

STEVEN D. WILSON

Illinois State Water Survey at the Prairie Research Institute, University of Illinois
2204 Griffith Drive, Champaign, Illinois 61820
(217) 333-0956 | E-mail: sdwilson@illinois.edu

EDUCATION

M.S. in Civil Engineering, December 1988

B.S. in Agricultural Engineering, B.S. in Agricultural Science, May 1987

University of Illinois, Champaign IL

EXPERIENCE

Groundwater Section

Principal Scientist, Groundwater Hydrologist	2/18 to present
Groundwater Hydrologist	9/02 to 2/18
Associate Hydrologist	9/93 to 9/02
Assistant Hydrologist	12/88 to 9/93
Student/Grad Student Employee	1/83 to 12/88

SUMMARY OF QUALIFICATIONS

- **Engaged, supportive manager**; experienced team leader; problem solver who doesn't micro-manage and uses a team approach to tackling tasks; experience leading more than 10 multi-year projects that include supervising staff and managing outside contractors in the office and in the field; facilitated multi-university and multi-organizational teams for large, federal programs.
- **Forward thinking** regarding communication and data availability; early adopter of social media and using the Internet for more than displaying products; maintain a robust program that includes training and technical assistance, using the latest technologies, and providing information through the web.
- **ISWS/PRI advocate**; 90+ public presentations around the state; 100+ professional presentations; author or co-author of 40+ publications and dozens of letter reports; given 100+ live online presentations, led over 40 webinars in the last 2 years.
- **Hard-working team player** with continued funding success; projects include over \$8.9 million in grant funding, the majority as lead PI, over \$700K each of the last 4 years.
- **Extensive developer and user of ISWS data sets**; answering hundreds of requests from private well owners, irrigators, community water supply operators, drillers, consultants, and state agency personnel; the go-to person for a number of state and local leaders related to groundwater, wells, and water quality; leading two long-term (25+ years) groundwater data collection efforts (IVWA and McTaz).
- **Motivated collaborator**, hold established relationships with many Illinois and national stakeholders including, IEPA, IDPH, IL Water Authorities, IL Rural Water, ISAWWA, ERTC, Coop Extension, USEPA, CDC, USDA, Indian Health Service, Washington DPH, Massachusetts DEP, and other state county health departments around the U.S.; often requested to submit a proposal or provide advice on next

steps by stakeholders around the country; involved in collaborative projects with other units (Extension), other campuses (UMass, Nebraska, Texas, Florida, Colorado, Penn State, Univ. of Rhode Island, Texas A & M, Virginia Tech, Mississippi State), and other national stakeholders (Rural Community Assistance Partnership, National Ground Water Association, State of Ohio, National Environmental Health Association, American Water Works Association, Association of Public Health Laboratories, Public Health Foundation).

Current Responsibilities:

Head, ISWS Environmental Public Health, Information and Data Services Section; leading a new section focused at the intersection of public health and drinking water; oversee staff of 16 charged with conducting applied research related to groundwater public health issues, the collection, storage and archiving of data at the ISWS, and providing education and outreach to the public and environmental/public health professionals. This includes oversight of our core programs related to well logs and surface water intakes, water use, aquifer properties, water levels, water quality, and data gathered through research projects, the Weather and Atmospheric Resources Monitoring Program, and Illinois Water Inventory Programs. Oversee current efforts to archive research project data, modernize the ISWS website, and grow our outreach program for promoting ISWS research, service, and education.

PI, The Private Well Class, an online educational program for private well owners. I wrote the lessons and oversee content development. Over 9,500 class participants nationwide in last 7 years; developed 10 lesson curriculum; monthly webinars that average over 100 attendees (over 25,000 attendees since 2013); includes instructional videos, podcasts, and aggressive social media marketing and presence; over 200 organizations nationwide link to www.privatewellclass.org; serve as the technical lead for a national \$1.7 million (annually) private well technical assistance and training program through RCAP that includes 4 national partners, NEHA, RCAP, NGWA, and WSC, as well as many collaborators nationally; held national private well focused conferences in May of 2017, 2019, and 2021, funded through USEPA since 2013.

PI, www.WaterOperator.org, a website, document library, and national calendar for Public Water Supply and Wastewater operators with links to over 15,000 documents; uses DNN content management system along with a SQL database engine; calendar linked to over 14,000 events each year, partner with RCAP and AWWA, funded through USEPA since 2008.

PI, RCAP Wastewater Technical Assistance program, provide wastewater resources and support through www.WaterOperator.org, and lead a nationwide effort to develop comparative analysis information on wastewater systems in support of RCAP field staff who are evaluating the sustainability of small wastewater systems.

Co-PI, Imperial Valley Water Authority rain gauge and observation well network; maintained since 1994 with 11 wells that now have telemetry; 16 site rain gage network; coordinate irrigation reporting for over 2,000 irrigation systems.

Co-PI, McTaz observation well network of 30+ wells in three counties; maintained since 1993; data instrumental in long term modeling and evaluation of the Mahomet Aquifer in Illinois.

Co-PI, Bloomington observation well sub-network; 7 McTaz wells close to Bloomington set up with telemetry, continuous water level measurements.

Co-PI, Logan County Water Authority observation well sub-network; 4 McTaz observation wells in Logan County set up with telemetry and real-time data provided online.

