

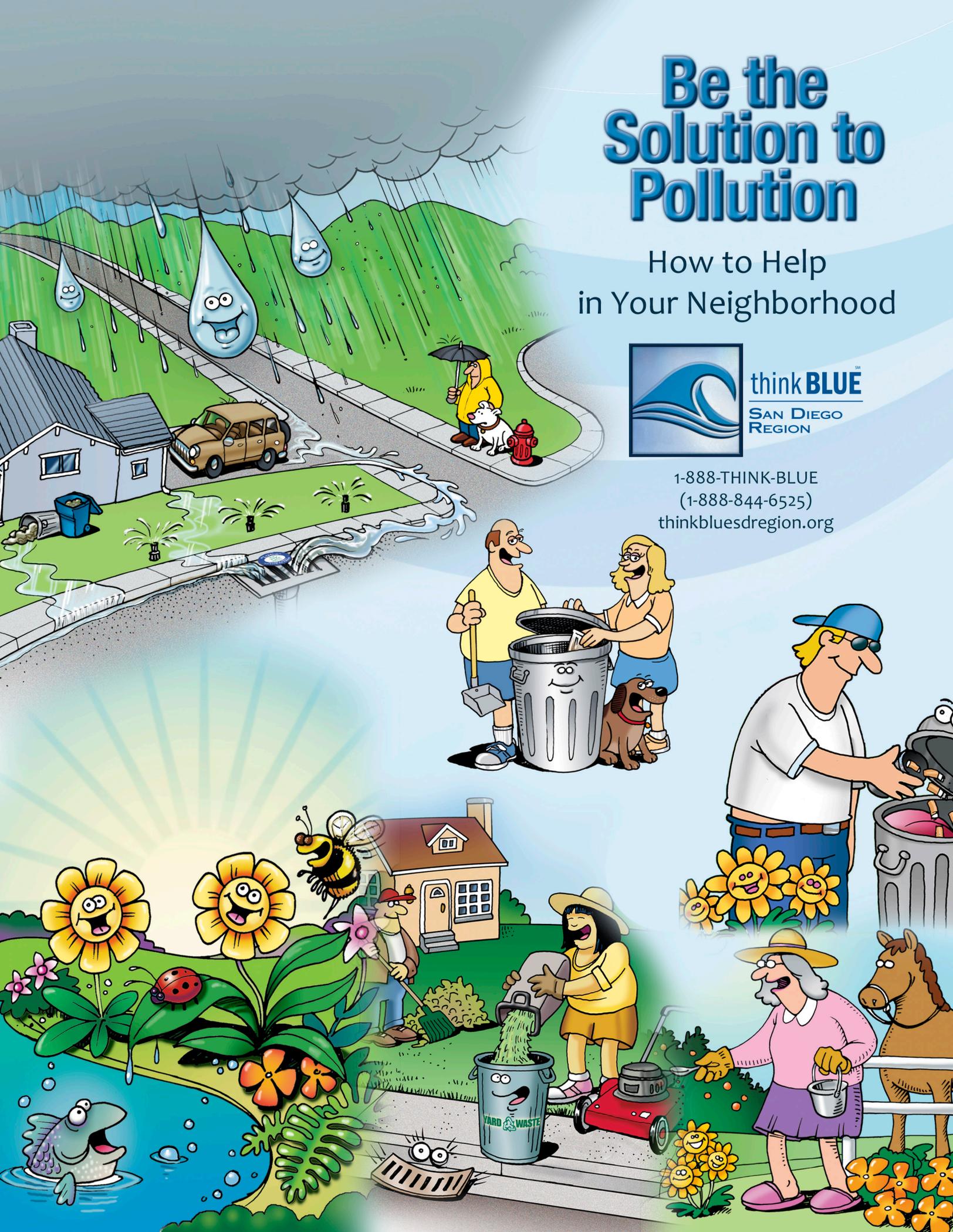
Be the Solution to Pollution

How to Help
in Your Neighborhood



think**BLUE**SM
SAN DIEGO
REGION

1-888-THINK-BLUE
(1-888-844-6525)
thinkbluesdregion.org



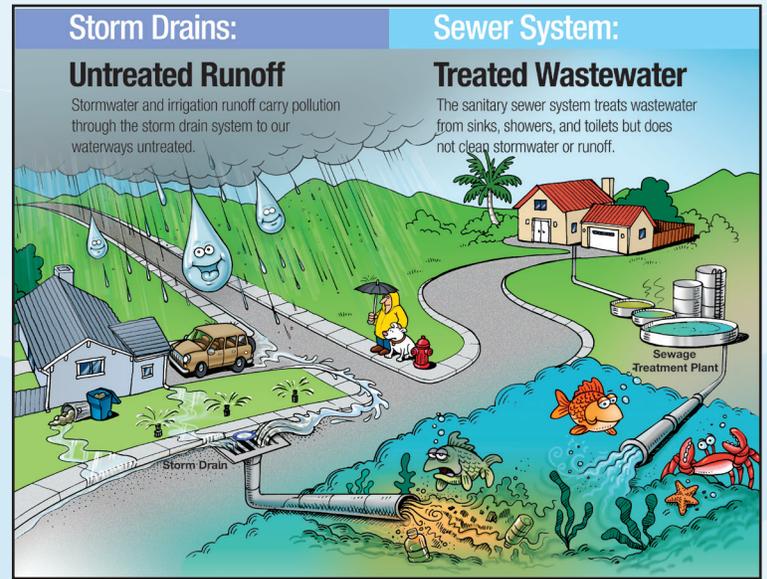
What is Urban Runoff?

Stormwater runoff is rainfall that flows over the ground. Urban runoff is any water that enters the storm drain system from urban areas.

The storm drain system includes the drains you see at street corners or at low points on the sides of streets. It also includes gutters, pipes, ditches, and basins.

Stormwater and urban runoff flow over driveways, lawns, and sidewalks, picking up debris, chemicals, dirt, and other pollutants.

Water in the storm drain system is **not treated** before it is sent to our creeks, lakes, and the ocean.



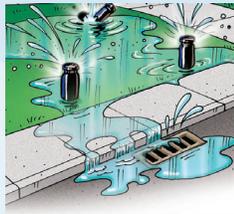
Common Pollution Sources from Neighborhoods

There are many potential sources of pollution from urban areas. You can help reduce the following pollutants in your neighborhood.

Irrigation Runoff

Irrigation runoff carries pollutants to the storm drain system even when it's not raining.

This wastes water and pollutes our waterbodies.



Pet Waste

Pet waste carries bacteria, viruses, and parasites that can pose risks to human health and threaten wildlife.

Bacterial contamination will close beaches.



