STATE OF CALIFORNIA

REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

MEETING DATE: June 11, 2014

ITEM: **4**

SUBJECT: **EXECUTIVE OFFICER'S REPORT**

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
SAN FRANCISCO BAY REGIONAL WATER QUALITY CONTROL BOARD

EXECUTIVE OFFICER'S REPORT: *June 2014*

A Monthly Report to the Board and Public

NEXT MEETING: June 11, 2014 **WEBSITE:** http://www.waterboards.ca.gov/sanfranciscobay/

Items in this Report (Author[s])

Petroleum Investigation at Yerba Buena Island (Myriam Zech)

Yerba Buena Island is a 147-acre natural island connected to Treasure Island by a causeway. Together, both islands make up the Treasure Island Naval Station. Area YF3 is located on the north shore of Yerba Buena Island (Figure 1a), directly across from Treasure Island's Clipper Cove (also known as Site 27, where last fall the Navy dredged lead-shot impacted sediment as discussed in our February 2014 Executive Officer's Report).

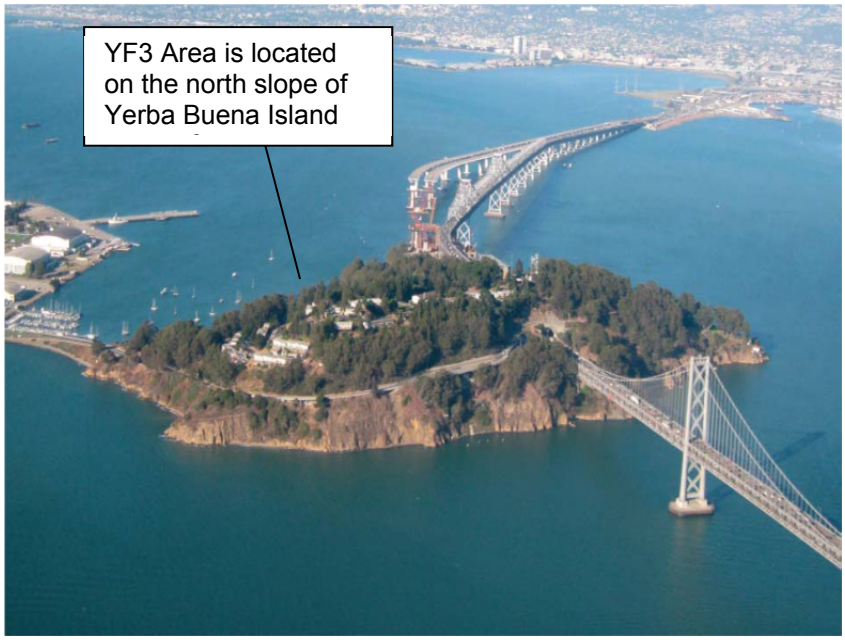

Figure 1a. *Aerial View of Yerba Buena Island from west.*

Area YF3 consists of a steep slope leading down to a rocky/sandy shoreline. This area served as a fueling depot for Navy vessels and contained at least six main fuel lines that were used as early as the 1940s to transport gasoline, diesel, bunker fuels, and other petroleum products. Area YF3 also includes two small aboveground storage tanks (Figure 1b) that were used for storing and heating the bunker fuel, which would otherwise be too viscous to flow down to the dock. While most of fuel depot infrastructure is now gone, there have been observations of petroleum sheens just below the surface in the shoreline sands.

Figure 1b. *Former fuel storage tanks for steam plant operation.*

In March 2012, the Navy used drill rigs to collect soil and groundwater samples to further assess petroleum impacts at Area YF3 (Figure 1c). The sampling analysis results showed elevated levels of petroleum fuel contaminants, including a sheen and strong hydrocarbon odors. As a result, the Navy has proposed an ecological risk assessment to determine if cleanup is necessary.

With the help of an ecological risk assessor from the State's Department of Toxic Substances Control, we are working with the Navy to make sure adequate data is collected to complete a meaningful risk assessment and that the appropriate receptor species are considered. For example, the Navy has suggested using the raccoon as an indicator species, while we think the American mink may be a better choice as it is a higher food chain carnivore. The Navy plans to submit its draft risk assessment later this month. We'll keep the Board informed as this and other investigations at the Treasure Island Naval Station move forward.

