

STATE OF CALIFORNIA
DEPARTMENT OF FISH AND GAME
 INTRAOFFICE CORRESPONDENCE

DATE
 Sept. 19, 1958

TO: G. K. Fisher
 Fisheries Biologist III
 Region 3

FROM: R. F. Elwell, FM I, Region 3

SUBJECT: RT-SH populations in Big Sulphur Creek drainage, Sonoma County

On Sept. 18, 1958 the writer and Weldon Jones rotenone-sampled the fish populations in several tributaries to Big Sulphur Creek to determine the numbers of RT-SH present in the drainage at this time. The results of these checks revealed an estimated RT-SH population of 55,400 remaining in some 23 miles of tributaries that have not been chemically treated. This population figure is a gross projection of actual counts of dead trout observed in measured stream sections and should be regarded as such. However, from visual observations made in conjunction with the sampling, it is believed to be reasonably valid. This figure, which is broken down below, does not include the numbers of rescued steelhead planted in the drainage, planted by Joe Wedge. (5,000)

Squaw Creek

Total length 10 miles. Trout water - 6 miles. Sampling revealed an average of 36 RT-SH (4 in. - 10 in.) per 100 ft. of stream section or an estimated population of 11,200 RT-SH for the 6-mile length.

Frazier Creek

Total length 3 miles. Trout water - 2 miles. Sampling revealed an average of 66 RT-SH (3 in. - 8 in.) per 100 ft. of stream section or an estimated total population of 6800 RT-SH in the 2 miles of trout water. Visual observations made above the sampling station revealed increasing numbers of trout not reflected in the above figure.

Little Sulphur Creek

Total length (not including an additional 10 miles of tributaries not sampled) 15 miles. Trout water - 10 miles. Sampling revealed an average of 48 RT-SH (3 to 8 in.) per 100-foot of stream section or an estimated total trout population of 37,400 in the 15-mile section.

RE me
 R. F. Elwell
 FM I
 Region 3

RFE:cd
 cc: Holman
 Elwell

Sept. 18, 1958

Population Sampling Results

Big Sulphur Creek, Sonoma Co.

	<u>Station</u>	<u>RT-SH</u>	<u>Suckers</u>	<u>Squawfish Fish</u>	<u>Cottids</u>
Squaw Ck.	mouth u/s 1/8 mile	248 (4" - 10")	98 (1.5-12")	0	0
	400' Section- 1/8 mi. u/s	118 (4"-9")	125 (1.5-13"),	0	0
	400' Section- 1/2 mi. u/s	159 (3"-10")	86 (1.5-12")	0	0
Frazier Ck.	mouth u/s 300'	198 (3"-8")	76 (1"-12")	1	8
	1 mi. u/s (visual)	30-35 / pool	-	0	0
Little Sulphur	100" Section- 1/8 mi. above Mercuryville Rd.	48(3"-5")	91 (1.5"-6")	0	0
	6 mi. above mouth (spot sampling)	est. 400 in 300' Sections (Jones with Morehouse)		0	0