



Keeping it on the Land

Information for the soil erosion and sediment control community in the Great Lakes Region

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Ohio Tackles Watershed Planning at the Local Level

by Rosida Porter, Watershed Specialist, Ohio Department of Soil and Water Conservation

The Ohio Department of Natural Resources (ODNR) is addressing a significant unmet need in local watershed management in the state of Ohio. The lack of professional watershed coordinators has inhibited the development of effective watershed management plans and long-term efforts directed toward improving surface water quality. Most of Ohio's water quality degradation comes from non-point source pollution, generated by poor land use practices and the physical alteration of streams. Dealing with these problems requires the development of local support and well-informed land-use and riparian management decisions.

In order to address this need, ODNR Division of Soil & Water Conservation announced a watershed coordinator grant program that awards up to \$40,000 a year to hire or retain a coordinator for developing and implementing surface water quality improvements in local watersheds. The first round of grants was awarded this spring to 20 watershed groups around the state and is the first in a total of more than \$4 million to be awarded over the next six years. ODNR Director Sam Speck said, "This first round of grants will allow local organizations to hire coordinators to sustain and direct work toward improving surface water quality."

The ODNR grant program is designed to build capacity among local governments, non-profit organizations and other non-governmental entities to create permanent watershed coordinator positions. Coordinators will plan and implement watershed programs to restore and protect water

resources within their watershed. ODNR's Division of Soil and Water Conservation recently hired a watershed coordinator to work with these new programs and to help existing programs expand into new areas.

In northwest Ohio's Lake Erie watershed, the non-profit Wood-Sandusky-Ottawa-Seneca Community Action Commission, Inc. received a watershed coordinator grant to lead a diverse partnership of farmers, landowners, industry and the Heidelberg Water Quality Lab. Last year, the project generated considerable support with a half-time coordinator paid through a Lake Erie Protection Fund grant, and this year Watershed Coordinator Monica Ostrand is working with the Sandusky Watershed Coalition on a nearly completed watershed action plan.



ODNR awarded the two-year-old Grand Lake St. Marys Watershed Project, located in Mercer and Auglaize counties, a coordinator grant. The project has tremendous local support and is showing success under newly-hired coordinator Heather Buck. It is administered by a Soil and Water Conservation District Joint Board.

The City of Oregon received a watershed coordinator grant for the Duck and Otter Creeks Partnership in Lucas County, which has recently filed paperwork to become a non-profit corporation. Duck and Otter Creeks are highly industrialized watersheds that rank near the bottom of the Ohio Environmental Protection

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Great Lakes Commission Encourages Conservation Programs with Farm Bill Reauthorization

The Great Lakes Commission praised the important water quality protection and resource management role played by Farm Bill conservation programs, such as the Conservation Reserve Program (CRP) and the Wetlands Reserve Program (WRP). In a resolution passed at its recent semi-annual meeting in Ann Arbor, Michigan, the Commission stressed the importance of re-authorizing these programs in a new Farm Bill. Commissioners also approved an initiative to seek authorization for the Great Lakes Basin Program for Soil Erosion and Sediment Control. The Basin Program provides funding to state and local units of

government and nonprofit organizations for innovative demonstration, technical assistance, and educational projects that control soil erosion and sediment control.

“Programs such as CRP, WRP and the Great Lakes Basin Program will only increase in importance as we address the Great Lakes water quality challenges posed by nonpoint source pollution,” said Wayne Warren, Ohio Department of Natural Resources and Great Lakes Commissioner. “And it is imperative that the new Farm Bill focus on these programs.”

For more information, please contact Tom Crane at 734-665-9135 or tcrane@glc.org

New Publication Explores Impact of Farm Bill Programs on Wildlife

The U.S. Department of Agriculture, Natural Resources Conservation Service’s (NRCS) Wildlife Habitat Management Institute has released its report, *A Comprehensive Review of Farm Bill Contributions to Wildlife Conservation, 1985–2000*. The publication includes summaries by experts on the impacts of the Conservation Reserve Program (CRP), Wetlands Reserve Program and other NRCS conservation programs on wildlife. It also includes “An Annotated Bibliography for Wildlife Response to the Conservation Reserve Program.”

