# Reissued MRP: How is it the same and how is it different

## *Construction Inspection Workshop*

**May 2016**

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**EOA, Inc.**

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# Outline of Presentation

- Regulatory Background
- New Municipal Regional Permit
- Resources

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# Terms

- **MRP:** San Francisco Bay Municipal Regional Stormwater Permit
- **NPDES:** National Pollutant Discharge Elimination System
- **Receiving Water:** Waters of the U.S. or creeks, rivers, lakes or bays
- **MS4s:** Municipal Separate Storm Sewer Systems
- **RWB:** Regional Water Board

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# Terms

- **BMPs:** Best Management Practices

  CASQA Definition: Includes schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent, eliminate, or reduce the pollution of waters of the receiving waters. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

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# Stormwater Regulations

U.S. EPA → Clean Water Act establishes NPDES permit program

↓

State Water Resources Control Board → NPDES Permitting authority in CA; Issues State Construction General Permit

↓

Regional Water Quality Control Board
9 regions → Issues MRP to Phase I MS4s; Inspects/Enforces State Construction General Permit

↓

Municipal Separate Storm Sewer System (MS4) → Implement Stormwater Program

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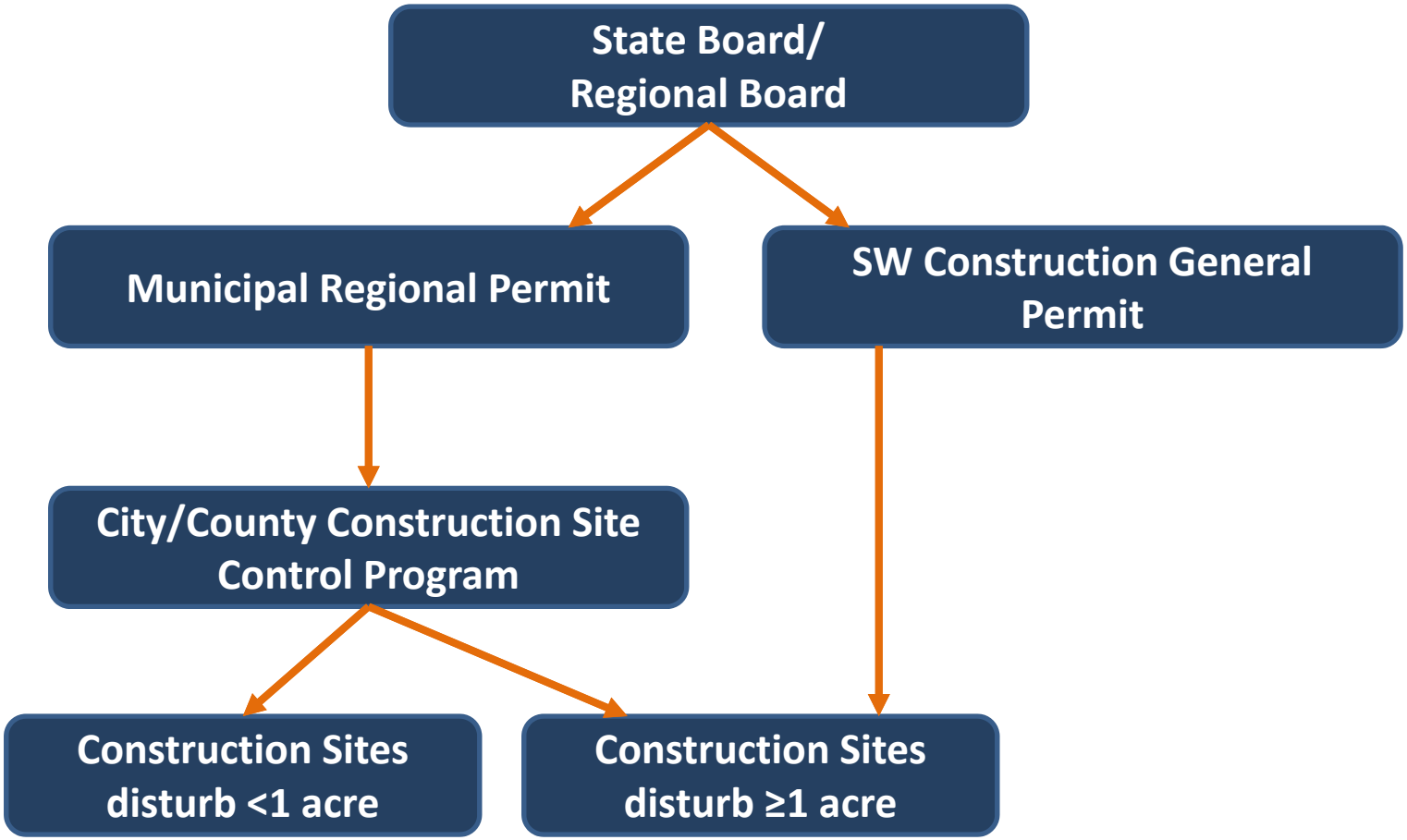
# Construction Site Regulations

