8th Annual NJ Watershed *Conference*

Resiliency Through Restoration

February 20 & 21, 2025

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

75 Years The Watershed Institute

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ABOUT THE CONFERENCE

New Jersey continues to face significant environmental challenges and the water-related impacts of climate change, including catastrophic flooding and lakes rendered unusable by harmful algal blooms, threatening public health, natural resources, and local infrastructure.

This year, the 8th New Jersey Watershed Conference, hosted by The Watershed Institute in partnership with NJDEP, will share practical strategies and valuable knowledge to address the challenges posed by climate change and environmental hazards across communities. By bringing together municipal and county leaders, environmental advocates, businesses, nonprofit organizations, and community members, we will work together to strengthen resilience and restore the environmental functions of our watersheds.

Log in to the Conference Zoom Events to access resources, recordings, and more.

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WELCOME

The Watershed Institute is delighted to bring this year's conference back to The College of New Jersey, and we're excited to gather with such an inspiring group of speakers and attendees. Your dedication to protecting and restoring our watersheds is what makes this event so impactful.

The theme of this year's conference—**Resiliency Through Restoration**—is more important than ever. We can no longer be satisfied with simply preventing further harm. Instead, we must take action to restore and repair the damage caused by past planning decisions, incomplete data, and changing environmental conditions. Now that we have a deeper understanding of the impacts of climate change, we have both the knowledge and the responsibility to do better.

We are honored to work alongside so many dedicated professionals. The strength of our field is reflected in the distinguished leaders from federal, state, and local government, regional commissions, academia, nonprofits, and environmental consulting who are joining us at this year's conference.

The challenges we face—water pollution, flooding, and drought—do not adhere to municipal or county boundaries. Addressing them effectively requires collaboration and regional planning. By coming together, sharing knowledge, and committing to action, we can restore the health of our watersheds and build a more resilient future for our communities.

Thank you for joining us! We look forward to a day of learning, discussion, and collaboration.

Jim Waltman
Executive Director
The Watershed Institute

Thank you to our Watershed Warrior!

TCNJ THE COLLEGE OF NEW JERSEY

GUEST WI-FI

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Conference Tracks

The conference sessions will be organized by 4 distinct tracks since efforts to improve resiliency in NJ will require interdisciplinary collaboration between a variety of professionals and expertise.

Stewardship

Planning Resiliency

Teaching Resiliency

Building Resiliency

AGENDA DESCRIPTIONS

February 20 (Virtual)

Welcome & Land Acknowledgement (9:15 a.m. - 9:30 a.m.)

- **Jim Waltman**, ***Executive Director, The Watershed Institute***

Cosilience - A Multi-Disciplinary Approach for Holistically Improving Watersheds by Improving Cattle Ranch Performance (9:30 a.m. - 10:30 a.m.)

- **Allen Williams, Ph.D.** | *Farmer and Research Scientist, Understanding Agriculture LLC and Regenified LLC*
- **David Johnson, Ph.D.** | *Research Scientist, Molecular Biologist, David C. Johnson LLC.*
- **Michael J. McGraw, CSE, QAWB, ACE** | *Senior Project Manager, Regulatory Compliance and Wildlife Surveys; Senior Wildlife Biologist, Princeton Hydro*
- **Lucia Middleton (Moderator)** | *Community Water Advocate, The Watershed Institute*

This session will discuss methods that have the potential to position two seemingly unrelated parties (conservation biologists and cattle ranchers) in using cattle-managed upland working lands to address watershed issues, while promoting secondary ecological benefits. This conversation will include snippets from the "Roots So Deep" documentary, which follows scientists from all over the USA studying the impacts of grazing practices, primarily on Southeastern U.S. upland landscapes. Data from 13 peer-reviewed publications will be highlighted, focusing on water quality and increasing resilience in working landscapes.

Role of Stormwater Retrofits in a Changing Climate (10:45 a.m. - 12:00 p.m.)

- **Chris Sotiro** | *Policy and Program Coordinator, NJ Future*
- **Clay H. Emerson, Ph.D. PE CFM** | *Senior Technical Director, Engineering, Princeton Hydro*
- **Erin Bennett** | *Proposal and Marketing Manager, Princeton Hydro*
- **Michael L. Pisauro, Esq (Moderator)** | *Policy Director, The Watershed Institute*

Stormwater Best Management Practices (BMPs), including detention basins, infiltration basins, bioswales, and rain gardens, are implemented to manage stormwater and improve water quality. Often seen in NJ, these stormwater features are outdated or underperforming due to the increase in rainfall caused by climate change. To fill these gaps and address the need for climate-resilient infrastructure, NJ Future partnered with Princeton Hydro to create the "NJ Stormwater Retrofit Best Management Practices Guide". This guide provides stakeholders with the tools to identify opportunities to retrofit existing and new stormwater BMPs in built-out environments. This session will cover the new guide and reflect on case study projects that demonstrate the key outcomes achieved.
Link to Guide: https://gitoolkit.njfuture.org/retrofit-guide/

Credits: PE, CFM (applied for)

Funding Opportunities for Resiliency and Restoration Work (1:00 p.m. - 2:15 a.m.)

- **Kathryn Fisher** | *Campaigns Manager, NJ League of Conservation Voters*
- **Lee Clark, MABC** | *Funding Navigator Program, Program Manager, New Jersey Future*
- **Patricia Lindsay-Harvey** | *Chair of Willingboro Environmental Commission, Member of Jersey Water Works Steering Committee*

Stormwater runoff creates significant problems across New Jersey, and overburdened communities are especially vulnerable to these issues. Increased flooding causes billions of dollars in damage, pollutes waterways, damages property, and even risks lives.

Investing in both gray and green infrastructure can solve many of our stormwater runoff problems, and there are different ways to pay for solutions. One dedicated funding source for stormwater problems is a stormwater utility, which is widely considered the most equitable way of funding stormwater improvements.

We will cover how stormwater utilities can directly fund new infrastructure and maintain existing infrastructure. We will also cover NJ Future's Funding Navigator Program, which is a program that connects communities, municipalities, and water systems with the state and federal funding and support they need. This session will cover local, state, and federal funding opportunities for stormwater improvements to address flooding, water quality, and other stormwater issues.

Planning for Resilient Watersheds: Vision, Management & Implementation (2:30 p.m. - 3:45 p.m.)

- **Laura Gould** | *Watershed Resilience Planner, Musconetcong Watershed Association*
- **Christa Reeves CWD** | *Water Quality Program Manager, Musconetcong Watershed Association*
- **Ellen Haggerty PE** | *Watershed Restoration Manager, Musconetcong Watershed Association*
- **Tom Dallessio, FAICP, PP, CPM, FRSA** | *Executive Director, Musconetcong Watershed Association*

Watershed planning comes in many forms, from high elevation examinations of long-term goals to detailed specifics regarding a particular area that affects a river or other water body. This session seeks to take a holistic look at how to effectively plan for watershed resilience, including visioning, management and implementation. "Resilient Musconetcong: A Comprehensive Vision Plan for the Musconetcong Watershed" is New Jersey's first watershed vision plan and provides a lesson on how to improve watershed management in the 21st century. Speakers will share the key aspects of the plan, talk about how to apply the vision plan to 319 Watershed Management Plans and how to implement the vision and 319 plans through restoration projects. This presentation directly ties into the theme of resilience through restoration in several keyways: Ecosystem Restoration, Water Quality Improvement, Flood Mitigation, Climate Change Adaptation and Community Engagement.

A key takeaway for the audience is understanding how these various planning efforts can work together in a cohesive way, understanding the ways that a vision plan guides a more targeted 319 plan, and how those efforts impact targeted restoration efforts all magnifying down on one river.

AGENDA DESCRIPTIONS

February 21 (Virtual and In-person)

Welcome & Land Acknowledgement (9:00 a.m. - 9:15 a.m.) ROOM 100

Jim Waltman, ***Executive Director, The Watershed Institute***

Conference Plenary (9:15 a.m. - 10:30 a.m.) ROOM 100

Panel of NJDEP Leaders

Jennifer Moriarty | *Assistant Commissioner, Watershed and Land Management*

Nicholas Angarone | *Chief Resilience Officer, Office of Climate Resilience*

Patricia Ingelido | *Director, Division of Water Supply & Geoscience, Water Resource Management*

Martha Sullivan Sapp | *Director, NJDEP Green Acres Program*

Katrina Angarone (Moderator) | *Chief Strategy Officer, Commissioner's Office*

As New Jersey continues to experience extreme weather events, increasing the resilience and restoration of our natural resources is a priority. How are the various programs and departments in New Jersey working together to help communities be more resilient?

