

STORMWATER POLLUTION PREVENTION

Best Management Practices for Riverside County Homeowner's Associations and Property Managers



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RIVERSIDE COUNTY WATERSHED PROTECTION PROGRAM

Riverside County Watershed Protection program is a partnership between Riverside County Flood Control, Water Conservation District, Coachella Valley Water District, and 27 cities that all work together to protect, preserve, and enhance the quality of the water and natural environment of our watersheds. We work with residents, businesses, and HOAs to provide resources to educate and engage on how to prevent stormwater pollution in Riverside County.

WATERSHEDS AND YOUR COMMUNITY

There are many city and county regulations when it comes to stormwater management. These are in place to ensure residents, businesses, and communities like yours can work together with our program to protect, preserve and enhance the quality of the water and natural environment of our watersheds.

HOW TO USE THIS GUIDE

This guide is meant as a roadmap to guide homeowner association managers and boards through not only meeting city and county regulations, but also helping Riverside County's watersheds thrive. The guide primarily focuses on how your community specifically can support stormwater pollution prevention, but also includes recommendations for actions your residents can take.

If you have any questions about anything included in this guide, please don't hesitate to reach out to us: **RCWatershed.org**

(951) 955-1200



DRAIN INSERTS & CATCH BASINS

These protect our local waterways by capturing trash and debris before they can enter the storm drain system. As water passess through, larger debris is captured and stored until it is removed during maintenance activities.

HOW TO LOCATE

Look inside storm drain inlets in your community. They are often holding significant amounts of trash and debris.

WHEN AND HOW TO MAINTAIN

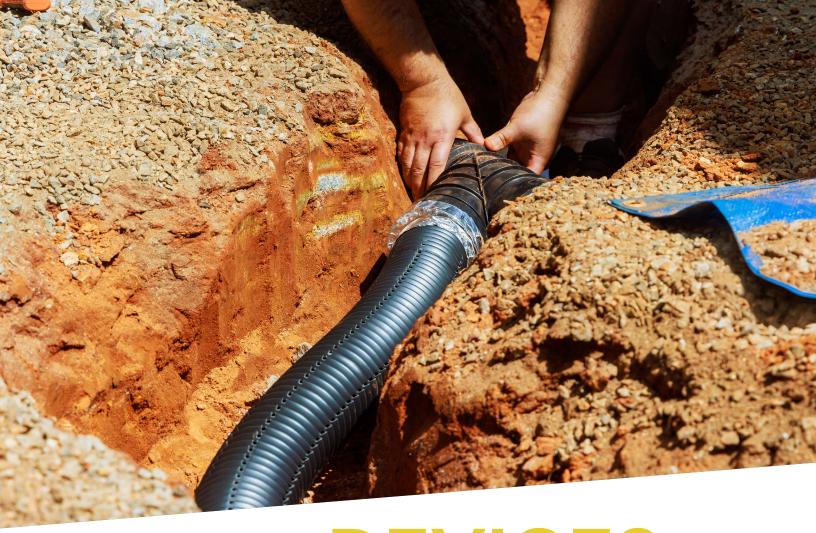
Catch basins should be inspected annually and cleaned when 25% full or if the sediment/trash/debris impairs the hydraulic capacity.

- 1. Remove any accumulated litter or debris.
- 2. (If any damaged components of the drain insert), contact a properly trained contractor to replace damaged components or worn filter fabric.
- 3. (If any sorbent materials in insert), contact a properly trained contractor to replace sorbent materials.
- 4. Hire a vactor truck contractor to clean the catch basin. If cleaning yourself, use a shop vacuum, pump, or bucket to remove the standing water and a shovel to remove sediment at the bottom.
- 5. If you are cleaning the catch basin yourself, dispose of the water into the sanitary sewer through a shop drain, sink, or other appropriate sanitary sewer drain. Let the removed solids dry out and properly dispose of the material. Make sure the removed solids do not wash back into your catch basin. Do not dispose of them on your property or someone else's property.

SAFETY PRECAUTIONS

- 1. Remove the grate with caution. It may be heavy.
- 2. Do not leave an open catch basin unattended.
- 3. Never enter a catch basin or other drainage structure unless properly trained.





INFILTRATION DEVICES

Infiltration devices divert stormwater runoff flows to areas where water can percolate through the surrounding soil. They use natural filtering to remove pollutants from stormwater runoff.

These can possibly be above ground in the form of trenches or gravel-filled areas, or installed beneath permeable pavement. Typically, these are dry except in times of heavy rainfall.

HOW TO LOCATE

Look for areas where water accumulates after rainfall, potentially in grassy or gravel trenches.

