



## Storm Water Education

Storm water education helps provide the understanding and momentum to plan for the predictable range of rainfall events.

Most storm sewer systems are comprised of drainage structures and piping which carry rainwater and snow melt to containment areas allowing runoff water to infiltrate and/or evaporate. Some storm water systems will flow through underground oil/grit separation structures which assist to reduce water contamination by trapping various hydrocarbons, debris, organic matter and coarse sediments, as storm water is discharged into water bodies of the state. Unlike wastewater (sanitary sewer) systems, the storm sewers are untreated and may carry pollutants. It is imperative that home owners and facility owners be aware of where their byproducts are heading.

Without proper controls, storm sewers can also contribute to soil erosion and sedimentation of our lakes, rivers and streams. The Road Commission of Kalamazoo County (RCKC) installs rock riprap at the outlets of storm sewers to minimize these effects. The RCKC also utilizes native seeding along areas of the roadside to increase storm water infiltration. The following website links provide good information for further storm water education: <https://protectyourwater.net/> and [http://www.michigan.gov/deq/0,4561,7-135-3313\\_3682\\_3714-106374--,00.html](http://www.michigan.gov/deq/0,4561,7-135-3313_3682_3714-106374--,00.html)

Residents are also encouraged not to cover inlets of storm sewer drains and roadside ditches with leaves and yard debris. Restrictions to the storm sewer system may cause runoff water to seek alternate paths not intended for heavy flows causing erosion and localized flooding. Restricted storm water drains and ditches may also cause unpredictable washouts and sedimentation on our roadways and personal property.

There are many ways that homeowners can assist to help improve our water quality as well. Residents should always properly dispose of household hazardous waste at approved sites, keep septic systems working properly and check their fuel storage tanks regularly for leaks. Natural landscaping can also assist to filter contaminants by reducing the velocity of water flow and filtering run-off water through natural vegetation. The use of natural landscaping can also reduce the need for irrigation and fertilizer applications when used as a storm water diversion and/or filtration system. Please see our brochure for more information.

Michigan has developed a set of operational techniques that developers can choose from to better manage runoff at its source. These are called Low Impact Development (LID) Best Management Practices (BMPs). These practices infiltrate, filter, store, evaporate and detain storm water runoff. Designs can be customized according to local regulatory and resource protection requirements, as well as site constraints. They can be integrated into the existing infrastructure and are often more cost effective and aesthetically pleasing than traditional, structural storm water conveyance systems. See the [Michigan Low Impact Development Manual](#).