



## Conference Agenda

Last Updated: May 12, 2022

# 2022 Lake Champlain Research Conference

May 23-24, 2022

Hilton Burlington Lake Champlain

60 Battery Street Burlington, VT 05401

<https://www.lcbp.org/about-us/how-we-work/meetings/lake-champlain-research-conference-2022/>

## Thank you to the Conference Co-Hosts!

Staff from the following organizations helped plan, organize, and fund the 2022 Lake Champlain Research Conference.



## **Thank you to our Conference Sponsors!**

These sponsorships help reduce costs to make the 2022 Lake Champlain Research Conference more accessible to participants.



## Agenda at a Glance

### Day 1: Monday 5/23/2022

8:00am – 5pm: **Registration**

*North Prefunction*

8:00am – 8:45am: **Breakfast Buffet**

*Green Mountain Ballroom*

9:00am – 10:30am: **Welcoming Remarks & Keynote Address**

*Adirondack AB Theatre*

*Welcoming Remarks*

*Keynote Address: The Clean Water Act: Steering 50 Years of Environmental Improvement in the Lake Champlain Basin – MaryJo Feuerbach, EPA Region 1*

10:30am – 11:00am: **Break & Networking**

11:00am – 12:15pm: **Concurrent Session #1**

Track 1A <b>Watershed Education</b> <i>Adirondack AB Theatre</i>	Track 1B <b>Wetlands</b> <i>Montpelier BC Classroom</i>	Track 1C <b>Aquatic Invasive Species</b> <i>Adirondack C Classroom</i>	Track 1D <b>Streams, Rivers, and Floodplains Pt 1</b> <i>Adirondack D Classroom</i>
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12:15pm – 1:15pm: **Lunch Buffet & Graduate Student Luncheon**

*Green Mountain Ballroom*

1:15pm – 2:30pm: **Concurrent Session #2**

Track 2A <b>Community Engagement for Water Quality</b> <i>Adirondack AB Theatre</i>	Track 2B <b>Agriculture</b> <i>Montpelier BC Classroom</i>	Track 2C <b>Lake Species and Habitats</b> <i>Adirondack C Classroom</i>	Track 2D <b>Streams, Rivers, and Floodplains Pt 2</b> <i>Adirondack D Classroom</i>
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2:30pm-2:45pm: **Break & Networking**

2:45pm – 4:00pm: **Concurrent Session #3**

Track 3A <b>“Lake Champlain Unfiltered”</b> <i>Adirondack AB Theatre</i>	Track 3B <b>Community Action</b> <i>Montpelier BC Classroom</i>	Track 3C <b>Phytoplankton and Data Collection</b> <i>Adirondack C Classroom</i>	Track 3D <b>Municipal/Developed Lands Infrastructure</b> <i>Adirondack D Classroom</i>
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4:00pm – 5:00pm: **Poster Session & Conference Reception**

*Green Mountain Ballroom*

4:45pm – 6:15pm: **Film Screenings & Conference Reception, continued**

*Adirondack AB Theatre*

- **Connected, A Journey Through the Champlain Adirondack Biosphere Network (CABN)** ~8 minutes
- **No Other Lake (Lake Champlain Film)** ~40 minutes
- Film screenings will be followed by a Q&A Panel

## Day 2: Tuesday 5/24/2022

8:00am – 1pm: **Registration**

*North Prefunction*

8:30 – 9:30am: **Breakfast Buffet**

*Green Mountain Ballroom*

9:30am – 10:30am: **Day 2 Keynote Addresses**

*Adirondack AB Theatre*

- **Round Goby Threat to Lake Champlain and the Champlain Canal**  
Shawn Good, Vermont Fish and Wildlife Department  
Meg Modley Gilbertson, LCBP
- **The Gunboat Spitfire: Local History, National Significance**  
Susan Evans McClure and Chris Sabick, Lake Champlain Maritime Museum

10:30am – 11:00am: **Break & Networking**

11:00am – 12:15pm: **Concurrent Session #4**

Track 4A Diversity, Equity, Inclusion and Public Access <i>Adirondack AB Theatre</i>	Track 4B Road Salt: A Contaminant of Emerging Concern <i>Montpelier BC Classroom</i>	Track 4C Cyanobacteria <i>Adirondack C Classroom</i>	Track 4D Functioning Floodplain Initiative Pt 1 <i>Adirondack D Classroom</i>
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12:15pm – 1:15pm: **Lunch Buffet & Poster Session, continued**

