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Title:	PRESENTATION AND UPDATE ON THE DISTRICT'S CLEAN WATER INITIATIVES: MARINE TERMINAL STORMWATER PLANNING AND IMPROVEMENTS, INCLUDING TENTH AVENUE MARINE TERMINAL, NATIONAL CITY MARINE TERMINAL AND CRUISE SHIP TERMINAL				
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DATE: May 14, 2019

SUBJECT:

PRESENTATION AND UPDATE ON THE DISTRICT'S CLEAN WATER INITIATIVES: MARINE TERMINAL STORMWATER PLANNING AND IMPROVEMENTS, INCLUDING TENTH AVENUE MARINE TERMINAL, NATIONAL CITY MARINE TERMINAL AND CRUISE SHIP TERMINAL

EXECUTIVE SUMMARY:

The District's stormwater program is a key part of the District's environmental stewardship efforts and clean water initiatives and helps ensure the District's compliance with the Regional Water Quality Control Board's Municipal Stormwater Permit.[1]

The District marine terminals including the Tenth Avenue Marine Terminal (TAMT), National City Marine Terminal (NCMT), and the Cruise Ship Terminal are three priority areas where the District is focusing stormwater resources. Maritime activities at the terminals are modernizing and increasing in capacity and workforce. To minimize environmental impacts and better align with the activities at each facility, the stormwater measures at the terminals are adapting accordingly. Significant stormwater program investment and improvements have been completed recently as a result of one-time resource allocations that were included in the FY19 budget. Additional activities are currently underway and will further the District's water quality protection efforts. District staff is looking to update the Board on the suite of improvements that occurred during FY19 and upcoming programmatic steps planned for FY20.

RECOMMENDATION:

Receive staff's presentation and informational update on the marine terminal stormwater planning

and improvements.

FISCAL IMPACT:

This agenda item has no fiscal impact for FY 2019.-Funds required for future fiscal years will be budgeted for in the appropriate year subject to board approval upon adoption of each fiscal year's budget. The District is proactively evaluating potential grant opportunities that may help leverage future costs.

COMPASS STRATEGIC GOALS:

The District's update to the terminal stormwater program ensures that the District stays in compliance with stormwater regulations, protects Bay water quality and aligns with maritime activities and modernization at the terminals. This agenda item supports the following Strategic Goal(s).

- A thriving and modern maritime seaport.
- A vibrant waterfront destination where residents and visitors converge.
- A Port with a healthy and sustainable bay and its environment.
- A Port that is a safe place to visit, work and play.
- A Port with an innovative and motivated workforce.
- A financially sustainable Port that drives job creation and regional economic vitality.

DISCUSSION:

The District's stormwater program has been protecting the water quality of San Diego Bay for decades. The program reaches municipal, commercial, and industrial areas around District tidelands and its pollution prevention actions are also woven into construction and development projects. The program's goal is to maintain the District's compliance with the Municipal Stormwater Permit, to improve the quality of runoff from District tidelands, and to reduce pollution coming from upstream to the extent possible by attempting to work collaboratively with the surrounding jurisdictions.

The program approach is to utilize a mix of non-structural and structural pollutant controls along with various administrative actions to achieve the District's goal. This includes actively investigating illegal discharges, conducting inspections, education and outreach activities, enforcement, and coordinating with other cities in the watershed to reduce pollution upstream. It also includes active maintenance of the District operated areas, such as parks, parking lots, the storm drain system, structural pollutant controls and portions of the bay's shoreline.

Structural pollutant controls are also installed in various locations around tidelands to remove potential pollutants from runoff prior to discharging to the Bay. These structural pollutant controls have been installed through District engineering projects and special studies and through redevelopment of leased areas. Additionally, the shipyards and boatyards around San Diego Bay have stormwater controls in place which diverts stormwater from their operation areas to the sanitary sewer which allows for pollutant removal at the municipal waste water treatment facility and avoids discharge to the bay.