Fertilizer

Fertilizers add excess nutrients, causing algal blooms and fish kills. This can cause bad odors.

Algae causes taste and odor problems in drinking water, and some algae can kill animals that drink the affected water.



Pesticides & Herbicides

Many pesticides and herbicides are toxic to fish and other aquatic life.

Land animals and people can get sick or die from eating diseased fish and shellfish or drinking polluted water.



Sediment

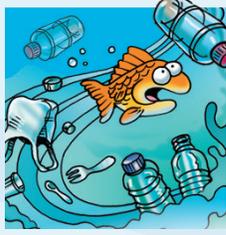
Sediment clouds the water, making it difficult for aquatic plants to grow. It also smothers aquatic habitats and carries a lot of other pollutants attached to it.



Trash

Trash is the most visible pollutant, including things like plastic bags, six-pack rings, bottles, and cigarette butts.

Trash can harm aquatic life. It can also clog the storm drain system, causing local flooding.

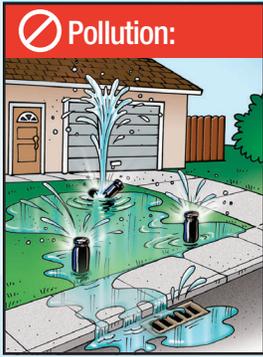


Other pollutants include motor oil, oil filters, antifreeze/transmission fluid, paint, solvent/degreasers, cooking grease, detergent, home improvement waste (concrete, mortar), and yard waste (leaves, grass, mulch).

Keeping pollutants out of the storm drain system isn't just a good idea - it's the law.

Everyone is required to do their part to prevent pollutants from entering the storm drain - at work and at home.