The authors explored many aspects of wildlife conservation. For example, Mark R. Ryan – who authored “Impact of the Conservation Reserve Program on Wildlife Conservation in the Midwest” – noted, “[l]imited evidence indicates that reproductive success and survival in CRP habitats in the Midwest were of sufficient quality to yield positive population growth for a few species (including several of high conservation concern).” He added, “Overall, the evidence accumulated to date indicates that CRP habitat in the Midwest likely contributes to the population stability or growth of many, but not all, grassland bird species.”

In announcing release of the report, L. Pete Heard, director of the Wildlife Habitat Management Institute, said, “Wildlife are indicators of the health of our environment. As such, they are good measures of the success of conservation programs.” The online report is available for viewing or downloading at www.ms.nrcs.usda.gov/whmi

The current Farm Bill expires in 2002.

Great Lakes Commission’s Farm Bill Resolution

Therefore, Be it Resolved, that the Great Lakes Commission applauds the progress that has been made to conserve and protect the soil, water, air, plant and animal resources of the Great Lakes/St. Lawrence region through the current and past Farm Bills; and

Be it Further Resolved, that the Great Lakes Commission supports the need for a stronger federal commitment to programs which further the goals of restoration and protection of the Great Lakes and rewards existing stewardship practices through voluntary, incentive-based approaches on privately owned lands; and

Be it Further Resolved, that the Great Lakes Commission supports conservation provisions in the 2002 Farm Bill that emphasize Great Lakes basin ecosystem health, enhance the quality of life in the Great Lakes basin, maintain or restore air, soil and water quality in local watersheds and contribute to the production of safe and affordable food and fiber products; and

Be it Further Resolved, that USDA-NRCS, Cooperative Extension Service and other agencies such as Sea Grant coordinate their efforts on a watershed basis.

Be it Further Resolved, that the Great Lakes Commission advocates the reauthorization of WRP, CRP, EQIP, WHIP, FIP, Farmland Protection Program and also urges the U.S. Congress to authorize the Great Lakes Basin Program for Soil Erosion and Sediment Control in the next Farm Bill at an annual appropriation of \$15 million in new funds; and

Be it Finally Resolved, that the next Farm Bill ensure that the technical and financial assistance capabilities of USDA-NRCS are restored and maintained at levels equivalent to 1985 in order to effectively carry out USDA’s environmental and natural resource programs.

Urban Buffer Resources



The urban buffer movement is building momentum, and the list of resources for those who seek more information is expanding as well. A partial list of urban buffer resources and potential partners includes the following:

Center for Watershed Protection, Ellicott City, Maryland. Founded in 1992, it provides information on effective techniques to protect and restore urban watersheds. For more information, please see www.cwp.org

TreePeople, a Los Angeles, California, area citizens group that uses education, planting projects, policy development and research to promote integrated urban watershed management. For more information, please see www.treepeople.org

Trees Forever, an Iowa-based nonprofit group committed to stewardship through locally oriented projects. For more information, please see www.treesforever.org

The National Tree Trust is a Washington, D.C., based nonprofit group working to help local volunteer groups in the growing, planting, and maintenance of trees in rural communities, urban areas, and along

highways. It administers a grant program to provide trees to communities. For more information, please see www.nationaltreetrust.org

U.S.D.A. Agroforestry Center, Lincoln, Nebraska. The center's work has included research on using trees as a natural waste treatment alternative. For more information, please see www.unl.edu/edu/hac

The National Fire Protection Association provides information and assistance on community wildfire control measures. For more information, please see www.firewise.org/communities/

The National Arbor Day Foundation in Nebraska City, Nebraska, has information on trees in the riparian zone. For more information, please see www.arborday.org

