

EXHIBIT B-5.III

Municipal Activities Program



Field Program Model Maintenance Procedure Training

**Field Programs Model
Maintenance Procedures Training**

Module B-5.III



**Audience: Management or
Superintendents Responsible for
Street Sweeping, Drainage Facility
Cleaning, or other City-wide
Municipal Programs**

Time: 3 hours





**Field Programs Model
Maintenance Procedure
Training**

Name
Affiliation
Location
Date



Introduction



Introduction

**Water Resources are
Crucial to Orange County**

Water provides recreation
for Orange County
residents.



It attracts tourists,
boosting the local
economy.






It is home to many
types of wildlife.

Introduction

Potential Impacts




- Urban runoff and stormwater pollution can impact the ocean, beaches and creeks, harming wildlife and impairing peoples' ability to enjoy the water.



Introduction

Sources of Pollution


- Homes
- Businesses
- Construction sites
- Municipal facilities



Introduction

Path of Pollutants

- Potential pollutants may run off driveways, streets and gutters into stormdrains.
- The stormdrains lead to creeks and rivers, where pollutants can flow untreated into the ocean.




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Introduction

It's Everyone's Responsibility

- Urban runoff and stormwater pollution is not just a coastal issue-it starts in all regions of the community and affects water quality from the mountains to the ocean.



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Introduction

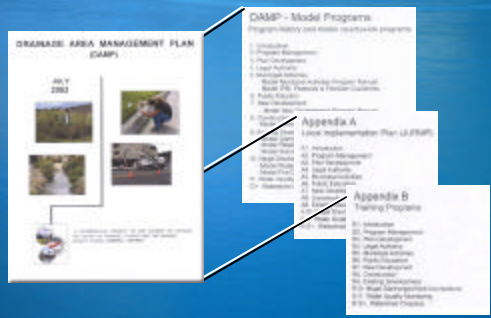
It's Your Responsibility

- Everyone must help to reduce urban runoff and stormwater pollution.
- This training will help explain what you can do while conducting field program maintenance to help implement the Orange County Stormwater Program.

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Introduction

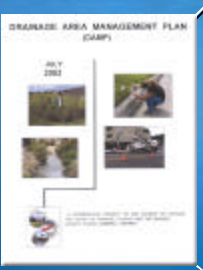
OC Stormwater Program



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Introduction

Program Elements



DAMP - Model Programs
Program history and model countywide programs

1. Introduction
2. Program Management
3. Plan Development
4. Legal Authority
5. Municipal Activities
6. Public Education
7. New Development
8. Construction
9. Existing Development
10. Illegal Discharges/Illicit Connections
11. Water Quality Monitoring - SDR/ SAR
12. Watershed Chapters

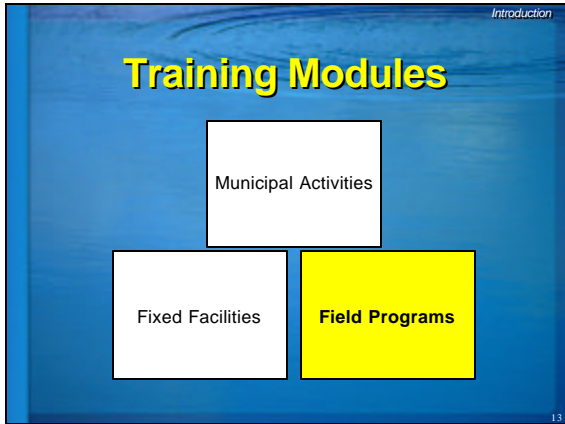
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Introduction

Training Outline

- Introduction
- Training Goal
- Field Programs
- Model Maintenance Procedures for Field Programs
- Questions

