3rd Annual Delaware Watershed Research Conference
Tuesday November 19, 2019

Agenda

8:30-9:00  Registration & Check-In  19th Street Entrance
           Poster Set-Up (All Day)  Commons
           Breakfast and Coffee (Until 10:15)  Science Live

9:00-9:30  Welcome and Opening Remarks  Auditorium

9:30-10:00  Keynote Presentation  Auditorium
            Randy E. Hayman, Commissioner, Philadelphia Water Department

10:00-10:15  Break

10:15-12:00  Session 1. Water Quality Monitoring & Modelling  Auditorium
            Session 2. Flooding & Hydrology  BEES Classroom

12:00-1:30  Lunch  Commons

1:30-2:45  Session 3. Public Health & Socio-Economic Perspectives (1)  Auditorium
            Session 4. Forest Protection  BEES Classroom

2:45-3:00  Break

3:00-4:15  Session 5. Public Health & Socio-Economic Perspectives (2)  Auditorium
            Session 6. Connectivity & Restoration  BEES Classroom

4:15-5:30  Poster Social  Commons

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<thead>
<tr>
<th>Session 1</th>
<th>Water Quality Monitoring &amp; Modeling</th>
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<tr>
<td>10:15-10:30  Modeling eutrophication processes in the Delaware Estuary to link watershed efforts to control nutrient impacts  Namsoo Suk  Delaware River Basin Commission</td>
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<td>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  USGS</td>
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<td>10:45-11:00  Thermal impacts of rain gardens at the headwaters of Jenkintown Creek in Pennsylvania  Rebecca Martin  Villanova University</td>
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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
            Stroud

11:15-11:30  Spatial and temporal patterns of specific conductivity in streams and rivers of the Delaware River Basin
            Diana Oveido-Vargas
            Stroud

11:30-11:45  Spatial and temporal patterns of water temperature in streams and rivers of the Delaware River Basin
            Marc Peipoch
            Stroud

**Session 2  Flooding and Hydrology**

10:15-10:30  What is a floodplain worth?
            Kristina Hopkins
            USGS

10:30-10:45  Quantifying flash flood susceptibility in the Delaware River Region
            David Brandes
            Lafayette College

10:45-11:00  Effects of impervious surfaces on flow patterns at the headwaters of a developed watershed
            Lesmes Alejandro Mora Jerez
            Villanova University

11:00-11:15  A fully automated framework for runoff estimation in urban areas; a case study of Philadelphia PA
            Hossein Hosseiny
            Villanova University

11:15-11:30  Bank erosion and floodplain sedimentation along the White Clay Creek, PA
            James Pizzuto
            University of Delaware

11:30-11:45  2D modeling of sediment transport in Green stormwater infrastructure
            Richard Ampomah
            Villanova University

**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
            Stroud

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
            Drexel University

2:00-2:15  Assessing sources of fecal contamination in New Jersey's Musconetcong River Watershed
            T. David Hsu
            Passaic River Institute

2:15-2:30  Revisiting the Musconetcong River after ten years
            Meiyin Wu
            Passaic River Institute
### Session 4  Forest Protection

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<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker &amp; Affiliation</th>
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<tr>
<td>1:30-1:45</td>
<td>Forest protection &amp; water quality: a mixed-methods approach to understanding what the science says and how practitioners are using it</td>
<td>Joshua Morse, University of Vermont/ OSI</td>
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<td>1:45-2:00</td>
<td>Bioclimatic modeling of tree species distributions in the Delaware Watershed</td>
<td>Patrick Jantz, Northern Arizona University/ Shippensburg</td>
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<td>2:00-2:15</td>
<td>The effects of future urbanization and energy infrastructure expansion on forest fragmentation</td>
<td>Alfonso Yáñez Morillo, Shippensburg University</td>
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<td>2:15-2:30</td>
<td>Municipal code and ordinance influence on forest cover and water quality in the Delaware River Basin</td>
<td>Julie Schneider, Center for Watershed Protection</td>
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### Session 5  Public Health and Socio-Economic Perspectives (2)

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<tr>
<th>Time</th>
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<tr>
<td>3:00-3:15</td>
<td>Freshwater phytoplankton assemblages in the New Jersey Delaware watershed</td>
<td>Yaritza Acosta Caraballo, Montclair State University</td>
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<td>3:15-3:30</td>
<td>Heavy precipitation, drinking water source, and acute gastrointestinal illness in Philadelphia 2015-2017</td>
<td>Anneclaire De Roos, Drexel University</td>
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<td>3:30-3:45</td>
<td>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</td>
<td>John Yagecic, Delaware River Basin Commission</td>
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<td>3:45-4:00</td>
<td>Restoring the Delaware Estuary: Uses, Dissolved Oxygen, and Values</td>
<td>Erik Silldorff, Delaware Riverkeeper Network</td>
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### Session 6  Connectivity & Restoration

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