AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR THE OCEAN WATERS OF CALIFORNIA TO CONTROL TRASH
AND
PART 1 TRASH PROVISIONS OF THE WATER QUALITY CONTROL PLAN FOR INLAND SURFACE WATERS, ENCLOSED BAYS, AND ESTUARIES OF CALIFORNIA

Johanna Weston

Environmental Scientist

Ocean Standards Unit, Division of Water Quality

State Water Resources Control Board

Public Meeting for Adoption Consideration
April 7, 2015

Purpose of the Public Meeting

- Proposed Final Trash Amendments and proposed Final Staff Report
  - Circulated on December 31, 2014
  - Noticed on February 12, 2015
  - Revisions circulated on March 26, 2015
  - Change sheet circulated on April 4, 2015
- Oral comments limited to revisions.
- Consider:
  - Adoption of the proposed Trash Amendments
  - Approval of the Final Staff Report

American River Trash Gyre
Coastal Cleanup Day 2014

Development Timeline

CEQA Scoping Meeting
October

Public Advisory Group Meeting
May and Aug.

Focused Stakeholder Group Meetings
April and May

Peer Review
July 14

Public Workshop
July 16

Release of proposed Final Staff Report and proposed final Trash Amendments
Dec. 31

Future Actions:
Submittal to Office of Administrative Law
and the U.S. EPA

2010 | 2011 | 2012 | 2013 | 2014 | 2015

Public Advisory Group Meeting
July, Aug., and Oct.

Public Advisory Group Meeting
March

Release of Draft Staff Report and proposed Trash Amendments
June 10

Public Hearing and Close of Comment Period (76 Comments)
Aug. 5

Public Meeting for Adoption Consideration
April 7

The Pollutant: Trash

- Pervasive problem and adversely affects beneficial uses of California's water bodies.
- Main transport pathway to surface waters is through storm water.
- Lack of statewide water quality objective and consistency for "trash."
- 73 section 303(d) listings and 16 Total Maximum Daily Loads (TMDL) approved.

Ocean Conservancy – Coastal Cleanup Day Results

Trash Amendments

- 2012-2013 Board Priority Project
- Statewide Water Quality Control Plans
  - California Ocean Plan (Appendix D)
  - Forthcoming Inland Surface Waters, Enclosed Bays, and Estuaries Plan (ISWEBE Plan) (Appendix E)
- Overarching goal is to address the impacts of trash with a statewide narrative water quality objective and implementation requirements using a land-use based compliance approach that targets high trash generating areas.

Proposed Final Trash Amendments

1. Narrative Water Quality Objective
2. Applicability
3. Prohibition of Discharge
4. Implementation Provisions
5. Time Schedule
6. Monitoring and Reporting

California Coastal Commission
2013 Coastal Art & Poetry Contest
Leo Yang
9th Grade

1. Narrative Water Quality Objective

Comments Received

1. Numeric water quality objective for trash.
2. Change from "accumulate" to "be present."

Trash Amendments

- Ocean Plan: "Trash shall not be present in ocean waters, along shorelines or adjacent areas in amounts that adversely affect beneficial uses or cause nuisance."
- ISWEBE Plan: "Trash shall not be present in inland surface waters, enclosed bays, estuaries, and along shorelines or adjacent areas in amounts that adversely affect beneficial uses or cause nuisance."