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# Municipal Regional Permit (MRP)

- **Regional permit regulating municipal stormwater systems**
- **Applies to 76 cities, counties, and districts in:**
  - Santa Clara, Alameda, Contra Costa, and San Mateo Counties
  - Fairfield and Suisun City (Solano County)
  - Vallejo (Solano County)


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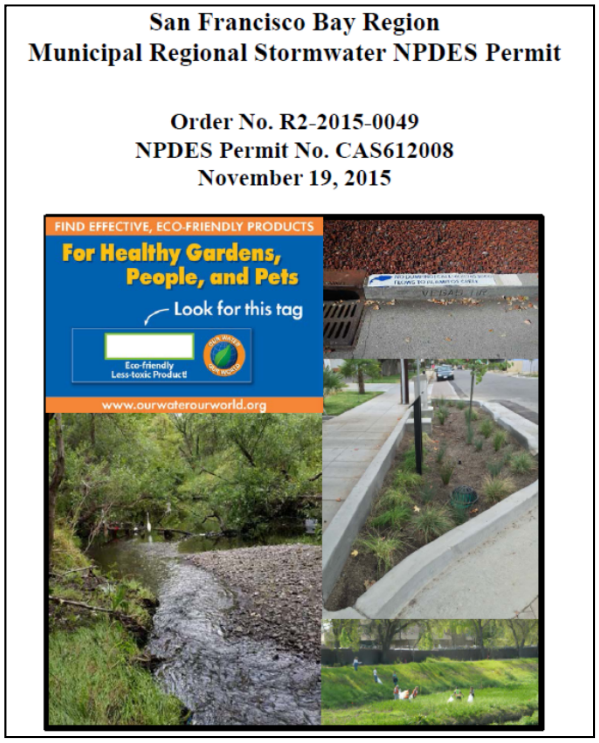
# Municipal Regional Permit (MRP)

- First adopted by Regional Water Board: October 14, 2009
- Permit renewed every 5 years
- Reissued November 19, 2015
- Became effective January 1, 2016

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# Construction Site Control Program

- **MRP Provision C.6**
- **Minor changes in reissued MRP**
- **Implement a construction site inspection and control program**
  - at all construction sites
  - all year long
- **Prevent discharges of pollutants and impacts on receiving waters**

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# Construction Site Control Program Requirements

- **Legal authority – no change**
- **Plan Approval Process – no change**
  - Verify Plans comply with local ordinance/ requirements
  - Verify sites disturbing ≥ 1 acre filed NOI for State Construction General Permit
  - Provide educational materials
- **Require appropriate BMPs within 6 categories – no change**

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# Erosion Control

- **CASQA Erosion Control BMPs**

| | | |
|---|---|---|
| Scheduling | Hydraulic Mulch | Preservation of Existing Vegetation |
| Hydroseeding | Compost Blankets | Soil Preparation/ Roughening |
| Straw Mulch | Wood Mulching | Earth Dikes & Drainage Swales |
| Slope Drains | Streambank Stabilization | Velocity Dissipation Devices |
| Soil Binders | Geotextiles & Mats | Non-vegetative Stabilization |
| | | Wind Erosion Control |


