

## Executive Officer’s Report August 11, 2021

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### **Cleanup of Historic Bulk Fuel Terminals Along the Napa River (Bill Cook)**

We recently closed six cleanup cases located along the east side of the Napa River near downtown Napa (Figure 1). These cases were associated with leaks from historic bulk terminals that stored and supplied fuel oil to homes and business in the Napa Valley dating back to 1913. The former bulk fuel terminals had leaked gasoline and diesel fuel in an area that has since been reclaimed as wetland habitat by the Napa River Flood Protection Project. These bulk fuel terminals and the contamination leaked from them were initially impediments to the Flood Project because they were located in areas planned for construction of marsh and flood terraces (Figure 2).

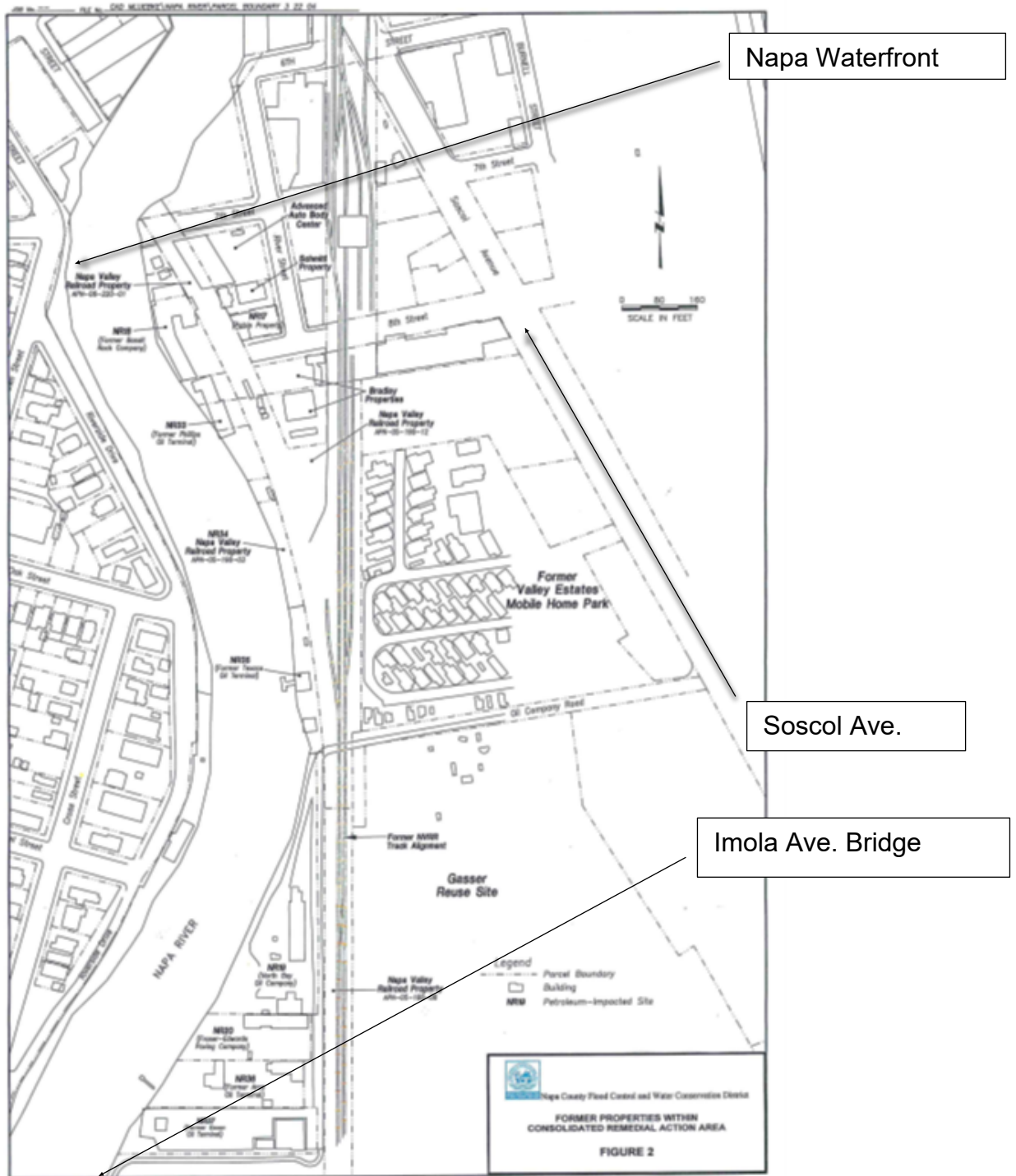
From the 1970s through the 1990s, the recurrent flooding in downtown Napa was an impediment to redevelopment. In the early 2000's, the US Army Corps of Engineers (Corps) and the Napa County Flood Control and Water Conservation District (Flood District) began implementing the Flood Project, which included creating new flood and marsh-plain terraces to attenuate flood waters, bypassing a major meander (and flow impediment) in the river, and restoring of over 650 acres of tidal wetlands of the San Francisco Bay Estuary south of downtown Napa. The Flood Project is successfully protecting homes, businesses, and properties from 100-year flood events.