IRRIGATION RUNOFF



What to Look for:

- ✗ Mulch or dirt on walks or driveways after the irrigation system runs. This may point to a broken or misaligned sprinkler.
- ✗ Check monthly for broken pipes or drip tubing.
- ✗ Watch the irrigation system regularly to ensure proper coverage and proper seasonal settings.
- ✗ Top signs of over-watering:
 - Soil is constantly damp.
 - Leaves or grass are a lighter shade of green or yellow.
 - Wilted young shoots.
 - Algae, moss, or mushroom growth.
 - Stains on concrete or asphalt.
 - Eroded spots on the lawn.

What You Should Do:

- ◆ Check with your local water district for watering restrictions.
- ◆ Water during the cool times of day, and don't let water run into the storm drain or street.
- ◆ Repair water leaks immediately.
- ◆ Water your lawn by hand.
- ◆ On manually controlled systems, add a timer to avoid the possibility of forgetting to turn it off.
- ◆ On automatic systems, use a multi-program controller that allows micro-zones to run on their own programs.
- ◆ Watch irrigation times to stop over-watering. Reduce irrigation time and/or frequency if there is standing water or runoff.
- ◆ Use a rain shutoff device or soil moisture sensor to avoid unnecessary watering.
- ◆ Use a system with pressure drop sensors that stop watering if there is a break in the line or heads.
- ◆ If you have steep slopes, try rotary or other low output nozzles.
- ◆ Change your irrigation schedule by season.



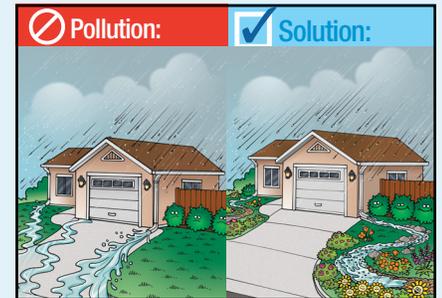
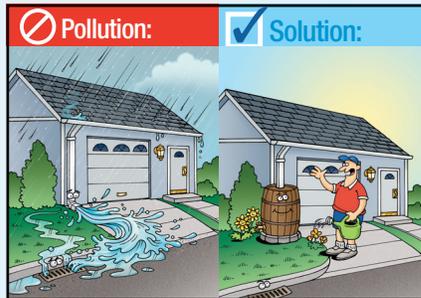
RUNOFF REDUCTION MEASURES

What to Look for:

- ✗ Rain water flowing off roofs and into the streets or storm drain.

What You Should Do:

- ◆ Install rain barrels to collect rain water from roof gutters and downspouts for later use.
- ◆ Divert runoff from gutters and downspouts to stable, landscaped areas.



Once your yard dries out from the storm, use your rain barrel's water for irrigation.

PET WASTE

One gram of dog waste can have more than 23 million microorganisms of bacteria.



What to Look for:

- ✗ Pet waste on the ground.

What You Should Do:

- ◆ Pick up pet waste while on walks and in your own yard.
- ◆ Dispose of pet waste properly in the trash.



LANDSCAPING

Fertilizers, Pesticides & Herbicides

What to Look for:

- ✗ Over-spray, spilling, or excessive use of fertilizers, bug spray, or weed killer.
- ✗ Fertilizers, bug spray, or weed killer improperly stored outside without protection from rain.

What You Should Do:

- ◆ Test the soil before fertilizing.
- ◆ Use plants that reduce the need for bug spray or weed killer. For information on Integrated Pest Management, visit www.ipm.ucdavis.edu.
- ◆ Use organic or slow-release fertilizers.
- ◆ Use least toxic products necessary.
- ◆ Always read product labels and follow all directions on proper use, storage, and disposal.
- ◆ Spot treat whenever possible.
- ◆ Sweep up and collect fertilizer from paved surfaces. Put it back in a container for later use.
- ◆ Do not use fertilizers, bug spray, or weed killer 3 to 5 days before a forecasted rain event.
- ◆ Store fertilizers, bug spray, or weed killer inside, protected from rain.
- ◆ The only allowable way to dispose of unused fertilizers, bug spray, or weed killer is through a household hazardous waste collection site. For the site nearest you, call 1-877-713-2784.



