

**State of California
California Regional Water Quality Control Board
Santa Ana Region**

February 8, 2019

ITEM: 12

SUBJECT: Executive Officer's Report

- 1. Costa Mesa Sanitary District v. Santa Ana Regional Water Quality Control Board -** On December 11, 2015, the Regional Board adopted Order No. R8-2015-0037 (Order) and imposed an administrative civil liability (ACL) against Costa Mesa Sanitary District (CMSD) in the amount of \$364,130 for two sewer system overflows that resulted in the discharge of 87,100 gallons of raw sewage to Newport Bay. CSMD petitioned the Order to the State Water Board, and the State Water Board dismissed the petition. CSMD then filed suit against the Regional Board in Orange County Superior Court alleging that the Regional Board abused its discretion when it applied the Enforcement Policy to adopt an ACL of \$364,130. The Superior Court ruled in favor of the Regional Board, and CSMD appealed the decision. On January 24, 2019, the Court of Appeals issued its decision affirming the trial court and upholding the ACL imposed by the Regional Board. If CSMD wants to seek review by the Supreme Court, they must file a petition within ten days of the date of the appellate decision.

- 2. Fish Die Off in Lake Elsinore –** Around December 20, 2018, the City of Lake Elsinore (City) began receiving reports on dead carp and shad along the shores of Lake Elsinore. As of January 23, 2019, the City reported that the fish, including sportfish, were still dying or were seeking refuge in the discharge plume of reclaimed water from Elsinore Valley Municipal Water District. Although toxicity is still occurring, recent observations and sampling indicate that Lake conditions are improving, and fish are no longer heading to the reclaimed water plume. Investigations into the cause of the fish kill indicate two possibilities: 1. pollutants entering the Lake during storm events from the recent Holy Fire burn area; or 2. golden algae being present in the Lake (with the latter being a more likely cause).

Stormwater samples collected in November from the Holy Fire runoff by Riverside County Flood Control and Water Conservation District (District) showed very high concentrations of total suspended solids, hardness, and heavy metals (aluminum, cadmium, copper, iron, lead, manganese, nickel, and zinc). A sediment plume was also visible in the Lake. Concentrations of several metals were high enough to be contributing to the toxicity in the Lake water. Though these metals are also naturally occurring in the environment, high zinc levels were probably from fire ash. However, dissolved metals in the Lake were still low, and the City was not able to confirm that the runoff from the Holy Fire was a cause of the fish kills.

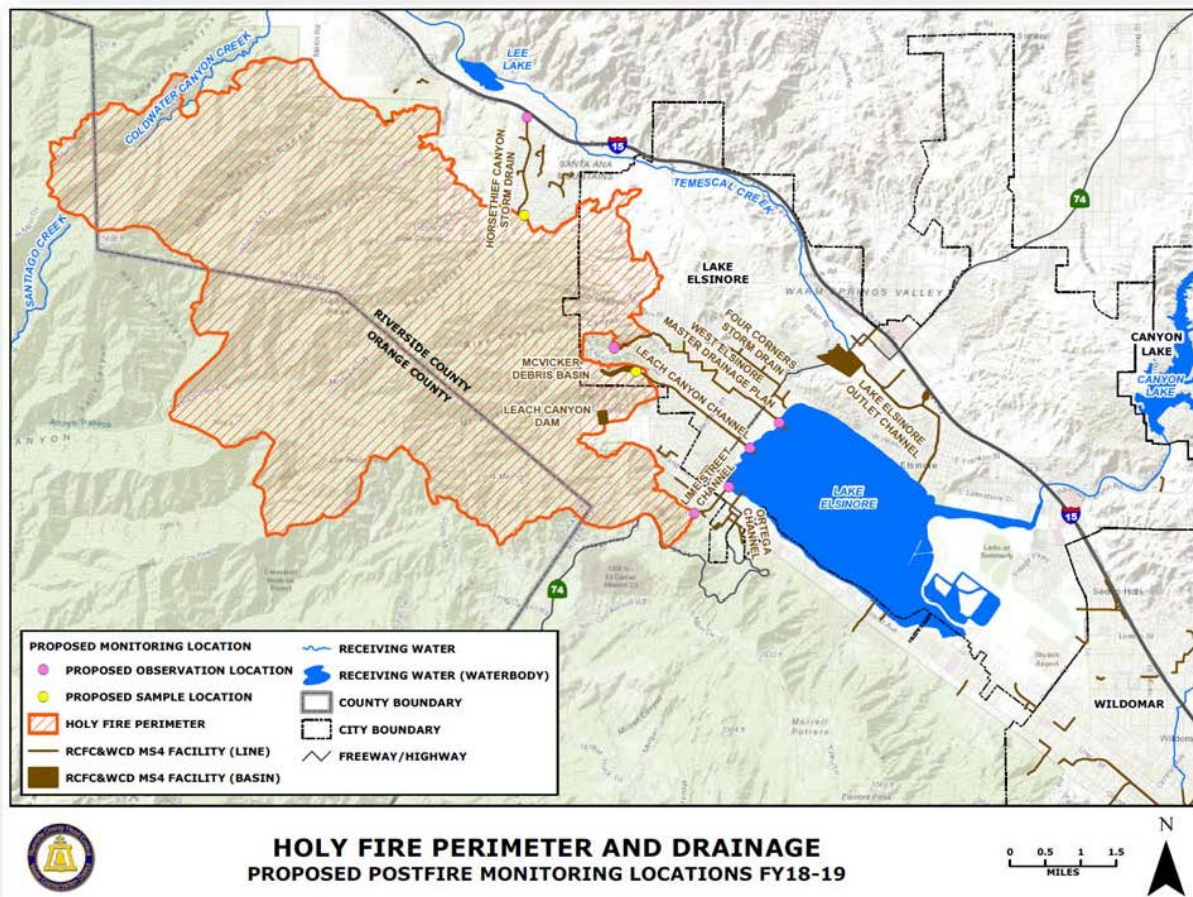
December dissolved oxygen (DO) measurements in the Lake showed that DO was fairly high for the season. Concentrations of algae regularly found in the Lake, as well as the ammonia, were below what would be expected to cause toxicity to fish when one takes into account the temperature, pH, and hardness of the Lake at the time. Concentrations of microcystins, cyanotoxins from blue green algae, did exceed the "Danger" California Action Levels of 20 ug/L. However, these levels were similar to those found during the summer and fall and had not previously resulted in fish kills.

