

Village of McCullom Lake 4811 West Orchard Drive McHenry, IL 60050 815-385-2211

Managing Storm Water

Introduction

Managing storm water runoff is often considered the job of local government, a subdivision developer, or possibly a homeowners association. Good planning and implementation by any of these entities is important to a successful community storm water management plan. It is equally important that individual homeowners understand their role in storm water management and the impact on the community.

Many communities have a storm water plan that incorporates the "no loss" concept. This involves keeping and using the rain that falls on a site *on that site*, rather than sending it off as storm water discharge. A basic starting point for this plan is for homeowners to reduce runoff from their individual lots. There are many simple but effective methods to achieve this goal.

Storm water runoff affects the quality of watersheds in our area. A watershed is an area of land that drains to a specific point of water, whether it is a lake, river, stream or ocean. Any activity in a small watershed eventually impacts larger watersheds. It is important to remember that we all live downstream from a watershed. All watersheds are connected and larger watersheds such as rivers eventually drain into the ocean.

What is Storm Water Runoff and what are its affects on our watershed?

Storm water runoff is the rain or melting snow that flows over the ground. Hard surfaces like driveways, sidewalks, and streets prevent storm water from naturally soaking into the ground. Storm water can pick up debris, chemicals, dirt and other pollutants and flow into a storm sewer system, or directly to a lake, stream, river, wetland or coastal water. Anything that enters a storm sewer system is discharged untreated into the water bodies we use for swimming, fishing, and providing drinking water. Polluted storm water runoff can have many adverse effects on plants, fish, animals and people.

By practicing healthy household habits, homeowners can keep common pollutants like pesticides, pet waste, grass clippings, and automotive fluids off the ground and out of storm water. Adopting these healthy household habits will help protect lakes, streams, rivers, wetlands, and coastal waters.

Day to Day Storm Water Management

Lawn Care

Excess fertilizers and pesticides applied to lawns and gardens wash off and pollute streams and lakes. In addition yard clippings and leaves can wash into storm drains and contribute nutrients and organic matter to streams and lakes. Chemical pollutants can also drain into drinking water supplies and pollute well water.

- Don't over water your lawn. Use a soaker hose instead of a sprinkler
- Use pesticides sparingly. Use organic mulch or safer pest control methods.
- Compost or mulch yard waste. Don't sweep it into streets or storm drains.
- Cover piles of dirt or mulch being used in landscaping projects.

Auto Care

Washing your car and degreasing auto parts at home can send detergents and other contaminants through the storm sewer system. Dumping these fluids into storm drains has the same result as dumping them directly into streams, lakes or other bodies of water

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

Septic Systems

Leaking and poorly maintained septic systems release nutrients and bacteria and viruses into the ground, which can be picked up by storm water run off and released into nearby waterbodies.

- Inspect your system every three years and pump your tank as necessary.
- Don't dispose of household hazardous waste in sinks or toilets.
- Connect to a sanitary sewer system if available, as soon as possible.

Residential Landscaping

Traditional concrete and asphalt do not allow water to soak into the ground, but divert it into storm drains. Permeable pavement, such as brick, wood chips and other natural material allow rain and snow melt to soak into the ground thereby decreasing storm water runoff.

- Collect rainwater from rooftops in mosquito proof containers, and use to water plants or grass.
- Use grassy swales wherever possible to collect rainwater and allow it to soak into the ground.
- Use vegetated filter strips of native grass or plants along roadways or streams to trap pollutants before they flow into waterbodies.

Commercial

Dirt, oil and debris that collect in parking lots and paved areas can be washed into the storm sewer system and eventually enter local waterbodies.

- 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 waste clean up team.
- Divert storm water away from disturbed exposed areas.
- Install silt fences, vegetative cover and other erosion controls
- Seed and mulch bare areas as soon as possible.

Construction

Erosion controls that aren't maintained can cause excessive amounts of sediment and debris to be carried into the storm water system. Construction vehicles can leak fuel, oil and other harmful fluids that can be picked up by storm water and deposited into local waterbodies.

- Divert storm water away from disturbed areas of the construction site.
- Install silt fences, vehicle mud removal areas, vegetative cover, and other sediment and 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 streambanks can lead to erosion. Overgrazed pastures can also contribute excessive amounts of sediment to local waterbodies. 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 streambanks and provide them a water source away from waterbodies.

- Store and apply manure away from waterbodies and in accordance with a nutrient management plan.
- Vegetate riparian areas along waterways.
- Rotate animal grazing to prevent soil erosion in fields. Apply fertilizers and pesticides according to label instructions to save money and minimize pollution.

Automotive Facilities

Uncovered fueling stations allow spills to be washed into storm drains. Cars waiting to be repaired can leak fuel, oil, and other harmful fluids that can be picked up by storm water

- Clean up spills immediately and properly dispose of cleanup materials.
- Provide cover over fueling stations and design or retrofit facilities for spill containment.
- Properly maintain fleet vehicles to prevent oil, gas, and other discharges from being washed into local waterbodies.
- Install and maintain oil/water separators.

The Village encourages residents to report any instance of illicit discharge of storm water, ordinance violations related to storm water discharge, spills, and misuse of sewer system, construction site soil/erosion violations and maintenance issues to the Village Hall at 815-385-2211.

Many of these practices are small and simple, but can contribute significantly to improved storm water management.