*Green Mountain Ballroom*

1:15pm – 2:30pm: **Concurrent Session #5**

Track 5A Cultural Heritage in the Lake Champlain Basin <i>Adirondack AB Theatre</i>	Track 5B Lake Champlain Federal Partners Climate Change Initiative <i>Montpelier BC Classroom</i>		Track 5D Functioning Floodplain Initiative Pt 2 <i>Adirondack D Classroom</i>
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## Agenda in Full

### Day 1: Monday 5/23/2022

8:00am – 4:30pm: **Registration**

**North Prefunction**

9:00am – 10:30am: **Welcoming Remarks & Keynote Address**

**Adirondack AB Theatre**

#### **Welcoming Remarks**

- Julie Moore, Secretary, Vermont Agency of Natural Resources
- Timothy Mihuc, Executive Director, Lake Champlain Research Consortium
- Breck Bowden, Director of Water Resources and Lake Studies Center, Lake Champlain Sea Grant
- Eric Howe, Director, Lake Champlain Basin Program

**Keynote Address: The Clean Water Act: Steering 50 Years of Environmental Improvement in the Lake Champlain Basin** – MaryJo Feuerbach, EPA Region 1

10:30am – 11:00am: **Break & Networking**

11:00am – 12:15pm: **Concurrent Session #1**

#### **Track 1A: Watershed Education**

**Adirondack AB Theatre**

##### **Moderator: Caroline Blake McKelvey**

- The Giant Lake Champlain Map Project
  - Elizabeth Lee, Lake Champlain Maritime Museum.
- Watersheds as a Framework for Learning
  - Ashley Eaton, Lake Champlain Sea Grant
- Lewis Creek Association Ahead of the Storm Watershed Education Program
  - Jessica Louisos, SLR International Corporation. Additional Authors: Kate Kelly, Lewis Creek Association
- Using Community Science to Empower the Public to Observe, Monitor, and Manage Invasive Species in the Adirondacks
  - Brian Greene, Adirondack Park Invasive Plant Program. Additional Authors: Rebecca Bernacki, Tammara Van Ryn, Zachary Simek

#### **Track 1B: Wetlands**

**Montpelier BC Classroom**

##### **Moderator: Zapata Courage**

- Citizen Scientists and Vermont's Wetlands
  - Tina Heath, VT Agency of Natural Resources Wetlands Program. Additional Authors: Charlie Hohn
- Wetland Restoration Monitoring in Vermont
  - Tina Heath, VT Agency of Natural Resources Wetlands Program. Additional Authors: Charlie Hohn
- Phosphorus Cycling in Restored Riparian Wetlands in Vermont
  - Eric Roy, University of Vermont. Additional Authors: Adrian Wiegman, Kristen Underwood, Breck Bowden
- Semi-automated Wetlands Mapping in the Otter Creek Watershed of Vermont and Implications for Monitoring and Conservation
  - Laura LaPierre, Vermont DEC. Additional Authors: B. Freyer, C. Hohn., B. Ketterling, L. Keszey, A. Kreiger, S. MacFaden, J. O'Neil-Dunne, and A. Royar

#### **Track 1C: Aquatic Invasive Species**

**Adirondack C Classroom**

##### **Moderator: Erin Vennie-Vollrath**

- Modelling the Impact of Alewife Invasion on the Food Webs of Lake Champlain
  - Justin Lesser, University of Vermont. Additional Authors: Rosalie Bruel, Jason Stockwell, Ellen Marsden
- Using eDNA to Monitor Invasive Species and Factors Influencing Detection Probability
  - Jake Riley, Stantec Consulting

- Pathways of Invasion: Recreational Boater Activity, Aquatic Invasive Species Distribution, and Landscape Level Connectivity to Inform Management and Prevention in New York State
  - *Michale Glennon, Paul Smith's College Adirondack Watershed Institute. Additional Authors: Dan Kelting*
- Analyzing Watercraft Inspection Steward Survey Data to Inform Aquatic Invasive Species Management, Monitoring, and Prevention Efforts in New York State
  - *Mitchell O'Neill and John Marino, New York Natural Heritage Program.*

