

2013 Governor's Conference on the Management of the Illinois River

Watershed Planning: Communities along the Illinois River

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The purpose of this presentation is to provide an overview of stormwater and watershed programs and policies in Peoria, Tazewell, and Woodford Counties of Illinois, and to provide you with a more detailed overview of an upcoming program called River Action League whose purpose is to engage citizen in water quality data collection.

To provide you with a stormwater update for the tri-county region, we will discuss policies, programs, and practices:

- Policy
 - Honoring Our Water is a regional stormwater planning document completed by a stormwater advisory committee to the Illinois River Valley Council of Governments. This plan, completed in 2011, has served to direct stormwater policy for the region.
 - A major recommendation of the stormwater plan is to implement a stormwater utility, particularly in jurisdictions impacted by NPDES Phase II permitting program. Currently, with a federal grant secured by Peoria County, several NPDES communities are undergoing a stormwater utility feasibility study where they are identifying annual costs to implement a comprehensive stormwater program and calculating fees to support these costs. The significance of this project is that a number of communities are simultaneously conducting this analysis thus inter-jurisdictional competition and the tendency to “not want to be the first” is minimized.
 - HB 1522 is Illinois legislation that allows Peoria County to implement a stormwater utility. While municipalities are able to leverage this fee, counties in Illinois need this special legislation.
 - The City of Peoria is in the process of updating their stormwater and infrastructure ordinances. This is a large undertaking and they are involving environmental and development interest groups in the process. The City is proposing to adopt the Unified Stormwater Ordinance recommended in the Regional Stormwater Plan.
 - Illinois and U.S. EPA recently completed a Middle Illinois River TMDL for the Illinois River watershed from Bureau to Tazewell Counties. Many of the recommendations of the Regional Stormwater Plan were incorporated into this study. In addition to the TMDL report, IEPA

completed two sub-watershed implementation plans for an urban system, Dry Run Creek, and a rural system, sub-watershed of Farm Creek.

- The Village of Morton, the City of Pekin, and the City of Peoria have submitted Long-Term Control Plans for their Combined Sewer Overflow systems. Pekin and Peoria are making major infrastructure improvements to their existing wastewater treatment systems.
- Programs
 - Several communities have banded together to work with a single consultant to create programs to help them comply with NPDES Phase II stormwater regulations. This allows for shared resources such as the regional stormwater utility study. This group is referred to as Central Illinois Communities for NPDES Regulations (CICN).
 - River Action League is a program headed up by Bradley University's STEM Education Center. The program is a citizen-based water quality data collection program and we will discuss this in detail later in this discussion.
 - Tri-County Regional Planning Commission has successfully secured grants from the U.S. EPA and the USDA to provide financial assistance to landowners in the forested river bluffs to conduct forest management and ravine stabilization. Forest management is the process of thinning invasive tree and shrub species with fire and/or cutting to allow for growth of ground vegetation whose roots stabilize the soil. Ravine stabilization often consists of rock gabion baskets and stone toe protection; for smaller ravines, cut trees are used as log check dams. These practices have proved successful in reducing erosion from the bluffs.
- Practices – There are several examples of the communities installing best management practices for stormwater. Here are a few.
 - City of Peoria installed a rain garden in a highly visible area within the CSO watershed as an educational tool. The rain garden was funded by Illinois American Water.
 - The new Riverfront Museum of Peoria not only has an entire exhibit dedicated to the Illinois River and its watershed, but also has bioswales and native plants in the landscaping.
 - Westlake Shopping Center of Peoria has an impervious parking lot.
 - Volunteer group, Peoria Wilds, is active in conducting forest management on the bluffs, an essential element to healthy open woodland habitats that control erosion of these steep slopes.

It is important to note that the economic development community in Central Illinois is taking notice of the opportunities of the natural resources of the Illinois River Valley. The community has a designated Illinois River Scenic Byway by which focus

groups promote eco-tourism. Peoria County recently held a discussion on the economic opportunities of harvesting asian carp. And Heartland Water Resources Council is actively working to develop a sediment processing plant near the river to serve as a long-term solution to sedimentation of Peoria Lakes and to provide a positive economic impact for the region.

A more in-depth look at one Tri-County partnership program, River Action League.

Main Goals –

- Provide non-formal water quality and watershed educational experiences for the citizens of the tri-county area.
- Provide much needed water quality data about the Illinois River watershed.

Who We Are –

- Formed as a partnership between Bradley University Center for STEM Education and Tri-County Regional Planning Commission.
- Training teachers from all over the area and non-formal educators (such as staff and volunteers at Peoria Riverfront Museum).
- Students, families and citizens of any age can participate.

River Action League staff work very hard to ensure the quality of the data that is being gathered by both the staff and citizen scientists. Many quality assurance checks and policies are in place.

- Training for citizen group leaders is very thorough
- Written Quality Assurance Project Plan; which is in the process of being approved by the ILEPA.
- The program is following industry standards for citizen science and including data that resource managers and planners are asking for.

In order to achieve both goals of the organization River Action League provides a great deal of services. First to the general public the program offers;

- Educational experiences for students and citizens of all ages.
- Water quality information about local streams all around the area.
- Quantitative as well as qualitative data.
- Photo documentation of sites.
- All data provided on an online mapping software to be able to compare different sites as well as one site over time (River Action League is currently fundraising to be able to have the technological abilities and the staff time to make this portion of our program possible).

To municipalities/private contracts the program offers;

- Establishing RAL sites at locations suggested by municipalities.
- Reliable testing at regular intervals.
- Water quality monitoring and data analysis at a minimal cost.
- Option to have staff conduct testing at difficult sites or on a more regular basis.

- Wide variety of testing options – pH, dissolved oxygen, nitrates, chloride, phosphate, *E. coli*, temperature, stream width and depth, flow rate, as well as photos and qualitative data.

To grow this program, add the new online mapping software and to establish the program as a sustainable program, River Action League is seeking partners. Partnerships are being sought at many different levels –

- Lead partners
- Participating partners
- Data Use partners
- Donor partners

Establishing a private contract for annual water quality monitoring with River Action League would place a municipality or other entity in the category of Data Use Partner.

For more information on River Action League please visit our website!

<http://www.bradley.edu/academic/cio/stem/league/>