

Stormwater Management Plan:

Construction Site Storm Water Runoff Control



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Overview

- What does this cover?
- Program Goal
- Element Activities

What does this cover?

- Construction sites and:
 - ♦ Design engineers
 - ♦ Owners
 - ♦ Applicants for construction site permits
 - ♦ Managers who work on site
 - ♦ Contractors
 - ♦ Inspectors
 - ♦ Regulatory staff



Program Goal

- To develop best management practices and procedures for sediment and erosion control on construction sites
- To regulate construction site activities with respect to managing stormwater runoff and pollution

Element Activities

- BMP (Best Management Practices) Design Manual
- SWPPP (Stormwater Pollution Prevention Plan) Plan Review
- Procedures
- Site Operator Training
- Inspection And Enforcement

BMP Design Manual

- Manual will
 - ♦ Highlight controls for managing water quality and quantity
 - ♦ Provide guidance for adequate site design
 - ♦ Be pursuant to City and State Stormwater Regulations
- For use by
 - ♦ Plan reviewers
 - ♦ Consultants



SWPPP Plan Review

- Review of Construction Plans for:
 - ◆ Hydrology (quantity of runoff)
 - ◆ Hydraulics (depth and capacity of runoff)
 - ◆ Quality (bordering/on-site pollutants of concern)
 - ◆ Structural Controls (for sediment & erosion control)
 - ◆ Adequate/Standard design details
 - ◆ Regulatory requirements (certification statements, sequencing, stabilization requirements)
 - ◆ Maintenance/Ownership responsibilities



Procedures

- Develop/Implement
 - ◆ Responsibility for overall management and implementation
 - ◆ Ordinance
 - ◆ Standard Operating Procedures (SOPs)
 - ◆ Training for Construction Site Operators
 - ◆ Enforcement policy to ensure compliance
 - ◆ Reporting Procedures
 - ◆ Evaluation of measurable goals

Site Operator Training

- Emphasize
 - ◆ proper sediment and erosion control BMPs
 - ◆ ideal ways to control waste on site
 - ◆ how to prepare SWPPPs for sites discharging to impaired waters
 - ◆ enforcement of required actions for compliance



Inspection & Enforcement

- Implement permit tracking system
- Inventory, prioritize and inspect all ongoing sites
- Track operation and maintenance of stormwater controls
- All new sites will need inspections within first 2 weeks of activity
- Response Mechanism for Complaints
- Monthly inspections
- Enforcement of any/all violations not compliant



Stormwater Management Plan: Flood Control Projects



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Overview

- What does this cover?
- Program Development

What does this cover?

- City projects to manage flooding also need to consider water quality and watershed impacts



Program Development

- Address water quality issues when retrofitting existing flood control structures.
- Incorporate these ideas into any flood control project planning.

Program Development

- Assess water quality impacts on waterbodies for all flood management projects in the watershed planning process.
- Use design criteria consistent with State flood control regulations.



Stormwater Management Plan:

Post Construction Stormwater Management in New Development and Redevelopment



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Overview

- What does this cover?
- Program Goal
- Program Tracking
- BMP Design and Maintenance

What does this cover?

- Project owners
- Property owners
- Regulators
- Design Engineers



Program Goal

- For new development and redevelopment after construction has ceased
 - ◆ To protect receiving waters from the discharge of pollutants by reducing it to the maximum extent practicable (MEP).
 - ◆ To protect water quality and to satisfy the appropriate water quality requirements of the Clean Water Act.
 - ◆ Develop and implement specific BMPs that will address pollutants of concern within our watersheds



Program Tracking

- Develop measurable goals based on our watersheds
- Develop project review, approval, compliance and enforcement requirements
- Summary of inspections and enforcement actions taken for post-construction
- Summary of changes to local ordinances or other documents outlining these standards
- Tracking and maintenance of records for post-construction review



A worker inserts a catch basin insert for oil and grease, trash, debris, and sediment removal from stormwater as it enters the storm drainage system (Source: AB Tech Industries, 2011).



BMP Design and Maintenance

- Create and implement design standards for post-construction stormwater quality
- Develop long-term operation and maintenance of structural post-construction controls
- Develop a schedule to demonstrate proper performance of these controls to the MEP
- Document annually the implementation and outcomes of such BMPS




Thank you!

