

From AWRA State Section:
Thirteenth Tennessee Water Resources Symposium

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The Tennessee Section of the American Water Resources Association strives to promote the advancement of water resources research, planning, and education by providing an annual forum to exchange multidisciplinary ideas about water issues throughout Tennessee and the surrounding region. The Tennessee Section has provided this annual forum since 1988.

<http://tnawra.er.usgs.gov/>



The Thirteenth Tennessee Water Resources Symposium (April 9-11, 2003; Montgomery Bell State Park, Burns, Tennessee) was everything, except unlucky, as most of the attendees considered this year's event the best ever. There were over 270 attendees present from state and federal agencies, academia and private sector. The honorable Paul Simon, former Senator from Illinois, gave the keynote address. Professor Simon now teaches classes in political science, history and journalism at Southern Illinois University. He is the founder and director of the Public Policy Institute at SIU's Carbondale campus. The Institute opened its doors in 1997 with the promise to "find new ways of solving some very old problems", said Simon. Mr. Simon holds 55 honorary degrees and has written 19 books including "*Tapped Out: The Coming World Crisis in Water and What We Can Do About It*" in 1998.

Professor Simon challenged us to provide leadership on water issues and discussed the issues, quality and quantity, on a global basis. The United States has four percent of the population and eight percent of the fresh water resources. It is estimated that agriculture uses approximately 75 percent of this resource, industry uses ten percent,

and consumers utilize the remaining 15 percent of our fresh water resources. China has twenty two percent of the world's population and only seven percent of the fresh water resources. There are approximately eight billion people in the world today, with the population continually growing. Ninety five percent of the world population growth will occur in developing nations. Water availability to support the current and growing population remains essentially constant.

The poor quality of water results in 14,000 deaths, 9,500 of which are children, each day. In fifteen years, the greatest resource depletion may be water instead of oil and regional wars may be fought over water in the Middle East. The six-day war is referred to as a water war. In Amman, Jordan, taps may be turned on only once per week. Egypt depends on the Nile River for ninety percent of its water needs but 80 percent of the Nile is located in Ethiopia where the birth rate is steadily increasing. The World Bank estimates 300 million people will face severe water shortages and three billion will face water shortages.

A short-term solution to the water shortage is pricing. When you increase price, typically it reduces usage. Desalination is also a solution. Saudi Arabia has developed such technology to the point where they now export food, when previously; they only raised eight percent of their food. The United States currently is only spending two to three million dollars per year on desalination. Water issues are not "sexy" in the United States. It will take a real crisis before water issues get significant mainstream media coverage. A World Court on water could be used to negotiate and monitor agreements between countries and function as an international mechanism to resolve disputes. Each of us can also do "little" things such as writing leaders on a local, state, and federal level on issues such as increasing funding on desalination. In the United States, we need to be sensitive to our "watershed boundaries" and use common sense with respect to our water resources. Only two states have worked together with a ratified compact to address these issues.

After Professor Simon's thought provoking keynote address, the technical sessions of the symposium began. There were three concurrent sessions with over sixty presentations ranging from highly technical sessions to sessions on education moderated by an employee of The Nature Conservancy. There were also 28 posters presented. Some posters had to be turned down, unfortunately, due to space limitations. The Tennessee Section of AWRA encourages student participation by awarding one of the posters with a plaque for their university. Poster presentations are also "encouraged" by water resources faculty at several universities who have supported the symposium for all thirteen years.

The watershed related sessions focused on urban watersheds due to the recent Phase II deadline. There were more sessions on water quality than water quantity and the sessions covered just about all aspects of watershed issues. Session topics included presentations on water supply and policy, urban watersheds, source water protection, flood frequency, ground water, stream ecology and water quality, industrial

biotechnology, applied biotechnology, runoff modeling, ecological resources, hydrologic conditions, resource restoration, and education. There were presentations suitable for all audiences.

The Tennessee Section of AWRA's annual water resources symposium is an excellent forum for regulators, municipalities, private sector, educators, and environmentally conscious citizens to get together in an informal setting to discuss water resources issues common to all. The keynote address by Professor Simon indeed set the tone for the symposium. It is hoped that most of the attendees will take his challenge to take the lead or provide support in tackling watershed and water issues that we are currently facing and will have to address in the future.