



Existing Development Program Management



Module B-9.I

Audience: Stormwater Managers
Time: 3-4 hours





Existing Development Program Management 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

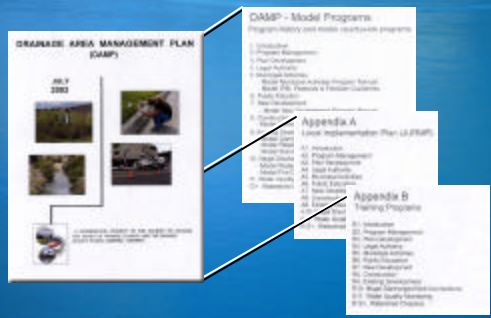
It's Your Responsibility

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

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Introduction

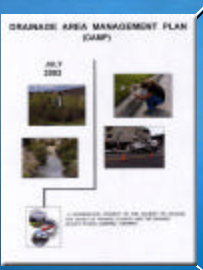
OC Stormwater Program



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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 Modules

Program Management	Inspection
Business	HOA

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Introduction

Training Goals

- Increase your understanding of the Existing Development Program.
- Support compliance with the Existing Development elements of the Santa Ana and San Diego municipal NPDES permits.
- Ensure effective program implementation

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Introduction

Training Outline

- Existing Development Program Introduction
- Industrial Program
- Commercial Program
- Break-
- Residential Program
- Common Interest Area/Homeowners Association (CIA/HOA) Program

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Existing Development Program Introduction

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Program Introduction

Regional Board Boundaries within Orange County



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Program Introduction

Program Introduction

- Cooperative project among all Permittees
- Program fulfills Existing Development requirements of:
 - Section 9.0 of the 2003 DAMP
 - Section IX, X, and XIII of the Santa Ana NPDES stormwater permit
 - Section F.3.b – d. and F.6. of the San Diego NPDES stormwater permit

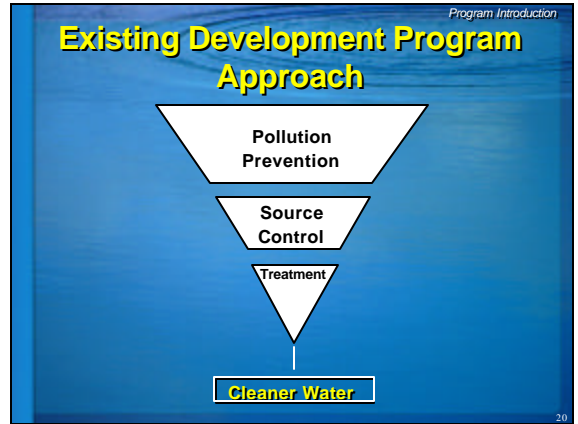
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Program Introduction

Existing Development Program Objectives

- Provide Permittees with:
 - Program framework
 - Set of methodologies for Existing Facilities
 - Iterative process to monitor and respond to problems
 - Implementation methodologies to meet DAMP and NPDES requirements
 - Countywide consistency for water quality protection

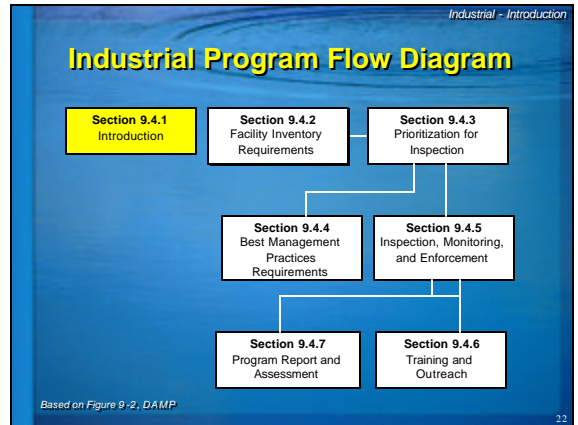
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Industrial Program

Industrial - Introduction

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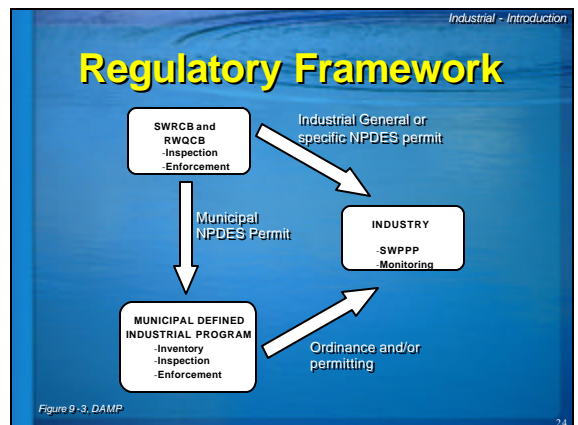


Industrial - Introduction

Industrial Program Development

- Program fulfills industrial activity requirements of:
 - Section 9.0 of the 2003 DAMP
 - Section IX of the Santa Ana NPDES SW Permit
 - Section F.3.b. of the San Diego NPDES SW permit

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Industrial - Introduction

Framework and Key Components

- Facility Inventory
- Prioritization for Inspection
- BMP Implementation and Pollution Prevention
- Inspection, Monitoring, and Enforcement
- Program Report and Assessment
- Training and Outreach

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Questions ?



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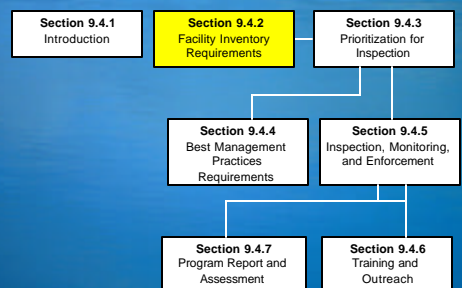
Facility Inventory Requirements



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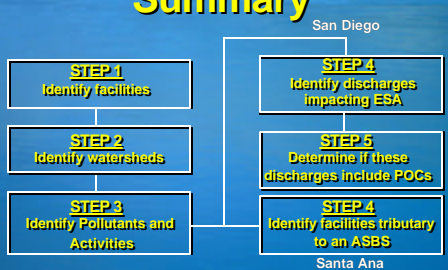
Industrial - Inventory

Industrial Program



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Inventory Process Summary



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Industrial - Inventory

Inventory Process

Step 1: Industrial Facilities

- Include all industries with SIC codes that fall into one of 11 categories of industrial facilities determined by the USEPA to potentially produce "storm water discharges associated with industrial activity"
- See the following link for a detailed description of each category:

