

H2O for HOAs Workshop



Storm Water Program BMPs

October 25, 2018

Presented at the

**Norman P. Murray Community Center
in Mission Viejo**

Sewer vs. Storm Drain



SEWER VS. STORM DRAIN

DO YOU KNOW THE DIFFERENCE?

Not all water in Orange County is treated the same...in fact, some water isn't treated at all. Rain and water from sprinklers and hoses wash litter, pet waste, motor oil, pesticides and other pollutants into the storm drain where it flows untreated into our creeks, rivers, bays and ultimately, our ocean. Only water that enters the sewer (from sinks and toilets) is treated before entering our waterways. SO DON'T TREAT THEM THE SAME.



www.ocwatersheds.com

Remember The Ocean Begins at Your Front Door

The Ocean Begins at Your Front Door



Never allow pollutants to enter the street, gutter or storm drain!

What is a Watershed?

A watershed is the geographic area draining into the ocean or other body of water through a single outlet and includes the receiving waters.

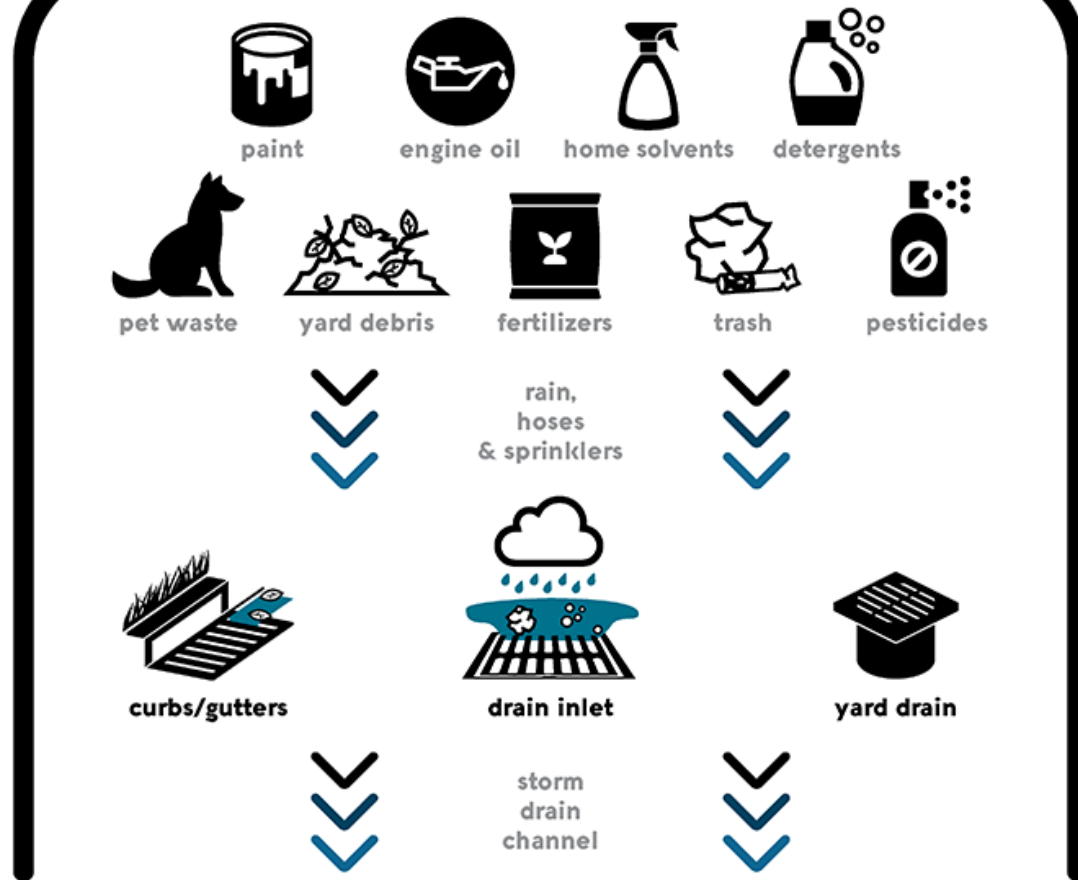


What Can You Do To Help?

Implement Best Management Practices (BMPs):

Practical and economically achievable measures such as good housekeeping, education and maintenance practices to reduce or eliminate discharges of pollutants.

POLLUTANTS FROM RUNOFF



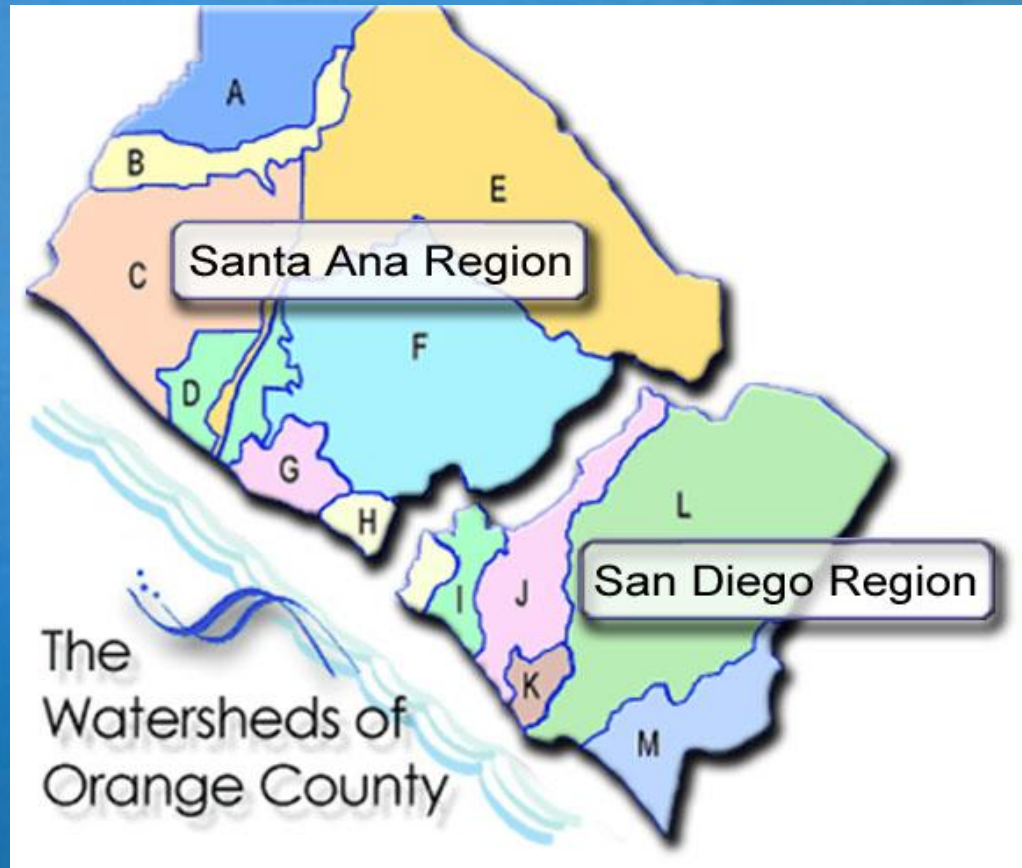
OCEAN

CIA/HOA Program

Program Goal

Increase understanding and implementation of appropriate BMPs to prevent pollutants from reaching waterways and the Pacific Ocean

Regional Board Boundaries within Orange County



San Diego Regional Water Quality Control Board Permit

- Residential
- Commercial
- Industrial
- Municipal
- Construction

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

ORDER NO. R9-2013-0001,
AS AMENDED BY ORDER NOS. R9-2015-0001 AND R9-2015-0100
NPDES NO. CAS0109266

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT AND WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM THE MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s) DRAINING THE WATERSHEDS WITHIN THE SAN DIEGO REGION

The San Diego County Copermittees in Table 1a are subject to waste discharge requirements set forth in this Order.

