

# AGENDA REPORT

TO:

Sabrina B. Landreth

City Administrator

FROM: Christine Daniel

Interim Director, OPW

SUBJECT:

Informational Report on Stormwater

Trash Load Reduction Compliance

**DATE:** March 30, 2017

City Administrator Approval

Date:

## RECOMMENDATION

Staff Recommends That The City Council Receive An Informational Report On The Status Of The City's Compliance With The Municipal Regional Stormwater Permit's July 1, 2017 Deadline For A 70% Reduction In Stormwater Drain Trash And Recommendations For **Achieving That Requirement.** 

### **EXECUTIVE SUMMARY**

This informational report on Oakland's compliance with clean water regulations regarding trash load reductions in the City of Oakland storm drain system was prepared by staff as directed by Rules Committee in response to a request from Councilmember Kalb of the Public Works Committee. The City of Oakland is subject to the Regional Water Quality Control Board's (Water Board) National Pollutant Discharge Elimination System (NPDES) Municipal Regional Permit (MRP). Under the permit, the City must reduce trash and litter entering into the City's municipal storm drain system by 70% by July 1, 2017 from the 2009 baseline level. It is unlikely the City will meet the 2017 trash load reduction requirement. This report discusses current trash reduction programs, regulatory compliance hurdles and next steps.

General information concerning the City of Oakland's trash load reduction program, including purpose, permit requirements, and compliance status, is available in the City of Oakland's annual report to the Water Board:

http://www.waterboards.ca.gov/sanfranciscobay/water issues/programs/stormwater/MRP/2016 AR/Alameda/Oakland 2015-16 MRP AR.pdf

## **BACKGROUND / LEGISLATIVE HISTORY**

The City of Oakland is subject to the Water Board NPDES MRP. Under the MRP, the City must comply with regulations to reduce discharges of pollutants into the City's municipal storm drain system. This informational report focuses specifically on Provision C.10 "Trash Load Reduction" of the MRP, which mandates reduction of trash and litter in the city storm drain systems.

> Item: **Public Works Committee** April 25, 2017

Sabrina B. Landreth, City Administrator

Subject: Informational Report on Stormwater Trash Load Reduction Compliance

Date: March 30, 2017

## The Trash Load Reduction requirements are:

- 40% by 2014
- 60% by 2016 (performance guideline)
- 70% by 2017
- 80% by 2019
- 100% by 2022

The trash load reductions are measured from a 2009 baseline generation rate (baseline) and are compared annually to current trash observations and reduction measures. Current trash reductions are determined by the extent of full capture treatment system, on-land visual assessments, reductions via source controls, and creek and shoreline cleanups.

Trash reduction in our waterways and storm drains is a citywide effort and includes numerous City departments. The following table shows the City's trash reduction programs and the City departments that are a part of those programs:

