H2O for HOAs Workshop

Storm Water Program BMPs

April 26, 2018
Presented at Laguna Niguel City Hall

List of Handouts

- Hard copy of this presentation

- Sample contract document language

- List of websites and contact information for where to find more information

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.
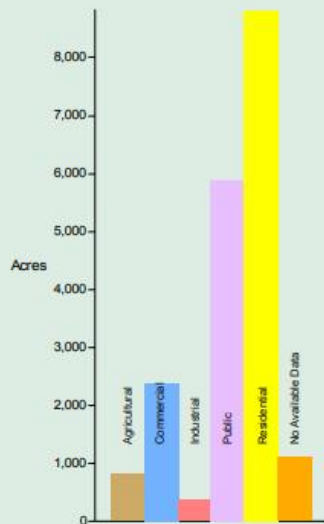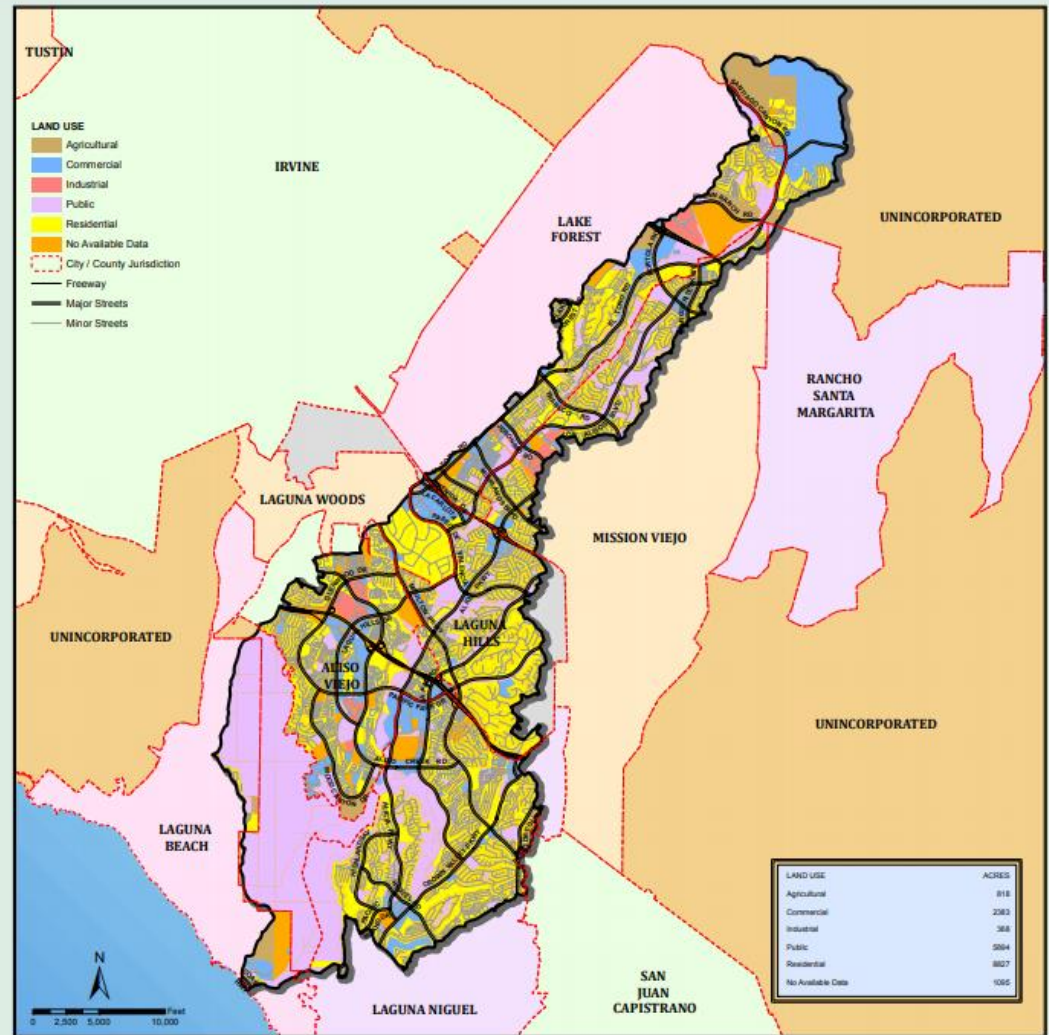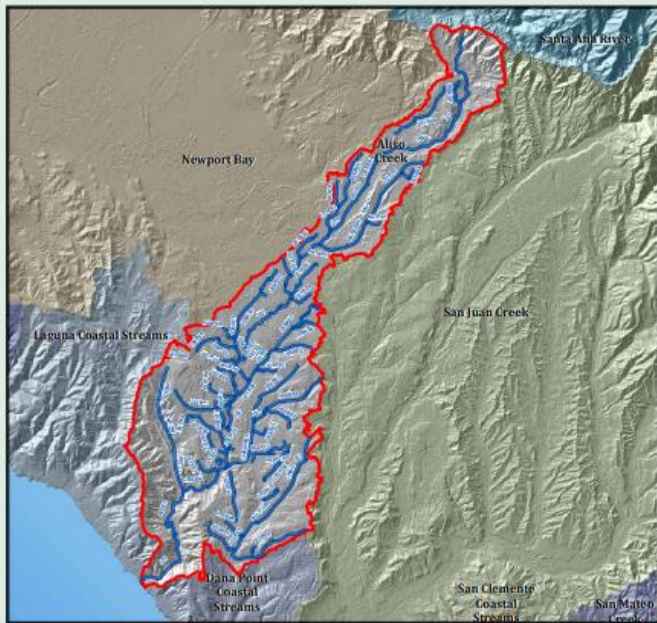
www.ocwatersheds.com
Remember The Ocean Begins at Your Front Door