The land formerly occupied by the bulk oil terminals was purchased by the Flood District and regulated under a cleanup order that this Board adopted in 2001. Consolidating these sites in a single order helped align the cleanup with the Flood Project schedule. From 2002 to 2004, the Corps and Flood District excavated the area where the bulk terminals were located, removing and remediating thousands of cubic yards of contaminated soil down to elevations that allowed for daily tidal inundation on the marsh plain terraces and storm flow inundation on the flood plain terraces.

Residual petroleum fuel impacted soil that resided below the flood plain elevation was excavated an additional five feet and capped with clean soil. Consequently, long-term groundwater monitoring and inspections were needed to demonstrate that there would be no lingering impacts to the newly created flood and marsh plain terraces. Earlier this year, based on over ten years of monitoring and inspection, we determined that no fuel impacts (e.g., sheen or globules) had been observed and no further groundwater monitoring was needed. Nonetheless, the Flood District has agreed to conduct annual inspections of the capped areas for evidence of scour or petroleum impacts. We are regulating this activity pursuant to Waste Discharge Requirement Order No. [R2-2019-0023 for the Flood Project](#).

Of the many lessons learned, one of the most salient is, *where there's a will, there's a way*. Integrating cleanup with habitat restoration and flood protection was challenging for many reasons. In the end, the creative application of our regulatory tools and our agency's efforts to facilitate and nudge stakeholder coordination helped create exceptional benefits to people and the environment.

Figure 1: Source Properties Map



**Figure 2: Demolition of Industrial Site (2002)**



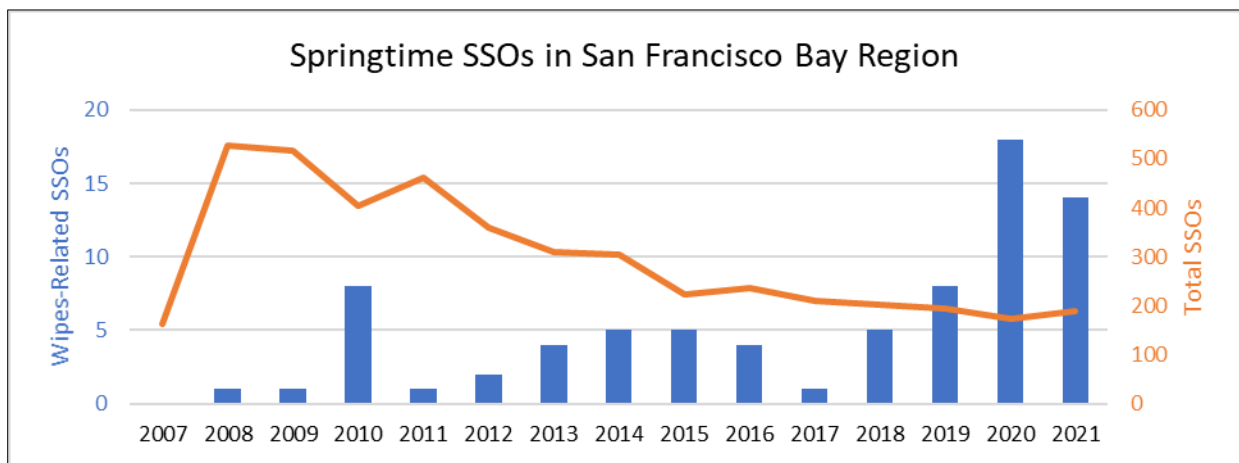
**Figure 3: Napa River Flood Channel (2021)**



### Sanitary Sewer Overflow Update (Kerry O'Connor)

In the May 2020 Executive Officer's Report, we reported on the increase of wipes-related sanitary sewer overflows (SSOs) during the coronavirus pandemic. We postulated the increase was due to the increased use of disinfectant wipes to prevent the spread of COVID-19 and was exacerbated by the toilet paper shortage. Here, we provide an updated analysis showing that wipes-related SSOs continue to plague the 136 sanitary sewer collection systems in our Region.

Minimizing SSOs is one of our highest priorities because untreated sewage can contain pathogens, viruses, metals, and organics that can spill into local waterways and endanger human health and the environment. The figure below shows the total number of SSOs and wipes-related SSOs in our Region during March, April, and May of each year since 2011. We chose to focus our analysis on spring conditions to show the impact of the "Stay-At-Home" mandates in California that began in March 2020.



Since 2011, the total number of SSOs occurring in the San Francisco Bay Region has steadily decreased (faster than statewide rates have decreased). In spring of 2020 and 2021, however, the number of SSOs caused by wipes-related blockages drastically increased, accounting for 7 to 10 percent of the total number of SSOs, compared to just 4 percent or less in previous years.

This phenomenon continues to be reported in the news and social media. In fact, the reduction in wipes-related SSOs observed in spring 2021 compared to spring 2020 may be a result of outreach efforts by agencies throughout our Region on Facebook, Twitter, Instagram, LinkedIn, and YouTube. A ["Don't Flush Your Wipes!"](#) video posted on YouTube by Central Contra Costa Sanitary District has received over 300,000 views since it was posted in April 2019. Some examples of wipes outreach on Twitter are shown below.