| 2 1 2 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1                 | City Department                  |  |              |                                  |  |                        |                          |                     |                         |               |                    |                    |                |                               |
|---|----------------------------------|--|--------------|----------------------------------|--|------------------------|--------------------------|---------------------|-------------------------|---------------|--------------------|--------------------|----------------|-------------------------------|
|   |                                  |  | Public Works |                                  |  |                        | Planning and<br>Building |                     |                         | Ω             | City.              | Īro                | Alam           |                               |
| Trash Reduction Activity                                | Police                           | Fire                                     | Watershed    | Project<br>Delivery              | Environ.<br>Services   | KOCB TOTAL             | Maintenance              | Code<br>Enforcement | Planning                | Building      | City Attorney      | City Administrator | Transportation | Alameda County                |
| Full Trash Capture Systems                              |                                  |  | X            | X                                |  |                        |                          |                     | X.                      | X             |                    |                    | X              | X                             |
| Inlet Trash Screen Systems                              | - Take Market Programme Specific | #-0-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1- | *            | Commission and the second second |  |                        |                          |                     |                         |               |                    |                    | *              | X                             |
| Full Trash Capture Maintenance                          |                                  |  | 1            |                                  | and the second s | 220 to 6500 . Xuokodda | ×                        |                     | CATALLACE POPULA        |               | . French and Erick |                    | ×              | ×                             |
| Excess Litter Fee Program                               |                                  | X  | X            |                                  |  |                        |                          | X                   |                         |               | ×                  | ×                  |                |                               |
| Business improvement District                           |                                  |  | ×            |                                  |  | A                      |                          | X.                  |                         |               | ×                  | ×                  |                | COLUMNIA CONTRACTOR PORTOR CO |
| Single-use Plastic Ban Ordinance                        | . i se a carlos de describito de |  | y - 3        |                                  |  |                        |                          |                     |                         |               |                    |                    |                | X                             |
| Expanded Polystyrene Faod<br>Service Ware Ban Ordinance |                                  | ×  | ×            |                                  | ×  |                        |                          |                     |                         |               |                    |                    |                |                               |
| Street Sweeping   | X                                |  | X            |                                  | X  | ×                      |                          | X                   |                         |               |                    |                    |                |                               |
| Facility Inspections and Controls                       |                                  | *  | X            |                                  | The state of the s |                        |                          | ×                   |                         |               |                    |                    |                |                               |
| On-Land Cleanup   |                                  |  | X,           |                                  | ×  | X                      | ×                        | i e                 |                         | to order or o |                    |                    |                | ×                             |
| Creek and Shoreline Cleanup                             |                                  |  | X            |                                  | Х  | ×                      | ×                        |                     |                         |               |                    | 0.00               |                | ×                             |
| lilegal Dumping Abatement                               | X.                               | ×  | X            |                                  | X  | ×                      | · vonezanaezmai          | X                   | e e mara de director de | Mary Morre    | ×                  | X                  |                | ×                             |
| Adopt a Drain   |                                  |  |              |                                  | X  | ×                      | *                        |                     |                         |               |                    |                    |                |                               |
| Homeless Abatement                                      | X                                | ×  | X            |                                  | X  | ×                      |                          | X.                  |                         | and a second  | ×                  | X                  |                |                               |
| Container Management                                    |                                  | ×  | ×            |                                  | :Х   | ×                      |                          | ×                   | Х                       |               |                    |                    |                |                               |
| Public Education and Outreach                           |                                  |  | and a second |                                  | Х  | X                      |                          |                     |                         | A             |                    |                    |                |                               |
| Green infrastructure                                    |                                  |  | X            | X                                |  |                        |                          |                     | X.                      | ×             |                    |                    | ×              |                               |

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## **ANALYSIS AND POLICY ALTERNATIVES**

The total trash load reduction, as reported in the FY15/16 Annual Report to the Water Quality Board, is 44.6%. The City of Oakland is one of 43 municipalities subject to the MRP that is below 70% trash load reduction as of September 30, 2016 (see Attachment A for a list of all MRP municipalities and compliance status). The current trash load reduction for the City of Oakland is unknown until full calculations are completed for the September 30, 2017 annual report to the Water Board. It is unlikely that the City will meet the July 1, 2017 70% percent trash load reduction requirement.

The City of Oakland has achieved the mandatory minimum full capture treatment area through the installation of 35 full capture devices and six partial capture devices. These systems currently account for 10% overall reduction. The City has also achieved a 16% reduction from "other" control mechanisms such as the Excess Litter Fee program, the Business Improvement Districts and on-land clean-ups, and an 8% reduction from the countywide plastic bag ban and the City's expanded polystyrene foam food service ware ban. An additional 3.3% reduction is attributed to creek and shoreline cleanups.

However, the Water Board has revised its methodology for calculating trash load reduction credit since the inception of the program, including revisions adopted as recently as 2015, and the resulting uncertainty has made it problematic for staff to prioritize programming and ensure full compliance. The current methodology excludes credit for trash reduction programs implemented before 2009, constrains credit for control measures and source reduction options, and fails to account for small trash reductions across large areas. The following are examples of Water Board credits for City trash load reduction programs that staff would recommend the Water Board provide greater value:

- Street Sweeping covers 13,000 curb miles, including cleaning downtown five days per week and arterials three times per week - 0% credit (excluded by the Water Board because it was implemented prior to 2009)
- Stormwater Inspections enforce trash containment and on-site litter control 0.4% credit
- Homeless Encampment Abatements, including targeting camps along waterways and removing litter and materials from City streets, equivalent to removing over 35% of the City of Oakland baseline trash load - 0% credit
- Adopt-A-Drain provides litter and debris removal to an estimated 10% of the City's storm drain inlets - 0% credit
- Illegal Dumping cleans up close to 30,000 piles of illegal dumping each year equal to 1900% of the City baseline trash load 7.2% credit
- On-Land Clean-Ups remove close to 30% of the City's baseline trash load each year 7.7% credit

Despite expansion of City trash load reduction efforts, the City's MRP compliance credit for trash load reduction has declined from 56% in 2014, to 47% in 2015 and to approximately 45% in 2016. The Water Board determination in 2014 that the City of Oakland cannot receive trash load reduction credit for its street sweeping program, originally valued at 18%, has been the largest contributor to the City's decrease in credit. (Attachment B shows Oakland's MRP compliance credits in each trash load reduction category for the last three reporting cycles).