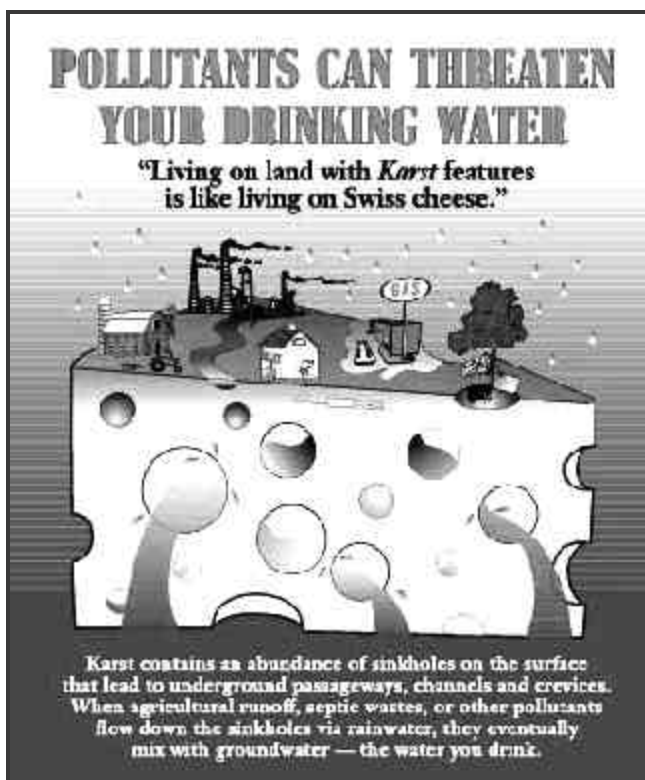
The Iowa Natural Heritage Foundation has done extensive work in both greenway promotion and development. For more information, call 515-288-1846.

Ohio Tackles Watershed Planning, continued from page 1

Agency's comparative ranking of the biological integrity of Ohio's rivers and streams. Letters of intent for funding come from a coalition of communities and industries located along the creeks, including BP-Amoco, Pilkington, City of Oregon and Sunoco.

The ODNR watershed coordinator program has begun to address a significant planning need at the local level with the first 20 grants. Resource managers look forward to the development of effective watershed management plans and sustained, long-term efforts to improve and protect surface water quality. This is an important first step in dealing with non-point source pollution at the local level where significant land-use management decisions are most often made.

To see a complete listing of watershed grants funded in 2000, see the ODNR Division of Soil and Water Conservation website at www.dnr.state.oh.us/odnr/soil+water/downloads.htm or contact Rosida Porter at 614-265-6647 or rosida.porter@dnr.state.oh.us



A poster used by the Sandusky Watershed Coalition to educate the public about a geological problem in the watershed. (Courtesy Sandusky Watershed Coalition)

Featured Projects

Great Lakes Basin Program for Soil Erosion and Sediment Control



Upper Tahquamenon River Restoration Project

Grantee: Tahquamenon Sportsman's Club, Michigan

Duration: June 1, 2000 to November 30, 2000

Type: Demonstration

The Upper Tahquamenon River flows through a forested area and houses a naturally reproducing brook trout population. Trout forage and spawning habitat are being threatened by streambank erosion problems in the headwaters area. Spawning sites for trout and habitat for aquatic insects have been diminished by sedimentation stemming from human and naturally generated sedimentation.

The Tahquamenon Area Sportsman's Club formed a partnership with the Michigan Department of Natural Resources' Fisheries Division and riparian landowners and sought to extend an experimental streambed improvement project from an initial 0.5 mile section of the river to additional eroding sites along the river.

Erosion problems in the Upper Tahquamenon were created by both historic logging activity and natural processes that occurred thereafter. The original erosion problems were caused by impoundments created at the turn of the 20th century to facilitate log drives. The original streambank vegetation was lost as a result of the impoundments and the stream's steep slopes were left exposed to chronic erosion from spring run-off and storm events. While new vegetation grew along the streambanks after logging was abandoned, the shallow-rooted conifers, which dominated the new growth, are now maturing and adding to the river's sediment load as they uproot and fall into the river. The exposed, unstable sand on the river's steep slopes readily washes into the river with fast flowing run-off from storms or the spring melt.



Pre-restoration - deadwood blocks the flow of the river. (Courtesy the Tahquamenon Sportsman's Club)

The project team reviewed an erosion site inventory, created during 1999, and selected sites for remedial work from that document. They met with interested volunteers and landowners to review proposed abatement measures. The team organized a voluntary work crew and obtained the equipment and materials required for the restoration project. During July and August, the work crew restored three sites consisting of 4.5 miles of streambank.