<http://www.epa.gov/npdes/pubs/list.pdf>




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Industrial - Inventory

Inventory Process

Step 2 - Watersheds

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



The Watersheds of Orange County

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Industrial - Inventory

Inventory Process

Step 3 – Potential Pollutant Generating Activities

- Table 9.4 – Potential Pollutants Generated by Industrial Activities
- Identify all potential pollutant generating activities occurring at each facility
- List Pollutants of Concern (POCs) associated with each activity

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Industrial - Inventory

Inventory Process

Step 4 – Areas of Special Biological Significance (Santa Ana Region)

- Determine the industrial facilities that are adjacent to, or discharge directly to an ASBS
- An ASBS exists for water bodies designated as Areas of Special Biological Significance by the SWRCB

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Industrial - Inventory

Inventory Process


Step 4 – Environmentally Sensitive Areas (San Diego Region)

- Determine the industrial facilities that are adjacent to, or discharge directly to an ESA
- An ESA exists if the following designations apply:
 - 303(d) impaired water body
 - ASBS
 - RARE
 - Preserves or equivalent
 - Critical Aquatic Resources
 - Other ESAs Identified by the Permittee

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Industrial - Inventory

Example map of Aliso Creek Watershed ESAs



■ 303(d) - 303(d) Impaired Water Body
■ TRUCEP - Triennial Comprehensive Conservation Planning Program
■ RARE - RARE: Restricted Use
■ CRR - Critical Aquatic Resources


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Industrial - Inventory

Inventory Process

Step 5 – Do discharges into ESA include POCs? (San Diego Region only)

- Determine whether any facility activities have the potential for discharging pollutants of concern (POCs) to a 303(d) listed water body for which the water body is impaired.



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Industrial - Inventory

Inventory Form

- Appendix A-9, Section 9.4.2.3
- Inventory Database fields:
 - Business Name
 - Local Licensing/Permits
 - Physical Address
 - Activities with Potential to Discharge Pollutants
 - Mailing Address
 - Potential Pollutants
 - SIC Code
 - Adjacent to and/or Discharge to ESA/ASBS
 - Industrial-Specific Information
 - Pollutants of Concern into an ESA
 - Watershed
 - Comments/Notes
 - GIS Information

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Industrial - Inventory

Industrial Facility Inventory Information Sources

- Sources of Inventory Information
 - Regional
 - Orange County Fire Authority
 - Orange County Health Care Agency
 - Local
 - SWRCB Databases of Permitted Industrial Facilities
 - Fire Department
 - Business Licensing and Permitting Offices
 - Chambers of Commerce
 - Solid Waste Haulers
 - Business listings

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Questions ?

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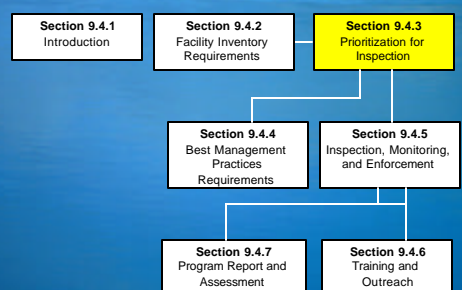
Prioritization for Inspection




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Industrial - Prioritization

Industrial Program



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      9.4.1[Section 9.4.1 Introduction] --- 9.4.3[Section 9.4.3 Prioritization for Inspection]
      9.4.2[Section 9.4.2 Facility Inventory Requirements] --- 9.4.3
      9.4.3 --- 9.4.4[Section 9.4.4 Best Management Practices Requirements]
      9.4.3 --- 9.4.5[Section 9.4.5 Inspection, Monitoring, and Enforcement]
      9.4.4 --- 9.4.7[Section 9.4.7 Program Report and Assessment]
      9.4.5 --- 9.4.6[Section 9.4.6 Training and Outreach]
    
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Based on Figure 9-2, DAMP

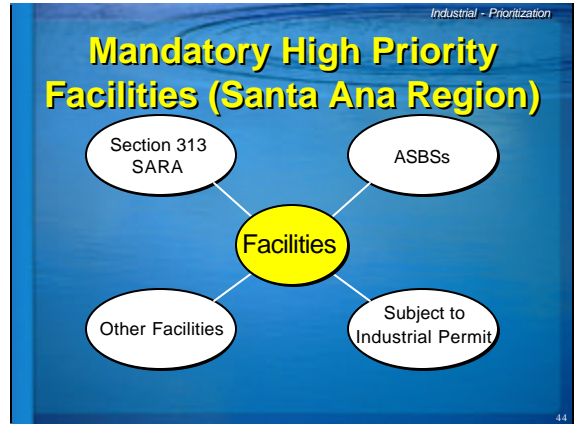
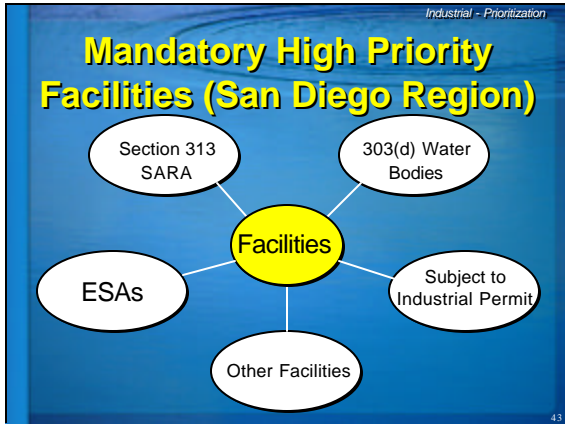
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Industrial - Prioritization

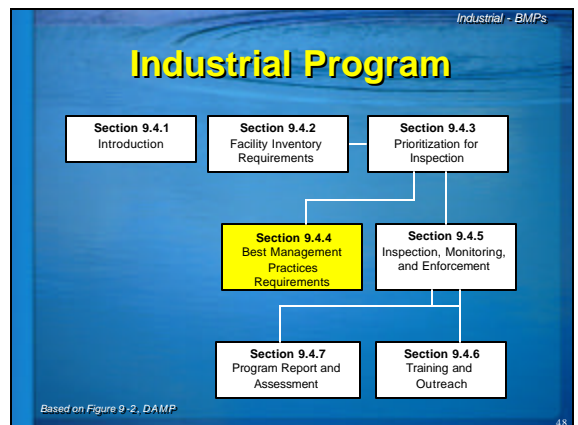
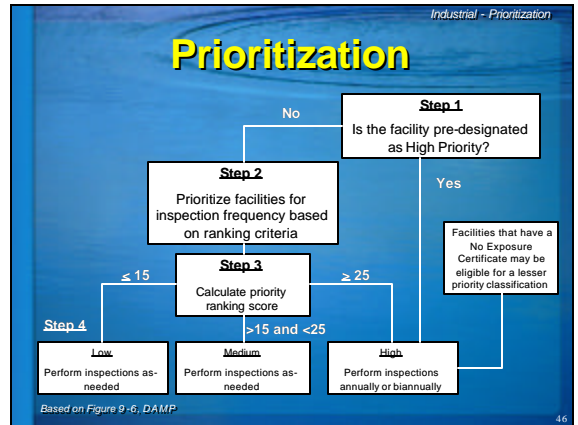
Prioritization Process

- Classify facilities as high, medium or low priority for inspection
 - Mandatory High Priority Facilities
 - Facility priority based on site information
- Subsequently confirm or reclassify the facility based on inspections, field observations and additional information.