Past Projects, Responsibilities, and Areas of Research:

Co-PI, IWIP implementation program; working with our IWIP coordinator and groups like Farm Bureau, counties, and other stakeholders throughout Illinois to encourage reporting; developed reporting methodology; meet with irrigators throughout the state; organized program to evaluate estimation methods, developing online tools, funded by IDNR.

Co-PI, National Center for Innovation in Drinking Water Treatment Technology for Small Systems; \$4.2 million program, funded by USEPA. Partners include the Universities of Massachusetts (lead), Nebraska, Texas, Florida, and Illinois (ISWS); facilitate a workgroup of regulators from over 20 states, partnering with ASDWA, developing a standard approach to state acceptance of new drinking water treatment technologies and development of an online warehouse of treatment technology data.

Co-PI, Water Well and Intake Records Program, updating water records, scanning documents, and developing a digital records flow for the future. Funded by the USGS.

PI, A comparative analysis tool for evaluating water and wastewater system performance, energy, and staffing benchmarks; online tool for technical assistance providers to share community data for comparative analysis, funded by Great Lakes RCAP and the State of Ohio.

Co-PI, eMOR electronic data system for PWS mandatory reporting of operating information; using Sharepoint and custom Excel templates to replace paper reporting to IEPA.

PI, Inventory of Wells near the Proposed Sugar Creek Well-Field; inventoried private wells, took water level measurements, and interviewed well owners in order to understand the potential impact of well field on nearby private wells (City of Bloomington).

PI, A Private Well Inventory in Central Illinois; over 1,700 wells were inventoried; area considered for a regional water supply; 788 wells were not in ISWS database.

PI, Identification, Evaluation and Testing of Effective Educational Campaigns for Private Well Owners. National Survey of Outreach programs to Determine what motivates well owners, what are barriers to testing, and best practices for outreach, funded by CDC. Developed an approach to outreach that was published in Journal of Water and Health that is being used around the country.

Co-PI, Spatial Variability of Arsenic in Groundwater; sampled wells in two subdivisions in Tazewell County to determine local variability.

PI, Arsenic in Non-Community Water Supplies; compiled arsenic data from 6 EPA Region 5 states and mapped changes due to new arsenic contaminant rule.

Co-PI, Time Series Sampling of Arsenic in Small Community Water Supplies; sampled community wells with arsenic to look at variability over time.

PI, Workshop for Non-Community Water System Managers; held workshops in two states with help of primacy agencies to provide arsenic compliance information.

Co-PI, The Fate of Arsenic in the Mahomet Aquifer; sampled private wells in Tazewell and Champaign Counties to evaluate arsenic concentrations.

PI, Non-Community Water System Compliance to the New Arsenic Rule; sampled non-community system wells in Illinois to evaluate arsenic concentrations.

PI, Development of an Automated Groundwater Level Observation Program for the IVWA.

PI, Study of the Aquifer Characteristics near Allerton Park; performed aquifer test that determined connections between the shallow aquifers and the Mahomet Aquifer.

PI, Evaluation of the Effect of Irrigation on Groundwater Levels and Stream flow in Mason Co; set up a test site along a creek with 9 observation wells to evaluate irrigation effects.

Co-PI, Evaluation of Temporal Changes in Groundwater Quality in Northeastern Illinois; developed water quality database for 6 Chicago-area counties.

PI, Evaluation and Modification of the Groundwater Section Database; developed IWIP and groundwater data for the IEPA ArcIMS website, also funded NE Illinois mass measurement.

PI, An Educational and Cost Effective Private Well Sampling Program for Flooded Areas; worked with 5 high school FFA chapters to collect samples in school districts

Co-PI, Fate of Ag Chemicals Under Flooded Conditions; tracer experiments were performed in a field flooded by IDNR annually to evaluate groundwater quality changes.

Co-PI, Large Diameter Wells and Ag Chemicals; 75 wells in 3 counties were sampled temporally to evaluate the susceptibility of these wells to ag chemical contamination.

PI, Groundwater Availability in McLean and Tazewell Counties; large aquifer assessment project that included drilling 40 wells, several mass measurements, a rain gauge network, two aquifer tests, water quality testing, and a groundwater model.

Co-PI, Dewatering Well Assessment of the East St Louis Highway Drainage System; performed step tests and made recommendations about well rehabilitation.

Northern Iroquois and Eastern Kankakee County Aquifer Assessment; managed a rain gauge and observation well network; collected irrigation water use data.

PROFESSIONAL AFFILIATIONS

Past Director of MTAC – developed and led an internal research program with ISWS and UI staff; developed RFP's for outside researchers

Member National Ground Water Association (NGWA)

Member American Water Works Association (AWWA) and Illinois Section (ISAWWA)

Member Water Environment Federation (WEF) and Illinois Section (IWEA)

Member National Environmental Health Association (NEHA)

Member Illinois Rural Water Association (IRWA)

Member Illinois Groundwater Association (IGA)

PROFESSIONAL SERVICE

One of 15 experts invited by CDC to Johns Hopkins University in January 2015 to help set the research agenda for the Agency related to private wells

Professional Trainer for the Illinois EPA Operator Certification Program (2017-Current)

Licensed Environmental Health Practitioner CE Sponsor with the Illinois Department of Financial and Professional Regulation (Lic# 200.000120) (2017-Current)

Water Quality Technical Expert – National Environmental Health Association

Elected Trustee and Chair for the National AWWA Small Systems Division (2012-2020)

Elected to the Board of Directors of Illinois Section of AWWA (2016-2020)

