



DATE: January 10, 2022

TO: Council Sustainability Committee

FROM: Director of Public Works

SUBJECT Regulation of Direct Discharge of Stormwater from Private Properties – Information and Discussion

RECOMMENDATION

That the Council Sustainability Committee (CSC) reviews and comments on this report.

SUMMARY

This report provides a summary of the Municipal Regional Permit (MRP) mandate to regulate properties that discharge stormwater directly to the City’s storm drain system and the recommended approach to address this mandate, including proposed amendments to the Stormwater Management and Urban Runoff Control ordinance (Chapter 11, Article 5 of the Municipal Code). The current MRP is attached to the City’s ordinance and is scheduled to be amended by the San Francisco Regional Water Quality Control in July 2022. Staff plans to begin working with owners of direct discharge properties in early 2022 and then will bring amendments to the City’s ordinance for CSC and Council consideration in the fall of 2022 after the new MRP is adopted.

BACKGROUND

The National Pollution Discharge Elimination System (NPDES) program was established in 1972 by the Federal Clean Water Act (CWA). The NPDES program was amended in 1986 to regulate stormwater runoff and established a permitting structure for municipal discharge to the waters of the State. From 1990 to 2009, each municipality in the Bay Area was regulated under countywide stormwater permits with individual requirements specific to each county. On October 14, 2009, the first regional stormwater permit, the MRP, was adopted by the San Francisco Bay Regional Water Quality Control Board (Water Board). The MRP regulated municipalities within the counties of Alameda, Contra Costa, Santa Clara, San Mateo as well as the cities of Fairfield, Suisun, and Vallejo and the Vallejo Sanitation and Flood Control District. Municipalities and local agencies included in the MRP are referred to as ‘Permittees’.

The MRP was revised and adopted by the Water Board as MRP 2.0 on November 19, 2015. MRP 2.0 will expire on June 30, 2021. The San Francisco Regional Water Quality Control staff have released the draft MRP 3.0 and the adoption date for the new permit is tentatively scheduled for July 1, 2022.

The current MRP 2.0 includes Provision C.10 - Trash Load Reduction, which mandates all Permittees to reduce trash loads from municipal stormwater sewer systems by completing several requirements. C.10 was added to the MRP in 2009 to address trash found in waterways and the ocean. Trash pollution contaminates waterways by leaching chemicals into the water from plastics, kills wildlife from entanglement and ingestion of trash, as well as deoxygenating the water, among other concerns. C.10 requirements set trash reduction goals to remove trash from waterways from the storm drain system. One such requirement, described in Provision C.10.a.ii.b, and states as follows:

“Permittees shall ensure that lands that they do not own or operate, but that are plumbed directly to their storm drain systems in Very High, High, and Moderate trash generation areas are equipped with full trash capture systems or are managed with trash discharge control actions equivalent to or better than full trash capture systems. The efficacy of the latter shall be assessed with visual assessments in accordance with C.10.b.ii. If there is a full trash capture device downstream of these lands, no other trash control is required. Permittees shall map the location, or otherwise record the location, of all such lands greater than 10,000 square feet that are plumbed directly to their storm drain systems by July 1, 2018, including the trash control status of these areas. This information shall be retained by the Permittees for inspection upon request.”

Private lands that are plumbed directly to the City’s storm drain system and do not drain to any storm drain inlet along the street are commonly called “private land drainage areas” or PLDAs.

The City’s current stormwater ordinance already requires all landowners to maintain clean properties, including picking up trash. The City’s current stormwater ordinance states as follows:

Sec 11-5.22(a) Littering Prohibited. No person shall throw, deposit, leave, maintain, keep, or permit to be thrown, deposited, placed, left, or maintained, any ‘refuse,’ ‘rubbish,’ ‘garbage,’ or other discarded or abandoned objects, articles, and accumulations, in or upon any street, alley, sidewalk, storm drain, inlet, catch basin conduit, or other drainage structures, business place, or upon any public or private lot of land in the City so that the same might be or become a pollutant.

