

BASIN BITES

and

TECHNICAL TIDBITS

SECOND QUARTER—SUMMER 2005

A Publication
of the
St. Joseph River
Basin Commission

BASIN COMMISSION MEETING SCHEDULED

The next meeting of the St. Joseph River Basin Commission is scheduled for September 13, 2005. The meeting will be held at the Elkhart County Administration Building—Commissioners' Meeting Room, 117 No. Second Street, Goshen.



Pam Louks with the Indiana Department of Natural Resources has been invited to give a presentation related to the Urban Forestry Program.

Travis A. Dahl, Hydraulics & Hydrology from the Detroit District of the U.S. Army Corps of Engineers has been invited to explain the new model completed for the St. Joseph River Basin. The model is related to the effectiveness of best management practices and the reduction of sediment transport into neighboring water resources.

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



POST CONSTRUCTION MAINTENANCE—MANAGING STORMWATER AND CONTROLLING EROSION WHEN THE PROJECT IS DONE—IS IT REALLY DONE?

Managing stormwater runoff doesn't end when the vegetation begins to grow and the last temporary control structure is removed. When the next rain falls, will the permanent structures serve the purpose they were planned for?

That's post construction maintenance—making sure that all structures originally included in the stormwater maintenance plan are working as intended.

Regular investigation of stormwater management practices is essential. Do the new property owners know why that depression in their front yard was placed where it was? Have the new trees they planted, blocked the tiling that leads to the designed retention or detention ponds, or has the property owner resized the tile, because the original pipe was too big and in the way? Are the retention basins receiving more runoff than they were designed for, because a natural drainage way was interrupted during site development or construction?



The most important part of managing stormwater runoff, is communicating to everyone impacted by the management structures—what the practices are and how they function. This insures that the drainage way that serves to retain water for infiltration doesn't get filled in. Or the neighbors don't mow down the vegetation or apply herbicides to the banks of the stormwater basin because they don't like the looks of the "weeds" that are stabilizing the banks and providing filtering of the runoff.

Just like site planning and project development, post construction is a critical factor in a stormwater management program that insures runoff is properly controlled and does not deteriorate neighboring water resources.



ST. JOSEPH RIVER BASIN WATERSHED PLAN

The St. Joseph River Basin Watershed Management Plan was completed in July 2005 resulting in greater than two years of work began by the *Friends of the St. Joe River Association, Inc.* The Plan identifies both those water resources that need protection from degradation due to their high quality, and those

distressed sub-watersheds needing help to improve and prevent further degradation.

Work on the Plan was a joint effort of Andrew DeGraves—the Friends’ Watershed Coordinator—Kieser & Associates and a Steering Committee of a variety of other interests in the Basin, including the St. Joseph River Basin Commission. Public input also occurred through a series of public meetings and publishing of the draft Plan on the Friends’ website.



A Watershed Management Plan serves as the blueprint for future activities aimed at preserving the overall water resources of an area. It lists developed goals and action items. The successful attainment of the St. Joseph River Basin Watershed Management Plan goals requires a partnership of agencies, organizations and the general citizenry interested in preserving the River and its tributary system.

To insure the goals are addressed in the future, The Friends of the St. Joe River Association (fotsjr01@sbcglobal.net) will conduct a number of strategic planning sessions this fall to determine who can best function to maintain the overall plan and complete the stated goals.

This issue of *Basin Bites and Technical Tidbits* will highlight some of the issues identified in the Plan, and explain how the goals will serve to impact those issues. The goals are listed in the order presented in the Plan.

The Issues ...

The Plan recognizes that impairments of water resource designated uses classified by either Indiana or Michigan are not broad reaching across the entire River Basin Watershed. Instead, specific impairments exist on a smaller scale—the subwatershed level.

The planning process identified one strong desire—“...the preservation, restoration and protection of open space as a system of natural areas, corridors, farmland, open land and parklands that can provide recreational opportunities,

support plant and animal habitat, protect sensitive environmental resources (including surface and groundwater quality) and ecological process, and maintain scenic character and natural beauty.”

The Goals ...

Details of the objectives, activities, and project milestones associated with each goal have not been included in this newsletter, due to space limitations. A review of the entire Plan can be made at <http://www.stjoeriver.net/wmp/wmp.htm>. The site also includes a number of River Basin maps developed to represent some of the information collected during the planning process.

While reviewing these goals, the reader is encouraged to visualize how their agency or organization, or even as individuals, can fit into the picture of preserving, maintaining and improving water resources in the Basin. Some activities are already in place and the objectives will be achieved only if those activities and policies continue.

Several of the goals, include the need for policy changes that recognize the interconnection of landuse issues and water quality. Others simply address the overall administration of the goals, and seek to designate the “keeper of the Plan”.