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- Industrial - Prioritization
- ### Prioritization based on site information
- A ranking system using the following criteria is used to prioritize facilities:
 - Type of activity
 - Materials used
 - Waste products generated
 - Potential for discharge of pollutants
 - Non-stormwater discharges
 - Size of the facility
 - Proximity to a receiving water bodies
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Industrial - BMPs

BMP Implementation

- Require implementation of BMPs for activities performed at each facility that has the potential to discharge pollutants.
- Permittees may require implementation of additional controls for facilities discharging to ESAs



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Industrial - BMPs

BMP Activity Factsheets

- 22 Activity Specific Factsheets (Refer to Attachment A-9D)
- Factsheet sections:
 - Pollution Prevention
 - Suggested Best Management Practices
 - Training
 - References and Resources

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Industrial - BMPs

Factsheet Relationship to Activities

Example activities with associated factsheets:

Activities/Sources	Fact Sheets
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
Airplane mechanical repair, maintenance, fueling, or cleaning	IC1. AIRPLANE MAINTENANCE AND REPAIR IC18. VEHICLE AND EQUIPMENT FUELING IC19. VEHICLE AND EQUIPMENT MAINTENANCE AND REPAIR IC20. VEHICLE AND EQUIPMENT WASHING AND STEAM CLEANING

Refer to Table 9-7 for a complete list

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Inspection, Monitoring, and Enforcement





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Industrial - Inspection

Industrial Program

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    graph TD
      S9.4.1[Section 9.4.1 Introduction] --- S9.4.2[Section 9.4.2 Facility Inventory Requirements]
      S9.4.2 --- S9.4.3[Section 9.4.3 Prioritization for Inspection]
      S9.4.3 --- S9.4.4[Section 9.4.4 Best Management Practices Requirements]
      S9.4.3 --- S9.4.5[Section 9.4.5 Inspection, Monitoring, and Enforcement]
      S9.4.4 --- S9.4.6[Section 9.4.6 Training and Outreach]
      S9.4.5 --- S9.4.6
      S9.4.4 --- S9.4.7[Section 9.4.7 Program Report and Assessment]
      S9.4.6 --- S9.4.7
    
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Based on Figure 9-2, DAMP

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Industrial - Inspection

Inspection Frequencies

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

Table 9-8, DAMP

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Industrial - Inspection




Inspection, Monitoring, and Enforcement Requirements

- Requirements and objectives are covered in detail in the Inspector Training Module
- Inspection Requirements are based on:
 - Permit and ordinance requirements
 - Prioritization
- Types of Inspection
 - Compliance Inspections
 - Follow-up Inspections



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Program Reporting and Assessment

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Industrial - Reporting and Assessment

Industrial Program

Section 9.4.1
Introduction

Section 9.4.2
Facility Inventory
Requirements

Section 9.4.3
Prioritization for
Inspection

Section 9.4.4
Best Management
Practices
Requirements

Section 9.4.5
Inspection, Monitoring,
and Enforcement

Section 9.4.7
Program Reporting and
Assessment

Section 9.4.6
Training and
Outreach

Based on Figure 9-2, DAMP

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Industrial - Reporting and Assessment

Reporting and Assessment

- Reporting
 - Non-compliance notification
 - The annual Commercial/Industrial Program Report
- Assessment
 - Inspection and enforcement efficacy
 - BMP implementation
 - Monitoring results
 - Overall program effectiveness
 - Action plans for implementing improvements

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Training and Outreach

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Industrial - Training and Outreach

Industrial Program

Section 9.4.1
Introduction

Section 9.4.2
Facility Inventory
Requirements

Section 9.4.3
Prioritization for
Inspection

Section 9.4.4
Best Management
Practices
Requirements

Section 9.4.5
Inspection, Monitoring,
and Enforcement

Section 9.4.7
Program Reporting and
Assessment

Section 9.4.6
Training and
Outreach

Based on Figure 9-2, DAMP

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Industrial - Training and Outreach

Training and Outreach

- Training Modules for field crews/inspectors
- Other Training Opportunities
 - Non-city sponsored training, such as regional and national organization sponsored training
- Outreach may include:
 - Webpage
 - Mailings
 - Workshops
 - Business outreach
 - Brochures and posters

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Questions ?

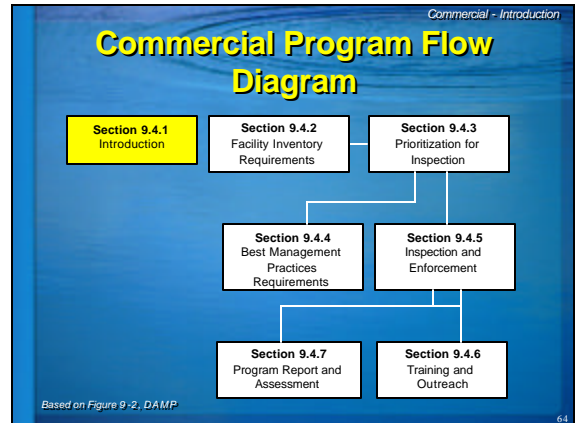


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Commercial Program



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Commercial - Introduction

Commercial Program Development

- Program fulfills commercial activity requirements of:
 - Section 9.0 of the 2003 DAMP
 - Section X of the Santa Ana NPDES stormwater permit
 - Section F.3.c. of the San Diego NPDES stormwater permit

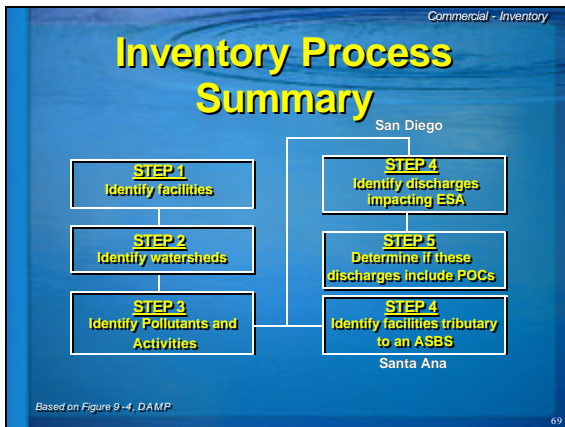
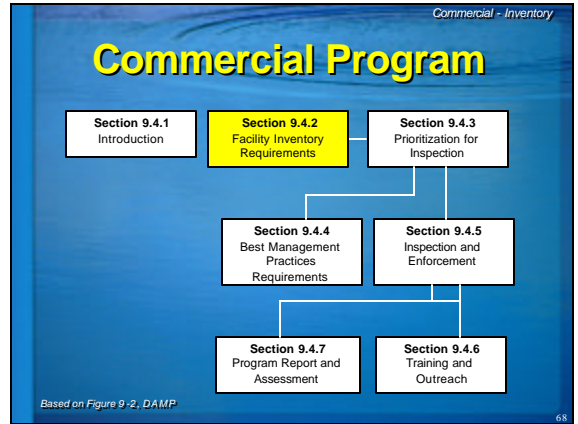
65

