



2009 CSREES National Water Conference; St. Louis, MO

What Happens When it Rains in the Illinois River Watershed?

Robert W. Frazee*
University of Illinois Extension
*rfraze@illinois.edu

Abstract:

The Illinois River is part of the third largest river system in the world-the Mississippi River. Most of the watershed is agricultural, but it also includes metropolitan areas, such as Chicago, Joliet, and Peoria, Illinois.

Even though the Illinois River is our state's most important inland water resource, it is being threatened due to major problems associated with sedimentation and stormwater runoff. Throughout the Illinois River Watershed, the average annual rainfall is 36 inches. When it rains on agricultural land, approximately 27 inches is utilized for evapotranspiration, 7 inches for groundwater recharge, and 2 inches is surface runoff. In contrast, in urban areas with considerable impervious surfaces, only 7 inches is utilized for evapotranspiration, virtually none for groundwater recharge, and 29 inches is surface runoff. I developed five educational tools to showcase this research:

"What Happens when it Rains in the Illinois River Watershed?" fact sheet provides a graphic hydrologic budget comparing a rural, non-developed area and an urban, developed area with considerable impervious surfaces.

"5 Things YOU Can Do to Help Protect and Preserve the Illinois River Watershed" fact sheet provides practical tips for homeowners.

-Using a 36-inch yardstick, I graphically illustrated the hydrologic budget for the agricultural area on one side and the urban area on the other. 3,500 yardsticks were imprinted with these Illinois River Hydrologic Budgets and distributed at watershed programs.

-Developed a PowerPoint presentation which addressed stormwater runoff in agricultural and urban areas and showcased best management practices to address these problems.

-Prepared an Exhibit Board & Poster on this topic.

These educational tools have provided unique and effective ways to emphasize Proper land use and management, in both urban and rural areas, is essential to protecting and preserving the Illinois River and its watershed for the future!

Impact Statement:

These five educational tools have provided unique and effective ways to emphasize Proper land use and management, in both urban and rural areas, is essential to protecting and preserving the Illinois River and its watershed for the future!

* 5,000 copies of the two Fact Sheets have been printed and distributed.

* 3,500 yardsticks have been printed with the two hydrologic cycles for the Illinois River Watershed, 2,500 distributed

* Powerpoint presentation has been presented to a number of local, state, and regional watershed groups.

* Exhibit has been showcased at several state, midwest, and national watershed conferences and programs.

Category: Watershed Assessment and Restoration

Type of Presentation: Poster Presentation