Member of the National Academies of Science Workshop Workgroup that developed the 2-day workshop: Quality from Every Tap: A Workshop of the NAS Environmental Health Matters Initiative (Nov 2019)

Member MA-DEP/RCAP Solutions Private Well Leadership Team (2020-Current)

Member USEPA National Tribal Workgroup (2019-Current)

Member USEPA Decentralized Cooperative (2019-Current)

Member Illinois Section AWWA Small Systems Committee (2010-Current)

Member National AWWA Small Systems Outreach Services Committee (2008-2020)

Member CDC Private Well Initiative Workgroup (2012-2017)

Member of the National WEF Operator Advisory Panel Workgroup. WEF created a seat for me to support their www.WorkforWater.org website. (2017-Current)

Member USEPA Operator Certification and Workforce Workgroup (2012)

Member NGWA Rural Water Sub-Committee; Chair in 2011 (2010-2016)

Member NGWA Government Affairs Committee (2011)

Member NGWA Water Resources Sub-Committee (2016-2020)

Member NGWA Education & Outreach Sub-Committee (2016-2020)

Led Training at NGWA Expo on downhole logging equipment. Attendees received 1 hour of professional development credit (December 2013)

Chair NGWA Private Well Task Force; led development of a white paper on regulatory issues related to mandatory sampling for private wells (2009)

Co-Chaired of the Implementation Workgroup of the Advisory Committee on Water Information (ACWI), Subcommittee on Ground Water, that piloted a national ground water monitoring network in 5 states. (Illinois-Indiana was a pilot.) (2009)

Co-Chaired the ENN Workgroup under ACWI that developed a chapter of the national framework guidance on how to implement a national monitoring well network. (2010-11)

Editorial Advisory Board for On Tap Magazine (NESC) (2010)

Chair Illinois Groundwater Association (1996)

Secretary/Treasurer Illinois Groundwater Association (1991-1994)

Scientific Advisor to the Imperial Valley Water Authority (2001-2020)

Scientific Advisor to the Central Region Groundwater Protection Committee (2003-Current)

Scientific Advisor to the Barrington Area Council of Governments (2003-2005, 2011-Current)

Organized a technical session for the NGWA Groundwater Summit (2006)

Organized a technical session on small system issues for AWWA (2011, 2017)

Member of IDPH Environmental Public Health Tracking Data Committee (2004-2005)

Member IEPA Source Water Assessment and Protection Committee (2001-2003)

Peer reviewer – Journal of Water and Health, AWWA Water Science, and Science of the Total Environment

UNIVERSITY, PRI, & ISWS SERVICE

Elected to the UI Council of Academic Professionals (2009-2010)

PRIDE – beta-tester for the purchasing tool.

PRIDE – provided feedback on travel tool and HR Transaction tool.

PRI – Lead task force (2016-2017)

PRI – Data Stewardship Advisory Committee (2017-2019)

PRI – Facilitating conversion of ISWS/ISGS well log databases (Current)

Facilitating workgroup of PRI staff modernizing the ISWS website. (2017-Current)

Facilitating workgroup of PRI staff developing an ISWS newsletter (2019-Current)

ISWS Information Management Committee (2002-2009, 2013-2016)

ISWS Data Archival and Access Sub-Committee (2007)

ISWS Special Activities Committee (20+ years)

Collaborator UI Coop Extension Video, “The Price of Bounty” that talked about environmental issues related to erosion and pesticide use in farming. (1991)

Proposal reviewer IWRC grant program (2012-2015)

Served on 9+ search committees for new hires at the ISWS.

Provided assistance to the Attorney General’s Office regarding a lawsuit involving a large hog facility; provided groundwater and well data, reviewed testimony and provided written testimony. (1993)

AWARDS & OTHER EXPERIENCE

Awarded the Kenneth D. Kerri Excellence in Workforce Development Award by the Association of Boards of Certification (2020)

Awarded the Individual Groundwater Protection Award from the Central Region Groundwater Protection Committee (2002)

Developed Illinois High School Video Contest; Public Service Videos on the Theme “The Value of Water”; solicited funding for prizes (\$2,000), organized a review committee; posted winners on YouTube. (2010)

Assisted in the development of GWINFO; led the structure development of the project archival section and the integration associating wells to specific projects.

PUBLICATIONS

Ringenberg, D. T., **S. D. Wilson**, B.I. Dvorak. 2017. *State Barriers to Approval of Drinking Water Technologies for Small Systems*, Journal AWWA, 109:8, August 2017.

Bridges, K., **S. Wilson**, and R. Perry, 2015, Center Pivot Irrigation in Illinois 2012 and 2014, ISWS Map Series 2015-03, Illinois State Water Survey, Champaign, IL.

Morris, L., **S. D. Wilson**, W. Kelly (2015). *Methods of Conducting Effective Outreach to Private Well Owners – A Literature Review and Model Approach*, Journal of Water and Health; October 2015; (DOI: 10.2166/wh.2015.081).

Wilson, S. D., 2015, *AWWA’s Small Systems Resource Page*, Illinois Section of AWWA Splash Magazine, Fall 2015, p. 61.

Bridges, K., R. Perry, and **S. Wilson**, 2014, 2012 Center Pivot Irrigation in Illinois, ISWS Map Series 2014-03, Illinois State Water Survey, Champaign, IL.

Wilson, S. D., K. Rennels, and G. Roadcap, 2013. A Water Well Inventory to Assess Potential Conflicts from Development of a Well Field in Selected Areas of McLean, Tazewell, and Woodford Counties, IL. Illinois State Water Survey, Champaign, IL, ISWS CR 2013-03.