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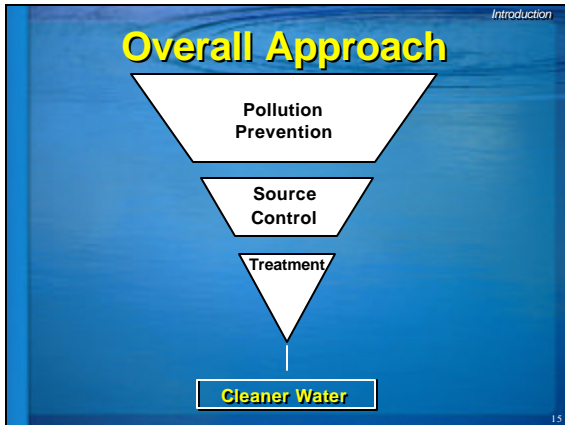


Introduction

Training Goal

Introduce Model Maintenance Procedures for Field Programs

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Introduction

Regional Board Boundaries within Orange County

Region	Watershed	Identifier
Region 8 Santa Ana	CoyoteCreek	A
	Carbon Canyon	B
	Westminster	C
	Talbert	D
	Santa Ana River	E
	San Diego Creek	F
	Newport Bay	G
	Los Trancos / Muddy Creek	H
Region 9 San Diego	Laguna Canyon	I
	Aliso Creek	J
	Salt Creek	K
	San Juan Creek	L
	Prima Deshecha & Segunda Deshecha	M

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Field Programs

Field Programs

- Non-stationary, municipally operated programs, for example:
 - Street Sweeping
 - Landscape Maintenance
 - Solid Waste Handling

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Field Programs

Field Programs

- Lake Management
- Landscape Maintenance
- Roads, Streets, and Highways O&M
- Drainage Facility Maintenance and Cleaning
- Fountains, Plazas, and Sidewalks Maintenance and Cleaning
- Solid Waste Handling
- Water and Sewer Utility O&M

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Field Programs

Drainage Facilities

Drainage facilities are stationary locations, but considered a Field Program as they exist city-wide.

Main Drainage Facility Types	Sub-Category Drainage Facility Types
Flood Management Projects and Flood Control Devices	Detention/Infiltration Basins
	Sedimentation Basins
Drainage System	Catch Basins
	Other Inlet Structures
	Open Channels
	Pump Stations
	Dry Weather Diversion

Based on Table 5.8, DAMP

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Field Programs

Field Programs

- Numerous Field Program activities can impact water quality
 - Mowing, Trimming/Weeding, and Planting
 - Irrigation
 - Street Repair & Maintenance
 - Litter Control
 - Water Line Maintenance
 - Drainage Facility Maintenance

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Field Programs

Field Program Activities

Main Field Program Types	Sub-Category Types/Activities
Lake Management	Fertilizer & Pesticide Management
	Mowing, Trimming/Weeding, Planting
	Managing Landscape Waste
	Controlling Litter
	Erosion Control
	Controlling Illegal Dumping
	Bacteria Control
	Monitoring

Based on Table 5.6, DAMP

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Field Programs

Field Program Activities

Main Field Program Types	Sub-Category Types/Activities
Landscape Maintenance	Mowing, Trimming/Weeding, Planting
	Irrigation
	Fertilizer & Pesticide Management
	Managing Landscape Waste
	Erosion Control

Based on Table 5.6, DAMP

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Field Programs

Field Program Activities

Main Field Program Types	Sub-Category Types/Activities
Roads, Streets, and Highways Operations and Maintenance	Sweeping & Cleaning
	Street Repair & Maintenance
	Bridge & Structure Maintenance

Based on Table 5.6, DAMP

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Field Programs

Field Program Activities

Main Field Program Types	Sub-Category Types/Activities
Fountains, Plazas, and Sidewalk Maintenance and Cleaning	Surface Cleaning
	Graffiti Cleaning
	Sidewalk Repair
	Controlling Litter
	Fountain Maintenance

Based on Table 5.6, DAMP

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Field Programs

Field Program Activities

Main Field Program Types	Sub-Category Types/Activities
Solid Waste Handling	Solid Waste Collection
	Waste Reduction & Recycling
	Hazardous Waste Collection
	Litter Control

Based on Table 5.6, DAMP

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Field Programs

Field Program Activities

Main Field Program Types	Sub-Category Types/Activities
Water and Sewer Utility O&M	Water Line Maintenance
	Sanitary Sewer Maintenance
	Spill/Leak/Overflow Control, Response, and Containment

Based on Table 5.6, DAMP

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Field Programs

Field Program Activities

- Field Programs or specific activities within Field Programs may be contracted out.
- Like municipal employees, contractors must be protective of water quality while performing activities.

