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

EXECUTIVE OFFICER'S REPORT: *July 2015*

A Monthly Report to the Board and Public

NEXT MEETING: July 8, 2015 **WEBSITE:** http://www.waterboards.ca.gov/sanfranciscobay/

Items in this Report (Author[s])

Basin Plan Triennial Review Public Workshop (Richard Looker)

Water Board staff is initiating the triennial review process for this region's Basin Plan by holding a public workshop on August 4 at 10 am in Room 11 on the Second Floor of Oakland's State Building. State and federal law require each Regional Water Board to review its Basin Plan at least once each three years to identify those portions of the Basin Plan that are in need of modification or new additions. This Board's last triennial review was completed in 2012.

Staff has prepared an initial list of candidate issues for inclusion in the Water Board's triennial review workplan and have posted this on the Board's website. We encourage input from all interested parties to assist us in identifying and prioritizing Basin Plan amendment projects to undertake that best address the water quality planning needs of our region. It is important to identify the scope, timing, and critical nature of potential amendment projects, as the Water Board is limited in staff resources available to complete Basin Plan amendments, and not all proposed projects can be undertaken in the coming three years.

We will be soliciting public input both at the August workshop and through written comments received by August 18. After considering all comments received, we will prepare a priority list of proposed Basin Planning amendment projects for the Board's consideration later this year.

Additional information on the Board's 2015 triennial review can be found at:
http://www.waterboards.ca.gov/sanfranciscobay/basin_planning.shtml#triennialreview

Wastewater PCBs and Mercury Loads Update (Robert Schlipf/Debbie Phan)

The loads of PCBs and mercury in wastewater discharges in 2014 continued to be well below the wasteload allocations for mercury and PCBs in such discharges that the Board established in 2007 and 2010, respectively. The allocations are specified in a watershed permit that the Board reissued most recently in 2012. The graphs in Figure 1a show that mercury loads from municipal and industrial wastewater discharges were consistent with previous years. This is most likely a result of continued pollution prevention efforts, excellent solids removals, and low wastewater flows associated with the drought.

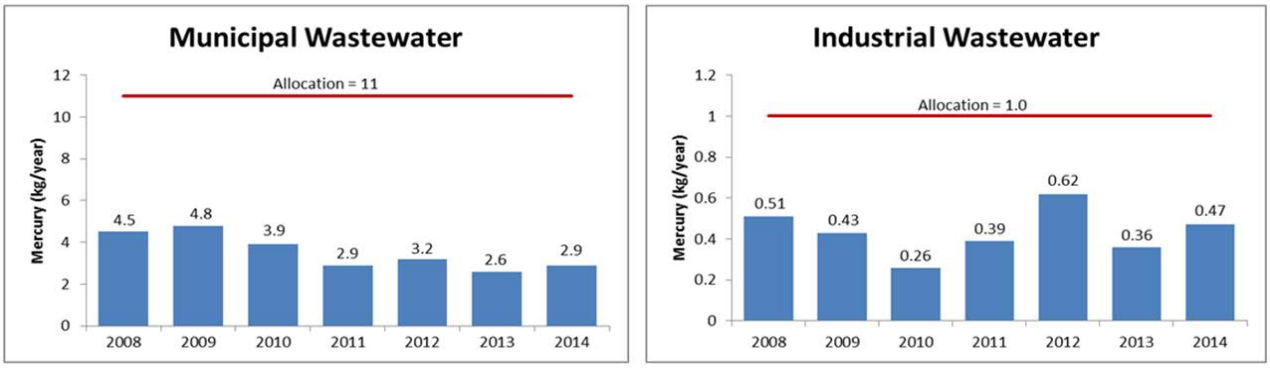

Figure 1a. *Mercury Loads from 2008 to 2014.*

As shown in the graphs in Figure 1b, PCBs loads from municipal wastewater discharges were 60 percent below the wasteload allocation. While the 2014 load doubled from 2013, it was still about 30 percent below the 2012 level. Three of the largest municipal wastewater dischargers accounted for about 70 percent of this increase. Since monitoring occurs only quarterly, the increase could be due to timing of the quarterly samples, analytical variability, or mobilization of solids with legacy PCBs from the collection system, which can occur during cleaning. As noted in the June 2014 Executive Officer's Report, the substantial decrease from 2012 to 2013 in municipal wastewater PCBs was attributed to laboratory contamination. From industrial dischargers, PCBs loads have been consistent over the past three years. In 2014, the PCBs load in industrial wastewater was about 65 percent below the allocation.

