

Existing Development Program

Module B-9.IV

Audience: Landscape Maintenance Business Owners/Managers
Time: +/- 45 minutes

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Landscape Maintenance Businesses

Name
Affiliation
Location
Date

PROJECT
Erosion
PREVENTION



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Introduction


Training Outline

- Introduction – water quality issues
- Municipal permits
- Existing Development Program - Commercial
- BMP Fact Sheets
- Inspections & Enforcement
- Conclusions
- Resources

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Introduction

PROJECT
Erosion
PREVENTION



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Water Resources are Crucial to Orange County



Water provides recreation for Orange County residents.



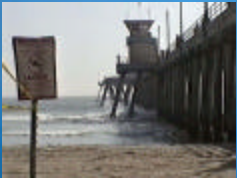
It is home to many types of wildlife.

It attracts tourists, boosting the local economy.

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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.

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Introduction

Sources of Pollution

- Homes
- Businesses
- Construction sites
- Municipal facilities




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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 your day to day business to meet your requirements under the Orange County Stormwater Program.

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Municipal Permits





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Introduction

Clean Water Act

- **Objective**
 - "To restore and maintain the chemical, physical and biological integrity of the Nation's waters"
 - "Fishable"* *"Swimmable"*
- **Permitting of Discharges**
 - The CWA established the National Pollutant Discharge Elimination System (NPDES) program to regulate discharges, including urban runoff and stormwater

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Municipal Permits

Regional Board Boundaries within Orange County

The Watersheds of Orange County

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Municipal Permits

Municipal Permits

- 5 Year Permit Terms
 - Order No. R8-2002-0010 adopted by the Santa Ana Board on January 18, 2002
 - Order No. R9-2002-0001 adopted by the San Diego Board on February 13, 2002

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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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CIA/HOA Program

Programs for Existing Development

Industrial Program

Commercial Program

Residential Program

Common Interest Areas and Homeowners Association Program

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Introduction

Overall Approach

Pollution Prevention

Source Control

Treatment

Cleaner Water

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Questions

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Commercial Program Overview





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Commercial Program (Partial)

- Landscaping and Installations
- Automobile Mechanical Repair, Maintenance, Fueling & Cleaning
- Automobile Body Repair
- Mobile Carpet, Drape, & Furniture Cleaning
- Pest Control Services
- Eating Establishments



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Introduction

Training Goal


Increase your understanding of your role in reducing pollutants from your landscape maintenance businesses.



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Landscaping Activities That May Generate Pollutants


- Installing New Landscapes
- Maintaining Existing Landscapes
- Using Pesticides, Herbicides, Fertilizers
- Using Gas Equipment
- Working Near Waterbodies

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Pollutants & Activities/Sources

- Sediment
- Nutrients/Fertilizers
- Floatable Materials
- Pesticides/Herbicides



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What Can You Do To Help?

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“Rules of Thumb”

- Non-Stormwater Discharges
 - Is water used in relation to the activity?
 - Is the waste contained and disposed of properly?
 - Does it have the potential to run offsite?
- Stormwater Discharges
 - Does rainwater have the potential to come into contact with the activity and carry pollutants offsite?

Introduction

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Best Management Practice (BMP)

Best practical and economically achievable measures to control the addition of pollutants to the waters of the United States through the application of pollution control practices, technologies, processes, siting criteria, operating methods, or other alternatives.

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BMP Fact Sheets

HQA – Program Implementation

- Fact sheets have been developed to provide more detailed guidance on how you can help by implementing Best Management Practices (BMPs)
 - IC 7 Landscape Maintenance
 - IC 17 Spill Prevention and Cleanup

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Fact Sheet Information

- Pollution Prevention
- Best Management Practices
- Training
- References

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Pollution Prevention

- Properly store and label materials
- Reduce Exposure
- Reduce use of water
- Recycle & Reuse
- Use Alternative, Safer Products

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IC 7 - Reduce Landscape Maintenance Requirements

