## Resources

For more information about nonpoint source pollution and how you can help prevent it, as well as community activities, contact the MSP.

Mishawaka Planning Department

574.258.1625 planning@mishawaka.in.gov ms4coordinator@mishawaka.in.gov www.mishawaka.in.gov

#### **City of South Bend**

574.235.5933 jengstro@southbendin.gov www.southbendIn.gov

### St. Joseph County

Town of Roseland Town of Osceola 574.235.9626 mschaefer@co.st-joseph.in.us www.stjosephcountyindiana.com

### St. Joseph County Soil and

Water Conservation District 574.291.7444 x3

Andrew.Fox@in.nacdnet.net www.stjosephswcd.org

### St. Joseph River Basin Commission/MACOG

574.287.1829 kmackowiak@macog.com www.sjrbc.com

### Ivy Tech Community College

574.289.7001 x5426 dcraker@ivytech.edu www.ivytech.edu

### **Bethel College Physical Plant**

574.257.3346 yaws@BethelCollege.edu www.BethelCollege.edu



Michiana Stormwater Partnership



Michiana Stormwater Partnership

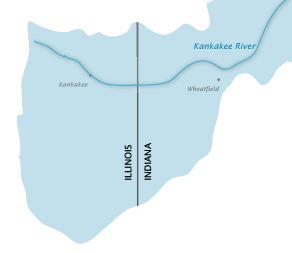
Contractor Initiative

# Protecting our Water Resources

The Michiana community is growing and prospering. Many landuse changes are part of this growth. With growth comes the responsibility for careful planning and proactive measures to ensure that progress does not come at the cost of our natural resources.

In urban areas, hard surfaces such as roads, bridges, parking lots, roofs and disturbed surfaces such as construction sites prohibit rainwater and snowmelt from slowly filtering into the ground. Instead, this runoff, which picks up pollutants along the way, is channeled into the storm sewer system. This type of widespread pollution, called *nonpoint source pollution*, flows untreated into local waterways.

> Lake Michigan



# Water Quality and Our Water Resources

Water resources in the region provide a variety of opportunities, both recreational and as a scenic backdrop for our communities. Its watershed includes runoff and drainage from several counties and numerous smaller rivers and tributaries. Polluted runoff from municipalities, agriculture, forestry and construction causes physical changes to the river's channel, harms fish and wildlife populations, kills native vegetation and impairs recreational use.







Improperly maintained slopes result in runoff and erosion.



Large, heavy rocks prevent dirt from being tracked onto streets in this properly maintained construction entrance. Dirt on the streets will eventually end up in storm drains.

www.michianastormwater partnership.org

# Protection Under the Clean Water Act

The Clean Water Act, administered by the Environmental Protection Agency (EPA), helps protect our nation's water supply. As part of this effort to protect and maintain water quality, the EPA established the Municipal Separate Storm Sewer System Program, known as MS4. The program reguires contractors who disturb more than 2,000 square feet in Mishawaka or more than one acre in other partnership communities to develop stormwater quality management plans and implement pollution prevention measures. The Indiana Department of Environmental Management (IDEM) designated the Michiana Stormwater Partnership (MSP) — comprised of the City of Mishawaka, the City of South Bend, St. Joseph County, the Town of Roseland, the Town of Osceola, St. Joseph County Soil and Water Conservation District, St. Joseph River Basin Commission, Ivy Tech Community College and Bethel College — as MS4 entities to ensure compliance with this program.



The use of vegetative buffers helps to prevent runoff of soil into ponds and waterways.

# A Partnership is Created

The Michiana Stormwater Partnership formed to comply with MS4 regulations and educate those who live and work in the community about the hazards of stormwater pollution. Municipal and college officials are jointly working to address:

- · Public education and outreach
- · Public participation and involvement
- · Illicit discharge detection and elimination
- · Construction site runoff control
- · Post-construction runoff control
- Pollution prevention and good housekeeping

Detailed information on each of these control measures is available at *www.michianastorm waterpartnership.org*.



# You Can Make a Difference

Residential and commercial construction sites are the leading cause of soil erosion and sediment runoff in urban areas. During periods of rainfall and snowmelt, improperly managed construction sites contribute more sediment to rivers and streams than would be deposited naturally. Pollutants often found in construction site runoff include sediment, pesticides, fertilizers, petroleum products, construction chemicals, contaminated soils, paints, debris and sanitary waste. Contractors can minimize the amount of pollutants that enter our waterways by implementing erosion control measures both during and after construction.

# Ask Questions First

The Michiana Stormwater Partnership has informational materials to help contractors incorporate erosion control and stormwater management plans into their projects. The partnership also works with contractors and developers to make sure they have obtained the proper permits for residential and commercial construction and are in compliance with MS4 regulations. For more information, contact your local municipality.

### www.michianastormwater partnership.org

# Implement Erosion Control Practices

Preparing erosion and sediment control plans before construction starts can reduce soil erosion and contain runoff. Plans should include soil stabilization measures, perimeter controls and runoff treatment practices that will be implemented and maintained before and during construction activities.

Plans should:

- Minimize clearing and grading by avoiding extreme slopes
- Protect waterways and stabilize drainageways
- · Phase-in construction to limit soil exposure
- Temporarily seed disturbed soils as soon as possible
- Prepare entrances and exits with materials that reduce tracking of soils off site
- · Install perimeter controls to filter sediments
- Keep sites clean by properly disposing of trash and litter



It is always a good idea to overseed any dirt stockpiles to prevent runoff into waterways.



This improperly maintained storm drain does not meet MS4 regulations.



A properly maintained construction site storm drain prevents soil from getting into the drain by utilizing physical barriers. This photo also illustrates how this type of drain system prevents trash from getting into the drain.

### www.michianastormwater partnership.org

# Put Together a Post-Construction Plan

What happens after construction is complete is as important as what happens during construction. Runoff from areas of new development or redevelopment significantly affects receiving waterways. Post-construction control measures should:

- · Comply with engineering plans
- Implement management practices to prevent, reduce or treat stormwater runoff
- Establish storage or detention controls to collect stormwater
- Incorporate vegetation



Protect soil from eroding onto streets, where it can carry construction site runoff. Silt fences and buffers also help protect the natural features of the land.



This is a good example of the proper use of silt fencing which acts as a barrier between the property being developed and the adjacent property. Also, it acts as a barrier to prevent runoff of soil and materials onto the street and eventually into waterways.

# Get Involved

You can help protect local waterways and keep Michiana a clean environment in which to work and live by volunteering for community projects.

- Participate in local meetings to help develop cleanup strategies
- Volunteer for river and stream cleanup groups
- Help restoration efforts by planting trees
- Develop a speakers bureau through community service organizations
- Contact city officials about areas of concern

For more information about community activities, visit www.michianastormwater partnership.org.

# Michiana Stormwater Partnership's Role in Prevention

The MSP members are implementing a number of measures to help prevent pollutants from entering storm drains. Among the MSP's responsibilities is to:

- Enforce regulatory ordinances
- $\cdot$  Review construction plans and inspect sites
- · Provide regular street sweeping
- · Use street deicers properly
- · Clean catch basins and storm sewers

The City of Mishawaka, in partnership with the Solid Waste Management District of St. Joseph County, operates a year-round facility for household hazardous waste disposal, open to all residents of St. Joseph County.