

# STORMWATER MANAGEMENT

## FOR HOMEOWNERS

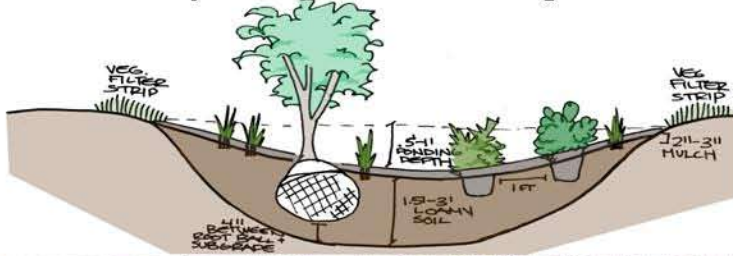
### Why Is Stormwater Management Important?

Development impacts the flow-patterns and quality of water

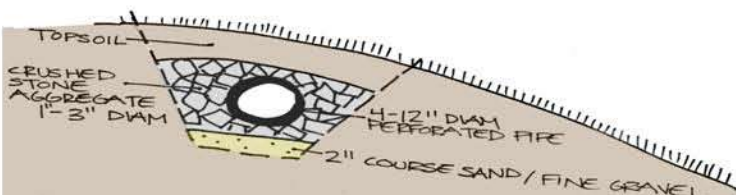
- Impervious surfaces such as concrete, asphalt and buildings prevent stormwater from infiltrating the ground and recharging aquifers as it naturally would
- These impervious surfaces create runoff at increased levels which can cause damaging flooding by increasing the amount of water in streams and rivers
- Stormwater runoff also collects pollutants like organic chemicals, excessive nutrients and petroleum hydrocarbons, all of which end up in our lakes, streams and rivers
- Increased levels of water erode stream banks and collect sediment and gravel which also pollutes the water and reduces waterway capacity

### Disconnecting Impervious Surfaces

Impervious areas such as driveways, patios and roofs can be disconnected to have their stormwater runoff directed to more penetrable surfaces like lawns with desirable slopes or vegetated areas, such as swales or rain gardens. Disconnecting a downspout from a roof is best done with a downspout extension as shown to the right.



**Level Spreaders** are recommended for redirecting runoff to a lawn. A downspout disconnect will connect to the level spreader perforated pipe, which will distribute the runoff over a larger area of lawn, making infiltration easier. Level spreader pipes should be installed as level as possible, along a slope contour as shown below and on the right. Level spreaders should have a **minimum length of 10 feet**, for roof areas around 500 sq ft. Add 10-30 additional feet for larger impervious surfaces.



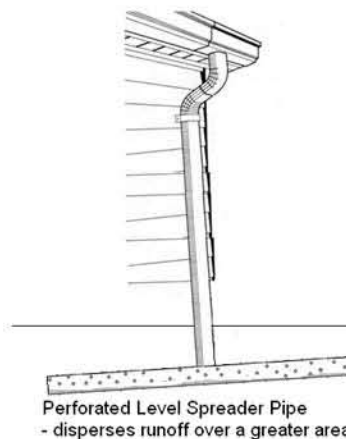
**You Can Help** reduce the effects of storm runoff by practicing stormwater management strategies. Fun and simple projects can be used to effectively reduce both water pollution and problems caused by flooding. Projects such as rain gardens can improve the natural beauty of your property while rain barrels can save you water.

**Rain Barrels** are used to simply collect rainwater for future use. The rainwater will be soft and therefore ideal for gardening and car and window washing. A rain barrel could provide you with around 1,300 gallons of water during summer months. Diverting this water from stormdrains to your barrel will decrease the impact of runoff while supplying free water.



**Rain Gardens** are essentially shallow depressions that contain a variety of plants. Flowers, shrubs, grasses and trees will capture, filter and infiltrate stormwater while adding a pleasant appearance that can take many shapes and forms. Rain gardens should be located 10 feet away from your house in a naturally occurring low area that gets full to partial sun. Dig a depression of no more than 1ft of ponding depth with even slopes that will create a sheet flow of runoff water over vegetated filter strips.

**Vegetated Filter Strips** are perhaps the simplest of all stormwater management strategies. Filter strips consist of vegetation or lawn that help capture runoff and remove pollutants. They should be at least 1ft wide but the wider the better. The best location is on an even slope as this will create a sheet flow. Avoid soil compaction when seeding or sodding the filter strip as compact soil would reduce the ability of runoff to infiltrate.



For more information refer to the **Lycoming County Guide to Minor Stormwater Management Plans**. Available at [www.lyco.org](http://www.lyco.org) Click on **Planning and Community Development** and then click on **Stormwater Management**