Credits: CLE, Planner (applied for)

Katrina Angarone,
Chief Strategy Officer, Commissioner's Office

Jennifer Moriarty,
Assistant Commissioner, Watershed and Land Management

Nicholas Angarone,
Chief Resilience Officer, Office of Climate Resilience

Patricia Ingelido
Director, Division of Water Supply & Geoscience, Water Resource Management

Martha Sullivan Sapp,
Director, NJDEP Green Acres Program

AGENDA DESCRIPTIONS

February 21 (Virtual and In-person)

SESSIONS BLOCK 1 (10:45 A.M. - 12:00 P.M.)

On the Hook for Maintenance: Creating Successful Plant Establishment in Rain Gardens Through Targeted Specification Revisions and Updates to Standard Operating Procedures - ROOM 104

- **Sarah Bray** | *Senior Construction Manager, Office of Sustainability, NYC Department of Environmental Protection*
- **Kory Dudash (Moderator)** | *Conservation & Sustainability Director, The Watershed Institute*

Establishing vegetation in right-of-way (ROW) rain gardens in New York City is incredibly challenging. Survivability is tied not only to proper installation, but also proper care during establishment. So how do you provide incentive to contractors to care for new plants while they establish, rather than reinforcing the bad behavior of installing the plants and walking away? As the number of rain gardens has exploded throughout NYC to 7,500 citywide, over the last 11 years, finding a solution to this question was imperative to the success of the Green Infrastructure (GI) Stormwater Management Program. This presentation will provide an in-depth review of the initial specifications and compare them to the specifications being used today. We will discuss the integral shift of language in the specifications away from build-accept-replace-walk-away, to an adaptive management establishment period requiring contractors to care for installed vegetation through final acceptance.

Credits: PE, CFM (applied for)

The 3 Rs: Watershed Work in NJ's Professional Academies - ROOM 225E

- **Laurie Ferreras** | *2025 Graduate, Rutgers University Master of Landscape Architecture Program, School of Environmental and Biological Sciences, Rutgers University*
- **Manushi Patel** | *2023 NJIT Graduate, Master of Science in Architecture Program, Architectural Designer, STV Inc.*
- **Tom Dallessio, FAICP, PP, CPM, FRSA** | *Executive Director, Musconetcong Watershed Association*
- **Susan Bristol, AICP/PP, AIA Emeritus, LEED AP (Speaker & Moderator)** | *Municipal Policy Specialist, The Watershed Institute*

Planning and design professionals are a critical part of the interdisciplinary work required to improve resilience in NJ communities. NJ's professional academies are not under one roof or on one campus but complement each other's approaches and often overlap in their pedagogical practices. The education of tomorrow's Architects, Landscape Architects and Planners is especially important to Watershed Work in NJ. Academic projects that emphasize the improvement of watersheds include redevelopment opportunities that practice 'unbuilding' past development, the restoration of natural systems and resilient design. The faculty on this panel are practitioners who have experienced the need for this watershed-based teaching and NJ's potential to improve resilience through restoration. Our students provide the vision and creativity needed to project the future. Empowering students to use "blue sky" thinking and experiment with "what if" scenarios can often result in recommendations that government officials have never considered and can provide important lessons on resiliency for professionals in the field.

Credits: Planner (applied for)

Climate Change Education K-12 in NJ - ROOM 224

- **Lauren Madden, Ph.D.** | *Professor of Elementary Science Education & Coordinator of the Environmental Sustainability Education Minor, The College of NJ*
- **Marissa Staffen** | *County 4-H Agent, Department of 4-H Youth Development, Rutgers Cooperative Extension of Essex County*
- **Matthew Newman** | *County 4-H Agent, Department of 4-H Youth Development, Rutgers Cooperative Extension of Monmouth County*
- **Pat Heaney (Moderator)** | *Assistant Director of Education, The Watershed Institute*

This session will provide an overview and update on climate change education in New Jersey. Data sources include: observation notes and interviews from 51 classrooms across the state, and evaluation efforts from the statewide network of Climate Change Learning Collaboratives (CCLCs). Findings on progress since the launch of NJ's comprehensive learning standards addressing climate change will be shared, and recommendations will be made for schools, school systems, and informal learning centers.

Creating Flood Resilient Landscapes in NJ - ROOM 225W

- **Brooke Maslo, Ph.D.** | *Associate Professor, Department of Ecology, Evolution, and Natural Resources, Rutgers University & Extension Specialist in Wildlife Ecology, Rutgers Cooperative Extension*
- **Thomas Flynn** | *Environmental Specialist, Floodplain Administrator, FEMA-CRS Coordinator, Township of Woodbridge, NJ*
- **Brian Friedlich, PE (Speaker and Moderator)** | *Managing Engineer, One Water Consulting, LLC*

Over the last several decades and particularly after Superstorm Sandy, New Jersey has become a leader in efforts to increase the resiliency of flood-prone areas. The panel presentation will be focused on efforts to build resilient landscapes through the acquisition and transformation of flood-prone properties through the Blue Acres Program and other buyout initiatives. Brooke Maslo, Ph.D. will first present on the use of an ecologically centered landscape resilience approach that combines principles of engineering, ecology, and landscape architecture with social science to transform acquired properties into public assets. The strategies discussed will be based on Dr. Maslo's recent publication titled "Creating Flood-Resilient Landscapes: A Primer for New Jersey Communities". The primer was developed by an interdisciplinary group from Rutgers University and South Dakota State University researchers. Brian Friedlich, P.E. will then present on engineering design strategies that blend the natural ecosystem with hydrologic and hydraulic design goals. Strategies will include green infrastructure, natural structures for hydraulic control, wetland enhancement/creation, and bioengineering techniques. The session will directly engage with the audience through a panel discussion and Q&A session.

Credits: PE, CFM (applied for), Planner (applied for)

SESSIONS BLOCK 2 (1:15 P.M. - 2:30 P.M.)

From an Abandoned Rubble Fill to a Wetland – Resilience and Restoration at Teaneck Creek Park - ROOM 104

- **Adam Strobel, PMP** | *Division Director of Land Management, Bergen County Parks*
- **Joseph Berg** | *Senior Ecologist, Biohabitats*
- **Kathleen Farley, Ph.D.** | *Executive Director, Teaneck Creek Conservancy*
- **Steve Tuorto, Ph.D. (Moderator)** | *Director of Science & Stewardship, The Watershed Institute*

Teaneck Creek Park is a low-lying site in Teaneck, NJ that was originally planned to be a landfill and was later used as a rubble fill and receives uncontrolled stormwater discharge from surrounding development. This project transformed the site into functioning wetland complexes to manage stormwater, improve habitat, and connect the community to nature. An innovative stormwater BMP, "Regenerative Stormwater Conveyance" (RSC), was used to repair eroded outfalls and convey stormwater to low-lying areas. In these areas, rubble-filled surface soils dominated by *Phragmites australis* were excavated to create 20 acres of sand seepage wetlands. The system uses urban stormwater to support wetland hydrology, storing runoff in shallow pools before filtering it through vegetated berms on its way to Teaneck Creek. This nature-based approach mitigates flooding, improves water quality, and enhances habitat. The presentation covers three project elements: partnerships and funding; technical approach and construction; and community engagement, stewardship, and monitoring.