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# Sediment Control

- **CASQA Sediment Control BMPs**

| | | |
|---|---|---|
| Silt Fence | Sediment Basins | Sediment Trap |
| Check Dam | Fiber Rolls | Gravel Bag Berm |
| Biofilter Bags | Sandbag Barrier | Street Sweeping & Vacuuming |
| Temp Silt Dike | Straw Bale Barrier | Storm Drain Inlet Protection |
| Active Treatment Systems | | Compost Socks and Berms |
| Stabilized Construction Entrance/Exit | | Entrance/Outlet Tire Wash |
| Stabilized Construction Roadway | | |

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# Good Site Management

- **CASQA Waste Management & Materials Pollution Control BMPs**

| | |
|---|---|
| Material Use | Material Delivery and Storage |
| Stockpile Management | Spill Prevention and Control |
| Solid Waste Management | Hazardous Waste Management |
| Contaminated Soil Management | Concrete Waste Management |
| Sanitary/Septic Waste Management | Liquid Waste Management |


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# Non-Stormwater Management

- **CASQA Non-Stormwater Management BMPs**

Water Conservation Practices

Paving and Grinding Operations

Clear Water Diversion

Potable Water/Irrigation

Vehicle and Equipment Fueling

Pile Driving Operations

Material & Equipment Use

Demolition Adjacent to Water

Dewatering Operations

Temporary Stream Crossing

Illicit Connection/Discharge

Vehicle and Equipment Cleaning

Vehicle and Equipment Maintenance

Concrete Curing

Concrete Finishing

Temporary Batch Plants

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# Other BMP Categories

- **Run-on Controls**
  - Keep water from off-site, upstream property from flowing through construction site
    - May bring off-site pollutants
    - May increase stormwater runoff flows
      - causing erosion or
      - overwhelming BMPs
- **Runoff Controls**
  - Manage stormwater flow to prevent erosion or flooding at downstream location

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# Other BMP Categories

- **Active Treatment Systems**
  - Are there any in the area?
  - Adds chemicals for coagulation, flocculation and/or filtration
  - State General Permit requires
    - ATS Plan: O&M manual, monitoring, sampling, spill prevention plan,
    - Designated operator & training
    - Data recording system
    - Numeric effluent limits for discharge

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# Minimum Inspection Requirements

- **Pre-wet season letter by September 1st**
- **Monthly inspections during wet season**
  - October 1st – April 30th
- **Applies to following sites (public & private)**
  - disturbing ≥ 1 acre,
  - identified as “high priority”
  - hillside projects disturbing ≥ 5,000 sq ft (NEW - begin inspections July 1, 2016)

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# Minimum Inspection Requirements

- **What is a hillside site?**
  - Based on municipality hillside development maps or criteria

  OR

  - ≥ 15% slope
- **Certify criteria in 2016 Annual Report (due September 30, 2016)**

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# Minimum Inspection Requirements

- **What is a high priority site?**
  - Identified by municipality or Regional Water Board
  - Evaluated considering following factors:
    - High soil erosion potential (e.g., soil type)
    - Steep slope
    - Proximity to creek
    - Compliance issues

  - RWB staff look for procedures during audit

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# Minimum Inspection Requirements

- **Complete inspection form for every required inspection**
- **When construction ends during wet season:**
  - Continue inspections until site fully stabilized
  - If stabilizing with vegetation, assume “fully stabilized” when 70% vegetative cover
- **Document “Last” inspection**

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# Inspection Recordkeeping

- **Tracking and reporting of data:**
  - Site name and inspection date
  - Weather during inspection
  - Enforcement response level
  - Problems in 6 BMP categories or illicit discharge
  - Resolution of problems
  - Comments
  - (REMOVED) whether it rained since the last inspection
  - (REMOVED) specific problems

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**FAILURE TO CORRECT VIOLATION(S) within 10 business days (or as specified in this notice) may result in PENALTIES described on page 2!**

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# CONSTRUCTION SITE INSPECTION REPORT