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.

WATERSHED: ALISO CREEK

COUNTY OF ORANGE, CALIFORNIA

22314 Acres

5

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.

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

Santa Ana Region

San Diego Region

The Watersheds of Orange County
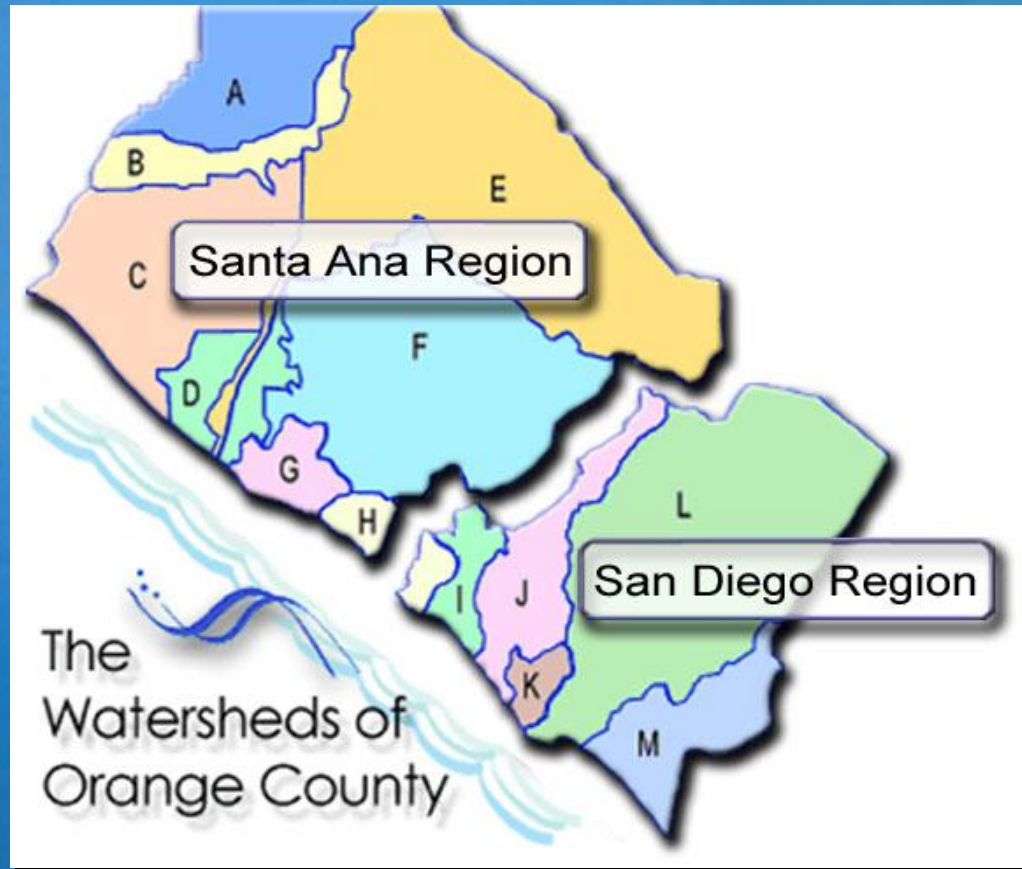
San Diego Regional Water Quality Control Board Permit