Figure 1c. *View of drill rig used during March 2012 sampling event.*

Wastewater PCBs and Mercury Loads Decline (Robert Schlipf/Samuel Plummer)

In 2012, the Board reissued the watershed NPDES permit that implements the mercury and PCBs San Francisco Bay Total Maximum Daily Load (TMDL) for all municipal and industrial wastewater sources. In 2013, municipal and industrial wastewater discharges were well below the TMDL's wasteload allocations for mercury and PCBs.

As shown in Figure 2a below, PCBs from municipal wastewater were 80 percent below the wasteload allocation, dropping 65 percent from 2012 levels. Industrial dischargers maintained compliance at 52 percent below allocation. A large factor in the change in the reported municipal wastewater load is attributable to changes in the lab used to analyze some of the samples, which may not coincide with real reductions in loads. It appears that one of the labs historically used had contamination problems and was reporting higher levels of PCBs than were actually present in the samples. After the discovery, and switching to other laboratories in 2013, dischargers who had used the problem laboratory started reporting results more in-line with other dischargers. So overall, the good news is that the total load is much lower than originally estimated, and from now on we expect to have a more accurate picture of how loads are changing.

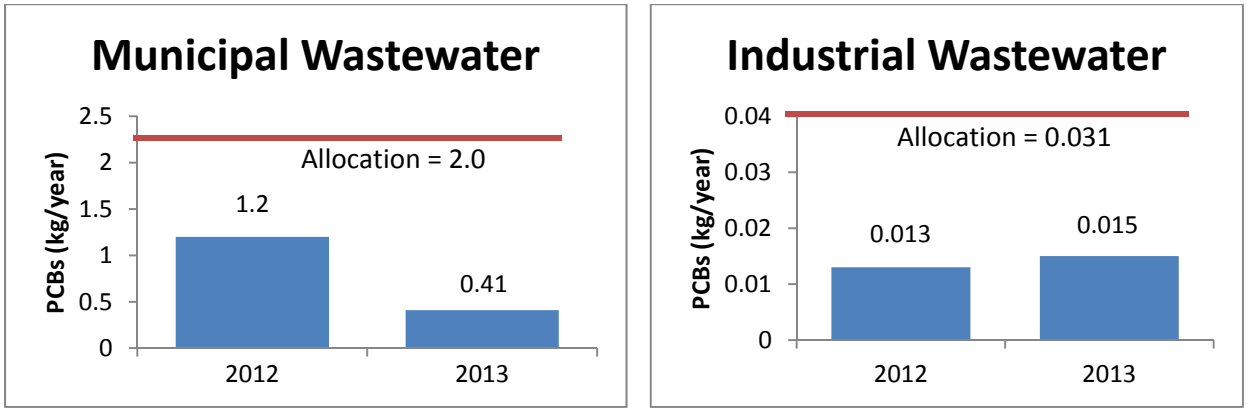

Figure 2a. *PCB Levels from 2012 to 2013.*

Figure 2b below shows that mercury in wastewater is continuing its downward trend. This is most likely a result of pollution prevention efforts, excellent solids removals, and lower wastewater flows due to drought and increased recycling. For industrial wastewater, the spike in 2012 occurred when the Shell Refinery experienced pretreatment problems; this led to five violations of its mercury concentration limits. Improvements in pretreatment returned Shell to compliance and the industrial wastewater group as a whole to loadings slightly lower than previous years.