Table 1a. San Diego County Copermittees

City of Carlsbad	City of Oceanside
City of Chula Vista	City of Poway
City of Coronado	City of San Diego
City of Del Mar	City of San Marcos
City of El Cajon	City of Santee
City of Encinitas	City of Solana Beach
City of Escondido	City of Vista
City of Imperial Beach	County of San Diego
City of La Mesa	San Diego County Regional Airport Authority
City of Lemon Grove	San Diego Unified Port District
City of National City	

The Orange County Copermittees in Table 1b are subject to waste discharge requirements set forth in this Order.

Table 1b. Orange County Copermittees¹

City of Aliso Viejo	City of Rancho Santa Margarita
City of Dana Point	City of San Clemente
City of Laguna Beach	City of San Juan Capistrano
City of Laguna Hills	City of Laguna Woods
City of Laguna Niguel	County of Orange
City of Mission Viejo	Orange County Flood Control District

¹ While not listed in Table 1b., the City of Lake Forest remains a Copermittee under this Order until the later effective date of this Order or the effective date of Santa Ana Water Board Tentative Order No. R8-2015-0001. Thereafter, the City of Lake Forest will no longer be considered a Copermittee under this Order because its Phase I MS4 discharges will be regulated by the Santa Ana Water Board pursuant to Water Code section 13228 designation. The requirements of this Order that apply to the City of Lake Forest for the duration of this Order, however, are described in Finding 29 and Footnote 2 to Table B-1.

CIA/HOA Activities That Generate Pollutants

- Automobile Parking and Washing
- Landscaping and Irrigation
- Community Center O&M
- Recreation Area O&M
- Maintenance Yard Operations
- Hardscape, Fountain, and Pool Maintenance
- Street and Storm Drain Maintenance

Examples of Pollutants and Sources

Activity	Potential Pollutants								
	Sediments	Nutrients	Pathogens/ Coliform	Foaming Agents	Metals	Hydrocarbons	Hazardous Materials	Pesticides and herbicides	Other
Automobile parking	X				X	X	X		
Automobile washing	X	X		X	X	X	X		
Household Hazardous Waste (HHW) disposal				X	X	X	X	X	X
Sidewalk, plaza and fountain cleaning	X	X	X	X			X		
Landscape maintenance	X	X	X				X	X	
Community pool O&M	X	X	X						X

Examples of Pollutants and Sources

(continued)

Activity	Potential Pollutants								
	Sediments	Nutrients	Pathogens/ Coliform	Foaming Agents	Metals	Hydrocarbons	Hazardous Materials	Pesticides and herbicides	Other
Recreation/common area O&M	X	X	X					X	
Pet waste disposal	X	X	X						
Garden waste disposal	X	X	X				X	X	
Automobile repair and maintenance	X				X	X	X		
Maintenance yard operation	X	X	X	X	X	X	X	X	X

BMP Implementation

- CIA/HOAs with Publicly-Owned and Maintained Streets and Storm Drains
- CIA/HOAs with Privately-Owned and Maintained Streets and Storm Drains

BMP Fact Sheets

- Fact sheets have been developed to provide more detailed guidance
- Fact sheets include:
 - Pollution prevention
 - BMPs
 - Training
 - References



IC16. POOL AND FOUNTAIN CLEANING

BEST MANAGEMENT PRACTICES (BMP)

A BMP is a technique, measure, or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost-effective manner.¹ The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

TARGETED CONSTITUENTS	
<input checked="" type="checkbox"/>	Sediment
<input checked="" type="checkbox"/>	Nutrients
<input checked="" type="checkbox"/>	Floatable Materials
	Metals
<input checked="" type="checkbox"/>	Bacteria
	Oil and Grease
<input checked="" type="checkbox"/>	Organics and Toxicants
<input checked="" type="checkbox"/>	Pesticides
<input checked="" type="checkbox"/>	Oxygen Demanding

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium- and high-priority facilities, the owners/operators must select, install, and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

- 1. Prevent algae problems with regular cleaning, consistent adequate chlorine levels, and well-maintained water filtration and circulation systems.**
 - Do not use copper-based algaecides.
 - Control algae with chlorine or other alternatives, such as sodium bromide.
- 2. Manage pH and water hardness to minimize corrosion of copper pipes.**
- 3. Discharge pool and fountain water properly.**

Consider hiring a professional pool-draining service to collect all pool water for off-site disposal. If this is not feasible, adhere to the following:

- When draining pools or fountains, never discharge water to a street or storm drain; discharge to the sanitary sewer if permitted to do so.

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

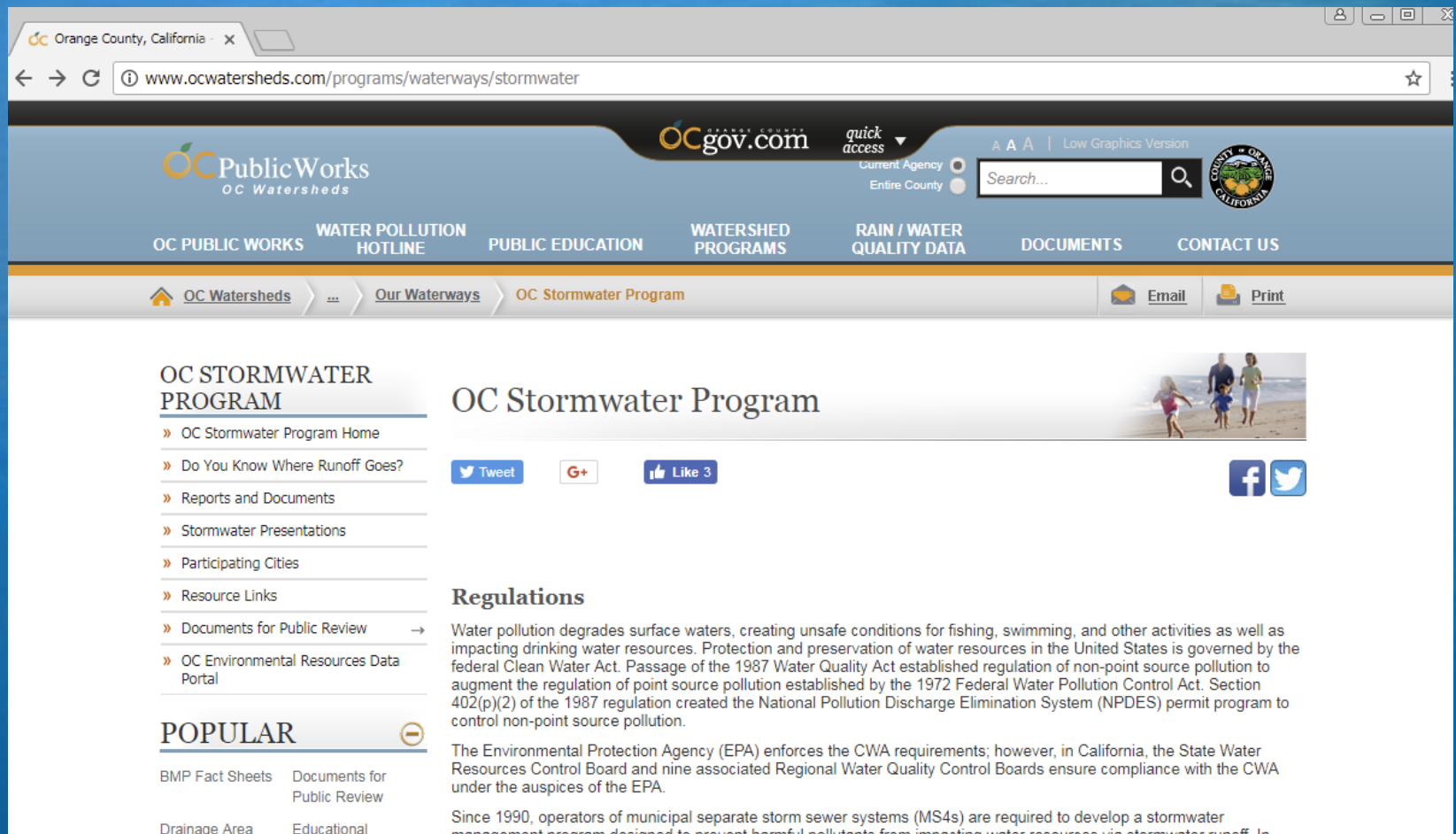
- Prevent algae problems with regular cleaning, consistent adequate chlorine levels, and well-maintained water filtration and circulation systems.
- Discharge pool and fountain water properly.
- Stencil storm drains.