2. Applicability

Comments Received

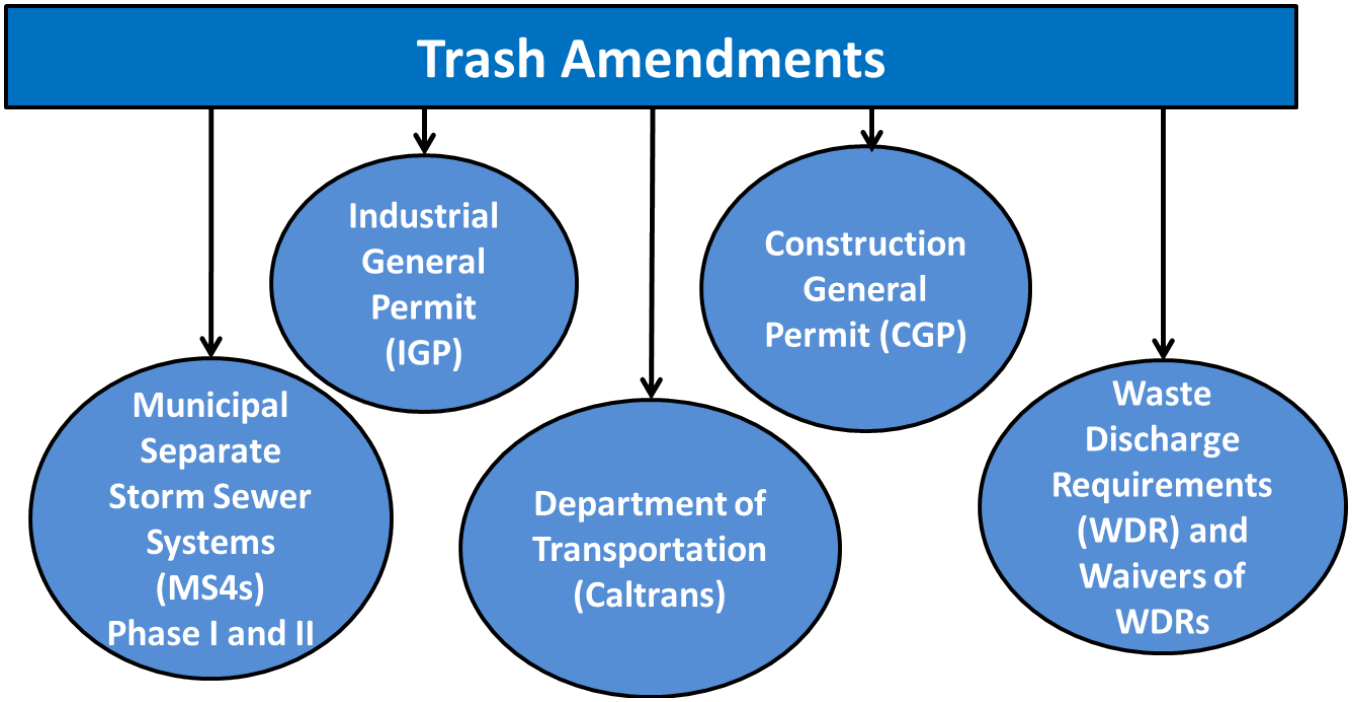
1. Include only those areas where trash is a 303(d) listed pollutant.
2. No mandatory reopener for trash TMDLs in the Los Angeles Region.

Trash Amendments

1. Applicable to all surface waters of the State.
2. Exception for those waters within the jurisdiction of the Los Angeles Water Board with trash or debris TMDLs.
   - Reconsideration of the scope of existing trash and debris TMDLs within one year, with the exception of Ballona Creek and Los Angeles River Watershed.

2. Applicability

Implemented through NPDES permits, waste discharge requirements (WDRs), and waivers of WDRs.



3. Prohibition of Discharge

Comments Received

1. Link the water quality objective with the prohibition of discharge.
2. Maintain "Preproduction Plastic Debris Program" requirements in the IGP.

Trash Amendments

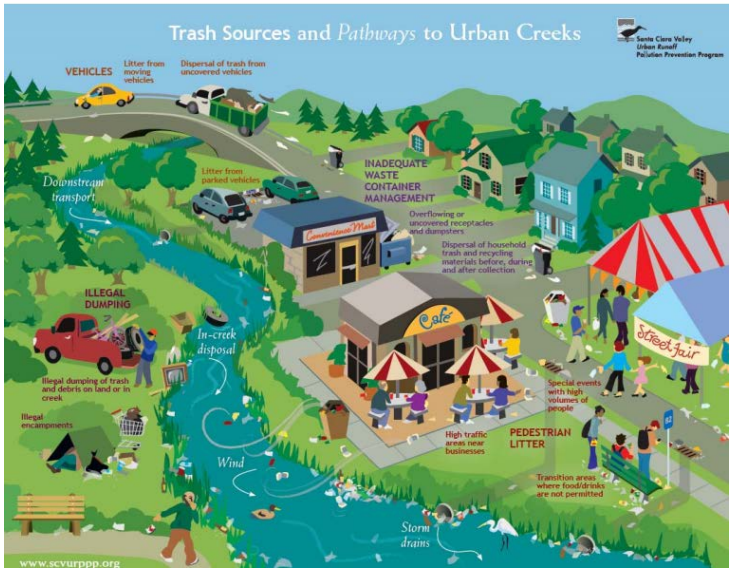
- Prohibition of discharge of trash to surface waters of the State.
  - Compliance achieved through requirements present in NDPES permits, WDRs, and waivers of WDRs.
  - Prohibition of discharge of preproduction plastics, unless existing IGP requirement provisions.

