

Long-Term Trash Load Reduction Plan Update

Rajani Nair, P.E., Deputy Director

Kerrie Romanow, Director

Environmental Services

Transportation and Environment Committee

September 11, 2023

Item (d) 3



Environmental Services

*Delivering world class utility services and programs
to improve our health, environment and economy*

Overview

- Understand regulatory requirements
- City's current trash load reduction status
- Overview of current and future trash control measures
- Next Steps



Why This Matters



Brief History - 1972 Clean Water Act

CALL TO ACTION: Increasing public concerns about water pollution

CLEAN WATER ACT ORIGINS:

- ❑ 1899 Rivers and Harbors Act/Refuse Act
- ❑ 1948 Federal Water Pollution Control Act

ADMINISTERED BY THE ENVIRONMENTAL PROTECTION AGENCY:

- ❑ Created 1970 under Richard Nixon Administration



Background: Long-Term Trash Load Reduction

California Regional Water Quality Control Board
San Francisco Bay Region
Municipal Regional Stormwater NPDES Permit

Order R2-2009-0074
NPDES Permit No. CAS612008
October 14, 2009



2009 Stormwater Permit Compliance Schedule Requirements

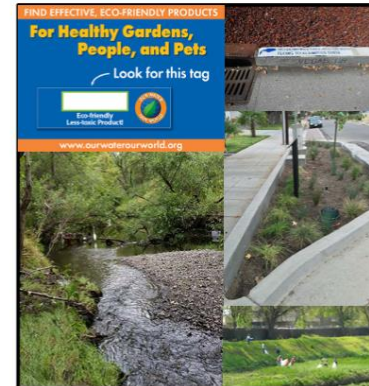
- 40% reduction in trash loads by 2014;
- 70% reduction in trash loads by 2017;

Deliverables

- Develop assessment methodology and determine baseline trash load from MS4;
- Develop and submit Long-Term Trash Load Reduction Plan by February 2014

California Regional Water Quality Control Board
San Francisco Bay Region
Municipal Regional Stormwater NPDES Permit

Order No. R2-2015-0049
NPDES Permit No. CAS612008
November 19, 2015



2015 Stormwater Permit Compliance Schedule Requirements

- 60% reduction in trash loads by 2016*;
- 70% reduction in trash loads by 2017;
- 80% reduction in trash loads by 2019;

Deliverables

- Revise and submit updated Long-Term Plan if 60% reduction target not met.

Regulatory Background and Past Accomplishments

Trash Control Measure	FY 21-22	FY 20-21	FY 19-20	FY 18-19	FY 17-18	FY 16-17	FY 15-16	FY 14-15	FY 13-14
Full Trash Capture Systems	51.70%	49.60%	49.60%	46.20%	38.90%	36.00%	16.50%	8%	7%
On-land Trash Control Measures	16.70%	15.60%	14.80%	15.60%	14.40%	8.20%	1.80%	2%	7%
Subtotal	68.40%	65.20%	64.40%	61.80%	53.30%	44.20%	18.30%	10.00%	14.00%
Jurisdictional Source Controls	10%	10%	10%	10%	10%	10%	10%	14%	10%
Creek and Shoreline Cleanups	10%	10%	10%	10%	10%	10%	10%	51%	37%
Direct Discharge Trash Control Plan	15%	15%	15%	15%	15%	15%	15%	N/A	N/A
Total	103.40%	100.20%	99.40%	96.80%	88.30%	79.20%	53.30%	77%	62%
Claimed	103.40%	100.20%	99.40%	96.80%	88.30%	79.20%	53.30%	77%	40%
Target				80%		70%	60%*		40%

* FY 15-16's 60% target was not mandatory. Permittees unable to achieve it were required to submit a detailed plan and schedule of implementation of additional trash load reduction control actions that will attain the 2017 mandatory deadline.

