

# 3<sup>rd</sup> Annual Delaware Watershed Research Conference

## Tuesday November 19, 2019

### Agenda

<b>8:30-9:00</b>	Registration & Check-In Poster Set-Up (All Day) Breakfast and Coffee (Until 10:15)	19 <sup>th</sup> Street Entrance Commons Science Live
<b>9:00-9:30</b>	Welcome and Opening Remarks	Auditorium
<b>9:30-10:00</b>	Keynote Presentation Randy E. Hayman, Commissioner, Philadelphia Water Department	Auditorium
<b>10:00-10:15</b>	Break	
<b>10:15-12:00</b>	Session 1. Water Quality Monitoring & Modelling Session 2. Flooding & Hydrology	Auditorium BEES Classroom
<b>12:00-1:30</b>	Lunch	Commons
<b>1:30-2:45</b>	Session 3. Public Health & Socio-Economic Perspectives (1) Session 4. Forest Protection	Auditorium BEES Classroom
<b>2:45-3:00</b>	Break	
<b>3:00-4:15</b>	Session 5. Public Health & Socio-Economic Perspectives (2) Session 6. Connectivity & Restoration	Auditorium BEES Classroom
<b>4:15-5:30</b>	Poster Social	Commons

#### **Session 1**    **Water Quality Monitoring & Modeling**

10:15-10:30	Modeling eutrophication processes in the Delaware Estuary to link watershed efforts to control nutrient impacts	Namsu Suk <i>Delaware River Basin Commission</i>
10:30-10:45	Development of fine-scale temperature models in the Delaware River: Application to predictive temperature modeling, decision support tools, and ecosystem services	Heather Galbraith <i>USGS</i>
10:45-11:00	Thermal impacts of rain gardens at the headwaters of Jenkintown Creek in Pennsylvania	Rebecca Martin <i>Villanova University</i>

11:00-11:15	Citizen science and continuous sensors-spatial and temporal patterns of specific conductivity and water temperature in streams and rivers of the Delaware River Basin	David Bressler <i>Stroud</i>
11:15-11:30	Spatial and temporal patterns of specific conductivity in streams and rivers of the Delaware River Basin	Diana Oveido-Vargas <i>Stroud</i>
11:30-11:45	Spatial and temporal patterns of water temperature in streams and rivers of the Delaware River Basin	Marc Peipoch <i>Stroud</i>

## **Session 2**    **Flooding and Hydrology**

10:15-10:30	What is a floodplain worth?	Kristina Hopkins <i>USGS</i>
10:30-10:45	Quantifying flash flood susceptibility in the Delaware River Region	David Brandes <i>Lafayette College</i>
10:45-11:00	Effects of impervious surfaces on flow patterns at the headwaters of a developed watershed	Lesmes Alejandro Mora Jerez <i>Villanova University</i>
11:00-11:15	A fully automated framework for runoff estimation in urban areas; a case study of Philadelphia PA	Hossein Hosseiny <i>Villanova University</i>
11:15-11:30	Bank erosion and floodplain sedimentation along the White Clay Creek, PA	James Pizzuto <i>University of Delaware</i>
11:30-11:45	2D modeling of sediment transport in Green stormwater infrastructure	Richard Ampomah <i>Villanova University</i>

## **Session 3**    **Public Health and Socio-Economic Perspectives (1)**

1:30-1:45	What's the story with high fecal indicator bacteria in Delaware River Watershed headwaters?	JinJun Kan <i>Stroud</i>
1:45-2:00	Current state of applying high-throughput sequencing for water quality assessment and bacterial source tracking in the Delaware River Watershed	Chris Sales <i>Drexel University</i>
2:00-2:15	Assessing sources of fecal contamination in New Jersey's Musconetcong River Watershed	T. David Hsu <i>Passaic River Institute</i>
2:15-2:30	Revisiting the Musconetcong River after ten years	Meiyin Wu <i>Passaic River Institute</i>

**Session 4****Forest Protection**

1:30-1:45	Forest protection & water quality: a mixed-methods approach to understanding what the science says and how practitioners are using it	Joshua Morse <i>University of Vermont/ OSI</i>
1:45-2:00	Bioclimatic modeling of tree species distributions in the Delaware Watershed	Patrick Jantz <i>Northern Arizona University/ Shippensburg</i>
2:00-2:15	The effects of future urbanization and energy infrastructure expansion on forest fragmentation	Alfonso Yáñez Morillo <i>Shippensburg University</i>
2:15-2:30	Municipal code and ordinance influence on forest cover and water quality in the Delaware River Basin	Julie Schneider <i>Center for Watershed Protection</i>

**Session 5****Public Health and Socio-Economic Perspectives (2)**

3:00-3:15	Freshwater phytoplankton assemblages in the New Jersey Delaware watershed	Yaritza Acosta Caraballo <i>Montclair State University</i>
3:15-3:30	Heavy precipitation, drinking water source, and acute gastrointestinal illness in Philadelphia 2015-2017	Anneclaire De Roos <i>Drexel University</i>
3:30-3:45	Evaluation of the technical, economic, and social impacts associated with updating major wastewater treatment infrastructure to address aquatic life uses and values for the Delaware Estuary	John Yagecic <i>Delaware River Basin Commission</i>
3:45-4:00	Restoring the Delaware Estuary: Uses, Dissolved Oxygen, and Values	Erik Silldorff <i>Delaware Riverkeeper Network</i>

**Session 6****Connectivity & Restoration**

3:00-3:15	Protecting headwater stream function integrity in the age of urbanization and climate change: time to reconsider the basics?	Stanley Kemp <i>University of Baltimore</i>
3:15-3:30	Assessing aquatic connectivity in New Jersey's Delaware Watershed	T. David Hsu <i>Passaic River Institute</i>
3:30-3:45	Multiyear, multidisciplinary monitoring in anticipation of the removal of several low-head, run-of-river dams - Bushkill Creek, Pennsylvania	Dru Germanoski <i>Lafayette College</i>
3:45-4:00	Community Engagement Along the Musconetcong River: Bacteria, River Restoration, and Future Directions	Jessica Miller <i>Montclair State University</i>