Stormwater Program at the Marine Terminals

As the stormwater program evolves and becomes more efficient, the District is placing greater focus on priority areas to direct resources in a manner that best addresses the San Diego Bay watershed priority pollutants. The District marine terminals including the TAMT, NCMT, and Cruise Ship Terminal are three of those priority areas. The marine terminals provide a diverse mix of maritime services from cargo and trade to cruise operations and associated support activities. Additionally, infrastructure improvements are underway or being planned over several years to modernize TAMT to increase terminal capacity and create jobs. The District's terminal stormwater program so that the program will better align with the work at the facilities and synchronize with the terminal modernization. The District is also responding to and addressing previous water monitoring data that indicates the need for additional BMPs.

Updates to the District's stormwater program for the marine terminals were largely completed this year and the approach was designed to be proactive, well communicated, and adaptive. The investment and improvements completed thus far highlight the District's commitment to Bay water quality. The updates are a mix of administrative improvements, education and outreach, monitoring and assessment approaches and structural pollutant controls.

A significant amount of work went into the pre-planning for the programmatic revisions with an emphasis on integrating structural pollutant control updates where immediately feasible. An interdepartmental team was assembled to complete the program updates, and budget capacity for these one-time initiatives was increased in FY19 to accommodate the workload. The District also assembled a technical team of subject matter experts in stormwater monitoring and assessment, structural BMP design, and stakeholder outreach strategies. Below is a summary of the completed and planned changes to the marine terminal stormwater program.

Completed: Facility BMP and Rain Event Plans

The terminal tenants have prepared Facility BMP and Rain Event Plans. Facility BMP Plans identify the actions and activities that will be implemented to eliminate or reduce pollutants generated during facility operations. The Plans also provide an implementation and tenant inspection schedule to ensure the BMPs are in place. Rain Event Plans are specifically focused action plans set into place 72 hours before a rain event to ensure that potential pollutants that could be discharged during stormwater is minimized. This new program element incorporates rain awareness and proactive site preparation into the facility corrective actions process. Through the inspection and audit process, the District will verify and ensure the plans are implemented.

The District took a very active role assisting tenants in preparing the plans. In addition to developing and providing a template for the plans, the District also worked with the tenants to generate the required maps for the plans. The District was actively engaged with the tenants and held two outreach workshops, several one-on-one meetings, and four drop-in times to help tenants prepare the plans. While the tenants are accountable for the plans and their implementation, the District worked and will continue to work collaboratively with the tenants on the plans and future implementation issues.

Completed: Staff an Environmental Position at the Terminals

A new staff position has been filled to provide additional stormwater programmatic support at the terminals. This senior-level position, which was approved in the FY19 budget, is tasked with onsite daily program implementation and oversight of the stormwater inspection and water monitoring at the

terminals. They will also serve as the primary point of contact on stormwater matters for marine operations and the terminal tenants. This designated staff will be key to improving and maintaining effective communication with the tenants on the stormwater program.

Completed: Clean stormdrain lines and Install Storm Drain Inlet filters at the Terminals

In August 2018, immediately following approval of the stormwater funding in the FY19 budget, District staff began planning major inlet filter upgrades to ensure all stormdrain inlets at the terminals were equipped with some type of structural treatment control. Consisting of a screen and specialized flow-through filter media that targeted metals, solids, and trash; these filters provide an immediate pollution reduction effect without construction and at a low cost. The inlet filters were also designed to have a sample tray beneath the media filter to allow for more representative water sampling.

Prior to the installation, the District cleaned the stormdrain lines where inlet filters were to be installed. By December 13, 2018, the inlet filters were successfully installed as planned in all 71 locations across TAMT, NCMT and B Street Pier. A one-year maintenance agreement is in place with Bioclean and after that time General Services will take over the inspection and routine maintenance.

Completed: Stormwater Monitoring Program and Program Assessment Plan

The District recently completed a marine terminal water quality monitoring program to assess the BMP effectiveness at the terminals and the overall program as well. This monitoring program replaced the prior water quality sampling program and aligns the efforts with the Municipal Stormwater Permit. The new monitoring program is designed to efficiently and effectively address the District's monitoring objectives. The program design incorporates "representative areas" that take in to account "like" activities and similar structural treatment types within a drainage area. Monitoring sites that benefit more than one monitoring objective are also part of the design.