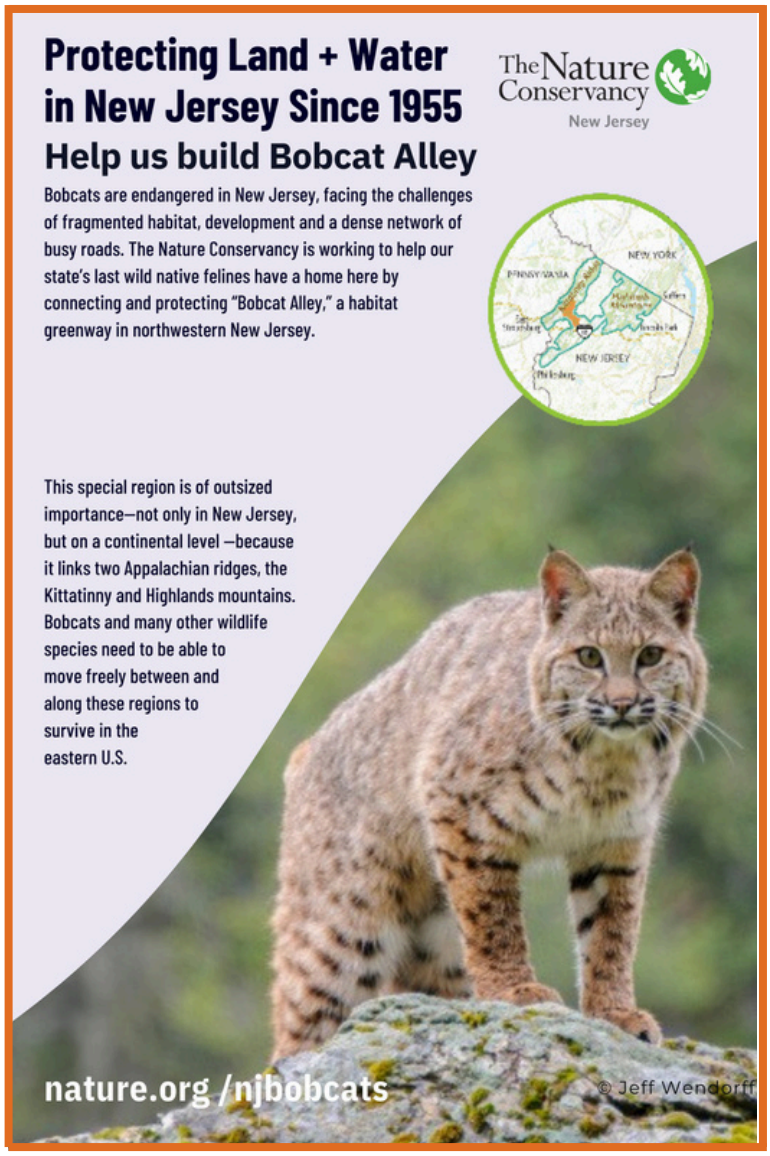
Credits: PE, CFM (applied for)

Watershed Plans as a Roadmap for Protection - ROOM 225E

- **Christopher C. Obropta, Ph.D., PE** | *Director of the NJ Water Resources Institute, Extension Specialist in Water Resources, Rutgers Cooperative Extension, & Professor, Department of Environmental Sciences at the School of Environmental and Biological Sciences, Rutgers University*
- **Kathy Hale** | *Principal Watershed Protection Specialist, NJ Water Supply Authority*
- **Kristi MacDonald, Ph.D** | *Director of Science, Raritan Headwaters Association*
- **Kelley Curran (Moderator)** | *Science Manager, New Jersey Highlands Council Water Protection and Planning Council*

Watershed Restoration and Protection Plans (WRPPs) are a proven framework for planning regional and local measures to capture and treat stormwater runoff. A large-scale watershed planning effort is underway in NJ's Highlands Region (source of drinking water for over 6.2 millions of NJ's residents). The Budd Lake WRPP was approved by NJDEP earlier in 2024 and The Spruce Run/Mulhockaway Creek WRPP will be submitted in late 2024. Based on the success of these WRPPs, a partnership was formed among the NJ Highlands Council, Rutgers Cooperative Extension, NJ Water Supply Authority, Raritan Headwaters, and 21 municipalities in the Highlands to develop WRPPs for most of the Highlands watersheds within the Raritan Basin. Panelists will provide an overview and share lessons learned from WRPP development and implementation. They will highlight the importance of considering climate change scenarios, stakeholder engagement, and involvement in plan development, alignment of WRPPs with municipal MS4 permits and Watershed Improvement Plans, climate vulnerability assessments, and the challenges and opportunities for WRPP implementation.

Credits: PE, CFM (applied for), Planner (applied for)



Empowering Students to be Local Stewards - ROOM 224

- **Jeff Mrozack** | *8th Grade Environmental Science Teacher, Unity Charter School*
- **Jennifer Carcich** | *Educator, Sustainability Coordinator and the Director of Learning Acceleration, Unity Charter School*
- **Davis Bush** | *StreamWatch Schools Coordinator, The Watershed Institute*
- **Jeff Hoagland (Moderator)** | *Education Director, The Watershed Institute*

Our youth are becoming increasingly interested in addressing climate and other environmental impacts, stepping up as advocates and local leaders. Jeff Mrozak and Jennifer Carcich of Unity Charter School will present on empowering students to engage as community scientists, exploring their local environment through hands-on field experiences, data collection, and learning how to collaborate with local stakeholders. Davis Bush will discuss how The Watershed Institute offers professional development programs such as the StreamWatch School and RIDER Select programs to local teachers. These programs support teachers in implementing conservation efforts in their classrooms by analyzing and interpreting data, connecting students to waterways, and understanding the links between climate change and environmental issues.

Assesing Climate Vulnerabilites of Natural Resources - ROOM 225W

- **Jaclyn Rhoads, Ph.D.** | *Executive Director, Pinelands Preservation Alliance*
- **Tanya Rohrbach, CFM** | *Program Manager of Policy and Planning, Sustainable Jersey*
- **Thomas Flynn** | *Environmental Specialist, Floodplain Administrator, FEMA-CRS Coordinator, Township of Woodbridge, NJ*
- **Sophie Glovier (Moderator)** | *Chief of Strategy and Program, The Watershed Institute*

Not only is NJ's population of 9+ million at risk from climate hazards, so are the millions of acres of the state's forests, wetlands, waterways, and other natural features. While policies and projects to assess and address climate impacts to people and the built environment are gaining momentum at all levels of government, vulnerabilities of natural features to climate change are not always at the forefront of climate adaptation planning and implementation. But there are things municipalities can and must do right now to strengthen natural ecosystems in the face of climate change. A first step is to understand and assess the challenges. This session will describe how to assess and translate environmental resilience so that towns take measurable actions to reduce climate vulnerabilities to the natural environment, thereby strengthening ecosystem services. It will feature presentations about activities currently underway at the local level.

Credits: Planner (applied for)

SESSIONS BLOCK 3 (2:45 P.M. - 4:00 P.M.)

Coastal Marsh Restoration - ROOM 104

- **Danielle McCulloch** | *Fish and Wildlife Biologist, Delaware Bay Coastal Program, U.S. Fish and Wildlife Service*
- **Carl Anderson** | *Restoration Ecologist, Marine Resources Specialist, NOAA Fisheries Office of Habitat Conservation, JJ Howard Marine Science Lab - Sandy Hook, National Oceanic and Atmospheric Administration*
- **Joshua Moody, Ph.D.** | *Coastal Wetland and Restoration Research Scientist, Division of Science and Research, NJDEP*
- **Tim Dillingham (Moderator)** | *Executive Director, American Littoral Society*

Coastal Marshes provide NJ's communities with significant benefits from their ability to absorb storm surges to acting as safe nurseries to many aquatic species that are important to commercial and recreational fisheries, to eco-tourism. Many of NJ's coastal marshes are degraded and under continued threat. Restoring these vital resources will strengthen the resilience of our communities, reduce flooding, improve habitat for aquatic life and economic opportunities. Learn more about the process and requirements to restore coastal marshes.

Credits: PE, CFM (applied for)

Case Study on Regional Approaches in the Stony Brook Watershed - - ROOM 225E

Brian Friedlich, P.E | *Managing Engineer, One Water Consulting, LLC.*

Andrew Lloyd, AICP, CFM | *Principal Planner, Mercer County Planning Department*

Michael L. Pisauro, Esq. (Speaker & Moderator) | *Policy Director, The Watershed Institute*

The MS4 permitting program was created in 2004 and is required by both federal and state regulations to address water quality and flooding issues in municipal stormwater systems. The MS4 Tier A Permit was recently updated, becoming effective on January 1, 2023, and includes several new requirements and a shift towards watershed level planning with the inclusion of a mandatory "Watershed Improvement Plan" (WIP). Municipalities are currently working on developing Watershed Inventory Reports (first phase of the WIP), which are due at the end of 2025. As municipalities work on and complete their watershed inventories, it is important that they understand and plan for completing Watershed Assessment Reports (second phase of the WIP) and Final Watershed Improvement Plans (third phase of the WIP). These next phases of the WIP require towns to develop plans to reduce water pollution, implement portions of TMDLs, and address flooding. Instead of each town duplicating work and developing inconsistent assumptions (who is responsible for what), is there a better way? Addressing the requirements of the WIP on a regional, watershed basis can be cheaper to develop, lead to more effective and cheaper solutions, and ultimately result in plans that can better achieve watershed improvement goals.

