

To the reader,

I must acknowledge certain people with gratitude and extra appreciation who have, and or, instructed, guided, supported, included, influenced, and tolerated me over the years while working at the Illinois State Water Survey (ISWS). These people have somehow helped shape me by **improving my capabilities, knowledge, and personality** though I continue to strive for self-improvement.

Mr. Richard Allgire, B.S. Physical Geography, (Retired ISWS)

Mr. Don Asbury, (Formerly Heavy Equipment Operator for Gene Royer Construction, currently Knox County Highway Department)

Ms. Erin Bauer, B.A. Economics, M.S. Geological Sciences, (ISWS Research Project Coordinator)

Mr. Adam Beardsley, A.A. Agriculture Technologies, (formerly Knox County Soil and Water Conservation District Resource Conservationist, formerly Service Manager Galesburg Birkey's Farm Store, currently Service Manager Alexis Fire Equipment Company)

Ms. Gina Beardsley, Administrator Assistant Crops Operations, (West Central Farm Service)

Mr. Greg Beardsley, Maintenance of Way Machine Operator and Laborer, (Burlington Northern & Santa Fe Railway)

Mr. Jeff Boeckler, B.S. Environmental Planning, (Formerly University of Illinois Extension, currently Principal of Northwater Consulting)

Mr. Corey Bump Sergeant First Class, (Retired, Illinois Army National Guard Marseilles Training Center, currently Illinois Department of Corrections)

Ms. Joyce Changnon, (Retired ISWS)

Ms. Diana (David) Day, (Formerly Illinois Department of Natural Resources (IDNR), currently Conservation Coordinator Pennsylvania Fish & Boat Commission)

Dr. Mike Demissie, B.S. Civil Engineering, M.S. Civil Engineering, Ph.D. Civil Engineering, (Retired ISWS Director)

Dr. Denise Devotta, B.S. International Development and Environmental Sciences, M.S. Natural Resources and Environmental Sciences, Ph.D. Ecosystem Ecology, (Formerly ISWS, formerly Senior Limnologist, PUB, Singapore's National Water Agency, currently Senior Environmental Consultant with DHI Group (Singapore) and Environmental Scientist DHI Group (Americas))

Ms. Jacqueline Dalzell, B.S. Business Administration, (Retired ISWS)

Ms. Linda Dexter, (Retired ISWS Administrative Coordinator)

Mr. Long Duong, (Formerly ISWS Research Field Specialist)

Mr. Frank Gumble, (Retired INDR Heavy Equipment Crew, currently General Contractor)

Mr. Thomas Hill, B.S. Botany, M.S. Zoology, (Retired ISWS, Deceased)

Mr. Rob Hilsabeck, M.S. Biology, (Formerly ISWS, currently Regional Fisheries Biologist for IDNR)

Mr. David Hullinger, B.A. Chemistry/Biology, (Retired ISWS Peoria Lab Manager)

Mr. David Humphrey, L.S. and staff of Environmental Science & Engineering (Retired)

Ms. Laura Keefer, B.S. Geology, M.S. Geography, (ISWS Fluvial Geomorphologist, Watershed science Section Head, and State Hydrologist)

Mr. John Lesnak, (Illinois Environmental Protection Agency (IEPA) Environmental Protection Specialist)

Mr. Randall Locke, B.S. Geology, M.S. Geology, (Formerly ISWS, currently ISGS Environmental Geochemist and Head Geochemistry)

Dr. Robert Newbury, B.S. Civil Engineering, M.S. Civil Engineering, Ph.D. Environmental Engineering Science, (Retired Newbury Hydraulics)

Mr. James Osborne, B.S., (Retired ISWS Research Field Specialist)

Mr. Steve Pescitelli, (Retired IDNR Regional Fisheries Biologist)

Dr. Raman K. Raman, Ph.D. Civil Engineering, (Retired ISWS Peoria Office Manager, Deceased)

Ms. Cyndee Riggin, (Retired ISWS)

Mr. Jon Rodsater, A.A. Social Studies (Retired ISWS Research Field Specialist)

Mr. Donald Roseboom, B.A. Biology, M.S. Chemistry, (Retired ISWS, Retired USGS, Deceased)

Mr. Greg Saline, (Formerly ISWS, currently Master Concrete Finisher)

Ms. Lara Seek, B.S. Biology, (ISWS Research Field Specialist)

Mr. Alton Simms, B.S. Business Administration, Soil Bioengineering Apprenticeship, (Vice President, Robbin Sotir & Associates)

Mr. Robert Sinclair, (Retired ISWS)

Ms. Betty Strom, (Retired ISWS)

Dr. Shundar, Lin, B.S. Civil Engineering, M.S. Sanitary Engineering, Ph.D. Sanitary Engineering, (Retired ISWS, Illinois Pollution Control Board 2008-2009)

Mr. Rick Twait, (Formerly ISWS, retired Superintendent of Water Purification for the City of Bloomington, Illinois)

Mr. Scott Tomkins, B.S. Biology, (Retired IEPA Bureau of Water Watershed Management Section, Nonpoint Source Unit, currently Living Waters Consultants)

Dr. Matt Whiles, Ph.D., (Formerly Professor of Zoology Southern Illinois University, currently University of Florida Soil and Water Sciences Department)

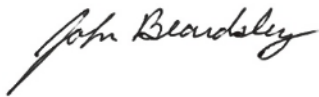
Mr. William White, B.S. Geography, M.S. Geography, (Retired ISWS Peoria Office Manager)

Ms. Laura Williams, B.S. Food Animal Science, (Formerly Plant Manager of Galesburg Facility of Western Smokehouse Partners, currently Continuous Improvement Senior Manager in Research and Development at Western Smokehouse Partners.)

And others

Sincerely,

John Beardsley

A handwritten signature in cursive script that reads "John Beardsley". The signature is written in black ink and is positioned below the printed name.

John David Beardsley

Associate Research Scientist
Illinois State Water Survey
Prairie Research Institute
Peoria, IL

Email: jbeardsl@illinois.edu
Phone: +1 309 299 5680

Education:

- Knoxville Community High School, Graduated May 1978
- Additional Education, Carl Sandburg College 1991
- Professional Certificate of completion from Portland State University for Principles of Streambank Analysis & Stabilization 2007

Work Experience:

2/2022 - to present

Associate Research Scientist

Illinois State Water Survey – Watershed Science Section, Stream, Watershed, Assessment and Restoration program (SWAR), Prairie Research Institute (PRI), University of Illinois, Peoria, IL.

7/2008 - 2/2022

Research Field Specialist

Illinois State Water Survey – Watershed Science Section, SWAR, PRI, University of Illinois, Peoria, IL.

1/1990 - 7/2008

Associate Supportive Scientist

Stream and Watershed Assessment and Restoration Program (formerly the Nonpoint Pollution Program) of the Watershed Science Section, ISWS, IDNR, Peoria, IL.

3/1988 - 1/1990

Technical Assistant

Nonpoint Pollution Program of the Office of Water Quality Management, ISWS, Illinois Department of Energy and Natural Resources, Peoria, IL.

1987 - 1989

Supervisor

Knox County Soil and Water Conservation District, Galesburg IL, Foreman of the construction site crew for streambank stabilization projects in Court Creek, (Knox County, IL). Marshall & Putman County Soil and Water Conservation District, Henry, IL, Foreman of the construction site crew for streambank stabilization projects in Crow Creek West, (Marshall County, IL).

General Overview of Responsibilities:

- Stream and Watershed Monitoring, Assessment and Restoration (SWAR) Program: Monitoring station installation and repair, apply for station permits, stream gauging and sample collection during storm events, installation of artificial pool and riffles to control stream grade, installation of LUNKERs (fish habitat) and willow posts as streambank stabilization, landowner, contractor, and agency coordination, habitat surveying, electro-fish surveying, photo documentation, geomorphic channel assessments, public outreach, channel geometry surveying, project coordinator, general site inspection, and assist principal investigator (P. I.) to carry out contract obligations.
- Public outreach: update and maintain [SWAR](#), (accessed 11/21/2022), program projects webpage, present stream table and posters at events, respond to information request, and collaborate with colleagues at events and currently with video.
- Benchmark Sediment Monitoring Network Manager: Sample collection, monitoring station installation and repair, apply for station permits, coordinate and train observers, assist Water and Atmospheric Resources Monitoring (WARM) colleagues.
- Assist Conservation Reserve Enhancement Program (CREP): project, station update and maintenance, collect samples, surveying, geomorphic assessments, field photo processing, and historic information mining.
- General Office Task: Assist P.I. in monitoring contract budgets and procurement agent for the University of Illinois since 2001.