- 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 Copermittees[1]

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.

COVER
Page 1 of 2

9

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

County Stormwater Program "OC Watersheds"

City of Aliso Viejo

City of Laguna Niguel

City of Laguna Hills

City of Mission Viejo

Pollution Prevention

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

BMPs for HOAs with Publicly-Owned and Maintained Streets and Stormdrains

Activity	BMP	Fact Sheet
Parking vehicles on residential streets, driveways, or in common area parking lots	Automobile parking BMPs	R-3
Washing Vehicles in residential driveways or street	Automobile washing BMPs	R-2
Disposal of household hazardous wastes such as paint, bleach, etc.	Household Hazardous Waste BMPs	R-7
Cleaning of CIA/HOA sidewalks. Plaza, and entry monuments and fountains	Sidewalk, plaza, and entry monument and fountain maintenance BMPs	FP-4

BMPs for HOAs with Publicly-Owned and Maintained Streets and Storm Drains
(Continued)

Activity	BMP	Fact Sheet
Landscape maintenance including irrigation and fertilization	Landscape maintenance BMPs	FP-2 IC-7
Operation and maintenance of community pools	Pool cleaning BMPs	IC-16
Operations and maintenance of recreation/common areas such as greenbelts, parks, golf courses, and stables	Disposal of Pet Waste BMPs	R-5
	Landscape Maintenance BMPs	FP-2
	Disposal of Green Waste BMPs	R-6

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
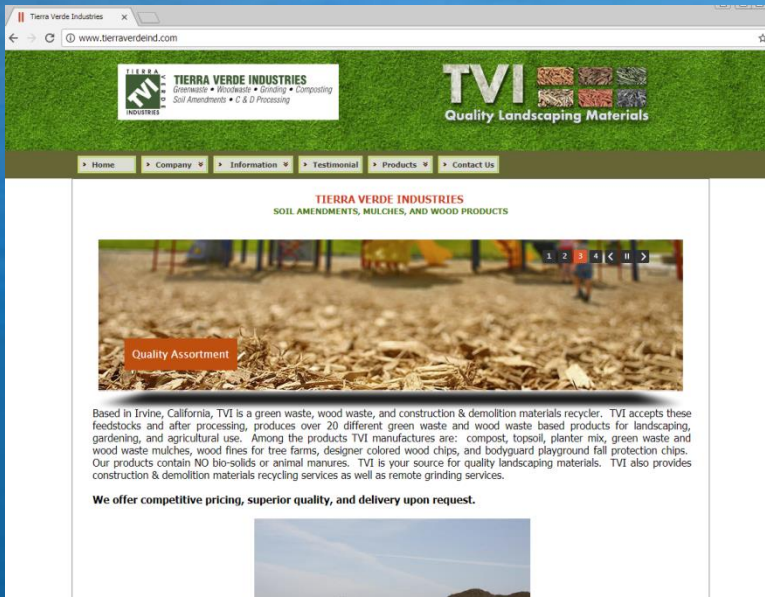
Landscape Maintenance

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.