Credits: CLE, PE, CFM (applied for), Planner (applied for)

Navigating Watershed Conservation Amidst Climate Change: The Resists-Accept-Direct (RAD) Framework - ROOM 224

Jon Wagar | *Deputy Executive Director of Operations and Sustainability, Duke Farms*

Sophie Glovier (Moderator) | *Chief of Strategy and Program, The Watershed Institute*

As climate change and other transformative forces increasingly impact watersheds, new approaches are essential to guide conservation and management efforts. Traditional strategies often fall short in addressing the complex and rapid changes to water resources, habitats, and ecosystem services. This workshop introduces the Resist-Accept-Direct (RAD) framework, originally developed by the National Park Service and partner organizations, as a dynamic tool to aid in making informed decisions about watershed conservation during uncertain times. Participants will explore how RAD can be applied to watershed ecosystems, helping prioritize responses that span floodplain management, water quality, infrastructure, and riparian ecosystem health. Through interactive discussions, you will connect with colleagues to assess your current watershed conservation priorities, consider future scenarios, and learn how to develop RAD-based strategies to achieve long-term watershed resilience. RAD thinking offers a new path forward, providing the flexibility and creativity needed to care for ecosystems facing unprecedented environmental shifts.

WatershedNJ - An Interactive Online Tool for Regional Planning - ROOM 225W

- **Janine Barr** | *Senior Research Specialist, Environmental Analysis & Communications Group, Bloustein School of Planning and Public Policy, Rutgers University*
- **Kate Douthat** | *Senior Research Specialist, Center for Remote Sensing and Spatial Analysis, Rutgers University*
- **Richard G. Lathrop. Jr. Ph.D.** | *Johnson Family Chair in Water Resources and Watershed Ecology, Director of the Walton Center for Remote Sensing & Spatial Analysis, Professor in the Department of Ecology, Evolution & Natural Resources, Rutgers University*
- **Robert Schuster (Speaker & Moderator)** | *Watershed Coordinator, Office of the Assistant Commissioner, Watershed and Land Management, NJ Department of Environmental Protection*

NJDEP and Rutgers are developing a web-based platform to support comprehensive watershed management statewide called WatershedNJ. The platform focuses on water quality management and will have three webtools: the Watershed Health Assessment Webtool (a tool for members of the public who are interested in learning about watershed health basics), the Water Quality Stressors Webtool (a tool to assist watershed managers, local officials, community organizations and others to identify stressors that may be decreasing local water quality), and the Improvement Opportunity Webtool (a tool to assist watershed managers, local officials, community organizations and others to identify possible solutions to improve water quality). This session will include a presentation on the current status of the WatershedNJ webtool development as well as an interactive portion to obtain attendee input on elements of the platform still under development.

PLENARY BIOS

Nicholas Angarone, AICP

Chief Resilience Officer,
Office of Climate Resilience, NJDEP

Nick Angarone is New Jersey's Chief Resilience Officer and manager of DEP's Office of Climate Resilience. As Chief Resilience Officer, Nick coordinates statewide resilience policy and serves as Vice-Chair of the Interagency Council on Climate Resilience. He also leads and directs the development of the Statewide Climate Change Resilience Strategy and provides technical guidance and support to local governments in their efforts to address the impacts of climate change.

Guiding the Office of Climate Resilience, Nick oversees the Bureau of Climate Resilience Planning and the Blue Acres buyout program, and administers the New Jersey Coastal Management Program in cooperation with a network of programs across DEP. He also represents Commissioner Shawn LaTourette on the State Planning Commission, ensuring that climate resilience, natural resource protection and infrastructure capacity is incorporated into the planning process.

Patricia Ingelido

Director, Division of Water Supply & Geoscience, Water Resource Management, NJDEP

Trish Ingelido is the Director of the Division of Water Supply and Geoscience at NJDEP and has over 22 years of experience in water resource management. She began her career at NJDEP as a watershed manager in the Division of Watershed Management. She spent over 10 years working in the Division of Water Monitoring and Standards, with a primary focus in water quality modeling, assessment, and TMDL development.

Beginning in 2018 she transitioned to the Division of Water Supply and Geoscience first as the Assistant Director and then as Director. There she has led teams working to strengthen New Jersey's leadership in drinking water programs, including the development of the New Jersey Lead and Copper Rule, the NJ Water Supply Plan update and to address emerging concerns, such as cyanotoxins associated with harmful algal blooms and 1,4 Dioxane. She has a BS in Environmental Science from Rutgers University, an MS in Environmental Policy from New Jersey Institute of Technology and is a Certified Public Manager.

Jennifer Moriarty

Assistant Commissioner, Watershed and Land Management, NJDEP

Jennifer Moriarty is the Assistant Commissioner for Watershed and Land Management, overseeing the Division of Watershed Protection & Restoration, the Division of Land Resource Protection and the Division of Resilience, Engineering & Construction. She joined DEP in 2021 as Director of the Division of Land Resource Protection, bringing a legal-minded approach to the Division's management and providing a framework for reasonable outcomes that recognize applicants' goals, while protecting wetlands, coastal resources, flood hazard areas, water quality, and public health and safety. She was instrumental in the drafting of portions of the REAL (Resilient Environments and Landscapes) rule proposal, particularly related to nature-based solutions and coastal zone management. As Assistant Commissioner, Jennifer brings a wealth of experience and her collaborative leadership style to support the WLM team as it works to implement transformative reforms that better protect our communities, neighbors and land resources from the impacts of climate change and prioritize a watershed-based approached to land resource protection.

Martha Sullivan Sapp

Director, Green Acres Program, NJDEP

Martha Sullivan Sapp has been with the Department of Environmental Protection's Green Acres Program for 38 years, serving as Director since 2012. Starting as a project manager handling land acquisition and park development projects, Martha also served as Communications Lead, Policy Coordinator, Rule Manager, Team Leader of the Urban Acquisition and Statewide Park Development Team, and Bureau Chief before becoming Director.

Katrina Angarone (Moderator)

Chief Strategy Officer, Commissioner's Office, NJDEP

Kati advances strategic initiatives, including expanding public access to environmental information, coordinating strategic planning and policy development on cross-media issues, and cultivating external partnerships. She also oversees the efforts of the Office of Legislative Affairs and Office of Environmental and Public Health Analysis. Kati has worked at DEP for more than 25 years and previously served as Assistant Commissioner for Watershed and Land Management (WLM), overseeing the Division of Watershed Protection & Restoration, the Division of Land Resource Protection and the Division of Resilience, Engineering & Construction. As WLM's leader, she focused on advancing watershed initiatives, including integration of New Jersey-specific climate change science into watershed policy.

Kati spent several years focused on water policy, including the adoption of new drinking water standards, which involved first-in-the-nation PFAS standards and water supply emergency response. More than half of her DEP career was spent assisting with the development of New Jersey's state land use policies, including stormwater management, habitat protection, flood hazard area controls and protection of the Highlands region. A passionate advocate of the environment, Kati is dedicated to DEP's mission to protect the environment and public health in service to the people of New Jersey

SPEAKER BIOS

Carl Alderson

Restoration Ecologist, Marine Resources Specialist, NOAA Fisheries Office of Habitat Conservation, JJ Howard Marine Science Lab - Sandy Hook, National Oceanic and Atmospheric Administration

Carl Alderson is a Restoration Ecologist/Marine Resources Specialist with the NOAA Fisheries Office of Habitat Conservation at the JJ Howard Marine Science Lab at Sandy Hook. Carl provides technical expertise in service to programs seeking compensation and restitution for injuries to natural resources, as authorized under federal and state laws. Carl provides technical support to NOAA Grants Programs including congressionally authorized BIL/IRA grants. The Office of Habitat Conservation is engaged in a national effort to improve the overall health of coastal habitats and river systems. Prior to joining NOAA in 2002, Carl led a NYC team of scientists in a decade-long effort to combat the injurious effects of oil spills in the NY-NJ Harbor Estuary. Carl is a graduate of the Rutgers University School of Environmental and Biological Sciences with a B.S. in Environmental Design and is a practicing Licensed Landscape Architect and avid kayaker.

Janine Barr

Senior Research Specialist, Environmental Analysis and Communications Group, Rutgers University, Bloustein School of Planning and Public Policy

Janine Barr is a Senior Research Specialist with the Environmental Analysis and Communications Group at Rutgers in the Bloustein School of Planning and Public Policy. Janine's work focuses on natural resources management and policies, science communication, and stakeholder engagement. Janine earned a B.S. in Biology and Environmental Studies from Gettysburg College and a M.S. in Oceanography from Rutgers University, where she obtained a Coastal Climate Risk and Resilience certificate. She has over four years of Federal work experience, most recently as a Sea Grant Knauss Fellow.

