



THE SOLUTION TO STORMWATER POLLUTION

Obliterate litter from our stormwater. Stop litter before it starts.

Trash left on the street, at the beach and in a park becomes litter, and a part of an ever-growing worldwide problem. Each piece of litter you drop damages our environment. And however small your trash might be, it all adds up. The litter problem can multiply into an environmental disaster. Discarded paper and other litter is often blown or washed into our stormwater drains, where it gets a free ride into our beaches, creeks, rivers, wetlands, estuaries and the sea. The cure for litter is you.

STORMWATER POLLUTION SOLUTIONS

RESIDENTIAL: Recycle or properly dispose of household products containing chemicals such as insecticides, pesticides, paints, solvents, and used motor oil (and other auto fluids). **NEVER** pour them onto the ground or into storm drains.

LAWN CARE: Excessive fertilizers and pesticides used on lawns wash off and pollute the environment. Yard clippings and leaves can wash into storm drains and contribute nutrients and organic matter to streams. To avoid pollution of our delicate eco-system:

- Don't overwater your lawn. Consider using a soaker hose instead of a sprinkler system.
- Use pesticides and fertilizers sparingly. When use is necessary, use these chemicals in the recommended amounts. Use organic mulch or safer pest control methods whenever possible.
- Compost or mulch yard waste. Don't leave it in the street or sweep it into storm drains.
- Cover piles of dirt or mulch being used in landscaping projects.



PERMEABLE PAVEMENT: Traditional concrete and asphalt don't allow water to soak into the ground; instead, these surfaces rely on storm drains to divert unwanted water. Permeable pavement systems allow rain and snowmelt to soak through, decreasing stormwater runoff.

HERE'S A FEW TIPS:

Rain Barrels: Can be used to collect rain water from rooftops in mosquito proof containers, then the water can be used later on lawn and garden areas.

Rainy Gardens & Grassy Swales: Specially designed areas planted with native plants can provide natural places for rainwater to collect and soak into the ground. Rain from rooftop areas or paved areas can be diverted into these areas rather than into storm drains.

Vegetative Filter Strips: Filter strips are areas of native grass or plants created along roadways or streams. They trap pollutants stormwater picks up as it flows across driveways and streams.

SEPTIC SYSTEMS: Leaking and poorly maintained septic systems release nutrients and pathogens (bacteria and viruses) that can be picked up by stormwater and discharged into nearby water bodies. Pathogens can cause public health problems and environmental concerns. Make sure to do the following:

- Inspect your system every three years
- Pump your tank as necessary every three to five years
- Don't dispose of household hazardous waste in sinks or toilets.



AUTO CARE: Washing your car and degreasing auto parts at home can send detergents and other contaminants through the storm sewer system. Dumping automotive fluids into storm drains has the same results as dumping materials directly into a body of water. The following tips can help:

- Use a commercial car wash that treats/recycles wastewater or wash the car in the yard so water goes into the ground.
- Repair leaks and dispose of used auto fluids and batteries at designated drop-off or recycling locations.

COMMERCIAL: Dirt, oil and debris that collect in parking lots and paved areas can be washing into the storm sewer system and eventually enter local water bodies.

- Sweep up litter and debris from sidewalks, driveways and parking lots, especially around storm drains.
- Cover grease storage and dumpsters and keep them clean to avoid leaks.
- Report any chemical spill to the local hazardous cleanup team. They will know the best way to keep spills from harming the environment.

CONSTRUCTION: Erosion controls that are not maintained can cause excessive amounts of sediment and debris to be carried into stormwater systems. Construction vehicles can leak fuel, oil and other harmful fluids which can be picked up by stormwater and deposited into local water.

- Divert stormwater away from disturbed or exposed areas of the construction site.
- Install silt fences, vehicle mud removal areas, vegetative cover, and other sediment/erosion controls and properly maintain them, especially after rainstorms.
- Prevent soil erosion by minimizing disturbed areas during construction projects, and seed and mulch bare areas as soon as possible.

AGRICULTURE: Lack of vegetation on stream banks can lead to erosion. Overgrazed pastures can also contribute excessive amounts of sediment to local water bodies. Excess fertilizers and pesticides can poison aquatic animals and lead to destructive algae blooms. Livestock in streams can contaminate waterways with bacteria, making them unsafe for human contact.

- Keep livestock away from stream banks and provide them a water source away from water bodies.
- Store and apply manure with a nutrient management plan and away from water bodies.
- Vegetate riparian areas along waterways.
- Rotate animal grazing to prevent soil erosion in fields.

PPP: POINTLESS PERSONAL POLLUTION: PPP is pollution washed into water bodies by rain or irrigation water and is a result of common daily activities, such as:

- Bacterial and excessive nutrients leaking from septic tanks
- Pesticides, herbicides and fertilizers
- Sand dirt from erosion
- Oil and grease from automobiles
- Litter and yard clippings
- Pet and livestock waste

STOPPING PPE:

- Never drain used motor oil into storm drains. All drains lead to the ocean.
- Compost leaves, grass and shrub clippings. Do not rake into roadways or drains.
- Use garden and lawn chemicals sparingly. Follow package directions and never apply if rain is in the forecast.
- Store products safely. Keep toxic materials in the original container, closed and clearly marked.

DANGEROUS POOLS: Chlorine is used to keep swimming pools clean because it kills everything, which makes it especially dangerous to eco-systems. Draining pools directly into stormwater drains, or allowing a pool to overflow in heavy rain, can have horrible affects on creeks, wetlands, river and estuaries.

DISASTEROUS EFFECTS OF RUN-OFF: Small quantities of toxic chemicals can have terrible consequences if they reach creeks and estuaries. Pesticides and herbicides can accumulate in aquatic animals like oysters, fish and seabirds. These toxins can make oysters poisonous to people, kill fish and cause breeding problems.

- Too many nutrients in a waterway can cause water plants like algae to grow out of control. They remove oxygen from the water, causing fish and animals to die or be driven away.
- Blue-green algae grows naturally in most waterways, but extra nutrients from fertilizer or pet/garden waste causes algae to bloom. Blooms are smelly and can be toxic.