Smothers, K. W., R. E. Warner, and **S. D. Wilson**, 2010, Midwest Technology Assistance Center for Small Public Water Systems Final Report, Illinois State Water Survey, Champaign, IL, ISWS CR 2010-04.

Holm, T. R., and **S. D. Wilson**, 2009. Spatial Variability of Arsenic in Groundwater. Illinois State Water Survey, Champaign, IL, ISWS CR 2009-06.

Westcott, N. E., **S. D. Wilson**, and K. L. Rennels, 2009, Operation of Rain Gauge and Groundwater Monitoring Networks for the Imperial Valley Water Authority Year 13, Illinois State Water Survey, Champaign, IL, ISWS CR 2009-08. 106 p.

Wilson, S. D., N. E. Westcott, K. L. Rennels, and H. A. Wehrmann, 2009, Operation of Rain Gauge and Groundwater Monitoring Networks for the Imperial Valley Water Authority Year 13, Illinois State Water Survey, Champaign, IL, ISWS CR 2009-08. 104 p.

Kelly, W. R and **S. D. Wilson**, 2008. An evaluation of Temporal Changes in Shallow Groundwater Quality in Northeastern Illinois Using Historical Data. Illinois State Water Survey, Champaign, IL, ISWS SR 2008-01.

- Wilson, S. D.**, H. A. Wehrmann, N. E. Westcott, and K. L. Rennels, 2008, Operation of Rain Gauge and Groundwater Monitoring Networks for the Imperial Valley Water Authority Year Twelve, Illinois State Water Survey, Champaign, IL, ISWS CR 2008-06. 102 p.
- Wilson, S. D.**, N. E. Westcott, and K. L. Rennels, 2008, Operation of Rain Gauge and Groundwater Monitoring Networks for the Imperial Valley Water Authority Year 14, Illinois State Water Survey, Champaign, IL, ISWS CR 2008-12. 102 p
- Holm, T. R., G. R. Peyton, and **S. D. Wilson**, 2008. Field Testing and Modeling of the Fenton Filtration Process for Arsenic Removal. Illinois State Water Survey, Champaign, IL, ISWS CR 2008-08.
- Holm, T. R., **S. D. Wilson**, and W. R. Kelly. 2006. Temporal Variability of Arsenic in Municipal Well Water. Illinois State Water Survey, Champaign, IL, ISWS CR 2006-07.
- Mehnert, E., W. S. Dey, D. A. Keefer, H. A. Wehrmann, **S. D. Wilson**, and C. Ray 2005, Illinois Statewide Monitoring Well Network for Pesticides in Shallow Groundwater: Network Development and Initial Sampling Results, Illinois State Water Survey and Illinois State Geological Survey Cooperative Groundwater Report 20, 64 p.
- Kelly, W. R., T. R. Holm, **S. D. Wilson**, and G. S. Roadcap, 2005. *Arsenic in Glacial Aquifers: Sources and Geochemical Controls*, Groundwater, Vol. 43, No. 4, pp. 500-510.
- Mehnert, E., D. A. Keefer, W. S. Dey, H. A. Wehrmann, **S. D. Wilson**, and C. Ray 2005. *Aquifer Sensitivity to Pesticide Leaching: Testing a Soils and Hydrogeologic Index Method*, Groundwater Monitoring & Remediation, Vol. 25, No. 4, pp. 60-67.
- Holm, T., W. Kelly, **S. Wilson**, G. Roadcap, J. Talbott, and J. Scott. 2005. *Arsenic Distribution and Speciation in the Mahomet and Glasford Aquifers, Illinois*. In Advances in Arsenic Research. Edited by P. A. O'Day, D. Vlassopoulos, X. Meng, and L. G. Benning. American Chemical Society Symposium Series 915. Washington, D. C.
- Holm, T., W. Kelly, **S. Wilson**, G. Roadcap, J. Talbott, and J. Scott. 2004. Arsenic Geochemistry and Distribution in the Mahomet Aquifer, Illinois. Research Report 107. Champaign, IL: Illinois Waste Management and Research Center.
- Wilson, S. D.**, B. Dunneback, K. Askren, and B. Kaiser. 2004. Arsenic in Illinois Groundwater: Implications for Non-Community Public Water Supplies. Funding Agency: MTAC. 40 pages. Internal Review.
- Wilson, S. D.**, W. R. Kelly, T. R. Holm, and J. L. Talbott, 2004. Arsenic Removal in Water Treatment Facilities: Survey of Geochemical Factors and Pilot Plant Experiments. MTAC, 86 pages.
- Roadcap, G. S. and **S. D. Wilson**. 2003. Analysis of an Aquifer Test at Decatur #2 and Implications for the Interaction between the Mahomet Aquifer and the Sangamon River. Funding Agencies: City of Decatur and the Mahomet Valley Water Authority. 22 pages.