Yard Waste

What to Look for:

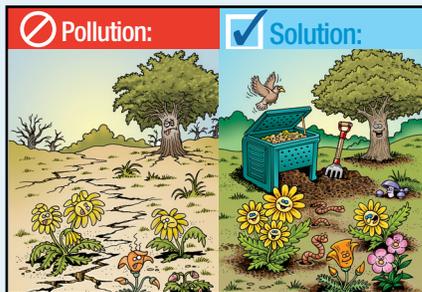
- ✗ Leaves and clippings left on the street or sidewalk.

What You Should Do:

- ◆ Remove dead plants and vegetation.
- ◆ Compost yard waste or place it in a curbside yard waste recycling bin.



Soil Conditions



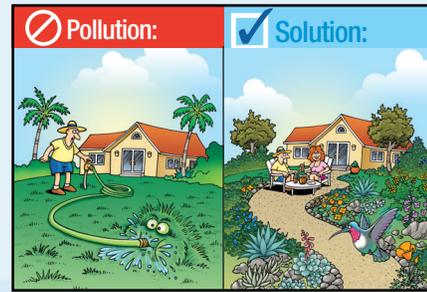
What to Look for:

- ✗ Dry, eroded soil.

What You Should Do:

- ◆ Add mulch or compost to build healthy soils and help plants grow.
- ◆ Add plants to bare spots in your yard.

Plants



What to Look for:

- ✗ Thirsty tropical plants that need a lot of water.

What You Should Do:

- ◆ Plant a beautiful, low-maintenance landscape using California-friendly plants.

Soil Piles



What to Look for:

- ✗ Uncovered piles of soil or dirt.

What You Should Do:

- ◆ Cover and protect soil. During home construction and landscaping projects, soil should not leave your property.

CLEANING



What to Look for:

- ✗ Water leaving your property or entering a storm drain.
- ✗ Signs of staining.

What You Should Do:

- ◆ Sweep patios, walkways, and driveways to save water and prevent pollution. Never hose, wash, or blow anything to the storm drain or street.
- ◆ Use a cloth to clean patio furniture.
- ◆ Use safer alternative cleaning products whenever possible.
- ◆ If water use is necessary, use a mop and bucket to spot clean. Always direct wash water to a stable, landscaped area.



CAR WASHING

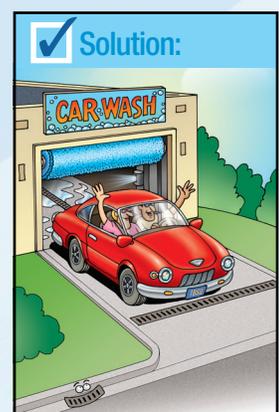


What to Look for:

- ✗ Wash water entering a storm drain.

What You Should Do:

- ◆ Use a commercial or self-service car wash where the water is recycled and wastewater is disposed into the sanitary sewer.
- ◆ Wash cars so the water drains into grass or landscaping. Do not allow water to enter the storm drain system.
- ◆ Turn the water off when not actively washing, or use a shut-off hose nozzle.
- ◆ Use soap sparingly.



CAR REPAIR & MAINTENANCE

What to Look for:

- ✗ Spills or leaks of automotive fluids.
- ✗ Signs of staining (oil, grease, etc.).
- ✗ Used auto parts improperly stored outside without protection from rain.

What You Should Do:

- ◆ Repair leaks.
- ◆ Use drip pans, tarps, or cardboard and newspaper under cars to catch leaks or spills.
- ◆ Never let auto fluids into the storm drain or street.
- ◆ Use rags and dry absorbent material, like sand, dirt, or cat litter, to clean up spills. Sweep up absorbents and put them in the trash.
- ◆ Dispose of used auto fluids and batteries at designated drop-off or recycling locations.
- ◆ Store auto parts under cover and off the ground to prevent rain water contact.
- ◆ Keep your car tuned to reduce oil use.
- ◆ Take your car to a commercial repair shop where fluids and parts are handled, recycled, and disposed of correctly.

*It's never been easier to recycle motor oil!
Check with your local auto parts store to
recycle your used motor oil and filter.*

HOME IMPROVEMENT PROJECTS

What to Look for:

- ✗ Sawdust, slurry, or dried concrete on dirt or on the street.
- ✗ Paint being washed into the street or over the sidewalk.

