

STATE OF CALIFORNIA
DEPARTMENT OF FISH AND GAME
INTRAOFFICE CORRESPONDENCE

DATE: August 12, 1953

TO: Willis A. Evans, Fisheries Management Supervisor - Region III
FROM: Herbert E. Pintler, Assistant Fisheries Biologist - Region III
SUBJECT: Experimental Trap - Sulphur Creek - Sonoma County

A field inspection of Sulphur Creek on Tuesday, July 14, 1953 by Regional Manager Jones, Capt. Shea, Fisheries Management Supervisor Evans, Warden Bruer, and the writer indicated a possible downstream migration of young steelhead. It was also observed at this time that rough fish, particularly Sacramento squawfish, had migrated upstream as far as the main falls, which seemed to act as a barrier to them.

It was decided at that time to install a modification of the Holman trap in the stream to check the following points:

1. To determine if a downstream migration of young steelhead was actually taking place.
2. If the latter were the case, to learn the approximate rate of downstream migration at this time of year in this stream.
3. To learn, within broad limits, the possible amount of rough fish predation.

A single trap was installed seven tenths of a mile above the falls on July 20, 1953 by William Irish, Sonoma County Fish Rescue Agent, his helper, and the writer. The following results were obtained: the trap was maintained from about 5 p.m. on July 20 to 4 p.m. on July 24. During this period 415 young steelhead (rainbow trout?) were recovered in the trap. These fish ranged in size from two to eight inches in length. The highest catch occurred during the night of July 22, when 74, young steelhead were collected and released from the trap the following morning. On two other dates, nearly as many were caught by the trap in spite of small leaks in the weir.

Water and air temperatures were checked throughout this period. Temperatures were taken between 8 a.m. and 8:20 p.m. Air temperatures ranged between 60° and 82° F., and water temperatures ranged between 69° and 83° F. In addition to young steelhead, some 121 tadpoles were also caught in the trap.

Because so few fish were collected during this period, it was felt by the writer either that there was no actual migration downstream by the young steelhead, or that if such a migration had occurred, the bulk of it took place at some earlier date. Consequently, the trap was abandoned and no attempt was made to install a second trap below the barrier to check on rough fish predation.

The accompanying sketch shows the Sulphur Creek drainage and the points where young steelhead were seen moving downstream, as well as the site of the trap, the falls, and the area known to be inhabited by small to medium sized rough fish.

An initial statement of the experiment is contained in a letter from Evans to Jones, dated July 17, 1953, same subject as above, in Region III survey files. Details of the installation itself may be found in the same files in a letter from Pintler to Evans, dated July 22, 1953, same subject as above. A copy of the latter will be made for interested personnel, if desired.

