

# The New Wave

## SWS recognizes the next generation of industry leaders

The future of the storm water and erosion control industry is bright, and so are the young professionals behind it. These men and women promise to propel research efforts, technology innovations and sustainable practices, leaving their mark for generations to come. Their impressive resumes and dedication to the industry have earned them recognition in the SWS 10<sup>th</sup> Anniversary Special Edition. Expect to see and hear more from these rising stars in the coming years.



### Andrew Demers

President, StormwaterONE

Andrew Demers is president of StormwaterONE, an occupational trade school. He has dedicated his life to making a positive impact on water quality. His original focus

was in healthcare; however, he made an abrupt change to storm water when his sister, a civil engineer, taught him about the negative impacts associated with runoff.

As an experienced outdoorsman (he has hiked the entire Appalachian Trail and is an avid boater), Demers was moved by the issues associated with storm water and has dedicated his life to delivering the education required to facilitate change.

Demers founded StormwaterUSA in 2007. He purchased the company in 2012 and rebranded it as StormwaterONE. He has developed an intricate network of both human and technical resources to accomplish his mission: "to make a positive numeric impact on water quality over the next 20 years."

marketing from Ferris State University in Big Rapids, Mich. He is involved in many industry organizations, including the International Erosion Control Assn. (IECA) and the Sports Turf Managers Assn., and has more than 10 years of professional memberships in the American Marketing Assn. In December 2014, Dibble received the CESSWI designation.

At his job, Dibble works across all business units. His primary responsibility is with the erosion and vegetative solutions business, emphasizing the creation and implementation of value-added marketing programs.

In addition to marketing initiatives, he is a brand manager responsible for the overall direction and support of the company's erosion control business. His responsibilities include vendor and agency partner management, along with all facets of product lifecycle and new product development.

Dibble has led the launches of numerous industry products, which required working directly with company senior executive staff and managers responsible for market development, technical service, research and development, and sales.



### Adam Dibble, CESSWI

Senior Marketing Manager/Erosion Control Brand Manager, Profile Products

Adam Dibble has been with Profile Products for five years and holds a bachelor's degree in business and



### Jason Dorney, CPESC

Director of Strategies, Weaver Express

Jason Dorney was president of the Mid-Atlantic chapter of IECA in 2014 and 2015. He holds a Bachelor of Science in biology from West Chester University in

Pennsylvania, and obtained his CPESC in 2013.

Dorney takes pride in the growing success of the Mid-Atlantic chapter of IECA, which has increased its membership as well as attendance at its annual chapter conference. The chapter also has added more workshops and road shows, increasing its outreach to engineers, regulatory agencies, contractors and others.

At the 2014 Environmental Connection Conference in Nashville, Tenn., the chapter was awarded the Rick Granard Award of Distinction—the highest honor a chapter can receive—as well as the Chapter Education and Outreach Award and an honorable mention for the Chapter Management and Chapter Development awards.

“Helping to grow the chapter and increase our reach within the erosion and sediment control and storm water industry has been one of my main goals in the past few years,” Dorney said. “By doing so, we are helping to increase awareness and education within our industry, as well as providing great opportunities for professionals to network with each other.”



### **Brad Flack, CPESC, CESSWI**

President, Storm-Tex Services

Brad Flack has been invited to speak on storm water and erosion control issues both nationally and internationally. He has served as the administrative vice president of the South Central Chapter of IECA and will serve as its president in 2015-2016. Flack is the Region 6 Chapter President for EnviroCert Intl., serving all certifications in Texas, Oklahoma, Louisiana, Arkansas and New Mexico. He has served as the Region 7 representative for the CPESC Inc. group and is co-chair for the Education Committee: Stormwater Management Track for IECA Region 1, which encompasses North America,

South America and Europe. He is an IECA Mentor as well as a Texas Commission on Environmental Quality EnviroMentor.

Flack serves as a member of the Policies and Procedures Committee for EnviroCert Intl. He has been involved with storm water quality management since 2004, when he learned about permitting, turf establishment, erosion control and detention pond maintenance.

Flack frequently goes on mission trips through his church to drill for water in rural villages in Honduras. He is the director of Hands and Feet Honduras.



### **Katie Harrel**

Staff Engineer, CWE

Katie Harrel is an engineer with a dedication to the storm water community. In 2012, she was awarded a \$10,000 grant from the Metropolitan Water District World Water Forum to fund a research project involving the design, construction and testing of a subsurface irrigation collection system beneath the lawn of the American Gold Star Manor, a senior housing community in Long Beach, Calif. The project supported Harrel's hypothesis that a system of this kind could reduce potable water use by 15% to 30%.

Harrel's career projects have included contributing to the development of enhanced watershed management programs—an important move for storm water quality protection in Los Angeles County. Her passion for innovation with environmental sensitivity is evident in her contributions to a Torrance, Calif., project that will retain, treat and infiltrate storm water runoff, helping the city comply with total maximum daily load (TMDL) requirements while preserving wetlands, native habitat and local wildlife, and providing open space for residents.



