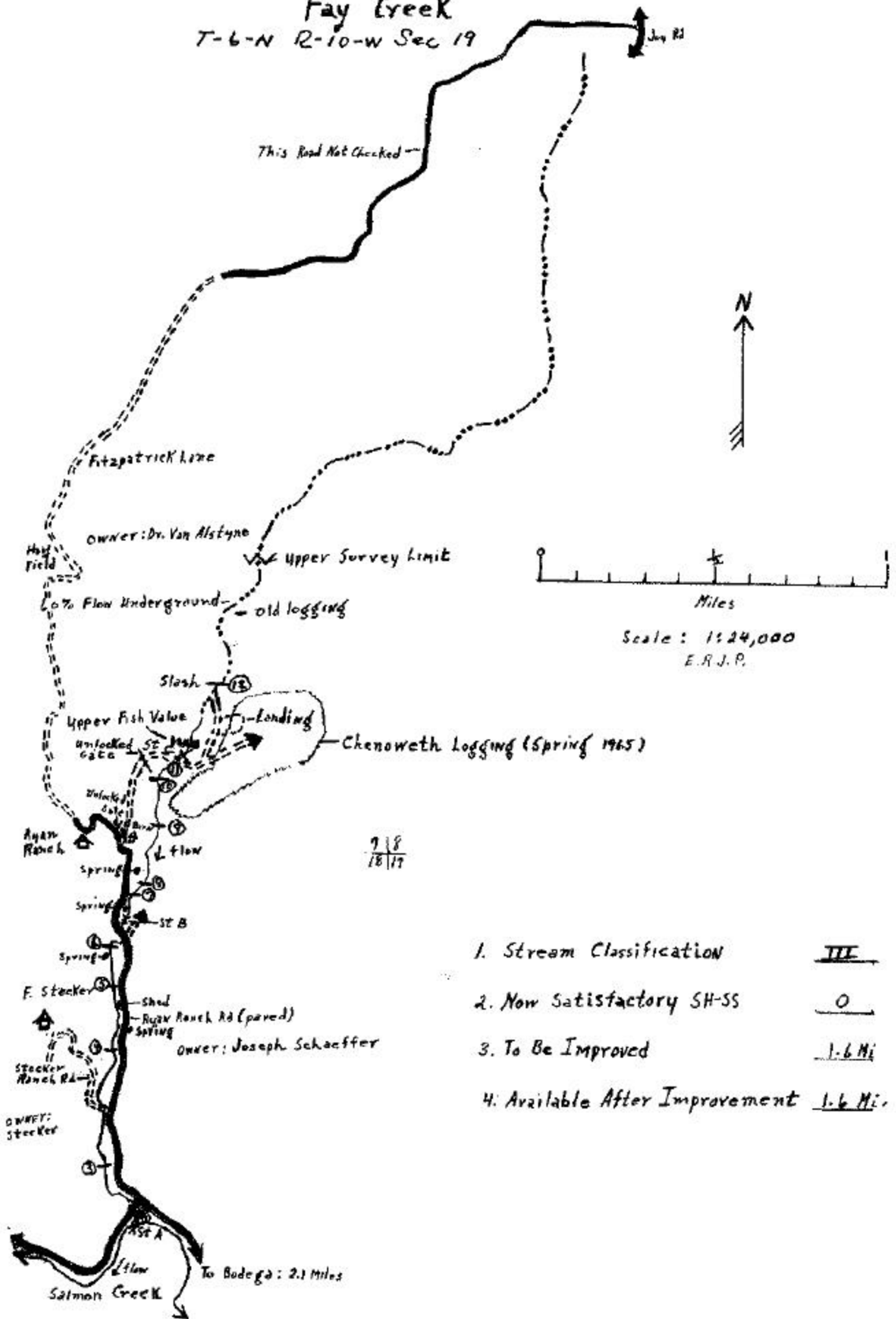
**RECOMMENDED MANAGEMENT** - Fay Creek should be managed for silver salmon and steelhead spawning and nursery. The few/and log jams and the logging road bridge should be removed to improve fish traffic and increase the summer flow, and to permit parr removed to areas of greater food abundance.

**SKETCH MAP** - See attached.

**REFERENCES AND MAPS** - 1. U.S.G.S. (Bodega Head 1942, Valley Ford 1954, Camp Meeker 1954, Duncan Mills 1943) 7½ minute series—Note error in map. Stream shown as being intermittent: not true at time of survey, and according to Ed Gleason, stream never has been dry. 2. Division of Forestry map (Sonoma Ranger Unit), 1956.

# Fay Creek

T-6-N R-10-W Sec 19



1. Stream Classification	<u>III</u>
2. Now Satisfactory SH-SS	<u>0</u>
3. To Be Improved	<u>1.6 Mi</u>
4. Available After Improvement	<u>1.6 Mi.</u>