California Regional Water Quality Control Board San Francisco Bay Region EXECUTIVE OFFICER'S REPORT

A Monthly Report to the Board and Public

October 2011

The next regular scheduled Board meeting is October 14, 2011. See <u>http://www.waterboards.ca.gov/sanfranciscobay/</u> for latest details and agenda

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Napa River Sediment TMDL Implementation (Mike Napolitano)

We are pleased to report significant progress toward achievement of the actions called for in the Napa River Sediment Total Maximum Daily Load (TMDL) the Board adopted in September 2009, including fine sediment control, fish passage restoration, river habitat enhancement, and stream flow protection. The TMDL requires sediment load reductions for vineyard, grazing, and rural lands; and from unimproved roads within parks, open space and municipal public works areas. The TMDL also identifies recommended actions to enhance fish passage, habitat complexity, and base flow in the Napa River and its tributaries.

For vineyards, by spring 2012, staff expects to release a public draft of a conditional waiver of waste discharge requirements (Waiver) that will prescribe conditions to ensure that effective vineyard management measures are implemented to protect water quality. We expect that the Waiver will recognize a third-party program, the Fish Friendly Farming Environmental Certification Program, as an effective way for landowners to demonstrate compliance with Waiver. Since 2004, approximately 12,000 acres of vineyards, equivalent to 1/3 of all the vineyard acreage in the watershed, have been certified as protective of water quality and habitat conditions under the Fish Friendly Farming Program. This program appears to be working, as sediment loads from certified properties appear to have dropped since we prepared the sediment source

assessment for the TMDL.

On the grazing front, with Board adoption of the Grazing Waiver for the Napa River and Sonoma Creek watersheds in September, we are working directly with landowners to ensure that effective management practices are in-place to control nutrient, pathogen, and sediment discharges. We will continue to work closely with local Resource Conservation Districts, the UC Cooperative Extension, and the Natural Resources Conservation Service to ensure that adequate technical assistance is available.

To address roads, U.S. EPA recently awarded Napa County a grant to conduct a road sediment delivery inventory for all county roads in the watershed and prioritize sites for treatment (as needed to comply with the TMDL). We expect this road inventory to be completed by fall 2012.

With respect to the TMDL non-regulatory recommended actions, three major fish passage projects have been completed on tributaries to the Napa River including projects on lower Dry Creek, Bear Canyon Creek, and lower York Creek; all key tributaries for steelhead spawning and rearing. In addition, after many years of planning, the Zinfandel Lane Bridge on the Napa River is being retrofitted to restore passage for Chinook salmon and steelhead. The project will be completed by October 15, and will re-establish suitable conditions for upstream migration of adult Chinook salmon, which are poised to ascend the river at the onset of the rainy season. Prior to construction, the bridge was a complete barrier to upstream migration by all juvenile salmonids, an almost complete barrier to upstream migration by adult Chinook salmon, and a significant impediment to upstream migration by adult steelhead. As a result of this project, we expect to see significant increases in steelhead and salmon populations in the watershed.

In August of this year, the State Board's Division of Water Rights (DWR) began a comprehensive effort to identify potential unauthorized water diversions in the Napa River watershed. Over one hundred landowners received notices regarding ponds for which the DWR does not have a record of an appropriative water right. This effort by DWR follows a request by this Board to conduct a survey of illegal storage and was motivated by the results of a 2004 watershed mapping project that identified over 1100 reservoirs in the watershed of which more than 400 were built on stream channels.

Last but not least, 1.5 miles of the Napa River Rutherford Restoration project have been constructed, and the remaining 3 miles are in the project-permitting phase. Similarly, downstream in the adjacent 9-mile long Oakville-to-Oak Knoll Reach, a restoration plan was completed in fall 2010. The CEQA study for project construction is expected to be released before the end of this year. In summary, there is a lot of real progress to report, and we are very excited about the trajectory established for environmental improvement in the Napa River watershed.



Photo Credit: Napa RCD

Photo 1. *LOWER DRY CREEK (BEFORE)* A seasonal dam and sill created a complete barrier to downstream migration by juvenile steelhead. Dry Creek may be the most important tributary in the Napa River watershed for steelhead rearing.