Training

- Train employees on these BMPs, stormwater discharge prohibitions, and wastewater discharge requirements.
- Provide ongoing employee training in pollution prevention.

County Stormwater Program

“OC Watersheds”



The screenshot shows the OC Stormwater Program website. The browser address bar displays www.ocwatersheds.com/programs/waterways/stormwater. The website header includes the OC Public Works logo, the OC.gov.com logo, and a search bar. The main navigation menu lists: OC PUBLIC WORKS, WATER POLLUTION HOTLINE, PUBLIC EDUCATION, WATERSHED PROGRAMS, RAIN / WATER QUALITY DATA, DOCUMENTS, and CONTACT US. The breadcrumb trail shows: OC Watersheds > Our Waterways > OC Stormwater Program. The page content includes a sidebar with links to the OC Stormwater Program Home, Do You Know Where Runoff Goes?, Reports and Documents, Stormwater Presentations, Participating Cities, Resource Links, Documents for Public Review, and the OC Environmental Resources Data Portal. The main content area features the title "OC Stormwater Program" with a photo of a family walking on a beach, social media sharing buttons for Twitter, Google+, and Facebook, and a "Regulations" section. The "Regulations" section explains that water pollution degrades surface waters and that the federal Clean Water Act governs water resources. It also states that the EPA enforces CWA requirements in California, and that since 1990, operators of municipal separate storm sewer systems (MS4s) are required to develop a stormwater management program.

Orange County, California - x

www.ocwatersheds.com/programs/waterways/stormwater

OC Public Works
OC Watersheds

OC.gov.com

quick access

Current Agency
Entire County

Search...

Low Graphics Version

OC PUBLIC WORKS

WATER POLLUTION HOTLINE

PUBLIC EDUCATION

WATERSHED PROGRAMS

RAIN / WATER QUALITY DATA

DOCUMENTS

CONTACT US

OC Watersheds > Our Waterways > OC Stormwater Program

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OC STORMWATER PROGRAM

- » OC Stormwater Program Home
- » Do You Know Where Runoff Goes?
- » Reports and Documents
- » Stormwater Presentations
- » Participating Cities
- » Resource Links
- » Documents for Public Review →
- » OC Environmental Resources Data Portal

POPULAR

- BMP Fact Sheets
- Documents for Public Review
- Drainage Area
- Educational

OC Stormwater Program

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Regulations

Water pollution degrades surface waters, creating unsafe conditions for fishing, swimming, and other activities as well as impacting drinking water resources. Protection and preservation of water resources in the United States is governed by the federal Clean Water Act. Passage of the 1987 Water Quality Act established regulation of non-point source pollution to augment the regulation of point source pollution established by the 1972 Federal Water Pollution Control Act. Section 402(p)(2) of the 1987 regulation created the National Pollution Discharge Elimination System (NPDES) permit program to control non-point source pollution.

The Environmental Protection Agency (EPA) enforces the CWA requirements; however, in California, the State Water Resources Control Board and nine associated Regional Water Quality Control Boards ensure compliance with the CWA under the auspices of the EPA.

Since 1990, operators of municipal separate storm sewer systems (MS4s) are required to develop a stormwater management program designed to prevent harmful pollutants from impacting water resources via stormwater runoff. In



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[RESOURCES](#) ▼

[EVENTS](#)

[SHOW ME MY WATERSHED](#)



ORANGE COUNTY'S
SOLUTION
TO RUNOFF POLLUTION



**OVERWATERING IS
OUT**

[CLICK HERE TO LEARN MORE](#)



City of Aliso Viejo

Environmental Services - x

www.cityofaliso Viejo.com/city-hall/departments/public-works/environmental-services/

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Home

Public Works

Engineering

Street Sweeping Map

Streets and Trails Masterplan

CommunityView GIS

Forms and Permits

Slurry Seal

Environmental Services

Recycling and Waste Program

City Hall » Departments » Public Works » Environmental Services

Environmental Services

Posted on January 13, 2015

The City of Aliso Viejo is committed to protecting the environment and is proactive in the implementation of pollution control and recycling measures.

The Environmental Services Section has developed comprehensive Stormwater and Solid Waste and Recycling Programs. Under these programs, the City provides assistance to residents and business owners, Homeowner Associations and Service Companies in compliance with the State and Federal regulations for water quality and solid waste recycling and diversion from landfills.

For more information, please contact the Department of Public Works.
Phone: (949) 425-2530
Email: public-works@cityofaliso Viejo.com
[Stormwater Program](#)
[Pollution Prevention](#)
[Water Efficient Landscape](#)
[Recycling and Solid Waste Program](#)

Posted in [Public Works](#).

City of Dana Point

Environmental | City of Dana Point x +

Not secure | www.danapoint.org/department/public-works-engineering/environmental

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DANA POINT
CALIFORNIA

DEPARTMENT RESIDENTS VISITORS BUSINESS I WANT TO... 🔍

Department » Public Works & Engineering »

ENVIRONMENTAL

Font Size: + - + Share & Bookmark Feedback Print

H₂O^C
STORMWATER PROGRAM
DANA POINT

NEW! [H₂O^C Stormwater Program Website](#)

[Integrated Regional Water Management Plan \(IRWMP\) for South Orange County](#) (Note: Large PDF File, 58.7 MB)

Navigate through the document by using the Table of Contents.

[Environmental Working Group's Guide to Sunscreens](#)

Safer for you, safer for the environment!

[DRAFT Dana Point Water Quality Local Implementation Plan](#)

For questions or comments, please contact Lisa Zawaski at lzawaski@danapoint.org or 949-248-3584

- Public Works & Engineering
 - Construction (Capital Improvement) Projects
 - + Engineering Permits
 - Environmental
 - Best Management Practices (BMP) Requirements for Construction Projects
 - + Ocean Water Quality/Surface Runoff
 - Solid Waste & Recycling
 - Street Sweeping
 - Water Conservation
 - Water Quality Requirements for Development Projects
 - For Kids
 - How to Report a Problem
 - + Solid Waste & Recycling
 - + Streets & Traffic Signals

12TH ANNUAL EWG SUNSCREEN GUIDE

DANA POINT WATER QUALITY LOCAL IMPLEMENTATION PLAN

City of Laguna Niguel

The screenshot shows a web browser window with the address bar displaying <https://www.cityoflagunaniguel.org/1159/Urban-Runoff-Management>. The page header features the City of Laguna Niguel logo, which includes a circular seal with a landscape scene and the text "CITY OF LAGUNA NIGUEL" and "1989". To the right of the logo, the text "Laguna Niguel" is displayed in a large, bold, dark blue font, with "CALIFORNIA" in a smaller, all-caps font below it.