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largest contributor to the City's decrease in credit. (Attachment B shows Oakland's MRP compliance credits in each trash load reduction category for the last three reporting cycles). *Alternative Compliance Plan* 

Because the City of Oakland will most likely not meet the 70% percent trash load reduction target by July 1, 2017, City of Oakland staff is developing an Alternative Compliance Plan (ACP) proposal to submit to the Water Board for negotiation and adoption by the beginning of 2018. The Oakland specific ACP will help the City to meet future trash load reduction compliance requirements by providing needed clarity for how to more effectively prioritize and credit programs, more accurately identify future funding requirements and help define feasible timelines for capital project implementation. The ACP proposal to the Water Board will include:

- Plan for funding and installation of full trash screens in storm drain inlets on high and very high trash arterials (including BRT);
- Plan for funding and timelines for installation of full trash capture hydrodynamic separators;
- Plan for installation of green infrastructure in future streetscape projects in high and very high trash areas;
- Plan for street sweeping study and potential subsequent changes to street sweeping practices; and
- Direct Discharge proposal that will include an implementation plan and timeline for homeless encampment, shoreline clean-up, and illegal dumping programs.

A funding analysis is also currently underway to determine the additional resources necessary to implement an ACP. Staff anticipates returning to Council with proposed funding and program considerations pending the negotiation and acceptance of the ACP with the Water Board.

### FISCAL IMPACT

No fiscal impacts are associated with this informational report.

#### PUBLIC OUTREACH / INTEREST

This item did not require any additional public outreach other than the required posting on the City's website.

#### COORDINATION

The Office of the City Attorney, Oakland Public Works, Fiscal Services, and the City Administrator's Office were consulted for the preparation of this report.

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## **SUSTAINABLE OPPORTUNITIES**

**Economic**: The continued efforts to reduce trash and litter will assist in improving the physical appearance of the City of Oakland, which translates directly into attracting and retaining business and promoting civic pride.

**Environmental**: The continued efforts to reduce trash and litter entering the storm-drain systems will improve the health of our creeks and waterways.

**Social Equity**: The enhanced efforts of collaboration and partnering between the City of Oakland, our residents and business community improves the quality of life and public safety.

## ACTION REQUESTED OF THE CITY COUNCIL

Accept an informational report on the status of the City's compliance with the Municipal Regional Stormwater Permit's July 1, 2017 deadline for a 70% reduction in stormwater drain trash and recommendations for achieving that requirement.

For questions regarding this report, please contact Lesley Estes, Watershed Manager, at (510) 238-7431.

Respectfully submitted,

Christine Daniel

Interim Director, Oakland Public Works

Reviewed by:

Danny Lau, P.E., Assistant Director

Prepared by:

Lesley Estes, Watershed Manager

Attachments:

2016 Compliance status of MRP municipalities 2014 – 2016 MRP Oakland compliance credit

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## Attachment A: MRP Compliance Status

| City                          | 2016 % Trash Load Reduction |
|-------------------------------|-----------------------------|
| Alameda C                     |                             |
| Dublin                        | 67                          |
| Emeryville                    | 69                          |
| Fremont                       | 69                          |
| Hayward                       | 79                          |
| Piedmont                      | 100                         |
| Pleasanton                    | 100                         |
| Union City                    | 81                          |
| City of Alameda               | 60                          |
| Berkeley                      | 38                          |
| Newark                        | 37                          |
| Oakland                       | 45                          |
| San Leandro                   | 31                          |
| Unincorp. Alameda County      | 12                          |
| Livermore                     | 22                          |
| Albany                        | 44                          |
| Contra Costa                  | County                      |
| Clayton                       | 100                         |
| Concord                       | 75                          |
| Danville                      | 96                          |
| El Cerrito                    | 80                          |
| Lafayette                     | 77                          |
| Orinda                        | 66                          |
| Pleasant Hill                 | 89                          |
| Hercules                      | 15                          |
| Martinez                      | 48                          |
| Moraga                        | 21                          |
| Pinole                        | 21                          |
| Pittsburg                     | 54                          |
| Unincorp. Contra Costa County | 44                          |
| Richmond                      | 27                          |
| San Mateo C                   |                             |
| Atherton                      | 75                          |
| Belmont                       | 89                          |
| Brisbane                      | 65                          |
| Colma                         | 91                          |
| Foster City                   | 84                          |
| Half Moon Bay                 | 91                          |
| Hillsborough                  | 100                         |
| Millbrae                      | 69                          |
| Pacifica                      | 62                          |
| Portola Valley                | 73                          |
| Redwood City                  | 62                          |