4. Implementation Provisions

MS4 Phase I and Phase II

Comments Received

1. Direction on how to establish Track 2 equivalency to Track 1.
2. Focus on full capture systems in Track 2.
3. Increase flexibility for the selection of high trash generating areas.
4. Focus on existing watershed priorities.



4. Implementation Provisions
MS4 Phase I and Phase II

Track 1: Install, operate and maintain full capture systems in storm drains that capture runoff from the priority land uses.

Or

Track 2: Implement a plan with any combination of treatment controls, institutional controls, and/or multi-benefit projects within the jurisdiction of the MS4 permittee. Demonstrate full capture system equivalency. Expectation is to install full capture systems to the extent not cost-prohibitive.

4. Implementation Provisions

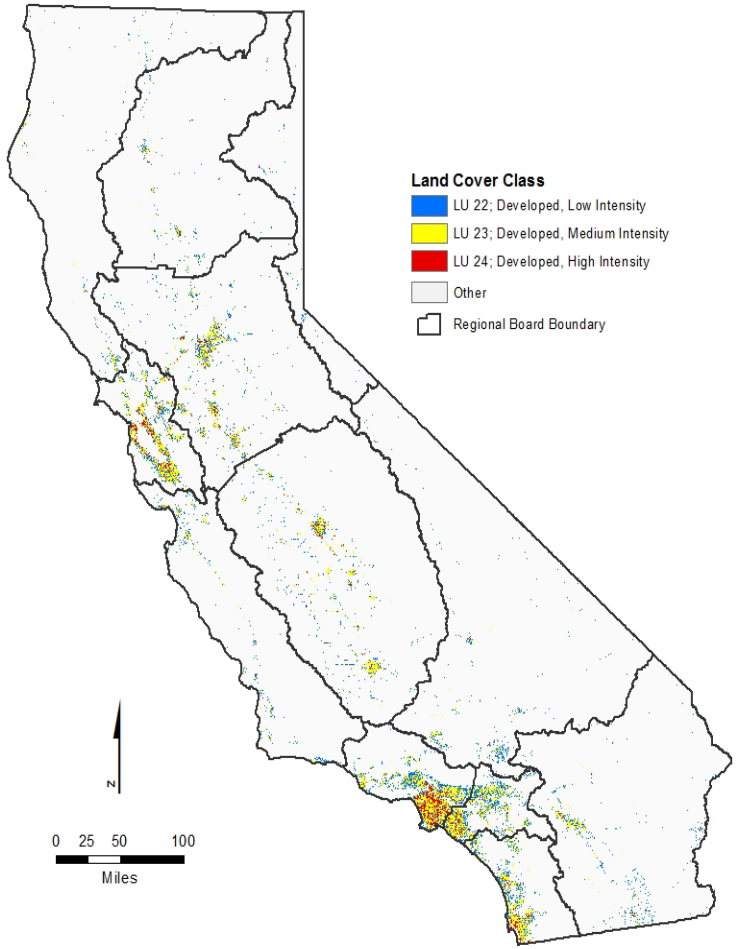
MS4 Phase I and Phase II

Priority Land Uses

- High Density Residential – 10 units per acre
- Industrial
- Commercial
- Mixed Urban
- Public Transportation Stations

Equivalent Alternate Land Uses

- Substitute priority land use for an alternate that generates rates of trash equivalent or greater.



4. Implementation Provisions

Full Capture System Equivalency

- Trash load reduction target if full capture systems were implemented for all storm drains in the relevant areas of land.
- Permittee derived approach.
- Two approach examples:
  - Trash Capture Rate Approach – Direct measurement of representative locations and application to all similar land uses.
  - Reference Approach – Compare against amount of trash in a reference receiving watershed with full capture systems installed.