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.

Slope Maintenance

What's wrong with this picture?

Slope Maintenance
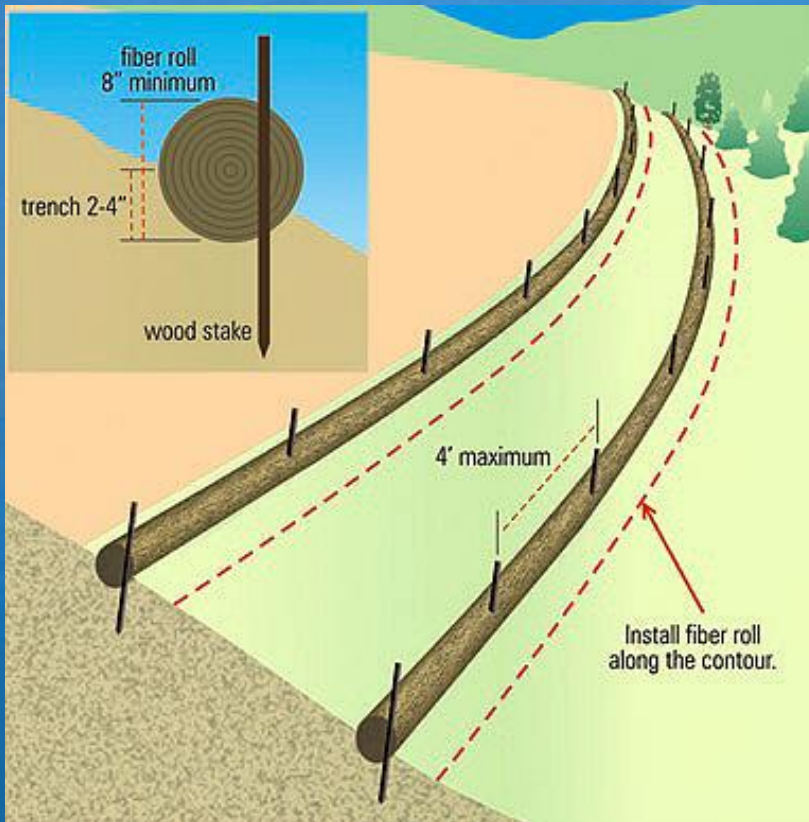
Temporary fiber rolls used on a slope

Slope Maintenance

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

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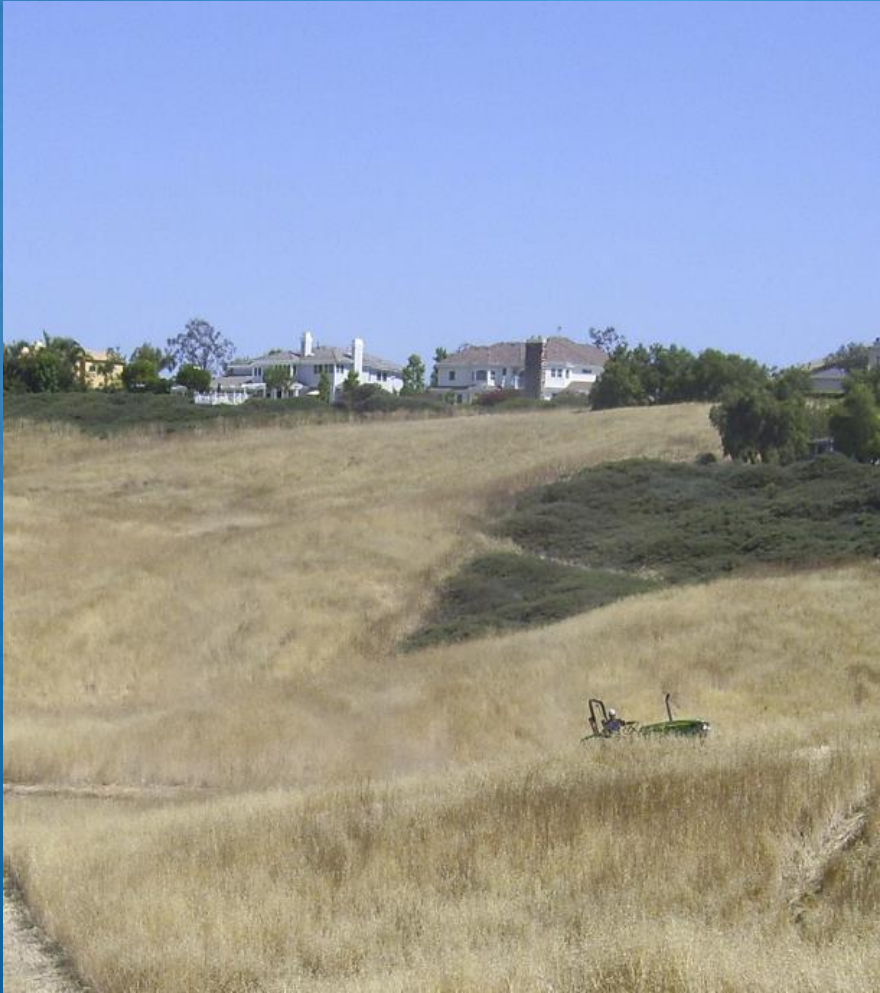
Weeds? Mowing (NOT discing) is the correct abatement method!