Erin Bennett

Proposal and Marketing Manager, Princeton Hydro

Erin is the Proposal and Marketing Manager at Princeton Hydro, where she facilitates proposal development and works closely with clients on grant applications. In previous roles she worked closely with residents and places of worship in Baltimore, MD, to implement small-scale stormwater BMPs. She regularly combines her science, technical, community outreach, and policy backgrounds to effectively perform in her role. She gained her M.A in Urban Affairs and Public Policy and B.S. in Natural Resources Management, both from University of Delaware. As part of her graduate assistantship, she assisted with research at the UD Water Resources Center. In 2024, she received the Green Infrastructure Champions certification administered through Rutgers University.

Joseph Berg

Senior Ecologist, Biohabitats

Joseph has over 30 years of experience in systems ecology, with an emphasis on the interaction of physical, chemical, and biological systems. He excels in the management of complex interdisciplinary projects involving multiple project partners. Mr. Berg has assessed, characterized and analyzed wetlands; terrestrial and aquatic resources; rare, threatened, and endangered species; forest resources; wildlife resources; fish and benthic invertebrates; amphibian and reptile resources; and related water quality and sediment quality issues. Mr. Berg has been involved in many projects throughout the Mid-Atlantic, and has worked with local, state, and federal regulatory and resource agencies throughout the US.

Sarah Bray

Senior Construction Manager, Office of Sustainability, New York City Department of Environmental Protection

Sarah Bray is a registered landscape architect with nearly 10 years of experience in implementing green infrastructure projects in New York City. She defines herself both as an ecologist and as a designer and began her long-standing environmental career in ecological restoration in both urban and rural landscapes. Today, she works as a senior construction manager for NYCDEP's office of sustainability. Ms. Bray earned her undergraduate degree from Oberlin College, Wetland Science and Management certificate from University of Washington, and a master's degree in Landscape Design from the Conway School. In her free time, she teaches as an adjunct professor at New York Botanical Garden and enjoys connecting with the people through community garden projects and open water sports.

Susan Bristol, AICP/PP, AIA Emeritus, LEED AP (Speaker & Moderator)

Municipal Policy Specialist, The Watershed Institute

Susan Bristol joined The Watershed Institute in 2023 where she serves as the Municipal Policy Specialist. Prior to that, she worked as a Professional Architect and Planner at her own practice, SPB Architecture LLC. Susan has worked at NJIT in Newark as an educator in the School of Architecture where she created the award-winning Garden State Studios. Susan is passionate about the environment, is an avid reader and loves being on or in the water. She has a B.S. Arch. and an M. Arch degree from the University of Virginia where, in addition to her Architecture major, she studied Landscape & Urban Design. Susan is a NJ licensed Architect and Planner and a certified LEED AP in green design.

Davis Bush

StreamWatch Schools Coordinator, The Watershed Institute

Davis joined The Watershed Institute in 2023. He studied marine science and sustainability studies at Stony Brook University, where he developed his love for the environment both on land and in the sea. Davis is passionate about empowering young people to fight for social changes they want to see and helping them get the tools and knowledge they need to do so. When not at The Watershed, Davis can be found hiking, reading, writing, coloring, and researching different kinds of sharks.

Jennifer Carcich

Sustainability Coordinator and Director of Learning Acceleration, Unity Charter School

Jennifer Carcich is a passionate educator with 25+ years of teaching experience. She has taught in urban, suburban, private, public, and charter schools. Jen has had multiple roles in the teaching profession. She is proud to have been a class assistant, lead teacher, co-teacher, science teacher, resource room teacher, and self-contained teacher in grades kindergarten through eight. Her love for the environment has landed her as the Sustainability Coordinator and the Director of Learning Acceleration for Unity Charter School in Morristown, NJ. Jen is TransOption's 2019 Outstanding Educator and The Alliance for New Jersey Environmental Education's 2020 Educator of Excellence in Environmental Education. She currently is a member of the New Jersey Department of Education's subcommittee for identification of gifted and talented students, 2023 presenter at MassCUE, is an adjunct professor at Kean University and Bridgewater State University and is in New Jersey's Leaders to Leaders program.

Lee Clark, MABC

Funding Navigator Program, Program Manager, New Jersey Future

Lee Clark is responsible for managing the New Jersey Future Funding Navigator program, a statewide effort to help under-resourced localities access funding for drinking water, wastewater, and stormwater needs. His main focuses are engaging with municipal officials and stakeholders and designing solutions for water utilities serving overburdened communities. Prior to joining New Jersey Future, Lee worked in the Green Acres program at the New Jersey Department of Environmental Protection, handling land acquisition and project contracts on behalf of the state of New Jersey. Prior to entering state government, Lee worked at the New Jersey League of Conservation Voters, managing their environmental justice policy agenda, conducting municipal outreach, and stormwater advocacy. A local elected official and communication adjunct professor at Kean University, Lee holds a bachelor's degree in political science, concentrating in political communication, and a master's degree in business communication from Rider University. Lee also holds a certificate in board leadership and governance through the DiverseForce program from the University of Pennsylvania.

Tom Dallessio, FAICP, PP, CPM, FRSA.

Executive Director, Musconetcong Watershed Association

Tom is a licensed professional planner, policy expert, university lecturer and nonprofit executive with over four decades of experience in the public, private, nonprofit and academic sectors. He's the Executive Director of the Musconetcong Watershed Association, an independent nonprofit organization with a mission to protect and improve the Musconetcong Watershed and its waters for people and nature. Tom is also a Research Affiliate at the New Jersey State Policy Lab and a Lecturer at the Edward J. Bloustein School of Planning & Public Policy at Rutgers University, where he has taught seminars and studios in Comprehensive Planning, Land Use Administration and Transportation. He's a Certified Public Manager and Fellow of the Royal Society for the Encouragement of the Arts, Manufactures and Commerce. Tom serves as Vice President of Policy at the American Planning Association – New Jersey Chapter and was awarded the B. Budd Chavooshian Award for Outstanding Professional Planner. Tom was elected to three terms on the Hopewell Borough Council and served as Council President and Acting Mayor as well as a member of the Planning and Zoning Boards, Library Board, Economic Development Committee and Historic Preservation Commission. He received his Bachelor of Arts from Rutgers College, Master of Arts from the Eagleton Institute of Politics and Master of City and Regional Planning from Rutgers University.

Kate Douthat

Senior Research Specialist, Rutgers University, Center for Remote Sensing and Spatial Analysis

Kate Douthat is a Senior Research Specialist in the Rutgers Center for Remote Sensing and Spatial Analysis. She focuses on wetlands, watershed planning, and land use change. She works closely with NJDEP on WatershedNJ, a project to bring the information and tools necessary for watershed planning together in one digital platform to improve the planning process and outcomes. Within WatershedNJ, Kate focuses on data, GIS analysis, and connecting data to user needs. Kate got her PhD in the Rutgers program of Ecology and Evolution in 2022. Her research focused on plant biodiversity and invasive species in artificial stormwater wetlands in New Jersey. The research goals were to understand how plant communities change after initial planting in order to improve stormwater BMP planting design and practices and to increase our understanding of how stormwater BMPs contribute to or detract from native biodiversity. Through this work she is familiar with stormwater infrastructure and best management practices and how they work on the ground. Before her graduate work at Rutgers, Kate started her career in the field working on a NJ organic farm and as a residential landscaper. She ran a small native plants landscaping business called Dogtooth Gardens. Kate can be reached at kate.douthat@rutgers.edu

Clay H. Emerson, Ph.D., PE, CFM
Senior Technical Director, Engineering, Princeton Hydro

As the Senior Technical Director of Engineering at Princeton Hydro, Clay's areas of expertise include hydrologic and hydraulic analysis, stormwater management and infiltration, non-point source pollution, watershed modeling, groundwater hydrology/modeling, and water quality and quantity monitoring at both the individual site and watershed scales.

Thomas Flynn
Environmental Specialist, Floodplain Administrator, FEMA-CRS Coordinator, Township of Woodbridge, NJ

Mr. Flynn holds a Bachelor's of Science degree from Rutgers University and a Master's degree from the City University of New York. Mr. Flynn is the Township of Woodbridge Environmental Specialist, Floodplain Administrator, FEMA – CRS Coordinator, and supports OEM Recovery. He was previously named New Jersey Association for Floodplain Management's local floodplain management official of the year, and has nearly 20 years of experience in protecting ecological resources, flood mitigation, and environmental policy analysis. His municipal role focuses on enhancing the manner by which the community addresses and improves environmental practices from ecological uplift and climate resilience to compliance with State and Federal regulation.