Below the header, there is a navigation bar with five links: "City Hall", "Services", "What's New", "Economic Development", and "How Do I...?". Below this is a dark blue search bar with the placeholder text "Search..." and a magnifying glass icon on the right.

The main content area is divided into three columns. The left column is a dark blue sidebar with white text, containing five links: "BMPs for Residents and Businesses", "Construction Sites Stormwater Requirements", "New Development Stormwater Requirements", "Over-Irrigation Prevention", and "Federal and State Water Quality Laws". At the bottom of this sidebar is a link for "H2O for HOAs Educational Event" and a small "Enable Google Translate" button.

The middle column has a breadcrumb trail: "City Hall > Departments > Public Works > Environmental Programs > Urban Runoff Management". Below this is the section title "Urban Runoff Management" in a large, bold, dark blue font. The text below the title states: "The mission of the City's Urban Runoff Management Program is to maintain and promote quality of surface water for the citizens of Laguna Niguel and to ensure compliance with the surface water quality regulations. The goal is to protect the quality of water in our creeks and ocean by prohibiting polluted and illicit discharges, e.g. over-irrigation runoff, into the storm drain system and by reducing the pollution load carried into the City's storm drain system during rain events." Below this text is a paragraph: "This Environmental Program of the City's Public Public Works Department is responsible for overall management of stormwater quality issues in the City. Through public education and outreach, the Stormwater Management".

The right column is titled "Contact Us" and lists "Hal Ghafari" as the "Environmental Programs Supervisor". It includes a link for "Email" and a phone number: "Phone: (949) 362-4384". Below this is a section titled "Report a Discharge" with the text "Please Contact" and another "Email" link. It also includes a phone number: "Phone: (949) 362-4337" and a link for "Report Online". At the bottom of this column is a blue box with white text that reads "CITY OF LAGUNA NIGUEL WATER QUALITY LOCAL IMPLEMENTATION PLAN".


City of Laguna Hills

Water Quality | Laguna Hills

Secure | https://www.ci.laguna-hills.ca.us/229/Water-Quality

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LAGUNA HILLS
California


Government

Services

Explore Laguna Hills


Doing Business


How Do I...





Water Quality


Overwatering is Out

 Register for Classes

 Report an Issue

 Current Planning Projects

 Community Voice

 Agendas & Minutes

Home > Government > Departments > Public Services > Public Works > Water Quality

Water Quality

Did you know the largest source of water pollution comes from City streets, neighborhoods, construction sites, and parking lots?

Storm Drains

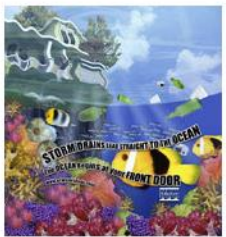
Anything we use outside of our homes, vehicles and businesses-such as motor oil, paint, pesticides, fertilizers, and cleaners, can be blown or washed into the storm drains.

The City's storm drain system is separate from the sewer system. In the sewer system, wastewater (sewage) is transported to wastewater treatment plants through underground sewer pipes. Whereas, in the storm drain system, water collected from the streets goes untreated into creeks and eventually the ocean.


Clean Waterways

Everyone's help is needed to keep the waterways clean. Together we can prevent pollutants from entering the storm drains by keeping our streets and gutter clean and following Best Management Practices. Below are some helpful resources and numbers

- [Orange County Watershed website](#)
- [Stormwater Pollution Clip](#)
- Hazardous Waste Collection Information: 714-834-6752



"COME TO THE CITY HALL AND ASK FOR THIS FREE POSTER"

 Enable Google Translate

City of Mission Viejo

Environmental Programs | City of MI

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https://cityofmissionviejo.org/departments/public-works/green

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Public Works ^

> About v

> Capital Improvement Projects

> Community GIS

> Engineering Standard Plans

> Environmental Programs

> Conservation

> Pollution Prevention

> Reduce, Reuse, Recycle

> Trash and Recycling Services

Environmental Programs Conservation

Conservation of the Earth's natural resources is essential to protecting the environment for this and future generations. To encourage residents and businesses to do their part to conserve our natural resources, Mission Viejo has provided a variety of information, resources, and tips to help you conserve.

Pollution Prevention

Why should you be concerned about pollution? Because everything found in our streets and gutters will also end up in your neighborhood parks, along walking trails, in our creeks and lake, and eventually in the ocean. Learn about the City's National Pollutant Discharge Elimination System (NPDES) Program as well as what actions you can take to prevent pollution.

Reduce, Reuse, Recycle

The City of Mission Viejo recognizes the importance of recycling, waste reduction, and reuse and has a wide variety of programs available for its residents. Learn how you can reduce, reuse, recycle.


Residential Curbside Trash and Recycling Services

City of Rancho Santa Margarita

Stormwater Program | Rancho Santa Margarita

https://www.cityofrsm.org/370/Stormwater-Program

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California

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Best Management Practices & Other Resources

Motor Oil Recycling

[Home](#) > [Government](#) > [Public Works & Engineering](#) > Stormwater Program

Stormwater Program

Orange County Stormwater Program

The Orange County Stormwater Program was initiated in 1990 as a cooperative local government response to the 1987 Amendment to the Federal Clean Water Act (CWA). This amendment extended the provisions of the CWA Section 402 National Pollutant Discharge Elimination System (NPDES), issuing a permit to the municipal storm drain system operators, also known as the Municipal Separate Storm Sewer Systems (MS4s), thereby making local governments responsible for the quality of their stormwater discharges.

Administration & Compliance

In California, these stormwater programs are administered by the State Water Resources Control Board (SWRCB) and 9 regional boards that issue NPDES-MS4 permits and enforce regulations within their respective regions. South Orange County lies within the jurisdiction of the San Diego Regional Water Quality Control Board (SDRWQCB). This regional board issued the 1st municipal NPDES-MS4 permit in 1990 for the "Orange County Stormwater Program," a partnership between the County and South Orange County cities, including the City of Rancho Santa Margarita. NPDES-MS4 permits are issued for a 5-year term with the current Fourth Term Permit issued on December 16, 2009.

In compliance with the NPDES-MS4 Permit, the City of Rancho Santa Margarita has developed a comprehensive Stormwater Program that exemplifies the high value that is placed on clean water and improving water quality. This program includes a Local Implementation Plan (LIP) that regulates urban water runoff in and around the City.

Select Language

City of San Clemente

The screenshot shows a web browser window displaying the City of San Clemente website. The browser's address bar shows the URL <http://www.san-clemente.org/departments-se>. The website features a blue header with the city's logo and the text "San Clemente THE SPANISH VILLAGE BY THE SEA". A navigation bar includes links for "HOME", "ABOUT US", "DEPARTMENTS & SERVICES", "GOVERNMENT", "RECREATION & COMMUNITY", and "I AM A...". A search bar and a language selection dropdown are also present. The main content area is titled "Public Education & Resources" and includes a sidebar with a list of services. The "ENVIRONMENTAL SERVICES" section is highlighted, and the "PUBLIC EDUCATION & RESOURCES" link is selected. The main text describes the "San Clemente's 24 Hour Pollution Reporting Hotline" and lists the goals of the Clean Ocean Program.