Regional Water Board Twitter



East Bay Municipal Utility District Twitter



Central Contra Costa Sanitary District Twitter



## **Livermore Old Train Depot Cleanup and Affordable Housing Redevelopment (Sherry Gamboa)**

The City of Livermore is working with Eden Housing to construct 130 units of affordable housing over subterranean garages in downtown Livermore. A portion of the redevelopment area includes the former Old Train Depot (Figures 1 and 2). Soil and groundwater in this area are affected by chemicals leaked from a former dry cleaner and lumber yard. The redevelopment project has drawn the interest of several community groups and newspapers. The City and Water Board staff are working cooperatively to ensure that vapor intrusion threats from volatile chemicals in the ground are adequately addressed to support the housing project.

### ***Background***

During environmental investigations for the redevelopment project conducted in the summer and fall of 2018, the City voluntarily sampled soil vapor and groundwater and identified volatile chemicals that could pose a vapor intrusion threat to the planned housing project.

In May 2021, the City proposed further investigation and voluntarily submitted an Interim Remedial Action Plan (Cleanup Plan). The purpose of the Cleanup Plan is so the City can begin cleaning up volatile organic compounds (VOCs) to accommodate the City's redevelopment construction schedule anticipated to begin in 2022. The Cleanup Plan proposes soil vapor extraction (SVE) to remediate VOCs and mitigate vapor intrusion, and soil excavation if necessary. While the interim remediation is implemented, groundwater monitoring will be performed to assess concentration trends; additional remedial measures will be implemented to address groundwater contamination as needed. Staff is confident that development can proceed safely because the current concentrations in groundwater are low, groundwater is relatively deep allowing VOC vapor concentrations to decrease through the vadose zone, and the residential units will be buffered from any potential vapor intrusion into indoor air by the garages on the first floor. Furthermore, the soil vapor and groundwater monitoring will provide early warning if any of the assumptions about risk and risk mitigation turn out to be inadequate.

In June 2021, Water Board staff provided comments on the Plan and requested clarification of the design of the subterranean garages, the SVE system, and the City's proposed cleanup levels. The City is addressing our comments and said it would submit a revised Plan for our review and implement the SVE system as soon as it gets our approval. The City has acknowledged that the SVE system operation may need to continue after redevelopment if cleanup levels are not achieved and that vapor mitigation systems may be needed in the interim.

### ***Community Interest***

Two community groups, Save Livermore Downtown and the Tri-Valley Sierra Club, have expressed concern about the redevelopment and Save Livermore Downtown filed a lawsuit in June 2021 to stop the project. Recent newspaper articles about the community groups' concerns and the lawsuit state that the City failed to consider concerns raised by Water Board staff. However, we were not contacted by these community groups, nor the newspapers, and our perspective is that the City has and continues to cooperate with all our requests.

Furthermore, Water Board staff are satisfied with the City's efforts to date and are ready to provide timely feedback on its Plan and other submittals to support safe implementation of the City's redevelopment plans. Remedial activities are anticipated to begin in early 2022. Operation and effectiveness of the SVE will be monitored following startup and the City will submit monitoring reports. Construction of the residential development is scheduled for mid-2022.

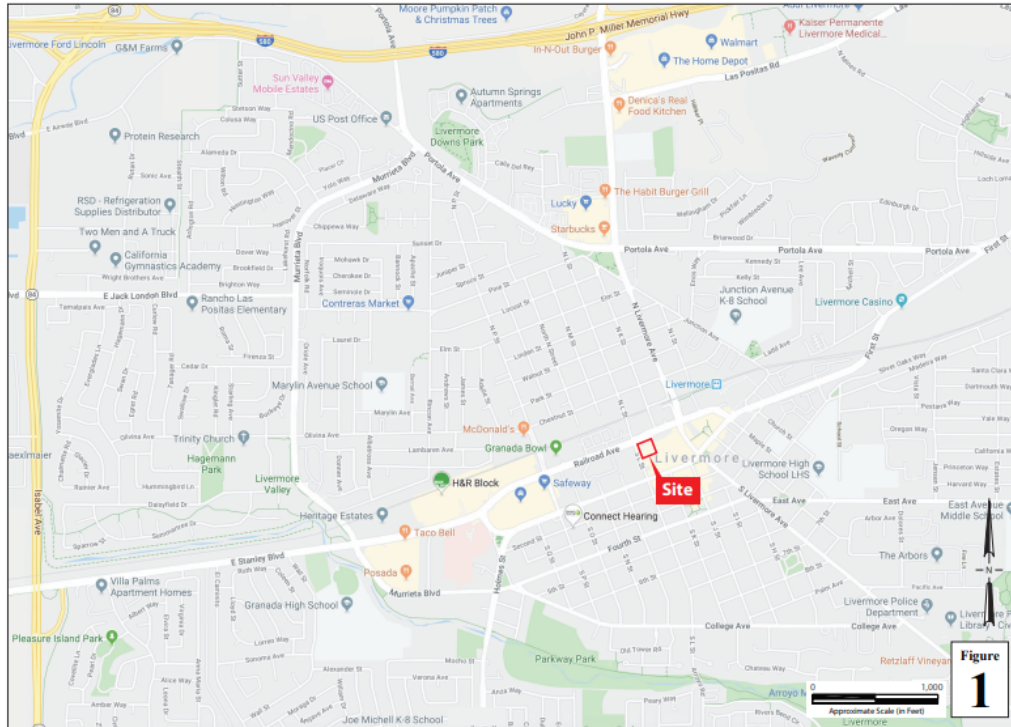


Figure 1: Site location map.



