



Existing Development Program

Module B-9.II

Audience: Code Enforcement and Inspection Staff
Time: 2-3 hours





Field Implementation of Existing Development Program

Industrial, Commercial, Residential, and CIA/HOA Components

Name
Affiliation
Location
Date



Introduction



Water Resources are Crucial to Orange County

Water provides recreation for Orange County residents.



It attracts tourists, boosting the local economy.

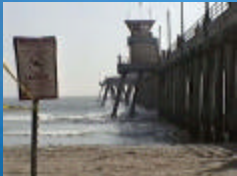


It is home to many types of wildlife.

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

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

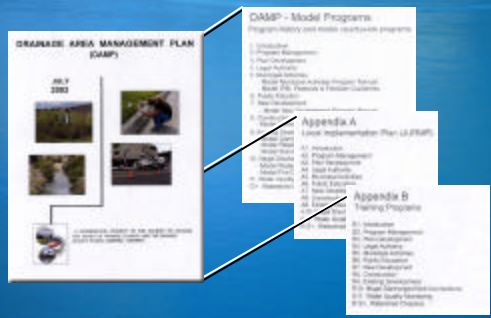
It's Your Responsibility

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

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Introduction

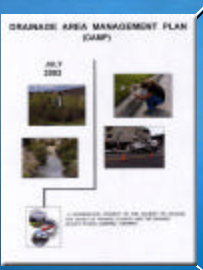
OC Stormwater Program



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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

Programs for Existing Development



Industrial Program



Commercial Program



Residential Program



Common Interest Areas and Homeowners Association Program

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Introduction

Training Goal

- Provide Information Necessary for Proper Implementation of Field Activities Related to the Industrial/ Commercial, Residential, and CIA/HOA Programs.

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Introduction

Training Outline

- Existing Development - Introduction
- Industrial
- Commercial
- Residential
- Common Interest Areas/Home Owner Associations (CIA/HOA)
- Break-
- Inspection Procedures and Enforcement

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Existing Development Introduction





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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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Existing Development - Introduction

Program Overview

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    graph TD
      Inventory --> Prioritization
      Prioritization --> BMP[BMP Implementation  
(including enforcement activities)]
      Prioritization --> Inspection[Inspection Requirements]
      Inspection --> Report[Program Report and Assessment]
    
