Regional Stormwater Management Snapshots

The National Association of Regional Councils (NARC) has supported regional approaches to resilient stormwater and watershed planning for nearly two decades. Regional Councils play a large and diverse role in water resource planning. Their work in stormwater management serves as a constant reminder of the value regional approaches bring to a community. Regional approaches are more comprehensive and cost-effective than single municipal-led projects. These approaches often increase public support and community engagement, which are critical to successful implementation. From comprehensive multi-jurisdictional planning efforts to community engagement campaigns, the efficacy of the regional approach continues to attract support from organizations nationwide, including the Environmental Law Institute and Harvard Law School. This document features stormwater management “snapshots” from Regional Councils across the nation, demonstrating the wide array of water quality projects that are suited for regional implementation.

Delaware Valley Regional Planning Commission: Philadelphia, PA
Suzanne McCarthy, Coordinator, Tri-County Water Quality Management Board, smccarthy@dvrpc.org

Beginning in 2004, state law in New Jersey required municipalities to map all stormwater outfalls that discharged into surface waters. The Delaware Valley Regional Planning Commission (DVPRC) assisted counties in fulfilling these management requirements and developed a standardized protocol for mapping outfalls. Additionally, DVRPC provides resource guides to K-12 teachers on runoff, pollution, water quality, and other relevant topics. These guides contain extensive information on local resources as well as classroom activities and lessons that follow an interactive approach to education and outreach, creating a sense of watershed awareness and ownership for students throughout the region. To learn more, visit http://www.dvrpc.org/Environment/water/.

Eastgate Regional Council of Governments: Youngstown, OH
Stephanie Dyer, Environmental Program Manager, sdyer@eastgatecog.org

Youngstown, OH, communities faced a number of environmental problems after the collapse of the steel industry in the late 1970’s. Over time, byproducts of years of steel production caused the region’s Mahoning River to become severely polluted. In the 1990’s, EPA passed regulations requiring each local jurisdiction to create an official stormwater management plan to help improve water quality. However, implementation of the plans was not aggressively enforced. Nearly 20 years later, many of these plans have not been implemented. To address this issue, Eastgate Regional Council of Governments developed a GIS map tool to highlight each municipality’s management plans as well as recommend locations for green infrastructure and low impact development projects. The tool garnered support from a wide range of community members and has effectively reignited the conversation on stormwater management plan implementation throughout the region. To learn more, visit http://www.eastgatecog.org/EnvironmentalPlanning.aspx; to view the GIS map, visit http://bit.ly/1AjwdRS.
Metropolitan Washington Council of Governments: Washington, DC

Tanya Spano, Chief of Regional Water Quality Management, tspano@mwcog.org

Prior to 2006, attempts to restore the Anacostia River watershed were met with inadequate inter-jurisdictional cooperation and a lack of long term funding. The Metropolitan Washington Council of Governments established the Anacostia Watershed Restoration Partnership (AWRP) in an effort to develop a long-term comprehensive plan to repair the river’s degraded ecosystem. The partnership revolves around stakeholder involvement, encouraging developers, environmental groups, and municipalities to engage in regular dialogue with governmental agencies. Through regional cooperation, the partnership has led to the implementation of a restoration plan that includes almost 2,000 stormwater retrofits, progressive ordinance and permit requirements, establishment of a TMDL for trash, strong bag fees, a new focus on green streets, and designation of the river as an “Urban Water of National Significance.” To learn more, visit http://www.mwcog.org/environment/water/stormwater.asp.

Northeast Ohio Area Wide Coordinating Agency: Cleveland, OH

Pamela L. Davis, Senior Water Quality Planner, pdavis@mpo.noaca.org

The Northeast Ohio Area Wide Coordinating Agency’s (NOACA) water quality program addresses issues at both the regional and community level. In an effort to guide local municipalities operating under Phase II MS4 permit requirements, NOACA organized the Regional Storm Water Task Force. The task force created three model ordinances for stormwater management in the region and updates them to align with changing Ohio EPA permit conditions. NOACA has led an initiative to develop a green infrastructure plan for Cleveland, as well as help publish a low impact development guide for the area. To learn more, visit http://www.noaca.org/index.aspx?page=99.

