

Members and Friends of the Indiana Water Resources Association,

The Indiana Water Resources Association (IWRA) is pleased to announce the following 2019 award winners that were recognized during the 40th Annual Water-Resources Symposium Awards Banquet held at the Hilltop Banquet Center, Oakwood Resort, in Syracuse on June 26, 2019:

William G. Wilber – John S. Zogorski Leadership Award

Ginger Davis; Hamilton County SWCD – 2019 IWRA President

Charles H. Bechert Award

Martin Risch; USGS (Recently Retired Scientist Emeritus), Indiana-Kentucky Water Science Center; IUPUI Dept. of Earth Sciences (Adjunct Instructor) – For his dedicated career of scientific work to significantly advance the understanding of water resources in Indiana.

Outstanding Achievement Awards

Private Sector: Justin Schneider; Indiana Farm Bureau – For his leadership and legislative support of recent water resource efforts in Indiana.

Public Sector: Hamilton County Tourism, Inc. and the City of Indianapolis – For creation of the “White River Vision Plan”.

Student Poster and Oral Presentation Award

Whitney Conard; University of Notre Dame – For her presentation “Effects of Land Use Type on Abundance and Type of Microplastic Pollution – A Contaminant of Emerging Concern in Indiana Rivers?”

The IWRA congratulates these deserving award winners and is proud to honor their achievements. The following are nominations submitted for the award winners and past recipients of each award:

Charles H. Bechert Award

Martin Risch: Martin “Marty” Risch’s dedicated career of scientific work has significantly advanced the understanding of water resources in Indiana and the United States and is most deserving of recognition through this award. Martin has worked as a project chief, section chief, and research hydrologist with the U.S. Geological Survey in Indiana. He led the first Groundwater Protection Program at the Indiana Department of Environmental Management for 7 years before joining the USGS Indianapolis office in 1990. During his early years with USGS, Martin led 11 groundwater and water-quality investigations at 5 military bases in Indiana. His role with that program increased, culminating in his leadership of the USGS agency-wide Department of Defense Earth Science Program from 2006-2014, including a national USGS-DoD technical exchange meeting in Indianapolis.

As a research hydrologist, Martin led several studies that expanded the understanding of the environmental toxin mercury in precipitation, air, reservoirs, and watersheds of Indiana, and established a statewide baseline of information from 1999 to the present. Martin led investigations of mercury in the atmosphere, precipitation, streams, reservoirs, forests, and watersheds of Indiana through multiple networks and regional campaigns. His projects established the primary baseline of mercury information for Indiana, where he served as USGS science advisor to the former Indiana Mercury Work Group. The geographic scope of his mercury research expanded to include the eastern USA, the Great Lakes Region, and the Ohio River Basin. His research about atmospheric deposition of mercury to forests in the eastern USA resulted in multiple scientific publications.

Martin collaborated to evaluate and design an atmospheric mercury monitoring network for the Great Lakes Region that started in 2014. The practical results of his research serve the information needs of other federal agencies, national organizations, and regional planning groups.

He was the chief architect of a volunteer-based national network to sample and analyze litterfall for mercury at MDN sites to investigate the role of plant matter in transporting airborne mercury into soil and water. Integral to these efforts, he created a clean mercury sample processing facility at the USGS Indianapolis office and established links with researchers nationally to collect and submit samples, and analyze and interpret these results, as communicated in several USGS and external publications. He trained staff from other agencies on multiple occasions in proper mercury sampling collection techniques. He continued his mercury research through 2017.

Martin has been very active with the National Atmospheric Deposition Program (NADP) since 2000. NADP is a 40-year old organization that coordinates monitoring networks for mercury and acid rain at some 400 sites in North America, including six sites that Martin managed in Indiana. He helped NADP develop and operate two national networks to measure dry deposition of atmospheric mercury. Martin organized and chaired the NADP international scientific symposium in Indianapolis in 2014 and was executive chairman of the NADP in 2015-2016.