Restoration included removal and redirection of windfall timber, stabilizing shoreline and installing deflection and habitat logs. The work crew redirected fallen trees by cutting most

branches and placing them so that they deflect water away from streambanks and toward the middle of the stream. The team placed the logs, drilled them, and

See "Upper Tequamenan River Restoration" on page 7



Post-restoration - note the free flowing stream. (Courtesy the Tahquamenon Sportsman's Club)

Featured Projects

Great Lakes Basin Program for Soil Erosion and Sediment Control

Improving Muskegon Lake Water Quality Through Proper Land Use in the Ryerson Creek Watershed

Grantee: Muskegon Conservation District, Michigan

Duration: July 1, 1991 to March 31, 2001

Type: Demonstration



Ryerson Creek, in the Muskegon Lake watershed, is rapidly urbanizing. The associated increase in impervious surface within the watershed has contributed to increased flows during storm events and led to streambank erosion problems along the creek. The Muskegon Lake Public Advisory Council (PAC) and the Michigan Department of Environmental Quality (MDEQ) have identified urban development, such as that occurring



Team members discuss potential retention and detention for the Ryerson Creek watershed. (Courtesy Muskegon Conservation District)

along Ryerson Creek, as a significant contributor to the sediment load of Muskegon Lake, an identified Area of Concern. In addition, Phase II Stormwater Regulations under the Clean Water Act require a very comprehensive approach to stormwater management by smaller communities, such as Muskegon. Therefore, developing a stormwater management plan for Ryerson Creek addressed several unmet needs in regional environmental management.

The Muskegon Conservation District worked with a coalition of federal, state and local governments, agencies and public advisory groups in order to develop a stormwater plan for the Ryerson Creek watershed. As a first step, the Conservation District formed the Ryerson Creek Technical Team to provide input into the stormwater plan. Team members included representatives from the Conservation District, the US Department of Agriculture Natural Resources Conservation Service, elected officials and staff from Muskegon and Egelston Townships, the City of Muskegon and the Muskegon County Drain Commis-

sioner. MDEQ's Surface Water Quality and Land and Water Management Divisions as well as Westshore Consultants provided additional technical support and advice.

Working with the Technical Team, Westshore Consultants and Grand Valley State University developed a stormwater management plan which addressed both



Kathy Evans, project manager, shows aquatic insects to Ryerson tour participants. (Courtesy Muskegon Conservation District)

water quantity and water quality concerns. They utilized a Geographic Information System (GIS) that combined watershed boundaries, land use, soil types and percentage of impervious surface to give an accurate picture of historic, current, and possible future watershed development. Additionally, the MDEQ provided hydrologic analysis of runoff volumes and peaks for the watershed using a U.S. Army Corps of Engineers' hydrologic modeling system.

The resulting *Stormwater Management Plan for the Ryerson Creek Watershed, Muskegon County, Michigan* is quite comprehensive in scope. It provides an over-



Wesley School students plant vegetation along Ryerson Creek. (Courtesy Muskegon Conservation District)

view of the watershed that examines the impact of land use and urbanization, and outlines local governance arrangements. The plan reviews the hydrologic analysis and identifies nine critical areas that must be addressed through an integrated approach in order to achieve effective stormwater planning.

See "Improving Muskegon Lake Water" on page 7

Around the Basin

Michigan

A project proposed by Anderson Farms of Homer, Michigan has qualified for funding under the **Michigan Department of Environmental Quality's (DEQ) Small Business Pollution Prevention Loan Program**. Approval of the project clears the way for finalizing a \$100,000 loan to Anderson Farms. The program provides low-interest loans to small businesses to encourage the implementation of projects that eliminate or reduce waste through source reduction or recycling. Under this program, the DEQ works in partnership with the company and its local bank to provide these loans.

Anderson Farms will purchase a state-of-the-art, energy efficient in-house swine finishing facility to raise hogs for market. The current operation is an open lot setup: manure is scraped daily and applied to agricultural land surfaces year-round, regardless of weather conditions or crop needs. The new facility will be enclosed and use low-energy insulated curtains and wet/dry feeders for water conservation. Also included is a 4,000-gallon manure injection tank, which allows manure to be applied during favorable weather and crop conditions. Contact Sharon Goble at 517-241-8280.