Photo Credit: Napa RCD

Photo 2. *LOWER DRY CREEK (AFTER)* After removing the dam, a natural boulder steppool was constructed in the channel to provide suitable conditions for fish migration.

Cleanup and Restoration at Hunters Point Shipyard (Ross Steenson)

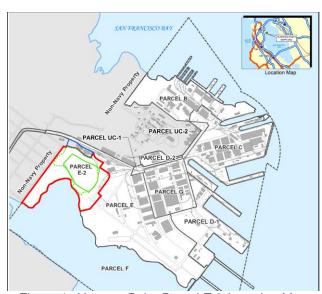
The Navy recently released a cleanup plan for a 47-acre portion of the Hunters Point Shipyard. The plan proposes the Navy's preferred remedy following its Feasibility Study in which the Navy identified several possible cleanup options. After considering public comments, the Navy will finalize its selected remedy and prepare a Record of Decision (ROD) for signature by the regulatory agencies in spring 2012.

The plan addresses Parcel E-2, which is located in the southwestern portion of the former shipyard (Figure 1). The parcel consists of three separate areas: the former industrial landfill, the Panhandle, and the East Adjacent Area (Figure 2). Most of the land comprising Parcel E-2 was created during the mid-1950s to late-1960s by filling the Bay and disposing of wastes. The landfill was covered in 1974 when the Navy ceased onsite operations. The landfill contains construction debris (wood, steel, concrete), municipal-type trash, and industrial waste (sandblast waste, paint sludge, solvents, and waste oils), and is suspected to contain low-level radiological contamination (from radionuclides used for paint on glow-in-the-dark dials and markers on Naval vessels). The landfill occupies 22 acres of the parcel, and the estimated volume of waste it contains is over one million cubic yards. Cleanup investigations began in 1984 and have continued to the present, along with interim remedies, including groundwater and landfill gas extraction and several large soil/sediment removal actions along the shoreline.

The Navy's preferred remediation approach for the landfill area would entail capping the landfill, constructing slurry walls to collect contaminated groundwater and leachate, and routinely monitoring. In the East Adjacent and Panhandle areas, contaminant hot spots would be excavated and a clean soil cover placed on top. A shoreline revetment, potentially with some natural shoreline features, would be constructed as feasible and appropriate.

In conjunction with implementing the remedy, the Navy would construct wetlands in the Panhandle Area to mitigate for past and planned environmental removal and

remediation actions. Approximately 1.55 acres of seasonal freshwater wetlands and 3.19 acres of tidal wetlands would be restored and created. However, it is likely that tidal wetland construction/restoration would be delayed until the final remedy for offshore sediment (Parcel F) is completed to avoid potential recontamination. Parcel F will be addressed later in the cleanup process and coordinated with other wetland restoration and sediment remediation projects occurring in nearby Yosemite Slough. At this time, the Navy does not have a forecast date for transfer of Parcel E-2 to the City of San Francisco, which would occur after the cleanup is implemented. According to the San Francisco Redevelopment Agency's 2010 Amended Reuse Plan, the vast majority of the parcel will be part of the Shoreline Open Space. About 0.42 acres in the northeastern portion of the East Adjacent Area is part of the Shipyard South Multi-Use District and may be used for recreational, industrial, and residential purposes.



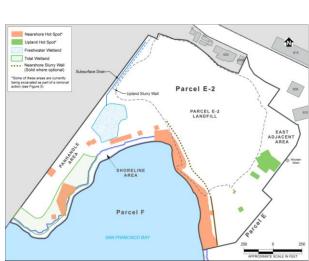


Figure 1. *Hunters Point Parcel E-2 Location Map.* The parcel is outlined in red. The landfill is outlined in solid green.

Figure 2. – Navy's Preferred Option.

Toxics Cleanup Division's Case Closure Accomplishments (Stephen Hill) Last fiscal year, the Board's Toxics Cleanup Division closed 71 low-threat cases (or about 11% of our active cases). Of this total, 51 closures involved leaking underground fuel tanks and 20 were non-fuel cases. Case closure signifies the completion of cleanup and allows staff to shift attention to more significant cleanup sites. This Board pioneered low-threat closures, first at leaking underground fuel tank sites and more recently at solvent-impacted sites. For both types of sites, we make sure that the following conditions are present prior to case closure:

- The site is adequately characterized;
- Reasonable source control has been completed;
- The groundwater plume is stable or decreasing;
- Residual contamination poses no significant threat to human health or the environment; and
- Water quality objectives will be met before beneficial use of the groundwater is needed.