4. Implementation Provisions

Full Capture Systems

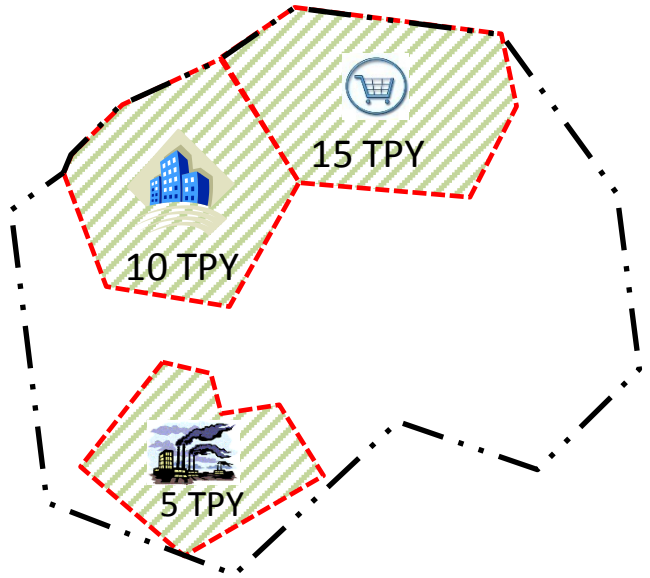
Comments Received

1. Deem full capture systems used by the San Francisco Bay Area Municipal Regional Permit (MRP) permittees as full capture.
2. Certify institutional controls.

Trash Amendments

- Designed to trap all particles that are 5 mm or greater and design treatment capacity of the corresponding storm drain.
- Design must be certified by the Executive Director.
- Includes those certified by the Los Angeles Water Board or listed in the Bay Area-wide Trash Capture Demonstration Project.

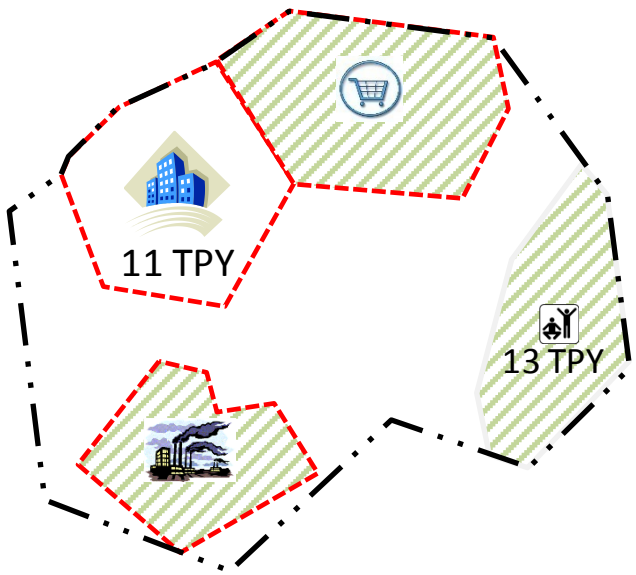
Track 1



Full Capture System Equivalency = 30 tons per year (TPY)

- Full capture systems installed in all storm drains in all priority land uses
- Annual report demonstrating installation, operation, maintenance and geographic locations.
- No demonstration of full capture systems equivalency.
- No other implementation or monitoring plan.

Track 1 (Equivalent Alternate Land Use)



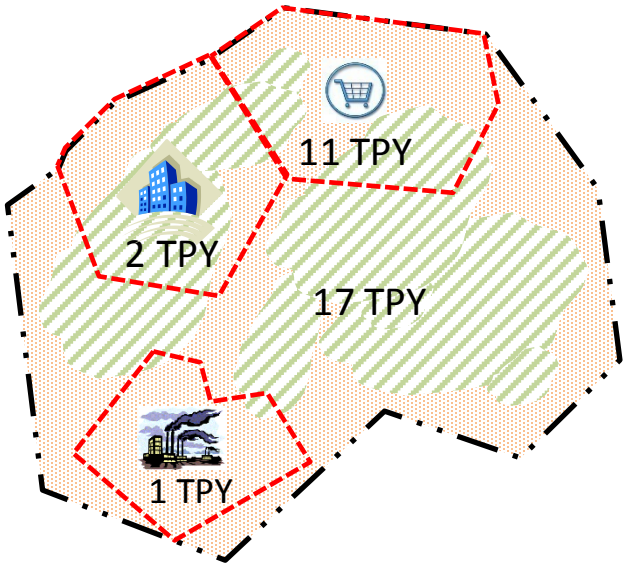
Equivalent Alternate Land Use ≥ Residential (13 TPY ≥ 11 TPY)

- Full capture system in priority land uses.
- **Equivalent Alternate Land Use is subject to approval by permitting authority.**
- **Must determine comparative trash generation rate in equivalent alternate land uses.**
- No implementation plan.
- No demonstration of full capture system equivalency.
- No monitoring plan.