Current Responsibility Details:

- Update and maintenance of SWAR program projects webpage, see [SWAR](#), (accessed 11/8/2021), Benchmark Sediment Monitoring Network, Lead Technician (2012-2019), Network Manager (2019-present): Assisted in the refurbishing of sampling equipment and stations, photo document station conditions, collected water samples, coordinate with field observers, and applied for Illinois Department of Transportation (IDOT) station installation permits. Install new sampling stations, acquired and trained field observers for existing and new stations. Repair damaged stations on demand. Remove discontinued stations. As BSMN, Network Manager, perform same duties with added responsibility of directing and overseeing the data processing by academic hourly, collaborate with the ISWS Sediment Laboratory analyst on sample results, represent the network and contribute to the WARM Technical Committee, determine network costs, assist WARM colleges in various duties, including water sample collection and weather station installation and dismantling. Reviewing historic benchmark station data for sample character.
- Kaskaskia River Watershed Conservation Reserve Enhancement Program, (CREP) project, 2012-2022: Assisted in reconnaissance and establishing sampling stations in Lost Creek, (Clinton County, IL), North Fork of the Kaskaskia River, (Marion County, IL), Hurricane Creek, (Fayette County, IL), East Fork Shoal Creek, (Montgomery County, IL), watersheds. Assisted in reconnaissance and establishing rain gauges at Shattuc, (Clinton County, IL) and Witt, (Montgomery County, IL). Collected water samples and discharge measurements during storm events, surveyed cross-sections, and stream profile, applied for station permits. Photo documented record spring flood event at Hurricane Creek and station conditions during weekly sampling. Assisted colleges in various tasks. Assisted with stream geomorphic assessment data collection of a 12-mile reach of Hurricane Creek. Processed over six hundred geomorphic assessment photos in Excel and Google Earth by including location information and writing photo descriptions, processed surveyed cross-section data.

- South Kickapoo Creek, (La Salle County, IL), 2009 – 2022: Coordinated field crew and assisted in collecting stream geomorphic assessment data. Coordinated with Illinois National Guard, IDNR and IEPA agencies, and ComEd. Conducted video aerial flyover of streams throughout the watershed from a helicopter to document stream channel conditions. In 2009, 2010, 2011, and 2012 photo documented project activities. Supervised and assisted in the construction of artificial riffles and stream channel geometry surveying. Assess riffle structure and channel conditions using photo documentation in 2013, 2014, 2015, 2016, 2017, 2018 and attend meetings. Prepared a proposal with Laura Keefer (ISWS) in March 2016 upon request by the Illinois National Guard for conducting stream sediment loadings and for additional geomorphic assessments of South Kickapoo Creek. Funding for the proposal is currently unavailable. Continue to update draft reports when current information becomes available.
- Continue to process current and past project photos and videos from the Stream and Watershed Assessment and Restoration Program to utilize as reference for report writing and reassessments of prior construction projects and assessed stream reaches when funding is available. Worked with Prairie Research Institute Librarian to include reports and nineteen video productions by the former ISWS Nonpoint Pollution Program in Ideals. Processed and provided historic information and flood photo documentation to Sally McConkey's ISWS Coordinated Hazard Assessment Mapping Program (CHAMP) group for their analysis of Kickapoo Creek watershed near Peoria, Illinois.
- Continue to collect information and monitor FAA rulings concerning aerial drones in anticipation of using innovative technology to collect stream information, 2014-2022. Acquired FAA Small UAS Certificate of Registration #FA3L3MKRXH 1/17/2016 to 1/17/2019. Acquired cheap personal drone with high-definition camera under recreational status to practice flying techniques and limit drone crash. The personal drone crashed in bean field in July 2016 and never found, personal drone reacquired in December 2016. The information will include drone background, federal requirements for universities, and practical uses for research. The information could be used for justification of future purchase for a high-tech drone device capable of collecting stream information such as video documenting stream conditions, flooding, and Lidar measurements. As of 2017 the FAA final rulings for aerial drones requires a drone pilot license which will cost in-between \$1,500 to \$2,000 to acquire. Drone technology continues to improve and cost for low tech drones are declining.

As of 2019 observations show that most drone operations are in wide open areas away from dense vegetation primarily for better viewing and less chance of drone loss. Currently the main comparison is video documenting stream channel conditions from a helicopter or a drone. Use of a helicopter requires pilot skill, specialized equipment, and software, can be expensive per mile, and has a life risk factor. The advantage of helicopter use is being able to video document hundred's miles of stream conditions faster. Use of a drone requires pilot skill, specialized equipment, and software. There may be a long-term advantage of drone use in terms of equipment cost but this would need to be weighed against two disadvantages. One disadvantage is current battery life is only 20 to 30 minutes. The other main disadvantage is FAA ruling requires drone operation to be in line of site and under 400-foot altitude. These factors increase the time and effort it takes to collect stream condition information per mile. Cost may also increase depending on the number of times drone loss occurs. Part of the high per mile expense for using a helicopter is the intense amount of effort in maintenance and safety preparation to reduce the chance of helicopter loss.

In 2020 the FAA finalized rules for unmanned aircraft systems (UAS) or drones requiring Remote Identification (Remote ID) to allow operators of small drones to fly over people and at night under certain conditions. Currently there are over 1.7 million drone registrations and 203,000 FAA-certificated remote pilots. The October 2020 FAA [fact sheet](#) list the current rules

for drone operation. On April 21, 2021, the [Operations Over People rule](#) became effective. There is also a statutory provision ([P.L. 115-254, Section 350](#) (PDF), as amended by P.L. 116-283, Section 10002) that clarifies that education and research uses of drones for educational purposes can be operated under the [rules for recreational flyers](#). This includes programs for institutes of higher education, programs run by JROTC, and educational programs chartered by a recognized Community Based Organization. The [FAA webpage](#) for drones in 2022 covers a wide range of topics for drones and provides updated registration numbers, (all accessed 11/21/2022).

- Peoria Field Office: Serve as point of contact with Illinois Central College (ICC) campus at East Peoria, Illinois, which serves as office for Peoria staff and warehouse. In 2019-2020 assisted with coordination and move of the Peoria Office from Illinois Central College (ICC) downtown Peoria Perley Building to the ICC campus at East Peoria, Illinois.

Past Responsibility Details:

- On 9/19/22 I met with Dave Pittman of the Friends of Rocky Glen at ICC to discuss planning of a 2023 public seminar covering watershed planning of Kickapoo Creek watershed near Peoria, Illinois. The event will be hosted by Friends of Rocky Glen and Tri-County Regional Planning Commission, and they plan on having Dr Trent Ford give a presentation.
- In June of 2022 I responded to a request by IDNR's Christina Feng to develop a cost estimate to recondition the riffle structures installed in the Cache River. The riffle structures were installed by ISWS from 2001 to 2004 through a five-mile reach of the Cache River. Widening of the river channel is threatening to breach the riffle structures. I worked with Christina Feng to develop the document 'Draft Recondition of Cache River Riffles' which will be used by IDNR to apply for grant funding.
- While photo documenting Cache River channel conditions at BSMP station 378 I noticed major changes occurring at the footing of IDNR's Tunnel Hill State Trail Bridge (a railroad trestle bridge built in 1906) upstream of the Sediment Benchmark station. Erosion may be occurring at the footing due to a log jam. On 12/6/2021 I provided pictures covering a six-year period showing the changes to IDNR's Christina Feng and Mark Guetersloh.
- I have responded to a request by local Belknap citizen Richard Greer to inspect and document slumping of the Cache River dike. On 11/22/21 I provided pictures and location of the 300-foot Cache River dike slump on INDR property to INDR through Christina Feng and Mark Guetersloh local INDR managers. They have inspected the dike and are currently applying for funds to address the slump.
- In November of 2021 I responded with Laura Keefer to a request by the Greater Egypt Regional Planning and Development Commission to develop a cost estimate to install two Benchmark sediment sampling stations in the Big Muddy River watershed. They plan on using the information to apply for grant funding.
- On 8/4/21 met with John Steven Bianucci Director of Conservation for [Iroquois Valley Farmland Reit](#) and Greta Larson Rock Creek Farm Agroforestry Manager to inspect streambank erosion in Rock Creek and provided information on stream restoration methods, (accessed 11/21/2022).
- On 7/9/21 met with Jennifer Tariq Executive Director of [Douglas-Hart Nature Center, Friendship Garden, and The Whiteside Garden](#) to inspect streambank erosion in a tributary of the Embarrass

