

ROLLA WATER RESOURCES LUNCHEON SEMINAR

Thursday, February 17, 2011

11:45 a.m. - 1:00 p.m.

U.S. GEOLOGICAL SURVEY

1400 INDEPENDENCE ROAD

ROLLA, MO 65401

The Value of Protecting Ozark Streams

Eric Dove

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One of the many appealing features of the Ozarks is the quality and beauty of our lakes and streams. Frequent algae blooms in the James River arm of Table Rock Lake however threatened not only valuable tourism dollars but also the quality of Ozark life. A nutrient based TMDL focusing on phosphorus and nitrogen was adopted for the James River in 2002. As we move into implementation, the question of the most cost effective method to reduce phosphorus loads is paramount. This paper compares the local cost of phosphorus removal from point sources as well as non-point sources. Specific Ozarks examples investigated included phosphorus reduction from a waste water treatment plant, stormwater BMP's, stream buffers and stream stabilization. The paper findings indicate Stream restoration is an excellent solution to preventing this phosphorus from being transferred to Ozark lakes and is cost efficient when compared to other non-point source reduction strategies. This paper briefly introduces the audience to many other economic benefits to stream restoration such as flood attenuation, greenways trails, and home price increase.

Biography: Eric's 17 years of experience includes a wide variety of water resources endeavors. He has been design engineer and lead modeler for flood control and recreational dams, fisheries improvement projects, dredging projects, detention ponds, water quality improvement ponds, wetland mitigations, FEMA mapping, breach analysis, benefit-cost analysis, watershed protection plans, and stream restoration designs. Eric has an extensive modeling background, has performed dam design on nearly 50 projects, and presented reservoir design topics at regional dam safety conferences.

---Next Luncheon---

Joe Wilson, Urich Log Jam Removal

Thursday, March 17, 2011 11:45 AM – 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>