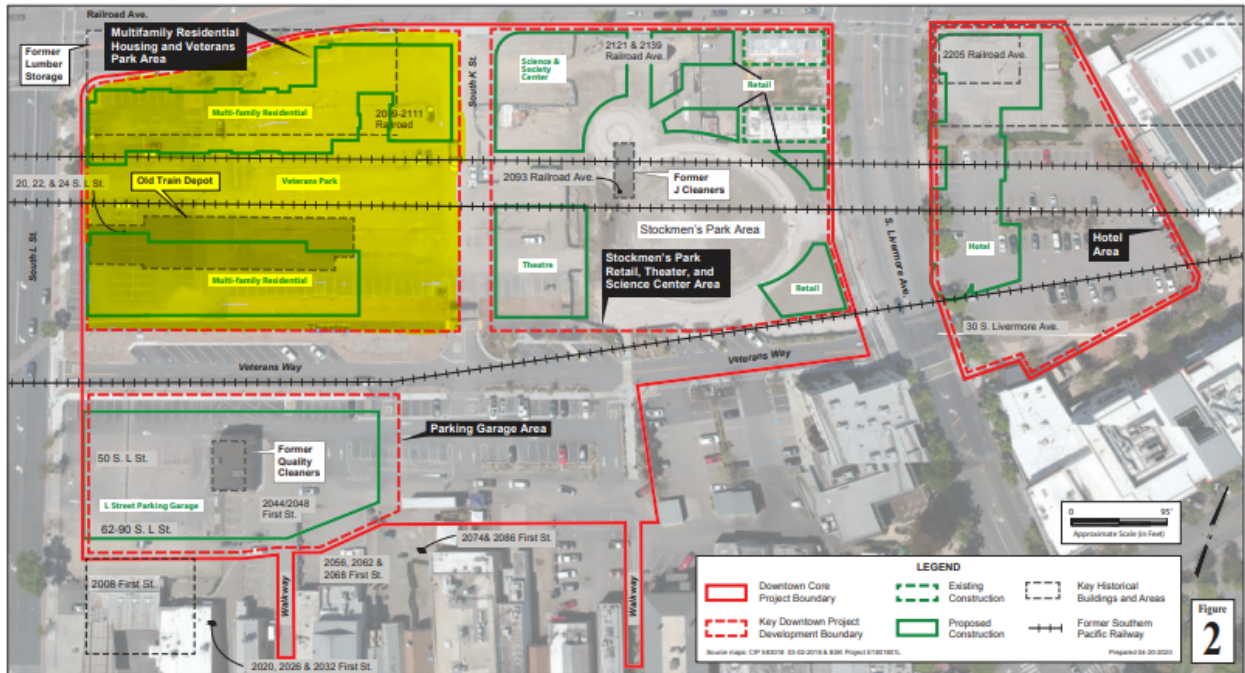


Figure 2: Proposed Redevelopment Plan – Old Train Depot site highlighted in yellow.

## **Caltrans State Route 37 Corridor Planning (Qi Yan and Christina Toms)**

Flooding and traffic congestion along State Route 37 (SR 37) have resulted in ongoing planning work on the future of SR 37, including how to adapt it to accommodate anticipated sea level rise. Water Board staff is participating in that effort, with the goal of ensuring that the project appropriately incorporates the protection of water quality and beneficial uses, and considers tools like the Adaptation Atlas.

SR 37 extends for 21 miles between U.S. 101 in Novato and Interstate 80 in Vallejo and serves as a vital transportation corridor that connects Marin, Sonoma, Napa, and Solano counties across San Pablo Bay. SR 37 traverses the San Francisco Estuary's largest mosaic of relatively intact and restored bayland habitats, including protected lands of the Napa-Sonoma Marshes and the San Pablo Bay National Wildlife Refuge. Tidal marshes and mudflats in this region are among the most likely to be resilient to climate change, due to the relatively less-intensively developed nature of adjacent landscapes and abundant sediment supply from mudflats and tributaries such as the Napa River and Sonoma Creek. SR 37 has recently seen significant impacts due to flooding, including closures for extended periods in 2017 and 2019, and is at risk of continued closures and traffic disruptions as sea levels rise.

Caltrans initiated a Planning and Environment Linkages study (Study) in late 2020 that will assess the impacts of climate change through 2130 and increasing traffic congestion on SR 37. The Study is a coordinated planning process for Caltrans staff, resource and regulatory agencies, county and municipal staff, environmental groups, and other stakeholders that will develop a corridor-wide vision and plan to reconstruct SR 37 to address segments vulnerable to sea level rise and extreme weather events, and reduce traffic congestion. The Study builds off of years of previous study, and will develop a project purpose and need statement, evaluate design alternatives, and identify a preferred project alternative. The Study is being completed concurrent and in coordination with a Design Alternatives Assessment (DAA) effort led by the Metropolitan Transportation Commission that is evaluating design alternatives for the western segment of the SR 37 corridor from U.S. Highway 101 to State Highway 121.

