



Storm Water NPDES Program

Public Works Department
Engineering Division

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by Cathy Chang, D. Env.

Associate Engineer/Stormwater Program Manager

Overview of Presentation

- Regulatory Background
- Total Maximum Daily Loads (TMDLs) and Their Requirements
- Fiscal Implications
- Available Options to Alleviate Fiscal Burdens
- Recommendations

Regulatory Background

- Clean Water Act
 - 1972 Clean Water Act– Swimmable, Fishable
 - 1987 Amendments– NPDES (National Pollutant Discharge Elimination System) regulations
- NPDES (federal requirement)
 - Responsibility of the US EPA
 - CA has delegated authority to implement NPDES
- 1st LA County Municipal Stormwater NPDES Permit in 1991
 - reissued in 1996, 2001, and presently undergoing re-issuance.
- 1998 Consent Decree (NRDC, Baykeeper and USEPA) mandates TMDLs for California
 - Total Maximum Daily Loads- numeric daily limits on pollutants causing impairment in 303(d)-listed waterbodies
- Nexus between TMDLs and NPDES
 - TMDLs are implemented through NPDES permits

Municipal Stormwater Permit Six Minimum Controls

- Public Information/ Participation
- Industrial/Commercial Facilities Control
- Illicit Discharge Detection / Elimination
- Construction Site Storm Water Control
- Post-Construction Storm Water Control
 - New Development and Redevelopment
- Pollution Prevention / Good Housekeeping for Municipal Operations

Each of these requirements involve:

- Inspections
- Updated, written plan of action
- Training
- Implementation
- Reporting
- Enforcement

TMDLs and Culver City

Zero Trash

**Bacteria level to
mimic pristine site**

**Metals and toxics
levels < drinking
water levels**

Culver City's TMDLs

Ballona Creek

- Trash
- Bacteria
- Metals

Ballona Estuary

- Bacteria
- Toxics

Marina del Rey Harbor

- Bacteria
- Toxics

Responsible Jurisdictions and Agencies

Ballona Creek/Estuary (81,980 acres)

- Cities
 - Los Angeles (80.90%)
 - Beverly Hills (4.38%)
 - **CULVER CITY (3.90%)**
 - Inglewood (2.33%)
 - West Hollywood (1.45%)
 - Santa Monica (0.32%)
- County of Los Angeles (4.74%)
- Caltrans (1.46%)
- Misc State (0.50%)
- National Park Service (0.02%)

Marina del Rey Harbor (1,855 acres)

- County of Los Angeles (44%)
- Cities
 - Los Angeles (53%)
 - **CULVER CITY (2%)**
- Caltrans (1%)

Watershed, stakeholder-based approach.
Cost-sharing proportional to geographical size since pollutant source attribution rather complicated.

Typical TMDL Requirements

- Special Studies
- Implementation Plan (Plan of Action)
- Monitoring Plan
- Implementation of Best Management Practices and Structural Solutions
- Meet Tiered Compliance Deadline (wet vs. dry weather, integrated approach vs. not)
- Reporting

What to Expect....

In summary,

- Many meetings
- Many cost-sharing Memorandum of Agreements
- Costs in tens of millions to comply

Preliminary TMDL Cost Estimates

- Ballona Creek/Estuary
 - Capital costs: Total Watershed: \$640M~\$1.252B
(Culver City share: \$24M~49M)
 - Annual maintenance costs: Total Watershed: \$44M~\$49M
(Culver City share: \$1.7M~1.9M)
 - Compliance deadline: 2012/2015/2021
- Marina del Rey Harbor
 - Capital costs: Total Watershed: \$46M~\$48M+ α
(Culver City share: \$910K~952K)
 - Annual maintenance costs: Total Watershed: \$0.9M
(Culver City share: \$18K)
 - Compliance deadline: 2014/2020

Reality Check

- \$25M~\$50M over "X" years to be negotiated in MOA
- >\$2.6M in annual BMP maintenance
- Actual costs will most likely exceed above estimates (simple assumptions)
- Culver City NPDES Funding
 - 2004/05: \$50K
 - 2005/06: \$100K
 - 2006/07: \$200K
- Non-Compliance??
 - Cal EPA and US EPA Fines!!
 - Up to \$11,000 per day!!
 - Plus the money they think we should have spent!!

Available Options

- Option 1- Lawsuit
 - Past cases demonstrate limited success in delaying but not overturning requirements
- Option 2- Increase program funding
 - Strategic pursuit of grants (proposition 12, 50, IRWMP, etc.)
 - Greater NPDES allocation of general funds
 - Establish/implement cost-recovery schedule
 - Strengthen ordinance to prevent/eliminate pollutant sources
 - Establish stormwater utility/assessment fee

Strategic Pursuit of Grants

PROS

- Potentially millions of dollars available to City for structural solutions

CONS

- Significant staff time to apply for and manage grant project (requires 20% match)
- Maintenance and operation costs are not covered by grant
- Need concrete strategy to obtain credit during cost-sharing with other TMDL municipalities
- Won't solve all NPDES fiscal problems

Establish/implement cost-recovery schedules

- LSWPPP/SUSMP plan check fees (existing)
 - Needs to be updated to include inspection fees
- Commercial Inspection fees
- Spill clean-up fees
- Enforcement penalty- must include cost recovery for clean up and city's liability
- Trash collection fee (from increased street sweeping and catch basin insert maintenance costs) to meet zero trash TMDL

Strengthen Ordinance to Prevent/Eliminate Pollutant Sources

- Strengthen enforcement of NPDES municipal code
 - Augmented enforcement authority
 - Set penalty amount
- Lower thresholds for (post) construction BMP requirements
- More stringent codes and policy regarding post-construction BMPs-- infiltration, where feasible, and collection/reuse

