Caltrans Stormwater Permit
Compliance Units
“a new way of doing business”

AASHTO Stormwater Practitioner’s Meeting
Session 7 – TMDL Implementation / Watershed Approach
July 31, 2014

Scott McGowen
Chief Environmental Engineer, Caltrans
Permit Amendment

- Permit Reopener Used
- Incorporate TMDL implementation requirements into Attachment IV
- Modified Region Specific Trash requirements into Attachment V
- TMDL Compliance requirement
  - 1650 units (acres) per year
- Board Adoption on May 19, 2014
- Effective July 1, 2014
Caltrans TMDL Area

Currently named - 84 TMDLs
- Over 4100 centerline miles of Caltrans highway
- 28% of State Highway
- 56,000 acres estimate total TMDL right-of-way
- 2/3 of the state drains to impaired water bodies, many do not currently have a TMDL
- TMDLs are likely to double in the next five years
Past vs. Present TMDL Requirements
(Result of collaboration: a new way of doing business)

Past
- **Prescriptive Individual Requirements**
  - 84 ways of doing business
  - Basin Plan/Watershed-specific
  - CT Waste Load Allocations
  - Time lines varied (10 to 30+ yrs)
- **Three-pronged approach**
  - Retrofits (SHOPP & Capital Projects)
  - Institutional Controls
  - Public Education
- **Unsustainable**
  - Everything, Everywhere
  - Prioritized High/Med/Low

Current
- **Model Practices by Pollutant**
  - Consistent Statewide Approach
  - 20 year timeline
- **Objective Compliance Measure**
  - Acres treated
  - Credit starts at programming
- **Greatest WQ Benefit per Dollar Spent**
- **Flexibility in Implementation**
- **Credit for Some Region-Specific Retrofits**
Past vs. Present TMDL Requirements
(Result of collaboration: a new way of doing business)

Past

- Prescriptive Individual Requirements (85 ways of doing business)
  - Basin Plan/Watershed-specific
  - CT Waste Load Allocations
  - Time lines varied (10 to 30+ yrs)
- Subjective approach
  - Retrofits (SHOPTP & Capital Projects)
  - Institutional Controls
  - Public Education (DTC)
- Unattainable (Everything, Everywhere)
  - Prioritized High/Med/Low

Current

- Model Practices by Pollutant
  - Consistent Statewide Approach
  - 20 year timeline
- Objective Compliance Measure
  - Compliance Unit = Acre treated
  - Credit starts at programming
- Greatest WQ Benefit per $
  - Clear Performance Measures
- Flexibility in Implementation
  - SHOPTP 335
  - Additional Post Treatment
  - Cooperative Implementation
  - Other
Watershed Management

- Coordination
  - State and Regional Boards
  - Caltrans Districts and Functions
  - Local Municipal NPDES Agencies (Cities and Counties)
  - Other Stakeholders
  - Watershed Manager

- Compliance Credit and Tracking of 1650 Units/Yr
  - Project Delivery – Post Construction BMPs
  - Maintenance – Activities
  - SHOPP -335 Stormwater (Stand alone retrofit projects)
  - Cooperative Implementation – Cooperative Agreements, MOUs, etc.
  - other
TMDL Implementation Framework

Reach Prioritization Analysis

- **Sediment/Nutrients/Mercury**
  - Treat Non-impervious Area Only
  - Stabilize Slope
  - Evaluate crossings for scour
  - 15,200 acres (3,300 acres are duplicate)
  - 600 Acres/year
- **Metals**
  - Urban – Treat ROW
  - Rural – vegetation treatment
  - 14,200 Acres
  - 710 Acres/Year
- **Trash**
  - Urban Hotspots – Treat ROW
  - Rural – Institutional controls
  - 8,300 Acres
  - 420 Acres/Year (area overlaps with Metals)
- **Pesticides**
  - Institutional Controls
  - Prohibit use of listed pesticides
- **Temperature**
  - Institutional and Regulatory Controls
- **Chlorides**
  - No Treatment
- **Selenium**
  - Source ID, Treat as needed
- **Bacteria**
  - Urban – Stakeholder Participation
  - 14,000 Acres (7,300 acres overlap with Metals, Sediment)
  - 340 Acres/Year

TMDL Compliance

\[ \text{Sediment 600 ac/yr} + \text{[Metals 710 ac/yr]} + \text{[Bacteria 340 ac/yr]} = \text{1650 Acres/Year} \]

- Compliance is either through implementation of treatment devices or source control (type noted above)
- Assumed as 20 Year Compliance
- Trash TMDLs are in same watershed as Metals TMDLs. BMPs to be implemented will address both pollutants.
- Bacteria TMDLs overlap with other TMDL watersheds categories (Metals and Sediment).