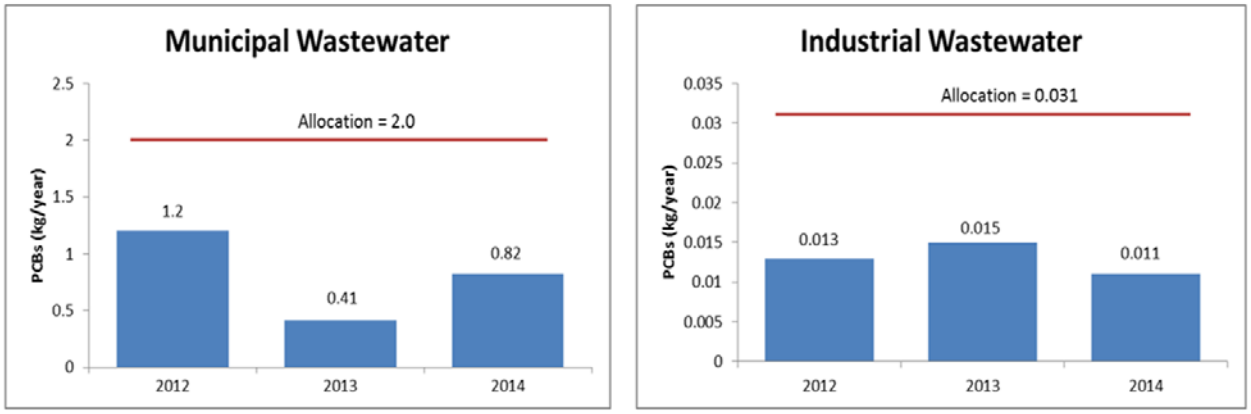

Figure 1b. *PCBs Loads from 2012 to 2014.*

Grazing Program Update (Paul Modrell)

Board staff are currently implementing two conditional waivers of waste discharge requirements for grazing operations (Waivers), one for operations in the Tomales Bay watershed and one for operations in the Napa River and Sonoma Creek watersheds. The Waivers are part of the implementation of sediment and pathogen total maximum daily loads for these watersheds and apply to non-dairy grazing operations that are 50 acres, or more, in size in the Tomales Bay watershed and 100 acres, or more, in size in the Napa River/Sonoma Creek watersheds. A total of 101 land owners have enrolled under the Tomales Bay Waiver, which comprises approximately two-thirds of the land area of the Tomales Bay watershed. By contrast, the Napa/Sonoma Waiver is a much smaller program, consisting of 29 land owners.

We spent the first half of 2015 training new staff, updating program organization, and building an inspection team. These Waiver implementation efforts focused on agency/stakeholder coordination, developing a communications and outreach strategy, improving our existing field data collection forms and program tracking database, developing additional metrics with which to measure program progress, and conducting wet and dry weather ranch inspections. In the past few months, staff conducted eight ranch inspections within the Tomales Bay watershed (see Figure 2) and four inspections in the Napa River and Sonoma Creek watersheds.

Through our ranch inspections and related outreach, we learned that awareness of the Waivers is still lacking within the Tomales Bay watershed and even more so in the Napa River/Sonoma Creek watersheds. We are experiencing a current dip in Waiver compliance with fewer annual certifications received in 2014 as compared to 2009 and 2011, which corresponded to periods of focused outreach and represented the height of compliance. Fortunately, grazing practices observed during this inspection season were fairly consistent and responsible. The prolonged drought has had an impact on rangelands resulting in less available forage and residual dry matter. Ranchers have generally responded by reducing herds and modifying grazing rotations. Looking forward, we intend to continue to conduct inspections and program outreach to increase levels of participation and annual reporting and pursue progressive enforcement as appropriate. In addition, we worked closely with the Tomales Bay Advisory Committee and stakeholders to develop a coordinated monitoring program, which was implemented this past wet season. We plan to evaluate the results this summer and meet with our monitoring partners and stakeholders to finalize the monitoring program for the next wet season. We will keep the Board informed of the progress in implementing the Waivers.