River at Whiteside Gardens and provided information on stream restoration methods, (accessed 11/21/2022)

- On 4/29/21 photo documented acres of subsided farmland and about a half mile of Route 185 severely damaged near Hillsboro, Illinois. The ground had sunk due to underground coal mining. Provided ISGS with the information. On 6/2/22 photo documented recent occurrence of additional acres of subsided farmland and about a quarter mile of Route 185 severely damaged near Hillsboro, Illinois.
- On 3/23/21 attended virtual a meeting with Michael Bruner, Reema Abi-Akar of Tri-County Regional Planning Commission and Christine Davis, Manager, Watershed Management Section Illinois EPA, Bureau of Water to discuss EPA 319 grant opportunities for Kickapoo Creek Watershed planning near Peoria.
- Responded in 2020 to separate information request covering willow post installation, bio-swales, conversion of cemeteries to prairie, maps of stream order for Illinois, LUNKER fish habitat structures, permit application for repair of North Creek riffle, Court Creek conservation easements, and installation of Cache River riffles.
- Provided information for a Prairie Research Institute staff [profile](#), (accessed 11/21/2022).
- Contributed to Aquatic and Riparian Habitat committee report for the State Water Plan update.
- Provided information for development of an IDOT permit application for installation of sediment sampling station on the Sangamon River near Cisco, Illinois.
- On 12/3/19 met with Ron Hall, United States Department Agriculture's (USDA) Natural Resources Conservation Service (NRCS), Rob Hilsabeck, IDNR, and landowners Rick and Jerry Symonds at North Creek near Oak Run, Knox County, Illinois. In 1999 the State Water Survey installed a series of pool and riffles through this landowner's property as a demonstration project funded by IDNR Conservation 2000 funds. Debris from flooding has damaged the project and erosion is occurring. Streambank and hillside seep are also causing their access road to become impassable. We documented stream conditions and discussed solutions, options and provided information.
- Met with NRCS District Conservationist Ron Hall on 11/26/19 in Galesburg, Illinois to review aerials of North Creek and previous pool and riffle project details.
- Attended a combined meeting of Lake Michigan and North Branch Chicago River Watershed Plans on 11/13/19 at Highland Park, Illinois.
- Attended Lake Michigan Watershed Plan meeting on 6/5/2019 at Lake County Health Department, Waukegan, Illinois.
- Photo documented 5/3/2019 flood event on the Mackinaw River in Tazewell County, near Dillon, Illinois.
- Attended Lake Michigan Watershed Plan kick-off meeting on 4/29/2019 in Lake Forest, Illinois.
- On 10/10/2018 assisted with the installation of Bucks Pond CZO sampling station near Monticello, Illinois.
- On 8/28/2018 met with IDNR staff to inspect erosion sites on the Vermilion River near Oakwood, Vermilion County, Illinois.

- On 6/28/2018 provided general information on Kickapoo Creek near Peoria, Peoria County, Illinois to Doug Blodgett with The Nature Conservancy.
- Photo documented rockslide with huge boulders on 6/1/2018 at South Kickapoo Road near Peoria, Illinois showing impact to infrastructure.
- Assisted Isabella Tondi with Wetlands Research, Inc. on 5/17/2018 by providing general information on Kickapoo Creek near Peoria, Illinois.
- Met with members of River Valley Sportsman Club on 4/25/2018 at Tenmile Creek. The Club has been concerned about downcutting and erosion of Tenmile Creek. Photo documented current stream conditions.
- On 2/21/2018 provided information on bioengineering methods to Steve Gough with Little River Research & Design.
- On 2/8/2018 provided information on stream restoration methods to Charles Theiling with US Army Corps of Engineers (USACE).
- Attended Peoria Lakes Comprehensive Conservation Plan Subject Matter Experts meeting on 12/11/2017 at the Fay M. Sims Executive Center, Urbana, Illinois.
- On 11/20/2017 provided a detailed history and activities of the ISWS's old Peoria Office building to Conner Tidd a local history enthusiasts and Archer Daniels Midland Company employee. In 2011 Archer Daniels Midland Company acquired the building.
- Assisted Beth Baranski (Water Protection Partnership Project Coordinator for Jo Daviess County Watershed Planning) by providing information on stream restoration methods and water quality sampling instrumentation as requested by Scott Tomkins of IEPA on 9/12/2017. Beth informed me that the information provided helped them win an award and additional funding for their project.
- Assisted general public, met with David Grimley and Drew Phillips (ISGS), and concerned landowner (McCalister family) on 7/6/2017 about erosion on a ravine tributary to Illinois River (Peoria County, IL), Photo documented stream conditions and provided information to the landowner.
- On 4/13/16 attended Kinkaid-Reeds Creek Conservancy District Board meeting in Murphysboro, Illinois at the request of the United States Forest Service (USFS). Laura Keefer (ISWS) presented a presentation covering geomorphic assessments. On 4/14-15/16 toured Kinkaid Creek (Jackson County, IL), Cedar Creek (Jackson and Union Counties, IL), Hutchins Creek (Union County, IL), and Big Creek (Hardin County, IL) watersheds. Photo documented stream conditions at various locations and discussed geomorphic assessments. Per a request from the USFS prepared a proposal with Laura Keefer to conduct geomorphic assessments in the Kinkaid Creek watershed and a proposal to conduct geomorphic assessments in areas of concern within the Shawnee National Forest. Funding for the proposals is currently unavailable.
- Assisted general public, met with concerned landowner (Catton family) on 9/25/2015 about erosion on a tributary to Crow Creek West (Marshall County, IL), Photo documented stream conditions and provided information to the landowner.
- On 8/27/2015 responded to IDNR's request for assistance in conducting their annual intensive basin fish surveys on North Creek, Haw Creek, and Spoon River in Knox County, IL.
- On 4/27/2015 attended Cache River Joint Venture Partnership and Soil and Water District Big Creek (Union and Pulaski Counties, IL) meeting, discussed past stream restoration efforts and geomorphic assessments.

- On 1/12/2015 and 4/23/2015 attended USACE Tenmile Creek (Woodford and Tazewell Counties, IL) sponsor/stakeholder meeting, discussed geomorphic assessments and stream restoration recommendations.
- Photo documented 2015 flooding and flood damage on the Illinois River from Beardstown, IL to Pearl, IL, on the Iroquois River in Watseka, IL, and at Bay Creek near Nebo, IL.
- Photo and video documented 2014 flooding, ice flow, and large ice jam on the Kankakee River from Wilmington, IL to Kankakee, IL. In February 2014, a massive ice flow jammed the entire cross-section of the Kankakee River and the height reaching the bottom of the bridge deck of Warner Bridge forcing its closure. The ice jam caused flooding and damage upstream for miles.
- In 2014 assisted in the installation of Critical Zone Observatory sampling stations on the Sangamon River near Saybrook, Mclean County, IL, Mahomet, Champaign County, IL, and Monticello, Piatt County, IL.
- On 1/22/2014 attended Walnut Creek (Knox County, IL) watershed committee meeting, discussed preparing a watershed plan for submittal of IEPA 319 funding.
- Assisted general public, met with concerned landowner (River Valley Sportsman Club) and ACOE on 4/22/2014 about erosion and nickpoint on main channel of Tenmile Creek (Woodford County, IL), Photo documented stream conditions and provided information to the landowner.
- Photo documented 2013 spring flooding and flood damage at The Nature Conservancy Emiquon Preserve, areas along both left and right banks of the Illinois River from Morris, IL, to Meredosia, IL, areas along Spoon River from London Mills, IL, to Havana, IL., areas along the Illinois side of the Mississippi River from New Boston, IL., to Nauvoo, IL, areas along Kickapoo Creek from Edelstein, IL, to Edwards, IL, areas at Senachwine Creek, Ten Mile Creek, South Kickapoo Creek, and Route 17 on Spoon River. Continuing to process over two thousand photos taken by creating an Excel file listing photo descriptions, locations, time, date, and including available stage data. Creating a Google Earth layer of locations that can be associated with the pictures and dumped into GIS software.
- On 6/11/2013 attended USACE watershed meeting and tour of Senachwine Creek (Peoria and Marshall Counties, IL), photo documented stream conditions and discussed geomorphic assessments.
- Assisted general public, met with concerned landowner (Salem Lutheran Church) on 7/11/2012 about erosion on Dry Run Creek (Peoria County, IL), Photo documented stream conditions and provided information to the landowner.
- Ten Mile Creek, (Woodford County, IL) 2011: Landowner, agency coordination, surveyed stream profile and developed cost for proposal to EPA for installation of artificial pool and riffle structures.
- Peoria Field Office, (Peoria County, IL) 2011: Coordinated, supervised, and assisted in the cleanup and move of the entire facility (laboratory, shops, offices, and yard) during the transfer of the property to Archer Daniel Midland (ADM) Company. In 1947 the State established the Peoria Field Office and it continued at that location until 2011 when the University of Illinois moved it to locations on the ICC campus. Carved out a work area from a huge pile of moved items at the rented portion of Lawrence Hall on the main ICC campus. Reorganize office area at the ICC Perley Building in downtown Peoria.
- Prairie Creek, (Hancock County, IL), Indian Creek, and Dago Slough, (Knox County, IL), 2009 – 2010: Flow gauging, water sample collection, and surveying. Coordinated field crew and assisted in collecting stream geomorphic assessment data, and landowner and agency coordination.

