

HOW TO BUDGET FOR YOUR STORMWATER PROGRAM

Panel Overview

California League of Cities

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Panel Overview

- Speakers:

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Discussion Topics

- There will be major changes in the stormwater program over the next 15 years
- Cities must prepare – Asset management planning and cost of service assessments are needed
- Funding of stormwater programs: Proposition 218 is a major barrier. We will discuss funding options that must be initiated now.
- Summary and Planning for the future:
 - CASQA Vision
 - State Board Strategic Initiative
 - California Environmental Dialogue

HOW TO BUDGET FOR YOUR STORMWATER PROGRAM – PART A

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Overview

- Some drivers for increasing costs for stormwater programs:
 - TMDL implementation
 - Trash amendment
 - Biological objectives
 - Nutrient numeric endpoints
 - Toxicity Policy
- New Permitting Approach:
 - Watershed plans
 - Outcome based metrics
- Sleepers
 - RWL Language in Permits
 - Waters of the US Rule

TMDL Implementation

- As of 2011, there were 1780 pollutant water body combinations listed state wide. There is a large potential for this number to keep increasing
- In the US, about 50,000 TMDLs approved
- GAO found in a 2014 report that pollutants reduced but few de-listings
- GAO recommended changes to TMDL Program

Costs of TMDLs

- The Newport Bay Conservancy estimates TMDL compliance in the 'hundreds of millions of dollars' (10 TMDLs likely)
- Chesapeake Bay - \$1.8B
- San Diego County – '20 Beaches': \$2.2-4.1B
- Per capita compliance costs in Newport Bay about \$428
- Per capita compliance costs in Chesapeake Bay about \$105
- Per capita compliance costs in San Diego are \$650 to \$1300
- Caltrans - \$7.6 per capita for TMDL compliance – per year
- Operation and maintenance costs are in addition to these estimates

Trash Amendment – What is it

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

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
 - Assume implementation cost range similar to trash amendment: \$4 - \$10 per capita

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 in CA (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? Assume \$1 per capita

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
- Why do we need it:
 - To determine if receiving waters exhibit chronic toxicity
- Potential issues are:
 - Remedy
 - Cost of remedy. Assume \$5 per capita

New Permitting Approach

- Permits are becoming ‘watershed based’
 - Agreed as best approach by all parties
 - Watershed plans under development in many southern California counties and Cities.
- Permits are becoming ‘outcome based’
 - Means permittees are required to establish defined interim goals for receiving waters and pollutants that do not currently meet basin plan standards
 - Requires an implementation schedule
 - Can prioritize, but...
- Why do we need a new approach
 - General consensus that progress is stalling on water quality improvement

New Permitting Approach

- Potential 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
 - Costs are variable. Plans are under development.
 - 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

The Sleepers – RWL and WOTUS

- What are RWL?
 - 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 (9th Circuit/Supreme Court ruling).
 - Permit language: “...discharger shall not cause or contribute to the violation of a receiving water standard...”
- Why do we need them?
 - We don't
- Potential issues
 - Virtually all stormwater NPDES Permittees are vulnerable to similar lawsuits at this point.
- Cost
 - “Remedy” has yet to be determined by the Courts
- Going Forward
 - CASQA working with the SWRCB on replacement permit language.

WOTUS Rulemaking

- What is the ‘waters of the US rule’?
 - EPA is currently re-evaluating the definition of a ‘waters of the US’. The definition is important, since it determines what is a ‘receiving water’ for protection under the Clean Water Act (CWA).
- Why do we need it
 - This is an existing rule that has been interpreted and modified by the Courts over time (for ex: SWANCC, and Rapanos)
 - ‘isolated’ waters without a ‘significant nexus’ historically excluded as waters of the US.
- Potential issues:
 - Could increase the number of streams in your jurisdiction that are required to meet CWA standards
 - Essentially expands the scope of NDPES permit coverage
- Cost
 - Unknown

Cost Summary

Costs shown are mid-range from those given and very preliminary....

Cost Item	Cost per Capita (\$)
TMDL Implementation	\$700 (present worth)/\$35 (per year)
Trash Amendment	\$7 (per year)
Biological Objectives	\$7 (per year)
Nutrient Numeric Endpoints	\$1 (per year)
Toxicity Policy	\$5 (per year)
New Permitting Approach	\$55 (per year)
Total	\$110 per capita per year