```

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Industrial Program




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Industrial Program

Industrial Program

- Background
- BMP Implementation
- Inspection
- Monitoring
- Reporting



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Industrial - Background

Background

- Inventory
- High Priority Facilities
 - Mandatory
 - Other
- Prioritization Ranking Relates to Inspection Frequency
 - High Priority
 - Medium & Low Priority

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Industrial - Background

Mandatory High Priority Facilities (San Diego Region)



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Industrial - Background

Mandatory High Priority Facilities (Santa Ana Region)



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Industrial - Background

Inspection Frequency

Priority	Santa Ana RWQCB	San Diego RWQCB
High	Annually	Annually or biannually
Medium	Biannually	As-needed
Low	Once per permit cycle (5 years)	As-needed

In addition, all complaints of illegal discharges and those violations arising from dry-weather field screening or analytical monitoring must be investigated.

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Industrial - BMPs

BMP Implementation

- Minimum Set of Activity-Specific BMPs
- Optional BMPs for High Priority Facilities
- Schedule for Implementation

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Industrial - BMPs

Industrial Activity – BMP Fact Sheets


Airplane Maintenance and Repair	Over Water Activities
Building Maintenance	Parking and Storage area Maintenance
Concrete and Asphalt Production, Application, and Cutting	Painting, Finishing, and Coating of Vehicles, Boats, Buildings, and Equipment
Contaminated or Erodible Surfaces Areas	Spill Prevention and Cleanup
Landscape Maintenance	Vehicle and Equipment Fueling
Outdoor Drainage from indoor areas	Vehicle and Equipment Maintenance and Repair
Outdoor Loading/Unloading of Materials	Vehicle and Equipment Washing and Steam Cleaning
Outdoor Process Equipment Operations and Maintenance	Outdoor Storage of Raw Materials, Products, and Containers
Waste Handling and Disposal	

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Industrial - BMPs

BMP Fact Sheet Contents

- Pollution Prevention
- Suggested Best Management Practices
- Training
- References and Resources




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Industrial - Inspection

Inspection

- Inspections are conducted to:
- Determine Compliance with Ordinances and Permits
- Review BMP Implementation
- Assess BMP Effectiveness
- Verify Inventory Information Used for Prioritization

Specific inspection procedures will be discussed in the second portion of this training



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Industrial - Monitoring

Monitoring – San Diego Region Only

- Facilities Required to Monitor
- Monitoring Objectives
- Minimum Monitoring Requirements
- Monitoring Approach*

* Discussed in the second portion of this training

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Industrial - Reporting

Reporting

BMPs summarize →

- Business categories
- List of source control BMPs in use
- Modifications to BMPs since last report

Inspection and Monitoring summarize →

- Inspection efforts
- Enforcement actions
- Monitoring efforts (San Diego Region)

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Commercial Program





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Commercial Program

- Background
- BMP Implementation
- Inspection
- Reporting



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Commercial - Background

Background

- Inventory
- Mandatory High Priority Activities/ Sources (San Diego Region)
- Prioritization of Commercial Facilities (Santa Ana Region)
- Prioritization Ranking Relates to Inspection Frequency

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Commercial - Background

Mandatory High Priority Activities/Sources (San Diego Region)

- Automobile mechanical repair, maintenance, fueling, or cleaning
- Airplane mechanical repair, maintenance, fueling, or cleaning
- Boat mechanical repair, maintenance, fueling, or cleaning
- Equipment repair, maintenance, fueling, or cleaning
- Automobile and other vehicle body repair or painting
- Mobile automobile or other vehicle washing
- Automobile (or other vehicle) parking lots and storage facilities
- Retail or wholesale fueling
- Pest control services
- Eating or drinking establishments
- Mobile carpet, drape or furniture cleaning

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Commercial - Background

Mandatory High Priority Activities/Sources Cont. (San Diego Region)

- Cement mixing or cutting
- Masonry
- Painting and coating
- Botanical or zoological gardens and exhibits
- Landscaping
- Nurseries and greenhouses
- Golf courses, parks and other recreational areas/facilities
- Cemeteries
- Pool and fountain cleaning
- Marinas
- Port-a-Potty servicing

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Commercial - Background

Commercial Activities/Sources to be Inventoried (Santa Ana Region)

- Automobile mechanical repair, maintenance, fueling, or cleaning
- Automobile and other vehicle body repair or painting
- Mobile automobile or other vehicle washing
- Mobile carpet, drape or furniture cleaning
- Mobile high pressure or steam cleaning
- Landscape and hardscape installations
- Painting and coating
- Nurseries and greenhouses
- Pool, lake and fountain cleaning
- Eating and drinking establishments

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Commercial - Background

Inspection Frequency

Priority	Santa Ana RWQCB	San Diego RWQCB
High	Once per permit cycle (5 years)	As-needed
Medium	N/A	N/A
Low	N/A	N/A

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Commercial - BMPs

BMP Requirements

- Minimum Set of Activity-Specific BMPs
- Optional BMPs for High Priority Facilities



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Commercial - BMPs

Commercial Activity BMP Fact Sheets

Animal Handling	Nurseries and Greenhouses
Building Maintenance	Outdoor Drainage from indoor areas
Carpet Cleaning	Outdoor Loading/Unloading of Materials
Concrete and Asphalt Production, Application, and Cutting	Outdoor Process Equipment Operations and Maintenance
Contaminated or Erodible Surfaces Areas	Outdoor Storage of Raw Materials, Products, and Containers
Landscape Maintenance	Over Water Activities

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Commercial - BMPs

Commercial Activity BMP Fact Sheets


Painting, Finishing, and Coating of Vehicles, Boats, Buildings, and Equipment	Parking and Storage area Maintenance
Vehicle and Equipment Maintenance and Repair	Vehicle and Equipment Washing and Steam Cleaning
Eating and Drinking Establishments	Pool and Fountain Cleaning
Spill Prevention and Cleanup	Vehicle and Equipment Fueling
Waste Handling and Disposal	