1. Inspection Date:_____ 1a. Current weather conditions: _____ ~~1b. Rainfall with runoff since last inspection? ❑ Yes ❑ No~~

2. Name of Project: _____ 2a. Project No./Permit No._____

3. Project Address: _____

4. Inspection Type: ❑ Routine ☐ Follow-up ☐ Other

5. Permit Type: ☐ Building Permit ☐ Grading Permit ☐ Site Development ☐ CIP Project

6. Project disturb ≥ 1 acre?:___(Y/N - If Yes, inspect monthly during wet season.) NOI Required:___(Y/N) SWPPP dated ___/___/___
Project covered under statewide Construction General Permit?___(Y/N) SWPPP on site?____(Y/N)

7. High Priority Site (significant threat to water quality)? _____ Hillside Site?_____ (Y/N - If Yes, inspect monthly during wet season.)

8. Project Type: ❑ Residential ❑ Commercial/Industrial ❑ Institutional ❑ Landscaping
❑ Utility (water,sewer, PG&E) ❑ Grading ❑ Demolition ❑ Street Improvement ❑ Other:_____

| 9. Erosion Control Measures: | Inspection Finding (A / NM / P / NA)* | Location on site/Comments |
|---|---|---|
| ☐ Jute Netting/Fiber Blankets | | |
| ☐ Mulch | | |
| ☐ Hydroseed/Soil binder/Compost blanket | | |
| ☐ Mark Areas to be Preserved | | |
| ☐ Tree Protection Fencing | | |
| ☐ Riparian Area Barrier | | |
| **10. Sediment Control Measures** | | |
| ☐ Stabilized construction entrance | | |
| ☐ Street Sweeping | | |
| ☐ Dust Control | | |
| ☐ Wattles / Fiber Rolls / Compost Socks | | |
| ☐ Silt Fences / Compost Berms | | |
| ☐ Sedimentation Basin | | |
| ☐ Check Dams | | |
| ☐ Inlet Filters (Gravel bags) | | |
| ☐ Earth Dikes / Drainage Swales | | |
| **11. Run-on and Runoff Control** | | |
| ☐ Earth Dikes / Drainage Swales | | |

# Inspection Recordkeeping

- **Database/spreadsheet of inspections**
- **RWB has requested these tables**
- **Inspection tables should match Annual Report summaries**
- **2015-2016 Annual Reporting same as previous years**
- **2016-2017 Annual Report and forward**
  - Begin reporting hillside site inspections (NEW)
  - Small reduction in reporting requirements

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# Enforcement Response Plan

- **Permittees should review ERPs and confirm meet new detailed description of contents**
- **Description of procedures/guidance for**
  - Appropriate enforcement actions
  - Follow up inspections
  - Referrals to another agency
  - Time period for implementing corrective actions
  - Roles and responsibilities of staff

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# Enforcement Response Plan

- **Discuss escalating enforcement tools for different field scenarios**
  - Potential discharges
  - Actual discharges
  - Non-compliance with previous enforcement actions
  - Sites with history of potential/actual discharges
- **(NEW) No longer use "violations" refers to actual and potential discharges**

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# Enforcement Response Plan

- **Timely Correction**
  - Actual non-stormwater discharges cease immediately (NEW)
    - Construction General Permit authorized non-stormwater discharges conditionally allowed
  - Corrective actions implemented
    - Within 10 business days,
    - Or before next rain event,
    - OR record rationale for longer compliance.

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# Source Control: Copper (Provision C.13.a)

- **Runoff from architectural copper can impact water quality and aquatic life**
  - Concerns during installation, treatment and washing

- **When issuing building permits require BMPs**
- **Annually report permitting and enforcement**
- **2016 Annual Report: report how addressed through issuance of building permit (NEW)**

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# Requirements for Architectural Copper

**Protect water quality during installation, cleaning, treating, and washing!**

## Copper from Buildings May Harm Aquatic Life

Copper can harm aquatic life in San Francisco Bay. Water that comes into contact with architectural copper may contribute to impacts, especially during installation, cleaning, treating, or washing. Patination solutions that are used to obtain the desired shade of green or brown typically contain acids. After treatment, when the copper is rinsed to remove these acids, the rinse water is a source of pollutants. Municipalities prohibit discharges to the storm drain of water used in the installation, cleaning, treating and washing of architectural copper.

