CENTER FOR WATERSHED PROTECTION

Runoff Rundown

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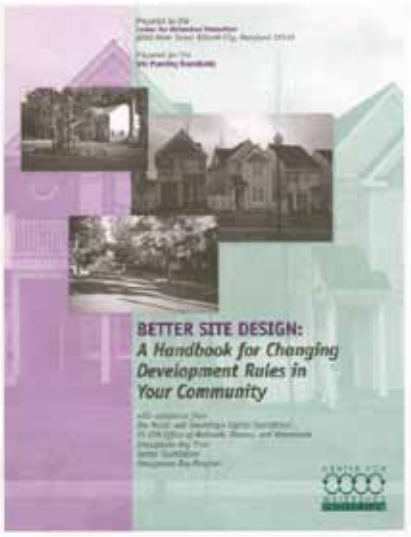
INSIDE THIS ISSUE:

Bringing Better Site Design into the 21st Century

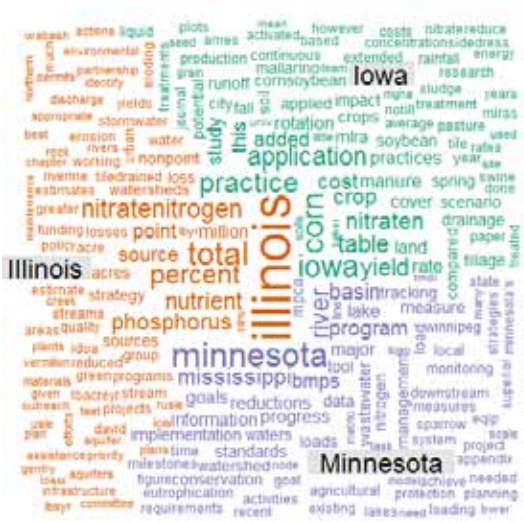


Published in 1998 as a consensus-based process for changing development regulations, the Center's Better Site Design Handbook outlines 22 model development principles for site design that act to reduce impervious cover, conserve open space, manage stormwater at new residential and commercial development sites; and reduce the overall cost of development. The Handbook's Codes and Ordinances Worksheet (COW), which was designed to facilitate an in-depth review of the standards, ordinances, and codes at the local level, has been used by the Center to review local development regulations in over 75 communities in Maryland, Pennsylvania, Virginia, South Carolina, Ohio, Wisconsin, New York, Alabama, and the District of Columbia. Other organizations such as the Cumberland River Compact, Southeast Watershed Forum, Pennsylvania Environmental Council, Potomac Conservancy, James River Association, and Tennessee Valley Authority have used the Better Site Design process to make updates to their local codes or to conduct their own roundtables.

Much has happened in the world of stormwater and site planning in the 18 years since the release of the Better Site Design Handbook. Technical and regulatory advances have changed how stormwater is managed and sites are developed, and changing climate conditions may necessitate future modifications to stormwater designs. In addition, many users of the Handbook and the COW have noted updates are needed to reflect different development scenarios, and to address where development occurs. To respond to this need, the Center for Watershed Protection is embarking on an effort to revise the Better Site Design Handbook and the related support products. The following updates are proposed:

- Updates to the COW questions to reflect the latest in stormwater management technology and regulations such as MS4 permits
- Different versions of the COW for different site situations including new development, redevelopment and stormwater retrofits
- New case studies
- Updated research on Better Site Design effectiveness
- A model code/ordinance library
- A section that addresses where development occurs
- Additional tips on how to get from code review to revisions, using lessons learned from the roundtables
- Online, web-accessible format

Phase 1 of the update will primarily focus on updating the COW and the results will be presented at our October 18th webcast on Better Site Design. If you are a past user of the COW and would like to share your experience with using it to successfully change local codes, or want to make suggestions for COW revisions, please contact Karen Cappiella at kc@cwp.org or 410-461-8323, ext. 3203. The Center will continue to fundraise so that subsequent phases of the Better Site Design update can be completed.



Upper Mississippi Nutrient (Loss) Reduction Strategies Final Report Available

Last July, the Center reported on a project to evaluate state plans for achieving the nutrient reduction goals identified in EPA's Gulf Hypoxia Action Plan and summarize the BMP efficiencies and per-acre costs from each state plan. We are pleased to release the final Upper Mississippi Nutrient (Loss) Reduction Strategies report which highlights similarities among nutrient reduction (or nutrient loss reduction) strategies for Illinois, Iowa, and Minnesota—focusing on agricultural BMPs. As expected, there is substantial overlap in the BMP efficiencies developed by each state, which adds credibility to their independent efforts. The report also identifies gaps in knowledge and focus areas for future research. This work was funded by the Walton Family Foundation.

New Project Roundup

We are always excited to start up new projects here at the Center. Below is a sampling of some recently awarded Center projects:

Healthy Watersheds /Forest TMDL Project

The Center is working with the Pennsylvania Department of Environmental Conservation and Natural Resources (PA DNCR) and other partners on a pilot project to incentivize retention of forestland in the Yellow Breeches watershed near Harrisburg, PA. The project involves characterizing the extent and rate of land cover changes, developing land cover scenarios, evaluating existing planning and zoning and other growth management tools available within the study area, and engaging local officials in discussions about the measures necessary to stimulate land use decisions that increase

forestland retention. The goal is to provide localities with the tools they will need to quantify potential water quality and economic impacts of land conversion and evaluate policy options, incentives, and planning tools that could continually improve their capacity to reduce the rate of conversion of forestlands, agricultural lands, and wetlands. These methods, which were developed by the Virginia Department of Forestry for a pilot study in Virginia, will ultimately be used to inform development of a system that will offer municipalities credit towards their TMDL requirements for retaining high conservation value forestland. The Center will assist PA DCNR by developing BayFast models and BMP load reduction scenarios for the various land cover scenarios and provide support on outreach to the local jurisdictions in the target watershed, collaboration with Virginia team members and preparation of the final report.

