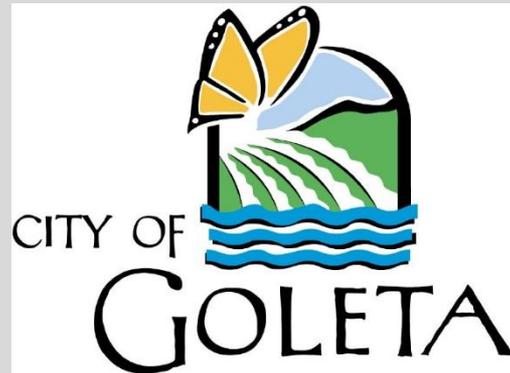


Track 2 Implementation Plan to Comply With the State Water Board's Trash Amendment



December 18, 2018

State Water Board's Trash Amendment

The City's stormwater management program is mandated by the Federal Clean Water Act, administered by the State and Regional Water Boards through General Municipal, Construction and Industrial Permits

In 2015 the State Water Board adopted a statewide Trash Amendment

The Amendment requires municipalities that own and operate storm sewer systems to eliminate trash larger than 5 mm generated within identified Priority Land Uses from entering receiving waters via the storm sewer system, over a specified compliance period

Priority Land Uses include:

- Industrial
- Commercial
- High-density Residential
- Transit Facilities, including bus terminals and transit stops

The State offered two tracks to comply with the Amendment

Compliance Track 1

Track 1 requires the installation, operation and maintenance of Water Board approved Full Capture Systems for all storm drains that capture runoff from the Priority Land Uses

- Compliance is achieved by certifying that Full Capture Systems have been installed. Installed Full Capture Systems must be regularly inspected and maintained

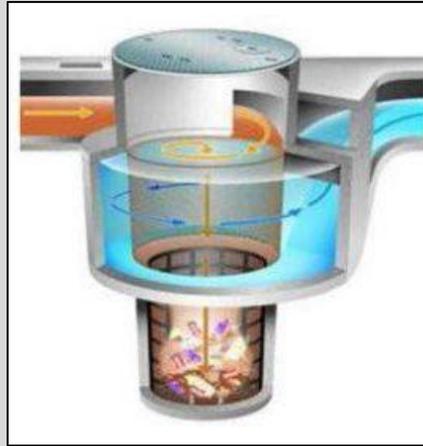
Disadvantages include:

- 181 catch basins located within the Priority Land Uses
- Portions of the storm sewer system may not accommodate Full Capture Systems
- Potential to exacerbate flooding in low lying areas or parts of the storm sewer system that are under capacity
- Does not address the presence of litter in the public right-of-way

Full Capture Systems

Regional devices

- Generally installed towards the end of storm drain lines
- Expensive to purchase and install
- Maintenance costs are generally low over time



Distributed devices

- Installed in individual catch basins
- Inexpensive to purchase and install
- High maintenance costs; require regular inspection and cleaning between 2-4 times annually to keep free of litter and organic material