Leveraging historical water quality data, several monitoring sites were selected at each of the terminals. Based on statistical analysis of historic data trends, the District is targeting three storm events to monitor for metals, total suspended solids, nitrates, oil and grease, and other physical parameters such as dissolved oxygen, conductivity and pH. District staff is monitoring weather conditions to sample at the next qualifying storm event. Note, there has not been a qualifying storm event, since the Stormwater Monitoring Program was completed.

The District also developed a Marine Terminals Stormwater Program Assessment Plan (Plan) for measuring progress towards the compliance objectives of the program. The Plan identifies assessment goals within three assessment categories: physical parameters, behavioral parameters, and administrative parameters. Physical goals include evaluation of non-structural and structural BMP management strategies for reducing pollutant discharges. Behavioral assessment goals include evaluation of pollution prevention and source control actions, education efforts, and findings from inspection programs. Administrative assessment goals consider the effectiveness of the program's overall approach toward water quality improvement strategies and programmatic protocols to reduce pollutants in discharges. The Plan goals are supported by metrics and specific outcome targets to measure progress towards achieving compliance objectives.

Completed: Larger Scale Structural Pollutant Controls at NCMT and TAMT

The District's effort to improve the quality of runoff from the terminals has been in progress and has been incorporated where opportunities arise. Of note, two larger scale marine terminal projects, further detailed below, recently expanded their scope to incorporate stormwater controls that treat drainage areas beyond regulatory requirements. This enabled a greater portion of the terminal drainage area to be treated and was incorporated into the existing projects to take advantage of cost efficiencies in construction.

NCMT: Berth 24-10 Repairs: In 2016, a District Major Maintenance project to make repairs to Berth 24-10 were underway. Due to the size of the project, the project was required to install permanent structural pollutant controls designed to treat the runoff from an 85th percentile storm event (approximately 0.5 inches, design capture volume (DCV) pursuant to the Municipal Stormwater Permit) for a 1-acre site. During construction, the District determined that it would be cost effective to expand the treatment area another 8 acres (approximately) which would increase the overall treated area of the terminal also help minimize future construction related disruption of terminal operations. Two bio-filtration units were installed, and construction was completed by September 2017.

TAMT Modernization Project - TIGER: Implementation of the TAMT Redevelopment Plan is currently underway, which includes a variety of infrastructure investments that will be undertaken over several years to accommodate an increase of the terminal's capabilities and capacity and provide greater flexibility to meet current and future market conditions.

Progress in the District's overall redevelopment plans received a boost in 2015 when the District competed for and was awarded a $10 million Transportation Investment Generating Economic Recovery (TIGER) grant from the U.S. Department of Transportation. The District has matched the grant with a $14 million contribution. The TIGER grant is funding the District's demolition of two transit shed structures, maritime staff office relocation, installation of permanent stormwater BMPs, site lighting, and installation of heavy load pavement systems along the southern berths; referred as the "TIGER project" The TIGER project is phased and improvements require that permanent structural pollutant controls with a DCV to treat 9.3 acres are installed.

Early in the planning, the District saw the TIGER project as an opportunity to integrate additional stormwater capture and treatment at TAMT and treat more drainage area than the 9.3 acres obligated by the Municipal Stormwater Permit. The District's strategic funding approach also allowed the District to leverage the grant opportunity for innovative stormwater treatment as part of the project. The Project team held workshops to understand how to overcome high ground water, marine terminal heavy-load requirements, and tidal limitations for below ground structural controls and how to capture a larger drainage area and treat stormwater before it is discharged into San Diego Bay.

The new system is a one of a kind design due its incorporation of an adjustable weir that enables the District to adjust the system for sea level rise. It consists of 11 modular wetland units that perform treatment in parallel and treats 41.4 acres of the 96-acre TAMT. The construction of the modular wetlands system was included in Phase 1 of the TIGER project which was just recently completed in April of this year.

In progress: Long-term Structural BMP Plan and Individual Drainage Area Analysis

A long-term structural BMP Plan is currently in development which will provide the District a stepped process for upgrading structural pollutant controls at the terminals. The potential structural pollutant controls that are likely to be included vary in complexity and extent of construction requirements and

pollutant removal efficiencies. The need to construct or install the pollutant controls will be informed by the water quality monitoring results and the program assessments.