Commercial - Introduction

Framework and Key Components

- Facility Inventory
- Prioritization for Inspection
- BMP Implementation and Pollution Prevention
- Inspection and Enforcement
- Program Report and Assessment
- Training and Outreach

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Commercial - Inventory

Inventory Process

Step 1 – Commercial Facilities

- Include all commercial sites/sources listed in Table 9-1 (San Diego) or Table 9-2 (Santa Ana) of the DAMP.
- Any commercial site/source inventoried as an industrial site does not need to be included

Commercial - Inventory

Inventory Process

Step 2 - Watersheds

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 & SegundaDeshecha	M

Commercial - Inventory

Inventory Process

Step 3 – Potential Pollutant Generating Activities

- Table 9.4 – Potential Pollutants Generated by Commercial Activities
- Identify all potential pollutant generating activities occurring at each commercial facility
- List Pollutants of Concern (POCs) associated with each activity

Commercial - Inventory

Inventory Process

Step 4 – Areas of Special Biological Significance (Santa Ana Region)

- Determine the commercial facilities that are adjacent to, or discharge directly to an ASBS
- An ASBS exists for water bodies designated as Areas of Special Biological Significance by the SWRCB

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Commercial - Inventory

Inventory Process

Step 4 – Environmentally Sensitive Areas (San Diego Region)

- Determine the commercial facilities that are adjacent to, or discharge directly to an ESA
- An ESA exists if the following designations apply:
 - 303(d) impaired water body
 - ASBS
 - RARE
 - Preserves or equivalent
 - Critical Aquatic Resources
 - Other ESAs Identified by the Permittee

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Commercial - Inventory

Example map of Aliso Creek Watershed ESAs

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Commercial - Inventory

Inventory Process

Step 5 – Do discharges into ESA include POCs? (San Diego Region only)

- Determine whether any facility activities have the potential for discharging pollutants of concern (POCs) to a 303(d) listed water body *for which the water body is impaired.*

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Commercial - Inventory

Inventory Form

- Appendix A-9, Section 9.4.2.3
- Inventory Database fields:

<ul style="list-style-type: none"> – Business Name – Physical Address – Mailing Address – Commercial-Specific Information – Watershed – GIS Information 	<ul style="list-style-type: none"> – Local Licensing/Permits – Activities with Potential to Discharge Pollutants – Potential Pollutants – Adjacent to and/or Discharge to ESA/ASBS – Pollutants of concern into an ESA – Comments/Notes
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Commercial - Inventory

Commercial Facility Inventory Database Maintenance

- Sources of Inventory Information
 - Regional
 - Orange County Fire Authority
 - Orange County Health Care Agency
 - Local
 - SWRCB Databases of General Industrial Permitted Facilities
 - City Fire Department
 - City Business Licensing and Permitting Offices
 - Chambers of Commerce
 - Local Solid Waste Haulers
 - Commercially available business listings
- Update annually based on inspections and newly identified industries

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Commercial - Inventory

Industrial Facility Inventory Information Sources

- Sources of Inventory Information
 - Regional
 - Orange County Fire Authority
 - Orange County Health Care Agency
 - Local
 - SWRCB Databases of Permitted Industrial Facilities
 - Fire Department
 - Business Licensing and Permitting Offices
 - Chambers of Commerce
 - Solid Waste Haulers
 - Business listings

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Prioritization for Inspection



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Commercial - Prioritization

Commercial Program

Section 9.4.1
Introduction

Section 9.4.2
Facility Inventory
Requirements

Section 9.4.3
Prioritization for
Inspection

Section 9.4.4
Best Management
Practices
Requirements

Section 9.4.5
Inspection and
Enforcement

Section 9.4.7
Program Report and
Assessment

Section 9.4.6
Training and
Outreach

Based on Figure 9-2, DAMP

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Commercial - Prioritization

Prioritization Process (San Diego Region)

- Permittees are NOT required to prioritize commercial facilities.
- All facilities listed in Table 9.1 of the DAMP are pre-classified as high priority
- Other facilities should be inspected and ranked if observations, monitoring, or complaints indicate they may contribute a significant pollutant load

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Commercial - Prioritization

Prioritization Process (Santa Ana Region)

- Classify inventoried facilities as being a high, medium or low priority for inspection based on ranking system
- Subsequently confirm or reclassify the facility based on inspections, field observations and additional information.

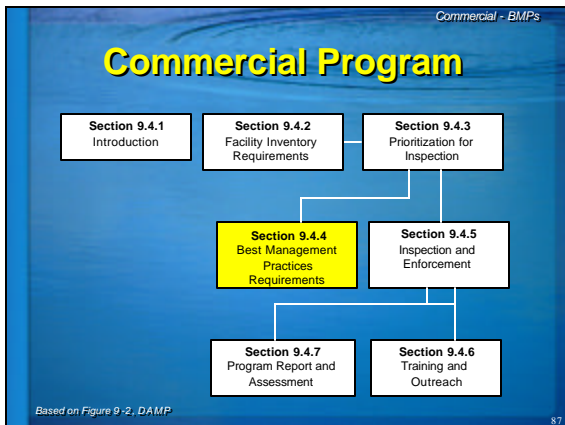
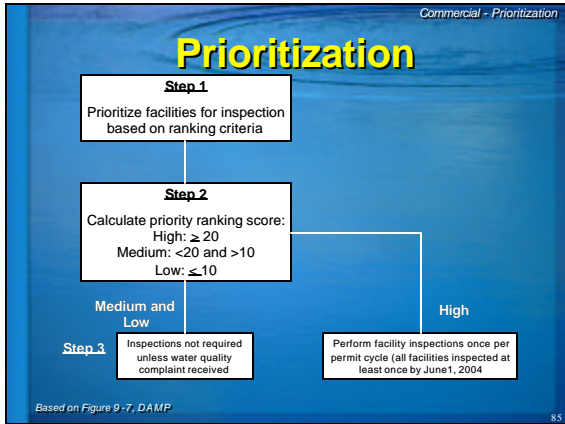
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Commercial - Prioritization