MS4 Jurisdiction Boundary — Priority Land Use Boundary — Full Capture Systems

High Density Residential — Commercial — Industrial — Equivalent Alternate Land Use

Track 2



Track 2 Trash Reduction ≥ Full Capture System Equivalency
(31 TPY ≥ 30 TPY)

- **Any combination of controls anywhere in jurisdiction.**
- **Must demonstrate full capture system equivalency.**
- **Must submit implementation and monitoring plans and annual report.**

MS4 Jurisdiction Boundary
Priority Land Use Boundary
Full Capture Systems
Other controls
High Density Residential
Commercial
Industrial

4. Implementation Provisions

Caltrans

- Identify significant trash generating areas.
- Implement any combination of control in the significant trash generating areas.
- Demonstrate full capture system equivalency.
- Coordinate with neighboring MS4 permittees.

NOAA Marine Debris Art Contest
2012-2013
Maylina D.
8th Grade, Florida

4. Implementation Provisions
IGP and CGP

- Eliminate all trash from storm water. If deemed unable, then:
- **1:** Install, operate and maintain full capture systems all storm drains that capture runoff from the facility or site.

Or

- **2:** Implement a plan with any combination of treatment controls, institutional controls, and/or multi-benefit projects for the entire facility or site. Demonstrate full capture system equivalency.

4. Implementation Provisions
Other Locations and Other Dischargers

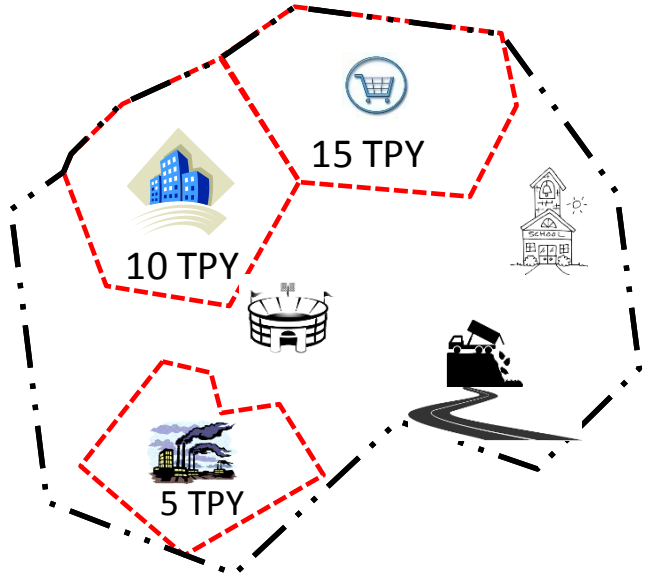
Comments Received

1. Focus on non-point sources and other areas outside of priority land uses.

Trash Amendments

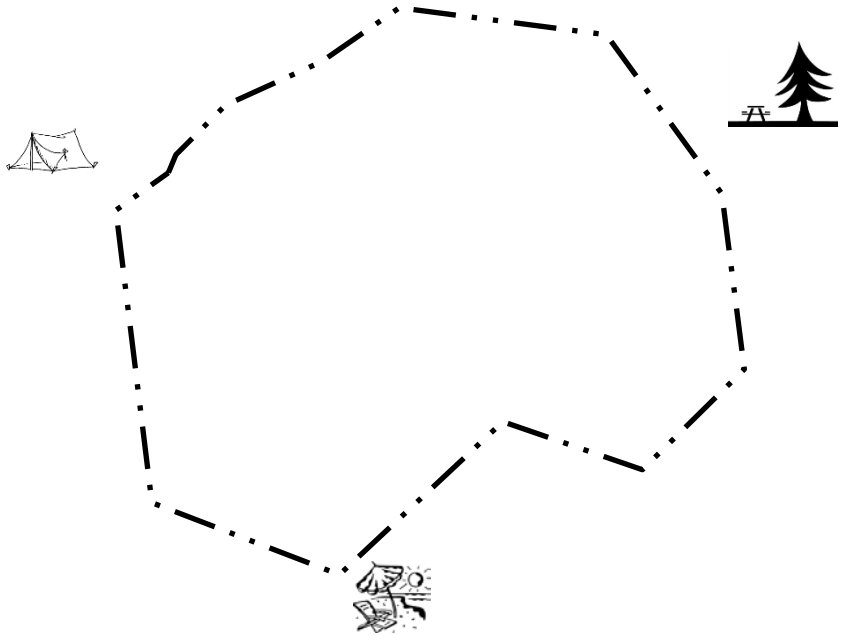
- Within an MS4, permitting authority can determine specific location or land uses generate substantial amounts of trash and require trash controls.
- Outside of an MS4, permitting authority can determine areas that generate significant trash and require trash controls.