- Big Bureau Creek, (Bureau County, IL), 2008: Conducted video aerial flyover of streams throughout the watershed from a helicopter to document stream channel conditions.
- Cedar Creek Watershed, (Knox, Fulton, and Warren Counties, IL), 2005, 2007: Conducted aerial flyover and video documented stream conditions throughout the watershed. The Illinois State Water Survey provided the information to the Spoon River Watershed Equip Special Project to evaluate project locations.
- Illinois River Basin Stream Project, 2003 – 2009: Partridge Creek, Ten Mile Creek, (Woodford and Tazewell Counties, IL), and Senachwine Creek, (Peoria and Marshall Counties, IL), Watersheds, coordinated field crew and assisted in collecting stream geomorphic assessment data. Conducted video aerial flyover of streams from a helicopter to document stream channel conditions. Attend watershed committee meetings, landowner, and agency coordination.
- Interim SWAR program manager, 2002 – 2003: Coordinated with existing IEPA and IDNR contract managers and produced annual and quarterly contract reports. Supervised field crew. Maintained general office tasks associated with contract and program management.
- Upper North Creek, (Knox County, IL), 2002 - 2003: Supervised and assisted in the construction of artificial riffles, train contractor and heavy equipment operator in riffle construction, electro-fish surveying, landowner, contractor, agency coordination, and surveying. Attend watershed committee meetings and field site visits to assess potential projects.
- Cache River, (Johnson County, IL), 2001 - 2004: Supervised and assisted in the construction of artificial riffles, train contractor and heavy equipment operator in riffle construction, photo documenting, and agency coordination.
- Court Creek, (Knox County, IL), 2000 – 2001: Supervised and assisted in the construction of artificial riffles, train contractor and heavy equipment operator in riffle construction, landowner, contractor, agency coordination, electro-fish surveying, and stream channel geometry surveying.
- Blue Heron Creek, (De Kalb County, IL), 2000: Supervised and assisted in the construction of artificial riffles, train contractor and heavy equipment operator in riffle construction, and landowner, contractor, and agency coordination.
- North Creek, (Knox County, IL), 1999 - 2001: Supervised and assisted in the construction of artificial riffles, train contractor and heavy equipment operator in riffle construction, stream channel geometry surveying, electro-fish surveying, and landowner, contractor, and agency coordination.
- Big Creek, (Union County, IL), Hurricane Creek, 1999 – 2001, (Coles and Cumberland Counties, IL), Lake Branch, (Clinton County, IL), 2001: Survey stream profiles, cross-sections, photo documenting, and landowner and agency coordination.
- Big Rock Creek, (Kendall County, IL), 1998: Assisted in the installation of geotextile materials and Ajack structures. Worked with heavy equipment contractor to shape streambank and place Riprap.
- Kishwaukee River, (Winnebago County), 1997: Survey stream profile reach in-between Route 20 and Interstate 90 near Cherry Valley, IL, for potential pool and riffle project.
- Panther Creek, and Cox Creek, (Cass County, IL), 1996 – 1997: Supervised and assisted in the construction, agency coordination, and installation of artificial riffles, train IDNR heavy equipment crew in riffle construction, electro-fish surveying, photo documenting, install LUNKER (fish habitat) structures, channel geometry surveying, and willow posts.

- Hall Creek, (Ogle County, IL), 1996 – 1997: Supervised and assisted in the construction of artificial riffles, train contractor and heavy equipment operator in riffle construction, landowner, contractor, and agency coordination and stream channel geometry surveying.
- Brush Creek, (City of Mission Hills, Johnson County, KS), 1995 – 1997: Survey stream profile for artificial riffle construction.
- Waukegan River, (Lake County, IL), 1992 – 2006: Habitat surveying, electro-fish surveying, artificial riffle construction, train contractor and heavy equipment operator in riffle construction, landowner and agency coordination, photo documenting, and stream channel geometry surveying.
- Blue Creek, and Lake Pittsfield, (Pike County, IL), 1992 – 2005: Flow gauging and water sample collection during storm events, monitoring station installation and data collection, landowner, contractor, municipality and agency coordination, photo documenting, and channel geometry surveying. Supervised and assisted in the construction of artificial riffles to control erosion, train contractor and heavy equipment operator in riffle construction. Assisted with the sedimentation survey of Lake Pittsfield.
- Glen Crest Creek, (Du Page County, IL), 1991 - 1993: Installation of A-jacks to control streambank erosion and install LUNKER (fish habitat) structures.
- Richland Creek, (Woodford County, IL): 1991 – 1992, 1996: Supervised and assisted in the installation of willow posts and tree revetments to control streambank erosion, channel geometry surveying, and landowner coordination.
- Mississippi River and Illinois River, 1991: Conducted sediment shear stress test in backwater lake aquatic plant beds and collected sediment core samples from boat.
- Argyle Lake State Park, (McDonough County, IL), 1990 – 1994, 2000: Flow gauging and water sample collection during storm events, landowner and agency coordination, and channel geometry surveying. Assisted with the sedimentation survey of Argyle Lake.
- Crabapple Creek, Siloam Springs State Park, (Adams and Brown Counties, IL), 1990 – 1994: Flow gauging, water sample collection, photo documenting, contractor and agency coordination, and surveying. Assisted in the construction of grade control structures in the ravine system. Assisted with the sedimentation survey of Crabapple Lake.
- Franklin Creek, (Lee County, IL), 1988 – 1991: Assisted with habitat surveys, electro-fish surveying, channel cross-section surveys, landowner, and agency coordination, supervised and assisted in the construction of LUNKER (fish habitat) structure site, install willow posts, and tree revetments to vegetate and armor banks.
- Peoria Lake, (Peoria County, IL), 1988 – 1993: Assisted in vegetating backwater lake areas, install fence to protect Arrowhead and Lilly plantings from wildlife, electro-fish surveying.
- Crow Creek West, (Marshall County, IL), 1988-1989: Supervised stream construction crew on streambank erosion control demonstration of soil bioengineering methods, landowner, consultant, and agency coordination, installed live booms, geogrids, and live fascines under the guidance of Alton Simms, Vice President and Principal of Robin B. Sotir & Associates, project designers. The Illinois Department of Conservation and Marshall County Soil and Water Conservation District funded the project.
- Court Creek, (Knox County IL), 1987-1989: Supervised stream construction crew on streambank erosion control projects, landowner and agency coordination, electro-fish surveying, installed tree revetments and LUNKER (fish habitat) structure site under the guidance of project designer Don Roseboom of ISWS. The Illinois Department of Conservation and Knox County Soil and Water Conservation District funded the project.

Achievements:

- Obtain ISWS Watershed Science Section Boat Safety Manual steward status.
- Obtain manager status of the Benchmark Sediment Monitoring Network.
- Firsthand installation and evaluation of bioengineering stabilization techniques.
- Utilized a static GPS surveying system in conjunction with a Total Station when conducting stream surveys.
- Process data under Principal Investigator's guidance.
- Practiced stream gauging techniques and setup stream gauging stations.
- Attend workshops to acquire an understanding of stream channel evolution processes.
- Applied stream channel grade control techniques into degraded stream channels.
- Trained contractors and heavy equipment operators on-site in constructing Newbury style series of artificial pool and riffles as a grade control application.
- Utilized and promoted stream geomorphic assessment protocols developed by Laura Keefer to assess stream conditions.
- Demonstrated stream channel evolution processes with stream table model at numerous events.