Kathleen Farley, Ph.D.
Executive Director, Teaneck Creek Conservancy

Kathleen joined Teaneck Creek Conservancy as their Executive Director in July 2022, months before Teaneck Creek Park reopened to the public following its restoration. She serves as a prominent voice for the restoration efforts, helping the community to understand the ecological significance of transforming degraded, abandoned rubble fill into a freshwater wetland people's park. Under her leadership, Teaneck Creek Conservancy stewards the 46-acre county park with the aim of connecting people with nature locally through the Conservancy's initiatives and free public programs. Kathleen earned her doctorate from Rutgers University-Newark where she investigated the consequences of habitat selection for American woodcock choosing degraded, urban landscapes during migration and breeding seasons. She received her master's degree for studying declining recruitment rates of American Kestrels in New Jersey from Montclair State University. Her Bachelors in Ecology and Nature Resource Management is from Cook College, Rutgers University. Her work has taken her into several ecological systems, from cloud forests to deserts, as well as into the classroom in both formal and nonformal education.

Laurie Ferreras
Graduate Thesis Student in the Landscape Architecture Program, School of Environmental and Biological Sciences, Rutgers University

Laurie Ferreras is a third-year Landscape Architecture graduate student at Rutgers University with a background in Ecology, Evolution, and Natural Resources (Rutgers, 2021). Passionate about connecting people to nature, she focuses on integrating ecological solutions into urban and natural landscapes, fostering community engagement, and addressing environmental challenges through innovative design. Her thesis work focuses on developing a climate change resiliency framework for the San Jose and Guanajibo areas of Mayagüez, Puerto Rico.

Kathryn Fisher
Campaigns Manager, NJ League of Conservation Voters

Kathryn Fisher is a Campaigns Manager with New Jersey LCV. In this role, she is responsible for leading, organizing, and growing New Jersey LCV's various campaigns and volunteer initiatives. She is also a leading member of Flood Defense New Jersey, a coalition of state and local nonprofit organizations working to protect New Jersey's communities from damaging floods and harmful stormwater pollution. Prior to joining New Jersey LCV, Kathryn started organizing during the 2018 midterms in New Jersey, and worked on three other congressional and presidential primary campaigns.

Brian Friedlich, P.E. (Speaker & Moderator)
Managing Engineer, One Water Consulting, LLC.

Brian Friedlich, P.E. - Brian Friedlich has 20 years of expertise in the field of water resources engineering. His focus has been on stormwater management, watershed planning, ecological restoration, and wastewater treatment. He has led the design, permitting and construction administration for many large-scale infrastructure improvement projects throughout the region. Brian has also developed a specialty in green infrastructure technologies for compliance with NJ stormwater management regulations. He regularly gives presentations at conferences and continuing education courses on topics related to stormwater management and permitting. Brian holds a bachelor's degree in environmental engineering from Tufts University and a master's degree in environmental engineering from the Massachusetts Institute of Technology. He is a registered professional engineer in the State of New Jersey.

Laura Gould
Watershed Resilience Planner, Musconetcong Watershed Association

Laura works to protect and enhance the resilience of not just the Musconetcong River itself, but the many vibrant communities in its watershed. She completed MWA's Watershed Vision Plan and is providing planning services to MWA's 319 Watershed Management Plan. Laura holds two master's degrees from Rutgers University: a Master of City and Regional Planning, and a Master of Public Informatics degree. She also earned a Bachelor of Science in Architecture from the New Jersey Institute of Technology.

Kathy Hale
Principal Watershed Protection Specialist, NJ Water Supply Authority

Kathy Hale is a Principal Watershed Protection Specialist for the New Jersey Water Supply Authority, a state-owned water utility that serves nearly 2 million customers. She has more than 30 years of watershed management experience in New Jersey, including work in the public and private sectors. At NJWSA, Kathy is responsible for managing source water protection projects, including watershed restoration and protection planning, in-stream and riparian buffer restoration projects, stormwater management projects, NJWSA's agricultural cost-share program and the River-Friendly Golf Course Certification Program. Kathy earned her B.A. in Animal Behavior from Bucknell University and an M.S. in Environmental Science from Indiana University – School of Public and Environmental Affairs. She serves on the board of the NJ Section of the American Water Resources Association and her Township's Environmental Commission.

Ellen Haggerty, PE

Watershed Restoration Manager, Musconetcong Watershed Association

Ellen is a licensed professional engineer with more than 20 years of experience in site remediation projects across the country. She is focused on dam removal and green infrastructure projects in and adjacent to the Musconetcong and its tributaries and is managing the restoration of the historic Asbury Mill. Ellen has a Bachelor of Science in Civil Engineering from Tufts University, a Master of Science in Environmental Engineering from Rice University, and a Master of Natural Resources from Virginia Tech.

David Johnson, Ph.D.

Research Scientist, Molecular Biologist, David C. Johnson LLC.

Dr. David C. Johnson is a molecular biologist, currently exploring how the development of beneficial soil microbiological communities in agroecosystems can: improve global food security and ranch and farm profitability, reduce agrochemical usage, increase soil organic carbon and total soil nitrogen, and effectively offset carbon emissions. His current research focuses on working with: a) the Globetrotter Foundation/No Regrets Initiative, researching the benefits of promoting a Biologically Enhanced Agricultural Management or BEAM approach in agroecosystems, b) Stella McCartney LTD, as an integral part of Stella McCartney's Science Based Targets Initiative collaborating with the Carbon Disclosure Project (CDP), the United Nations Global Compact, World Resources Institute (WRI) and the World Wide Fund for Nature (WWF) for achieving a net-zero emissions target for their farm-to-fashion supply chain; c) the Friends of the Bosque del Apache National Wildlife Refuge, restoring soil health through regenerative agricultural practices to restore wildlife habitat and help feed migratory birds in the Bosque Del Apache National Wildlife Refuge, and d) Cruces Creatives, a local non-profit collaborating with other local organizations for conducting trials, soil analysis and promoting adoption of BEAM practices, helping to disseminate this information to a local, regional and national audience.

Richard G. Lathrop, Jr. Ph.D

Johnson Family Chair in Water Resources and Watershed Ecology at Rutgers University; Director of the Walton Center for Remote Sensing & Spatial Analysis; Professor in the Department of Ecology, Evolution & Natural Resources, Rutgers University

Dr. Richard G. Lathrop Jr., Johnson Family Chair in Water Resources and Watershed Ecology at Rutgers University, serves as Director of the Walton Center for Remote Sensing & Spatial Analysis and is Professor in the Department of Ecology, Evolution & Natural Resources. Dr. Lathrop's research program works to integrate insights of landscape ecology and geography with the application of geo-spatial information technology to improve our understanding of the structure and function of coupled human-environmental systems. Working with partners, he attempts to translate that understanding into effective and appropriate techniques to improve 'on-the-ground' natural resource management and land use planning.

Patricia Lindsay-Harvey

Chair of Environmental Commission, Willingboro Township, NJ

Patricia Lindsay-Harvey is currently serving as the chair of Willingboro's Environmental Commission and was appointed to Willingboro's MUA in 2020. In 2023 and 2024, she was elected the Board Chair of the WMUA. She has been passionate about water and the environment for far longer than her current position in water utilities. She also serves on the steering committee of Jersey Water Works, as well as the Stormwater Subcommittee with Jersey Water Works. She has been a resident of Willingboro for 47 years and is deeply involved in the community.

Andrew Lloyd, AICP, CFM

Principal Planner, Mercer County Planning Department

Andrew Lloyd is a Principal Planner with the Mercer County Planning Department. He earned an MS in Sustainability, Planning and Environmental Policy from Cardiff University and has been working for Mercer County since 2017. His areas of focus are wastewater management and stormwater review and modelling - compiling data from multiple sources and aggregating using ArcPro. He is well positioned to assist municipalities in Mercer County collaborate to share cross-watershed data in pursuit of fulfilling new MS4 requirements.

Kristi MacDonald, Ph.D.

Director of Science, Raritan Headwaters Association

Kristi MacDonald, Ph.D., is the Director of Science at Raritan Headwaters Association (RHA), the non-profit organization with the mission of protecting and restoring watershed resources in the 470-mile2 Upper Raritan River Region of New Jersey. At RHA, she directs a team of fellow-scientists and conservation practitioners to monitor, study, and understand the impacts of land use and climate change on stream ecosystems and to work with municipalities and other partners to implement restoration and climate resiliency projects including green infrastructure, dam removals, riparian buffer plantings, and habitat stewardship. RHA's award-winning stream monitoring program provides valuable data for regulatory use in upholding the Clean Water Act. As a conservation scientist for the past 35 years, Kristi has focused her research on understanding how people can coexist with and foster healthy ecosystems, and the species they support, to inform better land use decisions. Prior to joining RHA in 2015, she held positions at NY/NJ Baykeeper, NJ Fish and Wildlife, and taught AP biology at a rigorous science magnet program for Newark Public Schools and she remains a research associate with Hudsonia. Kristi has studied wildlife as close to home as the New Jersey shore and as far away as islands in the Indian Ocean while serving as a U.S. Peace Corps volunteer. She is co-author of the recently published book "*Urban Biodiversity – the Natural History of the New Jersey Meadowlands*."

