



2022 Annual Watershed Conference Agenda

Across the watershed, communities are experiencing climate hazards including localized flooding, intense drought, Harmful Algal Blooms, beach closures, wildfires, and other impacts on water resources. To further community understanding of climate change, its impacts, and how we can prepare for it, our Annual Watershed Conference theme is **Climate Change Impacts on Water in the Hudson Valley.**

This year, Hudson River Watershed Alliance is using a hybrid model for the conference, taking advantage of the respective strengths of both virtual and in-person programs. The first day's webinar will share key context on climate projections and risks, providing a foundation for the conversations on adaptation strategies at the in-person sessions. The virtual session brings together scientists and experts that otherwise would have had to travel, using a format that is easy to record and reference in the future. Both in-person sessions feature local case studies and strategies from the Hudson River watershed, and will prioritize networking and conversation.

We've chosen to have focused half-day sessions at different times, days, and locations to accommodate different schedules and COVID-19 risk levels. We hope that anyone interested in participating can attend one or more sessions. If you would like to attend, but cost is a barrier, please reach out to Emily Vail at emily@hudsonwatershed.org.

Masks are optional, and we will update our COVID-19 policies if community risk levels rise. We will serve coffee and refreshments, including a continental breakfast at the session on October 25, but other meals will be on your own. This allows us to keep registration costs affordable and provides an opportunity for easier masking, if you choose to do so.

For registration and the latest information, visit our website [here](#).

Conference Schedule:

Day I (Virtual via Zoom): Monday, October 24, 1- 3:30 PM

The first session of the conference will focus on current regional information on climate change projections and impacts, including drought, flooding, stream channel erosion, and climate equity. This information will provide the context for decision-making and planning for climate resilience, with a focus on water resources.

Cost: \$10, \$5 for students

This session will be recorded and shared with registered attendees. As a Zoom webinar, video and audio will be off for attendees. We encourage interactions through chat and questions through the Q&A box. There are no formal breaks during this virtual session. Attendees are welcome to take breaks as needed.

1:00-1:15 PM - Welcome & Introduction

Emily Vail, Hudson River Watershed Alliance

Kate Meierdiercks, Siena College & Hudson River Watershed Alliance

1:15-1:40 PM - The New York State Climate Impacts Assessment and Projections for the Hudson Valley Region

Amanda Stevens, New York State Energy Research and Development Authority

What do climate models say we should expect for the Hudson Valley in the future? What will those changes in climate mean for the region? The New York State Climate Impacts Assessment aims to answer those questions for the Hudson Valley region, as well as the rest of the state.

1:40-2:05 PM - Hudson River Watershed Drought History and Impacts

Sylvia Reeves, National Oceanic and Atmospheric Administration, National Integrated Drought Information System (NIDIS)

The talk will share background on the history of drought in the region, drought impacts on the ecosystem and impacts on surface/groundwater availability. To address "Early Warning" and drought resilience, it will also provide information on NOAA's National Integrated Drought Information Systems efforts to work with a variety of partners on awareness, mitigation and adaptation to drought in the northeast United States.

2:05-2:30 PM - National Weather Service New York Flash Flood Preparedness, Products and Services

Nelson Vaz, Warning Coordination Meteorologist, National Weather Service

Nancy Furbush, Senior Service Hydrologist, National Weather Service

The presentation will focus on Tri-State flood climatology and historical flood events to help illustrate realistic extreme rainfall hazards and impacts. It will also take a brief look at how climate change could modify the extreme rainfall hazard as we progress through the end of the century. Lastly, the talk will close out by exploring the spectrum of National Weather Service New York flood products and services the organization provides for partner and public preparedness ahead, during and after an extreme rainfall event.

2:30-2:55 PM - Timescales of Recovery from Erosive Floods in a Changing Climate

Brian Yellen, University of Massachusetts at Amherst

Historical precipitation, groundwater, and streamflow records show that the Northeast United States is getting wetter, but what does this mean for extreme flooding and erosion? This talk will examine sediment cores and stream monitoring records to tease out the relationship between wetter regional conditions and watershed erosion. Results indicate that short-duration flood events have lasting effects on water quality, with persistently elevated turbidity following extreme floods. Furthermore, as our climate gets wetter, erosive events are increasing in magnitude independent of extreme flood frequency due to wetter soils that erode more readily.