Prioritization based on site information

- The ranking system uses the following criteria to prioritize facilities:
 - Type of Activity
 - Magnitude of Activity
 - Location of Activity
 - Potential for discharge of pollutants
 - History of Un-Authorized Discharges

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Commercial - BMPs

BMP Implementation

- Require implementation of BMPs for activities performed at each facility that have the potential to discharge pollutants.
- The Permittee may require implementation of additional controls for facilities discharging to ESAs

Commercial - BMPs

BMP Activity Factsheets

- 22 Activity Specific Factsheets (Refer to Attachment A-9D)
- Factsheet sections:
 - Pollution Prevention
 - Suggested Best Management Practices
 - Training
 - References and Resources

Commercial - BMPs

Factsheet Relationship to Activities

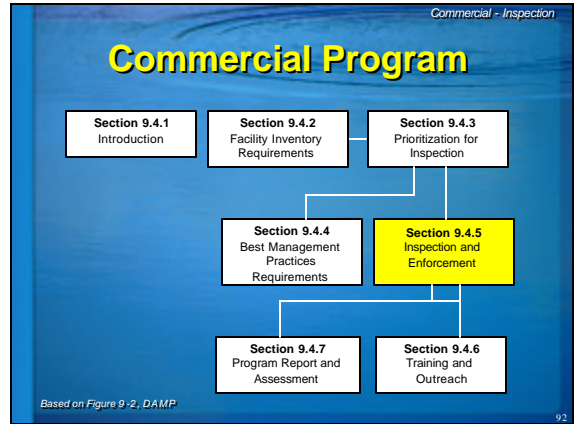
Example activities with associated factsheets:

Activities/Sources	Fact Sheets
Automobile mechanical repair, maintenance, fueling, or cleaning	IC18. VEHICLE AND EQUIPMENT FUELING AND REPAIR IC19. VEHICLE AND EQUIPMENT MAINTENANCE AND REPAIR IC20. VEHICLE AND EQUIPMENT WASHING AND STEAM CLEANING
Airplane mechanical repair, maintenance, fueling, or cleaning	IC1. AIRPLANE MAINTENANCE AND REPAIR IC18. VEHICLE AND EQUIPMENT FUELING AND REPAIR IC19. VEHICLE AND EQUIPMENT MAINTENANCE AND REPAIR IC20. VEHICLE AND EQUIPMENT WASHING AND STEAM CLEANING

Refer to Table 9-7 for a complete list

Inspection and Enforcement





Commercial - Inspection



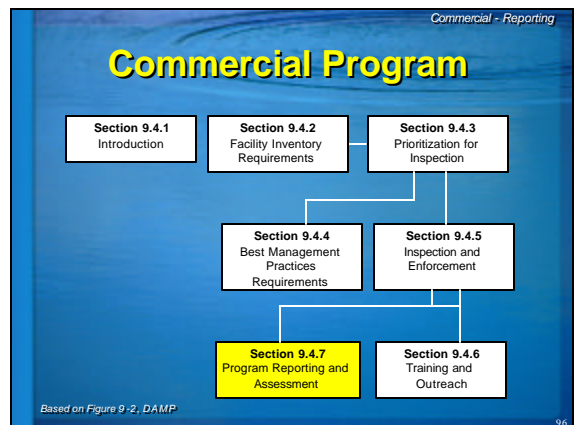
Inspection Frequencies

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

Table 9-8, DAMP

- Commercial - Inspection
- ## Inspection and Enforcement Requirements
- Requirement and objectives are covered in detail in the Inspector Training Module
 - Inspection Requirements are based on:
 - Permit and ordinance requirements
 - Prioritization
 - Types of Inspection
 - Compliance Inspections
 - Follow-up Inspections
- 

Program Reporting and Assessment


Commercial - Reporting

Reporting and Assessment

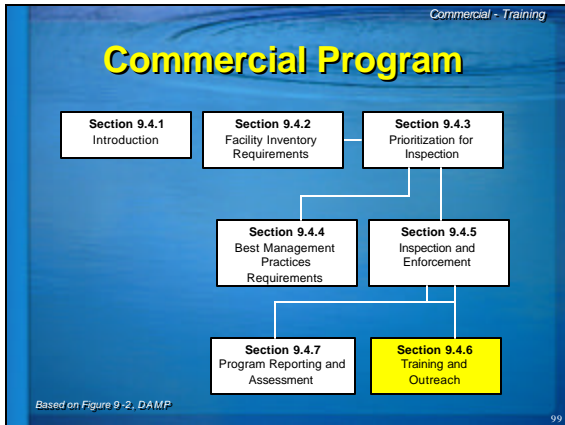
- Reporting
 - The annual Commercial/Industrial Program Report
- Assessment
 - Inspection and enforcement efficacy
 - BMP implementation
 - Overall program element effectiveness
 - Action plans for implementing improvements

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Training and Outreach



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Commercial - Training

Training and Outreach

- Training Modules:
- Other Training Opportunities
 - Non-city sponsored training, such as regional and national organization sponsored training
- Outreach may include:
 - Webpage
 - Mailings
 - Workshops
 - Business outreach
 - Brochures and posters

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Questions ?

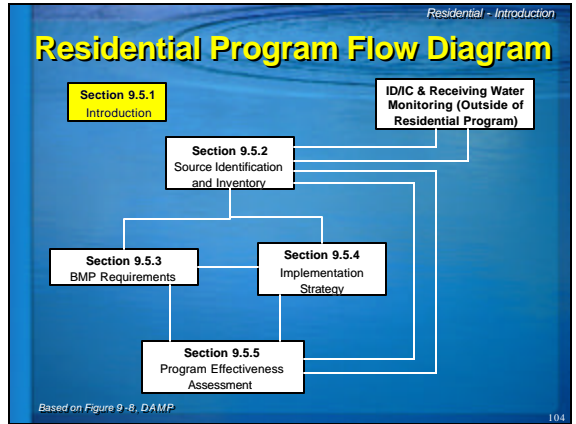


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- BREAK -

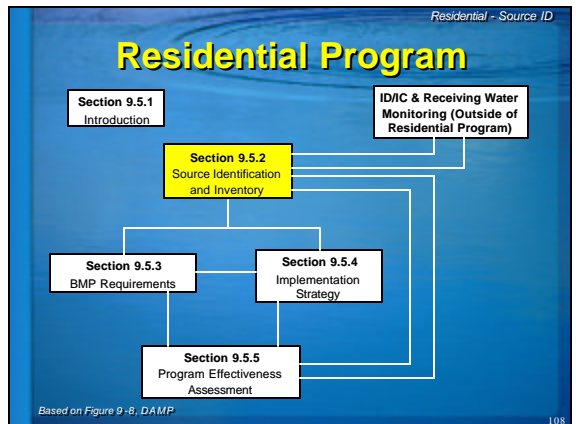


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- Residential - Introduction
- ### Residential Program Development
- Program fulfills residential activity requirements of:
 - Orange County Drainage Area Management Plan (DAMP), 2003.
 - Section XIII of the Santa Ana NPDES permit
 - Section F.3.d. of the San Diego NPDES permit
- 105