- Herzog, B. L., D. R. Larson, C. C. Abert, **S. D. Wilson**, and G. S. Roadcap, 2003. *Hydrostratigraphic Modeling of Complex, Glacial-Drift Aquifer System for Import into MODFLOW*. Groundwater. Vol. 41, No. 1, pp. 57-65
- Roadcap, G. S., and **S. D. Wilson**, 2001. The Impact of Emergency Pumpage at the Decatur Wellfield on the Mahomet Aquifer: Model Review and Recommendations. Illinois State Water Survey Contract Report 2001-11, 68 p.
- Wilson, S. D.**, R. C. Cobb, and K. Runkle, 2001. Arsenic in Illinois Groundwater. Interagency White Paper, Illinois State Water Survey, Illinois Department of Public Health, Illinois Environmental Protection Agency. November, 2001.
- Kelly, W. R., and **S. D. Wilson**, 2000. *Movement of bromide, nitrogen-15, and atrazine through flooded soils*. Journal of Environmental Quality 29(4):1085-1094.
- Wilson, S. D.**, and J. R. Karny, 2000. *A Community-Based Sampling Program for Evaluating Long-Term Flood Impacts on Rural Well-Water Quality*. In Research on Agricultural Chemicals in Illinois Groundwater: Status and Future Directions X, Proceedings of the Tenth Annual Conference, Makanda, IL, April 13, 2000, pp. 125- 139.
- Wilson, S. D.**, Roadcap, G. A., Herzog, B. L., Larson, D. R., and Winstanley, D., 1998. Hydrogeology and Ground-Water Availability in Southwest McLean and Southeast Tazewell Counties - Part 2: Aquifer Modeling and Final Report. ISWS and ISGS Cooperative Report 19. 138 pages.
- Herzog, B.L., **S.D. Wilson**, D.R. Larson, E.C. Smith, T.H. Larson, and M.L. Greenslate, 1995, Hydrology and Groundwater Availability in Southwest McLean and Southeast Tazewell Counties. Part 1: Aquifer Characterization, Illinois State Geological Survey and Illinois State Water Survey Cooperative Groundwater Report 17.
- Wilson, S. D.**, J. R. Karny, and K. J. Hlinka, 1995, *Agricultural Chemical Contamination of Shallow, Large-Diameter Wells in Illinois*. Proceedings of the ASCE Water Resources Engineering Conference, San Antonio, TX, August 14-18, 1995, pp. 169-173.
- Wilson, S. D.**, J. P. Kempton, and R. B. Lott, 1994, The Sankoty-Mahomet Aquifer in the Confluence Area of the Mackinaw and Mahomet Bedrock Valleys, Central Illinois. Illinois State Geological Survey and Illinois State Water Survey Cooperative Groundwater Report 16, 64 p.
- Schock, S. C., E. Mehnert, M. E. Caughey, G. B. Dreher, W. S. Dey, **S. D. Wilson**, C. Ray, S. J. Chou, J. Valkenburg, J. M. Gosar, J. R. Karny, M. L. Barnhart, W. F. Black, M. R. Brown, and V. J. Garcia, 1992, Pilot Study: Agricultural Chemicals in Rural, Private Wells in Illinois, Illinois State Water Survey and Illinois State Geological Survey, Champaign, IL, Cooperative Groundwater Report 14
- Wilson, S. D.**, K. J. Hlinka, J. M. Shafer, J. R. Karny, and K. A. Panczak, *Agricultural Chemical Contamination of Shallow-Bored and Dug Wells*. Proceedings of the 2nd Annual Research on Agricultural Chemicals in Illinois Groundwater Conference, Springfield, IL, April 27-28, 1992, pp. 140-148.

- Olson, R. D., **S. D. Wilson**, and E. W. Sanderson, 1992, Dewatering Well Assessment for the Highway Drainage System at Four Sites in the East St. Louis Area, IL (Phase 6), Illinois State Water Survey, Champaign, IL, ISWS CR 540. 135 p.
- Wilson, S. D.**, 1992, *Atrazine: What Is Its Link to Rural Water Quality?* Illinois Research, University of Illinois, Vol. 34, No. 4, p. 18.
- Wilson, S. D.**, E. W. Sanderson, and R. D. Olson, 1991, Dewatering Well Assessment for the Highway Drainage System at Four Sites in the East St. Louis Area, IL (Phase 5), Illinois State Water Survey, Champaign, IL, ISWS CR 509. 122 p.
- Wilson, S. D.** and B. C. Kimpel, 1990, *Measurement of irrigation water use: Results of two case studies in Illinois*. Proceedings of the ASCE Irrigation and Drainage Division Annual Conference, Durango, CO, July 11 - 13, 1990, pp. 109 - 117.
- Wilson, S. D.**, E. W. Sanderson, and R. D. Olson, 1990, Dewatering Well Assessment for the Highway Drainage System at Four Sites in the East St. Louis Area, IL (Phase 4), Illinois State Water Survey, Champaign, IL, ISWS CR 480. 152 p.
- McKenna, D. P., S. C. Schock, T. J. Bicki, W. S. Dey, D. A. Keefer, E. Mehnert, S.V. Panno, C. Ray, and **S. D. Wilson**, 1990, Evaluation of the potential effects of agricultural chemicals on groundwater quality, Part I in An Initial Evaluation of the Impact of Pesticides on Groundwater in Illinois, Report to the Illinois Legislature: Illinois State Geological Survey and Illinois State Water Survey, Champaign, IL, Cooperative Groundwater Report 12, p. 15-63.
- Cravens, S. J. and **S. D. Wilson**, 1989, *Irrigation Development and Management Alternatives of a Dolomite Aquifer in Northeastern Illinois*, Water Resources Bulletin, Vol. 25(5), p. 1073 - 1083.
- Cravens, S. J., **S. D. Wilson**, and R.C. Barry, 1989, Regional assessment of the groundwater resources in eastern Kankakee and northern Iroquois Counties, Illinois, Report of Investigation 111, Illinois State Water Survey, Champaign, IL.

