

Sustainable Watershed Action Team (SWAT) An Overview

What is SWAT?

The Sustainable Watershed Action Team (SWAT) project, funded by the Chicago Wilderness, is designed to provide technical assistance to local governments and developers in northeastern Illinois in designing and implementing environmentally sensitive construction projects or developing comprehensive plans containing state-of-the-art practices for such issues as stormwater management. Low impact development (LID) and conservation design best management practices are the focal point of projects undertaken with the 2008 grant.

A team of private consultants and other experts with direct experience in successfully designing and implementing LID and conservation design practices has been established to provide technical guidance for the planning or design of projects located in biologically sensitive areas. The involvement of experts with hands-on experience is instrumental to the SWAT process. Expertise in the following disciplines has been included on SWAT projects: engineering, hydrology, landscape architecture, environmental planning, and ecology.

One of the lessons learned after three years of SWAT efforts is that local officials are central to the success of a project. Local officials have the authority to develop state-of-the-art comprehensive plans, pass sustainability-based ordinances, and approve sustainable developments. By strengthening the planning infrastructure of municipal and county governments, land use practices can be influenced on a broader scale. Continuing a direct, hands-on outreach effort is important in addressing the growth and loss of natural resources that are projected for the future.

What does SWAT do?

The following are examples of the services provided by SWAT:

➤ Technical Assistance to Local Governments

Many local units of government do not have the resources to research and evaluate best practices to be adopted to improve development within their communities. In other cases, local governments face time pressures in meeting deadlines or are not familiar with natural resource issues. It is important to establish sound planning infrastructure within municipal and county governments – comprehensive plans, ordinances, etc. – to provide the mechanisms to protect natural resources. This has been the focal point of the more recent SWAT projects. SWAT experts worked with the following three communities:

Development of Comprehensive Plans – SWAT experts assisted in the development of a small community's comprehensive plan with a need to protect a high quality river and to address water quality and water quantity issues. SWAT developed a technical document that addressed the following issues:

- ✦ Stormwater Management
- ✦ Natural Resource Management
- ✦ Funding Mechanisms for Maintenance
- ✦ Economics of Conservation Development
- ✦ Native landscaping
- ✦ Conservation Development Strategies

This technical document was passed as a companion to the comprehensive plan. This community would be more able to address future growth issues in a more sustainable manner because they had a strong comprehensive plan to serve as a guide.

Annexation Agreement/Ordinance Language: Planning staff are often faced with time constraints in reviewing and approving proposed developments. SWAT has provided assistance by preparing annexation agreement language for stormwater management, use of native vegetation and other topics. Performance standards were established for one community to ensure the principles identified in a development vision would be realized.

General Guidance – Communities often have the need for guidance on issues related to natural resources. In one case, a community did not have the expertise to ensure the wetlands were protected on developments. SWAT provided written guidance regarding the review of projects with substantial wetlands to help them in their discussions with the developer. It is believed that this need for this type of assistance is greatly under-estimated.

Low Impact Development/Conservation Design Workshops – SWAT has held three major workshops to inform elected officials, technical municipal and county staff, and in one case, the general public about sustainable development practices. Following these workshops, one municipality and one county moved forward with writing and adopting new ordinances to allow and even encourage LID and conservation design best management practices to be incorporated into the design of residential and non-residential developments.

➤ Providing Direct Assistance to the Development Community

During the first year of the SWAT grant, a service was provided to the development community – the review of specific development plans to provide suggestions as to how their preliminary plat could be revised to be more protective of natural resources or how conservation design practices could have been incorporated at the beginning of the design process. The goal was to influence future developments even if the one reviewed was not modified. For example, SWAT experts reviewed a proposed project being developed that contained extensive wetlands, including those identified as ADID wetlands. Alternative development strategies were suggested. It was determined that this was not the most efficient way to affect change.