- Residential - Introduction
- ### Framework and Key Components
- Residential Source Identification and Inventory
 - Prioritize for BMP Implementation
 - BMP Identification and Pollution Prevention
 - Program Implementation
 - Program Report and Assessment
- 106



Residential - Source ID

Source Identification

- Maintain an inventory of residential areas and activities that potentially pose a high threat to water quality
- Residential Activities automatically identified as high threat:
 - Automobile repair, maintenance, washing, parking
 - Home and garden care activities
 - Disposal of household hazardous waste, pet waste, green waste

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Residential - Source ID

Source Identification

- Other areas/sources that are considered high threat to water quality.
 - Other residential sources determined by the Permittee
 - Resident tributary to a 303(d) water body generating pollutants of concern
 - Any residence within or discharging to an ESA.

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Residential - Source ID

Residential map-based inventory

- Annually update watershed based inventory map including:
 - Residential land use areas (including GIA/HOA areas)
 - Watershed(s) within municipality boundaries
 - Drainage facilities
 - Environmentally sensitive areas (ESAs), including 303(d) waterbodies

111

Residential - Source ID

Environmentally Sensitive Areas

- An ESA exists if the following designations apply:
 - 303(d) impaired water body
 - ASBS
 - RARE
 - Preserves or equivalent
 - Critical Aquatic Resources
 - Other ESAs Identified by the Permittee

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Residential - Source ID

Example map of Aliso Creek Watershed ESAs

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Residential - Source ID

Pollutants Associated with Residential Activities

Residential Activity	Potential Pollutants							
	Sediments	Nutrients	Bacteria	Foaming Agents	Metals	Hydrocarbons	Hazardous Materials Pesticides and herbicides	Other
Automobile repair and maintenance	X				X	X	X	
Automobile washing	X	X		X	X	X	X	
Automobile parking	X				X	X	X	
Home and garden care	X	X	X	X	X	X	X	X
Household Hazardous Waste				X	X	X	X	X
Pet waste	X	X	X					
Garden waste	X	X	X			X	X	

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Residential - Source ID

Prioritization

- Residential areas adjacent to, or discharging directly to, ESAs are designated as priority residential areas
- Priority residential areas require enhanced implementation of the residential program.

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Residential - Source ID

Monitoring

- The Residential Program has no monitoring requirements
- Permittees should review results ID/IC Program to identify hot spots of high pollutant loads from specific residential areas

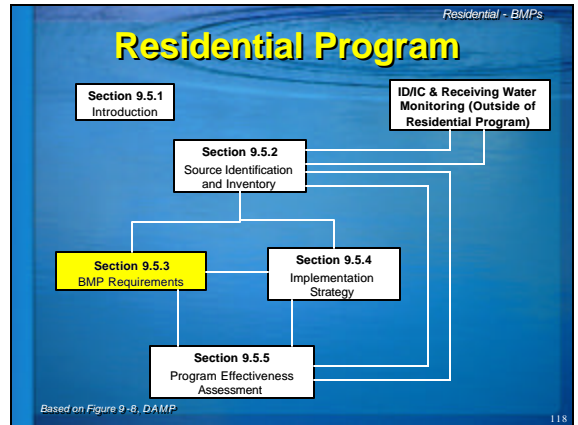
116

BMP Requirements





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Residential - BMPs

BMP Requirements

- BMP factsheets developed for each high threat residential activity (See Attachment A-9D)
- All residences countywide are required to implement the designated set of BMPs for the base implementation of the residential program
- Permittees to determine if additional activities should be implemented for high priority residential areas

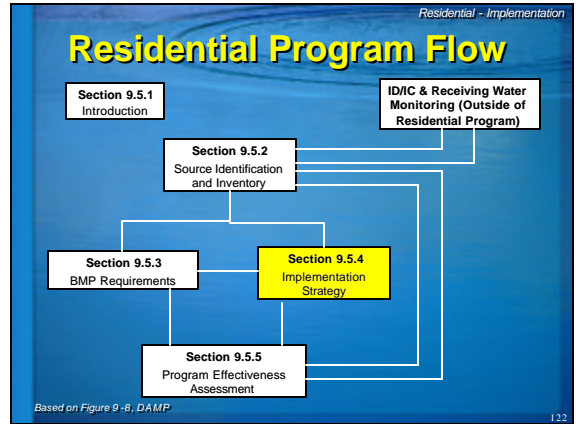
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Residential - BMPs

BMP Activity Factsheets


- 8 Activity Specific Factsheets (Refer to Attachment A-9D)
- Factsheet sections:
 - Overview
 - Designated Best Management Practices
 - Optional Best Management Practices

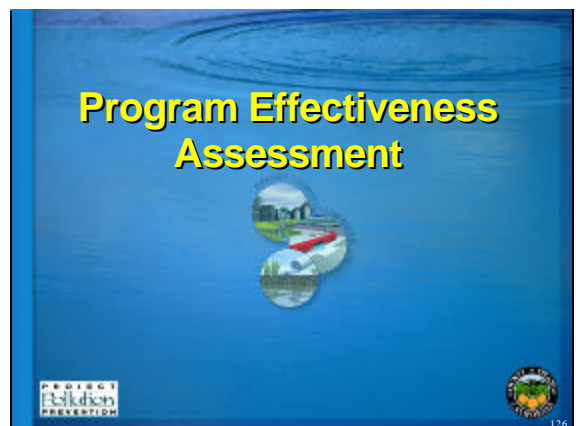
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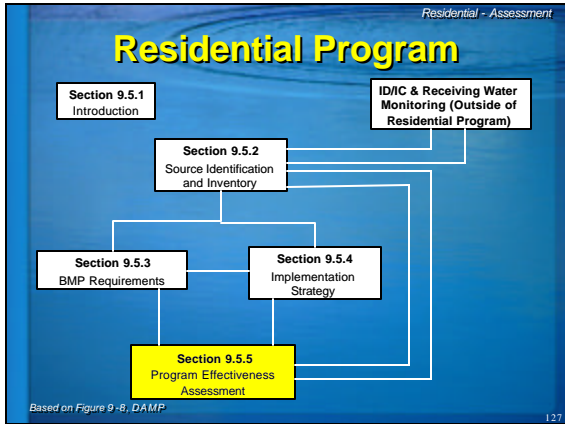