Note: If the infiltration device is underground, regular maintenance does not include digging it up. All maintenance can be completed above ground in the area of the BMP.

HOW TO MAINTAIN

- 1. Remove any accumulated litter or debris
- 2. Trim overgrown grassy areas prior to the wet season (October 1st-April 30th)
- 3. Replace mulch that has washed away or deteriorated
- 4. Flush out fine sediment settled into permeable pavement areas. Do not discharge wash water into any storm drains. Divert wash water onto a vegetated area.
- 5. Repair or replace damaged segments of the area





VEGETATED BMPs

Vegetated Best Management Practices (BMPs) prevents erosion, and also contributes to pollutant removal by absorbing pollutants that have been captured within the soil. These can be found in low-lying vegetated areas where water accumulates after rainfall or in surface-level planter boxes.

There may be a storm drain inlet in the center depending on the type of vegetated BMP.

HOW TO MAINTAIN

- 1. Remove any accumulated litter or debris obstructing the flow to the area
- 2. (If necessary) Make grading adjustments to ensure the area drains properly
- 3. Trim any overgrown vegetation (not more than the original design height)
- 4. Remove sediment deposits over 2 inches deep and deposits that cover vegetation
- 5. Do not obstruct curb cuts or divert flow away from the area
- 6. (If vegetation is not present) Re-vegetate the area
- 7. Provide adequate rip rap (or other energy dissipation structure) at the point where runoff enters the area.



COMMERCIAL TRASH ENCLOSURE REQUIREMENTS

FOLLOW THESE REQUIREMENTS TO KEEP OUR WATERWAYS CLEAN

In Riverside County, stormwater pollution is caused by food waste, landscape waste, chemicals, and other debris that are washed into storm drains and end up in our waterways - untreated! You can be part of the solution by maintaining your trash enclosure properly.

PUT TRASH INSIDE



Place trash inside the bin (preferably in sealed bags).

CLOSE THE LID



Prevent rain from entering the bin to avoid leakage of polluted water runoff

KEEP TOXICS OUT



NO:

- Paint
- Greace
- Fats
- Used Oils
- Batteries
- Electronics
- Fluorescent Lights

These items should be disposed of at a local hazardous waste collection center



SWEEP FREQUENTLY

Sweep trash enclosure areas frequently, instead of hosing them down, to prevent polluted water from flowing into the streets and storm drains.



FIX LEAKS

Address trash bin leaks immediately by using dry clean-up methods and reporting to your waste hauler to receive a replacement.



CONSTRUCT ROOF

Construct a solid cover roof over the existing trash enclosure structure to prevent rainwater from coming into contact with trash and garbage. Check with your local City/County for Building Codes.

To report illegal dumping or toxic spills, call (800) 506-2555 or visit https://rcwatershed.org/get-involved/report-pollution/
To learn more about household hazardous waste, visit RCWatershed.org/residents/at-home/household-hazardous-waste/



SIDEWALK + PARKING LOT CLEANING

Littering and vehicle use can leave behind pollutants on sidewalks, plazas, and other pedestrian traffic areas. Properly inspecting, cleaning, and repairing pedestrian areas and HOA-owned surfaces and structures can reduce pollutant runoff from these areas.

Maintain these areas by following the best management practices listed below.



LITTER CONTROL

- Enforce anti-litter laws.
- Place trash cans in busy, high pedestrian traffic areas of the community, at recreational facilities, and at community events.
- Ensure trash cans remain covered at all times.
- Clean out trash cans frequently to prevent leaking/spillage or overflow.
- !) TIP: POST "NO LITTERING" SIGNS.

SIDEWALKS AND PLAZAS

- When cleaning sidewalks and plazas, use dry methods such as sweeping, vacuuming, and using backpack blowers whenever practical, rather than hosing, pressure washing, or steam cleaning.
- DO NOT sweep or blow material into the street or gutter.

PARKING AREAS, DRIVEWAYS AND DRIVE-THRU

- Sweep or vacuum parking facilities on a regular basis.
- Sweep all parking lots at least once before the onset of the wet season.
- Use absorbents to pick up oil; then dry sweep.
- Appropriately dispose of spilled materials and absorbents.
- Consider increasing sweeping frequency based on factors such as traffic volume, land use, field observations of sediment and trash accumulation, and proximity to water courses.



TIP: IF WATER MUST BE USED, BLOCK STORM DRAIN INLETS TO CONTAIN RUNOFF. WHEN DONE, DISCHARGE WASH WATER TO LANDSCAPING OR CONTAIN AND DISPOSE OF PROPERLY.