GOAL #1—*Establish and sustain the financial and institutional capacity of a stakeholder group (e.g. steering committee, joint Basin Commission, watershed council, Friends of the St. Joe River Association) that assumes responsibility for coordinating implementation of the management plan and acts as the primary advocacy group, information clearinghouse, and planning partner for the watershed.*

Whereas the Friends of the St. Joe River Association originally obtained the grant to develop the Watershed Management Plan, the goal of developing the bi-state Watershed Management Plan was “to unite stakeholders in a concerted effort to address water quality concerns across jurisdictional boundaries.” It will take either an existing organization or the development of a new organization to seek project funding, oversee completion of goals and regularly prioritize the goals.

GOAL #2—Reduce soil erosion and sedimentation so that surface water functions and aesthetics are improved and protected.

Sedimentation of our water resources is the leading nonpoint source pollutant impacting our streams, rivers and creeks. Using every opportunity to reduce this impact is important for the overall improvement of the Basin.

GOAL #3—Reduce the amount of nutrient loading so that surface water functions and aesthetics are improved and protected.

Nutrients carried on soil particles or as direct runoff to neighboring waterbodies, serve to deteriorate our water resources. Educating the public on fertilizer applications, onsite wastewater disposal systems, stormwater management and nutrient management will serve to meet this goal.

GOAL #4—Increase cooperation, coordination and collaboration among stakeholders (both governmental and nongovernmental) on a regional basis to eliminate program duplication, reduce costs, find more effective solutions, and maximize human, financial, and institutional resources.

Developing partnerships, conducting workshops, volunteer monitoring and volunteer participation in existing conservation and nonpoint source pollution prevention programs will aid in completing this goal.

GOAL #5—Increase preservation, restoration, protection and appreciation of open space (a system of natural areas, natural systems, corridors, farmland, open land and parklands).

A Technical Tidbit—

Narrower streets mean less stormwater runoff. As street widths increase, accidents per mile per year increase exponentially. The safest residential street is 24-feet wide. Reduced residential street widths that allow parking tend to slow drivers down, creating safer roads. A winning combination—less pavement, less runoff, more safety!

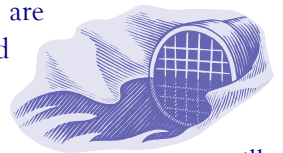
~Residential Street Typology and Injury Accident Frequency, 1998.

As we discover increasing evidence that correlates landuses and water quality deterioration, there is also increased awareness that policy changes may be necessary to reduce these impacts. The accompanying result will be a better utilization of lands, protection of prime agricultural land and an increased protection of natural systems.

GOAL #6—Eliminate/correct sources of disease-causing organisms that are harmful to public health and that limit the use of rivers, creeks, and lakes.

Disease-causing organisms introduced through the improper discharge of septic system wastes, the improper handling of manure or the overflow of combined sewer overflows have played a large part in reducing the desired uses of many waterbodies.

While municipalities are tackling the issue of combined sewer overflows and municipal separate storm sewer systems, individual residents and producers will also need to take additional actions to reduce contaminants entering waterways.



This goal addresses many of the issues associated with those concerns.

GOAL #7—Reduce the levels of pesticides, and other toxins that are harmful to public health and that degrade aquatic habitat.

If a little works, why use a lot? That will be the question that will be asked when goal #7 is addressed. Whether its parks and golf courses, the agricultural community or the average householder, there continues to be a need to increase awareness and share success stories related to integrated pest management and alternatives to pesticides, in addition to educating the public on proper application rates and methods.

With no action—

Finally, a Soil and Water Assessment Tool (SWAT) model was used to analyze what would happen if none of the recommended goals were achieved. The model determined that there would be a potential

increase of 27 percent runoff, 15 percent sediment load increase, and a 52 percent increase in phosphorous.

With these numbers, it is obvious that we cannot afford to ignore the proposed goals if we plan to preserve the St. Joseph River Basin for future generations.

What's next?

Review the Plan on the Website. Incorporate those activities that relate to you, your organization or agency into your policies and processes. Watch for announcements regarding strategizing meetings, education/information opportunities, and feedback on policy changes.

We all live down stream and there are elements in the St. Joseph River Basin Watershed Management Plan that all of us can participate in and will benefit from.



St. Joseph River Basin Commission

227 W. Jefferson Blvd.-#1120
South Bend, IN 46601-1830

The U.S. Fish and Wildlife Service's *Partners for Fish and Wildlife Program* provides financial assistance on a competitive basis to landowners interested in restoring wildlife habitat.

Contact:

<http://partners.fws.gov/HowToPartner/altcont.html>

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

is a quarterly publication of the

ST. JOSEPH RIVER BASIN COMMISSION

227 W. Jefferson Blvd.-#1120
South Bend, IN 46601-1830

Phone: 574-287-1829

FAX: 574-287-1840

e-Mail: sjrbcdir@macog.com

Website: www.sjrbc.com

Need more information about Indiana's Rule 5 and Rule 13—Contact the St. Joseph County Soil and Water Conservation Service for details on an upcoming mini-workshop in October



Printed on
Recycled Paper