*Building with copper flashing, gutter and drainpipe.*

## Use Best Management Practices (BMPs)

The following Best Management Practices (BMPs) must be implemented to prevent prohibited discharges to storm drains.

### *During Installation*

- If possible, purchase copper materials that have been pre-patinated at the factory.
- If patination is done on-site, implement one or more of the following BMPs:
  - Discharge the rinse water to landscaping. Ensure that the rinse water does not flow to the street or storm drain. Block off storm drain inlet if needed.
  - Collect rinse water in a tank and pump to the sanitary sewer. Contact your local sanitary sewer agency before discharging to the sanitary sewer.
  - Collect the rinse water in a tank and haul off-site for proper disposal.
- Consider coating the copper materials with an impervious coating that prevents further corrosion and runoff. This will also maintain the desired color for a longer time, requiring less maintenance.

*Storm drain inlet is blocked to prevent prohibited discharge. The water must be pumped and disposed of properly.*

### *During Maintenance*

Implement the following BMPs during routine maintenance activities, such as power washing the roof, re-patination or re-application of impervious coating:

- Block storm drain inlets as needed to prevent runoff from entering storm drains.
- Discharge the wash water to landscaping or to the sanitary sewer (with permission from the local sanitary sewer agency). If this is not an option, haul the wash water off-site for proper disposal.

## Protect the Bay/Ocean and yourself!

If you are responsible for a discharge to the storm drain of non-stormwater generated by installing, cleaning, treating or washing copper architectural features, you are in violation of the municipal stormwater ordinance and may be subject to a fine.

*Photo credit: Don Edwards National Wildlife Sanctuary*

## Contact Information

The San Mateo Countywide Water Pollution Prevention Program lists municipal stormwater contacts at www.flowstobay.org (click on "Business", then "New Development", then "local permitting agency").

*FINAL February 29, 2012*

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# Statewide Construction SW General Permit (CGP)

- Applies to projects that disturb ≥1 acre of land in California
- RWB staff responsible for compliance inspections & enforcement
- Contains requirements for minimum BMPs, inspections, sampling, SWPPP, reporting (SMARTs), QSP/QSD certification
- SMARTs public reports for NOI sites in your city

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# Why do you need to know about the CGP?

- **MRP requirement to**
  - verify owners of construction sites that disturb ≥ 1 acre have filed NOI for coverage by CGP
  - inspect construction sites that disturb ≥ 1 acre monthly during wet season for compliance with local ordinances

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# Why do you need to know about the CGP?

- **Reviewing SWPPP, QSP inspection records, sampling results, etc. may help inform your MRP inspection**
- **Public projects ≥ 1 acre must file for coverage under the CGP**
- **Overall site compliance reflects on your inspection program**
  - Referral to Regional Water Board for assistance with compliance

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# Overview of SMCWPPP

- San Mateo Countywide Water Pollution Prevention Program
- Program of City/County Association of Governments of San Mateo County (C/CAG)
- 20 Cities/Towns plus County and Flood Control District
- Assist Municipalities with Countywide Stormwater Permit Compliance Activities
- Matt Fabry, Program Coordinator
- Website – www.flowstobay.org