City Transparency | CM Report | Contact Us | Muni Codes | Press Releases

San Clemente
THE SPANISH VILLAGE BY THE SEA
www.sccleanocean.org

Search... **GO**
Select Language

HOME | **ABOUT US** | **DEPARTMENTS & SERVICES** | GOVERNMENT | RECREATION & COMMUNITY | I AM A...

▸ Animal Services (CASA)
▸ Beaches, Parks & Recreation Services
▸ Building Services
▸ Business Services
▸ City Clerk Services
▸ Code Compliance Services
▸ Engineering Services
▸ **ENVIRONMENTAL SERVICES**
▸ **PUBLIC EDUCATION & RESOURCES**
Download Library
Trash & Recycling
▸ Water Quality
Energy Efficiency
▸ Finance & Administrative Services
▸ Housing & Social Services
▸ Human Resources Services
▸ Maintenance Services
▸ Planning Services
▸ Public Safety Services
▸ Water Information
▸ Utility Services

Departments & Services » Environmental Services

Public Education & Resources

Print Feedback Share & Bookmark Font Size:

San Clemente's 24 Hour Pollution Reporting Hotline is (949) 366-1553

Public Education

The primary goal of The Clean Ocean Program is to inform community residents and businesses about the causes and effects of stormwater and urban runoff pollution. By increasing public awareness of activities within, and consequences to, San Clemente's watersheds, the program will gradually reduce watershed pollution in San Clemente. Educational efforts focus on understanding, and where necessary, changing attitudes by providing useful information that will enable individuals in the community to change behaviors and current practices. The educational program strives to communicate fundamentals of watershed pollution control including:

- The configuration and purpose of the City's storm drain system and how it differs from the sewer system.
- How pollutants can be released to the storm drain system.
- How stormwater and urban runoff pollution impacts local receiving waters and surrounding habitat.
- What best management practices (BMPs) are available for treating or controlling the various pollutants of concern.

City of San Juan Capistrano

City of San Juan Capistrano > Depa

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☆ ⓘ ⋮



City of San Juan Capistrano

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Public Works

Steve May, Director of Public Works and Utilities

Engineering

Operations & Maintenance ▾

Capital Improvement Projects

Traffic

Water Quality

FEMA - Floodplain Management Information

Resources ▾

FAQ

Forms

Fats, Oils and Grease (FOG)

Contact Us

Temporary Bike Path Detours

Water Quality

The 1972 amendments to the Federal Water Pollution Control Act (Clean Water Act) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The Clean Water Act (CWA) made it unlawful to discharge any pollutant from a point source into navigable waters, unless a National Pollutant Discharge Elimination System (NPDES) permit was obtained.

In 1987, the passage of the Water Quality Act established waste discharge requirements that implement the NPDES requirements. The NPDES permit program controls water pollution by regulating point sources that discharge pollutants in stormwater into waters of the United States. Since 1990, the owners and operators of municipal separate storm sewer systems such as the City's stormwater drainage system, has been required to:

- Develop a stormwater management program designed to prevent harmful pollutants from being dumped or washed by stormwater runoff, into the stormwater system, then discharged into local waterbodies, and
- Obtain a NPDES permit that authorizes the discharges of stormwater.

In California, the NPDES permit programs are administered by the State Water Resources Control Board and by the nine regional boards that issue NPDES permits and enforce regulations within their respective region. The City of San Juan Capistrano is within the jurisdiction of the San Diego Regional Water Quality Control Board.

Orange County lies within the jurisdiction of both the Santa Ana and San Diego Regions. These two regional boards issued our first municipal NPDES permit in 1990 to the "Orange County Stormwater Program," a partnership between the County, all cities within Orange County, and the Orange County Flood Control District. Since the program's inception, the County has served as the Principal Permittee.

NPDES permits are issued for a five-year term and have generally followed a progressive pattern. Our first permit provided an opportunity for Orange County municipalities to establish a program customized to local conditions. In its earliest form, the Orange County Stormwater Program focused on gathering data about existing conditions and

The Basics of Pollution Prevention

- Use Safer Products
- Recycle and Reuse
- Reduce Exposure
- Use Dry Cleanup Methods (e.g., Sweeping)
- Properly Store and Label Materials



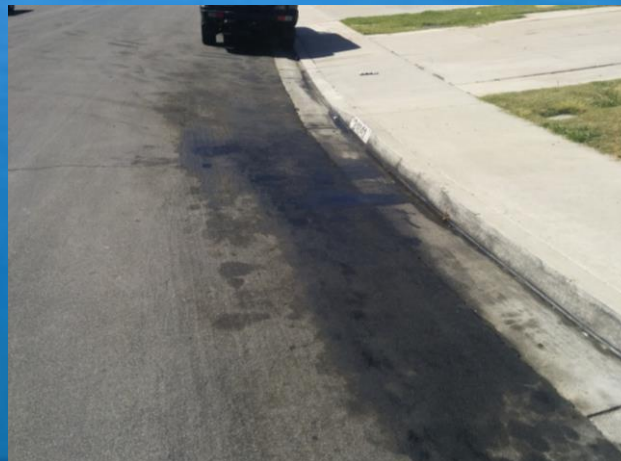
Common BMPs for all HOAs

Vehicle Parking

Problem: Vehicles leak motor oil, and block street sweepers from picking up trash and leaf debris.

Solutions:

- Remove vehicles from street during street sweeping/cleaning times
- Perform routine maintenance on vehicles to minimize leaks
- Place drip pans underneath leaking vehicles
- Use dry cleaning methods to remove material deposited by vehicles



Vehicle Washing

Problem: Chemicals and concentrated metals get washed into storm drain system

Solution: Prohibit car washing (and take car to a car wash)



Did you know that every time you wash your car in the driveway, all those **toxic chemicals** end up in our rivers, lakes and oceans?

Hardscape Maintenance

Problem: Pressure washing washes concentrated pollutants into storm drain system

Solution(s): Sweep, or block storm drain inlets and recover wash water



Landscape Maintenance

Problem: Organic waste, fertilizer, and pesticides can migrate into storm drain system.

Solutions for organic waste:

- All green waste must be collected and disposed of properly. The catch basin is not where green waste should be blown in.
- Recycle green waste! Assembly Bill 1826 requires it.

Organics

- MORE Home
- Food Scraps Management
- Food Banks & Food Recovery
- Case Studies & Model Programs
- Compost & Mulch
- Conversion Technologies
- FAQ
- Organics Home

Related Topics

- California Green Business Network
- CoolCalifornia.org Small Business Tool Kit
- Food Recovery Challenge (US EPA)
- Vermicomposting
- Mandatory Commercial Recycling

Contacts

- CalRecycle Programs
- CalRecycle Ombudsman
- Local Government Contacts

Mandatory Commercial Organics Recycling (MORE)

- [General Information](#)
- [Business Requirements and Resources](#)
- [Local Government Requirements and Resources](#)
- [CalRecycle Requirements](#)
- [Frequently Asked Questions](#)
- [Listserve](#)
- [Related Resources](#)

General Information

Background and Overview

In October 2014 Governor Brown signed [AB 1826](#) ([Chapter 727, Statutes of 2014](#)), requiring businesses to recycle their organic waste on and after January 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units (please note, however, that multifamily dwellings are not required to have a food waste diversion program). Organic waste (also referred to as organics throughout this resource) means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. This law phases in the mandatory recycling of commercial organics over time, while also offering an exemption process for rural counties. In particular, the minimum threshold of organic waste generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector will be required to comply.