2:55-3:20 PM - Centering Equity in Climate Resilience and Adaptation

Clara Fang, Antioch University New England

Climate change affects everyone, but historically marginalized communities are disproportionately impacted. Systemic racism, from housing discrimination to exclusionary participatory processes, has led to inequity in many communities in terms of climate resilience and adaptation. In 2021, the National Oceanic and Atmospheric Administration contracted with Antioch University's Center for Climate Preparedness and Community Resilience to produce a guide on how to center equity in climate adaptation and resilience planning. Through a review of existing literature, interviews with experts in the field, and original research, we have developed guiding principles and a set of best practices for local government and community partners on how to center equity in climate adaptation and resilience planning. This presentation will provide a brief overview of our findings and recommendations as well as how to access the full guide and additional resources.

3:20-3:30 PM - Closing

Day 2 (In-Person, Hyde Park, NY): Tuesday, October 25, 9 AM - 12:30 PM

Henry A. Wallace Center, FDR Presidential Library & Museum

4079 Albany Post Rd, Hyde Park, NY 12538

The second session of the conference will focus on specific strategies for improving water and climate resilience, providing attendees with real examples that illustrate how communities are integrating water and climate resilience across the Hudson River watershed. This in-person session will also provide ample opportunities to connect with regional programs and other attendees.

Cost: \$20, \$10 for students

Registration includes a continental breakfast. Masks are optional for attendees. Should Dutchess County enter a COVID-19 Community Level of High (based on the [CDC's COVID Data Tracker](#)), attendees to the event may be required to wear a mask, with additional social distancing measures.

Conference registration also includes a ticket to the Franklin D. Roosevelt Presidential Library & Museum. After the conference session, participants are welcome to visit the exhibits.

9:00-9:15 AM - Arrival and Registration

9:15-9:30 AM - Welcome & Introduction

Emily Vail, Hudson River Watershed Alliance

Kate Meierdiercks, Siena College & Hudson River Watershed Alliance

Deanne Fuller, Franklin D. Roosevelt Presidential Library and Museum

9:30-9:55 AM - From drought to deluge: Water quality impacts and watershed community responses

Dan Shapley, Riverkeeper

Recent climate extremes in the Hudson River Watershed, including a string of strong storms in 2021 and a significant drought in 2022, had notable water quality impacts affecting drinking and recreational water quality, and ecological health. Watershed champions can respond to conditions as they emerge, and prepare their watershed communities for changes to come. The talk will give examples of impacts and responses from our watershed and community.

9:55-10:20 AM - Climate Safe Yonkers: Promoting Neighborhood-Based Resilience to the Impacts of Climate Change Through an Equity Lens

Oded Holzinger, Groundwork Hudson Valley

As part of the national Climate Safe Neighborhoods Partnership, Groundwork Hudson Valley, a community-based environmental nonprofit from Yonkers, NY, is leading an effort to assess vulnerabilities to the impacts of climate change, namely extreme heat, and organize vulnerable communities to work towards local solutions. This initiative aims to raise awareness with both City leadership and the general public to the Urban Heat Island effect and its relationship to the historical racially discriminatory policy of Redlining, and to promote the implementation of different mitigation and adaptation strategies.

10:20-10:45 AM - Break

10:45-11:10 AM - A picture is worth a thousand words: New methods for understanding flood risk

Jessica Kuonen, New York Sea Grant-Cornell University

Sophie Millar, Scenic Hudson

As the frequency and duration of floods increases across New York and decision-makers are faced with the limitations of regulatory flood maps, community science offers an innovative way to engage residents and fill data gaps. MyCoast NY is a new community science webtool for collecting and analyzing photos of changing water levels, shorelines, and hazardous weather impacts across New York's varied coasts and water bodies. This talk will introduce MyCoast NY alongside a case study about how flood photos linked with environmental data can help inform understanding of flood risk at the local scale.

11:10-11:35 AM - Flood Risk Under Climate Change in New Paltz: Tools for Evaluating Current and Future Impacts

Dominick Dusseau, Woodwell Climate Research Center

Municipalities are at the forefront of climate change impacts, yet climate and flood risk data is not always available or accessible for local policy makers. This talk will delve into how climate data and flood risk tools can be used to inform planning decisions. The recent New Paltz flood risk study, completed by the Woodwell Climate Research Center, will be used as a case study to explore these adaptation strategies.