Enforcement: Complaints and Settlements (Brian Thompson)

On September 8, the Board's advisory team issued an ACL order to C&H Sugar Company after a settlement was reached with the Board's prosecution team and a 30day public comment period did not generate any opposition to issuing the order. C&H Sugar will pay \$379,200 to the State Board's Cleanup and Abatement Account for an alleged discharge of process water to Carquinez Strait. A copy of the order can be found on our website:

http://www.waterboards.ca.gov/sanfranciscobay/public_notices/pending_enforcement.shtml

Two dischargers have agreed to conditional offers to settle mandatory minimum penalty violations through the Board's Expedited Payment Program. The following payments will be made to the Cleanup and Abatement Account for alleged violations if payment agreements circulated for a 30-day public comment period do not generate opposition to accepting the offers.

- South Bayside System Authority \$3,000
- University of California, Berkeley \$3,000

Three dischargers are making payments to the Cleanup and Abatement Account for mandatory minimum penalties settled through the Board's Expedited Payment Program.

- Vulcan Materials Company \$9,000
- West County Agency and City of Richmond \$24,000
- East Bay Municipal Utility District \$21,000

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: <u>http://www.waterboards.ca.gov/board_info/eo_rpts.shtml</u>

Art Cleaners - Cleanup and Abatement Order (Nathan King)

On August 30, I administratively issued a Cleanup and Abatement Order (CAO) for Art Cleaners, a dry cleaner spill site located in San Jose. There is a history of noncompliance at this site. In 2010, the Board imposed administrative civil liability of about \$25,000 for failure to submit an investigation workplan. The dischargers have still not submitted the investigation workplan and have not paid the ACL penalty. This CAO requires the investigation and cleanup of solvents released to soil and groundwater as a result of dry cleaning operations at the site. Art Cleaners is located in a mixed residential and commercial area located within a block of San Jose State University, with residences and an elementary school in the immediate vicinity. The contamination from Art Cleaners may be affecting sensitive receptors in the vicinity, and its investigation and cleanup is a high priority for us. If the dischargers do not comply with this CAO, I will consider referring the matter to the Attorney General for further enforcement.

In-house Training

Our September training was on water rights, with a focus on how the State and Regional Water Boards' water rights and water quality programs intersect. Our October training will be on computer topics, namely Microsoft Office 2010 software, to coincide with a department-wide update from Office 2003 to Office 2010. Brownbag seminars included a September 8 session on groundwater-surface water interactions (with a focus on the surface water impacts from "daylighting" groundwater plumes), and a September 15 session on some products that came out of the San Francisco Estuary Institute's *Bay Area Model for Comprehensive Wetlands Assessment in a Watershed Context.*

Staff Presentations

On September 19, I joined with Attorney General Kamela Harris, Secretary of the Interior Ken Salazar, and other State and federal agency representatives to speak at the press conference announcing the civil settlement of the case against the owners and operators of the *Cosco Busan*, which struck the Bay Bridge in November 2007 and spilled over 53,000 gallons of oil. The settlement, lodged in a consent decree available at www.justice.gov/enrd/Consent_Decrees.html, requires the owners and operators of the *Cosco Busan* to pay \$44.4 million for natural resource damages and penalties, including \$1.5 million in administrative civil liabilities under the Water Code. In my remarks to the press, I noted that, while the settlement closes the case on the *Cosco Busan*, we all must be diligent in addressing ongoing petroleum discharges to the Bay, including oil discharged daily from the cars we drive and the ongoing seeps of oil into the Bay from past spills and disposal areas.

On September 22, several Board staff joined me at a "meet your regulator" reception hosted by the Bar Association of San Francisco. Representatives from various environmental regulatory agencies, environmental law firms, and consultants attended the reception. This event provided an opportunity to informally discuss regulatory issues with various parties affected by one or more of the Board's programs.