Sec 11-5.22(b) Standard of Maintenance for Parking Lots and Similar Structures. Persons owning or operating a parking lot, gasoline station, or a similar structure or uses shall clean the property as frequently and thoroughly as practicable in a manner that does not result in discharge of pollutants to the City storm sewer system.

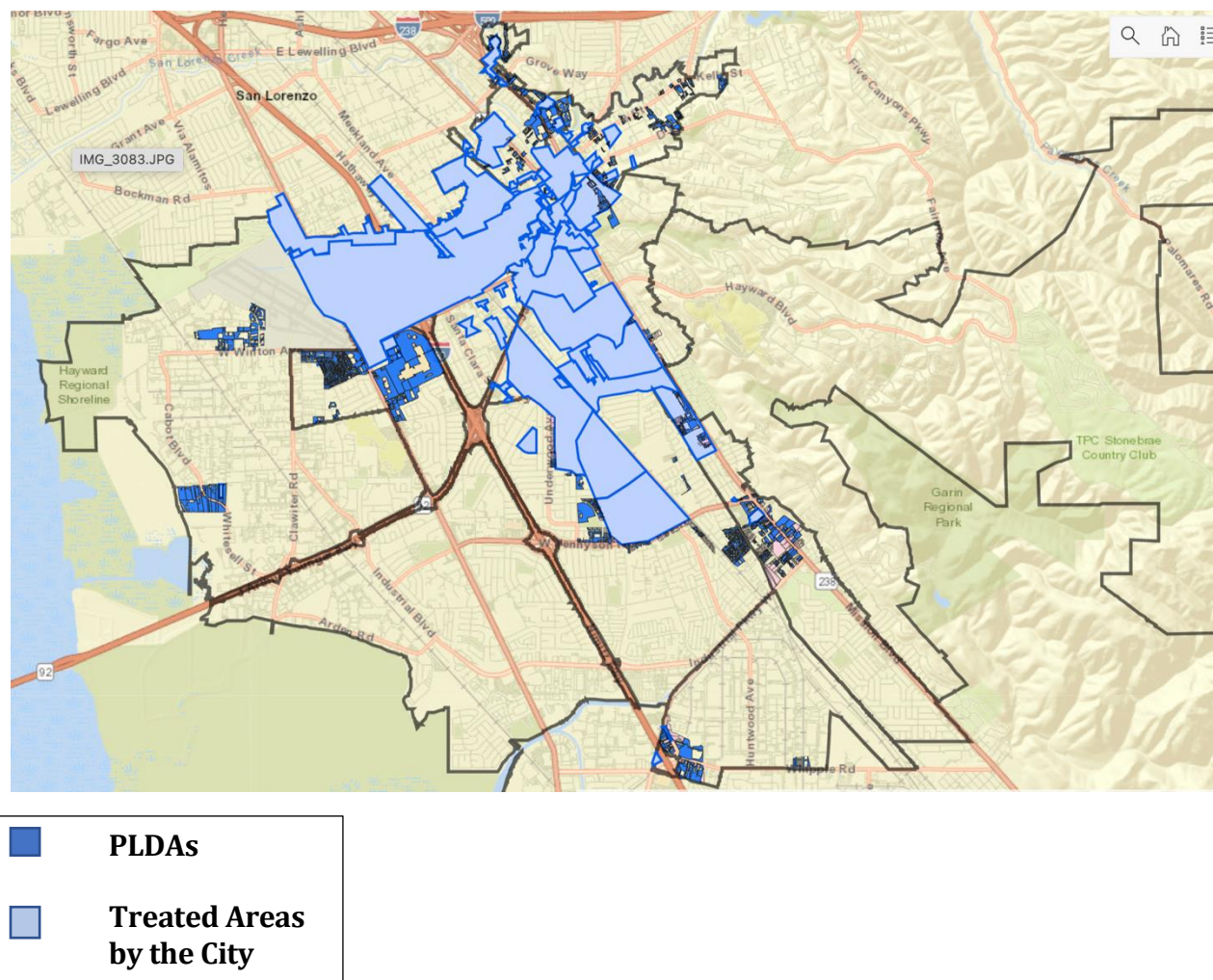
In addition to the mandate specified in the above municipal stormwater ordinance, the PLDAs will be required to install full trash capture if regular litter collection does not eliminate trash pollution from impacting City's storm drain system.