11:35-11:50 AM - Break

11:50-12:15 PM - An Introduction to Key Coping Strategies and Principles of Trauma-Informed Care: A Disaster Mental Health Perspective

Andrew O'Meara, Institute for Disaster Mental Health, SUNY New Paltz

Andrew O'Meara, Project Coordinator for the Institute for Disaster Mental Health at SUNY New Paltz, will lead this 20-minute discussion on the role of mental health in emergency planning and disaster management. This presentation seeks to provide helpful information on the role that trauma plays in memory encoding, how we can cope with overwhelming reactions to abnormal events, and best-practices for trauma-informed care when working with others. After this presentation, attendees will be able to understand how trauma impacts memory function, what elements are important for being trauma-informed, and some potential coping strategies to assist in times of increased stress.

12:15-12:30 PM - Closing

Day 3 (In-Person, Kingston, NY): Wednesday, October 26, 1 - 4 PM

Hudson River Maritime Museum Barn

50 Rondout Landing, Kingston, NY 12401

The final session will highlight the power of having strong networks when tackling the complexities of climate change adaptation at the local scale by focusing on flooding issues facing communities along the Hudson River shoreline. This in-person session will be facilitated by River Network, and will inform the Hudson River Flood Resilience Network's strategic roadmap. It will also include a tour of flood-proofing measures at the City of Kingston's wastewater treatment plant, located right on the tidal Rondout Creek across the Hudson River Maritime Museum's barn. River Network is a nationwide capacity-building organization with focus on climate resilient communities; robust water laws and policies; healthy rivers in agricultural landscapes; clean, safe, affordable drinking water; and strong organizations and leaders across all watersheds working toward clean and ample water for people and nature.

The [Hudson River Flood Resilience Network](#) convenes municipal leaders from riverfront communities to work together on current and future flood risks. The Flood Resilience Network is currently engaged in a strategic roadmap process that will identify current opportunities and needs to set the direction for the next stage of their work. While this session is focused on the Flood Resilience Network, it is open for anyone to attend to learn about their work and process that can inspire other networks: stakeholders across the entire watershed are impacted by the work of the Flood Resilience Network and their feedback and thoughts on the future of the Network are valuable.

Cost: free

Masks are optional for attendees. The session includes an hour-long tour of the City of Kingston's wastewater treatment plant, which is a 5-minute, flat walk from the venue.

This session is supported by funding from the Hudson River Estuary Program, New York State Department of Environmental Conservation, with support from the New York State Environmental Protection Fund, in cooperation with the New York State Water Resources Institute at Cornell University.

1:00-1:15 PM - Welcome & Introduction

Emily Vail, Hudson River Watershed Alliance

Libby Zemaitis, New York State Department of Environmental Conservation Hudson River Estuary Program

1:15-2:00 PM - Flood Resilience Network: Visioning and the Strategic Roadmap

Hannah Mico, River Network

River Network was hired as a consultant to help oversee the creation of a new vision and strategic direction for the Hudson River Flood Resilience Network. In this session, a sample Strategic Roadmap will be presented for feedback from the Network; the Roadmap will have been informed by ongoing engagements with the Network, and activities will invite further input from Network members to shape the final vision for the future of FRN. Participants can expect a highly engaging session with small breakouts, interactive session materials, and active decision-making.

2:00-2:15 PM - Break

2:15-3:00 PM - Establishing Collaborative Relationships for Flood Resilience

Hannah Mico, River Network

River Network will be guiding Network members and other session participants through exercises related to elevating collaborative relationships within the field of flood resilience. Participants will first work to define what collaborative relationships look and feel like, brainstorm around what mechanisms and systems help support such relationships, and will close out the session by translating these ideas into the FRN's membership framework.

3:00-4:00 PM - Tour of City of Kingston's Wastewater Treatment Plant and Climate Adaptation Actions

Julie Noble, City of Kingston

City staff will lead the group through climate adaptation actions that have been taken at the City's wastewater treatment plant over the past 10 years. The tour will cover storm and flooding impacts, risks and vulnerabilities of the site, funding sources, completed and planned upgrades to the facility. The tour will take place on site, outdoors.

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