Monitoring Trash, TMDLs and Efforts towards Compliance



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Impacts on Beneficial Uses













Los Angeles Times Photo. By Rick Meyer (January 22, 2001

Trash TMDL Locations



Trash TMDLs

- **2000**
 - San Gabriel River East Fork
- **2001**
 - Ballona Creek and Wetland
- **2007**
 - Machado Lake
 - Revolon Slough and Beardsley Wash
 - Ventura River Estuary
 - Lake Elizabeth, Munz Lake and Lake Hughes
 - Legg Lake
 - Los Angeles River (initiated 2001)
- **2008**
 - Malibu Creek Watershed
- **2009**
 - Santa Monica Bay Nearshore and Offshore Zone



Water Quality Objectives

Basin Plan

- "Waters shall not contain floating materials including solids, liquids, foams, and scum in concentrations that cause nuisance or adversely affect beneficial uses."
- "Waters shall not contain suspended or settleable material in concentrations that cause nuisance or adversely affect beneficial uses."

Numeric Target for Trash

- Numeric Target = Zero Trash
 - Consistent with other laws, municipal codes
 - State Board, Office of Administrative Law and EPA approval of zero trash TMDLs
 - Upheld by Court of Appeals





Zero Trash Definition

- Point Sources
 - Zero Trash Discharge

- Nonpoint Sources
 - Zero trash immediately following each cleanup





Compliance Strategy – Trash Point Sources

- Full capture systems
 - Trap all particles greater than 5mm
 - Treat not less than the peak flow rate resulting from a 1-yr, 1-hr storm
- Structural or non-structural Best Management Practices (BMPs)
- Compliance determonation
 - Trash loading reduction
 - Surface area

Certified Full Capture Systems

- Certified by Executive Officer of Regional Board
- 5 site-specific FCS certified
- Gross solids removal devises
- Catch basin inserts
- Trash nets
- Vortex separation system
- Continuous deflect system

Gross Solids Removal Devices Caltrans









Full Capture Systems









Vortex Separation System



Compliance Strategy - Trash Nonpoint Sources

- Minimum Frequency of Assessment and Collection with BMPs (MFAC/BMP) Program
 - Requirement of regular cleanup
 - Assessment
 - Trash Monitoring and Reporting Plan (TMRP)
 - Executive Officer to revise frequency based on effectiveness of MFAC/BMP

Rapid Trash Assessment

Surface Water Ambient Monitoring Program

- Trash Assessment Parameters
 - Level of Trash (20)
 - Actual Number of Trash Items Found (20)
 - Threat to Aquatic Life (20)
 - Threat to Human Health (20)
 - Illegal Dumping (10)
 - Illegal Littering (10)
 - Accumulation of Trash (20)
- Condition Categories
 - Optimal, Suboptimal, Marginal and Poor



MFAC Implementation

- BMPs
 - Applied on water surface and shorelines
 - Manual pickup
 - Skimming boats
 - Fence filters
 - Adding lids to trash cans
- Oxnard
 - GPS documenting devise



Implementation and Monitoring

- Point Sources
 - MS-4 Stormwater Permits
 - 13267 Report Request
 - 20% reduction each year
 - Achieve Zero Trash in 8 years
- Nonpoint Sources
 - Conditional Waiver
 - Cleanup and Abatement Order
 - Achieve Zero Trash in 5 years
- Monitoring Annual TMRP Report

Santa Monica Bay Marine Debris

- Define Debris as trash and plastic pellets
- Ocean Plan:

"Floating particulates and grease and oil shall not be visible."

- AB 258
- Numeric Target: Zero Plastic Pellets in Santa Monica Bay
- Definition: No plastic pellets discharged from industrial facilities

Additional SMBMD Requirements

- Beaches and Harbors
 - MFAC
 - Daily Cleanup
 - Monthly evening evaluation
- Plastic Pellets
 - 3 tier approach
 - Plastic monitoring and reporting plan (PMRP)

Implementation Schedule

- Point Sources: 8 years
- Nonpoint Sources: 5 years

- Special Provisions:
 - Additional 3 year extension if banning the followings in 5 years:
 - Single use of plastic bags
 - Smoking in public places
 - Single use expanded polystyrene food packaging

Los Angeles River Trash Fact Sheet

- Incorporated in MS4 December 2009.
- Baseline: 2719 tons/year for the watershed
- Requirements: Reduce 50% by October 2010
- Responsible Municipalities: 43
- 5 cities exceeded 50%
- FCS by 10 cities: 1313 tons/year
- PCIC by 8 cities: 105 tons/year
- Overall: 52%

Questions?

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