➤ Participating in a Community Charrettes

SWAT participated in an exciting, innovative community charrettes to generate alternative design strategies for a proposed development in a high-quality woodland. This was productive in terms of gaining the support of the community but requires full engagement of the developer and municipality to be effective.

As a result of the number of projects undertaken with this grant from Chicago Wilderness, it has been determined that working with units of government to develop strong comprehensive plans and development ordinances is the single most effective way of protecting natural resources through the development process. By providing sound planning infrastructure that includes a wide range of best management practices, developers will have the tools needed to develop more sustainably. This is the focus of the 2008 SWAT grant.

Who is leading the SWAT effort?

Deanna Glosser, Ph.D. is the director of the SWAT initiative. Deanna Glosser is the president of Environmental Planning Solutions, Inc., a small, woman-owned business. She has a doctoral degree from the Department of Urban & Regional Planning at the University of Illinois, Champaign-Urbana. Dr. Glosser is currently an Adjunct Assistant Professor at the University of Illinois' Department of Urban & Regional Planning, and an Adjunct Professor in the Environmental Studies program at the University of Illinois-Springfield.

Dr. Glosser worked for the Illinois Department of Natural Resources for 13 years where she was responsible for agency-wide strategic planning and performance measures, supervised the examination of development projects for adverse impacts to natural and cultural resources, and served as the agency lead on issues related to urban sprawl and growth management. She has been closely involved with the American Planning Association for over ten years and is currently the Secretary-Treasurer of the Divisions Council, a member of the Legislative and Policy Committee, and co-chair of the Food System Planning Steering Committee. She also serves on the boards of Illinois Audubon Society, Prairies State Conservation Coalition, and Illinois Stewardship Alliance.

SWAT Collaborators

SWAT has identified two key people to assist in identifying appropriate projects and SWAT experts. The collaborators have extensive knowledge of sustainable design practices and natural resources, and have contacts across northeastern Illinois.

Nancy Williamson is a principal collaborator with The Sustainable Watershed Action Team (SWAT) and partner in the development of the SWAT initiative. Employed by the Illinois Department of Natural Resources as a Watershed Coordinator with the "Partners for Conservation" program (formerly "Conservation 2000"), Nancy works as a program grant administrator and also as a liaison between the State and the public to enhance conservation in Northern Illinois.

Nancy is a member of the Chicago Wilderness Sustainability Committee and the Chicago Metropolitan Agency of Planning (CMAP) Land Use Committee and serves on the Environmental Working Group for Winnebago County's 2030 Planning process. With a background in graphics and illustration, Nancy was part of The Wetlands Initiative team who developed "Living with Wetlands," a publication now required by the Chicago Army Corps of Engineers to be distributed in developments which impact jurisdictional wetlands.

Nancy is a Trustee on the Board of the McHenry County Conservation District, the County's land acquisition agency that currently holds 23,000 acres in the public trust. She is a founding board member of the McHenry County Conservation Foundation, which led the successful citizen effort to pass two referenda totaling \$132 million for open space acquisition in McHenry County.

Dennis Dreher is the Director of Conservation Design for Cowhey Gudmundson Leder, Ltd., a regional engineering and natural resources consulting firm headquartered in Itasca, Illinois. His principal role is to work with clients and staff engineers and ecologists to identify and incorporate conservation design practices into new residential, commercial, and institutional development projects. He was formerly the Director of Natural Resources for the Northeastern Illinois Planning Commission where he managed a variety of water and natural resource projects for over

25 years. His areas of expertise include conservation design, stormwater and floodplain management, stream and wetland protection, water quality planning, watershed management, biodiversity protection, and sustainable development. Dennis has authored or assisted in the development of numerous water resources publications, including model ordinances, guidebooks, and watershed plans. He holds a B.S. and M.S. in Environmental Engineering from Purdue University and the University of Illinois, respectively.

Dennis also is the chair of the Water Resources Committee of the McHenry County 2030 Plan Commission and is a leading advisor to the County's Land First Initiative which recently developed a conservation design ordinance for the County.