Awards/ Honors:

- 2021 PRI-Distinguished Research Specialist Award
- One of six participants of the former Nonpoint Pollution Control Program in 1994, when the program received The Gaylord Donnelley Nature of Illinois Foundation Award.
- Participant of the former Nonpoint Pollution Control Program when the ISWS received the Making Waves award during the 1996 Clean Water Celebration.
- One of five recipients, Plaque from the Union County Soil & Water Conservation District, Anna, Illinois, for cooperation and assistance on Big Creek Watershed Pilot Project, 2005.

Society and Association Membership:

- Association of Illinois Soil and Water Conservation Districts Foundation
- Illinois Audubon Society
- Illinois Chapter North Central Division of the America Fisheries Society
- Illinois Lake Management Association
- National Geographic Society
- The Nature Conservancy

Committee Membership:

- Illinois State Water Plan Task Force Erosion & Sedimentation Committee
- Illinois State Water Plan Task Force Aquatic & Riparian Habitat Committee

- North Central Division of the America Fisheries Society, Rivers and Streams Technical Committee
- Court Creek Watershed Technical Committee
- Heartland Water Resources Council
- ISWS, Employee Search Committee in 2002, 2005, and 2013
- Citizen Action Group, Waukegan River Watershed Technical Advisory Committee
- Tri-County Regional Planning Commission, Partridge, Tenmile, and Ackerman Creek Watershed Geomorphology Technical Advisory Committee
- USACE Waukegan River Modeling Stakeholder Advisory Team

Workshops and Training:

- Attended Stream Restoration workshop on 11/3/2022 and 11/4/2022 in Darien, Illinois. The workshop was hosted by Ted Gray of Living Waters Consultants, Inc. Received certificate of completion, 11 PDH's.
- Attended Aquatic Invasive Species: Starry Stonewort Identification and Management online seminar on 10/26/2022, the seminar was hosted by Illinois Lake Management Association and Keith Gray President ILM Environments.
- Attended seminar Illinois Water Use Law 'Who Regulates the State's Waters?' by Gary R. Clark, Retired Director, IDNR Office of Water Resources on 10/11/2022 in Champaign, Illinois.
- Attended EPA's Watershed Academy online seminar on Integrating Water Quality Management and Natural Hazard Resilience through Nature Based Solutions on 5/24/2022, Received certificate of attendance, 2.0 training credit hours.
- Attended Virtual Harmful Cyanobacteria workshop by Dr. Ann St. Amand on 4/21/2022, the workshop was sponsored IEPA Bureau of Water Surface Water Section Streams and Lakes Monitoring Unit, 1.5 PDH.
- Attended Illinois Coastal Ravines Vegetation Survey online seminar on 4/13/2022. The seminar was sponsored by IDNR Coastal Management Program and Lake County Stormwater Management Commission.
- North Central Division American Fisheries Society Annual Spring Rivers and Streams Technical Committee meeting, 3/29/2022 and 3/30/2022 virtual meeting.
- Attended Lake and Reservoir Habitat Enhancements workshop on 3/18/2022 in Champaign, Illinois. The workshop was sponsored by the Illinois Lake Management Association and Illinois Chapter of the American Fisheries Society Joint Annual Conference. Received certificate of completion, 3 PDH's.
- Attended Illinois Lake Management Association and Illinois Chapter of the American Fisheries Society Joint Annual Conference on 3/16/2022 and 3/17/2022 in Champaign, Illinois.
- Attended Designated Erosion Control Inspector online workshop on 2/15/2022, sponsored by Lake County Stormwater Management Commission. Received certificate of completion, 4.5 PDH's.
- On 2/8/2022 attended online seminar Overview of Harmful Algal Blooms and Their Impact by Dr. West Bishop Algae Scientist and Water Quality Research Manager at [EutroPHIX](#), 1 PDH, (accessed 11/21/2022).

- On 8/18/2021 attended online seminar hosted by NCDAFS River and Streams Technical Committee covering Introduction to Stream Functions Pyramid Framework and Stream Quantification Tool by Will Harman of StreamMechanics.
- On 5\11\2021 attended [Illinois Lakes Management Association speaker series webinar](#) Integrated Approaches to Lake Management by Keith Gray of Integrated Lakes Management Inc. and “Are Algal Blooms Getting Worse?” by Dr. Grace Wilkinson, University of Wisconsin, (accessed 11/21/22)
- North Central Division American Fisheries Society Annual Spring Rivers and Streams Technical Committee meeting, 3/30/21 and 3/31/21 virtual meeting.
- On 3/18/21 attended Illinois Lake Management Association’s 36th Annual Conference virtual meeting.
- Attended 5/6/20 ISWS Website Tutorial- SiteFinity online.
- On 11/22/2019 Completed Security Awareness Training: Cyberstrength Assessment by the University of Illinois, Illinois Security Program.
- Attended Hydrology 101: Advanced Topics and Applications (8048W2020) online seminar on 11/21/2019, sponsored by American Society of Civil Engineers Continuing Education and the Environmental & Water Resources Institute. Received certificate of completion, 1.5 Professional Development Hours (PDH’s).
- Attended Proposal Preparation Training seminar on 11/18/2019 in Champaign, Illinois. The Prairie Research Institute Pre/Post-Award team sponsored seminar.
- Attended Hydrology 101: Understanding the Processes (8033W2020) online seminar on 11/6/2019, sponsored by American Society of Civil Engineers Continuing Education and the Environmental & Water Resources Institute. Received certificate of completion, 1.5 PDH’s.
- On 10/23/2019 attended training session by Jennifer Davis of PRI communications covering the use of Sitefinity application to create and modify webpages. Held at the ISWS in Champaign, Illinois.
- Using Acoustics for Research and Flood Monitoring: An Insider Look at Essential Technologies in Times of Change workshop by SonTek, a Xylem brand, and University of Illinois Civil and Environmental Engineering. Held on 8/23/2019 at University of Illinois Digital Computer Lab, Urbana, Illinois.
- Attended United States Power Squadrons America’s Boating Course on 5/15/2019 in Champaign, Illinois. Instructed by Lt/C Gary E. Magnuson, JN-IN of Mid Illini Sail & Power Squadron. Received certificate of completion of proctored exam. The National Association of State Boating Law Administrators approved America’s Boating Course and the United States Coast Guard recognizes the course.
- North Central Division American Fisheries Society 31st Annual Spring Rivers and Streams Technical Committee meeting, 4/2/2019 and 4/3/2019 in Milan, Illinois.
- Attended Designated Erosion Control Inspector workshop on 4/11/2019 in Gurnee, Illinois, sponsored by Lake County Stormwater Management Commission and Chicago Metro Chapter of the American Public Works Association. Received certificate of completion, 4.5 PDH’s.
- Attended Illinois Lake Management Association’s 34th Annual Conference on 3/14/2019 in Crystal Lake, Illinois. Presented in partnership with Illinois Environmental Protection Agency. Received certificate of attendance, IEPA approved 10.0 training credit hours, course ID 13984.
- Attended Illinois State Water Survey All Staff Safety meeting online seminar on 2/5/2019.