| San Mateo                    | 60  |  |  |  |  |  |  |
|------------------------------|-----|--|--|--|--|--|--|
| Unincorp. San Mateo County   | 74  |  |  |  |  |  |  |
| Woodside                     | 100 |  |  |  |  |  |  |
| San Carlos                   | 35  |  |  |  |  |  |  |
| Burlingame                   | 44  |  |  |  |  |  |  |
| Daly City                    | 38  |  |  |  |  |  |  |
| Menlo Park                   | 53  |  |  |  |  |  |  |
| San Bruno                    | 50  |  |  |  |  |  |  |
| South San Francisco          | 42  |  |  |  |  |  |  |
| East Palo Alto               | 29  |  |  |  |  |  |  |
| Santa Clara County           |     |  |  |  |  |  |  |
| Campbell                     | 81  |  |  |  |  |  |  |
| Cupertino                    | 78  |  |  |  |  |  |  |
| Los Altos                    | 81  |  |  |  |  |  |  |
| Los Altos Hills              | 100 |  |  |  |  |  |  |
| Los Gatos                    | 76  |  |  |  |  |  |  |
| Monte Sereno                 | 100 |  |  |  |  |  |  |
| Palo Alto                    | 84  |  |  |  |  |  |  |
| Santa Clara                  | 68  |  |  |  |  |  |  |
| Sunnyvale                    | 62  |  |  |  |  |  |  |
| Unincorp. Santa Clara County | 68  |  |  |  |  |  |  |
| Mountain View                | 48  |  |  |  |  |  |  |
| San Jose                     | 53  |  |  |  |  |  |  |
| Milpitas                     | 43  |  |  |  |  |  |  |
| Solano County                |     |  |  |  |  |  |  |
| Fairfield                    | 98  |  |  |  |  |  |  |
| Vallejo                      | 34  |  |  |  |  |  |  |
| Suisun City                  | 41  |  |  |  |  |  |  |

## Attachment B: MRP Compliance Credits

| Trash Load Redu  | ction Summary |            |            |  |
|--|---------------|------------|------------|--|
|  | MR            | edit       |            |  |
| MRP Trash Load Reduction Categories                            | FY 2013/14    | FY 2014/15 | FY 2015/16 |  |
| Trash Full Capture Systems                                     | 8%            | 9.8%       | 10%        |  |
| Excess Litter Fee Program                                      | 0%            | 0%         | 1.8%       |  |
| Business Improvement District                                  | 6.1%          | 5.6%       | 6.2%       |  |
| Single-use Plastic Ban Ordinance                               | 4%            | 4%         | 4%         |  |
| Expanded Polystyrene Food Service Ware Ordinance               | 4%            | 4%         | 4%         |  |
| Intensive street sweeping 3 or More Times/Week                 | 12.5%         | 0%         | 0%         |  |
| Intensive Street Sweeping One or More Times/Week               | 6.3%          | 0%         | 0%         |  |
| Facility Inspections & Controls                                | 0%            | 0%         | 0.4%       |  |
| On-Land Cleanup  | 0%            | 8%         | 7.7%       |  |
| Receiving Water Cleanups                                       | 0%            | 10%        | 0%         |  |
| On-land and Creek/Shoreline Cleanups                           | 15–20%        | 0%         | 0%         |  |
| Offset Associated with Additional Creek and Shoreline Cleanups | 0%            | 0%         | 3.3%       |  |
| Illegal Dumping Abatement Program                              | 0%            | 5.9%       | 7.2%       |  |
| Adopt a Drain Program  | 0%            | 0%         | 0%         |  |
| Homeless Abatement Program                                     | 0%            | 0%         | 0%         |  |
| Container Management and Technical Assistance                  | 0%            | 0%         | 0%         |  |
| Public Education and Outreach                                  | 0%            | 0%         | 0%         |  |
| Offset Associated with Direct Trash Discharges                 | 0%            | 0%         | 0%         |  |
| Total Estimated % Trash Load Reduction                         | 56–61%        | 47.3%      | 44.6%      |  |