Water Board staff (Qi Yan and Christina Toms) have participated in the Study workgroup and interagency meetings, and Christina is part of DAA's environmental technical working group that is providing technical expertise to the project team evaluating interim and long-term solutions to address flooding and resilience between U.S. 101 and SR 121. Staff is working to ensure that these efforts result in a purpose and need statement and project goals that appropriately address the significant engineering challenges and sensitive habitats surrounding the corridor, and that appropriate engineering and nature-based design alternatives are evaluated and incorporated into the corridor vision and design.

As part of the Study/DAA process, Caltrans is evaluating a number of corridor alignment alternatives, including:

- Constructing the new roadway in the same location or closely offset from the existing alignment,
- Constructing a new alignment over San Pablo Bay south of the current alignment, and

- Constructing alignments that would reroute SR 37 to the north to avoid San Pablo Bay and baylands habitat.

While project alignment and design alternatives are in an early stage of development, it is likely that the chosen alignment will remain in a similar location to the existing SR 37, with design alternatives to raise the roadway elevation that include constructing the new roadway on either an embankment or as a causeway on piers. Constructing SR 37 on an embankment would require significant volumes of fill, the potential sources of which are unclear, and would result in substantial impacts to the surrounding tidal marsh and wetlands due to the fill footprint needed to tie slopes from the elevated roadway into the existing ground elevations. Embankment construction would also likely require an intensive and costly construction technique called cement deep soil mixing to support the added weight of the road and embankment above the underlying Bay muds present through much of the corridor. Relative to placing SR 37 on an embankment, constructing a causeway on piers would reduce the project's construction and roadway footprint, reduce fill impacts, reduce disruptions to traffic patterns during the construction period, and improve landscape-scale hydrologic and geomorphic connectivity so bayland habitats can adjust and migrate in response to climate change. The most recent cost estimates by Caltrans indicate that the two alternatives are broadly comparable on a cost/linear foot basis, but these cost estimates are preliminary and do not yet appear to include potentially significant components such as mitigation for project impacts. It is likely the ultimate design will incorporate a combination of SR 37 on embankment and causeway.

The project also has the potential to improve regional transit connections such as bus, rail, and ferry service. Water Board staff are especially interested in the potential to co-locate a rail line currently owned by Sonoma Marin Area Rail Transit (SMART) within the SR 37 corridor (ideally on an elevated causeway). The SMART rail corridor's current alignment extends between Novato and Napa Junction (near American Canyon) through tidal marshes, diked baylands, and along the region's historic estuarine-terrestrial transition zone. This location makes it extremely prone to flooding under existing conditions and poses a significant obstacle to the future migration of the region's tidal marshes upslope in response to rising sea levels. Co-locating the railroad with an elevated SR 37 would allow for the historic alignment to be removed or otherwise retrofitted to support the resilience of the region's built and natural communities. Caltrans has not yet committed to incorporating transit connections into the purpose and need statements that will guide the Study and DAA processes.

Water Board staff will continue to work closely with Caltrans, MTC, resource agencies, and project stakeholders as the long-term vision and plan for SR 37 are developed. This includes ensuring that the the project's purpose and need statement incorporates preservation of the corridor's sensitive ecosystems, including baylands habitat, and that the chosen alignment and design alternative is the least environmentally damaging practicable alternative, avoids and minimizes impacts to waters of the State, including creeks and wetlands, to the maximum extent practicable, protects and enhances the region's considerable beneficial uses, includes appropriate and timely mitigation for fill impacts, and incorporates stormwater treatment controls to treat pollutants in roadway stormwater runoff. With the SR 37 environmental technical working group and the Sonoma Baylands Working Group established by the Coastal Conservancy, Water

Board staff are also working to incorporate recommendations from the Baylands Goals report and San Francisco Bay Shoreline Adaptation Atlas into the Study/DAA process.

## Caltrans Trash Control Implementation Progress (Qi Yan)

Consistent with the requirements of the Caltrans Statewide NPDES Municipal Stormwater Permit ([Order No. 2012-0011-DWQ, as amended](#)) and the [Statewide Trash Amendments](#) to the Water Quality Control Plans for Ocean Waters and for Inland Surface Waters, Enclosed Bays, and Estuaries, Caltrans must control discharges of trash from significant trash generating areas (STGAs) of its right-of-way (ROW) by not later than 2030. Trash control is typically accomplished via the implementation of full trash capture devices or via a combination of alternative measures, such as source controls to prevent the discharge of trash in the first place, and trash removal from streets and highways before it can discharge to the storm drain, such as by street sweeping or maintenance crews.