SURFACE CLEANING

Proper inspection, cleaning, and repair of pedestrian areas and HOA-owned surfaces and structures can reduce pollutant runoff from these areas. Discharges of wash water to the stormwater drainage system from cleaning or hosing of impervious surfaces is prohibited.

Maintain these areas by following the best management practices listed below.



WHEN CLEANING BUILDING SURFACES

If water must be used, block storm drain inlets and contain runoff. Discharge wash water to landscaping or contain and dispose of properly.

BUILDING SURFACES, DECKS, ETC., WITHOUT LOOSE PAINT

 Use high-pressure water, no soap.

UNPAINTED BUILDING SURFACES, WOOD DECKS, ETC.

 If using a biodegradable or another cleaning agent to remove deposits, contain and dispose of them properly.



GRAFFITI REMOVAL

- Avoid graffiti abatement activities during rain events.
- Protect nearby storm drain inlets prior to removing graffiti from walls, signs, sidewalks, or other structures needing graffiti abatement. Clean up afterward by sweeping or vacuuming thoroughly, and/or by using absorbent and properly disposing of the absorbent.
- Take care when disposing of water since it may need to be disposed of as hazardous waste.

TIP: CONSIDER USING A WATERLESS AND NON-TOXIC CHEMICAL CLEANING METHOD FOR GRAFFITI REMOVAL (E.G. GELS OR SPRAY COMPOUNDS).



CONCRETE REPAIR + SIDEWALK

Properly inspecting and repairing pedestrian areas and HOA-owned surfaces and structures can reduce pollutant runoff.

Maintain these areas by following the best management practices listed below.

CONCRETE INSTALLATION + REPAIR

- Avoid mixing excess amounts of fresh concrete or cement mortar on-site. Only mix what is needed for the job.
- Wash concrete trucks off-site or in designated areas on-site, such that there is no discharge of concrete wash water into storm drain inlets, open ditches, streets, or other stormwater conveyance structures.
- Store dry and wet concrete materials under cover, protected from rainfall and runoff, and away from drainage areas. After the job is complete, remove temporary stockpiles such as asphalt materials and sand as soon as possible.
- Return leftover materials to the transit mixer. Dispose of small amounts of excess concrete, grout, and mortar in the trash.
- When washing concrete to remove fine particles and expose the aggregate, contain the wash water for proper disposal.
- DO NOT wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stockpile, or dispose of in the trash.
- Protect applications of fresh concrete from rainfall and runoff until the material has hardened.

SIDEWALK REMOVAL + REPAIR

- Schedule surface removal activities for dry weather.
- Avoid creating excess dust when breaking asphalt or concrete.

PROTECT NEARBY STORM DRAIN INLETS

 Prior to breaking up asphalt or concrete, take measures such as placing straw waddles or gravel bags around inlets.
 Clean afterward by sweeping up material.



 During the sawing operation, cover each storm drain inlet with filter fabric and contain the slurry by placing straw bales, sandbags, or gravel dams around the inlets.

CLEAN UP

- Designate an area for clean-up and proper disposal of excess materials.
- Remove and recycle as much of the broken pavement as possible.
- When making saw cuts in the pavement, use as little water as possible. After the liquid drains, shovel or vacuum the slurry, remove it from the site, and dispose of it properly.
- Once dry sweeping is complete, the area may be hosed down if needed.
- Discharge wash water to landscaping, pump to the sanitary sewer if permitted to do so, or contain and dispose of properly.
- ALWAYS dry sweep first with a street sweeper or vacuum truck to clean up tracked dirt. DO NOT dump vacuumed liquid in storm drains.



WHEN WORKING OUTDOORS USE THE





CONTROL

Locate the nearest storm drain and ensure nothing can enter or be discharged into it.



CONTAIN

Isolate your area to prevent material from potentially flowing or being blown away.



CAPTURE

Sweep up debris and place it in the trash. Clean up spills with an absorbent material (e.g. kitty litter) or vacuum with a Wet-Vac and dispose of properly.



SUSTAINABLE PRACTICES FOR LANDSCAPE MAINTENANCE

Your contributions make a difference in the way you maintain your community's common spaces. Learn how to truly be a "green" thumb and prevent stormwater pollution.

Recycle Yard Waste



Yard waste, like grass and leaves, can block the storm drain or carry harmful chemicals into it.

- Recycle yard waste by placing them into your greenwaste container.
- Do not blow, sweep, rake, or hose yard waste into the street or catch basin.
- Try grasscycling by leaving clippings on the lawn when mowing.

For more information, visit CalRecycle.CA.gov/ OrganicsGrasscycling

Use Chemicals Sparingly



Fertilizers, herbicides, and pesticides are often carried into the storm drain by sprinkler runoff.