- Attended lecture “Taking to the Skies: Applying Drone-based Aerial Photography and Photogrammetry to Illinois Archaeology” by Mike Farkas and John Lambert Illinois State Archaeology Survey on 8/15/2018 at the Forbes Natural History Building, Champaign, Illinois.
- North Central Division American Fisheries Society 30th Annual Spring Rivers and Streams Technical Committee meeting, 3/27/2018 and 3/28/2018 in Milan, Illinois.
- Attended SonTek training for the RiverSurveyor S5 Acoustic Doppler Current Meter on 3/20/2018 at the Sangamon River (Champaign County, IL) near Mahomet, Illinois. Reviewed data collected at the Water Survey office in Champaign, Illinois.
- Attended Illinois Lake Management Association’s 33rd Annual Conference, 3/2018, Presented in partnership with Illinois Environmental Protection Agency. Received certificate of attendance, IEPA approved 9.75 training credit hours, course ID 12787.
- Get it in Writing: Developing Your Lake Management Plan, 2/24/18 at Lake County Permit Center, Libertyville, Illinois, by Lake County Health Department and Community Health Center, Chicago Metropolitan Agency for Planning, and Illinois Lakes Management Association, Received certificate of attendance, 3.0 PDH’s.
- Attended IEPA’s Watershed-based Planning Conference on 11/30/2017 in Springfield, Illinois.
- Attended Tech Transfer Loose Rock Riffle Grade Control Southern Illinois Tour hosted by USACE’s River Engineering Branch Coastal and Hydraulics Lab Engineer Research and Development Center on 6/26/2017 through 6/30/2017, toured several pool and riffle project sites assessing conditions and discussing installation methods.
- Completed the EPA’s Watershed Academy Webcast on [The Condition of U.S. Lakes and Streams](#): Findings from the National Aquatic Resource Surveys. Received 3/23/2017 certificate of attendance, 2.0 training credit hours, (accessed 11/21/2022).
- North Central Division American Fisheries Society 29th Annual Spring Rivers and Streams Technical Committee meeting, 3/14/2017 and 3/15/2017 in Milan, Illinois, theme was “Thinking Outside of the Banks”.
- Attended seminar on 1/24/2017 by Laura Kammin of Illinois-Indiana Sea Grant on PRI Resilient Watershed Initiative at the Illinois Sustainable Technology Center.
- Illinois Water 2016, by the Illinois Water Resources Center, Urbana, Illinois.
- Completed the In-Situ Webinar: [Using Turbidity as a Surrogate for Estimating Suspended Sediment Concentration and Discharge](#) by Larry Freeman (Retired USGS) on 7-28-2016, webinar ID: 113-975-651, (accessed 11/21/2022).
- Completed the In-Situ Webinar: Understanding Suspended sediments, Solids, and Turbidity by Larry Freeman (Retired USGS) on 4-7-2016, online seminar ID: 155-944-931.
- Attended SonTek training for the RiverSurveyor S5 Acoustic Doppler Current Meter on 8/19/2015 at the Sangamon River (Champaign County, IL) near Mahomet, Illinois.
- Sangamon River Conceptual Modeling Workshop, 7/16/2015, Beardstown, Illinois, by U. S Army Corps of Engineers, Rock Island District.
- [15th Biennial Governor’s Conference on the Management of the Illinois River System](#), 2015, by the University of Illinois Office of Continuing Education Conferences & Institutes, (accessed 11/21/2022).

- North Central Division American Fisheries Society 27th Annual Spring Rivers and Streams Technical Committee meeting, 3/31/2015 and 4/1/2015 in Milan, Illinois, focus was on “Small Streams”.
- Precision Aerial Ag Show, Progress City USA, Decatur, Illinois, 7/9/2014 and 7/10/2014, by AG/Engage.
- Dead Dog Creek Phase II Stream Restoration Project Tour 9/23/2014, Winthrop Harbor, Illinois, by Lake County Stormwater Management Commission.
- Illinois Water 2014, by the Illinois Water Resources Center, Urbana, Illinois.
- Economics of Rivers and Streams Management: A special working session, 2014, by the Rivers and Streams Technical Committee of the North Central Division American Fisheries Society.
- In 1999, 2014, and 2015 completed Fire Extinguisher Education & Awareness Training.
- On 5-21-2013 completed the USGS Webinar: Modernizing Water Time-Series Data Collection & Processing by Joseph Nielsen (USGS).
- 14th Governor’s Conference on the Management of the Illinois River System, 2013, by the University of Illinois Office of Continuing Education Conferences & Institutes.
- Illinois Water 2010, Quantity, Quality & Sustainability, by the Illinois Water Resources Center, Urbana, Illinois.
- 12th Governor’s Conference on the Management of the Illinois River System, 2009, by the University of Illinois Office of Continuing Education Conferences & Institutes.
- Fishery Response to Stream Restoration Practices: Continued discussion of a special working session, 2009, by the Rivers and Streams Technical Committee of the North Central Division American Fisheries Society.
- Illinois Lake Management Association’s 24th Annual Conference Workshop: Grant Opportunities and Funding Options for Lake and Watershed Projects, 2009, Presented in partnership with Prairie River Network through CWA 319 funding provided by Illinois EPA and USEPA.
- Illinois Lake Management Association’s 24th Annual Conference, 2009, Presented in partnership with Illinois Environmental Protection Agency.
- Fishery Response to Stream Restoration Practices: A special working session, 3/11-12/2008, Milan, IL, by the Rivers and Streams Technical Committee of the North Central Division American Fisheries Society.
- River Restoration Practices and Concepts: Fish Passage on Mid-Western Streams: Evaluation of Stability and Functionality of Dam Removals, Constructed Fishways and Culvert Crossing, 11/7-8/2007, Wheaton, Illinois, by the Illinois Institute of Technology, Illinois- Indiana Sea Grant College Program Purdue University Calumet. Received certificate of completion, 12.0 PDH’s.
- 11th Governor’s Conference on the Management of the Illinois River System, 10/2-4/2007, Peoria, Illinois, by the University of Illinois Office of Continuing Education Conferences & Institutes.
- Principles of Streambank Analysis & Stabilization 3-day short Course, 2007, Portland, Oregon, by the Portland State University- River Restoration Professional Certificate Program. Received certificate of completion, 24.0 PDH’s.
- 10th Governor’s Conference on the Management of the Illinois River System, 2005, by the Heartland Water Resources Council of Central Illinois, Illinois Department of Natural Resources.

- Spoon River Watershed Equip Special Project Informational Meeting, 12/20/2005, Dixon Mounds, Lewistown, Illinois, by Natural Resource Conservation Service and Illinois Department of Natural Resources.
- On-site training in geomorphic assessment protocols by Laura Keefer (ISWS) at Partridge Creek (Woodford County, IL.), on 5/5/2005.
- Use of Pools and Riffles in Illinois Workshop: A discussion of management applications and research needs for stream restoration, 2/26-27/2004, Carbondale, IL, by the Illinois Department of Natural Resources.
- Connecting Illinois Watersheds Conference, 2/5/2004 and 2/6/2004, Peoria, IL, by the University of Illinois Extension, Illinois Department of Natural Resources, Illinois Environmental Protection Agency.
- Tri-County Planning Commission Watershed Tour, 8/14/2003, Partridge Creek, Tenmile Creek, and Ackerman Creek watersheds, (Woodford and Tazewell Counties, IL).
- River Restoration & Riverfront Development Visioning Workshop & Cruise, 7/27/2002, by The Tri-County Regional Planning Commission, Heartland Water Resources Council, Tincher & Associates, and The Illinois State Water Survey.
- GPS Inside and Out, 2002, by the Northeast Chapter of the Illinois Land Surveyors Association.
- The 2nd Kaskaskia River Watershed Summit, 2002, by the Kaskaskia Watershed Association.
- USGS Stream Restoration Workshop, Champaign, Illinois, 2002.
- Fluvial Geomorphology Workshop, 2000, by Lyle Steffen of the Natural Resource Conservation Service.
- Stream Habitat Assessment Workshop, 1999, by Les Stanfield (senior author of the Ontario Stream Assessment Protocol), Ontario Ministry of Natural Resources, Ontario, Canada.
- Beyond two thousand Program, Time Management: How to Increase Your Personal and Professional Productivity, 1998, by Eagle International Institute Inc.
- Stream Analysis and Remediation Workshop, 1998, by Newbury Hydraulics.
- Illinois Department of Natural Resources Region 1 Orientation and Training Educational Seminar, 7/31/1996, held at Starved Rock State Park.
- Watershed Assessment Process in Michigan by Tom Rozich, Michigan Department of Natural Resources, Riparian Management for Water Quality: Streambank Stabilization and Constructed Wetlands by Tom Isenhardt, Department of Forestry, Iowa State University, 4/2-3/1996, Milan, Illinois, by the Rivers and Streams Technical Committee of the North Central Division American Fisheries Society.
- Workshop on Manitoba's Stream Restorations: Designing Fish Habitat Improvements Works using Natural Stream Habitat Templates and Principals of Fluvial Behavior, Case Studies of Riffle-Pool Restoration, Case Studies Fish Ladders through Lowhead Dams by Mark Gaboury, coauthor of the Stream Analysis and Fish Habitat Design Workbook, 4/5-6/1995, Milan, Illinois, by the Rivers and Streams Technical Committee of the North Central Division American Fisheries Society.
- Stream Analysis and Fish Habitat Design Workshop, 4/6/1994 and 4/7/1994, by Newbury Hydraulics, Milan, Illinois, by the Rivers and Streams Technical Committee of the North Central Division American Fisheries Society.
- Surveying with GPS: A Practical Course by Kara Co., 1994.