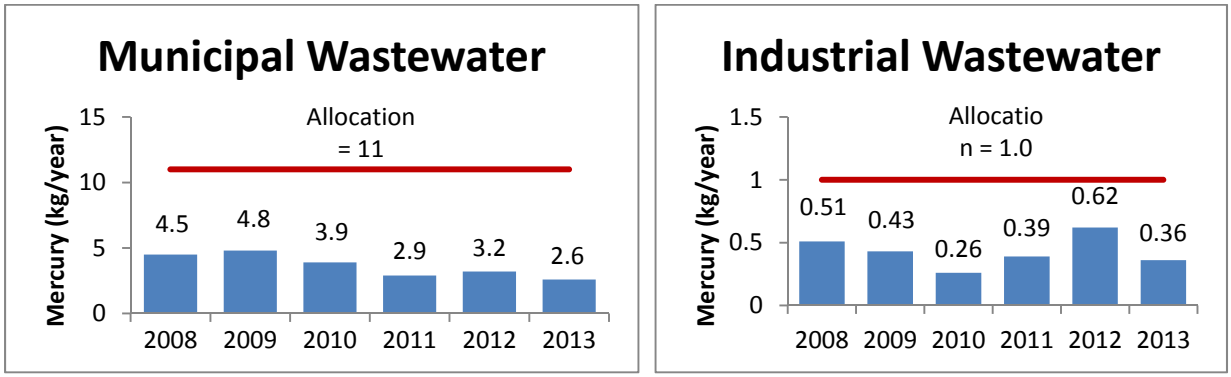

Figure 2b. *Mercury Levels from 2008 to 2013.*

Litigation Update (Yuri Won)

On May 7, the Court of Appeal affirmed the Alameda County Superior Court's decision that upheld the State Water Board's approval of the Napa River Sediment Total Maximum Daily Load (TMDL). In 2011, the Living Rivers Council (LRC) filed a lawsuit, seeking a writ of mandate to order the State Board to set aside the TMDL for failure to comply with the California Environmental Quality Act.

At trial, LRC claimed that (1) the TMDL incorporated the Napa County Conservation Regulations as a means of compliance with the TMDL and that this Board failed to conduct an environmental impact report-level analysis in its substitute environmental document (SED); (2) the Board did not adequately consider cumulative impacts; (3) the Board improperly deferred development of the TMDL's runoff performance standard; and (4) the SED piecemealed environmental review because it failed to identify the potential effects of a vineyard waiver policy. In 2012, the trial court rejected these claims. LRC appealed on the first, third, and fourth

issues, which the Court of Appeal has now also rejected. LRC petitioned for a rehearing on May 22, which the Court of Appeal denied on June 3. Its decision will be final on June 6.

Pescadero-Butano Watershed Update (Setenay Bozkurt Frucht)

Board staff has completed the sediment source analysis for the Pescadero-Butano watershed in San Mateo County and, on May 1, held a meeting to solicit feedback and input on the analysis. The meeting was held at the San Mateo Resource Conservation District (RCD) office in Half Moon Bay and was attended by twenty people from various agencies including the California Department of Fish and Wildlife (CDFW), the National Oceanic and Atmospheric Administration (NOAA), the U.S. Fish and Wildlife Service, the Natural Resources Conservation Service, California State Parks, San Mateo County, and the RCD. San Mateo County was represented by several departments including Public Works, Planning, and Parks. Supervisor Don Horsley and his staff also attended the meeting.

The Pescadero - Butano watershed and its coastal lagoon provide a significant diversity of habitats for a variety of species and provide several beneficial uses from recreation to rare and endangered species to water supply. Pescadero and Butano channels and floodplains supported magnificent steelhead and coho runs prior to the 1820s. At that time, the lowland valleys in the watershed were swampy meadows that were permanently wet and acted as a sponge by metering water and sediment delivery to the creeks. Over the last two centuries, however, land use practices triggered and sustained a profound transformation of the landscape and adversely impacted much of the natural productivity and ecological integrity of the watershed. Currently, the creeks do not meet water quality standards and are listed as impaired due to excess sediment. In addition to sedimentation issues, nuisance flooding, which is partly a result of the excess sedimentation, and fish kills in the lagoon are also important water quality issues.

Staff's presentation at the meeting described how the land use changes in the last 200 years have affected the hydrology and sediment characteristics in the watershed, doubling sediment input to the creeks. Currently, creeks in the watershed are incised up to 30 feet in places and function as deep, straight, overly efficient canals that transport all the water and sediment downstream to the coastal lagoon. As a result, the lagoon, which is highly productive and plays a critical role for anadromous fish species, has lost more than half of its area and volume.