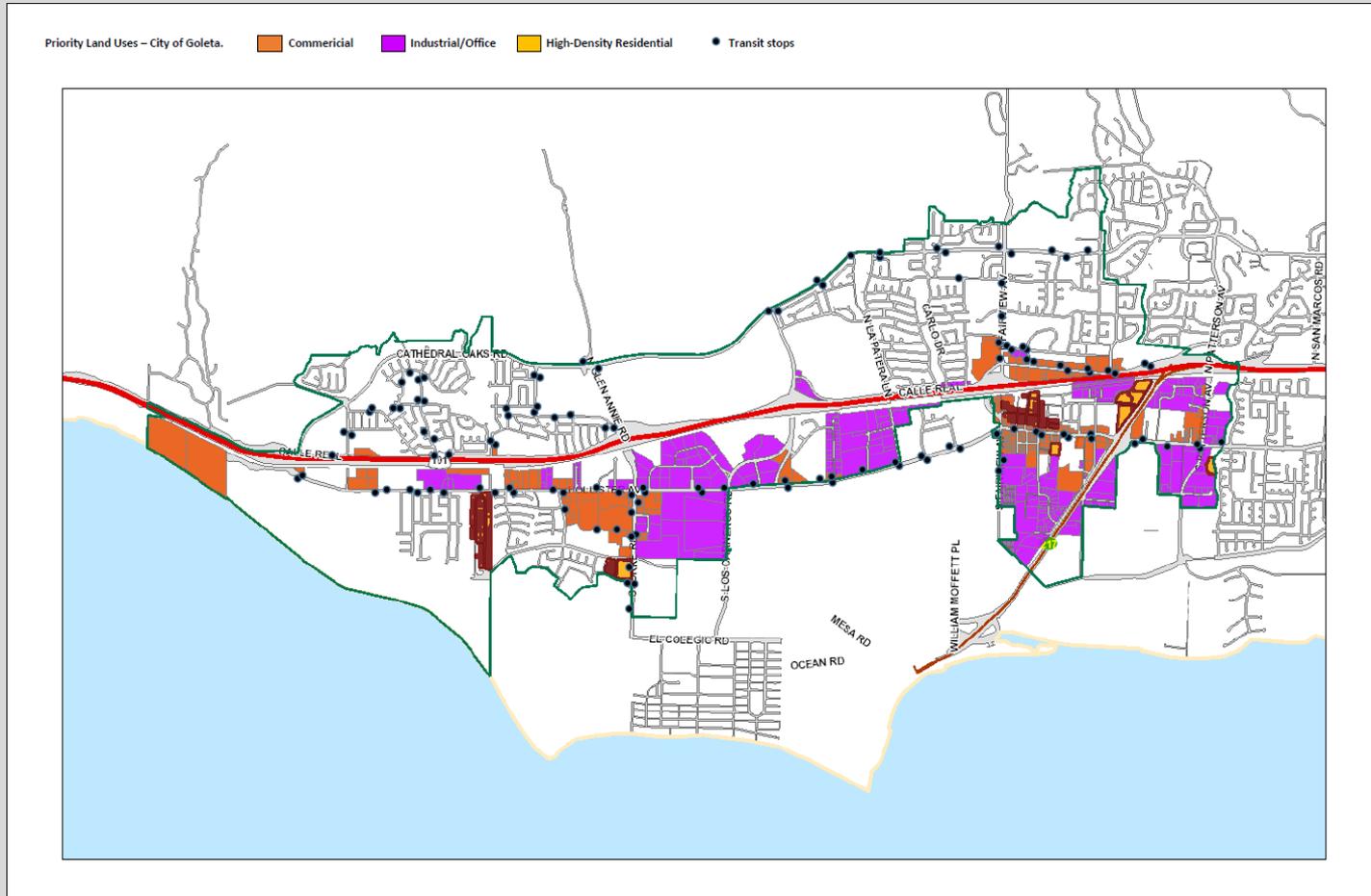
Compliance Track 2

Track 2 requires the installation, operation and maintenance of any combination of Full Capture Systems, multi-benefit projects, other treatment controls, and/or institutional controls within the Priority Land Uses

- Municipalities must demonstrate that such a combination achieves Full Capture System Equivalency
- Requires extensive assessment of the level of trash present within the Priority Land Uses, and establishing a baseline trash load
- Provides some flexibility in compliance attainment
- Installation of Full Capture Systems is expected where feasible
- Requires annual monitoring and reporting of progress
- Subject to approval by the Regional Water Board's Executive Officer

On August 15, 2017, Council directed staff to pursue a Track 2 compliance approach and develop an Implementation Plan for submittal to the Regional Water Board

Priority Land Uses in Goleta



On Land Visual Trash Assessments

Approved methodology for assessing levels of trash present within the Priority Land Uses

- Street and sidewalk assessments
- Area based assessments for large parking lots with internal drainage connecting to the storm sewer system

Assessments had to occur following mid-point between street sweeping, and as close to the next scheduled sweeping to capture worse-case

On Land Visual Trash Assessments

Streets and sidewalks broken into individual survey segments

Amount of litter observed categorized into one of four levels

- Level A: Not Littered, effectively no trash observed in the assessment area
- Level B: Slightly Littered, predominantly free of trash, except a few littered areas
- Level C: Littered, predominantly littered except for a few clean areas
- Level D: Very Littered, trash continuously seen throughout the assessment area

