



2021 WEST MICHIGAN GREEN STORMWATER INFRASTRUCTURE SEMINAR

PRESENTATION DESCRIPTIONS

Incorporating Green Infrastructure in Place Based Real Estate Development

Dana Kollewehr, EDFP, Community Assistance Specialist, Michigan Economic Development Corporation

This session will provide attendees with ways communities can set the stage for and encourage green infrastructure in private development and share examples of redevelopment projects supported by State incentive programs.

Cracking the Code: Using PACE to Finance Green Stormwater Infrastructure

Nathan Griswold, GRP, ASLA, CNSP, President, Inhabitect, LLC

Inhabitect, LLC has successfully utilized PACE financing to fund green stormwater infrastructure projects. Nathan Griswold will provide a snapshot of two projects, in Wayne County and Grand Traverse County, and highlight some of the exciting opportunities that this funding mechanism offers.

Vital Streets: Incorporating Green Infrastructure into Complete Streets

Carrie Rivette, P.E. Wastewater/Stormwater Maintenance Superintendent, City of Grand Rapids

Learn about the process that led the City of Grand Rapids to getting an income tax for Vital Streets and then how the City departments worked together to develop a toolkit that incorporates Low Impact Development into street reconstruction.

'Shed Talks

Wendy Ogilvie, Director of Environmental Programs, Grand Valley Metro Council

Cheryl Vosburg, Executive Director, Kalamazoo River Watershed Council

Kelly Goward, Environmental Program Manager, Macatawa Area Coordinating Council

Hear from local watershed experts about what's happening in our area watersheds. Each will share information about current projects, future plans and how you can get involved.

Activity Rotation Stations

Wendy Ogilvie, Grand Valley Metro Council

Kyle Hart, Education Coordinator, West Michigan Environmental Action Council

Lexie Kasper, Administrative Specialist, Ottawa Conservation District

Local organizations will lead interactive games and demonstrations about watersheds and green infrastructure. Participants will divide into 3 groups and rotate through each station every 10 minutes.

Rainscaping for Businesses: Using Nature as an Asset

Shany Viars, Economic and Policy Research Associate, American Rivers

Rainscaping is a method that promotes the use of nature to restore our rivers and improve water quality. Rainscaping for Businesses aims to connect business owners, neighborhood organizations, faith-based places, and other property owners to resources that reduce harmful pollutants, minimize impacts to our waterways and foster climate-resilient neighborhoods. This presentation will give an update on the program as we learn more about the priorities from business owners and others in our community. We strive to advocate in partnership for equitable and inclusive participation and developed materials reflecting the diversity in culture and visions in our community.

Macatawa Rainscaping

Kelly Goward, Macatawa Area Coordinating Council

The MACC and local partners recently launched a Macatawa Rainscaping program modeled off of LGROW's Grand River Rainscaping. This presentation will provide a brief overview of the program in the Macatawa Watershed, what has been accomplished so far and future plans for the program.

Using Interactive Digital Storytelling to Engage Stakeholders in Green Stormwater Infrastructure Planning

Donald D. Carpenter, PhD, PE, LEED AP, Drummond Carpenter, PLLC

This project assesses opportunities for integrating green stormwater infrastructure (GSI) within existing infrastructure in three coastal communities in the Lake Charlevoix watershed. Lake Charlevoix (Michigan, USA) is 17,200-acre lake with approximately 56 miles of shoreline that is connected via a navigable channel to Lake Michigan. These communities were historically industrial trading centers that are evolving into seasonal tourist destinations. GSI uses infiltration based systems to mimic natural hydrology and can extend the life of aging gray infrastructure, improve water quality by enhancing treatment of stormwater before being discharged into nearby surface waters, and promote resiliency in a coastal environment being impacted by climate change. This project brought GSI experts, watershed council leaders, coastal zone management authorities, local public works staff, elected officials, and community members together to discuss the value of GSI and identify priority locations for future implementation. This presentation will also highlight how this GSI planning project was modified because of CoVID-19 health concerns. What was originally devised as a series of in-person community design visioning sessions was transformed into a virtual engagement platform using interactive digital storytelling (ArcGIS StoryMap platform) complete with embedded videos, maps, renderings, resources, and community polling. As this project demonstrates, online interactive storytelling can be effective at community engagement across a wide range of topics regardless of whether a human health crisis exists. The final product of this project was community specific GSI assessment and suitability plans. These plans will guide future water quality protection efforts and position the communities to move forward with coastal resiliency efforts for the benefit of the watershed.



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SPEAKER BIOGRAPHIES

Donald D. Carpenter, PhD, P.E., LEED AP, Drummond Carpenter, PLLC

Donald D. Carpenter, PhD, PE, LEED AP is Vice President of Drummond Carpenter, PLLC and a Professor of Practice at Lawrence Technological University in Southfield MI. He is an accredited green design professional (LEED AP) and practicing professional engineer (PE) whose expertise includes green stormwater infrastructure (GSI), stormwater management, hydrologic modeling and design, and field data collection. Dr. Carpenter has 25 years' experience working with diverse clients across the United States as a researcher and practicing professional. As a National Charrette Institute certified community engagement specialist, he has extensive experience in community engagement and planning. His efforts have facilitated community implementation of stormwater master plans and the development of community socio-economic sustainability plans. As founding Director of the Great Lakes Stormwater Management Institute at Lawrence Technological University, he conducts research on innovative infiltration-based stormwater practices and advises communities on how to implement GSI. Finally, Dr. Carpenter is an active board member on several educational and non-profit boards and serves on the Board of External Reviewers to advise the State of Washington Department of Ecology on stormwater treatment technologies.