Lauren Madden, Ph.D.

Professor of Elementary Science Education, Department of Elementary and Early Childhood Education, The College of New Jersey

Dr. Lauren Madden is a Professor of Elementary Science Education at The College of New Jersey. She holds a BA in Earth Sciences-Oceanography, MS in Marine Science and PhD in Science Education. Dr. Madden's work advocates for scientific literacy and the health of our planet through teaching and learning. Her research has been supported by grants from the New Jersey SeaGrant Consortium, National Science Foundation, and US Environmental Protection Agency. She has written a textbook on Elementary Science Teaching Methods along with more than 40 peer-reviewed journal articles and book chapters. She was named the 2021 Outstanding Science Teacher Educator of the Year by the Association for Science Teacher Education and served as the inaugural iCAN STEM Role Model Award by the New Jersey STEM Pathways Network. In recent years, her work has focused directly on K-5 climate change education, and she was the lead author on the New Jersey School Boards' Association & Sustainable Jersey For Schools' Report on K-12 Climate Change Education Needs in New Jersey. Her expertise in climate change education in New Jersey has been featured prominently in many media outlets including the New York Times, Washington Post, The Guardian, NPR, and the Star Ledger.

Brooke Maslo, Ph.D.

Associate Professor, Department of Ecology, Evolution, and Natural Resources, Rutgers University & Extension Specialist in Wildlife Ecology, Rutgers Cooperative Extension

Dr. Maslo is an Associate Professor in the Department of Ecology, Evolution, and Natural Resources at Rutgers University, and an Extension Specialist in Wildlife Ecology for the Rutgers Cooperative Extension where she directs the Wildlife Conservation and Management Program. Dr. Maslo's work focuses on the effective translation of scientific research into practical conservation directives, specifically linking biodiversity to the provisioning of ecosystem services. She has published papers on applied conservation and ecological restoration in multiple peer-reviewed journals, including Conservation Biology, Ecological Applications, and Restoration Ecology. Her work on floodplain restoration in NJ earned her a 2017 Merit Award in Landscape Planning and Analysis from the American Society of Landscape Architects – NJ Chapter, and a 2024 Excellence Award in Water Resources Planning from the American Water Resources Association – NJ Chapter. Her resilience planning and implementation efforts in New Jersey have received international coverage in Scientific American, PBS Newshour, The Associated Press, and German National Public Radio.

Danielle McCulloch

Fish and Wildlife Biologist, Delaware Bay Coastal Program, U.S. Fish and Wildlife Service

Danielle McCulloch is a Fish and Wildlife Biologist for the U.S. Fish and Wildlife Service's Delaware Bay Coastal Program. She has restored and researched estuarine ecosystems and species for nearly 20 years. Before joining the Service in New Jersey, she was a marine scientist working in Chesapeake Bay on oyster reef restoration, living shorelines, estuarine ecology and restoration research. In her current role, she plans, implements, funds and monitors coastal resilience and habitat restoration projects that benefit fish, wildlife and communities. She is driven to work with others to protect and enhance marshes to meet conservation and community resilience goals.

Michael McGraw, CSE, QAWB, ACEE

Senior Project Manager, Senior Wildlife Biologist & Ecologist, Princeton Hydro

Michael McGraw is a Senior Wildlife Biologist and Ecologist. Since 2002, Michael has performed an extensive variety of reptile, amphibian, and avifaunal surveys in the Eastern and Midwestern U.S. with a strong emphasis on endangered, threatened, and species of concern. Beyond survey and research, his work as a consulting scientist includes project design, permitting, project management, and client relations, as well as writing technical reports and proposals. Michael is currently managing numerous projects and functioning as a lead biologist on a variety of projects, including wildlife surveys, ecological assessments, threatened and endangered species surveys, population biology research, wetland mitigation, sensitive habitat restoration, FAA-mandated wildlife hazard management plans for airports, land management and site master planning, and energy development projects.

Joshua Moody, Ph.D.

Coastal Wetland and Restoration Research Scientist, Division of Science and Research, NJDEP

Dr. Joshua Moody is a coastal wetland and restoration research scientist in the New Jersey Department of Environmental Protection, Division of Science & Research. His focus areas include: the current conditions and trajectories of NJ coastal wetlands; the state of the science regarding coastal wetland resilience tools and monitoring methodologies; and field-based research to fill data gaps regarding the ability of coastal wetlands to provide valuable ecosystem services such as carbon sequestration, flood protection, and quality habitat for a variety of residential and transitory species. Dr. Moody received his PhD in Environmental Science from Drexel University (2017) where his research focused on nutrient removal services of ribbed mussels across the salt marsh landscape. Prior to coming to NJDEP, Dr. Moody was the Restoration Program Manager at the Partnership for the Delaware Estuary.

Jeff Mrozack

8th Grade Environmental Science Teacher, Unity Charter School

Teaching environmental science is crucial for several reasons, as it helps individuals understand the complex relationships between humans, ecosystems, and the planet. Jeff has brought his passion for this topic to his students, and educates them about pressing issues like climate change, deforestation, pollution, loss of biodiversity, and resource depletion. With a solid understanding of these topics, his students can make informed decisions that protect the planet and contribute to sustainable development. Jeff's 8th grade students have shared this passion, and have taken on a large yearlong project monitoring the the Whippany River. Students test the water in a variety of ways, and analyze the effects of road salt on our natural waterways. Jeff also is a member of Brick City Rescue, a 501 ©3 pitbull rescue focusing on education, advocacy and placing dogs in need in healthy and happy homes. This ties into his mission of sustainability and helping support the community.

Matthew Newman

County 4-H Agent, Department of 4-H Youth Development, Rutgers Cooperative Extension of Monmouth County

Matthew Newman is a County 4-H Agent at the Department of 4-H Youth Development at Rutgers University. His primary responsibilities include the development and delivery of a countywide youth program serving youth and families of Monmouth County. His focus areas include cultural and global engagement, community development, and environmental issues. Matthew's efforts are with and through adult volunteers providing young people real-world experiences in their areas of interest. In addition to his county efforts, Matthew also provide statewide opportunities for youth throughout New Jersey, including the New Jersey Youth Institute World Food Prize. Matthew served as a Peace Corps Volunteer in Albania, Guyana, and most recently, he participated in a pilot-program where he served as a virtual Peace Corps Volunteer serving the country of Ukraine.

Christopher C. Obropta, Ph.D., P.E.

Director of NJ Water Resources Research Institute, Extension Specialist in Water Resources with Rutgers Cooperative Extension, & Professor with the Department of Environmental Sciences at the School of Environmental and Biological Sciences, Rutgers University.

Dr. Obropta leads a highly specialized staff from the Rutgers Cooperative Extension Water Resources Program to identify and address water resources issues by engaging and empowering communities to employ practical science-based solutions to help create a more equitable and sustainable New Jersey. Over the last twenty years, he and his staff have been working with communities to implement green infrastructure practices throughout New Jersey to help these communities increase their climate resilience.

Manushi Patel

Architectural Designer, STV Inc.

Manushi Patel is an aspiring architect working as a Designer at STV and a Master of Science in Architecture graduate from NJIT. She is passionate about designing for people through projects that have a positive impact on the community. In her current role, she is working on multiple projects based in New York City in the transportation studio. In addition to transit architecture, her experience includes commercial design focused on interiors for designing flexible office spaces during her time working at LSM in Washington, D.C. Committed to growth in leadership, she is currently a mentor for the Architecture Alumni Group at Penn State from where she received her Bachelor of Architecture.

