BASIN BITES and TECHNICAL TIDBITS

A Publication of the **St. Joseph River Basin Commission**

THIRD QUARTER– FALL 2005

BASIN COMMISSION MEETING SCHEDULED

The next meeting of the St. Joseph River Basin Commission is scheduled for December 6, 2005 at the Elkhart County Public Services Building.

Mark Salee, Regulatory Affairs Specialist with the City of Elkhart has been invited to give an update and demonstration of the St. Joseph River *E. coli* model that is being refined under a Clean Water Act Section 104b grant. The original model was developed over a two-year period under a Clean Water Act Section 205j grant.

E. coli is an indicator organism, associated with potential surface water contamination from sewage or manure. Sources include illicit discharges from septic systems, barnyard runoff or improper manure management, and combined sewer overflows.

The Basin Commission meeting begins at 10:00 a.m. and is open to the public.

GOOD NEWS

The *Indiana Stormwater Management Manual* is on the move! The Manual replaces and updates the *Indiana Handbook for Erosion Control in Developing Areas.*

The new manual will provide builders, developers and contractors a variety of best management practices that can be incorporated into their site plans. The practices focus on various runoff and erosion control scenarios.

Originally, Rule 5 focused on erosion control site planning, when 5 or more acres of land were disturbed. Rule 13 and the revised Rule 5 now address land disturbances of 1 acre or more.

Most MS4 (municipal separate stormwater sewer systems) communities are finalizing their stormwater management programs. The programs emphasize site planning, construction controls and post construction controls. In addition, elements related to good housekeeping and education/outreach programs have been included in local programs.

When the Indiana Handbook was originally printed, the St. Joseph River Basin Commission distributed copies to every library in the Indiana portion of the Basin.

Watch for announcements regarding availability of the new manual after the new year.

A Technical Tidbit—

Porous pavements can have a 75 percent failure rate within 5 years of installation. Factors that influence the success rate and increased longevity include design and composition of the pavement, underlying soil type, and maintenance routine of the pavement.

~Urbanization and Water Quality; A Guide to Protecting the Urban Environment. MWCOG, 1994.

DVD Format Now Available

The MACOG-produced video, *Septic System 1-2-3; Use and Maintenance of Onsite Wastewater Disposal Systems,* is now available on DVD. The production provides a general view of what a septic system is and what its limitations are, in addition to providing some common-sense suggestions that serve to improve the overall life of the system.

Nearly 10,000 videos were originally developed and distributed in 2003 throughout the St. Joseph River Basin and beyond, to homeowners new to septic systems or to those wishing to learn more information about the system's limits or capabilities.

2006 St. Joseph River Basin Commission Meeting Schedule

March 7*

June 6*

September 12*

December 5**

*Elkhart County Administration
Building—Rm. # 104,
117 No. Second St., Goshen
**Elkhart County Public Services Building
4230 Elkhart Road
Goshen, IN 46526

All meetings are open to the public and begin at 10:00 a.m. Agendas are posted on the River Basin Commission website at least one week before the meeting.

Saving Money While Benefiting the Environment

Rising gas prices are spurring people to find ways to save money at the pump. The solution—good car maintenance. The well-tuned vehicle more-efficiently burns fuel, which increases gas milage.

However that same maintained vehicle prevents fluids from leaking onto the pavement and running off into neighboring storm sewers, which could eventually contaminate our water resources. The added environmental benefit of a fine-tuned car is cleaner air. Fuel efficiency, achieved by good car maintenance and properly inflated tires, reduces emissions that contaminate our air and hold the potential to settle onto our waterways.

Fixing leaks, properly tuning engines and inflating tires, all serve a multitude of environmental interests and save you money too!

LID

L.I.D. or "low impact development" is a planning concept that is quickly growing to address the issues of stormwater runoff and sediment transport associated with soil erosion. The umbrella concept of LID is making as little mark on the landscape as possible, so as not to impact the general environmental condition while still allowing for land surface changes.

LID is not a landuse control such as zoning, but rather a strategy and management tool that is incorporated into the actual landuse. It has three main functions:

- It maintains or restores the natural hydrologic functions of a site
- It achieves environmental regulatory requirements
- It meets natural resource protection objectives.

Decentralization is one concept of LID—rather than one large retention or detention pond, each lot or cluster of lots have smaller swales or detention areas. The solution is more localized, requires far less distribution infrastructure, and prevents overloading of one specific management structure.

Smaller structures also reduce the impacts on existing vegetation removal and soil disturbance during construction of the practice.

The goal of LID is to retain native soil and vegetation in order to

- Reduce total impervious surface coverage
- Provide infiltration areas for overland flows generated in adjacent developed portions of the project
- Maintain or more closely mimic the natural hydrologic function of the site.

Critical to a successful LID project is the initial site assessment process that evaluates hydrology, topography, soils, vegetation and water features to identify how stormwater moves through the site prior to development.

Low-impact development succeeds because all aspects of the project are assessed before it is started, and appropriate best management practices incorporated to insure potential environmental impacts have been prevented.

As more communities are developing strategies to control erosion and manage stormwater, the concepts associated with low-impact development may prove to be a very viable solution.

HERITAGE WATER TRAILS—PRESERVING HISTORIC WATERWAYS

Rivers and streams served as the super highways of early pioneers. It was through these transportation routes that settlers traveled to new lands and discovered new opportunities. Both the Heritage Water Trails Program in Michigan and the Illinois Water Trails program are making strides to recognize these passages to the Midwest, by renewing the significance and importance of water trails.

Currently, two projects are emerging that fall under Michigan's Heritage Water Trails Program and are within the St. Joseph River Basin—River Country Heritage Water Trail, in St. Joseph County, Michigan has been established for some time. The McCoy's Creek/St. Joseph River at Buchanan, Michigan is currently in the planning stage.

What makes a water trail? Recognizing the importance of our water resources as a means of transportation, is a major factor in identifying those reaches of our waterways. Similar to hiking trails, water trails serve as a recreational way to enjoy our natural resources and the surrounding land via a canoe, kayak or small boat.

What components make up a good water trail?

- Safe, convenient access points along the route or reaches
- Linkages to other land and water trails and attractions
- Historical information signage
- Directional signage
- Trail guides—both land and water
- Maps
- Overnight accommodations

The success of the River Country Heritage Water Trail was accomplished by enthusiastic volunteers—people who enjoy the River, its tributaries and the history that surrounds the waterways—anxious to highlight that historical significance and preserve its value. Funding for signage came from local benefactors.

Water trails provide a great many benefits to the community and the overall region. Those include:

- Increased tourism for neighboring communities
- Local economic development
- Education opportunities for residents
- Awareness and monitoring of the environment
- Recreational choices for residents
- Promotion of local events
- Encouragement of historic preservation

Developing linkages between the current and proposed projects will further enhance the water trails effort throughout the Basin. Currently no formal water trails programs exist in Indiana.

MISSION

The St. Joseph River Basin Commission exists to conserve, enhance and promote the natural resources and benefits of the Watershed for present and future generations by providing vision, leadership and means.

Basin Bites and Technical Tidbits
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Best Wishes for the Holidays and a Happy and Peaceful 2006

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STOP the Mudness is a new program focusing on controlling erosion and sedimentation. The program includes a number of checklists that heighten awareness of where soil erosion can occur and identifies potential best management practices to reduce sediments from entering our lakes, streams and rivers.

For more information, check out:
http://stopthemudness.net.