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—NOV. 1st DEADLINE—
2006 OWRRI RFP for water research seed money.
Information available at the OWRRI website

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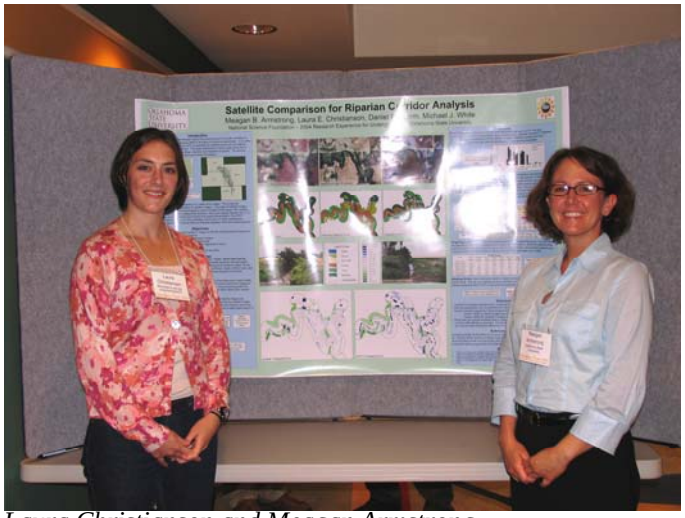
2005 Oklahoma Water Conference Tackles Important Water Research Issues

On September 27 and 28 more than 100 professionals and students gathered at OSU-Tulsa for the 3rd Annual Oklahoma Water Conference. Participants came from as far as Fort Collins Colorado, and as nearby as the University of Tulsa—just a hop and a skip from the OSU-Tulsa campus.

Approximately 28 professionals presented their research during 5 sessions, 2 lunches, and a panel discussion. Topics covered included the Arbuckle-Simpson Aquifer, Emerging Issues, Nutrient Water Issues, Urban River Corridors, the Conservation Environmental Assessment Program, and Water Research Priorities for Oklahoma.

In addition, a three-judge panel evaluated student posters in the conference's first Student Poster Competition. Laura Christianson and Meagan Armstrong of Oklahoma State University took first place with their poster entitled, "Satellite Comparison for Riparian Corridor Analysis," while Daniel Spooner of the University of Oklahoma took second place with his poster titled, "Effects of Flow and Temperature on Freshwater Mussel Physiological Condition and Community Integrity in Southeastern Oklahoma Rivers."



Laura Christianson and Meagan Armstrong

Proceedings of the conference will be available at the conference website at http://environ.okstate.edu/OKWATER. Currently available at the website are conference photos and presentation abstracts. The 2005 Oklahoma Water Conference was sponsored by the Oklahoma Water Resources Research Institute (OWRRI) and Biosystems and Agricultural Engineering at Oklahoma State University.

PERSPECTIVES ON WATER RESOURCE RESEARCH PRIORITIES IN OKLAHOMA

Will Focht, October 1, 2005

The Third Annual Oklahoma Water Conference, held at OSU-Tulsa on September 27 and 28 of 2005 concluded with a panel of representatives from various economic and political sectors in Oklahoma who presented their views on pressing water resource research needs. Afterwards, the panelists engaged members of the audience in a discussion of water research needs and issues. The panel was chaired by Dr. Focht, Director of the Oklahoma Water Resources Research Institute. He also represented the perspective of a researcher. Other members of the panel were Duane Smith, Executive Director of the Oklahoma Water Resources Board, representing the state government perspective; Richard Smith, Senior Environmental Planner for the Indian Nations Council of Governments, representing the local government perspective; Summer Goebel, Manager of Corporate Environmental Health and Safety at Oklahoma Gas and Electric, representing the industry perspective; Terry Detrick, Vice President of the Oklahoma Farmers Union, representing the agriculture perspective; and Monty Matlock, Director of the Department of Environment, Conservation and Safety of the Pawnee nation, represented the tribal government perspective.

The panel session generated a list of research priorities grouped into seven areas.

Water Resource Planning
Revision of the comprehensive state water plan to ensure the sustainability of clean water supplies; an easy-to-use methodology to encourage rural water districts to develop plans for a sustainable water supply that satisfactorily addresses continued economic growth and adequate supplies of clean water; and finally, an increased focus on watershed-level planning and assessment.

Policy Analysis, Formulation, and Implementation
Improvement of methods for policy analysis of watershed management alternatives; development of protocols for economic and technical evaluation of regionalized water supply systems; development of efficient protocols for estimating the cost of water management policies; investigation of the technical, economic, environmental, political, legal, and social feasibility of inter-basin water transfers; and strategies for more effective and efficient intergovernmental relations regarding water resource management, regulation and water rights.

Data Acquisition and Management
Implementation of expanded and cheaper stream, lake, and groundwater monitoring to provide a more complete understanding of water quality and quantity across Oklahoma.