The District is also proactively evaluating potential grant opportunities that may help leverage costs for future structural control installation. One step in this process is to have design plans ready for specific drainage areas. Once these designs are in-hand they will allow the District greater access to grant funding and help future planning for redevelopment within the drainage areas. More in-depth and detailed designs have begun for two sites, a 19-acre drainage area at TAMT and 5 acres at the Cruise Ship Terminal.

In progress: Pollution Prevention Outreach Program

Effective communication is a key part of the new marine terminal stormwater program and is also included as part of the program assessment process. A pollution prevention outreach program is currently under development and will be completed by September 2019. The outreach program will outline the various actions the District will take to inform, engage, and communicate with the tenants on the stormwater program.

Although the program document has not been fully completed, several elements of outreach and engagement have already been initiated. As part of the District's efforts to communicate the planned programmatic changes to the terminal tenants, the District actively engaged the tenants and asked for their feedback through various notifications, meetings, presentations, and outreach materials. This engagement process was also incorporated into the development of the BMP Plans and Rain Event Plans.

Next steps

The stormwater updates and developments at the terminals demonstrate the District's commitment to clean water and protecting San Diego Bay. The work completed thus far reflects that commitment, but the work is not over. In the coming months, District staff will be finalizing the long-term structural BMP plan and pollution prevention outreach program. In the meantime, all other elements of the terminal stormwater program are active. Staff will continue to conduct inspections to ensure BMPs are implemented and well communicated. Wet weather sampling will be completed as weather permits and the collection of program assessment data will begin. New staff will be onboarded, introduced to the tenants, and become familiarized with maritime operations and activities related to environmental compliance. Staff will also continue to update the Board on the marine terminal stormwater program's progress on a quarterly basis.

General Counsel's Comments:

The Office of the General Counsel reviewed this agenda as to form and legality.

Environmental Review:

This informational presentation and update to the Board does not constitute an "approval" or a "project" under the definitions set forth in California Environmental Quality Act (CEQA) Guidelines Sections 15352 and 15378 because no direct or indirect changes to the physical environment would occur. CEQA requires that the District adequately assess the environmental impacts of projects and

reasonably foreseeable activities that may result from projects prior to the approval of the same. Any project developed as a result of Board's direction that requires the District or the Board's approval, including without limitation District proposed legislation or a request for funding will be analyzed in accordance with CEQA prior to such approval. CEQA review may result in the District, in its sole and absolute discretion, requiring implementation of mitigation measures, adopting an alternative, including without limitation, a "no project alternative" or adopting a Statement of Overrising Consideration, if required. The current Board item in no way limits the exercise of this discretion. Therefore, no further CEQA review is required.

In addition, this Board item complies with Section 87 of the Port Act, which allows for the establishment, improvement, and conduct of a harbor, and for the construction, reconstruction, repair, maintenance, and operations of wharves, docks, piers, slips, quays, and all other works, buildings, facilities, utilities, structures, and appliances incidental, necessary, or convenient, for the promotion and accommodation of commerce and navigation. The Port Act was enacted by the California Legislature and is consistent with the Public Trust Doctrine. Consequently, the proposed project is consistent with the Public Trust Doctrine.

Finally, this Board item does not allow for "development," as defined in Section 30106 of the California Coastal Act, or "new development," pursuant to Section 1.a. of the District's Coastal Development Permit (CDP) Regulations because it will not result in, without limitation, a physical change, change in use or increase the intensity of uses. Therefore, issuance of a Coastal Development Permit or exclusion is not required. However, the District's projects require processing under the District's CDP Regulations. If a project is formulated as a result of Board's direction, the Board will consider approval of the project and any improvements associated after the appropriate documentation under District's CDP Regulations has been completed and authorized by the Board, if necessary. The Board's direction in no way limits the exercise of the District's discretion under the District's CDP Regulations.

Equal Opportunity Program:

Not applicable.

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Order No R9-2013-0001 as amended by Order No R9-2015-0001 and Order No. R9-2015-0100 https://www.waterboards.ca.gov/sandiego/water_issues/programs/stormwater/sd_stormwater.html