Caltrans' efforts to control trash are guided by the [Cease and Desist Order](#) (CDO) the Board issued in February 2019 (Order No. R2-2019-0007). The CDO provides enforceable acreage benchmarks and a schedule for their achievement, as well as planning and reporting requirements sufficient to demonstrate that Caltrans will substantially control trash discharges from its ROW by 2026, and fully control those discharges by 2030. Caltrans achieved the CDO's 2020 benchmark of 2,000 acres of ROW controlled for trash through a combination of on-ROW retrofit projects, cooperative implementation projects with local municipalities, and ROW treated by existing municipal structural trash controls. The next benchmark requires control of trash discharges from 4,000 acres of ROW by June 30, 2022, which Caltrans currently projects to meet.

The CDO requires Caltrans to submit a Trash Control Implementation Workplan (Workplan) every two years that describes how it will plan, fund, and implement trash control measures sufficient to meet CDO benchmarks. Caltrans submitted a revised Workplan on December 31, 2020, as required by the conditional acceptance letter we sent in response to their previous Workplan submittal in December 2019, to address shortcomings such as insufficient funding commitments to meet CDO benchmarks. The revised Workplan includes a detailed description of Caltrans' compliance strategies to meet the CDO benchmarks. We sent Caltrans a comment letter in February 2021 that outlines Workplan elements of significant concern that could lead to non-compliance with CDO benchmarks and that should be addressed in the next Workplan submittal, which is required by December 31, 2021.

Caltrans and Water Board staff continue to meet regularly to discuss CDO compliance, which has resulted in progress toward identifying additional trash control project opportunities both on-ROW and with local municipalities, solidifying funding commitments, further developing trash control implementation feasibility criteria, and assessing and demonstrating the effectiveness of trash control measures other than full trash capture such as Enhanced Maintenance and Vegetation Controls. We expand on these below.

### ***Cooperative Implementation Projects***

Caltrans has actively collaborated with municipalities to fund cooperative implementation trash control projects that treat both municipality and Caltrans ROW. These projects are implemented via cooperative implementation agreements

(agreements), under which Caltrans provides funding for the off-ROW trash control project and the municipality agrees to construct, operate, and maintain it.

In FY 2020-21, Caltrans executed agreements to provide over \$20 million of funding to projects with Permittees under the Municipal Regional Stormwater NPDES Permit (MRP). These municipalities include Emeryville, Hayward, Oakland, and Palo Alto. Caltrans will also provide additional funding to expand the scope of existing project agreements with Richmond and Vallejo. These are funds that could have been used statewide, but Caltrans prioritized funding these trash control projects in Bay Area economically disadvantaged communities. The FY 2020-21 cooperative projects are projected to treat 213 acres of Caltrans ROW. To date, Caltrans has successfully executed 18 agreements with a total funding contribution of over \$55 million. These municipal partnership projects will potentially control trash from over 2,000 acres of Caltrans ROW and over 30,000 acres of municipalities' ROW.

The CDO allows Caltrans to request alternative compliance credit toward benchmark acreages for the off-ROW area treated by a cooperative implementation project. Due to Caltrans' commitment to prioritize FY 2020-21 funding of trash control devices that will treat significant portions of West Oakland (over 500 acres) and Vallejo (over 2,000 acres), two economically disadvantaged communities, we agreed to grant alternative compliance credits for these cooperative implementation projects under the CDO (approximately 200 acres total credits), contingent on Caltrans demonstrating infeasibility for controlling trash in specific Caltrans STGA ROW.

#### ***Trash Reduction Feasibility Studies***

Caltrans is required to conduct Trash Reduction Feasibility Studies to assess feasibility of implementing structural and non-structural trash controls to comply with the acreage benchmarks and schedule of the trash CDO. A Feasibility Study report assessing no less than 50 percent of significant trash generating ROW is required to be submitted by Dec. 31, 2021. Caltrans and Water Board staff met multiple times in 2020 to discuss how Caltrans assesses infeasibility of implementing trash controls. In May 2021, we sent Caltrans a memo commenting on its project-based and corridor-based trash control feasibility analyses, and feasibility criteria discussed during our monthly coordination meetings, and are awaiting Caltrans' response.

Caltrans is challenged to implement on-ROW trash controls in many areas due to traffic and worker safety considerations, lack of available ROW to install and maintain trash controls, and lack of hydraulic head to enable controls to function properly. We will continue working with Caltrans staff to come to agreement on the evaluation criteria, including better justifying conditions that make trash control implementation infeasible on Caltrans ROW, and approaches that Caltrans can take to address potential constraints.

#### ***Non-structural trash control measures – Enhanced Maintenance and Vegetation Controls***

In January 2020, Caltrans initiated two pilot studies to evaluate the feasibility of Enhanced Maintenance Measures (enhanced maintenance) and the effectiveness of trash capture by existing roadside vegetation to achieve full trash capture equivalence.

Through the vegetation pilot study, Caltrans staff is assessing the effectiveness of existing vegetation in trapping trash, which can be manually picked up before migrating

into the storm drainage inlets, resulting in a reclassification of ROW from a moderate to a low trash generation area. Early indications are that vegetation works to trap trash. We will continue to work with Caltrans staff to assess the comprehensiveness of the evaluation and reliability of the conclusion, especially regarding whether the study has evaluated an appropriate variety of environmental settings and corridors to consider impacts that could affect the applicability of vegetation as an effective trash control measure, such as slope, highway/ramp/loop type, vegetation conditions, seasonal considerations, rainfall events, and availability of labor to remove trapped trash.