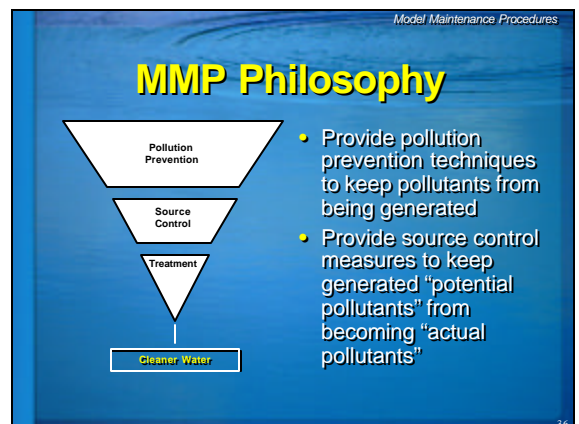
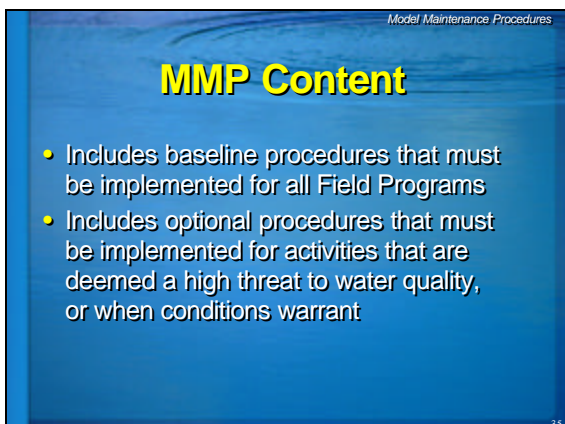
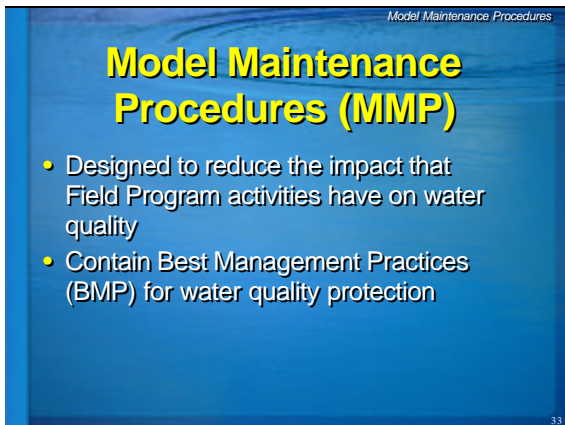
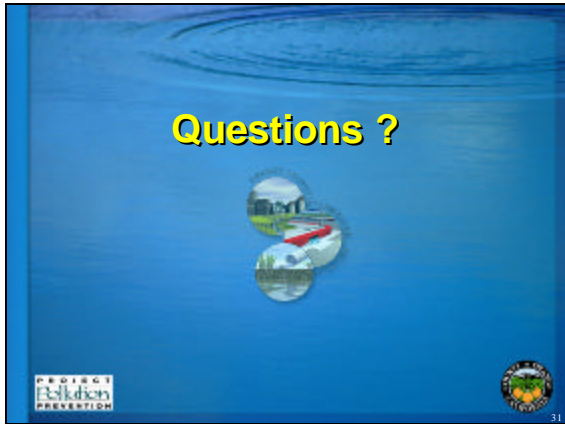
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Field Programs

Field Program Activities

- Field Program activities must be performed in a manner that is protective of water quality.
- Model Maintenance Procedures have been developed.