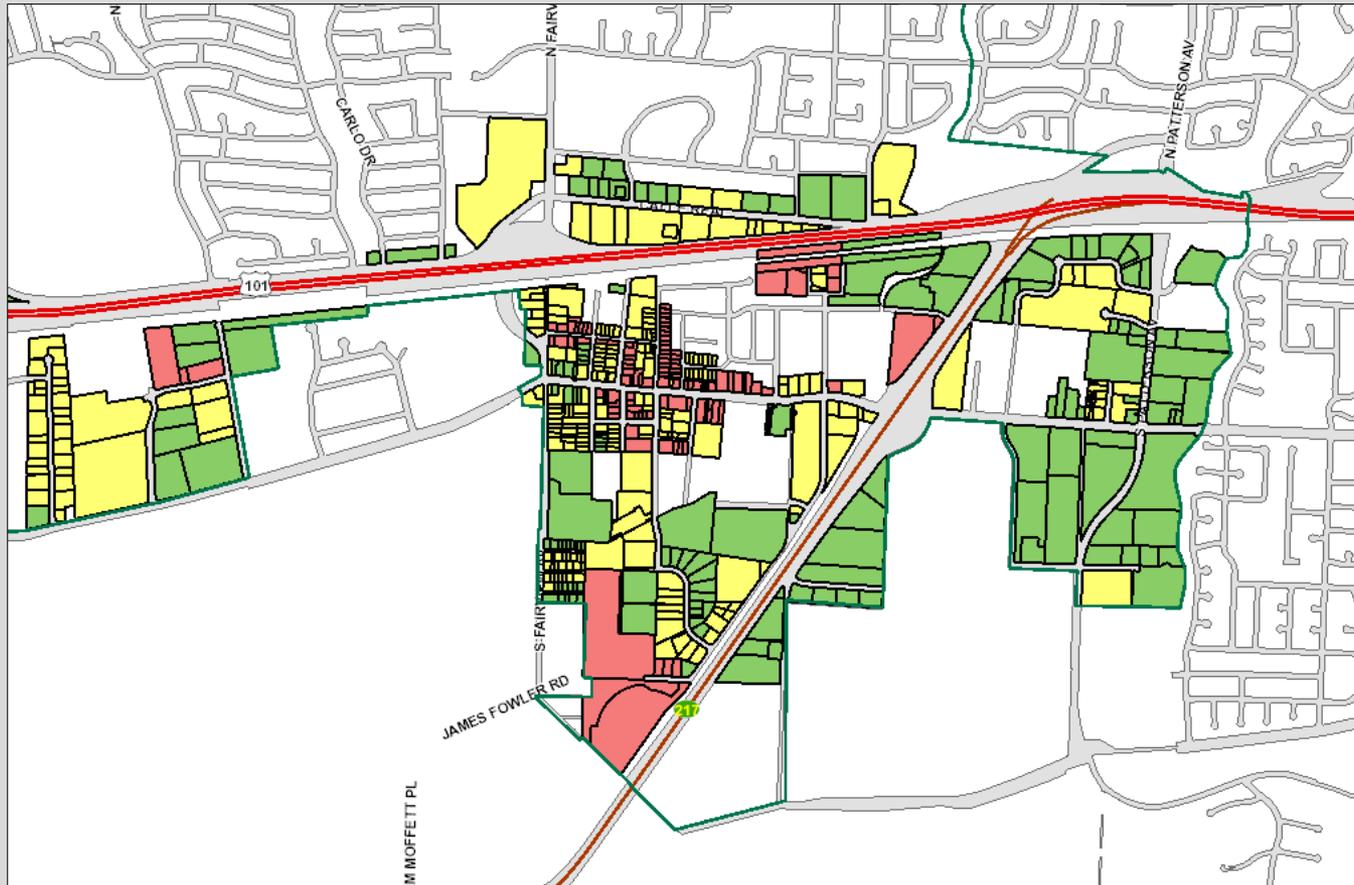
Trash sources, such as refuse bins, bus stops, convenience stores noted

