

## **MANAGING THE FLOW OF STORMWATER**

Stormwater runoff is the most common way that nonpoint source pollution reaches local rivers, creeks, and lakes. Stormwater can carry chemicals, nutrients, sediments, debris and other forms of NPS into local streams (either directly or through storm sewers) if the water is not absorbed by soil and vegetation.

## **STORMWATER MANAGEMENT BASICS**

Stormwater flows into the stormwater system through a storm drain. These are frequently located along the curbs of parking lots and roadways. The area of the grate prevents larger objects from entering the catch basin or inlet. Once the stormwater enters the catch basin, it flows through pipes, which lead to an outfall where the stormwater enters a stream, river, lake or the ocean.

## **THE IMPACTS OF URBANIZATION**

Urbanization or Development has a great impact on local water resources. With the increase of impervious surface ( roads, rooftops, parking lots and other hard surfaces that do not allow stormwater to soak into the ground), the rate of stormwater runoff is increased. This means a greater volume of water reaches the waterway faster and less of that water is able to infiltrate into the ground. An increase of impervious surfaces can also result in an increase in flooding after storms and a reduction of flow during dry periods. The reduced amount of infiltrating water can lower ground water levels, which in turn can stress downstream environments, which depend on steadier flows of water.

## **PROTECTING STORMWATER COLLECTION SYSTEMS**

In the first rush of water from a rainstorm, much of the debris and other polluting substances that settle on the land surface and in the stormwater collection system since the last storm will be picked up and carried into the local surface water body. This can significantly add to water quality problems. Therefore, it is important protect all components of the stormwater collection system from sources of pollution. The following should never be dumped down storm drains or catch basins, or on the street: motor oil, pet waste, grass trimmings, leaves, debris and hazardous chemicals of any kind. Anything dumped into our stormwater collection systems can be carried into our streams.

Keeping catch basins, inlets clean and free of debris is one way to protect stormwater quality. Pick up debris along the street that will otherwise be washed into the basins with the next storm. Avoid raking leaves and grass trimmings into the street where they could be washed into and clog the basins.

Many catch basins have been labeled with stencils or markers that indicate that its stormwater flows to local waterway. Educate your neighbors and community about what should not go down the storm drains.

If there is a stormwater management system in your community, find out who is responsible for maintaining it. It may be an individual, a homeowner's association or government agency. Check with your municipality to see who owns the property. If you see problems such as large amounts of debris or damaged structures, be sure to contact the responsible party.

## **WHAT YOU CAN DO**

By following these few simple guidelines, you can make your home more attractive and help prevent erosion.

- Never dump motor oil, Grass Trimmings, leaves, animal waste or other pollutants into the street, storm drains or catch basins.
- Landscape your yard to minimize stormwater runoff.
- Limit impervious surfaces in your yard.
- Divert rain from paved surfaces onto grass or on the vegetated areas to permit infiltration.
- Choose the appropriate plants, shrubs and trees for the soil in your yard. Consult your local nursery or Rutgers Cooperative Extension for advice on which plants, shrubs and trees will require less water, fertilizers and pesticides.
- Help to keep your local catch basins clean and functioning by picking up debris along the street that will otherwise be washed into the basins with the next storm. Avoid raking or blowing grass, leaves into the street where they could wash into and clog the catch basins.
- Participate in a local storm drain labeling project to educate others that what goes into the catch basins will be carried to our local rivers and streams.
- If you live near a catch basin, inlet or stormwater management basin, see that it is being properly maintained.

## **FOR MORE INFORMATION GO TO THE FOLLOWING WEBSITES:**

[www.nj.gov/dep/watershedrestoration](http://www.nj.gov/dep/watershedrestoration)

[www.cleanwater.nj.org](http://www.cleanwater.nj.org)