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Lake Management





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Lake Management

FP-1



Lake Management activities may produce potential pollutants

- Pesticides/fertilizers
- Landscape waste
- Trash
- Sediments






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Lake Management

FP-1

- Model Maintenance Procedures are included for:
 - Fertilizer and Pesticide Management
 - Mowing, Trimming/Weeding, and Planting
 - Managing Landscape Waste
 - Controlling Litter
 - Erosion Control
 - Controlling Illegal Dumping
 - Bacteria Control
 - Monitoring

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Landscape Maintenance





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Landscape Maintenance

FP-2



- Potential pollutants from Landscape Maintenance Activities include:
 - Landscape waste
 - Sediments
 - Pesticides
 - Fertilizers




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Landscape Maintenance




FP-2

- Model Maintenance Procedures are included for:
 - Mowing, Trimming/Weeding, and Planting
 - Irrigation
 - Fertilizer and Pesticide Management
 - Managing Landscape Waste
 - Erosion Control





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Roads, Streets, and Highways Operations and Maintenance

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Roads, Streets, and Highways Operations and Maintenance



- Potential pollutants from Operations and Maintenance Activities include:
 - Oil and grease
 - Trash
 - Sediments

FP-3

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Roads, Streets, and Highways Operations and Maintenance

- Model Maintenance Procedures are included for:
 - Sweeping & Cleaning
 - Street Repair & Maintenance
 - Bridge and Structure Maintenance

FP-3

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Sidewalk, Plaza and Fountain Maintenance and Cleaning





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Sidewalk, Plaza, and Fountain Maintenance and Cleaning

- Potential pollutants from Maintenance and Cleaning Activities include:
 - Litter
 - Chlorine and algaecides from fountain water

FP-4

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Sidewalk, Plaza, and Fountain Maintenance and Cleaning

- Model Maintenance Procedures are included for:
 - Surface Cleaning
 - Graffiti Cleaning
 - Sidewalk Repair
 - Controlling Litter
 - Fountain Maintenance

FP-4

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FP-5

Solid Waste Handling





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Solid Waste Handling





- Potential pollutants from Solid Waste Handling Activities include:
 - Trash
 - Hazardous waste




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Solid Waste Handling

- Model Maintenance Procedures are included for:
 - Solid Waste Collection
 - Waste Reduction and Recycling
 - Hazardous Waste Collection
 - Litter Control

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Water and Sewer Utility Operations and Maintenance

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Water and Sewer Utility Operations and Maintenance



Utility Operations and Maintenance Activities can produce spills, leaks, or overflows from water and sewer systems that can affect water quality.

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Water and Sewer Utility Operations and Maintenance

- Model Maintenance Procedures are included for:
 - Water Line Maintenance
 - Sanitary Sewer Maintenance
 - Spill/Leak/Overflow Control, Response, and Containment

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Drainage Facility Operation and Maintenance





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Drainage Facility Operation and Maintenance

DF-1



- Drainage Facilities collect and transport various potential pollutants
- Periodic cleaning and removal is required






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Drainage Facility Operation and Maintenance




DF-1

- Model Maintenance Procedures are provided for:
 - Inspection and Cleaning of Stormwater Conveyance Structures
 - Controlling Illicit Connections and Discharges
 - Controlling Illegal Dumping




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Questions ?

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Conclusion







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Conclusion

Conclusion

- Your activities can impact water quality.
- MMPs are designed to help you perform activities in a manner protective of water quality.
- Lead by example.





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Conclusion

Remember

- Everyone benefits from clean water, and everyone has a responsibility to protect it by reducing urban runoff and stormwater pollution.



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Conclusion

Resources

For more information:
Visit www.ocwatersheds.com
or
Call the Orange County Stormwater Program at 714-567-6363.



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Conclusion

Thank You!

Thank you for attending and learning how you can help!



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Conclusion

Handouts

- Meeting Agenda
- Model Maintenance Procedure Fact Sheets
- Hard copy of presentation
- Contact list

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