



Permitting/Regulatory Trends – the View from California

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Overview

- Permitting trends and issues in CA:
 - Receiving water limitations language
 - TMDL implementation
 - Trash amendment
 - Watershed plans in permits
 - Runoff as a resource: retention and use
- Sleepers
 - Biological objectives
 - Nutrient numeric endpoints
 - Toxicity Policy

Receiving Water Limitations Language

- What are RWL?
 - They are in CA NPDES Permits
 - “...discharger shall not cause or contribute to the violation of a receiving water standard...”
 - The Supreme Court found that permittees are liable for violations of receiving water quality standards if the receiving water, and an MS4 discharge both violate.
- Issue
 - Virtually all stormwater NPDES Permittees are vulnerable to lawsuits, similar to NRDC et.al., vs. LACFCD et.al.
- Cost
 - “Remedy” has yet to be determined by the Courts
- Going Forward
 - State regulatory agency (potentially) working on replacement permit language.

TMDL Implementation

- As of 2011, there were 1780 pollutant waterbody combinations listed in California.
- In the US, about 50,000 TMDLs have been approved.
- GAO found in a 2014 report that pollutants reduced, but few de-listings
- GAO recommended changes to TMDL Program

New Implementation Approach

- Caltrans is responsible for compliance with 85 TMDLs. The requirements are applicable to 8 pollutant categories:
 - Sediment, nutrients, mercury, turbidity, metals, pesticides, trash, bacteria, selenium, temperature, and chloride.
- One acre of area treated in a TMDL watershed constitutes one compliance unit. Caltrans is required to achieve 1,650 compliance units per year, 33,000 over 20 years.
- Caltrans estimates the cost of a compliance unit at \$176,000, with an option in the Permit for cooperative programs at \$88,000 per compliance unit.
- Caltrans to spend \$145M to \$290M per year for next 20 years for TMDL compliance (assuming no new TMDLs).

Trash Amendment

- Developed by CA regulatory agency to forestall further trash TMDLs:
 1. Option 1 – Full Capture
Install, operate and maintain full capture systems in storm drains that capture runoff from one or more of the priority land uses/facility/site.
 2. Option 2 – Full Capture and Institutional Measures
Implement a plan with a combination of full capture systems, other treatment controls, institutional controls, and/or multi-benefit projects with same performance results of Track 1 with the MS4 jurisdiction/significant trash generating areas/facility/site.
- Schedule – within about 15 years
- What does it cost:
 - \$4 to \$10 per capita
- Where do we have to do it:
 - Areas with high trash potential: Multifamily, commercial, industrial, transportation land uses.

Watershed Plans

- Permits are moving to be ‘watershed based’
 - San Diego and LA ‘regional’ Permits adopted this approach
 - Watershed plans under development. Require collaboration by jurisdictions.
- Ten plans in SD region:
 - Priority water quality conditions
 - Water quality improvement goals, strategies and schedules (NALs)
 - Monitoring and assessment program
 - Implementation plan

Watershed Plans

- Issues are:
 - Requires capital expenditures to meet interim and final goals
 - May violate cause or contribute language if interim goals are missed
 - Additional enforcement hooks
- Cost
 - Estimates are about \$10 to \$100 per capita per year for implementation over about 20 years. O&M is additional.
 - Costs for watershed plan implementation *should* eliminate future TMDLs

Runoff as a Resource

- Permits require retention or use locally of runoff:
 - “...implement LID BMPs that are designed to retain (i.e. intercept, store, infiltrate, evaporate, and evapotranspire) onsite the pollutants contained in the volume of storm water runoff produced from a 24-hour 85th percentile storm event (design capture volume);
 - Alternative compliance is allowed
 - Hydromodification requirements also apply

Biological Objectives

- Biological Objectives are:
 - Narrative or numeric benchmarks that describe conditions necessary to protect aquatic life beneficial uses
- Why do we need them:
 - CWA: Restore and maintain the physical, chemical and biological integrity of receiving waters
- Potential Issues are:
 - Reference conditions
 - Application – hardened channels?
 - Corrective actions
 - Monitoring
- Cost
 - Unknown since objectives are still under development

Nutrient Numeric Endpoints

- Nutrient Numeric Endpoints are:
 - Used for setting numeric limits for National Pollutant Discharge Elimination System (NPDES) permits; development of Total Maximum Daily Load (TMDL) nutrient numeric endpoints;
- Why do we need them:
 - Eutrophication is a problem for many water bodies (especially estuaries)
 - Can cause domestic water supply issues (Lake Erie and Toledo Ohio)
- Potential issues are:
 - Final numbers
 - How they will be applied
 - Cost – will need to focus on source control to be practical?

Toxicity Policy

- The Toxicity Policy is:
 - Numeric toxicity objectives, a standardized method of data analysis, corresponding monitoring and reporting requirements, and provisions for compliance determination. Water column and sediment.
- Why do we need it:
 - To determine if receiving waters or sediments exhibit acute or chronic toxicity
- Potential issues are:
 - Remedy
- Cost:
 - Unknown