Why Organics? Mandatory recycling of organic waste is the next step toward achieving California's aggressive recycling and greenhouse gas (GHG) emission goals. California disposes approximately 30 million tons of waste in landfills each year, of which more than 30 percent could be used for compost or mulch (see the [2014 Waste Characterization Study](#)). Organic waste such as green materials and food materials are recyclable through composting and mulching, and through anaerobic digestion, which can produce renewable energy and fuel. Greenhouse gas (GHG) emissions resulting from the decomposition of organic wastes in landfills have been identified as a significant source of emissions contributing to global climate change. Reducing the amount of organic materials sent to landfills and increasing the production of compost and mulch are part of the [AB 32 \(California Global Warming Solutions Act of 2006\) Scoping Plan](#). For more information on the connection between the waste sector and California's GHG emission reduction goals, please see [CalRecycle's Climate Change page](#).

Implementation Dates and Thresholds

The law phases in the requirements for businesses, including multifamily residential dwellings

Program News...

- In January 2017, a memo from CalRecycle Director Scott Smiline was sent to all jurisdiction and Annual Report Contacts outlining at any time jurisdiction Reviews of Mandatory Commercial Recycling and Commercial Organics Recycling Programs.
- New Flyer and Brochure for schools regarding AB 1826 and small scale composting.
- Mandatory Businesses and Multifamily Organic Waste Recycling Brochure and now in Spanish.
- Education Outreach Tools
- [AB 876 Guidance and Calculator](#) - CalRecycle created guidance and a calculator to assist jurisdictions with longer term planning for organics infrastructure. The related calculator is now available for use.

Organics in California's Overall Disposed Waste Stream, 2014

Organics are:

- Food
- Green - leaves, grass
- Landscaping - prunings, trimmings, branches, stumps
- Non-hazardous Wood Waste

* Compostable Paper includes food-soiled paper and other compostable paper

Data from CalRecycle's 2014 Disposal Facility-Based Characterization of Solid Waste in California

Category	Percentage
Organics	34%
Compostable Paper*	7%
All Other Materials	59%

Landscape Maintenance

Solutions for fertilizer use:

- Follow the manufacturer's directions.
- Don't over fertilize.
- Fertilize only when plants are actively growing.
- Keep fertilizer off of impervious surfaces and sweep it back onto the lawn.
- Maintain a buffer zone around surface water bodies.



Landscape Maintenance

Solutions for pesticide use:

- Follow the directions on the label, the “label is the law” for pesticides.
- Don’t overuse.
- Keep off impervious surfaces.
- Maintain a buffer zone around wells and surface waterbodies.
- Utilize Integrated Pest Management (IPM) practices.
- Properly store, dispose of and clean up spills.



Pesticide Selection

Before selecting and applying a pesticide:

- ❖ Know the pest
- ❖ Know federal, state and local pesticide regulations
- ❖ Know how to properly use application equipment
- ❖ **Read the Label!**
- ❖ Know what PPE is required.

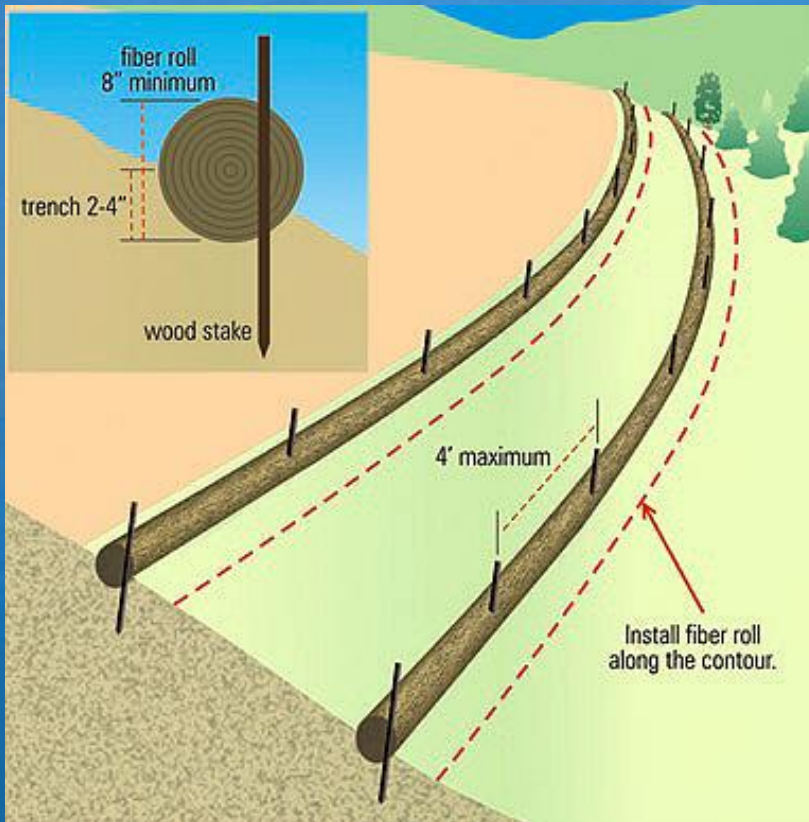


Slope Maintenance



What's wrong with this picture?

Slope Maintenance



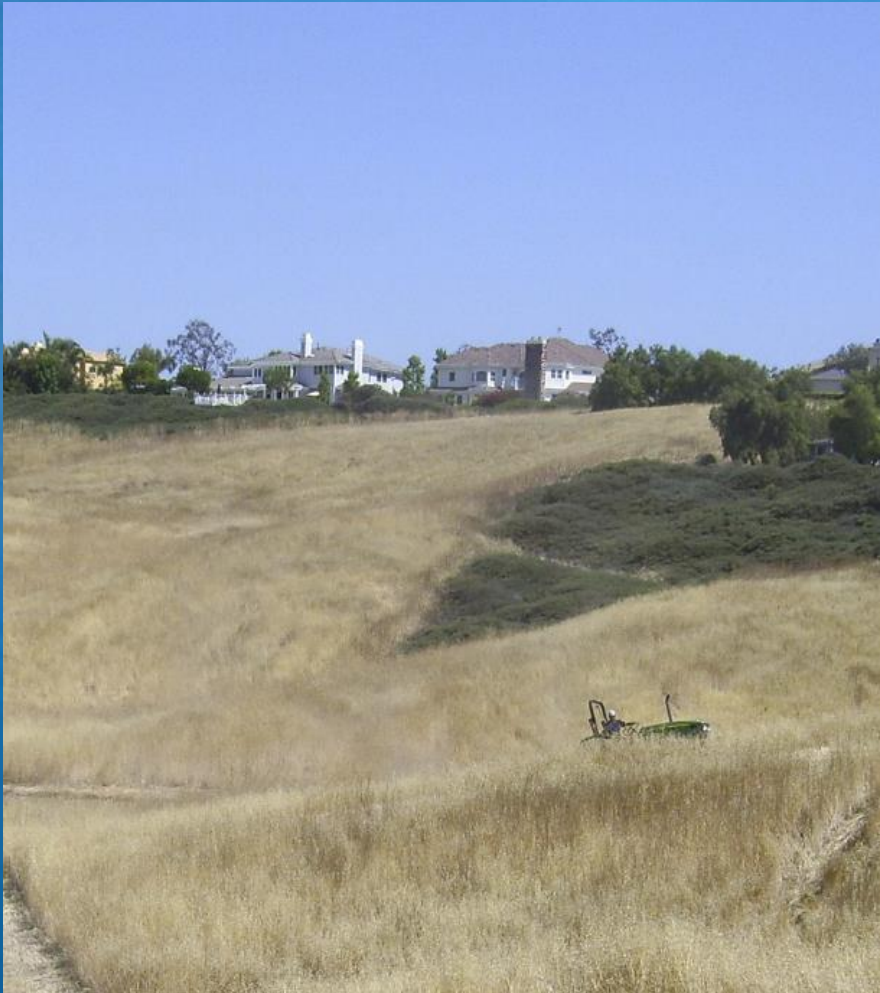
Temporary fiber rolls used on a slope

Slope Maintenance



Temporary fiber rolls used on a slope in combination with hydro-seeding, but permanent vegetation is best!