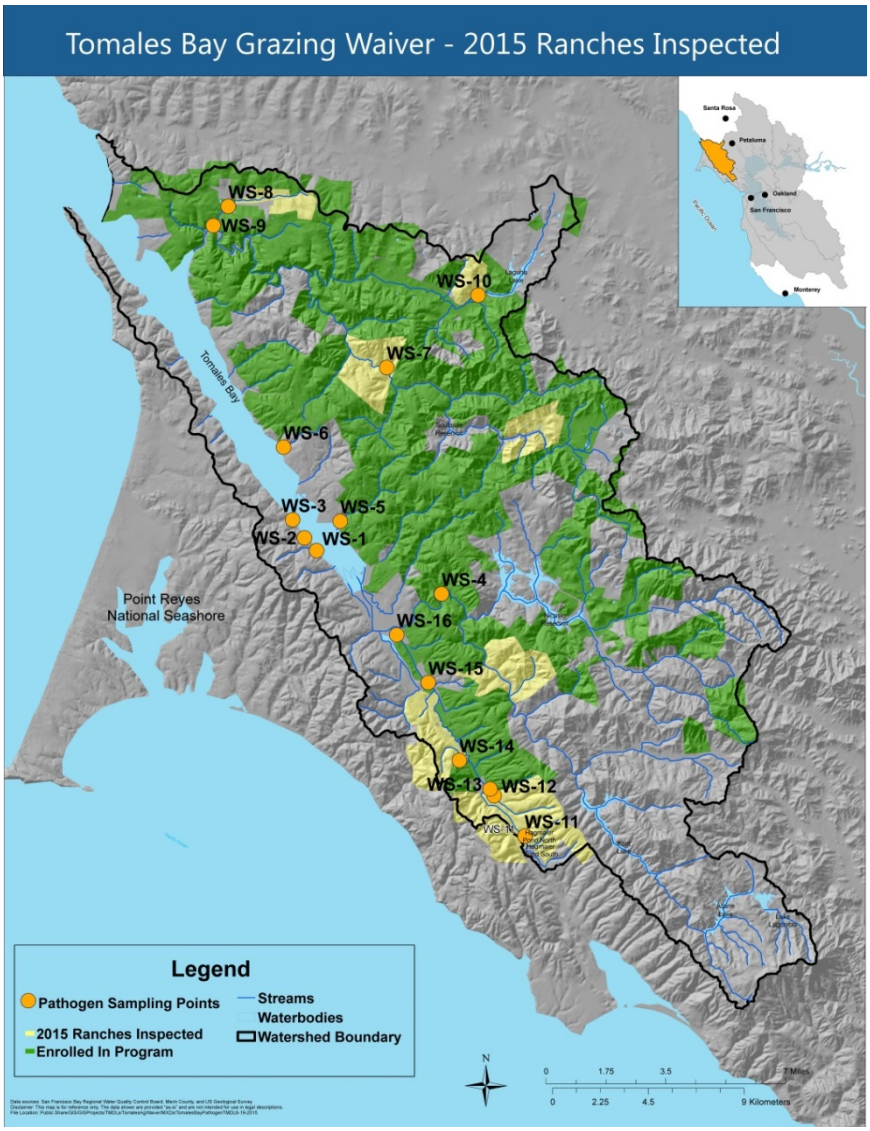

Figure 2. *Ranch inspections within the Tomales Bay watershed.*

North S.F. Bay Selenium Total Maximum Daily Load (Barbara Baginska)

Scientific peer review of the North San Francisco Bay Selenium Total Maximum Daily Load (TMDL) and Basin Plan amendment is currently in progress. The focus of this TMDL is protection of fish, specifically white sturgeon, which is the most susceptible species to selenium bioaccumulation in the North Bay.