Current Requirements (as of July 1, 2022)

Achieve Trash Load Reduction
compared to 2009 baseline:

- ☒ 90% by June 30, 2023
- ☐ 100% by June 30, 2025

35% Offsets and
Credits phase out
between 2022
and 2025

FY 22-23 Accomplishments

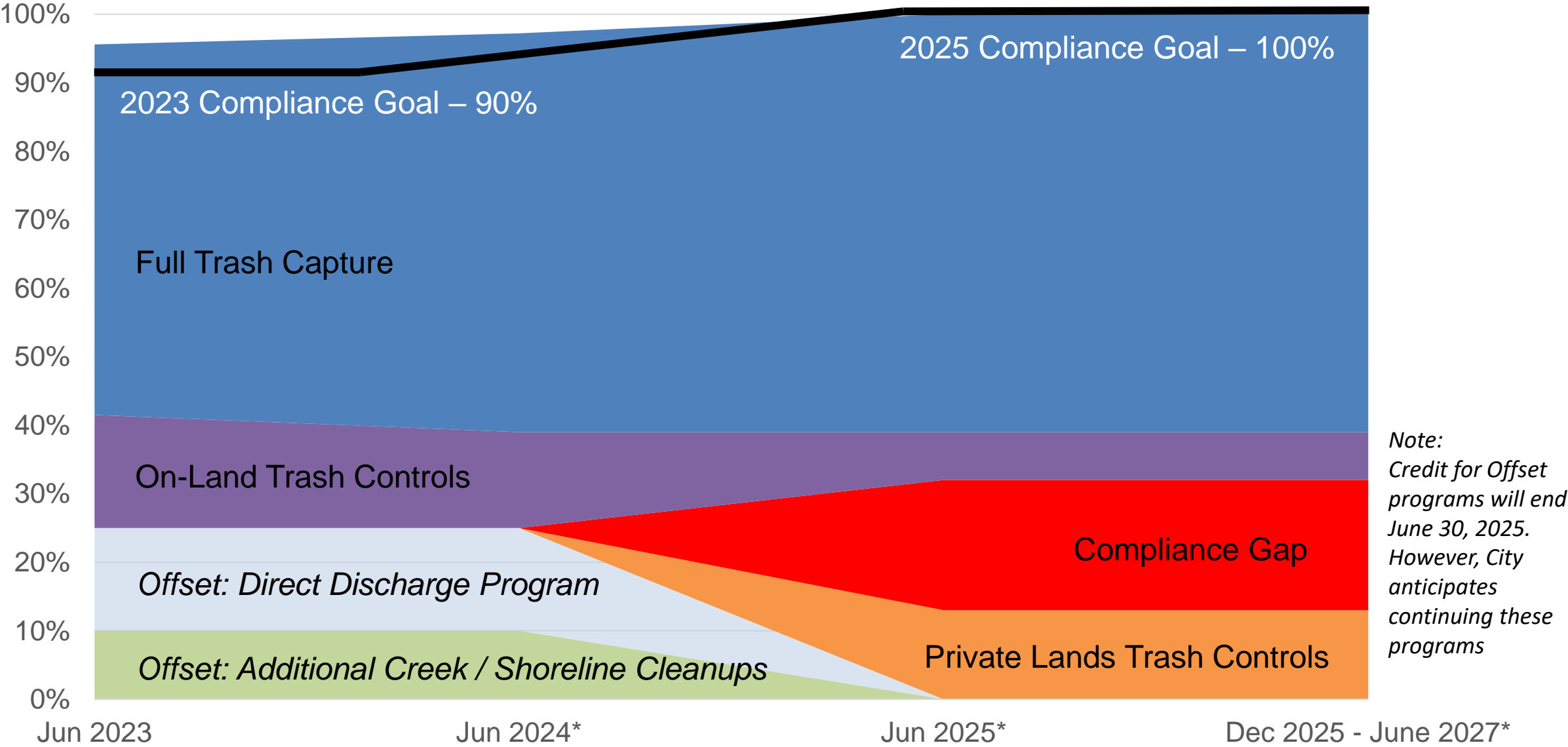
Full Trash Capture (FTC) =	54.1%
On land Visual Trash Assessment (OVTA) (FY 22-23 TLR) =	16.5%
Subtotal:	70.6%
Jurisdictional Source Controls (phased out as of July 1, 2023)=	0%
Add'l Creek Cleanups =	10%
Direct Discharge Trash Control Plan (DDTCP) =	15%
TOTAL =	95.6%