Martin’s work has fundamentally improved the understanding of multiple issues in Indiana’s water resources at several different stages of his scientific career. His work on the hydrology of several Department of Defense sites was instrumental in providing understanding of hydrology, water quality and contaminants that ultimately assisted with transfer of lands from military to beneficial public and private uses and that provided the basis for sound management of lands that

continued in use for military training missions. More recently, his work to characterize groundwater quality in parts of southwestern Indiana potentially affected by hydrocarbon production helped inform public health assessments of the issue by the Centers for Disease Control.

Martin's work on mercury in Indiana precipitation, water and fish fundamentally increased the understanding of its distribution in Indiana and served as the focus of resource management discussions on sources affecting Indiana. His authorship of USGS Professional Paper 1780 titled "Mercury in Indiana Watersheds: Retrospective for 2001–2006" provided the most comprehensive description to date in Indiana of mercury in several environmental compartments—air, water, fish tissue and others. This report and the related data have affected subsequent discussions and planning by state and other agencies. His investigations revealed a potential source of methylmercury in surface-water flow from reservoirs and led to a USGS effort to understand mercury releases from several U.S. Army Corps of Engineers-managed reservoirs in Indiana. Results from that work have affected reservoir management and potential risks to fish consumption. The statewide and national impact of his mercury research was recognized with a U.S. Department of the Interior Superior Service Award in 2009.

As the ecosystems studies section chief in the Indiana-Kentucky Water Science Center from 2012-2015, Martin managed numerous multi-state water-quality investigations and monitoring programs. Martin and his colleagues published an analysis of trends in statewide water quality in Indiana for 2000-2010. Specifically, his role in starting USGS programs in Indiana to foster continuous, real-time monitoring of water-quality parameters has led to enhanced understanding of sediment transport and nitrate runoff and loads in Indiana streams and their relation to land use practices. He helped to develop the USGS partnership in the National Water Quality Initiative long-term project to investigate the effects of conservation farming in the School Branch watershed in central Indiana. (That latter work connects back to Martin's initial work and passion for the natural resources of the Eagle Creek reservoir watershed.) His work and that of his scientific colleagues fostered multiagency collaboration to characterize nutrient and sediment loads in Indiana streams that continues to this day. Behind the scenes, he worked tirelessly to establish processes within USGS that provided publicly accessible high-quality data on Indiana water resources.

Through his career, Martin has been an advocate for scientific communication. He authored over 30 USGS publications and scientific journal papers and presented regularly at state, national, and international scientific conferences. For the past 5 years, he has been an adjunct professor with the Earth Science Department of Indiana University-Purdue University Indianapolis, teaching senior and graduate level courses in ecosystems and hydrogeology and thereby contributing to the next generation of hydrologic science in Indiana. He currently volunteers in his role as a USGS scientist emeritus.

Outstanding Achievement Awards

Justin Schneider (Private Sector): For many of us in water resources our work involves the research or management aspect. It is challenging, interesting, and fun work. For us to be successful we need someone on the legislative side providing the leadership, guidance, and funding to do our work. One person and organization that has shown that leadership is Justin Schneider of the Indiana Farm Bureau. When water availability became an issue a couple years ago after the drought in 2012, the Indiana Chamber of Commerce did an assessment on "Modernizing the State's approach to a critical resource: water". Justin served as an advisor on the committee led by Jack Wittman of Intera. But Justin took the findings from that report and was a primary mover in working with Senator Charbonneau on getting a bill passed to fund the Volunteer Groundwater Monitoring Network which brought our GW monitoring network back to 1990 levels, which will ensure that we have the information to help managers make sound groundwater use decisions.

To add to that success Justin recently worked with Senator Gutwein and other members of the General Assembly to create State funding for the Kankakee River Basin and Yellow River Basin Development Commission (replacing the Kankakee River Basin Commission). This new commission has used a study by Siavash Beik, his team at Christopher Burke Engineering, and Bob Barr at the IUPUI Center of Earth and Environmental Science as a basis for a 40-year work plan to decrease the flooding and sedimentation problem in the Kankakee River Basin, a long-term interstate issue with Illinois. The plan developed by Christopher Burke and IUPUI is a comprehensive plan that focuses on resiliency and mitigation to enhance the natural processes and systems to meet these needs. On the agriculture side, one part of the mitigation is to hold water and sediment on farm fields using Soil Health practices. Another is to use 2-stage ditches to recreate the natural floodplain benefits on ditches and streams. Justin was a primary proponent for these agricultural components but without his leadership and the clout of the Indiana Farm Bureau, this work in the Kankakee River Basin would never have succeeded.

