

Rolla Water Resources Luncheon Seminar

Thursday, April 11, 2013

Noon – 12:45 p.m.

U.S. Geological Survey
1400 Independence Road
Rolla, MO 65401

Low-Flow Frequency Statistics at Streamgages and Methods for Estimating Statistics at Ungaged Locations In Missouri

Rodney Southard

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The weather and precipitation patterns in Missouri vary considerably from year to year. In 2008, the statewide average rainfall was 57.34 inches and in 2012, the statewide average rainfall was 30.64 inches. This variability in precipitation and resulting streamflow in Missouri underlies the necessity for water managers and users to have reliable streamflow statistics and a means to compute select statistics at ungaged locations for a better understanding of water availability. Knowledge of surface-water availability is dependent on the streamflow data that have been collected and analyzed by the U.S. Geological Survey for more than 100 years at approximately 350 streamgages throughout Missouri. The U.S. Geological Survey, in cooperation with the Missouri Department of Natural Resources, computed streamflow statistics at streamgages through the 2010 water year, defined periods of drought and defined methods to estimate streamflow statistics at ungaged locations, and developed regional regression equations to compute selected streamflow statistics at ungaged locations. The results of this study will be presented in this presentation.

Biography: Rodney Southard is currently serving as Surface-Water Specialist for the USGS Missouri Water Science Center. He graduated from UMR in 1986 with a Master's Degree in Civil Engineering. While attending college he was hired as a student with the USGS and after graduation was employed by the USGS in the Mississippi Water Science Center in Jackson. From Mississippi, he moved to the Arkansas Water Science Center in Little Rock then to the Iowa Water Science Center in Iowa City. He has been involved in all aspects of the the USGS data program, from running a field trip in Mississippi to serving as chief of the Data Section in Iowa during the well-known 1993 flood. Rodney had the opportunity to come back to Rolla in 1994, where he currently works in the studies section of the USGS Missouri Water Science Center. Rodney has worked on numerous surface water projects publishing more than 30 reports with the USGS in his career. His latest, soon to be completed, project is the development of regional low-flow equations for the state of Missouri.

---Next Luncheon---

TOPIC: TBD

Thursday, May 9, 2013, Noon – 1:00 PM

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>