SELECTED PRESENTATIONS

- Wilson, S. D. 2021. *Private Well Resources for Owners and EHPs*, Illinois Environmental Health Association Annual Conference, Ottawa, IL, November 8, 2021. *(Invited)*
- Wilson, S. D. 2021. *Online Resources and Support for Water and Wastewater Operators*, Illinois Potable Water Supply Operators Association Annual Conference, Springfield, IL, September 17, 2021. *(Invited)*
- Wilson, S. D., M. Brech, and D. Gray. 2021. *Washington State Certification Update for Water Operators; Communication and Exam Practices; and WaterOperator.org*, Evergreen Rural Water of Washington Annual Conference, Online, September 1, 2021. *(Invited)*
- Wilson, S. D. 2020. *Protecting Public Health with the Private Well Assessment Tool*, National Ground Water Association Annual Conference, Online, December 9, 2020.

- Wilson, S. D. 2020. *Private Wells and Wellhead Protection*, NGWA Private Wells and Public Health Symposium, Online, December 7, 2020.
- Wilson, S. D. 2020. *Funding-Financing Options for Private Well Owners*, Private Well Class Monthly Webinar Series, Online, October 13, 2020.
- Wilson, S. D. 2020. *Online Resources for Water and Wastewater Operators*, British Columbia Environmental Operators Certification Program Annual Conference, Online, September 15, 2020.
- Wilson, S. D. 2020. *Sealing Abandoned Wells*, Mahomet Aquifer Consortium Summer Meeting, Online, August 6, 2020.
- Wilson, S. D. 2020. *Septic Systems 101*, Private Well Class Monthly Webinar Series, Online, July 13, 2020.
- Wilson, S. D. 2019. *Safe Management and Operations of Private, Tribal Wells*, Cahilla Band of Indians/ EFC West Private Well Management Workshop, Anza, CA., September 4, 2019.
- Wilson, S. D. 2019. *Human Nature, Lessons Learned, and Strategies for Public Health Outreach*, Keynote Address, North Carolina Environmental Health Symposium, Asheville, NC., August 1, 2019.
- Wilson, S. D. 2018. *Resources to Assist You When Working with Private Well Owners*, National Ground Water Association Annual Conference, Las Vegas, NV December 5, 2018.
- Wilson, S. D. 2018. *Rural Community Water: Understanding Public and Private Sources of Drinking Water*, Illinois Cooperative Extension Webinar, November 1, 2018. *(Invited)*
- Wilson, S. D. 2018. *Wastewater and Water operator Resources – Water Operator.org*, Illinois Association of Water Pollution Control Operators, Urbana, IL, October 10, 2018. *(Invited)*
- Wilson, S. D. 2018. *Private Wells, Water Quality, and Why It's Important for Health Professionals to Promote Well Water Testing*, Workshop on the Importance of Safe Well Water to Maternal and Child Health, Indiana Department of Health, Indianapolis, IN, October 5, 2018. *(Invited)*
- Wilson, S. D. 2018. *Frequently Asked Questions about Unregulated Drinking Water*, National Environmental Health Association Annual Conference, Anaheim, CA, June 27, 2018.
- Wilson, S. D. 2018. *Groundwater, Wells, and Water/Wastewater Operator Resources*, USEPA Region 9/RCAC Tribal Drinking Water Symposium, Reno, NV, May 22, 2018. *(Invited)*
- Wilson, S. D. 2018. *Private Groundwater, Wells, and Water/Wastewater Operator Resources*, USEPA Region 9/RCAC Tribal Drinking Water Symposium, Reno, NV, May 22, 2018. *(Invited)*
- Wilson, S. D. 2018. *Private Well Outreach and Education Programs for Health Professionals*, New York State Conference of Environmental Health Directors, Blue Mountain Lake, NY, May 8, 2018. *(Invited)*

- Wilson, S. D. 2017. *The Private Well Conference – A National Workshop on Private Well Issues*, National Ground Water Association Annual Conference, Nashville, TN December 6, 2017.
- Wilson, S. D. 2017. *Private Well and Water Operations All-Day Workshop*, Cherokee Nation Environmental Programs Office, Tahlequah, OK November 8, 2017. *(Invited)*
- Wilson, S. D. and Osterhoudt, D. R. 2017. *Moving the Ball Forward: Progress of the States' Workgroup in Partnering and Sharing New Technologies Data*, Association of State Drinking Water Administrators National Conference, Norfolk, VA. October 19, 2017.
- Wilson, S. D. 2017. *The Private Well Class Program*, Will County Health Department Sanitarian Workshop, Joliet, IL October 12, 2017. *(Invited)*
- Wilson, S. D. 2017. *Understanding How Geology, Well Construction, and Site Conditions Affect Well Water Quality*, National Environmental Health Association National Conference, Grand Rapids, MI. July 12, 2017.
- Wilson, S. D. 2017. *Make the Internet Work for You*, American Water Works Association National Conference, Philadelphia, PA, June 13, 2017.
- Wilson, S. D. 2017. *Update on Water Use Reporting for Irrigators Under the Illinois Water Inventory Program (IWIP)*, Illinois Farm Bureau Legislative Conference, Springfield, IL. March, 1, 2017. *(Invited)*
- Wilson, S. D. 2017. *Outreach to Well Owners and Using the New Well Assessment Tool*, Webinar, Centers for Disease Control and Prevention Safe Watch Program, February 28, 2017. *(Invited)*
- Wilson, S. D. 2017. *Irrigation Water Use Reporting in Illinois*, Cass County, Illinois Farm Bureau Meeting. Beardstown, IL. February 6, 2017. *(Invited)*
- Wilson, S. D. 2017. *A New Groundwater and Wells Class for Non-Community Systems*, Association of Boards of Certification Annual Conference, Fort Lauderdale, FL. January 12, 2017.
- Wilson, S. D. 2016. *Well Owner Outreach and Assessment of Private Wells*, 4-hr Sanitarian Workshop. Murfreesboro, TN September 6, 2016; Eugene, OR September 28, 2016; Macomb, IL October 13, 2016; Roanoke, VA October 24, 2016.
- Wilson, S. D. 2016. *Developing A Better Understanding of Drinking Water Technology Approval*, USEPA Small Systems Webinar, December 13, 2016. (420 attendees)
- Wilson, S. D. 2016. *Groundwater and Wells*, Illinois Department of Public Health Recertification Workshop for Non-Community Water Systems, Dekalb, IL November 9, 2016; Champaign, IL November 10, 2016.
- Wilson, S. D. 2015. *Water Quality in Private Wells*, Webinar – Mississippi State Extension Service Well Owner Workshop. Harrison County, MS. December, 1, 2015. *(Invited)*
- Wilson, S. D. 2015. *Irrigation Water Use Reporting for the Imperial Valley Water Authorities*, Central Illinois Irrigated Growers Association Annual Meeting, Havana, IL. November, 6, 2015. *(Invited)*