Minnesota

The Minnesota Board of Water and Soil Resources (BWSR) received a coastal grant to plan a **wetland delineation certification course**, to be held on July 23-26 at Superior Shores in Two Harbors. Attendance is limited and priority will be given to people working in the coastal area, but BWSR is maintaining a waiting list in case of late openings. The purpose of the course is to provide training that is specific to the red soils and cool, moist climate of northern Minnesota. The session will be led by nationwide wetland delineation expert Charlie Newling. Other invitees include Greg Larson, Marc Diers, and Steve Eggers. BWSR will conduct classroom and field sessions and associated testing so that they can award wetland delineation certification. Contact Mark Nelson at 218-723-4752 or mark.nelson@bwsr.state.mn.us

New York

The Erie County Soil & Water Conservation District, under a grant from New York State, is helping farmers in the Cattaraugus Creek Watershed identify areas of agricultural concern and assess conservation needs using a state-developed process known as **Agricultural Environmental Management (A.E.M.)**. The first tier of the process is a self-assessment completed by the farm

operators. Tier 2 involves on-farm visits and completing a series of operation-specific worksheets to document conservation needs and applied practices. Tier 3A moves into more detailed, practice-specific planning in anticipation of implementation under Tier 3B.

A.E.M. planning has already been completed in Erie County's Buffalo Creek and Eighteenmile Creek watersheds. Financial assistance from both the New York State Bond Act/Environmental Protection Fund and the U.S. Department of Agriculture Environmental Quality Incentives Program in New York require A.E.M. planning to be completed through at least Tier 2 prior to application for funding. A.E.M. planning has led directly to cost-sharing assistance in excess of 2 million dollars since 1998 for agricultural conservation work in watersheds where planning has been completed. As the Cattaraugus Creek A.E.M. planning is completed, the Erie County Soil & Water Conservation District, hopes to have similar success in bringing financial assistance to farms in Cattaraugus Creek. Contact John Whitney at 716-652-8480 or john.whitney@ny.usda.gov

Pennsylvania

The National Oceanic and Atmospheric Administration and the U.S. Environmental Protection Agency issued final approval May 16 for **Pennsylvania's Coastal Nonpoint Pollution Program**, submitted in 1995 in accordance with Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990. Pennsylvania is the fifth state of the 33 coastal program states and territories to receive full approval. The program covers practices to reduce nonpoint source pollution from forestry, agriculture, urban runoff, hydromodification, and marinas and recreational boating. Pennsylvania is addressing these sources largely through existing programs. Final approval qualifies the state for additional Coastal Zone Management Program funding to address nonpoint pollution sources to coastal waters. Contact Pat Pingel at 717-772-5637 or ppingel@state.pa.us

Wisconsin

The **Wisconsin Buffer Council**, in cooperation with Pheasants Forever, has received financial commitments of more than \$81,000 to help fund a buffer internship program. The goal is to raise \$160,000 to fund 40 internships. College interns will contact landowners to discuss programs that provide financial incentives to establish buffers. Interns will also assist landowners applying for enrollment, help develop the plan and assist in construction layout of the buffers. Contact Gene Hausner at 608-276-8732, ext. 245.

Watershed Planning Focus on Scajaquada Creek



Watershed planning for the Scajaquada Creek, a largely urban watershed in Erie County, New York has begun with the formation of the Scajaquada Creek Watershed Advisory Council.

The Advisory Council will work to gather citizen, agency and technical specialist input

to develop and implement a watershed management plan to address a wide variety of resource concerns in the watershed including, seriously contaminated sediment, combined storm sewer discharges, stormwater management, illicit discharges, riparian habitat and trails, and litter and trash problems.

The Erie County Legislature, at the initiative of Legislator, Judith Fisher, provided funding for the first phase of planning effort. Scajaquada Creek flows through (and under) the City of Buffalo, discharging into the Niagara River. Many cleanups and community events are being planned to keep the public involved and enthusiastic about the planning project.

A number of small implementation projects are also scheduled in advance of the completion of the plan so the public has an early sense of accomplishment and impact. Urban Resources Partnership (URP) funds through USDA will be used for some early implementation activities.