- Program Implementation – Baseline Level**
- Applicable to all residence within jurisdiction
 - Examples of BMP implementation:
 - Train City Personnel
 - Respond to County Hotline Calls
 - Update the City's Webpage
 - Annual Mailings
 - Public Service Announcements
 - Annual Utility Bill Inserts
 - Informational Packets
- 123

- Program Implementation – Enhanced level**
- Applicable only to areas discharging pollutants of concern into an ESA
 - Permittees are required to:
 - Identify high threat activities with the potential to discharge pollutants of concern
 - Identify additional BMPs or outreach targeting pollutants of concern associated with identified high threat activities
 - Enhanced implementation may also include conducting regular field review patrols
- 124

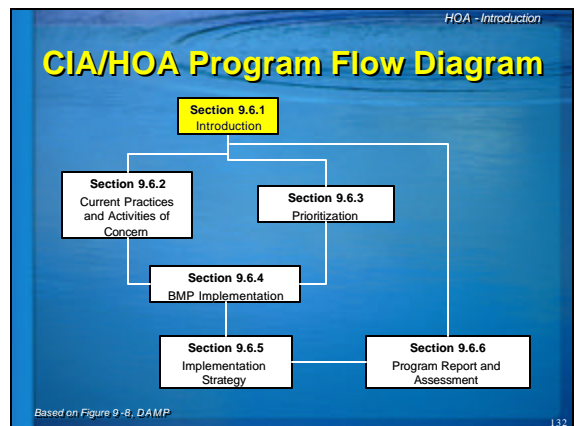
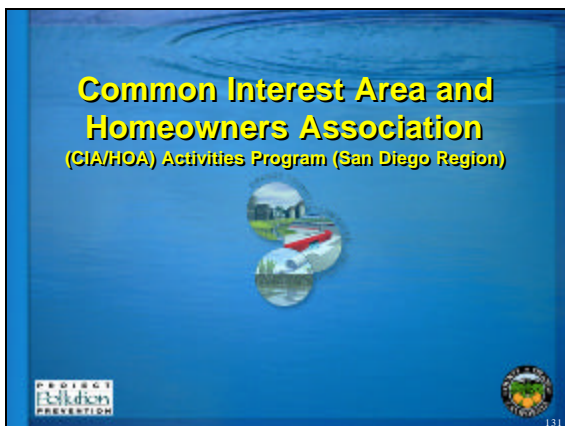
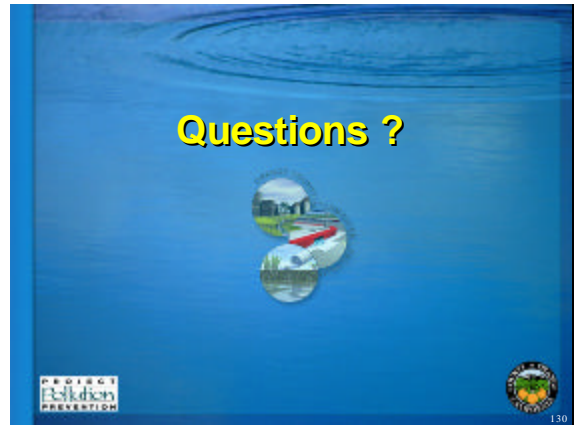
- Enforcement**
- Enforcement mechanisms for Residential Activities:
 - Notice of Non-Compliance
 - Administrative Compliance Orders
 - Cease and Desist Orders
 - Infractions and Misdemeanors
 - Requirements and objectives are covered in detail in the Inspector Training Module
- 
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- Residential - Assessment*
- ## Program Reporting
- Complete Annual Report documenting implementation of the residential program
 - Source Identification and Inventory
 - BMP Requirements
 - Implementation Strategy
 - Complete questionnaire presented in Attachment A-9G
- 128

- Residential - Assessment*
- ## Program Assessment
- Permittee's effort to implement goals established in the residential program.
 - Adequacy of existing BMPs.
 - Public input to the residential program.
 - Amount and type of disseminated information.
 - Enforcement activities.
 - Specific action plans and timeframes for implementing necessary improvements.
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HOA - Introduction

CIA/HOA Program Development

- Program fulfills CIA/HOA activity requirements of:
 - Orange County Drainage Area Management Plan (DAMP), 2003.
 - Section F.6. of the San Diego NPDES permit
- Over 3000 CIA/HOAs exist in Orange County

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HOA - Introduction

Framework and Key Components

- Assess Current Practices and Activities of Concern
- Prioritize Areas of Concern
- BMP Implementation and Pollution Prevention
- Program Implementation
- Program Report and Assessment

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Current Practices and Activities of Concern

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HOA - Current Practices

CIA/HOA Program

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    graph TD
      S9.6.1[Section 9.6.1  
Introduction] --- S9.6.2[Section 9.6.2  
Current Practices  
and Activities of  
Concern]
      S9.6.1 --- S9.6.3[Section 9.6.3  
Prioritization]
      S9.6.2 --- S9.6.4[Section 9.6.4  
BMP Implementation]
      S9.6.3 --- S9.6.4
      S9.6.4 --- S9.6.5[Section 9.6.5  
Implementation  
Strategy]
      S9.6.3 --- S9.6.6[Section 9.6.6  
Program Report and  
Assessment]
      S9.6.5 --- S9.6.6
    