Establish Stormwater Utility

- Less than 10% of municipalities in LA County has SW fee
- Most passed prior to Prop 218 (requires 2/3 vote)
- Most collected as part of property tax
- Some SW fee include street sweeping
- Massive public education (\$) required to pass fee, post Prop 218
- New legislations in works (e.g. ACA 13) to exempt SW fee from Prop 218

LA County Stormwater Utility Fees

MUNICIPALITY	STORM WATER ASSESSMENT FEE RATE
City of Santa Monica (SW Mgmt User Fee)	~\$36/SFR; varies for comm Total \$1.2M/yr
City of Los Angeles (SW Poll. Abatement Fee)	\$24/SFR/yr + \$10/\$100K prop tax (Prop O) (Prop O adds \$500M to existing fund)
City of Redondo (SW Impact Fee)	\$200~\$450/residential (one-time); \$13/100 sq. ft of commercial (one-time);
City of Manhattan Beach (SW Assessment Fee)	\$20~\$30/SFR; varies for comm Total: \$350K
City of Beverly Hills (SW Enterprise Fund)	\$105/SFR/yr \$600~\$850/yr for comm Total: \$1.7M*
City of Santa Clarita (SW Utility Fee)	\$24/SFR/yr; varies for comm Total: \$2.3M*

Recommendations

- Receive and file staff report
- Direct staff to work with City Controller on various options to increase funding for implementing TMDLs and return to City Council with recommendations.



Additional Supporting Information

Ballona Creek TMDLs Deadlines

TMDL	US EPA Approval Date	Compliance Deadline
Trash (includes wetland)	August 2002	August 2012 (10-yrs), with interim compliance deadlines
Metals (includes Estuary)	January 2005	January 2015 (10-yrs for 100% dry; 50% wet compliance) January 2021 (15-yrs for 100% dry; 100% wet compliance)
Toxic Pollutants (Estuary only)	January 2006	January 2021 (15-yrs) with interim compliance deadlines
Bacteria (includes Estuary and Sepulveda Channel)	Pending early 2007??	2017 (10-yrs) or 2020 (13-yrs) with a demonstrated integrated water resources management approach

Marina del Rey Harbor TMDLs Deadlines

TMDL	US EPA Approval Date	Compliance Deadline
Bacteria (Mother's Beach and Back Basins)	March 2004	March 2014 (10-yrs) or March 2020 (16-yrs) with a demonstrated integrated water resources management approach
Toxic Pollutants (Back Basins only)	Pending June 2006??	2021?? (15-yrs) with interim compliance deadlines

Ballona Creek TMDL Implementation

TMDL	Implementa-tion Plan	Monitoring Plan	Implementation Efforts
Trash (includes wetland)	N/A	N/A	Initiated; To be completed by 2008
Metals (includes Estuary)	Not initiated (Special Study needed)	Initiated	Not initiated
Toxic Pollutants (Estuary only)	Not initiated (Special Study needed)	Initiated	Not initiated
Bacteria (includes Estuary and Sepulveda Channel)	Not initiated	Initiated	Not initiated

Marina del Rey Harbor TMDLs Implementation

TMDL	Implementa- tion Plan	Monitoring Plan	Implementation Efforts
Bacteria (Mother's Beach and Back Basins)	Completed and submitted 2006	Completed and submitted 2006	Started non-structural measures
Toxic Pollutants (Back Basins Only)	Not initiated (Special Study needed)	Initiated	Not initiated

Ballona Creek TMDLs Implementation Costs

TMDL	Assumed BMPs	Est. Watershed Cost	Culver City Cost	Other CC Costs
Trash	N/A	N/A	Prop 50 (const) \$10K/yr(O&M)	\$5K/yr (monitoring)
Metals (includes Estuary)	Vacuum-assisted sweepers; sand filters; infiltration trenches	\$245M~\$335M (const) ~\$37M/yr (O&M)	\$9.6M~\$13M (const) ~\$1.4M/yr (O&M)	\$50K/yr (plans/studies) \$10K/yr (monitoring)
Toxic Pollutants	Same as above	Included in above costs	Included in above costs	\$50K/yr (plans/studies) \$10K/yr (monitoring)
Bacteria	NS flow & bacT source control; cisterns; neighborhood recharge; sand filters; dry weather diversions; NOTF (capture & reuse)	\$375M~\$917M (const) \$7M~12M/yr (O&M)	\$14M~\$35M (const) \$0.3M~\$0.5M/yr (O&M)	\$50K/yr (plans/studies) \$10K/yr (monitoring)
Grand Total		\$640M~\$1.252B (const) \$44M~49M/yr (O&M)	\$24M~\$49M (const) \$1.7M~1.9M/yr (O&M)	\$150K/yr (plans/studies) \$35K/yr (monitoring)

Marina del Rey Harbor TMDLs Implementation Costs

TMDL	Assumed BMPs	Est. Watershed Cost	Culver City Cost	Other CC Costs
Bacteria	Diversion & treatment; circulation; structural and non-structural controls (difficult to estimate)	\$40M+ α (const) \$0.07M/yr (O&M)	\$800K+ α (const) ~\$1.4M/yr (O&M)	\$10K/yr (special study) \$10K/yr (monitoring)
Toxic Pollutants	Vacuum-assisted sweeper; sand filters; infiltration trenches	\$5.5M~\$7.6M (const) \$0.8M/yr (O&M)	\$110K~\$150K (const) ~\$16K/yr (O&M)	\$30K/yr (plans/studies) \$10K/yr (monitoring)
Grand Total		\$45.5M~\$47.6+ α (const) \$0.9M/yr (O&M)	\$910K~\$952K (const) ~\$18K/yr (O&M)	\$40K/yr (plans/studies) \$20K/yr (monitoring)