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Commercial - BMPs

BMP Fact Sheet Contents

- Pollution Prevention
- Suggested Best Management Practices
- Training
- References and Resources



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Commercial - BMPs

BMP Activity Fact Sheet Relationship

Automobile mechanical repair, maintenance, fueling, or cleaning

↓

IC18. Vehicle and Equipment Fueling
 IC19. Vehicle and Equipment Maintenance and Repair
 IC20. Vehicle and Equipment Washing and Steam Cleaning

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Industrial - Inspection

Inspection

Inspections are conducted to:

- Determine Compliance with Ordinances and Permits
- Review BMP Implementation
- Assess BMP Effectiveness
- Verify Inventory Information Used for Prioritization

Specific inspection procedures will be discussed in the second portion of this training



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Commercial - Reporting

Reporting

BMPs → summarize →

- Business categories
- List of source control BMPs in use
- Modifications to BMPs since last report

Inspection → summarize →

- Inspection efforts
- Enforcement actions

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Residential Program






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Residential Program

Residential Program

- Background
- BMP Implementation
- High Threat Activities
- Program Implementation
- Enforcement
- Reporting

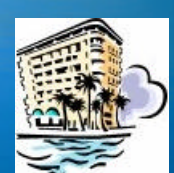


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Residential - Background

Background

- All residential areas assumed to have same activities of concern
- Residential areas adjacent to ESAs are focus for enhanced BMP implementation
- Monitoring program results used to identify additional residential areas for enhanced implementation



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Residential - BMPs

BMP Requirements

- A set of minimum BMPs has been established for high threat residential activities
- Optional BMPs for residential areas and activities generating pollutants associated with 303(d) listings.

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Residential - High Threat

High Threat Residential Activities

Automobile repair and maintenance
Automobile washing
Automobile parking
Home and garden care activities
Disposal of household hazardous waste
Disposal of pet waste
Disposal of green waste



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Residential - Implementation

Program Implementation

- Baseline implementation includes outreach and education
- **Enhanced implementation for high priority areas:**


- Door-to-door outreach
 - Urging residents to observe optional BMPs
 - Regular field review patrols

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Residential - Enforcement

Enforcement Options

- Field review
- Respond to water pollution complaints
- Administrative Remedies
 - Notice of non-compliance
 - Administrative compliance order
 - Cease and desist orders
 - Citations
- Criminal Remedies
 - Infractions
 - Misdemeanors



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Residential - Reporting

Reporting

- Employee education activities
- Residential Education and Outreach Program
- Hotline calls regarding residential areas and activities
- Enforcement actions

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CIA/HOA Program

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CIA/HOA Program

- Background
- BMP Implementation
- High Threat Activities
- Program Implementation
- Enforcement
- Reporting



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CIA/HOA - Background

Background

- Includes elements from both the commercial and residential programs
- CIA/HOA areas adjacent to ESAs and those responsible for maintenance of streets and storm drains are focus for enhanced BMP implementation
- Monitoring program results used to identify additional CIA/HOAs for enhanced implementation

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CIA/HOA - Implementation

BMP Implementation

- A set of minimum BMPs has been established for high threat CIA/HOAs
 - CIA/HOAs with publicly-owned and maintained streets
 - CIA/HOAs with privately-owned and maintained streets
- Optional BMPs for CIA/HOAs generating pollutants associated with 303(d) listings

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CIA/HOA - High Threat

High Threat Activities


Automobile parking	Disposal of green waste
Automobile washing	Vehicle maintenance and repair
Disposal of household hazardous waste	Vehicle fueling
Sidewalk, plaza, and fountain maintenance	Material storage, handling, and disposal
Landscape maintenance	Cleaning of vehicles and equipment
Pool cleaning	Storage of vehicles and equipment
Disposal of pet waste	Material loading and unloading

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CIA/HOA - High Threat

Additional High Threat Activities

Street sweeping
Solid waste handling
Drainage system operation and maintenance
Water and sewer utility operation and maintenance



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CIA/HOA - Implementation

Program Implementation


- Baseline implementation includes outreach and education
- Enhanced implementation for high priority areas:**
 - Inform maintenance association governing board about program
 - Mail BMP fact sheets to board
 - Train association employees
 - Field observation

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Residential - Enforcement

Enforcement Options

- Field review
- Respond to water pollution complaints
- Administrative Remedies
 - Notice of non-compliance
 - Administrative compliance order
 - Cease and desist orders
 - Citations
- Criminal Remedies
 - Infractions
 - Misdemeanors



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CIA/HOA - Reporting

Reporting

- Employee education activities
- Outreach efforts
- Hotline calls regarding CIA/HOA areas and activities
- Enforcement actions

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Questions ?

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-BREAK-




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Inspection Procedures




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Inspection Session Outline

- Inspection Frequency
- Types of Inspections
- Inspection Process
- Analytical Monitoring
- Record Keeping
- Enforcement




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Inspection - Frequency

Inspection Frequency

Industrial

Priority	Santa Ana RWQCB	San Diego RWQCB
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Inspection - Frequency

Inspection Frequency

Commercial

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Medium	N/A	N/A
Low	N/A	N/A



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Inspection - Types

Types of Inspection

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graph TD
    A([Compliance Inspections])
    B([Follow-Up Inspections])
    
```