City's current
Trash Load
Reduction without
offsets



Need to revise Long
Term Trash Plan since
below 90%

Trash Load Reduction Percentage



* Estimated trash load reduction percentage

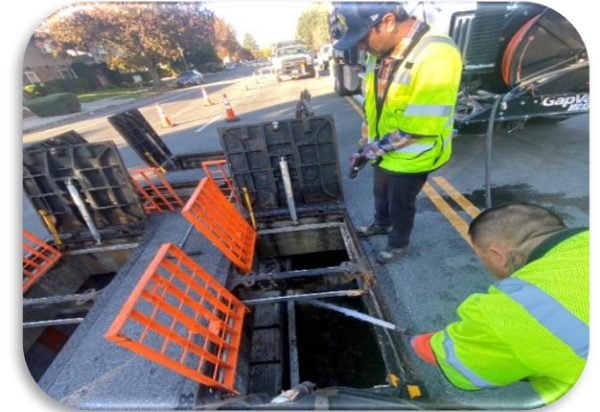
Current Trash Control Measures – Full Trash Capture

■ Full Trash Capture (FTC) Devices installed

- ❑ 34 Large Full Trash Capture Devices
- ❑ 107 Connector Pipe Screens
- ❑ 88 Bioretention Systems

■ FTC O&M

- ❑ Record Keeping



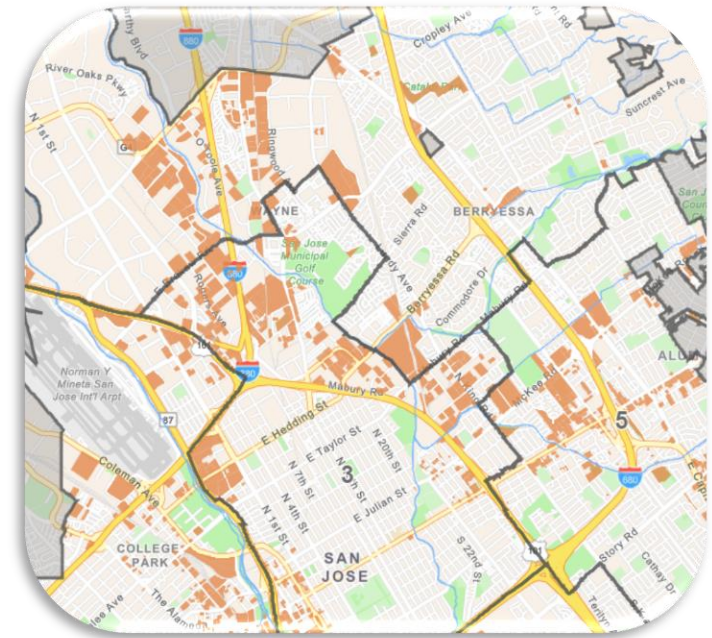
Other Current Trash Control Measures

- Creek and Shoreline Cleanups
- Free Residential Junk Pickup
- Special Events Waste Management
- Outreach and Community Engagement
- Jurisdictional Source Controls
- Commercial and Solid Waste Inspection and Enforcement Programs
- Public Litter Cans
- Encampment Management Program
- Downtown PBID
- Adopt-a-Park
- Neighborhood Litter Program
- InforBI Data Management
- RAPID
- Neighborhood Beautification Programs
- Street Sweeping
- Litter Enforcement



Future Trash Control Measures

- New requirement - Private Land Drainage Areas (PLDAs) Trash Inspection program
- Future Large Trash Capture Device projects
 - ❑ 4 Hydrodynamic Separators (Phase VII)
 - ❑ 5 Hydrodynamic Separators, (Phase VIII)
 - ❑ Bioretention Systems
- Other programs being developed or implemented



Next Steps

- Submit revised Long-Term Plan to the Water Board by September 30, 2023
- Analyze and evaluate data to determine where to prioritize efforts
 - Full Trash Capture
 - Expansion of existing trash control measures
 - Implementation of new programs
- Submit additional funding for implementation in FY 24-25



Long-Term Trash Load Reduction Plan Update

Rajani Nair, P.E., Deputy Director

Kerrie Romanow, Director

Environmental Services

Transportation and Environment Committee

September 11, 2023

Item (d) 3



Environmental Services

*Delivering world class utility services and programs
to improve our health, environment and economy*