- Wilson, S. D. 2015. *Outreach to Private Well Owners and Underserved Populations*, University of North Carolina Water and Health Conference. Chapel Hill, NC. October 30, 2015. *(Invited)*
- Wilson, S. D. 2015. *Implementing the Irrigation Portion of the Illinois Water Use Act*, Illinois Rivers Conference. Peoria, IL. October 28, 2015. *(Invited)*
- Wilson, S. D. 2015. *State Survey to Improve Understanding of Drinking Water Treatment Technology Approval*, USEPA Small Systems Workshop. Cincinnati, OH. August 27, 2015.
- Wilson, S. D. 2015. *Identification and Implementation of Effective Educational Campaigns for Private Well Testing*, National Environmental Health Association Annual Conference. Orlando, FL. July 15, 2015.
- Wilson, S. D. 2015. *Water Quality in Private Wells*, Indian River Lakes Conservancy Well Owner Workshop. Redwood, NY. June 27, 2015.
- Wilson, S. D. 2015. *Water and Wastewater Operator Resources and Online Support*, USET Tribal Utility Summit. Catawba Indian Nation, Rock Hill, SC. April 9, 2015.
- Wilson, S. D. 2015. *The Mahomet Aquifer in Central Illinois*, Atlanta, IL Rotary Club. Atlanta, IL. March, 31, 2015.
- Wilson, S. D. 2015. *Irrigation Water Use Reporting in Illinois*, LaMotte Creek Water District Annual Meeting. Palestine, IL. March, 10, 2015. *(Invited)*
- Wilson, S. D. 2014. *The Private Well Class for Non-Community Water Supplies*, USEPA Quarterly Non-Community Managers Meeting. (Webinar). December 3, 2014.
- Wilson, S. D. 2014. *An Online Technical Assistance Program for Private Well Owners*, Ground Water Protection Council Annual Forum. Seattle, WA. October 7, 2014.
- Wilson, S. D., L. Morris, and J. Wilson. 2014. *Best Practices for Reaching Out to Well Owners*, Illinois Environmental Health Association Annual Conference. Peoria, IL. October 1, 2014. *(Invited)*
- Wilson, S. D., and G. Roadcap. 2014. *The Mahomet Aquifer and Groundwater Model Update*, Central Illinois Irrigated Growers Association Irrigation Clinic. Havana, IL. February 13, 2014. *(Invited)*
- Wilson, S. D. 2014. *Rural Private Wells: Concerns and Owner Responsibilities*. Nebraska Water Resources Center at the University of Nebraska-Lincoln Spring 2014 Seminar Series. Lincoln, NE. January 22, 2014. Can view online at: <http://watercenter.unl.edu/SpringSeminars/SpringSeminarSeries2014.asp>. *(Invited)*
- Wilson, S. D. 2014. *Webinar-Resources for Small Tribal Water and Wastewater System Operators at SmallWaterSupply.org and The Private Well Class*. Indian Health Service Staff Workshop. January 15, 2014. *(Invited)*
- Wilson, S. D. 2013. *The Private Well Class*, National Ground Water Association Annual Expo. Nashville, TN. December 3-6, 2013.
- Wilson, S. D. 2013. *The Private Well Class and NTNC's*. Panel Discussion on Innovative Training Strategies, USEPA 2013 National Capacity Development and Operator Certification Workshop. Atlanta, GA. November 19-21, 2013. *(Invited)*