Catch basins within survey segments assessed for significant litter

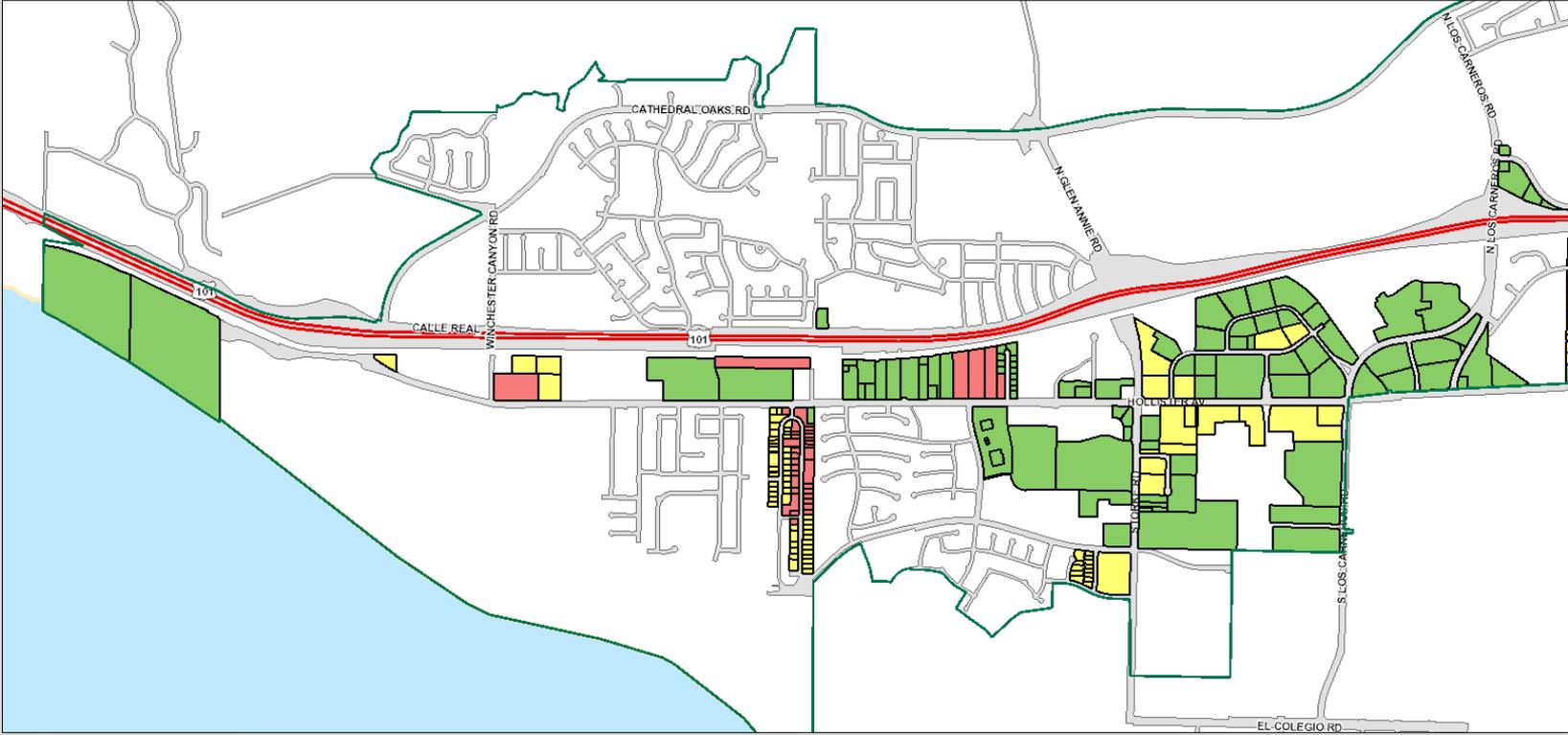
On Land Visual Trash Assessments

- Litter observed in the street and sidewalk assumed to be generated by adjacent parcel(s)
- Where a parcel is bounded by two or more assessment segments with differing trash levels, the higher level is assigned to the parcel
- Where a parcel is assigned different trash levels between the two rounds of assessments, the higher level is assigned to the parcel
- As a result of the assessments, a base-line parcel condition map of the City's Priority Land Uses was generated