- Retain or plant native vegetation
- Use low water use flowers, trees, shrubs, etc.
- Consider alternative landscaping techniques
 - Naturescaping
 - Xeriscaping



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IC 7 - Properly Store and Dispose of Gardening Wastes

- Dispose of vegetation as garbage
- Do not dispose of wastes in streets, waterways, etc.
- Place temporary stockpiles away from storm drains and watercourses



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IC 7 - Properly Manage Irrigation

- Irrigate slowly – do not exceed soil infiltration rate
- Inspect systems for leaks
- If reclaimed water is used – ensure there is no runoff
- When repairing a leak pour muddy water into landscaped areas



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IC 7 - Properly Store and Dispose of Chemicals

- Provide secondary containment for chemicals
- Label all containers
- Dispose of empty containers properly
- Triple rinse containers



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IC 7 - Properly Manage Pesticide Use

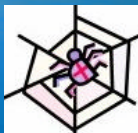
- Follow Guidelines
- Consider Conditions
- Prepare & Apply Carefully
 - Use it when you need it
 - Prepare what you need
 - Minimize off-target application
- Other Options
 - Mix and layer topsoils
 - Use slow release fertilizers



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IC 7 - Consider Integrated Pest Management

- Mulching
- Alternatives to Pesticides/Herbicides
 - Hand removal
 - Traps
 - Fencing
- Promote Beneficial Organisms
 - Ladybugs, bats, birds, praying mantis, spiders, etc.



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IC 7 - Properly Manage Fertilizer Use

- Follow Guidelines
- Consider Conditions
- Prepare & Apply Carefully
 - Use it when you need it
 - Prepare what you need
 - Minimize off-target application
- Other Options
 - Mix and layer topsoils
 - Use slow release fertilizers



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IC 17 – Spill Prevention and Clean Up

- Develop procedures
- Spill Prevention
- Spill Control and Clean Up Activities
- Reporting
- Train employees



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Training

- Train Employees
- Provide tools and knowledge
- Educate about spill prevention and clean up
- Initial training and refresher training
- Work with cities on training opportunities



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Inspections & Enforcement



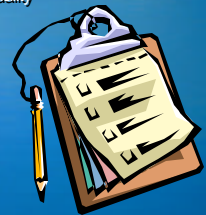
PROJECT
REDUCTION
PREVENTION



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Inspection

- Inspections Will Commence
- Cooperation Is KEY
 - Work together to improve water quality
- Inspection Checklist
- Compliance Inspections
 - Evaluating compliance
- Follow-up Inspections
 - Reevaluating non-compliance



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Education First



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Enforcement..... Where Education Fails



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Enforcement

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



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Questions



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Conclusion

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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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Conclusions

- Cooperative countywide program developed to address stormwater
- Landscaping activities can **IMPACT** water quality
- Businesses must implement pollution prevention and source control BMPs to:
 - Eliminate non-stormwater discharges
 - Reduce the exposure of pollutants to stormwater
- The County/City will inspect & enforce this program

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Resources

For more information, visit www.ocwatersheds.com or call the Orange County Stormwater Program at 714-567-6363.



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Sources of Additional Information

- Orange County Best Management Practices (BMP) Fact Sheets
California Stormwater Quality Task Force, 2003. *Best Management Practice Handbooks – Industrial/Commercial BMP Handbook.*
- BASMAA, 1999. *Start at the Source – Design Guidance Manual for Stormwater Quality Protection.*
- California Exotic Pest Plant Council, 1999. *Exotic Pest Plant List.* (www.caleppc.org)
- Professional Lawn Care Association of America, 1997. *Water Quality and Your Lawn.* (www.pesp.org/1995/plcaa95-final.htm)

Handouts

- Hard copy of this presentation
- Orange County Best Management Practices (BMP) Fact Sheet:
 - Landscape Maintenance – IC7
 - Spill Prevention & Cleanup – IC17
- Commercial Program Inspection Checklist
- Educational Materials

Questions

Thank You!

Thank you for attending and learning how you can help!