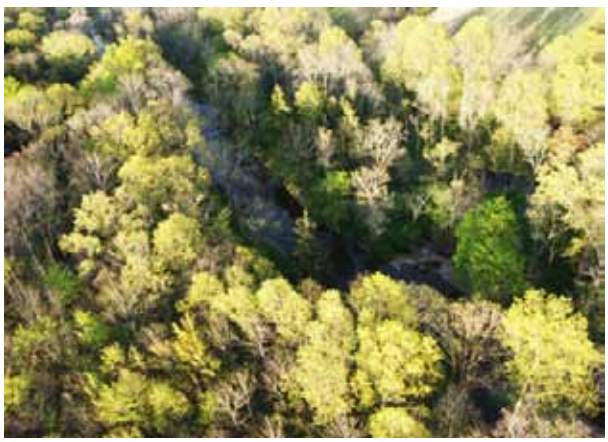
Bubbles for the Bay

The Center will be working with the Waterfront Partnership of Baltimore, Inc. on a Bubbles for the Bay competition to evaluate the application of aeration technologies to help increase dissolved oxygen and improve water quality in the Baltimore Harbor. This work is funded by the Abell Foundation and the Center will lead the first phase, which includes a feasibility study to determine whether aeration is appropriate for the Harbor and under what conditions. If the study determines that aeration technology could be successful in Baltimore Harbor, the next phase of the project will involve holding a design contest to select the best aeration technology, installing and monitoring the effectiveness of the winning technology, engaging Baltimore students in designing their own aeration solutions while learning about the Harbor and Chesapeake Bay, and raising awareness among Baltimore residents about the impact that pollution has on the Harbor and Chesapeake Bay.

Pennsylvania Pollution Reduction Plans

With the deadlines for NPDES MS4 general permit applications due this September, the Center's work helping Pennsylvania MS4s achieve their application and implementation goals is ramping up. We were recently awarded a contract to assist Whitehall Township develop a Pollutant Reduction Plan and recently started work on a TMDL and Pollutant Reduction Plan for Blair County.

Research for Targeting Regulatory Protections to Vulnerable Forest in the Delaware River Basin



The Center and partners Rutgers University and the Pinchot Institute for Conservation recently kicked of Phase 1 of a 3-year study to prioritize areas of the Delaware River Basin that are in need of improved regulatory protection for important forest lands such as riparian buffers. Phase 1 is being led by the Pinchot Institute and includes a gap analysis to identify geographic areas in the Delaware basin with the greatest need for a comprehensive review of forest protection regulations and the appropriate scope for such a review. The Center will lead Phase 2 by conducting a comprehensive inventory of forest buffer protection policies and regulations in one or more of the priority regions identified. In Phase 3, Rutgers University will lead an evaluation of the linkages between varying forest protection policies and the amount of forest measured through high-resolution mapping. The project results will be used to guide where and how future ordinance work occurs in the basin, improve future land use forecasting models and improve our understanding of what makes a forest protection ordinance effective. This work is a product of a grant from the Academy of Natural Sciences at Drexel University's Delaware Watershed Research Fund, which is funded by the William Penn Foundation.

2017 NATIONAL WATERSHED & STORMWATER CONFERENCE

Connecting Practitioners to Innovative Ideas

With less than a week left to register, sign up today to attend the Center for Watershed Protection's 2017 National Conference on April 4th and participate in the "Emerging Tools in Watershed Protection, Restoration and Implementation" webcast. With new tools and technologies emerging in the watershed field, the way protection and restoration projects are conducted is quickly progressing. These tools include mobile computing, remote sensing, innovative financing mechanisms and new approaches to agricultural advances and behavior change.

The Center has scanned the county for the most innovative emerging tools in watershed protection, restoration and implementation and the presenters we identified will share how these tools may impact future watershed work. Speakers include:

- Jeff Duke, GIS Services Manager, Northeast Ohio Regional Sewer District
- Dr. Srini Dharmapuri, LIDAR Scientist, Michael Baker International
- Marcus Quigley, CEO, Opti

Learn more here. Hurry, registration closes March 29th! Register to attend online or in-person at one of our hub locations. Spots are limited. Rates are below:

Webcast Only

General Admission: $249 Center for Watershed Protection Association Members: $199

Live Locations

General Admission: $249 Center for Watershed Protection Association Members: $199

Register to Attend Now

Center Webcast on Nutrient Trading

May 17, 2017, 1-2:30 PM EST

Nutrient credit trading offers both risks and opportunities for meeting total maximum daily load (TMDL) nutrient reduction targets. Some states have established nutrient trading or offset programs, with most current trades involving wastewater treatment plants and limited involvement from the stormwater sector. In this webcast, we will look at the increasing exploration of nutrient trading, review case studies of trading programs, and discuss the future of nutrient trading in meeting pollution reduction regulations.

Click here to register for this webcast!