Pilot studies of enhanced maintenance are designed to evaluate the effectiveness of measures such as litter pickups and street sweeping in achieving full trash capture equivalence. Data collected from June 2020 to March 2021 show that enhanced maintenance could effectively reduce the amount of trash accumulated on streets and sidewalks, and thus improve the visual trash assessment score (by converting rate of "Moderate" to "Low"), but results vary in different corridors, indicating uncertainty of enhanced maintenance effectiveness in different settings. Caltrans will continue to collect data through November 2021 and final reports will be submitted for our review. Caltrans has proposed to claim approximately 790 acres of enhanced maintenance and vegetation control credits to meet CDO benchmarks in 2022. Our concurrence with those credits will be based on Caltrans demonstrating that the measures are effective at controlling trash to low levels. Additional work is necessary to develop a technical basis for the role played by roadside vegetation in controlling trash and to further increase maintenance frequency at certain corridors, should Caltrans wish to claim the credits.

### ***On-land Visual Trash Assessment***

The CDO requires Caltrans to periodically reassess its ROW to determine the remaining extent of STGAs; that is, the area from which trash must still be controlled in addition to the 8,800 acres of significant trash generating area as identified in the CDO. Based on the assessment results, areas identified as STGAs will comprise the total acreage Caltrans is required to manage to meet the trash reduction requirements. Caltrans is required to conduct visual trash assessments in all Low and Moderate rated ROW by December 31, 2021, but in early August requested an extension of one year to complete this assessment due to the significant Caltrans staff resources that are being put toward getting the Clean California initiative (described below) up and running. We are considering the time extension request and working with Caltrans to ensure that the visual assessment that is conducted results in an accurate representation of trash conditions and is consistent with established visual assessment methodologies, such as the Bay Area Stormwater Management Agencies Association On-Land Visual Trash Assessment method that is used by MRP Permittees.

### ***Clean California Initiative***

A recent exciting development at Caltrans has been the unveiling of the [Clean California Initiative](#), a \$1 billion program to revitalize California's streets and public spaces through litter abatement and local beautification projects. Executive Officer Michael Montgomery and Board Member Andy Gunther attended a kick-off event for the initiative in Oakland on July 7, 2021. Through the statewide initiative, approximately \$418 million has been dedicated for litter abatement, and over \$580 million to support state and local beautification projects and municipal coordination. While the Initiative's details are still being finalized, the three-year statewide program will significantly increase Caltrans funding commitments to control trash, mainly through trash and litter pick-up, which could expedite Caltrans trash CDO compliance and result in additional

opportunities to fund cooperative implementation green stormwater infrastructure and trash capture projects.



## **Via Verdi Slope Stabilization Project – 401 Water Quality Certification (Katie Hart)**

In June we issued a water quality certification (certification) to the City of Richmond (City) for the Via Verdi Slope Stabilization Project. The project is located just east of the Interstate 80 and El Portal Drive interchange, and involves stabilization of the Via Verdi roadway, which provides the sole access to the 85 single-family homes and 100 apartment units that make up the Sobrante Glen residential development. To stabilize the road, a 350-foot long concrete box culvert will be constructed in San Pablo Creek at the toe of a landslide. The stabilization is expected to prevent further collapse of the slope and allow continued access to the residential area. Engineered backfill will be placed around and over the culvert to buttress the landslide and achieve an acceptable factor of safety for the slope. The culvert design includes a roughened channel bottom to facilitate fish passage. This roughened channel design will extend into an existing downstream culvert, replacing a dysfunctional baffle structure that was installed in 2012.

The certification was issued after extensive discussion with the City about alternative means to stabilize the landslide without culvert fill in the creek and the associated loss of a healthy riparian forest along the banks. Various alternatives were considered and, although other viable designs were presented, the City determined that the risks of landslide movement during construction were too great for any of the alternatives to be practicable. Consistent with Water Board policy for projects discharging fill to creeks, wetlands, and other waters, we required mitigation for the loss of open creek aquatic and riparian habitat, which included the removal of a significant number of large native trees.

### ***Background***

In the mid-1970s the Sobrante Glen neighborhood was constructed and the development included installation of a large elliptical pipe culvert in San Pablo Creek to provide access on Via Verdi. In addition to the large culvert, construction of Via Verdi involved placement of an engineered buttress to stabilize a landslide beneath the road alignment to the north of the creek. In 2010, a section of the large culvert collapsed, creating a sinkhole in Via Verdi north of El Portal Drive. The damaged collapsed culvert was replaced with a concrete box culvert during the 2011/12 construction season.

In 2017, roadway distress within Via Verdi just east of the box culvert was observed, and further study determined that the Via Verdi embankment had moved down towards the creek as part of a larger landslide. The landslide affects approximately 250 feet of the Via Verdi roadway and extends below the buttress fill into the Orinda Formation, a geologic unit that is prone to landsliding. Via Verdi has been closed to traffic and the site is currently bypassed by an emergency access road that passes through an adjacent cemetery.