- Use natural and non-toxic alternatives as often as possible.
- Spot-apply, rather than blanketing entire areas.

Apply chemicals directly to the area that needs treatment.

- Read the product label and use only as directed.
- Never apply before a rain.

Use Water Wisely



Conserving water minimizes the amount of urban runoff going into the street.

Control the amount of water and direction of sprinklers.

The average lawn only needs about an inch of water a week or 10 to 20 minutes of watering.

 Periodically inspect and fix sprinklers for leaks.

> Realign sprinkler heads to make sure water is distributed onto the lawn and not onto the sidewalk.



Keep these tips in mind when hiring professional landscapers and remind them as necessary.



Leftover pesticides, fertilizers and herbicides should be brought to a Household Hazardous Waste Center.*.

For more information on proper disposal, visit RCWaste.org/Household-Hazardous-Waste

Businesses can call for cost inquiries and to schedule an appointment



WORKING WITH LANDSCAPE PROFESSIONALS

Tips for working with landscape professionals in your HOA common areas or private residences



FIND A LANDSCAPE PROFESSIONAL:

Visit BeWaterWise.com/WELDCP.html for a list of EPA WaterSense-certified Qualified Water Efficient Landscape Professionals and Certified Water Managers

ASK THAT YOUR LANDSCAPE PROFESSIONAL REGULARLY PERFORMS MAINTENANCE SUCH AS

- · Check sprinkler and water lines for leaks
- Adjust lawn mower grade based on time of year and best practices
- For more information visit RCWatershed.com/Spruce-Up including a checklist for you or your landscape professional.





LOOK INTO MAKING WATER AND COST-SAVING IMPROVEMENTS TO YOUR YARD.

- Weather-based irrigation controllers
- Grass Replacement / Native landscaping
- Rotating sprinkler nozzles
- Rebates and incentives available for many of these improvements. Learn more at So-CalWaterSmart.com or BeWaterWise.com

REQUEST A WATER AUDIT

- Available from select water agencies for free, a representative visits your community and/or home and provides a report on water use, including recommendations for water and cost-saving improvements.
- Contact your local water agency/provider for more information.





POOL MAINTENANCE

When discharged to the street, gutters, or storm drains, pool chemicals and filter solids

DO NOT GET TREATED before reaching The Riverside County's waterways

FOLLOW THESE TIPS FOR PROPER DISPOSAL OF POOL WATER:

- De-chlorinate Chlorine naturally dissipates over time and should be completely gone if the water is left standing for 3-5 days. Use a pool testing kit prior to discharge to ensure the concentration of chlorine is zero.
- pH

Check pH – determine the pH of the pool water before discharging on your own or ask your pool maintenance company to check it for you. It should be between 6.5 and 8.5.

- Free and clear Make certain the water is free of any discoloration, dirt or algae.
- Use your grass When discharging to a grassy area, the flow should be controlled so it doesn't cause any erosion problems or enter a neighbor's property.
- Avoid metal-based algaecides (i.e. copper sulfate). If used, empty your pool or spa into the sewer.

Chlorine, acid cleaning chemicals and metal-based algaecides used in pools can kill beneficial organisms in the food chain and pollute our drinking water.

What's the difference between discharging to the sewer vs storm

WHEN ACID CLEANING OR OTHER CHEMICAL CLEANING:



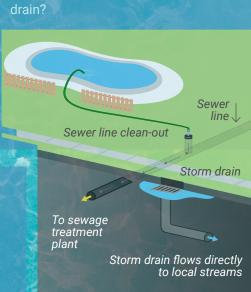
Neutralize the pool water to pH of 6.5 to 8.5, then discharge to the sewer.

WHEN DRAINING YOUR POOL:

- Before draining your pool, contact your city for approval to drain your pool water into the sewer or storm drain.
- Saltwater pools must only be drained to the sewer or hauled away. Check with your pool maintenance company for draining requirements.

FOR SWIMMING POOL AND SPA FILTER BACKTWASH:

 Dispose of solids into trash bag, then wash filter into a landscape area. Discharge water to the sewer, never to the storm drain. Many pools are plumbed to discharge directly to the sanitary sewer but call your plumber or pool maintenance company if you are unsure.





CITY ORDINANCES

This is a placeholder page to include any city-specific ordinances

HHW RESOURCES

Below are some resources with useful information for your HOA residents. You may add these free resources to your newsletters, websites, and any other communication channels you use. For downloadable files, please visit RCWatershed.org.

