ROLLA WATER RESOURCES LUNCHEON SEMINAR

Thursday, September 16, 2010
11:45 a.m. - 1:00 p.m.
U.S. GEOLOGICAL SURVEY
1400 INDEPENDENCE ROAD
ROLLA, MO 65401

Hydraulics of Willow Branch Stormwater Improvements—Analysis, Modeling, and Design of an Urban Stormwater System

Charles E. Patterson, PhD, P.E., C.F.M.
Allgeier, Martin, and Associates, Inc. Hydro Division

Willow Branch is a tributary of Joplin Creek in Joplin MO. The Willow Branch project area has a drainage basin area of 490 acres at the upstream end of the project and 640 at the downstream. Willow Branch flows through downtown Joplin and portions of the branch have been enclosed for over 100 years. The project area is 100% developed and available locations for stormwater improvements were limited. The proposed system was modeled using EPA SWMM. The use of SWMM allowed the analysis of the proposed system and the existing system as a single network. Analysis, design, and construction of the Willow Branch project will be discussed.

Biography: Dr. Patterson is a Senior Hydro Engineer of Allgeier, Martin and Associates, Inc., Hydro Division, Rolla, Missouri, where he is responsible for hydrologic and hydraulic analysis and design and construction plan development and has 22 years of engineering experience. Dr. Patterson is also an Adjunct Assistant Professor at the Missouri Science and Technology in Rolla.

---Next Luncheon—
Charles Morris, PhD, P.E.
Thursday, October 21, 2010 11:45 AM – 1:00 PM

We have slots for talks to fill this year. If you have a suggested topic, please contact Robert Holmes (bholmes@usgs.gov)

Park in the USGS south lot (free parking) and enter the visitor entrance in the southwest corner of the building. For those of you attending the meeting from outside Rolla, you can find directions to the USGS Rolla Center at: http://mcmcweb.er.usgs.gov/. The Rolla Water Resources Luncheon is a Brown Bag Lunch event. For those unfamiliar with the area and disinclined to brown bag it, you can find take-out options offerings among the Rolla restaurants found at: http://mcmcweb.er.usgs.gov/rollamap09ext.pdf