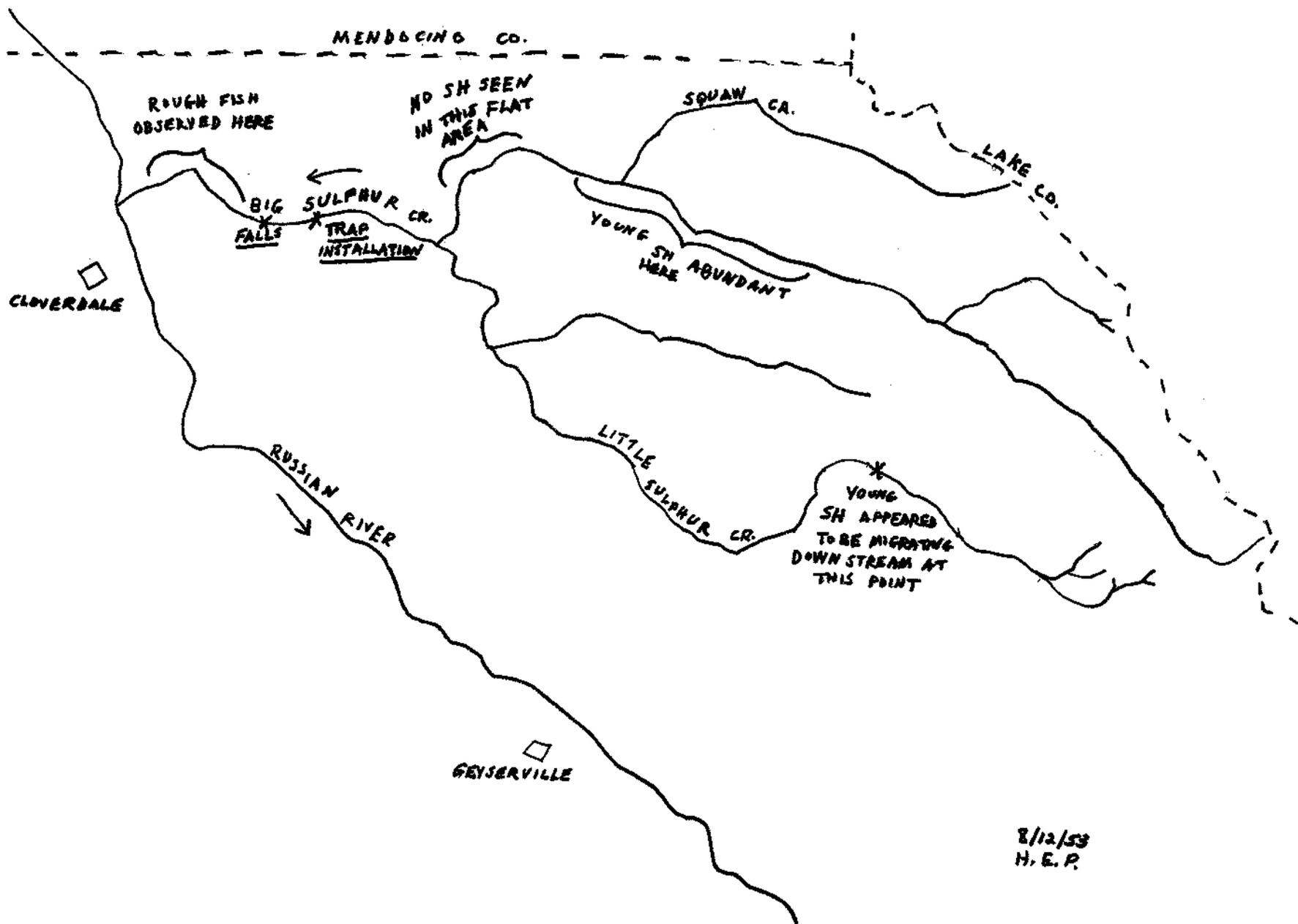
Herbert E. Pintler
Herbert E. Pintler
Assistant Fisheries Biologist
Region III

HEP:fo

Enc.

cc: Shea
Irish
Brans - Brax

VERY ROUGH SKETCH OF SULPHUR CREEK, SONOMA COUNTY
IN CONNECTION WITH INSTALLATION OF EXPERIMENTAL TRAP



597

4 2/3

WEIR INSTALLED
5 p.m. 30 JULY,
1953

WEIR RESULTS - SULPHUR CREEK, SONOMA CO. 0.7 MI. ABOVE FALLS

DATE	TIME	NO. TROUT	APPROX. RANGE IN SIZE - INCHES	OTHER FISH		TEMPERATURE	
				NOS.	SIZE	AIR	WATER
20 JULY	8:30 p.m.	0	—	—	—	—	—
21 JULY	9 a.m. Several small leaks in weir	39	2" - 8"	12 tadpoles	—	66°F	72°F
21 July	1:00 PM	44	2" - 6"	9 "	—	76°F	80°F
21 July	3:00 PM	40	2" - 6"	6 "	—	77°F	80°F
21 July	5:00 PM	25	2" - 6"	7 "	—	81°F	83°F
21 July	8:00 p.m.	2	2"	4	✓	74°F	81°F
22 July	8:00 AM	Small 46 leaks in weir	2" - 5"	14 "	✓	60°F	70°F
22 July	11:00 AM	4	2" - 4"	7	✓	65°F	74°F
22 July	1:00 PM	9	2" - 4"	6	✓	74	79°F
22 July	3:00 PM	5	2" - 4"	4	✓	77°F	82°F
22 July	6:00 PM	3	2" - 3"	5	—	78°F	82°F
22 July	8 PM	4	2-3	3	—	71	79
23 July	8:00 AM	74	2" - 4 1/2"	7	—	64	71
23 July	11:00 AM	5	2" - 4 1/2"	5	—	68	74
23 July	2:00 PM	24	2" - 4"	5	—	78	80
23 July	5:00 PM	11	2" - 3"	6	—	82	82
24 July	8:00 AM	41	3"	5	—	74	79
24 July	12:00 NOON	6	2" - 4"	7	—	60	69
24 July	4:00 PM	12	2" - 4"	5	—	70	74
Mr. Evans			2" - 4 1/2"	4	—	80	81

There is not many trout below the dam and they are just about the summer bridge.

30-24
July
1953

415

Bill Dusk
Box 117, Cloverdale, Calif.
Range: 2" - 8" F.H.L. 121

Range: 60-82
Range: 69-83

8 a.m. - 8:20 p.m.