DISCUSSION

The current MRP requires that the City reduce all trash from stormwater systems to waters of the state by 100% by the year 2022. MRP 3.0 will likely extend this deadline to 2025. To meet this requirement staff has been installing several large trash capture devices in main lines and hundreds of small trash capture devices in storm drain inlets. PLDAs that are treated further downstream by trash capture devices owned and maintained by the City will not be required to install trash capture devices.

Figure 1 below illustrates in light blue the areas that are already or are planned to be treated by City-owned trash capture devices. The areas in dark blue are PLDA properties for which the City is unable to install trash capture devices downstream due to a variety of factors including hydraulics and limitations of existing infrastructure.

Figure 1: PLDA Areas and Areas Treated by the City's Trash Capture Facilities



Monitoring and Regulation of PLDAs – In spring of 2021, staff retained Geosyntec Consultants to assist with regulation of direct discharge properties by mapping all potential PLDAs, verifying their trash generation status (the level of trash observed on the property), and inputting all data into a geographic information system (GIS). A total of 874 parcels were identified as possible PLDA properties. Geosyntec assessed most of the parcels by conducting field visits to determine trash generation status. Geosyntec has completed their data entry into GIS maps and provided staff with a final report. Approximately 234 properties have been identified by Geosyntec as PLDAs requiring management by the City for trash reduction compliance. Approximately 150 properties remain to be verified and assessed by staff. Staff will verify and assess the remaining properties in the next few months. In 2022, a second trash assessment or follow up assessment is required to confirm the trash generation status for each PLDA property. Staff plans to complete these assessments for all PLDA properties in the spring of 2022. To ensure private properties are assessed in an objective and transparent manner, staff will use the Water Board’s approved trash assessment protocol¹. Once the final trash generation assessments are complete, staff will have a final list of properties to add to stormwater program’s inspection list for routine inspections for trash compliance.

Table 1 below provides a tentative schedule for PLDA determination, completing the required trash assessments, creating a final inspection list, and implementing this new trash reduction program.

Table 1: Tentative Schedule for PLDA Regulation

Activity	Timeframe
Initial Assessments/Field Visits	Fall /Winter 2021
2 nd Assessment/Field Visit, Finalize List of PLDAs to be regulated	Spring 2022
Notify Property Owners of PLDA Status	Early Summer 2022
Present Draft Ordinance Amendments to CSC	September 2022
Council Consideration of Ordinance Amendments	October 2022
First Round of Routine Inspections	November 2022

Complete compliance with MRP Provision C.10.a.ii.b is required by June 2025 and will include routine inspections for trash compliance, engaging with the owner of each mapped PLDA to address trash on their property. Staff estimates this will require a three-year phased timeframe to incorporate the additional properties for routine inspection for trash compliance. During the initial inspection, the trash reduction requirements will be explained to each property owner, and they will be notified that they will be inspected routinely for trash compliance. If trash is found on a PLDA property, the owner will be given 10 days to provide a trash management plan detailing how they are going to remove trash and prevent it from impacting stormwater.

The plan could include either picking up trash at a certain frequency to eliminate trash from entering storm drains or installing full trash capture devices to remove trash from

¹ http://eoainc.com/wp-content/uploads/2018/03/OVTA_Protocol_C-Area_Based_Survey_v.1.0-March_2018_v3_Final.pdf

stormwater. After thirty days, if trash compliance standards are not being met, staff will follow up with the property owner. If the owner decides to install a trash capture device, then a reasonable amount of time will be allowed for construction. If additional enforcement is necessary, the stormwater inspectors may issue a notice of violation letter. If the notice is not effective, the inspector may issue a citation with a fine for noncompliance. As full trash capture is a new requirement for PLDA properties, staff anticipate some properties may need time to install full trash capture devices. Staff will also need time incorporate these new requirements into routine inspections and follow up inspections to judge staffing resources.