Substantial Trash Generating Locations



- May include parks, stadia, schools, campuses, landfill roads etc. under jurisdiction of MS4, but not within priority land uses.
- Permitting authority may require compliance with Track 1 or Track 2.
- Trash controls in these areas are in addition to other Trash Amendments requirements (i.e., doesn't replace need to comply with Track 1 or Track 2).

Other Dischargers (non-MS4)



- "Other Dischargers" include point and non-point source dischargers such as beaches, campgrounds, picnic areas, etc.
- Permitting authority may require other dischargers to implement "any appropriate trash control requirements."

MS4 Jurisdiction Boundary

Priority Land Use Boundary

Full Capture Systems

High Density Residential

Commercial

Industrial

Equivalent Alternate Land Use

5. Time Schedule

Comments Received

1. Reduce time schedule for Track 2.
2. Add time schedule for additional areas determined to require trash controls.
3. Add time schedule specific to the MRP and East Contra Costa Municipal Storm Water Permit.

Photo: *LA County Flood Control District*

5. Time Schedule

- **San Francisco Bay Area Municipal Regional Permit and East Contra Costa**
  - Substantially equivalent to Track 2.
  - Prior implementation plan can be deemed equivalent to the Trash Amendments requirements.
  - Earlier full compliance deadline.
- **MS4 Phase I, MS4 Phase II, and Caltrans**
  - 10 years of the effective date of the first implementing permit with interim milestones, but no later than 15 years of Trash Amendments.
  - Removed new development specifications.
- **IGP and CGP**
  - Deadlines specified in the first implementing permit.

5. Time Schedule

Effective date of the Trash Amendments

18 months

Modify, re-issue or adopt a new permit

Issue Water Code Section 13267 or 13383 Order

3 months to select Track 1 or Track 2

18 Months to submit Track 2 implementation plan

10 years, no more than 15 years for final compliance

6. Monitoring and Reporting

Comments Received

1. More guidance on monitoring.
2. Remove receiving water monitoring.
3. Mandatory receiving water monitoring.

Trash Amendments

- **MS4 Track 1:** Reporting to demonstrate installation, operation, and maintenance of full capture systems.
- **MS4 Track 2 and Caltrans:** Demonstrate effectiveness of controls and full capture system equivalency.
  - Questions are guidance.
- **IGP and CGP:** Report control measures.

Other Changes:

Time Extension and Regulatory Source Controls

Comments Received

1. Remove time extensions and regulatory source controls as a Track 2 method of compliance.
2. Retain time extensions and regulatory source controls as a means to support true source control.

Trash Amendments

- Senate Bill 270 (Statewide Plastic Bag Ban) was enacted. Removed time extensions and regulatory source controls.
- Track 2 is focused on controls that reduce trash.

Economic Considerations

- California already spends $428 million to control trash (~$10.70 per resident)
- Estimated Incremental Cost
  - MS4 Phase I - $4 -$10.67 per resident per year
  - MS4 Phase II - $7.77-$7.91 per resident per year
  - IGP - $3,671 per facility
  - Caltrans - $34.5 million capital cost and $14.7 million per year for operation and maintenance

Conclusion

- One of the most recognized pollutants.
- Establishes narrative water quality objective for trash and implementation provisions.
- Land-use based compliance approach that targets high trash generating areas.
- A step towards a trash free California.