Baseline Parcel Condition Map, Eastern Goleta



Baseline Parcel Condition Map, Western Goleta



Estimated Annual Baseline Trash Load

The estimated annual baseline trash load is calculated by multiplying the acres within the different trash ratings by the average trash generation rate

Areas assessed at level A are considered to be at Full Trash Capture Equivalent, and no additional measures are required in those areas

Rating	Number of Parcels	Number of Catch Basins	Average Trash Generation Rate	Acres	Estimated Annual Baseline Trash Load (Acres X Rate)
Low (A)	252	90	N/A	643.5	N/A
Moderate (B)	350	69	7.5	291.5	2186
High (C)	150	18	30	107	3203.5
Very High (D)	0	0	100	0	0
	752	177		1042	5389.5

Estimated Annual Baseline Trash Load

As a result of conducting the OVTA surveys, 642.5 acres or 62 percent of the Total Priority Land Use area has been determined to be at full trash capture equivalent

This allows the City to focus its efforts on the remaining 398.5 acres assessed at level B or C

This also reduces the number of catch basins that may need to be retrofitted with Full Capture Devices

- 407 catch basins City wide within the public right-of-way
 - Additional catch basins and drop inlets are located within private land development or on private streets that are not maintained by the City, some of which ultimately connect to the City's storm sewer system.
- 181 catch basins located within the Priority Land Use areas
- 87 catch basins located with Priority Land Use areas assessed at level B or C

Track 2 Compliance Approach

Primary recommended means of trash load reduction

- Retrofit the storm drain system where feasible
- Implement parking restrictions for effective street sweeping
- Manual litter abatement

• Secondary recommended means of trash load reduction

- Education and outreach to target audiences
 - Business community
 - Multi-family housing complex managers
- Enhanced creek, beach and community cleanup programs
- Partnering with other agencies
 - CalTrans

Implementation Plan

Municipalities have until 2030 to achieve full compliance

Regular progress towards compliance must be demonstrated through annual reporting requirements

Pilot installations of Full Capture Systems in up to 4 catch basins in PLU areas assessed at level C proposed for FY 2019/20

- Experience gained from pilot installations will inform future system retrofitting

Additional analysis will be required to:

- Characterize the storm drain system that may need to be retrofitted with Full Capture Systems
- Determine where parking restrictions for street sweeping is appropriate and how to most efficiently implement them

Implementation Plan

The Implementation Plan represents a balance between providing enough specificity and assurance to the Water Board that the City will be able to attain compliance within the specified implementation plan, and the current uncertainties over precisely how, where and when the Plan's proposed measures will be applied

Municipalities may change Tracks, as necessary

The Plan is a dynamic document that may be modified as experience dictates, new technologies become available, or unanticipated challenges arise

Implementation Schedule

The Plan includes a recommended Implementation Schedule for phasing in source control and load reduction measures over the compliance period



Years 1-4

- Develop Storm Drain Master Plan
- Additional analysis of storm drain system, sweeping schedules, etc.
- Pilot installations of full capture systems
- Manual litter abatement
- Educational outreach campaigns

Years 5-8

- Phase in parking restrictions in core areas
- Continued installation of full capture systems
- Storm drain system repairs and upgrades

Years 9-12

- Potential expansion of parking restrictions to other Priority Land Use areas
- Continued installation of full capture systems

Estimated Costs

The full cost of compliance over the implementation period will depend on the final combination of system retrofits, implementing parking restrictions, manual litter abatement efforts, and other supplemental measures

Costs of Implementation during the next couple of years will be included in the FY 2019/20, FY 2020/21 Budget Cycle

Development of a Storm Drain Master Plan, potential regional Full Capture Systems, and needed storm drain system repairs and upgrades have been included in the approved Capital Improvement Program project list

Funding Sources

Potential funding sources for compliance with the Trash Amendment include:

- Solid Waste Fund balance
- CalRecycle City/County Payment Program grants
- Education and outreach funding provided through MarBorg's Franchise Agreement
- Storm drain Development Impact Fees
- Prop. 1 grants

Thank you!

Questions?