Full trash capture devices vary in shape, size, and cost. The approved full trash capture list from the Water Board will be provided to all PLDA owners and assistance will be given to guide owners with proper installation requirements. Figures 2 and 3 illustrate two examples of full trash capture devices for storm drain inlets.

Figure 2: Triton Drop Inlet Filter

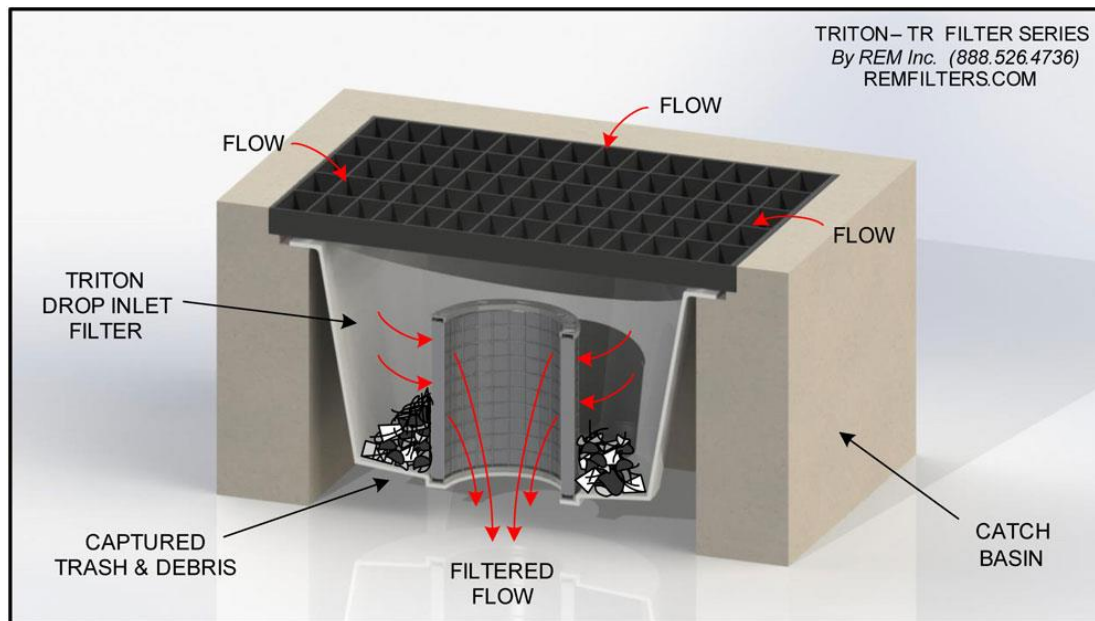
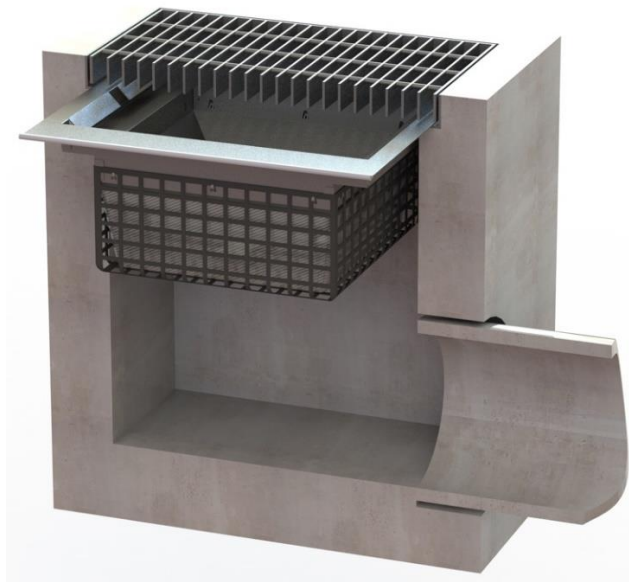


Figure 3: BioClean Grate Inlet Filter



To assist with enforcement, staff recommend adding language in the City’s Municipal Code to support compliance with MRP Provision C.10.a.ii.b. Specifically, the additional language would include defining full trash capture if trash is not being managed by picking up trash. The following is proposed language to define a “full trash capture system”:

Full Trash Capture System: any device or series of devices that traps all particles retained by a 5mm mesh screen and has the design treatment capacity of not less than the peak flow rate resulting from a one-year, one-hour storm in the tributary drainage catchment area.