Slope Maintenance



Weeds? Mowing (NOT discing) is the correct abatement method!

Irrigation System Maintenance

Problem: Irrigation runoff carries pollutants to the storm drain system (and indicates water waste).

Solution: Adjust irrigation systems to not “water the sidewalk” and cause runoff into the storm drain system.



San Diego Regional Water Quality Control Board

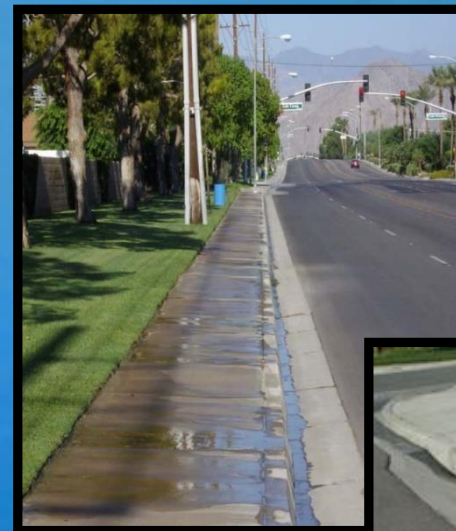
SAN DIEGO WATER BOARD CRACKS DOWN ON OVER WATERING THAT LEADS TO POLLUTION

FOR IMMEDIATE RELEASE
August 18, 2015

Contact: Chiara Clemente
Phone: (619) 521-3371

SAN DIEGO -- The San Diego Regional Water Quality Control Board (San Diego Water Board) is cracking down on water wasters throughout its region to stem pollution that is generated by overwatering.

With the state in a fourth year of extreme drought conditions, the San Diego Water Board recently initiated compliance audits to determine which cities are taking effective measures to eliminate over-irrigation – a requirement of storm water regulations adopted more than five years ago. The statewide emergency water conservation regulation adopted in [July 2014](#) also prohibits runoff, which is generally the result of over-watering. The regional effort enhances compliance with both prohibitions.





Misaligned sprinklers can create runoff that gets into the storm drain system



[H2OC CITIES](#)

[RESOURCES](#) ▼

[EVENTS](#)

[SHOW ME MY WATERSHED](#)



ORANGE COUNTY'S
SOLUTION
TO RUNOFF POLLUTION



OVERWATERING IS
OUT

[CLICK HERE TO LEARN MORE](#)

REPORT POLLUTION

In Orange County, federal, state, and local laws prohibit the dumping or discharge of anything, including water runoff, to the storm drain system, with only a few exceptions*.

Each city has their own ordinances and exceptions. Contact **your city** for more information.

To report pollution, please either visit <https://myOCeServices.ocgov.com> to submit a [Service Request](#) under Water Pollution, or call the 24-Hour pollution reporting hotline at **1-877-89-SPILL (77455)**.

Both options allow you to request service updates or to report anonymously. If this is an emergency, call 911.

To learn more about the work Orange County is doing to prevent harmful runoff, visit our [FAQs](#) page.

*In South Orange County, landscape irrigation runoff is prohibited.



**24-Hour pollution reporting
hotline:**
(877) 89-SPILL(77455)



24-Hour reporting website:
<https://myOCeServices.ocgov.com>

Community Pool Operation & Maintenance

- Discharge pool water properly:
 - To sanitary sewer preferred
 - Last resort to storm drain (must dechlorinate and remove other pollutants)
 - Do not discharge diatomaceous earth



Common Area Maintenance

Disposal of Pet Waste

- Properly dispose of pet waste (includes stabled animals)
- Implement pet stations
- Restrict animal access to creeks and streams



Common Area Maintenance

Disposal of Green Waste

- Do not dispose of green waste in streets and in catch basins.
- Use a green waste collection service.
- Place temporary stockpiles away from storm drain inlets and watercourses.



Material Storage, Handling and Disposal

- Store materials indoors or under cover if possible
- Keep storage areas clean and dry
- Provide secondary containment for stored liquids
- Regularly inspect storage areas for spills or leaks



Trash Collection, Recycling and Disposal

- Regularly inspect trash containers for damage and repair or replace as needed.
- Contact waste hauler for replacement cans and bins:

CR&R: (877) 728-0446

WM: (949) 642-1191

- Secure trash containers and provide secured covers.

**BMPs for HOAs with Privately-Owned and
Maintained Streets and Storm Drains
(In addition to those already detailed)**

Street Sweeping

- Maintain a consistent sweeping schedule
- Sweep streets at least once per month (recommended minimum)
- Avoid street cleaning during wet weather
- Don't flush down streets



Storm Drain Maintenance

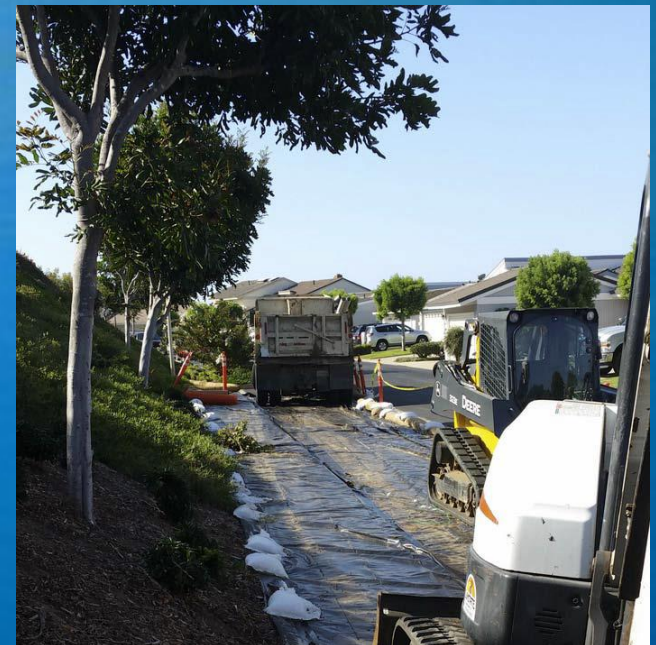
Problem: Storm drain catch basins collect trash and organics

Solutions:

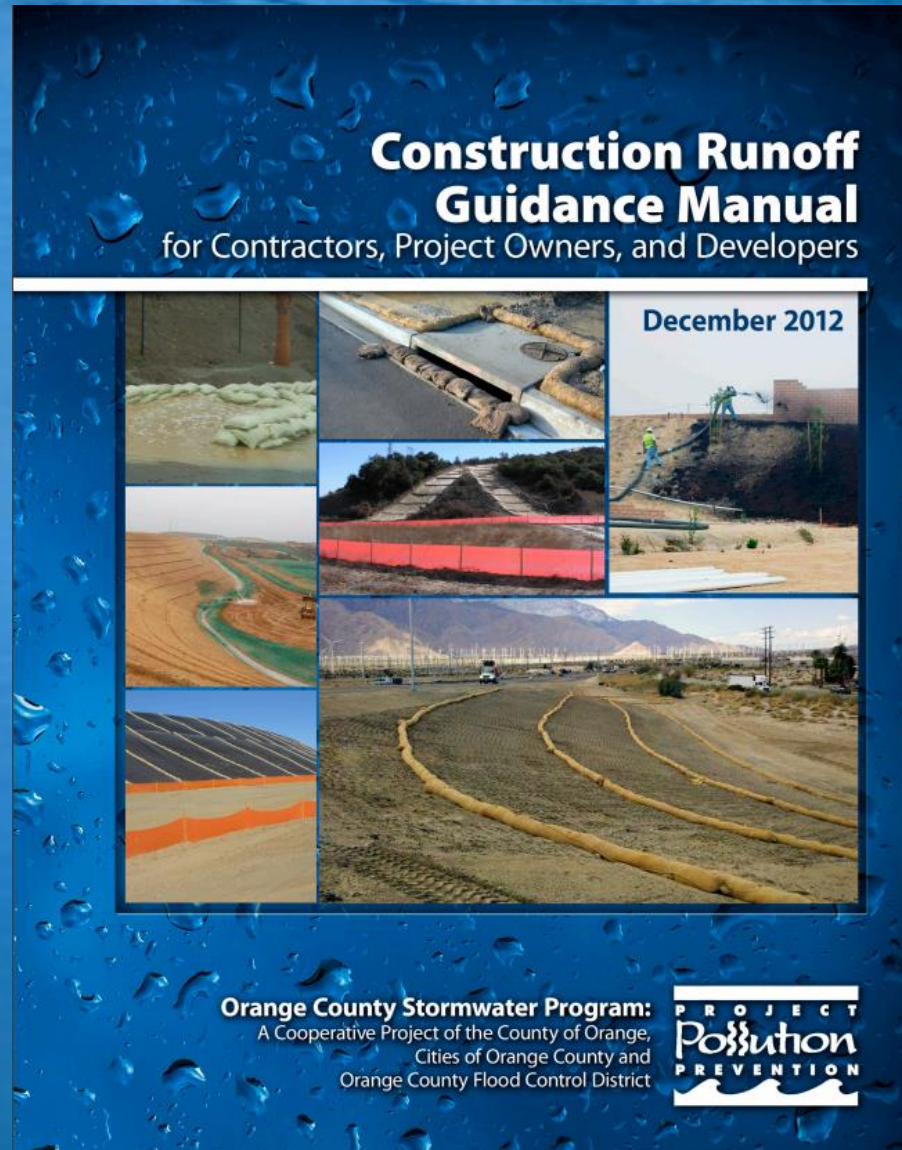
- Annually inspect and clean drainage facilities
- Eliminate any discharges that may occur while maintaining and cleaning drainage facilities
- Implement a storm drain stenciling program
- Report all observed illicit connections and discharges to the 24-hour water pollution problem reporting hotline (877) 89-SPILL or to the City.



Construction & Maintenance Projects



Construction & Maintenance Projects



Construction & Maintenance Projects

Orange County Stormwater Program

Best Management Practices for Construction Sites

Earthmoving Equipment

All earthmoving equipment must be stored onsite. Drip pans must be placed under equipment not in use, and maintenance must be conducted onsite instead of in the street. Any leaks should be cleaned up and repaired immediately.



Washout Areas

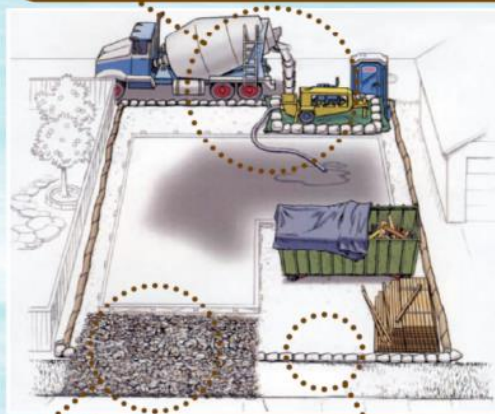
Disposal of "wet" construction materials should be handled in the washout area. This includes paint, stucco, and concrete. Use a plastic-lined pit to collect and contain liquids and prevent runoff into the street and gutter. The washout area must be checked and maintained daily to ensure compliance. Washout material must be disposed of properly.

Dirt and Grading

Stockpiled dirt and gravel must be stored onsite and covered. Dust control shall be maintained throughout all phases of construction. During the rainy season (October 1 – April 30) additional gravel, bags, tarps, and visqueen must be stored onsite for emergency repair.

Concrete Trucks/Pumpers

Pumpers must be surrounded by perimeter controls, such as gravel bags, sandbags, and straw wattles. Tarps also must be placed beneath concrete pumpers at all times to prevent spills into the street and sidewalk. Residual materials must be cleaned up as well. Trucks and pumpers are required to clean out in the washout area, not in the street, catch basin or a wheelbarrow.



Perimeter Controls

Gravel bags, silt fences and straw wattles are acceptable perimeter controls and must be used to control site run-on and runoff. Avoid running over perimeter controls with vehicles or heavy equipment, as they can damage the materials. Keep extra absorbent materials and/or a wet/dry vacuum onsite to quickly pick up spills. Sites must be checked and maintained daily.

Tracking Controls

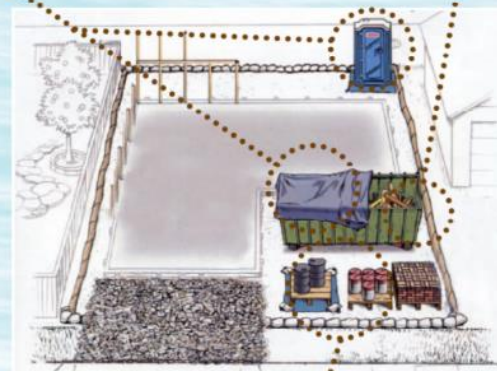
All entrances/exits on the site must have coarse gravel (1" to 3" angular material) and/or steel shaker plates to limit offsite sediment tracking. Hand or mechanical sweeping must also be used as needed to clean up any material that gets tracked offsite.

Dumpsters and Portable Toilets

Dumpsters must be covered with a tarp at the end of each work day and area around dumpster must be kept clean. Dumpsters must be located onsite unless an Encroachment Permit is obtained for placement in street. Portable toilets must have drip pans and be placed onsite so that any spills do not discharge offsite.

Building Materials/Staging Areas

Construction materials (including landscape materials) must be stored onsite. Building materials must be covered when not in use to prevent runoff caused by wind or rain.



Liquid Storage

Paints, solvents, fuel and other liquids stored onsite must be contained and covered. It is illegal for contractors to wash out or dump liquid waste or residue in the street, storm drain or sewer. Use washouts or hazardous material drums to contain liquid waste and residue and dispose of this material properly.

Training & Education by CIA/HOAs

- Incorporate requirements into contract documents. Your local storm water program manager can give samples.
- Train and Retrain Employees & Contractors
 - Safety
 - BMPs
 - Water Prohibitions and Requirements
 - Chemical Management
- Educate Residents
 - Association Newsletter
 - Association Webpage
 - Other Mailings

Conclusions

- Countywide program has been developed to improve water quality
- CIA/HOA maintenance activities can **IMPACT** water quality
- CIAs/HOAs should implement BMPs to reduce pollutants
- BMP fact sheets provide guidance

Resources

For more information:

Visit www.ocwatersheds.com

or

Visit your local city's environmental
website

City Contacts

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San Clemente Cynthia Mallett 949/366-1553 MallettC@san-clemente.org	San Juan Capistrano Joe Mankawich 949/487-4313 jmankawich@sanjuancapistrano.org

Thank You!

Thank you for attending and
learning how you can help!