On September 27, John Muller and I spoke at the City of Millbrae's City Council meeting, congratulating the Council and city employees on the Board's award of the 2011 Dr. Teng-chung Wu Pollution Prevention Award to the City of Millbrae. Both John and I commented on the basis of the award, Dr. Wu's vision for reducing pollution by preventing wastes from reaching our waters, and the significant accomplishments of Millbrae, as a small agency, in reducing wastes and pollutants at their sources.

On October 4, U.S. EPA's Alexis Strauss and I spoke at a public workshop hosted by the Stege Sanitary District and the East Bay Municipal Utility District (East Bay MUD) to kick-off the private sewer lateral ordinance Stege has adopted for its service area of parts of El Cerrito, Kensington, and Richmond. Stege is implementing the ordinance as part of its response to the enforcement orders both U.S. EPA and the Board have issued to Stege, East Bay MUD, and six cities in East Bay MUD's sewershed to address sanitary sewer system overflows and discharges from East Bay MUD's wet weather facilities. Both Alexis and I emphasized the need for all property owners to maintain their laterals as a major part of the agencies' efforts to reduce inflow and infiltration into sanitary sewers. As at similar workshops, I spoke at in Emeryville and Piedmont in August, most questions and comments from the public focused on the mechanics of the ordinance and how real estate agents can best work with homeowners on lateral repair and inspection during property transfers.

On October 5, Stephen Hill participated in a panel discussion at the Groundwater Resources Association of California's biennial groundwater conference. The panel provided a 20-year retrospective on groundwater cleanup and discussed future trends.

Stephen's presentation highlighted the formative role played by this Board in the development of California's groundwater cleanup programs. He noted five significant changes in groundwater cleanup since the programs began in the early 1980s: rapid growth in the number and diversity of cleanup sites; more comprehensive approach to setting cleanup goals; improved investigation and cleanup methods; creation of a low-threat closure option; and the increasing role of Brownfields in site cleanup. The conference was well attended by firms and organizations working on water supply, water recycling, and groundwater cleanup issues.

State of the San Francisco Estuary Conference, September 20 and 21 The 10th biennial State of the San Francisco Estuary Conference was held in Oakland on September 20 and 21 and was marked by the release of the *State of San Francisco Bay 2011* report (<u>http://www.sfestuary.org/StateofSFBay2011/</u>). The report presents a science-based assessment of the health of the San Francisco Estuary and reveals a complex picture that many of the speakers attempted to unravel.

Board staff were involved with almost all aspects of the conference, including planning, logistics, and oral and poster presentations. Tom Mumley moderated the *Improving Water Quality Session* and spoke about *Water Quality Based Regulatory Actions*. Later in that session, I gave a talk on *The Mothball Fleet – Using Regulatory tools to Improve Water Quality*. Naomi Feger moderated a timely session titled *Nutrients in a Changing Estuary: Emerging Issues with a Vintage Water Quality Problem*. In the *Let's Pick Up the Trash* session, moderated by Tom Mumley, Dale Bowyer spoke about *Developing a Method for Trash Flux Measurement in Creeks*. Leslie Ferguson moderated a session titled *Restoring Rivers in Bay Area Anchor Watersheds* in which Ann Riley spoke about the *Napa River Project: A National Model*. Building upon the theme of sustainable communities, Ann Riley and Dale Hopkins organized a session on *Watershed Stewardship*. Andree Greenberg chaired the poster session.

Staff Publications

Board staff Carrie Austin and Dyan Whyte, along with UC Berkeley professor Jim Kirchner, and former Board student intern Alex Myers, recently published a paper in the Journal *Environmental Science and Technology (Environ. Sci. Technol., 2011, 45 (18), pp 7874–7881, <u>http://pubs.acs.org/doi/abs/10.1021/es2014874</u>) titled <i>Quantifying Remediation Effectiveness under Variable External Forcing Using Contaminant Rating Curves.* In addition to documenting the 92-93% reduction in mercury loads ascribed to the Board and U.S. EPA-funded Gambonini Mercury Mine Cleanup and Abatement Project, this paper puts forth a robust method for assessing cleanup effectiveness at sites where factors such as rainfall, stream flow, and sediment transport may affect the discharge of contaminants. The paper illustrates how remediation effectiveness may be better assessed by comparing pre- and post- remediation contaminant rating curves, which permit "all else equal" comparisons of pre- and post-remediation contaminant with a remediation case study, the Gambonini Mine in Marin County.