The following is proposed language to require a “full trash capture system” at staff’s discretion if trash is impacting the City’s storm drain system:

Persons owning, operating, or maintaining such Premises shall install and maintain a Full Trash Capture System within four months of written notification by the Director or the Authorized Enforcement Official to prevent the discharge of trash or other pollutants into the City’s Municipal Storm Sewer System from private parking lots, streets, roads, and drainage facilities. The Director or the Authorized Enforcement Official may require such Persons enter into a long-term agreement, in a form approved by the City, to ensure the operation and maintenance of the Full Trash Capture System. Failure or refusal to timely comply with these requirements is prohibited and shall constitute a violation of the Chapter.

If recommended by the CSC, the additional language will be inserted into the stormwater Municipal Code when it is presented to Council in the fall of 2022.

ECONOMIC IMPACT

Compliance with MRP Provision C.10.a.ii.b will result in costs to some Hayward businesses as compliance with trash reduction will result in increased monitoring, trash pickup, and possibly installation of full trash capture facilities as determined through stormwater inspection and follow up for compliance. The cost of installing a full trash capture device will depend on the shape and size of the storm drain inlets, number of inlets, and size of drainage area. The cost of a single device can range from a few hundred dollars to thousands.

FISCAL IMPACT

The City's compliance with the MRP is managed by Water Pollution Source Control (WPSC) staff within the Department of Public Works & Utilities. Implementing MRP Provision C.10.a.ii.b will increase the workload for WPSC staff and will require additional implementation to ensure all PLDA properties are compliant with trash reduction requirements. Funding for MRP-related activities is currently provided from the City's Stormwater Enterprise Fund, which is funded by property tax revenue. However, expenditures have been and are expected to increase every year. Staff is challenged with finding innovative tools and other resources to comply with the MRP but will continue to participate in the Alameda Countywide Clean Water Program's committees and receive regional support from these efforts.

STRATEGIC INITIATIVES

This agenda item relates to the Strategic Priority of *Improve Infrastructure*. Specifically, this agenda item relates to the implementation of the following projects:

- Project 17: Meet regulatory requirements for zero trash in stormwater by installing trash capture devices
- Project 17a: Install trash capture devices
- Project 17b: Perform related trash reduction activities

SUSTAINABILITY FEATURES

Preventing trash pollution from entering the storm drain system will benefit Hayward's aquatic ecosystems and the health of the San Francisco Bay, and will help to create a clean and green community for Hayward residents and businesses.

PUBLIC CONTACT

No public contact has been made regarding this agenda item, however, staff's tentative schedule for implementing this new program regarding PLDAs will include outreach letters and initial inspections to educate and guide PLDA owners on the process towards compliance.

NEXT STEPS

Staff will be working in the next few months to complete the PLDA property list to set inspection goals for trash assessments, inspections and follow up. WPSC staff will plan a three-year phase in of these additional inspections with the goal for complete compliance with MRP Provision C.10.a.ii.b by June 2025 to reach 100% trash reduction for all of Hayward as mandated in the MRP.

Once the final MRP 3.0 is adopted, staff will review it for additional trash compliance requirements. Staff intends to present a report to the CSC with a comprehensive list of recommended ordinance changes and updates to support compliance with all trash reduction mandates and other requirements of the MRP.

Final adoption of the MRP 3.0 is scheduled for July 1, 2022. Staff plans to provide an update in September 2022 to the CSC. Upon a recommendation from the CSC, staff would present the recommended ordinance amendments to Council in October 2022. Full implementation of education, inspections and enforcement would commence in November 2022.

Prepared by: Elisa Wilfong, Water Pollution Control Administrator
Erik Pearson, Environmental Services Manager

Recommended by: Alex Ameri, Director of Public Works

Approved by:



Kelly McAdoo, City Manager