What You Should Do:

- ◆ Before starting work, locate all landscape drains and storm drains within the project area. Consider covering them to prevent pollution.
- ◆ With concrete, mix only as much as is needed.
- ◆ If there is extra concrete, re-purpose as much as possible to avoid having to throw it out.
- ◆ To get rid of wet concrete, put it in a bucket. Allow it to dry and break it up for the trash.
- ◆ Take unused paint and all other household hazardous waste products to a designated drop-off or recycling location. For the site nearest you, call 1-877-713-2784.

TRASH

Cigarette Butts



What to Look for:

- ✗ Cigarette butts on the ground.

What You Should Do:

- ◆ Put extinguished cigarette butts in trash cans with lids.
- ◆ Put cigarette butt bins in areas frequently littered by smokers.

Cigarette butts are the number one most littered item in America.

They have been found in the stomachs of fish, birds, whales, and other animals that mistake them for food.

Hazardous Waste

What to Look for:

- ✗ Batteries, cleaning products, fertilizers, fuel, fluorescent bulbs, paint, used motor oil and filters, used needles and sharps, pool chemicals, and other products labeled with words like Danger, Warning, Toxic, Caution, Poison, Flammable, Combustible, or Corrosive are all household hazardous wastes.

What You Should Do:

- ◆ Buy only the amount you need.
- ◆ Use safer alternative products.
- ◆ Store your household chemicals in a protected, secured area.
- ◆ Take household hazardous waste to a designated drop-off or recycling location. For the site nearest you, call 1-877-713-2784.



Recyclables

Many animals eat plastic trash by mistake. Scientists note that over 267 species of animals are affected by plastic marine debris.



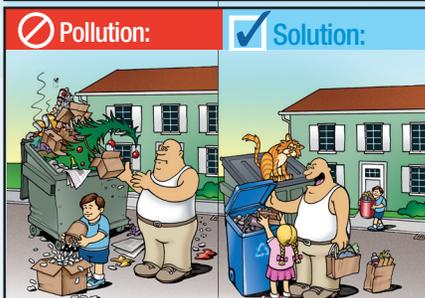
What to Look for:

- ✗ Single-use items, like water bottles and plastic shopping bags, create more trash.

What You Should Do:

- ◆ Reduce, Reuse, Recycle, Repurpose.
- ◆ Purchase and use reusable items, like water canisters and grocery tote bags.

Trash Day



What to Look for:

- ✗ Litter on the ground, blowing in the wind, in landscaping, or along fence lines.
- ✗ Over-filled, open, or uncovered trash cans and recycling bins.

What You Should Do:

- ◆ Put litter in its place - in trash or recycling bins.
- ◆ Cover or close lids on trash and recycling bins.
- ◆ Don't overfill trash cans.

Liquids



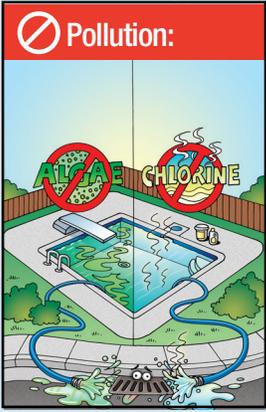
What to Look for:

- ✗ Fluids leaking from trash bags or containers.

What You Should Do:

- ◆ Empty liquids and ice into the sink before throwing out trash.

SWIMMING POOLS



What to Look for:

- ✗ Algae growth.
- ✗ Pool chemicals improperly stored outside without protection from rain.

What You Should Do:

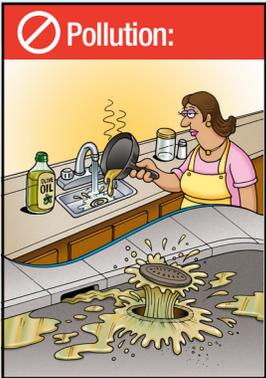
- ◆ Saltwater pools should never be drained into a storm drain, unless it goes directly to the ocean.
- ◆ Test water before releasing it. The water must be dechlorinated and debrominated and have a neutral pH. It also must not have any algae, dirt, vegetation, or suds.
- ◆ If possible, release water onto a stable, landscaped area so it filters into the ground. If permitted by your local agency, discharge it to the sanitary sewer system. If neither option is possible, release the water into the storm drain system, making sure it is not picking up dirt or other pollutants or causing erosion before reaching the storm drain.