**Ryan Janoch**

Founder, Mapistry

Ryan Janoch is a co-founder of Mapistry, a software company that provides online tools for storm water permit compliance. Prior to Mapistry, he spent 10 years in engineering,

managing storm water programs, evaluating and engineering storm water systems, and providing litigation support. He presents regularly in webinars and at industry meetings and conferences on a variety of storm water topics, from treatment devices to mobile technology. Janoch served as a reviewer for a major technical journal and his articles on storm water have appeared in print and digital media.

At Mapistry, Janoch is developing online tools that integrate mapping with a user-friendly interface to automatically develop SWPPPs. He is a member of the Water Environment Federation's (WEF) national committee on testing and evaluating storm water products and practices. He is a former member of Virginia's Stormwater BMP Clearinghouse Committee and the former chairman of the Stormwater Equipment Manufacturers Assn.'s technical committee, where he led the efforts in drafting two new laboratory protocols for storm water treatment devices for the New Jersey Department of Environmental Protection.



**Tsou Jaw, Ph.D.**

Project Engineer, CWE

Dr. Tsou Jaw is a water resources specialist whose career has focused on hydrologic, hydraulic and water quality modeling for regional storm water and watershed manage-

ment programs throughout Southern California. He has 10 years of experience, the last three of which largely have been spent demonstrating BMP effectiveness through water quality modeling to meet program objectives throughout Los Angeles County. He performed hydrologic and hydraulic analysis for the Los Angeles County Don Wallace Multiuse Trail Connector Project, which will provide water quality enhancement to the region.

Jaw is conducting reasonable assurance analyses for the Dominguez Channel and Rio Hondo/San Gabriel River watersheds to demonstrate that sufficient

and effective approaches are implemented to protect water bodies from pollution. Knowing that simplified model physics could misrepresent real pollution generation and transport procedures, Jaw constructs baseline/proposed scenarios in computer models and other algorithms to reasonably simulate more complicated watershed behaviors in the real world.



**Joe Lewis, P.E., CFM**

Civil Engineer, MS4Front Manager, Houston Eng. Inc.

Throughout his 13-year career in water resources engineering, Joe Lewis has focused on storm water management and integrating geographic

information systems (GIS) technology into traditional engineering. His project experience combats flooding and water quality issues using floodplain management, hydrologic modeling, land development review, municipal separate storm sewer systems (MS4) permit planning, and GIS and terrain analysis. Always looking to integrate GIS and Web technology with engineering, Lewis' vision led to Houston Eng. Inc.'s Web software MS4Front and the Watershed Gateway suite of products.

The suite includes Web and mobile applications, enhanced GIS data products and ArcGIS desktop tools. Lewis also is instrumental in advancing water quality-focused terrain analysis techniques and standards.



**C. Emerson Olander, P.E.**

Project Technical Lead, MWH Global

C. Emerson Olander specializes in the engineering and design of municipal wet infrastructure and is currently involved in large storm water management and combined

sewer separation programs as project technical lead for MWH Global in Boston. He also is a nationally recognized aquatic life support engineer working for public zoos and aquariums.

Olander received his Bachelor of Science in biological and environmental engineering from Cornell University and studied geohydrology and environmental/agricultural economics at the Swedish University of Agricultural Sciences.

Olander was the project manager and civil

discipline lead for three simultaneous infrastructure improvement programs in Cambridge, Mass.: the Alewife Brook Combined Sewer Overflow Control Program; the Agassiz Area 13 Sanitary Sewer Overflow and Flood Relief Program; and the Western Avenue Area Storm Water Management Program. Project work included preparation of a facilities plan for the 113-acre Western neighborhood; six combined sewer separation designs, including an award-winning storm water wetland; and nine construction projects exceeding \$130 million in improvements. These projects achieved total renewal of the public right of way in a complex urban environment within a sensitive framework of stakeholders and regulatory agencies.



**Christopher Olson, P.E.**

Program Manager, Colorado Stormwater Center

Christopher Olson has a Master's of Science in environmental engineering, with a Ph.D. expected in 2015. His career includes service as a university instructor for campus and online courses and work at two consulting firms in Sacramento, Calif.

Olson presently teaches a graduate campus and online course in urban storm water management and certification programs at the Urban Watersheds Research Institute in Denver on modeling, BMP inspection and maintenance, and green infrastructure/low impact development (LID). He is a licensed professional engineer in Colorado.

Olson was selected by Colorado State University as program manager for the Colorado Stormwater Center. He has taught internationally, including in Saudi Arabia. In 2015, Olson was invited to Korea to explain LID at the World Water Forum. He collaborated with East Normal China University and the Shanghai Water Authority on storm water research. Olson is a key storm water scientist with a U.S. Environmental Protection Agency-sponsored nutrient center. He also is involved with the city of Fort Collins' (Colo.) studies on BMP effectiveness. He has developed videos and field manuals for inspection and maintenance of BMPs; QA/QC guidelines for LID practices; and a rain garden field guide for homeowners.