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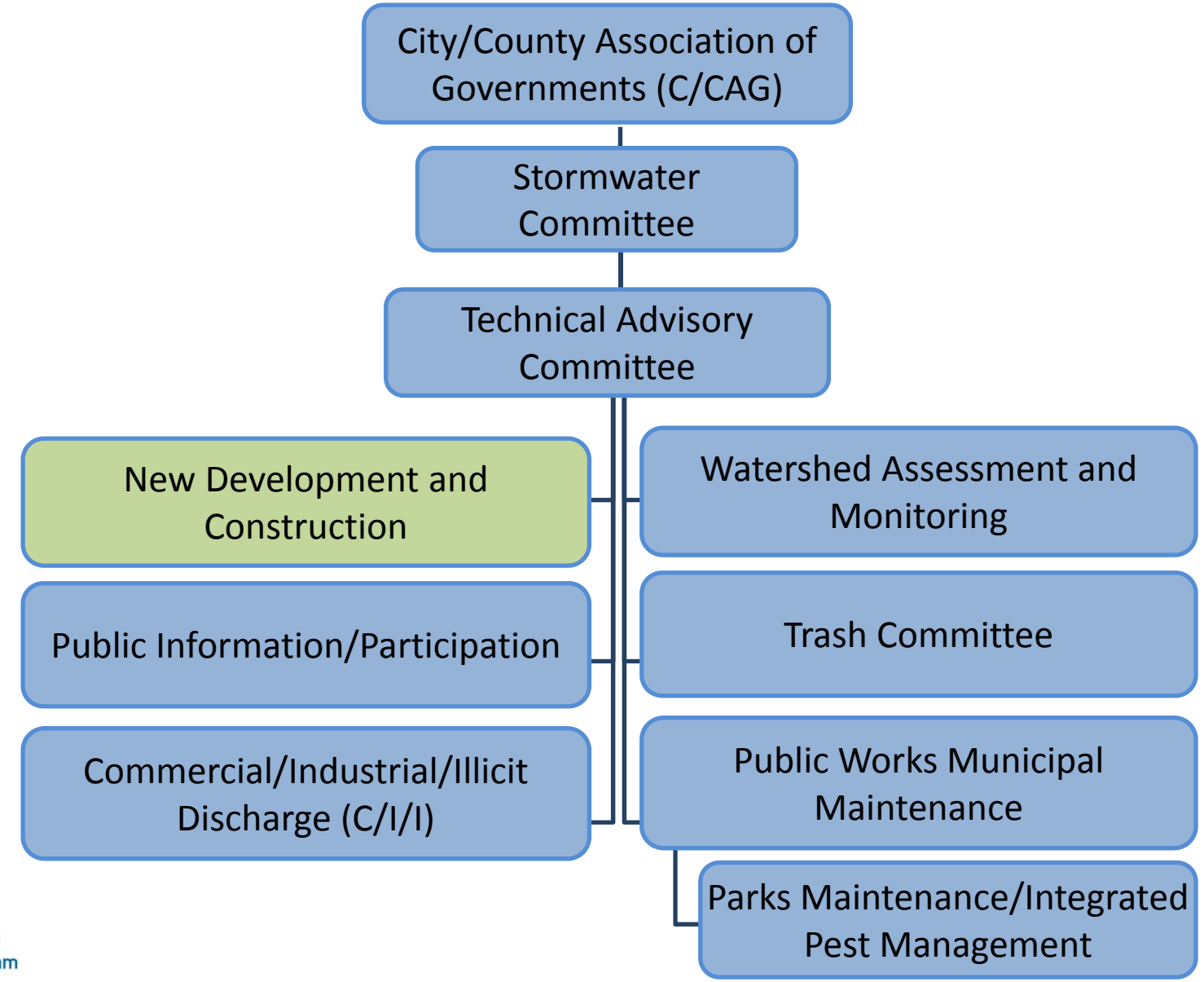
# San Mateo Countywide Water Pollution Prevention Program Organizational Structure

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# Resources…

- **SMCWPPP Construction BMP Resources**
  - http://www.flowstobay.org/construction
- **CASQA Construction BMP Handbook Portal**
  - available on web by subscription
  - contact your agency stormwater coordinator for information on how to access the portal
  - www.casqa.org


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# SMCWPPP Website

- www.flowstobay.org
- At Work tab – choose Construction Sites
- At Work tab – choose Brochures
- About Our Program – choose Presentations for training material
- Members only New Development webpage

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Participate In An Event

College Of San Mateo Earth Day
April 22, 10 am to 01 pm
MORE INFO >

Rainwater Harvesting & Graywater Reuse Class
April 23, 10 am to 11 am
MORE INFO >

