

Fish Report 2008: San Anselmo's Celebrity Steelhead

by Parker Pringle

2009

Winter is a fascinating time to watch the creek. From December to April, beautiful steelhead trout spawn in the watershed. Good spots to look for migrating steelhead are the Ross Post Office pool; the Ross fish ladder; the flood channel resting pools; the pools at Bridge Avenue and below the Postal Services Plus, both in downtown San Anselmo. If you live on the creek, a steelhead may spawn in view of your backyard. Please send news of your sightings to info@friendsofcortemaderacreek.org.

Late last spring, Friends was flooded with emails and phone calls from folks concerned about steelhead over two feet long seen in San Anselmo. At least six of these fish were hanging out at the Bridge Avenue pool, which is opposite the Fire Station. In years of normal rainfall, steelhead return to the Bay after spawning. But these adult fish stayed, probably because the extraordinary absence of rain prevented them from getting a cue to exit the creek (an adult fish stayed in the Ross Post Office pool, too). From February until July, they could be seen milling around their pool.

In response to public concern, Friends contacted several experts for advice. Their consensus was that the steelhead would encounter extremely harsh conditions during the summer, but had likely chosen an excellent holding pool; they recommended that the fish be left alone. The Bridge Avenue pool is perhaps the longest deep pool in the watershed, offering undercut banks for hiding and abundant shade, all important for steelhead survival. Indeed, their pool pick was fortuitous.

Nonetheless, on May 25, a silver-sided steelhead showed up dead on the bank, its guts torn open. In July, water visibility was poor and it was hard to see fish. By August and September it was virtually impossible to see through the surface of the water. But on September 14 one 28-inch steelhead was spotted.

Did any adult steelhead survive until the first big storm at the end of October? We cannot know. However, it is likely that most of the adult steelhead perished. In the San Geronimo Valley watershed, SPAWN (Salmon Protection and Watershed Network) believes that three or four adult steelhead survived to November; they counted 14 adults in June. By nature's design, adult steelhead don't summer in the creek, although they can if conditions are favorable. This past spring saw a historic drought and the summer two intense heat waves. San Anselmo Creek went dry in places. These were not favorable conditions.

Also unfavorable was the water quality at the Bridge Avenue pool, which Friends monitored from June to November. We installed an underwater temperature recorder, which took a temperature measurement every ten minutes. Several times over the summer, we downloaded the data and used a probe to measure dissolved oxygen and other indicators of water quality. Periodically, we posted a graph of this data on the fence next to the pool.

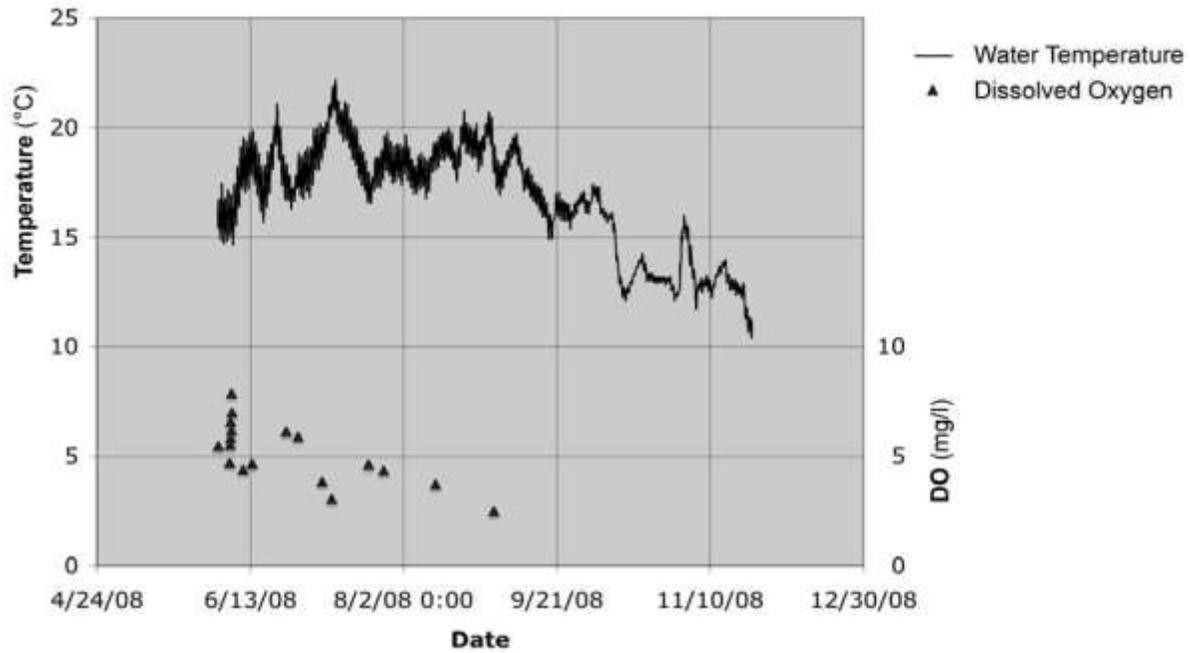
The data show that from June into September conditions were stressful to steelhead. Temperatures were stressful but not dangerous, staying below 20 degrees except for one week in July when temperatures rose nearly to 22 degrees, the beginning of the lethal range for adult steelhead. The more significant stress was the dangerously low level of dissolved oxygen, which lasted the entire summer. The combination of low dissolved oxygen and high water temperature greatly increases steelhead susceptibility to disease, predators, and simple exhaustion.

Conditions did begin to improve steadily after September 10. If some steelhead held on until October 31, they would have received the cue for which they had spent eight months waiting: high roiling Crustaceans, preparing to return to the Ross valley. Perhaps we will see one of them this winter or next. muddy water. These patient fish would now be roaming the Pacific, feasting on squid, anchovies, and crustaceans, preparing to return to the Ross valley.

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Bridge Avenue Pool, San Anselmo Water Temperature and Dissolved Oxygen Data: 2008



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