```

Based on Figure 9-8, DAMP

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HOA - Current Practices

Current Practices Assessment

- CIAs/HOAs with Publicly-Owned and Maintained Streets and Storm Drains
 - Maintenance typically performed by Permittee
- CIAs/HOAs with Privately-Owned and Maintained Streets and Storm Drains
 - Maintenance typically performed by maintenance association.
- Typical activities presented in Section 9.6.2.1. of the DAMP.

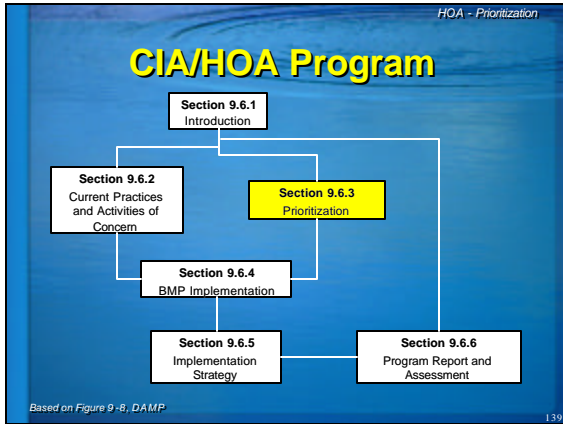
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Prioritization





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- HOA - Prioritization
- ## Determination of High Priority Activities
- Activities listed in Table 9-10 are predetermined high priority activities
 - Any other activity identified by the Permittee to pose a significant risk to human or environmental health should be included in the high priority list.
- 140

- HOA - Prioritization
- ## Prioritize CIA/HOA Locations
- Locations that are considered high threat to water quality.
 - 303(D) listed water body where pollutant causing impairment is present in discharge
 - Environmentally Sensitive Area (ESA)
 - Other sources determined by the Permittee
 - CIA/HOAs determined to be responsible for maintenance of streets and storm drains
- 141

- HOA - Prioritization
- ## Residential map-based inventory
- Utilize annually updated Residential Program map-based inventory to locate:
 - Residential land use areas
 - Watershed(s)
 - Drainage facilities
 - ESAs, including 303(d) waterbodies
- 142

- HOA - Prioritization
- ## Prioritized Implementation
- CIA/HOA areas directly tributary to 303(d) listed water bodies or storm drains discharging to 303(d) water bodies will receive a higher priority for implementation if the water body is listed for pollutant(s) associated with residential activities.
- 143

- HOA - Prioritization
- ## Environmentally Sensitive Areas
- An ESA exists if the following designations apply:
 - 303(d) impaired water body
 - ASBS
 - RARE
 - Preserves or equivalent
 - Critical Aquatic Resources
 - Other ESAs Identified by the Permittee
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HOA - Prioritization

Significant Pollutant Loads

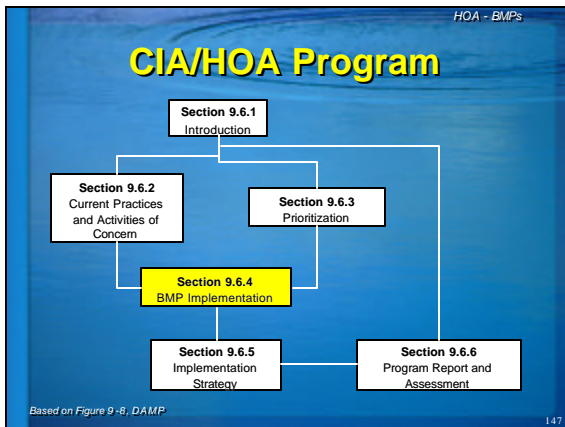
- Determine if CIA/HOA activities or discharges contribute significant pollutant loads from:
 - ID/IC Program
 - Receiving Water Monitoring
 - Dry weather Monitoring
- Note that no monitoring specific to the CIA/HOA Program is required

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BMP Implementation



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HOA - BMPs

BMP Implementation

- CIA/HOAs with Publicly-Owned and Maintained Streets and Storm Drains
 - BMPs presented in Table 9-11
- CIA/HOAs with Privately-Owned and Maintained Streets and Storm Drains
 - BMPs presented in Table 9-12

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HOA - BMPs

Enhanced Implementation

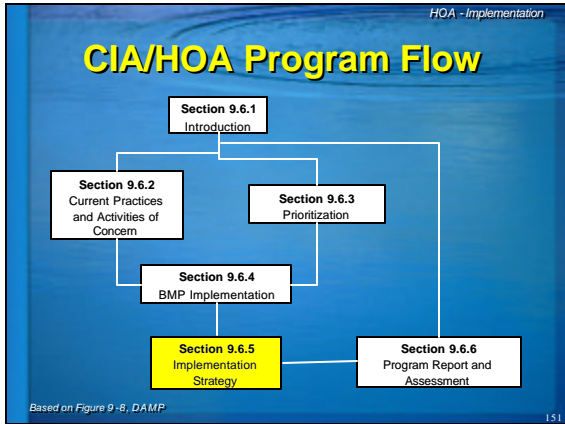
- City defined BMPs may be required if program effectiveness indicates that the required BMPs are inadequate
- Focused implementation of education, outreach, and enforcement may be required for High Priority CIA/HOAs if monitoring and effectiveness assessment indicate that the required BMPs are inadequate.

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Implementation Strategy



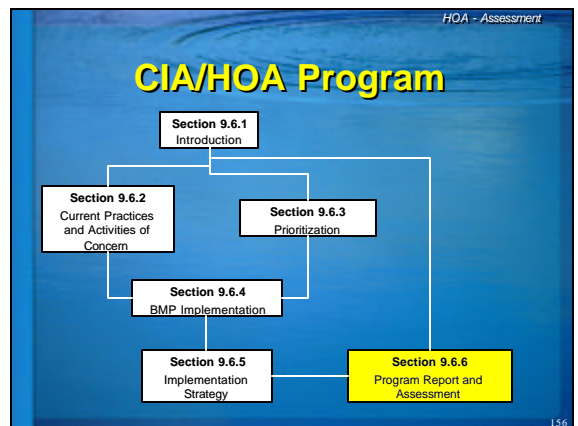
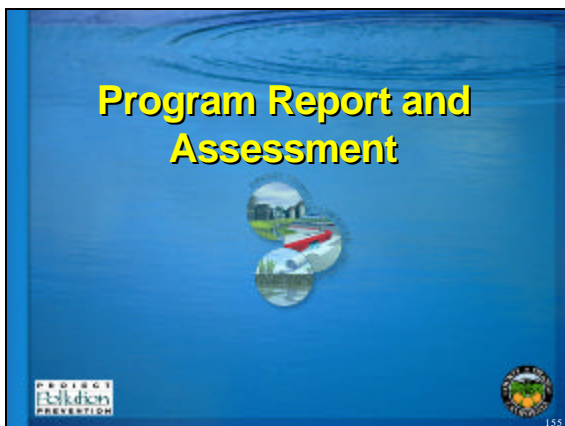
150



- HOA - Implementation
- ## Implementation Strategy
- Target high priority areas for inspection efforts, such as discharges:
 - To 303(d) listed water bodies
 - Directly to an ESA
 - Of significant pollutant loads
 - Target high priority areas for education and outreach:
 - Mail letter to CIA/HOA explaining program
 - Mail BMP Factsheets
 - Mail questionnaire to residents based on appropriate BMPs
- 152

- HOA - Implementation
- ## Public Education and Outreach
- Association Employee Education
 - Hotline
 - Webpage
 - Mailings
- 153

- HOA - Implementation
- ## Enforcement
- Enforcement requirements and objectives are covered in detail in the Inspector Training Module
 - Enforcement should follow in response to hotline reports and focus on high priority areas
- 154




HOA - Assessment

Program Report and Assessment

- CIA/HOA Program Annual Report
- Track success of program implementation through comparison of each successive Annual Report.
- Determine where modifications may be necessary to improve effectiveness


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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
- Existing Development Program is a critical piece
- 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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