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.

Enforcement News

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.

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 or 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
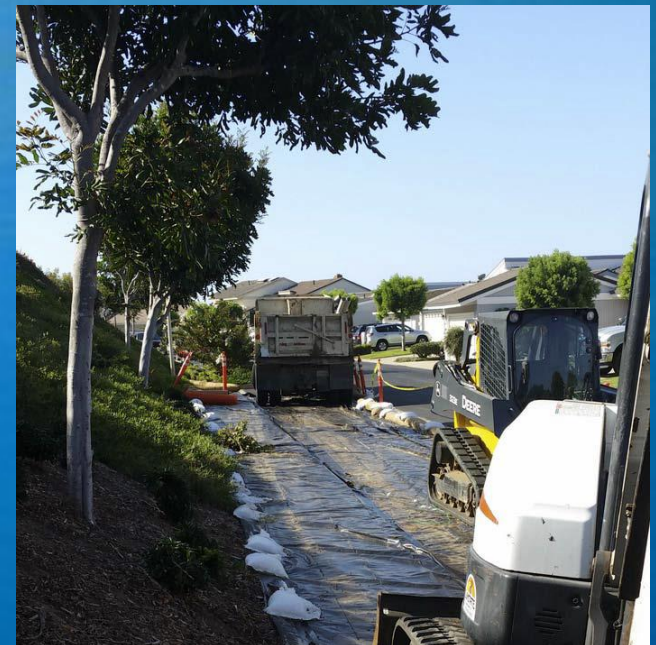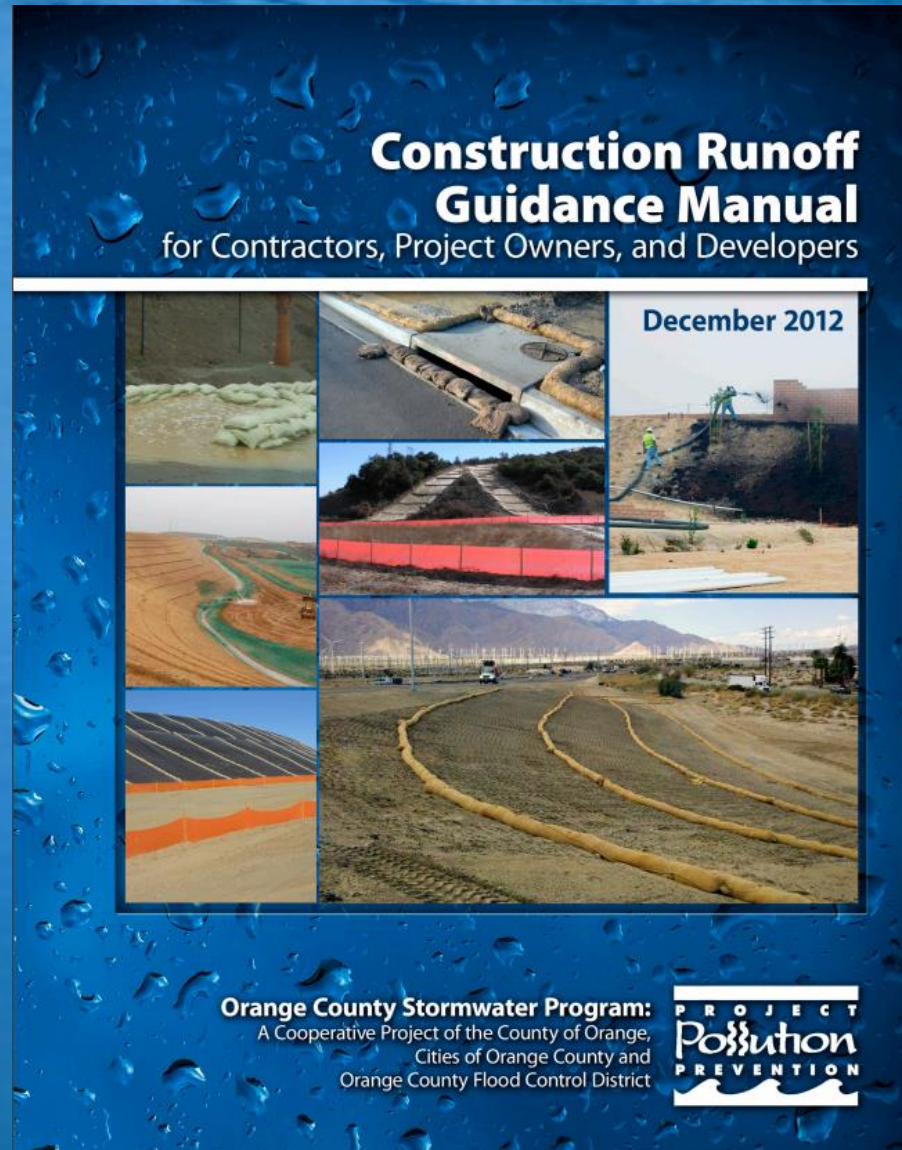
Construction & Maintenance Projects

Construction & Maintenance Projects

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.

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.

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.

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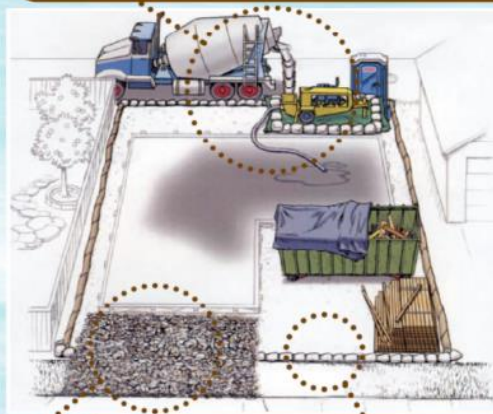Stockpiled dirt and gravel must be stored onsite and covered. Dust control shall be maintained throughout all phases of construction. During the rainy season (October 1 – April 30) additional gravel, bags, tarps, and visqueen must be stored onsite for emergency repair.

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.

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

Aliso Viejo Moy Yahya 949/279-4385 myahya@cityofalisoviejo.com
Laguna Niguel Hal Ghafari 949/362-4384 HGhafari@cityoflagunaniguel.org
Laguna Hills Amber Shah 949/707-2657 Ashah@lagunahillsca.gov
Mission Viejo Hazel McIntosh 949/470-8458 hmcintosh@cityofmissionviejo.org

Thank You!

Thank you for attending and learning how you can help!