**Andy Potts, P.E., LEED AP, CPESC**

Senior Watershed Services Technologist, CH2M HILL

Andy Potts has more than 15 years of experience in storm water management, green storm water infrastructure,

water resources engineering and planning, and sustainable site design applications. He focuses on urban green infrastructure/LID/sustainable site design and implementation, innovative storm water management, LEED, hydrologic and hydraulic analyses and modeling, site plan reviews, storm water manuals, porous pavement system design, and watershed studies.

Potts was a technical co-author for the Michigan LID Manual, the Pennsylvania Stormwater BMP Manual, and for chapters in the 2014 WEF Green Infrastructure Implementation Manual and forthcoming American Society of Civil Engineers book on permeable pavements.

Potts was a technologist for the Onondaga County (N.Y.) Combined Sewer Overflow Program and Green Infrastructure (GI) Program Implementation. He was the technical co-author of the Lancaster (Pa.) Green Infrastructure Plan and detailed design lead for multiple projects.

After contributing to the storm water master plan for the densely developed University of North Carolina campus, Potts designed a unique storm water system for a \$75 million redevelopment, including a vegetated roof plaza, a 56,000-gal cistern and infiltration beds.

Potts was lead storm water designer for a portion of the Philadelphia Green Infrastructure for Stormwater Volume Control Project, which identified ways to integrate urban storm water management into a private park within a diverse Philadelphia neighborhood through a decorative rain garden, level spreader and cisterns. The design combined multiple storm water, environmental and community greening goals. He is currently serving as project manager and senior technologist for projects under the GI Planning and Conceptual Design contract, which has identified more than \$25 million in potential regional and local GI projects.

As senior engineer for the East Liberty Green Infrastructure Study and Design in Pittsburgh, Potts conducted a detailed evaluation of applicable storm water

techniques and their effects on combined sewer overflows in the East Liberty neighborhood. He developed conceptual storm water designs for potential demonstration projects, which led to detailed design and construction support for the East Liberty Presbyterian Church greening project, completed in 2014.



### Carrie Powers, CPESC, CMS4S

Founder, CP Compliance

Carrie Powers has worked in storm water management since 2004. She began her career as an erosion and sediment control inspector and started a consulting firm, CP Compliance.

In addition to providing MS4 compliance consulting services to local governmental entities, Powers manages the storm water program for the city of Glendale, Colo. As an active member of the Colorado Stormwater Council (CSC) Permit Compliance Committee, she helped develop program audit guidance, serves as a liaison between CSC and the Colorado Department of Public Health and Environment on defining and determining compliance, and researches and tracks the impact of other state and national regulatory activities on MS4 permits in Colorado.

Powers manages the Arapahoe County Stormwater Permittees for Local Awareness of Stream Health Group and has won the Cherry Creek Stewardship Partners "Educator of the Year" award for her storm water education efforts. She holds a bachelor's degree in geography from the University of Colorado, Boulder.



### Cindy Rivers

Senior Environmental Scientist, CWE

Cindy Rivers specializes in storm water quality source control BMPs. Her hands-on approach has allowed her to successfully manage and perform hundreds of compliance inspections for various municipalities. Her cultural sensibilities and multilingual talent have enabled her to conduct effective community outreach, educating the public about the importance of BMPs and the consequences of human activity without

implementing the proper BMPs. Rivers is passionate about public outreach as a fundamental way to improve storm water quality.

Rivers is a versatile storm water professional who directly impacts water quality projects from planning through implementation. She is developing enhanced watershed management programs, which are creating the framework for storm water quality protection in Los Angeles County, as well as coordinated integrated monitoring programs, which evaluate MS4 effects to receiving waters during wet- and dry-weather conditions. She performs field sampling in flood control channels, storm drain outfalls and lakes, and manages data for multiple sampling programs.



### Ali Zahraei, Ph.D.

Project Engineer, CWE

The effects of water pollutants on habitats compelled Dr. Ali Zahraei to pursue a career in storm water management. As a post-doctoral fellow at the National Oceanic and Atmospheric Administration's Cooperative Remote Sensing Science and Technology Center, he developed advanced severe storm forecasting models, which involved developing the Flood Vulnerability Index, Application for Extreme Rainfalls and a Flood Vulnerability Map, as well as risk assessment of urban storm water management using digital elevation maps. Zahraei currently works for CWE, a consulting firm, where he performs BMP effectiveness modeling for watershed management groups in Los Angeles County.

Zahraei's most significant recent accomplishments have revolved around the Los Angeles County MS4 NPDES Permit. He is conducting storm water reasonable assurance analyses, water quality modeling, potential risk analysis associated with storm water quality projects, and BMP project prioritization and selection within Los Angeles County's Dominguez Channel and Rio Hondo/San Gabriel River watersheds. These analyses and planning efforts will help permittees comply with federal and state TMDLs, and ultimately improve residents' health and quality of life. **SWS**

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*The individuals recognized in this section are listed in no particular order and were nominated by various organizations and peers.*