



**Science & Policy Committee**  
**Face to Face Meeting, Monday, July 25<sup>th</sup>, 2016**

**Call to Order** at 12:30 noon (EST) by Committee Chair, Andrew N. Sharpley [sharpley@uark.edu](mailto:sharpley@uark.edu)

Twelve Committee members were able to attend the meeting at the International SWCS Meeting in Louisville, KY.

After brief introductions of members there, **Clark Gantzer** gave an updated discussion on “*Flooding and Floodplain Management*,” which included information on recent related publications and articles. These noted that 10 major floods since 2010 have cost Americans \$34 billion and the December floods will add a further \$3 billion alone to the bill once all the damage is repaired (see Tom Gerencer at <http://moneynation.com/u-s-floods-cost-34-billion/>). Even though a small fraction of the Mississippi River Watershed above St. Louis received extraordinary rainfall during this event, the channelized river near and below St. Louis rapidly rose to set the third highest stages ever, exhibiting the flashy response typical of a much smaller river (Criss & Lu0, 2016, J. Earth Sci. 27:117-122). Pinter et al. 2016 (see; <https://watershed.ucdavis.edu/files/biblio/PinterEtAl2016.pdf>) states that levees in the Upper Mississippi River Basin provide large economic benefits of at least \$51.1 million annually. However, these benefits simultaneously translate to a large residual risk of flood damage. Conclusions were that national levee policies and plans for local projects were unbalanced, crediting levee benefits but rarely fully planning for adverse impacts of levee breaches or considering alternatives. Olson et al. (2016; see <http://www.jswconline.org/content/71/1/13A.full.pdf+html>) suggests that a regional effort on both sides of the Ohio and Mississippi Rivers is needed to strategically identify floodplain areas that could provide temporary water storage and policy incentives for landowners of low-lying lands to profitably invest in crops and income alternative.

Following this, the Committee discussed the many diverse and wide-ranging impacts of flooding and floodplain management, which include but are not limited to re-insurance concerns, land use and land development, wildlife habitat, water quantity, and water quality. In other words, it affects all of us in one way or another. Clearly there is a need for an analysis of existing policies to highlight the strengths, weaknesses and gaps.

**John Peterson** mentioned that the following book would be a good read into the policy disagreements between the USACE and SCS (NRCS) over watershed flood damage reduction work

*Big Dam Foolishness, the Problem of Modern Flood Control and Water Storage*, by Elmer T. Peterson, 1954, The Devin-Adair Company, 23 East 26<sup>th</sup> Street, New York, NY. Library of Congress catalog card no. 54-10812. The book is long out of print, but here is a link to the full text: [https://archive.org/stream/bigdamfoolishnes00peterich/bigdamfoolishnes00peterich\\_djvu.txt](https://archive.org/stream/bigdamfoolishnes00peterich/bigdamfoolishnes00peterich_djvu.txt)

**John Peterson** said that the 1936 Flood Control Act would be a good reference as to the USACE-SCS differences. He wrote a short paper in 2002 when he was the Executive Director of the National



Watershed Coalition. The paper was only to guide his thoughts on a talk I was asked to give, but there is good information in it. This paper was circulated to the Committee.

Doug Helms wrote a history article for NRCS on “Small Watersheds and the USDA,” on the watershed programs. Dr. Helms is the retired Senior Historian of USDA and this article is a good read and can be found at [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/about/history/?cid=nrcs143\\_010953](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/about/history/?cid=nrcs143_010953). Below is a paragraph from Doug’s article that starts delving into the differences between the USACE and SCS (NRCS). Opposition to the Pick-Sloan plan was a big factor.

“Farmers and other residents had been lobbying for an upstream program, with some communities, especially in Kansas, forming watershed associations. The proponents had testified in 1951 before the subcommittee handling the Missouri Basin Agricultural Plan that they should not have to wait for complete river basin development to implement a small watershed program. The chairman of the subcommittee introduced a small watershed bill, but that bill did not reach the floor because Public Works Committee members stopped it in the House Rules Committee.<sup>48</sup> Kansas, along with the rest of the Missouri River Basin, was, in the early 1950s, debating the virtues of a proposed Missouri Valley Authority modeled after the TVA, as opposed to the Pick-Sloan plan, a combination of the U.S. Army Corps of Engineers plan and the Bureau of Reclamation plan. Part of Pick-Sloan included the Tuttle Creek Dam on the Big Blue River in Kansas to help protect Topeka, Lawrence, and Kansas City from flooding.”

The Committee agreed that a focused conference on this issue would be of great benefit and value to the wider community and to SWCS and members will look for opportunities for external funding to support a conference, which would be held under the banner of SWCS. It was agreed that past experts who have presented to the Committee on recent conference calls should be key contributors to a conference along with others to be identified. Holding such a conference would be an initial step in getting a subsequent process of having presentations compiled as peer-reviewed papers in a special issue of the Journal of Soil and Water Conservation. Additional outcomes would be additional reviews and analyses and a policy statement for the SWCS Board.

**Bruce Knight and others** reiterated that there is a great opportunity for SWCS to focus this discussion and be a leader in disseminating (i.e., SWCS conferences) and be a repository (i.e., Journal of Soil and Water Conservation) for outcomes and a broader outreach from planned activities.

Finally, the Committee discussed other topics for future discussion and felt that protecting and improving “soil health” was an important area that SWCS activities could support and participate in.

The meeting was adjourned at 1:45 pm (EST).

**As the next conference call for the S&P Committee is scheduled for next Tuesday, August 2<sup>nd</sup>, we will look to rescheduled that call based on input from the group.**