Urban land use designation determined by Census Tract
Reach Prioritization for Each Of Eight Pollutant Category

- Identify Reaches (In Most Watersheds)
- Prioritize Reach Criteria
  - Impairment Status
  - CT percent of Drainage Area
  - Connectivity to Receiving Water
  - Community Environmental Health Impact
Attachment IV – Cooperative Implementation

- Collaboration with MS4s
  - Implementation activities
  - $88,000 = 1 compliance unit (acre)
- Examples
  - Bay Area (Trash and Hg)
  - LA Watershed Programs (EWMP or WMP)
  - San Diego Watershed Program (WQIPs)
- Programmatic Agreements
  - SWRCB Grant Program though Interagency Agreement
  - Potential Third-Party Brokers
Potential Actions for Compliance Units (Credits)

- Stand-alone BMP retrofits
- Cooperative implementation
  - Monitoring program-related retrofits
  - Other Monitoring Efforts, which Leads to Implementation
- Post-construction treatment beyond permit requirements
- Other pollution reduction practices?
  - Institutional controls (e.g., hot spots litter pickup, slope stabilization, sweeping, etc.)
  - True source control (e.g., Brake-Pad Partnership, OGAC)
Post Construction Treatment Requirement

- Treat the added impervious areas when equal to or greater than one acre, or 5000 sqft for facilities

- Treating “more than the minimum” will help
- If a project can treat more impervious area, than credit can be banked for use within the same watershed
- Banked credits can be used for future projects that trigger treatment, but cannot construct treatment for a variety of reasons. eg.:  
  - Unbalanced Cost/Benefit ratio for the BMP  
  - Environmental or Right of Way constraints
Retrofit of Treatment BMPs in TMDL Watersheds

- Minimum of 1650 Compliance Units per Year
  - Credits for impervious AND pervious areas of right of way
  - Post-construction treatment beyond permit requirement is helpful and can be credited
  - Treatment of more than 1650 CUs within a given year, is banked for future year credit
  - Caltrans does not know how much supplemental “extra” credit can be documented with convention capital projects. Standalone retrofit projects will have to make up the remainder. Is 1650 annual CUs reasonable. Time will tell.
Tracking and Reporting Compliance
Environmental Analysis/NPDES

- Administration
- Project Schedule
- Map Tools
- Enforcement Tracking
- Measurable Objectives

- Monitoring
- Municipal Coordination
- Program Development
- SWMP Revisions
- Upload Report or Plan
Design

- Caltrans GIS Data Layers Map
- Stream Crossing Design
- Treatment BMP Inventory
Design

Caltrans GIS Data Layers Map

Use this map to view the various types of Caltrans geographic information related to stormwater. Click GIS Layers to add or remove map items. If layers are grayed out, zoom in further on the map to activate that layer.
BMP Location

TMDL Tool

TMDL Map Tool

Use this map to view the various types of Caltrans geographic information related to TMDLs. Click GIS Layers to add or remove map items. Click on a District, then Zoom to view TMDLs for that District. Click Switch Basemap to change the base GIS map.

605/91 BMP Location
Reporting

- Annual Report
- Permit Deliverables Summary
- TMDL Compliance Tracking
- District Work Plan
- SMARTS Input Summary
- Enforcement Summary
- Measureable Objectives (MOs) Summary
- Report Summary
Resources for Stormwater Compliance

<table>
<thead>
<tr>
<th>FY 13-14 Governor's Enacted Budget</th>
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<tbody>
<tr>
<td>2660-007-0042</td>
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<td>$99,722,000</td>
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- Capital Outlay Support
- Maintenance
- Traffic Operations
- Legal

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<thead>
<tr>
<th>2014 State Highway Operation Protection Plan (SHOPP) (201.335)</th>
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<td>$90,000,000 (constrained need) per 2013 Ten Year SHOPP</td>
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- FY 2014-15
- FY 2015-16
- FY 2016-17
- FY 2017-18

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<th>Capital Projects STIP, SHOPP, and Local Assistance</th>
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<td>Construction BMPs (Temporary)</td>
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<td>Design Pollution Prevention (Permanent)</td>
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<td>Post Construction BMPs (Permanent)</td>
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<td>Orders &amp; Enforcement Actions</td>
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Questions or Comments?

Scott McGowen
scott.mcgowen@dot.ca.gov
Chief Environmental Engineer