

Shimofuri Goby (*Tridentiger bifasciatus*) Observed directly below Santa Felicia Dam on Piru Creek, snorkel surveyed ~ 0.3 miles below dam 8-16-13. Steve Howard and Mike Booth



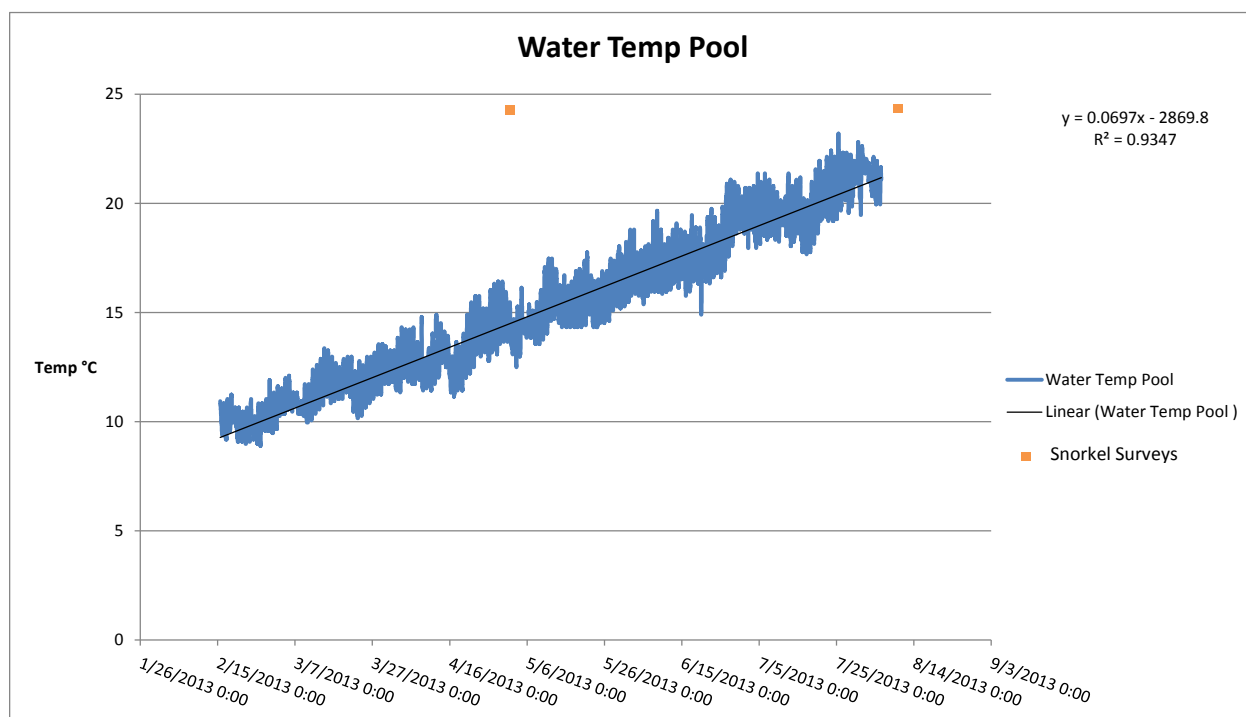












Two snorkel surveys were conducted in 2013 focused on *O. mykiss* production and relative growth of 2013 cohort from what appears to be from a single redd below the dam. Only YOY *O. mykiss* were

observed during a survey conducted on 5/6/13 and the water was very cold as depicted in the above chart. The temperature logger was placed in a pool approximately 500 feet downstream of Santa Felicia Dam. *O. mykiss* YOY (good growth, much larger than the earlier survey), threespine stickleback, prickly sculpin, a few largemouth bass and shimofuri goby were observed during a survey conducted on 8-16-13. Many goby were observed (~10-15) but we certainly did not observe all of them. The water temperature was much warmer on this date due to the low and decreasing depth of Lake Piru. It is not clear why some of these species were not observed during the 5-6-13 survey. The water temperatures increase considerably approximately one mile downstream when the release channel meets the main Piru Creek channel. These species could have avoided the cold tailwater directly below the dam and dispersed upstream when the temperatures increased. The only problem is that there is a small obstacle (USGS weir) located approximately 750 feet downstream of the dam. I have no idea if fish are swimming over the weir. I do know that one large *O. mykiss* (~18 inches) made it over the weir sometime between our two surveys. This fish has one eye so it is recognizable. Flow in the creek was 7 cfs during both surveys.

Shimofuri goby have been documented in two Santa Clara River tributaries since the 1990's and are believed to have originated from ballast water in San Francisco Bay and traveled up the California Aqueduct to Pyramid Reservoir on Piru Creek. They have been observed in the Pyramid Reservoir (October 1990) and were documented in Piru Creek directly below Pyramid Reservoir in June 1992. Shimofuri goby were also documented in Castaic Lake in 2012. Our observations are the first in this watershed below all dams and now there is a direct conduit to the Santa Clara River and the estuary. We will collect a few specimens for species verification and submit them to the LA Natural History Museum.