Contact Kathy Carpenter at 315-477-6504 or kathy.carpenter@ny.usda.gov

Improving Muskegon Lake Water, continued from page 5

The project has had several immediate applications and promises significant future benefits. During the project period, the Technical Team developed and conducted a public workshop on riparian landscaping and water quality monitoring techniques for the benefit of wildlife and water quality. In conjunction with the project manager, the Technical Team also gave presentations at six meetings with the public and local officials to support the development of ordinances to implement the stormwater management plan. An additional three forums, developed for local units of government in Muskegon County, resulted in the creation of a Muskegon County Stormwater Committee which is investigating MDEQ's voluntary stormwater permit.

The project team has also developed numerous fact sheets and articles on the stormwater project that were distributed to interested local groups and also printed in two local newsletters with a combined distribution of 20,000 recipients in Muskegon County. Additionally, the project team demonstrated bioengineering techniques for restoring eroding sites along the creek. To date they have restored two sites, of approximately 1.5 acres, and will be using similar techniques to restore a third site. The project manager estimates that over 140 tons of soil will be saved over the entire life of the project.

For more information, contact Kathy Evans at 231-773-0008.

Upper Tahquamenon River Restoration, continued from page 4

drove quarter-inch reinforcing steel rods through them and into the river bottom. The crew also suspended some cover logs in the water above the river bottom. These provide valuable cover for trout. The crew did not remove or re-position every fallen tree. Instead, each was analyzed to determine how it might be used to maximum benefit of the river. For those that were left as they fell, some branches were removed to allow anglers and others passage within the river rather than forcing them to the streambanks where ingress and egress points contribute significant sediment load to the stream.

The project team completed 4.5 miles of streambank restoration, saving an estimated 25 tons of sand from entering the stream annually over a 50 year period.

The project team held a picnic to celebrate the project's completion as well as to review their progress. Those in attendance included volunteers, landowners and their guests, as well as agency representatives.

Additionally, the project team has used Basin Program funds to secure further funding from the Michigan Department of Natural Resources Inland Fisheries Grant Program. Work on the Upper Tahquamenon will be ongoing. The team plans to continue long-term maintenance, including the installation of a sand trap to remove several hundred cubic yards of sand annually. They are also encouraging riparian landowners to consider replanting to ensure stable streambanks.

For more information, contact Paul Rose at 989-742-4225.

Of Interest...

Workshops and Conferences

If you have an addition to this calendar, please contact Jennifer Read at 734-665-9135 or jread@glc.org

August

4-9

Ecological Society of America Annual Meeting

Location: Madison, Wisconsin

Contact: Nadine Lymn at 202-833-8773

E-mail: nadine@esa.org

20-24

Hands-On Course on Sustainable Development

Location: Chicago, Illinois

Contact: Eugene Goldfarb at 312-353-1696

E-mail: eugene_goldfarb@hud.gov

27-30

9th National Nonpoint Source Monitoring Workshop, Monitoring and Modeling Nonpoint Source Pollution in the Agricultural Landscape

Location: Indianapolis, Indiana

Contact: Tammy Taylor at 765-494-9555

E-mail: taylor@ctic.purdue.edu

September

5-6

Wetlands and Remediation: The Second International Conference

Location: Burlington, Vermont

Contact: Carol Young at 614-424-7604

E-mail: youngc@battelle.org

12-14

International Joint Commission Public Forum on Great Lakes-St. Lawrence Water Quality

Location: Montreal, Quebec

Contact: Jennifer Day at 313-226-2170

E-mail: commission@windsor.ijc.org

24-26

The Brownfields 2001 Conference

Location: Chicago, Illinois

Contact: Molly Wenner at 877-343-5374

E-mail: brownfields2001@dyncorp.com

October

9-12

Great Lakes Commission Annual Meeting and Associated Events

Location: Milwaukee, Wisconsin

Contact: Mike Donahue at 734-665-9135

E-mail: mdonahue@glc.org

22-25

International Conference on Contaminated Soils, Sediments, and Water

Location: Amherst, Massachusetts

Contact: Denise Leonard at 413-545-1239

E-mail: dleonard@schoolph.umass.edu



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