- Wilson, S. D. 2013. *The Private Well Class: Application to Non-Community Water Systems*. Association of State Drinking Water Administrators (ASDWA) Annual Conference. Long Beach, CA. October 28-31, 2013.
- Wilson, S. D., J. S. Wilson and C.R. Smith. 2013. *The Private Well Class*, Poster presented at the 10th Annual USEPA Drinking Water Workshop on Small System Issues, Cincinnati, Ohio, September 9-12, 2013.
- Wilson, S. D. 2013. *Resources for Small Tribal Water and Wastewater System Operators*. Native American Water Association (NAWA) Annual Conference. Manistee, Michigan. July 17, 2013.
- Wilson, S. D. 2013. *A Survey of Community Water Systems Capacity and Sustainability*. Association of Boards of Certification (ABC) Annual Conference. San Diego, CA. January 2013.
- Wilson, S. D. and J. S. Wilson. 2011. *Panel Discussion and Presentation – How Utilities Are Using Social Media to Solve Problems*. State/EPA Regions 6-10 Capacity Development and Operator Certification Workshop. Boise, ID. November 2011. *(Invited)*
- Wilson, S. D. 2010. *Online Resources and Support for Water And Wastewater Operators*. Association of State Drinking Water Administrators Annual Conference. Pittsburgh, PA. October 2010.
- Wilson, S. D. 2007. *Non-Community Water System Compliance to the New Arsenic Rule in the Upper Midwest*. American Water Works Association Annual Conference and Expo. Toronto, Ontario, Canada. June 2007.
- Wilson, S. D., J. Foote, and H. A. Wehrmann 2007. *GWINFO: Integrated Groundwater Data and Project Archival System*. National Groundwater Association Summit. Albuquerque, NM May 2007.
- Wilson, S. D., and K. Brown. 2007. *Arsenic Occurrence in Non-Transient, Non-Community Public Water Systems in the Upper Midwest*. NGWA Naturally Occurring Contaminant Conference. Charleston, SC. March 2007.
- Wilson, S. D. and K. Rennels. 2007. *Groundwater-Surface Water Interaction and Data Summary for the Imperial Valley Water Authority Region in Illinois*. Mason County Annual Irrigation Association Meeting. February 8, 2007.
- Wilson, S. D., W. Kelly, G. Roadcap, T. Holm, B. Kaiser, J. Talbott, and J. Scott. 2006. *Arsenic in Illinois Groundwater*. USEPA Region 5 Groundwater Managers Meeting. Peoria, IL. August 15, 2006.
- Wilson, S. D., H. A. Wehrmann, J. Foote, and K. Allan. *Implementation of an Integrated Groundwater Database System for Linking and Sharing Data between Agencies in Illinois Using GIS and the Web*. NWQMC National Monitoring Conference. Chattanooga, TN. April 2004. Conference Program, p. 69.
- Wilson, S. D., T. R. Holm, W. R. Kelly, G. S. Roadcap, J. Talbott, and J. Scott. *Distribution of Arsenic in Public and Private Wells in Illinois*. Midwest Groundwater Conference. Kalamazoo, MI. October 2003.
- Wilson, S., W. Kelly, G. Roadcap, T. Holm, L. Skowron, B. Kaiser, J. Talbott, and J. Scott. 2001. *Arsenic in Illinois Groundwater: Current Research Efforts Underway at the Illinois State Water Survey*. Water 2002. Champaign, IL. November 2002.

- Wilson, S. D., 2002. *McLean County Water Quantity Issues*. Presented at the McLean County Water Resources Workshop, McLean County Cooperative Extension. Bloomington, IL. March 2002.
- Wilson, S. D., and B. Kohlhasse, 2001. *Development and Recent Studies in the Mahomet Aquifer - Central Illinois*. Illinois Potable Water Operators Meeting, Springfield, IL, September 2001.
- Wilson, S. D., 2001. *Arsenic in Private Wells*. DNR Director's Scientific Advisory Committee Meeting. Springfield, IL. July 2001.
- Wilson, S. D., 1998, *Site Characterization - Evolution of a Conceptual Model*. NGWA Annual Convention and Expo: AGWS&E Technical Education Session, Las Vegas, NV, Dec 13-16, 1998.
- Wilson, S. D., and J. R. Karny, 1998, *A Community-Based Sampling Program for Evaluating Long-Term Flood Impacts on Rural Well-Water Quality*. Illinois Groundwater Consortium Eighth Annual Conference, Makanda, IL, April 1-2, 1998.
- Wilson, S. D., S. C. Schock, J. Shafer, and K. Hlinka, 1995, *Agricultural Chemical Contamination of Shallow, Large-Diameter Wells in Illinois*. ASCE Water Resources Engineering Conference, San Antonio, TX, August 14-18, 1995.
- Wilson, S. D., G. A. Roadcap, and B. L. Herzog, 1995, *Assessment of the Aquifer Conditions at the Confluence of the Mahomet and Mackinaw Buried Bedrock Valleys*. 40th Annual Midwest Groundwater Conference, Columbia, MO., October 16-18, 1995.
- Wilson, S. D., S. C. Schock, J. Shafer, and K. Hlinka, 1994, *Agricultural Chemical Contamination of Shallow-Bored and Dug Wells*. Illinois Groundwater Consortium Conference on "Research on Agricultural Chemicals in Illinois' Groundwater: Status and Future Directions IV, Makanda, IL, March 23-24, 1994.
- Wilson, S. D., 1992, *Ground Water Availability and Vulnerability in Madison County, IL*. Madison County Cooperative Extension Ag Day, Edwardsville, IL, February, 18, 1992.
- Wilson, S. D., 1990, *Groundwater of Mercer County*. Mercer County Cooperative Extension Informational Meeting, Aledo, IL, August 28th, 1990
- Wilson, S. D., and S. J. Cravens, 1989, *Ground Water Management in Illinois*. ASCE Irrigation and Drainage Division Annual Conference, Newark, DE, July 19, 1989