Rules for draining swimming pools vary in each city. Check with your local sewer agency for approval to drain pool water into the sanitary sewer through a sink, tub, or cleanout.

- ◆ Store pool chemicals inside, protected from rain.
- ◆ Rinse filter cartridges and backwash filters onto a dirt or landscaped area, not into the street or storm drain.
- ◆ Clean your pool regularly, maintaining proper chlorine levels, water filtration, and circulation. You will not have to drain your pool as often.
- ◆ Consider hiring a commercial service to clean and maintain your pool. Make sure they dispose of the water and solids properly.

FATS, OIL, AND GREASE (FOG)

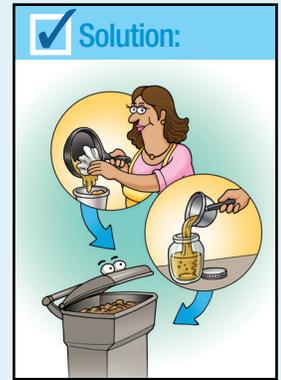


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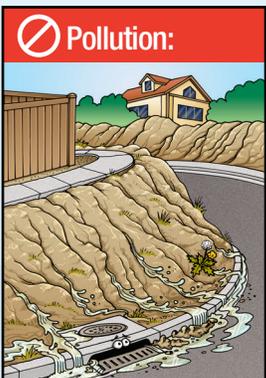
- ✗ FOG is found in cooking oil, fats and oil from cooked meats, food scraps, gravy, mayonnaise, salad dressings, sauces, butter, lard, shortening, and other foods. FOG clogs sewers and causes sewer spills.

What You Should Do:

- ◆ Scrape or wipe off sauces, oils, and grease into a leak-proof container and put it in the trash.
- ◆ Collect cooking grease in a can and store it in the freezer. Put it in the trash on trash day.



SLOPES AND BARE SOIL

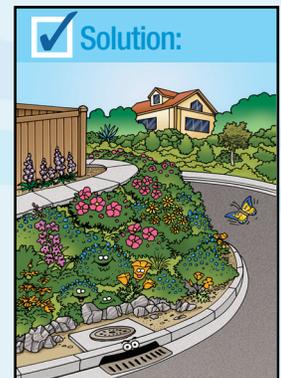


What to Look for:

- ✗ Bare slopes, bare soil with gullies, and unpaved roads.
- ✗ Brown water flowing off the slope when it rains.

What You Should Do:

- ◆ Plant slopes with a variety of California-friendly plants to hold soil in place.
- ◆ Use mulch between plants on slopes to protect the soil from movement.
- ◆ For unpaved roads, shape the road so water drains away from the center and put angular gravel or aggregate mix on the surface to provide stability.



IF YOU SEE POLLUTION OCCURRING...

Document what you observe.

- Is it an urgent or emergency situation?
- Is it an ongoing discharge?
- What type of pollution is it?
- Where do you see it? (note address or landmarks)
- When did you see it? (note date and time)
- Take photos or video, if able.



Try to find the suspected source of the pollution or discharge.

- If possible (without trespassing or compromising safety), find out the source of the pollution or discharge.

Report the discharge.

- Call the regional hotline at 1-888-THINK-BLUE (1-888-844-6525) or fill out a report online at www.thinkbluesdregion.org

If you have a good relationship with the person responsible for the pollution, share the information in this handout with them.

*In Escondido report a possible storm water violation on-line:
www.escondido.org/report-it.aspx*



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Only Rain in the Storm Drain!

State and regional regulations require discharges from the following categories to be reduced or eliminated unless authorized by a separate permit or discharged in accordance with local ordinances and codes:

- Dechlorinated swimming pool discharges
- Residential vehicle washing
- Air conditioning condensation
- Water from footing drains or foundation drains
- Water line flushing and water main breaks
- Water from crawl space pumps
- Uncontaminated pumped ground water
- Trash

Learn more about San Diego regional water quality at www.thinkbluesdregion.org