WHAT IS CONSIDERED HOUSEHOLD **HAZARDOUS WASTE?**

- Gardening products: pesticides herbicides, poisons, fertilizers, and garden chemicals
- Outdoor Products: BBQ propane tanks, kerosene lamp oil, lighter fluid, and pool chemicals
- · Paint products: paint, stain, varnish, adhesive, paint thinner, resin, epoxy, caulking, and wood preservatives
- Household Products: batteries, cooking oil, fluorescent tubes & bulbs. light ballasts, smoke detectors, and mercury thermostats

All of these products must be properly disposed of at a Household Hazardous Waste Facility OR Antifreeze, Batteries, Oil & Paint Collection Facility.



STORING HOUSEHOLD HAZARDOUS WASTE



PERMANENT HOUSEHOLD ANTIFREEZE. HAZARDOUS WASTE COLLECTION FACILITIES:

BATTERIES, OIL& PAINT COLLECTION FACILITIES: Agua Mansa

1780 Agua Mansa Road Jurupa Valley Open: Non-Holiday weekend Saturdays only 9:00 AM to 2:00 PM

Lake Elsinore

512 N. Langstaff Street Lake Elsinore Open: October-May: 9:00 AM to 2:00 PM 7:00 AM to 12:00 PM

Palm Springs

Palm Springs Open: Non-Holiday weekend Saturdays only October-May 9:00 AM to 2:00 PM 7:00 AM to 12:00 PM

Beaumont -

Hemet Area Lamb Canyon Landfill 16411 Lamb Canyon Road Beaumont Open: Monday through Saturday 6:00 AM to 4:30 PM

Moreno Valley Area

Badlands Landfill 31125 Ironwood Ave Moreno Valley
Open: Monday through
Saturday 6:00 AM to 4:30 PM

Temecula Area

County Road Yard 25315 Jefferson Avenue Murrieta Open: Non-Holiday weekend



HHW Brochure Ideal for printing

GARDENING PRODUCTS

chemicals can pose a threat to our wate when washed down the storm drain.



OVERIRRIGATION

Overirrigation is one of the ways we create runoff at home which can carry pollutants into our waterways.

Tips for Usage:

- · Water less frequently
- · Fix leaking sprinklers
- · Check that your sprinkler heads are not pointing towards the street or sidewalk
- · Install smart sprinklers, which have water-saving features like scheduled irrigation and weather awareness

BATTERY PRODUCTS

Batteries must be safely disposed of at Antifreeze. Batteries Oil & Paint Collection Facilities OR Household Hazardous Waste Facilities.

When batteries end up in the landfill, the metals and chemicals can leak into the ground and into our waterways. This applies to ALL batteries, including alkaline, rechargeable, and automotive.

PAINT PRODUCTS





HHW Brochure Ideal for printing

PET WASTE DISPOSAL RESOURCES

Here are some resources with useful information for your HOA residents. You may add these free resources to your newsletters, websites, and any other communication channels you use. For downloadable files, please visit RCWatershed.org.







ADOPT. SCOOP. WIN.

DOG OWNERS AND WATER POLLUTION PREVENTION

Why is it important to pick up dog doo?

Everything that flows into the storm drain goes **untreated** into Riverside County's waterways. If water touches dog waste on its way to the storm drain, fecal coliform bacteria can get into our streams, creeks, rivers, and the ocean and cause damage.

Why is dog doo bad for our waterways?

Aside from polluting our waterways with bacteria, nutrients in dog doo like nitrogen and phosphorus cause algae to grow rapidly in waterbodies. This process, called eutrophication, reduces the available oxygen for aquatic life and can lead to significant animal death. It can also lead to waterway closures, harm drinking water quality, and spread diseases.

A single gram of dog doo can contain 23 million fecal coliform bacteria, and bacteria from dog doo accounts for up to 20% of the bacteria in urban waterways.

Who is Riverside County Watershed Protection?

Riverside County Watershed Protection is a partnership program between Riverside County, the Flood Control & Water Conservation District, Coachella Valley Water District, and 27 cities that manage watershed programs. Through public education, best management practices, evaluation and water quality monitoring, this partnership aims to empower residents and businesses with pollution prevention information and keep our watersheds healthy. We strive to protect, preserve, and enhance the water quality and the natural environment of our watersheds.

rcwatershed.org | (951) 955-1200



Pet Waste Flyer

Ideal for printing

STAY CONNECTED



Website

RCWatershed.org



Facebook

Facebook.com/RivCoWatershed



Instagram

Instagram.com/RivCoWatershedProtection



Report Pollution Violations

RCWatershed.org/Get-Involved/ReportPollution



Email

RCWatershed@gmail.com