Michael L. Pisauro, Esq., (Speaker and Moderator)

Policy Director, The Watershed Institute

Mike is a practicing attorney with over 25 years of experience. As the Policy Director for The Watershed Institute, Mike engages with state and local officials to protect and improve New Jersey's watersheds. He wrote The Watershed Institute's Enhanced Model Stormwater Ordinance, a document that helped guide municipalities towards policies to better protect local communities from flooding and improve water quality. In past years, he has worked on a campaign to overturn the Christie administration's weakening of the Flood Hazard Rules as well as efforts leading to enactment of New Jersey's Clean Stormwater and Flood Reduction Act. He appears regularly before zoning and planning boards to comment on development applications. Prior to joining the Watershed, he ran his private practice concentrating on environmental work for citizen and environmental organizations. He was a lobbyist for the New Jersey Environmental Lobby for nine years. Mike has served on the Hopewell Valley Green Team and was an appointed board member for the New Jersey Licensed Site Remediation Board. Mike received his B.S. in Economics from James Madison University and a J.D. from the University of Richmond.

Christa Reeves, CWD

Water Quality Program Manager, Musconetcong Watershed Association

Christa leads MWA's Water Quality Program and has been with the Musconetcong Watershed Association since 2016. She is the project manager for two current 319 Watershed Management Plans and a National Water Quality Initiative. Christa is a Certified Wetlands Delineator and Lead Culvert Assessor for Aquatic and Terrestrial passage through the North Atlantic Aquatic Connectivity Collaborative (NAACC). She graduated from East Stroudsburg University of Pennsylvania with a B.S in Environmental Studies with a focus in Stream Ecology and a minor in Geography with a focus in GIS.

Jaclyn Rhoads, Ph.D.

Executive Director, Pinelands Preservation Alliance

Dr. Jaclyn Rhoads is the Executive Director of Pinelands Preservation Alliance. She received her doctorate degree in environmental policy from Drexel University. She further pursued a certificate in executive management of non-profits from the University of Pennsylvania. She serves on many boards and committees including the Darby Creek Valley Association, Friends of the John Heinz National Wildlife Refuge, New Jersey League of Conservation Voters and the Norwood Shade Tree/Environmental Advisory Council. She is the vice-chair of the Delaware County Sustainability Commission and was on the transition team for Delaware County Council that created the model for the Sustainability Commission.

Tanya Rohrbach, CFM

Program Manager of Policy and Planning, Sustainable Jersey; Sustainability Institute at The College of New Jersey

Tanya Rohrbach is the Program Manager of Policy and Planning for the Sustainable Jersey Program at the Sustainability Institute at The College of New Jersey. She is a certified floodplain manager and assists local governments in achieving sustainability-focused conservation, climate adaptation, and community development goals. Tanya holds a B.A. in Biology and a M.S. in Geography from Rutgers University. As the lead author of the Guide to Local Climate Change Adaptation Planning: The Model Climate Change-Related Hazard Vulnerability Assessment for New Jersey Municipalities, she is a leader in the state for instituting municipal climate resilience guidance and action.

Chris Sotiro

Policy and Program Coordinator, NJ Future

Chris coordinates the day-to-day operations of the Mainstreaming Green Infrastructure (MGI) Program, which fosters community resilience to climate change while promoting economic, environmental, and social benefits.

Marissa Staffen

County 4-H Agent, Department of 4-H Youth Development, Rutgers Cooperative Extension of Essex County

Marissa Staffen is a County 4-H Agent at the Department of 4-H Youth Development at Rutgers University. She leads a comprehensive youth development program in Essex County, NJ, focusing on environmental sustainability, including climate change, and urban gardening. Her work engages youth in hands-on learning experiences, fostering their understanding of environmental issues and empowering them to become active agents of change. Marissa's research interests center on youth learning in these areas.

Robert Schuster (Speaker & Moderator)

Watershed Coordinator, Watershed and Land Management, NJDEP

Bob Schuster is the Watershed Coordinator at the NJDEP Office of Assistant Commissioner, Watershed and Land Management. He has over 30 years in sample collection; and chemical, biological, and microbial analysis, as well as data assessment of all State waters. This includes data from ambient and routine monitoring networks, real-time continuous monitoring, beach testing, and NJDEP special projects (storm water monitoring and microbial source tracking) and the EPA National Aquatic Resource surveys, with a focus on utilizing data for remediation actions and management policy decisions.

Adam Strobel, PMP

Division Director of Land Management, Bergen County Parks

Adam L. Strobel is Division Director of Land Management at Bergen County, NJ, where he oversees capital and Open Space Preservation funding for the Department of Parks. His leadership was instrumental in transforming an abandoned dumping ground into the award-winning Teaneck Creek Park wetlands, a $7.0M ecological restoration project. Throughout his career, he has secured over $15 million in NJ Green Acres funding for land acquisition and park development, including $1.25M for the sand seepage wetlands and $113,000 for the regenerative stormwater feature at Teaneck Creek known as Stormwater Canyon. Adam volunteers his time as Board President of the Teaneck Creek Conservancy since 2008, he champions collaborative approaches to environmental restoration. Adam holds a Master of Public Administration from Rutgers University and maintains PMP certification.

Jon Wagar

Deputy Executive Director of Operations and Sustainability, Duke Farms

Jonathan (Jon) Wagar is responsible for operations and sustainability at Duke Farms, serving as a key leader overseeing natural resource management, sustainable agriculture, facilities, landscaping, budgeting, technology, and public safety for the organization. Wagar also teaches environmental studies and climate change courses at Raritan Valley Community College as an adjunct assistant professor Previously, he worked in land acquisition and stewardship roles at Conservation Resources, New Jersey Conservation Foundation, and Schiff Natural Lands Trust. Wagar earned his biology degree from Richard Stockton University and Master of Forestry degree from Yale School of the Environment. He was a Peace Corps volunteer in Guatemala focused on sustainable agriculture and environmental conservation.

Allen Williams, Ph.D.

Farmer and Research Scientist, Understanding Agriculture LLC and Regenified LLC.

Allen Williams is a 6th generation family farmer and founding partner of Understanding Ag, LLC, the Soil Health Academy, and Regenified, LLC. He has consulted with thousands of farmers and ranchers in the U.S. and 45+ other countries, on operations ranging from a few acres to over 2 million acres. Allen pioneered many of the early regenerative grazing protocols and forage finishing techniques and now teaches those practices and principles to farmers globally. He is a "recovering academic", having served 15 years on the faculty at Louisiana Tech University and Mississippi State University. He holds a B.S. and M.S. in Animal Science from Clemson University and a Ph.D. in Genetics & Physiology from LSU. He has authored more than 400 scientific and popular press articles, and is an invited speaker at regional, national, and international conferences and symposia. He has been featured in several of the Carbon Nation film series, "Soil Carbon Cowboys", the Roots So Deep documentary series (Roots So Deep Documentary | Regenerative Farming And Climate), World Without Cows (Home - World Without Cows), the Dr. Oz show, ABC Food Forecast News, in A Regenerative Secret, the Farmer's Footprint film series, the Sacred Cow film series, and TedX Boston (First, heal the soil | Allen Williams | TEDxBoston). He co-authored a book with Teddy Gentry, "Before You Have a Cow". Allen is a regular contributor to several leading industry publications.

MODERATOR BIOS

Kelley Curran

Science Manager, New Jersey Highlands Water Protection and Planning Council

Kelley Curran leads the New Jersey Highlands Water Protection and Planning Council science team as Science Manager. She is an environmental scientist with more than 20 years of experience in the water resources management field and particular expertise in site-specific assessment and analysis, and stormwater management. Prior to joining the Highlands Council, Kelley worked primarily in the consulting sector providing environmental research, analysis and on-going monitoring to support large-scale remedial projects, state and federal reporting and compliance, and real estate transactions. She has significant experience related to the evaluation and remediation of underground storage tanks. Her experience also includes work in the nonprofit sector as Director of Water Quality Programs with the Great Swamp Watershed Association (GSWA), which included development and implementation of a Quality Assurance Project Plan to support GSWA's stream monitoring activities, coordination of stream restoration projects aimed at protecting and improving water quality, and grant writing. Kelley earned her B.S. in Environmental Science/Biology at Kutztown University and holds an M.S. in Environmental Science from the New Jersey Institute of Technology.

Tim Dillingham

Executive Director, American Littoral Society

Tim Dillingham has led the American Littoral Society as its Executive Director since 2003. His work has led to expanded advocacy regarding the restoration of Barnegat Bay and other coastal areas, a comprehensive program of habitat restoration and resiliency on Delaware Bay, new partnerships to promote community-based restoration projects, expansion of marine education programs in underserved communities throughout New Jersey, increased public access to the coast, and the use of nature-based approaches to increasing coastal resiliency in the face of a changing climate. He is currently the co-chair of the Stakeholder Advisory Committee on Aquaculture and Red Knots, co-chair of the Coastal Resiliency Collaborative, and a founding Board member of Restore America's Estuaries. He serves as a member of the Steering Committee for the NJ Climate Change Alliance.

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