

# Memorandum

To: Files

Date: October 14, 2001

From: Bill Cox  
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 Sonoma / Marin  
 Department of Fish and Game

Subject: Walker Creek, Marin County

On October 12, 2001 I surveyed Walker Creek, tributary to Tomales Bay, Marin County for the specific purpose of looking for coho salmon. No coho salmon were found.

I used a modified "ten pool protocol" sampling ten pools in each of two reaches with a Smith-Root type XII electro-fisher set at 300VDC and 90PPS. Only a single pass was made through each pool. Fish were captured, only as needed, to identify them to species. A third reach was planned for the survey but access could not be arranged.

The three reaches planned for this survey were in an area where I expected to find coho if they were in the stream. These reaches approximated the locations where a total of 5 coho were collected in October 1981 by John Emig.

Reach 1, the downstream-most reach, was located approximately 1 mile downstream of the confluence of Chileno Creek between Lat N38° 12.902', Long W122° 52.298' and Lat N38° 12.972', Long W122° 52.167'. Reach 2 was planned to be just upstream of the confluence of Chileno Creek where Emig collected 4 coho in 1981. Reach 3, the upstream-most reach, was located immediately downstream of the confluence of Salmon Creek between Lat N38° 9.843', Long W122° 47.008' and Lat N38° 9.698', Long W122° 46.901'. One coho was collected by Emig in 1981 in Reach 3 or a short distance downstream.

Despite the very dry winter of 2000-2001, which has resulted in very low to no flow in many streams, Walker Creek had a high summer flow, about 2.5 cfs, because of releases from Soulajule Reservoir. Runs, and even some pools, had a distinctly fast flow. Runs and pools were not well distinguished.

Water temperature in Reach 1 was 55° F at 1130. In Reach 3 the temperature was 60° F at 1430. While these temperatures are within the optimum range for coho salmon, August and September temperatures are more likely to be in the high 60's or low 70's.

|         |                                      |
|---------|--------------------------------------|
| Reach 1 |                                      |
| Start   | Lat N38° 12.902', Long W122° 52.298' |
| Stop    | Lat N38° 12.972', Long W122° 52.167' |
| Pool 1  | 4 steelhead, 1 sculpin, 3 roach      |
| Pool 2  | 16 steelhead                         |
|         |                                      |

|         |   |
|---------|---|
| Pool 3  | 4 steelhead, 1 stickleback, 3 roach             |
| Pool 4  | 28 steelhead, 2 sculpin, 2 stickleback, 2 roach |
| Pool 5  | 6 steelhead, 5 sculpin, 22 roach                |
| Pool 6  | 21 steelhead, 11 sculpin, 14 roach              |
| Pool 7  | 7 stickleback, 3 roach                          |
| Pool 8  | 15 steelhead, 1 sculpin, 2 stickleback, 1 roach |
| Pool 9  | 11 steelhead                                    |
| Pool 10 | 6 steelhead, 8 sculpin, 1 stickleback, 3 roach  |

|         |   |
|---------|---|
| Reach 3 |   |
| Start   | Lat N38° 9.843', Long W122° 47.008'             |
| Stop    | Lat N38° 9.698', Long W122° 46.901'             |
| Pool 1  | 15 steelhead, 5 sculpin, 2 stickleback, 3 roach |
| Pool 2  | 5 steelhead                                     |
| Pool 3  | 8 steelhead, 1 sculpin, 3 stickleback, 9 roach  |
| Pool 4  | 6 steelhead                                     |
| Pool 5  | zero  |
| Pool 6  | 4 steelhead                                     |
| Pool 7  | 6 steelhead                                     |
| Pool 8  | 6 steelhead, 1 roach                            |
| Pool 9  | 7 steelhead, 1 roach                            |
| Pool 10 | 4 steelhead, 1 sculpin, 2 stickleback, 7 roach  |