The proposed TMDL is based on current loading from all sources, including point sources such as petroleum refineries, as the proposed numeric targets are either being attained or are close to being attained in the North Bay. The main goal of the implementation plan is to prevent an increase in selenium loads. Much of the loading to the North Bay is from the Central Valley and associated with natural sources of selenium. These sources may need to be adaptively managed consistent with the Central Valley Region's TMDLs, especially if there are changes in San Joaquin River flows. Monitoring to evaluate attainment of the TMDL and numeric targets is proposed, as is monitoring to evaluate long term loading from the San Joaquin River. To control local sources, albeit minor, the proposed TMDL includes effluent limits for petroleum refineries.

We anticipate circulation of the proposed TMDL and Basin Plan amendment for public review sometime in July and will bring them to the Board for its consideration this fall. In the interim, the Board's NPDES Division will be proposing early implementation of the effluent limits in refinery permits on a permit-by-permit basis.

Hamlin Dry Cleaners Public Forum Followup (Barbara Sieminski)

Soil and groundwater beneath the Hamlin Dry Cleaners site in downtown Lafayette has been impacted by releases of perchloroethylene (PCE) from past dry cleaning operations. Investigation and cleanup of site pollution is required by the Board's 2011 cleanup order for the site. During the June 2015 Board meeting's Public Forum, the Board heard comments from Ms. Barbara Rothschild, co-owner of two apartment buildings immediately west of the site. Staff provided an initial response during the June Public Forum and agreed to provide a more detailed response in this Executive Officer's Report.

Ms. Rothschild is concerned that the site's responsible parties have done too little to address PCE migration onto her apartment-building property and that there have been delays in preparation of a remedial action plan for the site. She indicated that no followup sampling was conducted at her property after sampling in 2012 and 2014 revealed PCE concentrations in soil gas and indoor air at her property above cleanup standards. Ms. Rothschild expressed concerns that it may not be safe for her tenants and that her property has lost value. She asked the Board to promptly require the responsible parties to investigate the impact to her property and prepare and implement a full-fledged remedial action plan. Ms. Rothschild also requested that the Board amend the 2011 cleanup order with updated soil vapor cleanup standards.

Site Cleanup Status: Significant cleanup has been completed at the site. A soil vapor extraction system has been installed near the solvent source area and has operated since 2009. The system was expanded in 2011 to address potential vapor intrusion impacts at the apartment buildings. The system has been effective in removing PCE from soil gas near the property boundary and limiting PCE vapor migration toward the offsite apartment buildings. The PCE source (sump and adjacent contaminated soil) was removed last year. In 2015, pilot testing of in-situ groundwater cleanup using zero-valent iron injections was successfully initiated. Based on the monitoring results, PCE concentrations in groundwater and soil vapor are decreasing. Additional testing is still required to evaluate feasibility of cleanup methods for the downgradient portion of the groundwater plume and to prevent further groundwater contaminant migration.

Vapor Intrusion Threat at Apartment Buildings: Existing data does not indicate a serious threat of vapor intrusion to the offsite apartment buildings, although additional sampling is needed to confirm this preliminary result. The PCE detected in indoor air is in the "acceptable risk" range. PCE levels in soil vapor have declined near the apartment buildings. Two monitoring wells near the property boundary show very low (currently non-detectable to 5.3 µg/l) PCE concentrations. Finally, past and ongoing cleanup actions have reduced contaminant concentrations and the associated threat from vapor intrusion. However, another solvent, trichloroethylene (TCE) was detected in indoor air in the northern apartment building. This appears to be from an indoor air source (carpet-installation materials) in the building.

Additional Cleanup Actions: On June 17, as part of a workplan-approval letter, Board staff required the following, which addresses Ms. Rothschild's concerns: 1) additional soil gas, sub-slab, and indoor air sampling near and in the apartment buildings, and 2) repair/replacement of a plugged soil gas probe near the property boundary. We also agreed to amend the 2011 cleanup order to update the soil gas cleanup standards. We understand that both the Hamlin Cleaners' responsible parties and Ms. Rothschild support this direction. We will update the Board as needed on this case as work progresses.