The presentation was well received by all attendees, a number of whom noted that it was very informative and clearly laid out the issues needed to bring everyone on the same page. We concluded the meeting with an open discussion and stated our commitment to a collaborative process to explore solutions to restore water quality.

Concurrently, several agency partners are collaborating to work towards a solution to prevent fish kills this fall. The naturally occurring, but unusually early, closure of the sand bar at the mouth of Pescadero Creek this year has trapped steelhead in the lagoon, preventing them from entering the ocean. In addition, the longer the bar is closed, more of the surrounding marsh is inundated. This can result in lethal water quality conditions and fish kills. CDFW and NOAA are working with staff to implement an emergency action to open the sandbar in June. The goal is to provide passage to the ocean for steelhead and reduce water levels in the lagoon to avoid the development of the lethal water quality conditions that have occurred in the past.

In-house Training

Our May in-house training was a May 22 field trip to the Niles Cone, a heavily-used groundwater basin located in the Fremont area and managed by the Alameda County Water District. We have no in-house training planned in June through August. Other trainings included a May 9 webinar on vapor intrusion, which considered new challenges in light of TCE short-term toxicity and highly variable intrusion rates, and a May 23 session on incremental sampling, a tool for assessing soil contamination for less-mobile contaminants. Former Board staff member, Roger Brewer, co-taught the May 23 session.

Staff Presentations

Brian Thompson and Eileen Leung attended Palomares Elementary School's 8th Annual Watershed and Science Expo on May 16, where there were over 10 exhibitors from various agencies and environmental groups and upwards of 1,000 students. Students rotated through exhibits to learn about the local Palomares Creek watershed, east of Castro Valley. Brian helped students evaluate the "health" of the watershed by scoring attributes of the creek as shown in Figure 3, an exercise based on the type of stream bioassessments used by the Board's Surface Water Ambient Monitoring Program. Eileen helped students understand stormwater pollution by sprinkling water over a watershed model after students added various "pollutants" (e.g., dirt, confetti, vegetable oil). The students also learned about low impact development by sprinkling water over a shopping center model, which would change from 100 percent runoff to reduced runoff with the addition of rain barrels and permeable landscaping.

Figure 3. *Students enjoy measuring water quality parameters (temperature, dissolved oxygen, turbidity, and pH) in samples from Palomares Creek. Students also evaluated the physical characteristics of the creek, habitat, riparian cover, human alterations, and the presence of benthic macroinvertebrates (better known as "bugs and critters").*

Penalty Enforcement Actions Proposed and Final (Lila Tang)

The following tables show proposed settlements and final actions for imposition of penalties as of last month's report. Proposed settlements are available at:
http://www.waterboards.ca.gov/sanfranciscobay/public_notices/pending_enforcement.shtml

Proposed Settlements
The following are noticed for 30-day public comment periods. If no significant comments are received by the comment deadline, the Executive Officer will sign orders implementing the settlements.

Discharger	Violation	Penalty Proposed	Comment Deadline
Successor Agency of the Redevelopment Agency to City of San Jose, Adobe Tower I in San Jose	Late discharge report	$33,000	June 5, 2014
Successor Agency of the Redevelopment Agency to City of San Jose, Adobe Tower II in San Jose	Late discharge report and discharge limit exceedance	$36,000	June 5, 2014

Final Actions
On behalf of the Board, the Executive Officer approved the following:

Discharger	Violation	Penalty Imposed	Supplemental Environmental Project
Lehigh Hanson West Region, Pier 92 in San Francisco	Discharge limit exceedance	$3,000	none
LBA-RIV Company XII, LLC, Former Merchant Building Groundwater Treatment System in Berkeley	Discharge limit exceedance	$3,000	none

The State Board's Office of Enforcement includes a statewide summary of penalty enforcement in its Executive Director's Report, which can be found on the State Board website:
http://www.waterboards.ca.gov/board_info/eo_rpts.shtml