- Stream Stabilization Workshop, 3/16-18/1993, by the Illinois River Soil Conservation Task Force, Illinois State Water Survey, and Illinois Cooperative Extension Service. Willow post method training held on Richland Creek for SCS, SWCD, CES agency staff, and land improvement contractors.
- Stream Management Workshop, 1991, by the Illinois River Soil Conservation Task Force, Illinois Department of Energy and Natural Resources, Illinois Cooperative Extension Service.
- Boating Safety, Certification # 28476E, 1/17/1991, by Illinois Department of Natural Resources.

Presentations:

- I have responded to public request for information in the field at Sediment Benchmark stations numerous times. I have presented to the public questions "what are you folks doing on the bridge and what are you doing with the samples?" In 2022 I have presented 2 times at station 126 in Wilmington, 2 times at station 125 in Momence, 1 time at station 122 near Leonore, and 1 time at station 378 near Belknap. In 2021 I have presented 3 times at station 105 in Momence, 4 times at station 103 in Rockton, 3 times at station 102 in Freeport, 2 times at station 126 in Wilmington, 2 times at station 378 near Belknap, and 2 times at station 370 near Carmi.
- Annual Upper Sangamon River Conservancy Showcase held on 5/7/2022 at the Izaak Walton Cabin in the Lake of the Woods Forest Preserve, Mahomet, Illinois. Display posters on stream processes, South Kickapoo Creek stream restoration, Illinois River tributary geomorphic assessments, and stream restoration methods. Display stream table and explain stream channel geomorphic processes.
- I was invited by IDNR to talk about pool and riffle installation on the tour of Todd Fink trail during Heron Pond's 50th Anniversary Celebration on 4/9/2022 near Belknap, Illinois. The event was hosted by Friends of Illinois Nature Preserves, Friends of the Cache Watershed, Illinois Nature Preserves Commission, and Illinois Department of Natural Resources.
- Roanoke Flooding Education Event, hosted by Woodford County SWCD and The Nature Conservancy on 7/29/2021 in Roanoke, Illinois. Display stream table and explain stream channel geomorphic processes.
- 4th Annual Upper Sangamon River Conservancy Showcase held on 5/4/2019 at the Izaak Walton Cabin in the Lake of the Woods Forest Preserve, Mahomet, Illinois. Display posters on stream processes, South Kickapoo Creek stream restoration, Illinois River tributary geomorphic assessments, and stream restoration methods. Display stream table and explain stream channel geomorphic processes.
- IDNR Marseilles Fish and Wildlife Area and Illinois Army National Guard Marseilles Training Area meeting with Department of Natural Resource staff, 12/19/2018. Present power point outlining project assessments and monetary requirements to conduct repairs in the main channel of South Kickapoo Creek and the existing status and future risk to infrastructure and habitat in tributary SKC of South Kickapoo Creek. This meeting included top military staff from Camp Lincoln, Springfield.
- Sangamon River Watershed Celebration hosted by the Sangamon River Alliance, and the Agricultural Watershed Institute, 11/10/2018, and held at the National Sequestration Education Center, Decatur, Illinois. Display posters on stream processes, South Kickapoo Creek stream restoration, Illinois River tributary geomorphic assessments, and stream restoration methods. Display stream table and explain stream channel geomorphic processes.

- 3rd Annual Upper Sangamon River Conservancy Showcase held on 5/5/2018 at the Izaak Walton Cabin in the Lake of the Woods Forest Preserve, Mahomet, Illinois. Display posters on stream processes, South Kickapoo Creek stream restoration, Illinois River tributary geomorphic assessments, and stream restoration methods. Display stream table and explain stream channel geomorphic processes.
- IDNR Marseilles Fish and Wildlife Area and Illinois Army National Guard Marseilles Training Area meeting with Department of Natural Resource staff, 12/20/2017. Present power point outlining project assessments and monetary requirements to conduct repairs in the main channel of South Kickapoo Creek and the current status and future risk to infrastructure and habitat in tributary SKC of South Kickapoo Creek. This meeting included top military staff from Camp Lincoln, Springfield, Illinois, and Illinois Department of Natural Resources Region 1 director of lands.
- 1st Eco-Conference on the Sangamon River Watershed hosted by the Upper Sangamon River Conservancy, Sangamon River Alliance, and the Agricultural Watershed Institute, 11/4/2017, Decatur, Illinois. Display posters on stream processes, South Kickapoo Creek stream restoration, Illinois River tributary geomorphic assessments, and stream restoration methods. Display stream table and explain stream channel geomorphic processes.
- On 7/12/2017 assisted Marseilles Fish and Wildlife Area site superintendent Tom Jackson in conducting a tour of South Kickapoo Creek project area for IDNR staff. Present power point outlining project assessments and monetary requirements to conduct repairs in the main channel of South Kickapoo Creek and the existing status and future risk to infrastructure and habitat in tributary SKC of South Kickapoo Creek to Lawrence Patterson, IDNR Architecture Engineering & Grants Division Federal Programs Coordination Manager and Arthur Neal, IDNR Civil Engineer.
- 29th Annual Rivers and Streams Technical Committee meeting of the North Central Division American Fisheries Society 3/2017, Milan, Illinois. Display posters on South Kickapoo Creek stream restoration, Illinois River tributary geomorphic assessments, and stream restoration methods. Display stream table and explain stream channel geomorphic processes.
- IDNR Marseilles Fish and Wildlife Area and Illinois Army National Guard Marseilles Training Area meeting with Department of Natural Resource staff, 2/2/2016 and 12/20/2016. Present power point outlining project assessments and monetary requirements to conduct repairs in the main channel of South Kickapoo Creek and the existing status and future risk to infrastructure and habitat in tributary SKC of South Kickapoo Creek.
- [Museum of the Grand Prairie in the Lake of the Woods Forest Preserve](#), 7/16/2016, display stream table and explain stream channel geomorphic processes during their opening day of the traveling Smithsonian exhibit entitled Water/Ways, which was in partnership with Illinois Humanities, (accessed 11/21/2022).
- [Prairie Research Institute 2015 Naturally Illinois Expo](#), (accessed 11/21/2022), Display stream table and explain stream channel geomorphic processes.
- IDNR Marseilles Fish and Wildlife Area and Illinois Army National Guard Marseilles Training Area meeting with Department of Natural Resource staff, 1/14/2015 and 12/21/2015. Present power point outlining project assessments and monetary requirements to conduct repairs in the main channel of South Kickapoo Creek and the existing status and future risk to infrastructure and habitat in tributary SKC of South Kickapoo Creek.
- IDNR Marseilles Fish and Wildlife Area and Illinois Army National Guard Marseilles Training Area meeting with Department of Natural Resource staff, 12/17/2014. Present power point

covering 2013 flood damage, project assessments and monetary requirements to conduct repairs in the main channel of South Kickapoo Creek and the existing status and future risk to infrastructure and habitat in tributary SKC of South Kickapoo Creek.

- Booker T. Washington STEM Academy, 5/9/2014, Display stream table and explain stream channel geomorphic processes to fourth and fifth grade classes studying erosion.
- Prairie Research Institute Science Camp 2013, Display stream table and explain stream channel geomorphic processes during the tour at the ISWS on 7/17/2013.
- Annual IDNR Marseilles Fish and Wildlife Area and Illinois Army National Guard Marseilles Training Area joint meeting, 1/10/2012 and 9/2/2012. Present power point outlining the existing status and monetary requirements to complete the project in the main channel of South Kickapoo Creek and the existing status and future risk to infrastructure and habitat in tributary SKC of South Kickapoo Creek.
- 13th Annual Environmental Education Day 10/14/2010, by the Tazewell County Health Department. Held in the Avanti's Dome in Pekin, IL. The attendees were (15) fifth grade classes including 332 students. Display stream table and explain stream channel geomorphic processes.
- Earth Day event held at the [Peoria Academy 2010](#), (accessed 11/21/2022), Display stream table and explain stream channel geomorphic processes.
- Indian Creek and Dago Slough watershed stakeholder meeting held September 14th, 2009, at the Agri Center in Galesburg, Illinois. Displayed a video called "Watershed Causes of Channel Erosion" and a power point covering the Stream and Watershed Monitoring, Assessment and Restoration (SWAR) program, channel erosion processes, assessments, and aerial flyovers.
- Rock Island District US Army Corps of Engineers public open houses hosted on board the Motor Vessel MISSISSIPPI during August 6, 2009, in Peoria, Illinois where 2430 people visited and during August 8, 2009, in Ottawa, Illinois where eight hundred people attended. Display stream table, video, posters and explain stream channel geomorphic processes while distributing informational brochures, rain gauges and maps.
- Institute of Natural Resource Sustainability 2009, 2010, and 2011 Naturally Illinois Expo, Display stream table and explain stream channel geomorphic processes.
- Event held at Springdale Cemetery, Peoria, Illinois, 7/10/2009. Springdale Cemetery is a historic cemetery located on the Illinois River bluff throughout the watershed of the bluff ravine system of Turkey Creek (AKA Springdale Creek). The Tri-County Regional Planning Commission applied for an EPA 319 grant to control streambank erosion encroaching on grave sites. Upon completion of the project the cemetery held tours of the stream project and historic areas of the cemetery. The project group asked the ISWS to display the stream table and explain geomorphic processes.
- [Peoria Academy of Science](#) 2008 Science Treasure Hunt for Children, (accessed 11/21/2022), Display stream table and explain stream channel geomorphic processes in eleven sessions from May through August. The total attendance was 150 children and fifty-one adults. The children rated the presentation as the third best science site to visit out of twenty-one. The ISWS also conducted an additional special session for five Bradley University students who heard about the event.
- [Clean Water Celebration](#) 2008, 2009, 2010, 2011, 2013, and 2014 events, by the Sun Foundation, Tazewell County Health Department, Tri-County Planning Commission, EPA, IDNR and others. Display stream table and explain stream channel geomorphic processes, (accessed 11/21/2022).