Cleanup Orders Issued or Rescinded by the Executive Officer (Stephen Hill)

Last month, I rescinded one site cleanup order, as explained below. The Board has delegated to the Executive Officer the authority to issue or rescind site cleanup orders pursuant to Water Code section 13304. The choice between having these orders acted on by the Board or by the Executive Officer hinges on the degree of controversy and urgency in each case. In general, I only issue or rescind these orders in situations where there is little or no controversy or when there is some urgency (e.g., cleanup action is needed promptly to address a current or imminent threat to human health or the environment). Otherwise, we bring these types of cleanup orders to the Board for its consideration and action in a public hearing.

Hewlett Packard site in Mountain View (Michael Rochette): On June 4, I rescinded the cleanup order for this former computer component manufacturing facility at 690 East Middlefield Road, near Highway 237, in Mountain View. Hewlett Packard constructed the facility in 1966 and used a 500-gallon underground storage tank for storage of chlorinated solvents such as trichloroethylene (TCE). The tank leaked and caused soil, soil gas, and groundwater contamination. The site has been subject to Board cleanup orders since 1988. From 1988 to 2011, Hewlett Packard performed cleanup activities including: tank removal, operation of a soil vapor extraction system, operation of a groundwater extraction system, and enhanced bioremediation of groundwater. TCE concentrations in shallow groundwater beneath the site have decreased from 24,000 micrograms per liter (ug/L) to 62 ug/L. At the downgradient edge of the groundwater plume, TCE concentrations have decreased from 240 ug/L to 12 ug/L. A deed restriction is in place that prohibits shallow groundwater use and limits land use at the site to commercial or industrial.

Staff Presentations

The U.S. Army Corps of Engineers Regulatory Branch requested assistance from A.L. Riley to help train its new hires. She kicked off the training with a workshop on May 29 at the Corps' San Francisco office. The purpose of the workshop was to help Corps staff understand the Board's approach to the Clean Water Act section 401 certification process. She also shared technical documents that our staff uses to evaluate flood control and erosion control project proposals.

On June 11, I participated on a panel at the East Bay Dischargers Authority's (EBDA) Climate Ready Workshop on regulatory approaches to permitting actions that implement climate change adaptation strategies. EBDA is investigating decentralized alternatives to existing wastewater treatment and disposal strategies, including studying strategies that would protect wastewater treatment facilities from sea level rise. I emphasized that, while existing State and federal water quality laws and regulations did not anticipate the need to adapt to sea level rise, we want to work with all stakeholders on developing regulatory approaches that recognize

actions that provide net environmental benefit while protecting wastewater and other infrastructure. Representatives of other agencies echoed my comments, and we plan to involve the Board as we work to develop these regulatory approaches.

On June 12, Naomi Feger gave an update to the Nutrient Management Strategy Steering Committee on the status of developing a Nutrient Assessment Framework for San Francisco Bay. We have been working with the Southern California Coastal Water Research Program, the San Francisco Estuary Institute (SFEI), and an expert science team to evaluate approaches for assessing the condition of San Francisco Bay relating to nutrients. The work to-date has focused on evaluating the relationship between phytoplankton biomass, dissolved oxygen, and harmful algal species, and establishing potential thresholds that could be used to make assessments and inform monitoring and modeling. We are also working with SFEI and the Steering Committee to develop a science plan for the next three to ten years to support a better understanding of the condition of the Bay and the potential for adverse water quality impacts due to nutrients.

On June 12, I spoke as part of a government agency panel at Sustainable Silicon Valley's (SSV) seminar on Onsite Water Treatment and Non-potable Reuse for San Mateo and Santa Clara Counties. This seminar was followup to SSV's May 8 seminar I reported on in last month's report. SSV is continuing to push both public and private entities in these two counties to match San Francisco's work at expanding local use of "re-purposed water" such as rainwater capture, greywater reuse, vault water reuse, and onsite blackwater treatment and reuse. I joined representatives of the Governor and Assemblyman Rich Gordon in emphasizing that the State heartily supports these efforts, will work with local entities to streamline any permitting of such expanded local use, and will work to identify resources that can assist local entities in their efforts to expand such use.

In-house Training

We had no in-house training in June and will resume in-house training in the fall. Brownbag seminars will include a July 22 session on anaerobic ammonia oxidation by Dr. Rob Collinson. This technology involves using slow-growing bacteria to remove ammonia and nitrite from wastewater under anaerobic conditions. This new technology is more energy efficient than conventional technologies.