The City's consultant collected more samples from the Lake in January. Preliminary results showed that there were concentrations of golden algae that could be causing the fish mortality. This was the first time golden algae had been observed in Lake Elsinore. Toxicity tests on Lake

water showed complete mortality for four out of five locations. The sample with no toxicity was one collected near the discharge of the reclaimed water where fish were seeking refugia. Toxins (prymnesins) released by golden algae affect fish gills by causing hemorrhaging in the cells of the gills. Dead fish along the shoreline were observed to have bloody gills, which indicated that the fish die off was likely caused by golden algae.

Throughout these investigations, the City has cleaned up and removed approximately 90 tons of dead fish from the Lake and shoreline. More recent samples indicate that the toxins are still there and are water soluble, though much improved from prior tests in early January. The decline in toxicity appears to correspond with the decline in the golden algal bloom. Fish are no longer congregating in the channel where the discharge of reclaimed water is occurring. In addition, the District continues to clean out its debris basins following rain events to reduce and minimize the effects of runoff on the Lake from the Holy Fire as it did before the December rains.

Regional Board staff, in coordination with the City, has been discussing with State Board staff about applying for funds from the Cleanup and Abatement Account (CAA) to further investigate the cause of the fish die off in the Lake and evaluate impacts of pollutants from the Holy Fire. Based on the results from proposed additional sampling, there may be a need to apply for additional funds to clean up or abate what may be causing this fish mortality. Actions might include dredging material deposited from the Holy Fire into the Lake. However, funds may be limited since CAA funds are prioritized for emergency actions to protect public health.



3. Climate Change Policy – There is a multi-tiered effort in California to address climate change. Assembly Bill 32, the California Global Warming Solutions Act of 2006, established requirements for all State agencies to consider strategies to reduce greenhouse gas emissions (http://www.leginfo.ca.gov/pub/05-06/bill/asm/ab_0001-0050/ab_32_bill_20060927_chaptered.pdf). The Office of Environmental Health Hazard Assessment developed indicators of climate change in California, including drivers, environmental changes, and impacts of climate change (<https://oehha.ca.gov/climate-change/document/indicators-climate-change-california>). California also has identified and is implementing strategies to adapt to a changing climate as seen in its Safeguarding California Plan (<http://resources.ca.gov/climate/safeguarding/>). The State Water Resources Control Board (State Water Board) furthered these efforts by adopting Resolution No. 2017-0012, which in part encourages Regional Water Quality Control Boards (Regional Water Boards) to consider climate change in their actions (https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2017/rs2017_0012.pdf).

To support California's ongoing climate leadership, the State Water Board identified the following areas to reduce greenhouse gas emissions: 1. methane capture/short-lived climate pollutants; 2. water conservation and efficiency; 3. recycled water; 4. storm water; and 5. energy efficiency and renewable energy. To prepare for and adapt to impacts of climate change, the State Water Board identified the following actions: 1. improve ecosystem resilience; 2. respond to climate change impacts; and 3. rely on sound modeling and analyses. The State Water Board further identified additional actions to support implementation, provide education, and engage the public through funding, outreach, and administration.

Region 8 staff has been coordinating with the State and other Regional Water Boards, as well as other State agencies, in an effort to better understand our role and obligations. As a result, Region 8 staff is drafting a regional climate change policy that establishes climate change principles and support for implementing associated decisions. I anticipate this policy to be presented to the Board for approval this Summer or Fall.