- Open House for the Emiquon Field Station at the Conservancy's Emiquon Preserve, 4/26/2008, by the University of Illinois at Springfield and The Nature Conservancy in Illinois. Display stream table and explain stream channel geomorphic processes.
- Protecting the Illinois River...A Time for ACTION symposium, 3/7/2008, Peoria, Illinois, by the Institute for Principled Leadership in Public Service at Bradley University, Tri-County Planning Commission and The Dirksen Congressional Center. Display stream table and explain stream channel geomorphic processes.
- 11th Governor's Conference on the Management of the Illinois River System, 10/2-4/2007, Peoria, Illinois, by the University of Illinois Office of Continuing Education Conferences & Institutes. Display posters covering Illinois River tributary geomorphic assessments, channel evolution model, and stream restoration methods.
- Event held at Little Flower Middle School, Springfield, IL, on 5/10/2004, Display stream table and explain stream channel geomorphic processes.
- Illinois State Fair IDNR Office of Scientific Research & Analysis Discovery Park Tent 8/16/2003. Manned Rain Check Network booth, distributed ISWS rain gages and instructions.
- Illinois Department of Natural Resources Office of Resource Conservation Training, Streams & Watersheds: Principles, Processes and Practices, 2/19-20/2003, Springfield, Illinois, Display stream table and explain stream channel geomorphic processes.
- Event held at St. Patrick Elementary school in Springfield, 2003, Display stream table and explain stream channel geomorphic processes.
- Presented a PowerPoint covering the ISWS's contract work on the Environmental Protection Agency National Watershed Monitoring Project: Biological and Physical Monitoring of Waukegan River Restoration Efforts in Biotechnical Bank Protection and Pool/Riffle Creation to the State Water Survey's Watershed Science Section on 6/10/2002 in Champaign, Illinois.
- Event held at the Lakeview Museum in Peoria, 2002, Display stream table and explain stream channel geomorphic processes.
- North Creek Pilot Watershed Project Tour, 10/30/2001, by Illinois Department of Natural Resources and Knox County Soil and Water Conservation District, presented on-site to participants of the tour how to construct a series of Newbury style artificial pool and riffles.

Publication Coauthor:

Timeline of Events Since Inception of the Illinois State Water Plan, 2019 Draft, by the committee for Aquatic and Riparian Habitat, Brian Metzke, Leon Hinz, Randy Saur, Laura Keefer, John Beardsley.

Boating Operation & Safety Manual, 2019 Draft, ISWS Revision 1.3, Current Contributing Editors: John Beardsley, Laura Keefer, Erin Bauer, and Kip Stevenson, Illinois State Water Survey, Prairie Research Institute, University of Illinois, Champaign-Urbana, IL.

The Pictorial Story of a Dike at Emiquon, 2018 Draft, Beardsley John D., Illinois State Water Survey, Prairie Research Institute, University of Illinois, Champaign-Urbana, IL.

Illustrated Evolution of a Stream Reach of South Kickapoo Creek, 2018 Draft, Beardsley John D., Illinois State Water Survey, Prairie Research Institute, University of Illinois, Champaign-Urbana, IL.

Comparison of Multiple Pool and Riffle Assessments for South Kickapoo Creek, Marseilles State Fish and Wildlife Area, 2018 Draft Progress Report, Beardsley John D., Laura L. Keefer Illinois State Water Survey, Prairie Research Institute, University of Illinois, Champaign-Urbana, IL.

[Assessing Progress on the 1997 Integrated Management Plan for the Illinois River Watershed, 2017, Contributing Editors:](#) Duane Esarey (ISAS), Nancy Holm (ISTC), Laura Keefer (ISWS), Elizabeth Meschewski (ISTC), Andrew Phillips (ISGS), Jeffrey Stein (INHS), and Richard Winkel (PRI), **[Additional Contributors:](#)** Daniel Abrams (ISWS), Erin Bauer (ISWS), John Beardsley (ISWS), T.J. Benson (INHS), Tara Beveroth (INHS), Nani Bhowmik (ISWS), Andrew Casper (INHS), Yong Cao (INHS), Kevin Cummings (INHS), Diana Davisson (ISWS), Michael Dreslik (INHS), Elias Getahun (ISWS), Leon Hinz (INHS), Vern Knapp (ISWS), Sally McConkey (ISWS), Momcilo Markus (ISWS), John Marlin (ISTC, Mud to Parks), Brian Metzke (INHS), Chris Phillips (INHS), Jeremy Tiemann (INHS), Michael Ward (INHS), Brian Wilm (INHS), and Aaron Yetter (INHS), Prairie Research Institute, University of Illinois, Champaign-Urbana, IL., (accessed 11/21/2022).

Extreme Headcutting and Stream Restoration Efforts in South Kickapoo Creek, Poster, 2017, Beardsley John D., Laura Keefer, Illinois State Water Survey, Prairie Research Institute, University of Illinois, Champaign-Urbana, IL.

Stream Assessments in Illinois River Tributaries, Poster, 2007, Revised 2015, White William P., John D. Beardsley, Jon A. Rodsater, Long T. Duong, Illinois State Water Survey, Prairie Research Institute, University of Illinois, Champaign-Urbana, IL.

Hydraulic and Fluvial Morphology Processes, Poster, 2007, Revised 2015, White William P., John D. Beardsley, Jon A. Rodsater, Long T. Duong, Illinois State Water Survey, Prairie Research Institute, University of Illinois, Champaign-Urbana, IL.

Techniques for Stream Restoration, Poster, 2007, Revised 2015, White William P., John D. Beardsley, Jon A. Rodsater, Long T. Duong, Illinois State Water Survey, Prairie Research Institute, University of Illinois, Champaign-Urbana, IL.

Dry Run Creek Review, Unpublished Data Report, 2012, Beardsley John D, Illinois State Water Survey, Champaign, Illinois. Submitted to Peoria Salem Lutheran Church.

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The SWAR program produced videos from 1989 through 2006 for project deliverables, workshops, and outreach by the following contributors who had a roll in the production either as working on manuscript, acquiring media, or posing for scale. Other contributors acknowledge Jon Rodsater for acquiring the bulk of the media.

Primary contributors: John Beardsley, Long Duong, Thomas Hill, Rob Hilsabeck, Jon Rodsater, Don Roseboom, and Rick Twait.

Other contributors: Phil Bradshaw, Diana Day, Linda Dexter, Bob Frazee, Marc Gaboury, Rick Johnson, Laura Keefer, Alan Kirwan, Billy Kocher, John Lesnak, Rod McCoy, Dr. Robert Newbury, Richard Offenback, Steve Pescitelli, Ken Russell, Dan Sallee, Greg Saline, Alton Simms, Robin Sotir, Steve Staats, Randy Stowe, Scott Tomkins, Mike Trigg, Bill White, Steve Wickner, and others.

Agency contributors: Illinois State Water Survey, Illinois Department of Natural Resources, Illinois Environmental Protection Agency, Izaak Walton League Peoria Chapter, U. S. Environmental Protection Agency, U. S. Army Corps of Engineers, Waukegan Park District, and others.

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