Piedmont Triad Regional Council: Kernersville, NC

Elizabeth Jernigan, Stormwater Education and Outreach Coordinator, ejernigan@ptrc.org

In 2004, The Piedmont Triad Regional Council gathered 24 local government representatives from cities with Phase II MS4 permits and formed a stormwater education program, Stormwater SMART, for National Pollutant Discharge Elimination System (NPDES) Phase II requirements. The SMART program aims to educate the region on what stormwater is and how community actions impact water quality, and to provide solutions for home and business owners to reduce negative impacts on water quality. Taking a hands-on approach, the program offers numerous volunteer opportunities, classroom presentations, and community cleanup events to engage the public in stormwater management. To learn more, visit http://www.ptrc.org/index.aspx?page=219.

Pima Association of Governments: Tucson, AZ

Mead Mier, Regional Watershed Planner Lead, mmier@pagnet.org

With the goal of regional cooperation in stormwater management, the Pima Association of Governments (PAG) formed the Stormwater Management Working Group (SWMWG) in 2001. Representatives from PAG’s member jurisdictions, state agencies, and industries meet to discuss local stormwater issues, management, and funding. Since its creation, SWMWG has become a center for stormwater information exchange, planning, and project development in the Tucson region. The working group also coordinates outreach efforts and heads PAG’s annual ‘Clean Water Starts With Me’ campaign during monsoon season. The multi-media educational initiative focuses on informing a
younger audience on how to prevent stormwater pollution and protect the area’s waterways. To learn more, visit http://www.pagnet.org/Programs/SustainableEnvironment/Water/tabid/178/Default.aspx.

**Southeast Michigan Council of Governments: Detroit, MI**

*Amy Mangus, Manager of Water Quality, mangus@semcog.org*

The Southeast Michigan Council of Governments (SEMCOG) created a Municipal Training Program to assist communities in protecting the region’s waterways through maintenance of their Phase II Stormwater Permit requirements. The Program educated the public on stormwater best management practices through workshops, online modules, fact sheets, and posters. SEMCOG also helped facilities in the area develop their own pollution prevention plans, provided ordinance assistance, and keeps annual records of management activities. Additionally, SEMCOG developed the Green Streets Guidebook to show examples of successful low impact development projects in the Great Lakes Region. The guidebook contains various road improvements that have been effective in managing stormwater runoff and enhancing water quality. To learn more, visit http://semcog.org/Stormwater.aspx.

**Southwest Florida Regional Planning Council: Fort Myers, FL**

*Lisa Beever, Program Director, Charlotte Harbor National Estuary Program, lbeever@chnep.org*

Population growth and development in Fort Myers, FL has made stormwater management an increasingly important issue. Particularly apparent after extreme weather events, the previous lack of stormwater best management practices caused a significant amount of pollutant-containing runoff to enter the region’s watershed. Through the State of Florida’s impaired water rules, local governments and Florida Department of Transportation are required to reduce pollutant loads in certain areas. These requirements are implemented through National Pollutant Discharge Elimination Systems (NPDES) and Environmental Resource permits. Consequently, measurement of pollutant load reductions has become increasingly important in the design of stormwater systems. The Southwest Florida Regional Planning Council (SWFRPC) saw overall reduction of stormwater runoff through tree and shrub installation throughout the watershed as a potential solution. This practice proved very effective in reducing the overall stormwater runoff. To quantify the pollutant load reduction, SWFRPC used the U.S. Forest Service’s iTree Hydro software to measure the amount of pollutant per unit of stormwater entering a given water system. They then calculated the decrease in hydrologic load from installation of a specific tree or shrub. SWFRPC used these findings to facilitate the expansion of this program in additional local governments in their region. To learn more, visit www.swfrpc.org or www.chnep.org.

**Toledo Metropolitan Area Council of Governments: Toledo, OH**

*Kari Gerwin, Stormwater Planner, gerwin@tmacog.org*

After a 2010 Ohio EPA TMDL report identified sedimentation/siltation as a major cause of water quality impairment in the Swan Creek region, the need for retrofitted stormwater management practices became apparent to local officials. Through the Lake Erie Protection Fund Small Grant, the Toledo Metropolitan Area Council of Governments identified areas in the Swan Creek watershed that would benefit from sustainable management practices such as rain gardens, pervious pavement, and rain barrels. Out of a total of 87 sites, GIS data identified 14 sites that if retrofitted with a more sustainable design, would have the highest impact on Swan Creek’s water quality. The project has led to the creation of a comprehensive GIS mapping tool that contains recommendations and best management practices for environmental planners in the Swan Creek area. To learn more, visit http://www.tmacog.org/storc.htm.