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Inspection - Process

Inspection Process

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graph TD
    A[Pre-inspection preparation] --> B[Approaching a site]
    B --> C[Facility inspection]
    C --> D[Analytical Monitoring]
    D --> E[Record-keeping]
    E --> F[Enforcement]
    
```




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Inspection - Process

Inspection Process

Pre-Inspection Preparation

STEP 1: Establish Purpose
STEP 2: File Review
STEP 3: Database Review



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Inspection - Process

Inspection Process

Approaching the Site

Observations:

- Nearby conveyances or water bodies
- Visible discharge points along the perimeter of the site
- Outdoor areas of intensive industrial activity
- Signs of recent additions or remodeling

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Inspection - Process

Inspection Process

Facility Inspection

STEP 1: Entry
STEP 2: Opening Conference
STEP 3: Outdoor Walk-through
STEP 4: Indoor Walk-through
STEP 5: Document Inspection Activities
STEP 6: Closing Conference



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Inspection - Process

Inspection Process

Facility Inspection

Step 1: Entry

- Obtain consent to enter and inspect property
- If denied then contact NPDES coordinator and/or city attorney or County Council
- Present proper credentials
- Request to meet with appropriate industry officials

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Inspection - Process

Inspection Process

Facility Inspection

Step 2: Opening Conference

Verify and update inventory information:

- Changes in ownership
- Clarification on observations noted before site entry
- Review of SWPPP (site map, activities, types of pollutants, etc.)
- Review of any existing storm water monitoring data

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Inspection - Process

Inspection Process

Facility Inspection

Step 3: Outdoor Walk-through

- Walk through all outdoor areas and observe activities
- Observe all portions of the storm water conveyance system
- Document observed conditions

→ Use Inspection Form



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Inspection - Process

Inspection Process

Facility Inspection

Step 4: Indoor Walk-through

- Review indoor activities and areas to ensure that pollutants are not spilled, dumped, or allowed to flow outdoors.
- Document observed conditions, including BMPs being implemented.

→ Use Inspection Form



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Inspection - Process

Inspection Process

Facility Inspection

Step 5: Document Inspection Activities

- Complete inspection form
- Take notes and photos to document locations and types of BMPs being implemented
- Note where BMPs should be implemented in the future



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Inspection - Process

Inspection Process

Facility Inspection

Step 6: Closing Conference

- Collect any missing or additional information (e.g. verify SIC codes)
- Review additional information sources as needed
- Inform facility officials of follow-up procedures.



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Inspection - Monitoring

Analytical Monitoring

Triggers

- Is facility subject to industrial general permit?
- Is facility a high priority site?





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Inspection - Records

Record Keeping

- Update inventory
- Complete Inspection Report
- Process enforcement documentation



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Inspection - Enforcement

Enforcement Options

- Administrative Remedies
 - Notice of non-compliance
 - Administrative compliance order
 - Cease & desist orders
 - Citations
- Criminal Remedies
 - Infractions
 - Misdemeanors




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Inspection - Enforcement




Notification

- Determine whether an event of non-compliance presents a threat to human or environmental health
- Identify procedures for notifying the RWQCB
- Follow-up inspections






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Questions ?

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Conclusion

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Conclusion

Conclusion


- Stormwater pollution is everyone's problem
- New comprehensive Orange County Stormwater Program developed to address this problem
- Inspection is a critical component of the Existing Development Program
- It will take time to develop and implement the Existing Development Program

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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
- BMP Fact Sheets (including summary activity/fact sheet table)
- Inspection Procedures
- Inspection Form
- Outreach material
- Hard copy of presentation
- Contact list

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