The habitats within and surrounding the site support a variety of wildlife, and overhanging riparian vegetation protects pools up to three feet deep within, and upstream from, the site. Conditions downstream of the Via Verdi/El Portal culvert include well-developed riparian cover and a shallow, gravel stream bed. These areas may provide habitat for the federally threatened California red-legged frog and steelhead trout.

***Project Impacts***

Culverting of the creek through the project reach will eliminate 350 linear feet of natural earthen stream bed habitat and the associated riparian vegetation, which supports the beneficial uses of preservation of rare and endangered species, wildlife habitat, and water contact and non-contact recreation. In addition to the loss of soft bottom creek habitat, the new culvert will extend the length of the existing structure beneath Via Verdi to 770 linear feet from the current 420 linear feet, which may cause further impediment to fish passage through the reach.

***Creek Impact Mitigation***

To compensate for the project impacts to San Pablo Creek and riparian habitat, the City will enhance riparian habitat along Rheem Creek and support fish passage improvements in Wildcat Creek. The Rheem Creek work will restore native vegetation along an 1,850 linear foot reach on Contra Costa College property where an educational component will be incorporated into the work.

In Wildcat Creek, the City will support fish passage improvements within an existing concrete flood control channel in that creek. Wildcat Creek flows from Wildcat Canyon in the East Bay Hills to the San Francisco Bay. Historically, the lower reaches of the creek overflowed the banks and inundated adjacent land. In the early 1960s, Contra Costa County (County) and the U.S. Army Corps of Engineers (Corps) constructed flood protection measures as part of an effort to improve the area's economic vitality. This flood control project, which was completed in 1995, extended from the creek mouth to Rumrill Blvd. and increased the channel conveyance to accommodate the anticipated 100-year flow event through installation of a concrete lined channel and earthen sediment basin. The channel design included a fishway set within and aligned along the center of the concrete channel. In its current state, the fishway frequently clogs with debris, which renders it impassable for potential upmigrating fish. Even without the clogging, the fishway design does not meet the current resource agency standards for fish passage and is a barrier to movement of anadromous fish upstream to access high-quality fish habitat and potential spawning areas.

Work to modify the fishway design has been underway since the late 1990s. The new design would provide fish passage through the sediment basin and concrete channel. At present, 65 percent plans have been developed along with specifications and cost estimates. Because the concrete structure is a Corps flood control channel managed by the County, the County will be the lead in implementing the project. Project implementation will be supported through various funding sources, with the construction of one portion largely provided by the City. While the retrofit of the fishway is only one of many efforts that are needed to support restoration and enhancement of Wildcat Creek, it is one of the most important now. Under ideal conditions the concrete channel would be removed and the creek restored to natural conditions, but that is infeasible given the potential flooding concerns for the neighboring community.

Both mitigation efforts for this project are located within communities that face socioeconomic challenges and we anticipate that they will integrate well with both past and future Wildcat and Rheem Creek enhancement measures.

**August 2021 Enforcement Actions (Brian Thompson and Jessica Watkins)**

The following table shows the settled enforcement actions since July's report. Please refer to the [Pending Enforcement Liabilities and Penalties](#) webpage for more information.

**Settled Action**

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

<b>Discharger</b>	<b>Violation(s)</b>	<b>Imposed Penalty</b>	<b>Supplemental Environmental Project</b>
Castro Valley Marketplace, LLC	Discharge limit violations.	\$18,000	None.

**401 Water Quality Certification Applications Received (Abigail Smith)**

The table below lists those applications received for Clean Water Act section 401 water quality certification from June 15 through July 8, 2021. A check mark in the right-hand column indicates a project with work that may be in BCDC jurisdiction.

<b>Project Name</b>	<b>City/Location</b>	<b>County</b>	<b>May have BCDC Jurisdiction</b>
UC Berkeley Channel Restoration at the North Fork of Strawberry Creek at the West Circle Reach	Berkeley	Alameda	
Schnitzer Steel Oakland Terminal Maintenance Dredging	Oakland	Alameda	✓
Bear Creek Road Bridge Seismic Retrofit	Orinda	Contra Costa	
Miner Road Bridge Seismic Retrofit	Orinda	Contra Costa	
Point San Pablo Public Access and Marina Improvement	Richmond	Contra Costa	✓
Loch Lomond Marina Kayak Ramp and Floating Dock	San Rafael	Marin	✓
Maintenance Dredging at the Loch Lomond Marina	San Rafael	Marin	✓
Partial Replacement of the USACE Base Yard Debris Dock	Sausalito	Marin	✓
Napa Valley Marina Dredging	Napa	Napa	✓
Mills Lane Storm Drain Improvement	St. Helena	Napa	
San Juan Pump Station Bank Stabilization	Belmont	San Mateo	
Alpine Road Trail Improvements		San Mateo	
Perimeter Buoy As Needed Maintenance	San Francisco	San Mateo	✓
Singleton Road Interim Bridge Project at Coyote Creek	San Jose	Santa Clara	
Harney Road Bridge Repair	Eldridge	Sonoma	
Culvert Construction at 530 Peru Avenue	Sonoma	Sonoma	