City Of Belmont: 2016 Earth Day Celebration
April 23, 09 am to 12 pm
MORE INFO >

More Events

# Construction

Soil, cement wash, asphalt, oil and other hazardous debris from construction sites can make their way into the San Mateo County storm drain system, flowing untreated into local creeks, the San Francisco Bay, and the Pacific Ocean. This page provides resources to help project applicants include construction stormwater controls in development project designs. These resources are organized in the following sections:

- Construction Best Management Practice (BMP) Tips
- Construction BMP Brochures
- Creek and Wetland Permitting
- Forms and Checklists
- Posters
- Additional Information

## Construction BMP Tips

Follow these best management practices to prevent pollution, protect public health and avoid fines or legal action:

**Store Materials Safely:** Keep construction materials and debris away from the street, gutter and storm drains. Cover exposed stockpiles of soil, sand or gravel and excavated material with plastic sheeting, protected from rain, wind and runoff.

**Preventing Erosion:** Riparian Erosion and Sediment Control brochure. Avoid excavation or grading during wet weather. Plant temporary vegetation or add hydro mulch on slopes where construction is not immediately planned and permanent vegetation once excavation and grading are complete. Construct diversion dikes to channel runoff to a detention basin and

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# Construction BMP Outreach Materials

- Construction BMP Plan Sheet
- Fresh Concrete & Mortar Application
- Earth-Moving Activities
- General Construction & Site Supervision
- Heavy Equipment Operation
- Landscaping, Gardening, & Pool Maintenance
- Roadwork and Paving

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# Construction BMP Outreach Materials

- Painting and Application of Solvents and Adhesives
- Blueprint for a Clean Bay: Best Management Practices to Prevent Stormwater Pollution from Construction-Related Activities (BASMAA)
- Building Demolition and Mercury Hazards
- Stormwater Construction Poster

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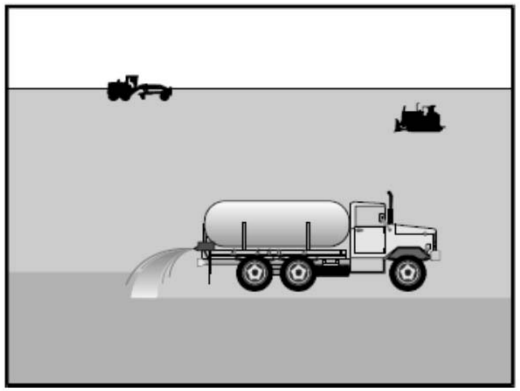
# CASQA BMP Fact Sheets

## Soil Binders EC-5



### Categories

| | | |
|---|---|---|
| EC | Erosion Control | ☑ |
| SE | Sediment Control | |
| TC | Tracking Control | |
| WE | Wind Erosion Control | ☒ |
| NS | Non-Stormwater Management Control | |
| WM | Waste Management and Materials Pollution Control | |

**Legend:**
☑ Primary Category
☒ Secondary Category

### Description and Purpose

Soil binding consists of application and maintenance of a soil stabilizer to exposed soil surfaces. Soil binders are materials applied to the soil surface to temporarily prevent water and wind induced erosion of exposed soils on construction sites.

### Suitable Applications

Soil binders are typically applied to disturbed areas requiring temporary protection. Because soil binders, when used as a stand-alone practice, can often be incorporated into the soil, they are a good alternative to mulches in areas where grading activities will soon resume. Soil binders are commonly used in the following areas:

- Rough graded soils that will be inactive for a short period of time
- Soil stockpiles
- Temporary haul roads prior to placement of crushed rock
- Compacted soil road base
- Construction staging, materials storage, and layout areas

### Limitations

- Soil binders are temporary in nature and may need reapplication.

### Targeted Constituents

| | |
|---|---|
| Sediment | ☑ |
| Nutrients | |
| Trash | |
| Metals | |
| Bacteria | |
| Oil and Grease | |
| Organics | |

### Potential Alternatives

EC-3 Hydraulic Mulch
EC-4 Hydroseeding
EC-6 Straw Mulch
EC-7 Geotextiles and Mats
EC-8 Wood Mulching



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# Contact Information


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