Kelly Goward, Environmental Program Manager, Macatawa Area Coordinating Council

Kelly Goward is the Environmental Program Manager at the Macatawa Area Coordinating Council (MACC). She has been with the MACC since August 2012, working with local stakeholders to improve the water quality of Lake Macatawa and the overall health of the Macatawa Watershed. Her work focuses on providing MS4 permit compliance assistance, securing grants for on-the-ground restoration and conducting public education and outreach. Kelly holds a B.S. in Biology from Grand Valley State University and a M.S. in Natural Resources and Environmental Management from Ball State University.

Nathan Griswold, GRP, ASLA, CNSP, President, Inhabitect, LLC

Nathan has worked at the forefront of the green infrastructure industry for 18-years. He has played critical roles in the design, development, sale, construction and successful establishment of nearly 1,000 green roofs across North America. He is one of the first individuals to receive Green Roof Professional (GRP) accreditation from Green Roofs for Health Cities (GRHC) and was selected as the industries North American Policy Educator where he helped guide and implement the organization's efforts to advance green roof technology and educate design professionals and policymakers on all forms of green infrastructure. Nathan has developed a system to assist clients with the funding of their roofing/waterproofing and green infrastructure through C-PACE financing. He launched Inhabitect, LLC to serve as an independent and all-inclusive resource for designing, building and growing living architecture, green stormwater infrastructure, and natural shorelines that are functional, beautiful, affordable, and approachable. He earned an associate's degree in plant science from Northwest Michigan College. He also holds a bachelor's degree in landscape architecture (ASLA), a RISE

environmental specialization, and a certificate in landscape and nursery development from Michigan State University.

Kyle Hart, Education Coordinator, West Michigan Environmental Action Council

Kyle Hart is the Education Coordinator for the West Michigan Environmental Action Council (WMEAC). He has been supporting WMEAC's education programs since 2018 after graduating from GVSU with a B.S. in Natural Resources Management and a minor in Geology. Kyle manages a variety of projects for WMEAC including K-8 watershed education, the zero waste collaborative with Kent County Department of Public Works, and the annual Mayors' Grand River Cleanup. He has a special interest in stormwater management and holds his National Green Infrastructure Certification as well as a certification in Geographic Information Systems (GIS) from GVSU. He enjoys putting both of those skills together and educating others about our water resources in West Michigan via maps and online tools.

Dana Kollewehr, EDFP, Community Assistance Specialist, Michigan Economic Development Council

Dana Kollewehr is the Community Assistance Team (CATeam) Specialist for Kent, Muskegon and Ottawa Counties at the Michigan Economic Development Corporation (MEDC). Kollewehr assists with the planning and financing of mixed-use real estate development in traditional downtowns and connects municipalities, business owners and developers to state and federal funding programs. Prior to this role, Kollewehr has served in various place-based economic development positions at the local, regional and State level. In her roles she has been instrumental in developing and shaping downtown revitalization programs, managing historic downtown districts and leading projects and initiatives that have resulted in substantial new investment and place-based businesses. Dana resides in West Olive, Michigan with her husband Ben and enjoys mountain biking, camping, kayaking and exploring area trails in her spare time.

Wendy Ogilvie, Director of Environmental Programs, Grand Valley Metro Council

Wendy joined the Grand Valley Metro Council in 2013 as the Director of Environmental Programs, bringing her expertise of over 25 years in watershed and stormwater management. Her work focuses on convening and developing partnerships to build capacity in addressing environmental issues. She is a Green Infrastructure Professional and Certified Trainer through the National Green Infrastructure Certification Program. She coordinates the work of the Lower Grand River Organization of Watersheds, an agency of GVMC, in protecting and restoring the water resources within the watershed. Originally from Maryland, Wendy came to Michigan to earn a B.S. in Forestry from the University of Michigan and a M.S. in Resource Development from Michigan State University.

Carrie Rivette, P.E., Wastewater/Stormwater Maintenance Superintendent, City of Grand Rapids

Carrie Rivette is a Professional Engineer with a Bachelor of Science in Environmental Engineering from Michigan Technological University and has over 25 years of experience in the environmental and water resources field. She serves as Stormwater Superintendent for the City of Grand Rapids and has been on the West Michigan Soil Erosion Control Network and Lower Grand River Organization of Watersheds boards for the past 8 years

Shanyn Viars, Economic and Policy Research Associate, American Rivers

Shanyn joined American Rivers in 2018 with a background in economic analysis, urban planning, sustainability, and data management. As an economist, Shanyn works on assisting municipalities and communities on alternative funding and financing mechanisms for sustainable water management. Shanyn earned both a B.S. and M.S. in Economics with a concentration in Urban Policy from the Belk College of Business at UNC-Charlotte. Shanyn also taught Economics at Grand Valley State University (2019).

Cheryl Vosburg, Executive Director, Kalamazoo River Watershed Council

Cheryl Vosburg is the Executive Director of the Kalamazoo River Watershed Council. She earned a bachelor's degree in Biology/Chemistry from Western Michigan University. She is also a Michigan State University Extension Master Gardener. Cheryl has worked, protecting water resources, in the Kalamazoo River Watershed and beyond for 30+ years. She has experience working on a multitude of projects in the watershed including water quality monitoring, data analysis, watershed management and planning, community engagement, etc. She's also worked on invasive species management projects, design of stormwater best management practices, and coordinated many watershed-wide education/recreation events.