Finally, on a water quality level, Justin has been a primary proponent for researchers to "think like a farmer". What do your results mean to farmers? Can it save them money? Can it improve their yields? Have the years of BMPs implemented shown an improvement. His challenge to us researchers and managers is if we can explain our results in simple, clear language that impresses on the benefits to farmers, we will be that much closer to keeping our nutrients and sediment out of our streams and groundwater.

For these reasons, Justin Schneider and the Indiana Farm Bureau deserve this award.

Hamilton County Tourism, Inc. and the City of Indianapolis (Public Sector): Hamilton County Tourism and the City of Indianapolis coordinated a joint effort to create the White River Vision Plan. The plan is a community-driven plan to enhance 58 miles of the White River in Marion and Hamilton counties. The goal of the vision plan is to create an

accessible, recreational, and cultural environment that encourages a unique sense of place for the community as a whole. What came of the vision plan is a strong emphasis on the resource that is the White River. A draft version of the plan has been created with much momentum behind it. The main vision and principles are to restore and adapt, steward river health, increase year-round activities, draw people to the river, build on the river's story, build economic strength and identity, preserve places for everyone, and honor ownership and land use patterns, while partnering across boundaries. Through these efforts, these public entities have spearheaded interest and initiative towards addressing the White River as a resource, an asset, and to focus efforts on the health and wellbeing of the River. They have brought together many individuals and entities to gather state of knowledge and determine gaps in knowledge. They have culminated much of the community's perspective to gear educational programs and outreach opportunities toward encouraging engagement of the river. This engagement will foster a society with a fondness and respect for the river and will create stewards to help facilitate a long term respect for the resource. For these reasons we believe that Hamilton County Tourism and the City of Indianapolis deserve the IWRA Outstanding Achievement Award in the public sector.

Past Award Recipients:

Charles H. Bechert Award:

1981 Oral Hert
1982 Dan Weirsma
1984 Bill Andrews
1986 Bill Steen
1990 Dennis Stewart
1992 Jacque Delleur
1996 Jim Barnett
1998 John Simpson
2002 Tom Bruns
2004 Mark Reshkin
2006 Charlie Crawford
2007 Judith Beaty
2008 Jim Stewart
2009 Dennis Clark
2010 Jim Gammon
2011 John Craddock
2012 Dick Powell, Noel Krothe
2013 Henk Haitjema
2014 Les Arihood
2015 Greg Olyphant
2016 Manuela Johnson
2017 Dr. William G. Wilbur
2018 Kathleen Fowler

Outstanding Achievement Awards:

Academic Sector:

2009 Lenore Tedesco
2010 Bill Jones
2011 Ron Turco
2012 Alan Johnson
2013 Sara Pryor
2014 Jane Frankenberger
2015 Manchester University Environmental Studies
2016 IUPUI Dept. of Journalism and Public Relation
2017 Bob Barr
2018 Venkatesh Merwade

Private Sector:

2009 Siavash Beik
2010 The Nature Conservancy
2011 Jill Hoffmann & Lyn Crighton
2012 Robert Armstrong
2013 Jack Wittman
2014 Sara Peel
2015 Acres Land Trust
2016 Todd Feenstra

2017 Mike Starkey & Jack Maloney
2018 David Hillman

Public Sector:

2009 Dave Knipe
2010 Rod Renkenberger
2011 IDNR, Division of Water
2012 Johnson Co. WHP/LPT
2013 Sally Letsinger
2014 Bill Guertal
2015 Jane Hardisty
2016 James Sullivan
2017 Shannon Zezula
2018 Indiana Finance Authority

Thanks to all who submitted nominations and congratulations to the 2019 recipients.

Sincerely,

Mark Basch
IWRA Awards Committee