

# BMPs for Urban Runoff

Urban runoff is polluted surface water from our homes, shopping malls, businesses, city streets and busy freeways. It includes the hydrocarbons and heavy metals from automobiles; the pesticides, herbicides and fertilizers from our lawns and gardens and sediment from construction sites.

Watershed degradation can be reversed with the help of all of us. The following is a list of urban runoff best management practices (BMPs) we can implement in our homes, businesses, and construction sites

## **For Homeowners:**

- Follow directions for the use of pesticides, herbicides and fertilizers on your lawns and gardens. Don't overdo it! Using more is not necessarily better and increases nutrient and chemical loading. Try to buy products labeled non-toxic, biodegradable or water soluble.
- Don't overwater lawns or leave the water running any longer than necessary. Plant over exposed soil and/or landscape with rocks to hold soil in place and help prevent sediment from running off the land. Excess sediment can carry pollutants as well as destroy aquatic habitats
- Collect and recycle used oil from automobiles. Many auto repair shops accept used oil for recycling.
- Don't litter or dump into storm drains. Remember to properly dispose of household cleaners, paints and chemicals. Many cities have programs for household waste container collection. For information, check with the Division of Solid Waste. Septic systems should be properly maintained.
- In areas where soil has been disturbed, use straw bales or silt fences to collect sediment. Sod or seed exposed areas as soon as possible. Vegetation helps hold the soil in place and helps to absorb runoff water into the water table and prevent pollutants from entering streams, rivers and lakes.
- Follow regulations for installing septic tanks. Maintain septic tanks regularly.
- Join a watershed watch team to assess the health of streams and rivers in your neighborhood and observe any changes that occur from point and nonpoint source pollution. Work with elected officials and qualified professionals to address water pollution concerns in your watershed. Educate children to respect the environment and practice stewardship of the land and water.

## **For Developers:**

- Designers and architects should plan developments with pervious (penetrable) surfaces as much as possible. Impervious surfaces such as parking lots and streets prevent water from being absorbed into the ground and as it runs off, it carries sediment and pollutants with it. Runoff increases erosion from land around it and accelerates erosion within stream channels. Here are examples of "low impact development" (LID) practices that help

prevent erosion, protect water quality and preserve “green areas” (grassy and wooded areas or gardens) in housing developments:

- Design for maximum tree preservation and minimum disturbance. Preserve soils with high infiltration rate and locate BMPs there. Try to construct on impervious soils. Minimize disturbance in the watershed.
- Cluster style developments with smaller lots use less land and preserve green areas.
- Design narrower streets, narrower sidewalks on one side of the road only, and hammerhead or donut-shaped cul-de-sacs.
- Build parking lots with smaller stall spaces. Overflow parking areas may use pervious surfaces such as gravel or grass.
- In commercial areas, businesses may share parking lots or make use of vertical parking systems.
- Route rooftop runoff to a grassed area. Direct street runoff into swales (grassed waterways).
- Use retention basins (to hold water permanently) or detention basins (to hold water temporarily) to collect stormwater.