Water Resource Assessment
Quantification of the risks of antibiotics, hormones, endocrine-disruptors, and other exotic pollutants added to water; improvement in understanding of conjoint ground water--surface water relationships; improvement in understanding of riparian area function, protection and restoration; improvement in methodologies for long-term hydrological forecasting; and improvement in the scientific justification of microbial TMDLs.

Water Resource Management
Improvement of nutrient management, particularly of phosphorus and nitrogen; development of cost-effective strategies for managing invasive species, especially zebra mussels; development of cost-effective methods for preventing impingement and entrapment of aquatic organisms in water intakes, particularly at power generating facilities; feasibility of the deployment of underground (root zone) irrigation and fertilizer delivery technologies; development of cheaper and more reliable drinking water treatment systems that can be deployed quickly and easily in case of emergency disruptions; improvement in methods of efficient water use, reuse, and recycling; and improvement in pollution reduction and prevention methods.

Education, Outreach, Demonstration, and Technical Assistance
Improvement in educational, outreach, demonstration, and technical assistance programs to better inform stakeholders on water resource threats and potential management solutions (e.g., relating to arsenic control, stormwater management, and TMDL development and compliance)

Balanced Research Agenda
A balance between basic and applied research; short- and long-term research; unidsciplinary and interdisciplinary research; local versus global research and water availability, water use, and water institutional research, as noted by the National Research council and the National Institutes for Water Resources. Also, the definition of the water research agenda should be developed only after careful consideration of whether it should be focused, or address a broad range of research; and whether it should be defined by researchers, policymakers, or stakeholders-or a combination of these.

2005 Conference Photo Essay

Jill Daugherty

Conference Luncheon

Daniel Spooner and Jeanne Schneider

Duane Smith

Poster Session

It's Time Again for the USGS National Competitive Grants Program

The U.S. Geological Survey, in cooperation with the National Institutes for Water Resources, requests proposals each year for matching grants to support water research on topics of national importance. Proposals are sought in not only the physical dimensions of supply and demand, but also quality trends in raw water supplies, the role of economics and institutions in water supply and demand, institutional arrangements for tracking and reporting water supply and availability, and institutional arrangements for coping with extreme hydrologic conditions. In 2005, the U.S. Geological Survey received 49 proposals, eight of which received funding through the National Competitive Grants Program (104G) which had only slightly less than $1 million available. The successful proposals are listed below. Abstracts are available at http://water.usgs.gov/wrri/o5grants/national/nationalindex.html.

Chemolithotrophic denitrification: The missing link in the biogeochemical cycle of arsenic
P.I.s: Reyes Sierra and James A. Field, University of Arizona and Ronald Oremland, USGS Western Region. $121.163 (2 years)

Model Development for Conjunctive Use Planning and Aquifer Protection in Semi-arid Regions
P.I.: William Yeh, University of California, Los Angeles. $98,534 (3 years)

Development of Characterization Approaches and a Management Tool for the Groundwater-Surface Water System in the Vicinity of Sutherland Reservoir and Gerald Gentlemen Station, Lincoln County, Nebraska
P.I.: Eileen Poeter, Coloardo School of Mines. $132,731 (2 years)

Coastal Groundwater Management in the Presence of Positive Stock Externalities
P.I.s: Kaeo Duarte and James Roumasset, University of Hawaii at Manoa. $148,021 (3 years)

Saltwater Intrusion Management with Conjunctive Use of Surface Water and Ground Water
P.I.s: Frank Tsai and Vijay Singh, Louisiana State University. $172,842 (3 years)

Assessing the ecotoxicology of alkylphenol mixtures across the aquatic food chain
P.I.s: Heiko Schoenfuss and Matthew Julius, St. Cloud University, and Larry Barber, USGS Central Region. $63,014 (2 years)

The impact of rural water supply systems on property values
P.I.s: Steven Shultz and Jay Leitch, North Dakota State University. $62,728 (2 years)

Assessing the Effectiveness of Local Water Institutions in Water Management
P.I.: Robert Hearne, North Dakota State University. $150,392 (3 years)

The 2006 preliminary request for proposals has been distributed by the USGS and can be viewed at https://niwr.org/competitive_grants/2006RFP104G_Prelim. For planning purposes, the amount available for research under this program is estimated to be $920,000 in federal funds, though the amount could change in the final version of the RFP. Proposals must be filed on the Internet at https://niwr.org/ by 5:00 PM, Eastern Standard Time, February 10, 2006 and must be approved for submission to the National Competitive Grants Program not later than 5:00 PM, Eastern Standard Time, February 24, 2006 by the Institute or Center through which they were submitted. Any investigator at an institution of higher learning in the United States is eligible to apply for a grant through a water resources research institute or center. Proposals involving substantial collaboration between the USGS and university scientists are encouraged. Proposals may be for projects of 1 to 3 years in duration and may request up to $250,000 in federal funds. Successful applicants must match each dollar of the federal grant with one dollar from non-federal sources. The research priorities for the 2006 USGS National Competitive Grants Program and the RFP are available at the Oklahoma Water Resources Research Institute website.

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