### Track 1D: Streams, Rivers, and Floodplains Part 1

Adirondack D Classroom

#### Moderator: Rebecca Diehl

- The past, present, and future of Lake Champlain: Using long-term monitoring data to determine tributary nutrient loads and guide management
  - *Matthew C. H. Vaughan, Lake Champlain Basin Program*
- Increased Winter Thaws in Northern Climates: An Emerging Threat to Lake Champlain Basin Water Quality?
  - *Andrew Schroth, University of Vermont. Additional Authors: Carol Adair, Kathleen Lewis, Saul Blocher, Aimee Classen, Keith Mussleman, Meghan Taylor, Sonya Vogel, Julia Perdrial, Dustin Kincaid, Erin Seybold*
- Assessing the Impact of Private Roads on Aquatic Habitat Connectivity in the Missisquoi Basin
  - *Luke Briccetti, SUNY Plattsburgh Graduate Student. Additional Authors: Dr. Tim Mihuc, Dr. Kimberly Coleman*
- Monitoring Japanese Knotweed Using Drone Imagery
  - *Simon Parish, Norwich University. Additional Authors: Harry Simotwo, Galen Ryan, Cynthia Fortin, Ronald Lessard*

12:15pm – 1:15pm: **Lunch Buffet & Graduate Student Luncheon**

Green Mountain Ballroom

1:15pm – 2:30pm: **Concurrent Session #2**

### Track 2A: Community Engagement for Water Quality

Adirondack AB Theatre

#### Moderator: Chris Navitsky

- Forest Landowner Understanding of Water Quality Protection Practices: Case Study in the Lake Champlain Basin
  - *Elizabeth Doran, Civil & Environmental Engineering, University of Vermont. Additional Authors: Kimberly Coleman*
- Incentives and Barriers to Adoption of Green Stormwater Infrastructure by Vermont Municipalities and Residents
  - *Stephanie Hurley, University of Vermont. Additional Authors: Sarah Coleman, Holly Greenleaf*
- Resilient Right-of-Ways: A Collaborative and Integrated Approach to Advance Trees, Forests, and Other Green Stormwater Infrastructure Practices in Vermont's Roadside Environments
  - *Elise Schadler, VT Forests, Parks & Recreation. Additional Authors: Joanne Garton, Karl Honkonen*
- Targeted Stormwater and Shoreline Erosion Assessments on the Lake Champlain Shoreline in Georgia, VT
  - *Kerrie Garvey, Watershed Consulting Associates, LLC. Additional Authors: Andres Torizzo*

### Track 2B: Agriculture

Montpelier BC Classroom

#### Moderator: Joshua Faulkner

- Re-conceptualizing the Soil and Water Assessment Tool to Predict Subsurface Water Flow Through Macroporous Soils
  - *Aubert R. Michaud, Organisme de bassin versant Baie Missisquoi. Additional Authors: David Poon, Joann K. Whalen*
- Phosphorus Losses in Surface and Tile Drainage from Northern New York Corn Fields
  - *Laura Klaiber, Miner Institute. Additional Authors: Stephen Kramer, Mark Haney*
- Dimensioning and Locating Experimental Riparian Buffers Using Distributed Hydrological Modeling
  - *Guillaume Morin, Institut national de la recherche scientifique. Additional Authors: Cedrick Guedessou, Silvio Gumiere, Étienne Foulon and Alain N. Rousseau*
- Monitoring the Environmental Status of an Integrated Watershed Management Project Using a Suite of Indices
  - *Etienne Foulon, Institut national de la recherche scientifique, Centre eau terre et environnement. Additional Authors: Mohamed Laabouli, Alain N. Rousseau*

## Track 2C: Lake Species and Habitats

Adirondack C Classroom

### Moderator: Tim Mihuc

- A Preliminary List of Mayflies (Ephemeroptera), Stoneflies (Plecoptera) and Caddisflies (Trichoptera) from Lake Champlain with Discussion of Unique Habitats and Species of Conservation Concern
  - *Luke Myers, Lake Champlain Research Institute, SUNY Plattsburgh. Additional Authors: Timothy Mihuc*
- Tracking Stocked and Naturally-produced Lake Trout Demonstrates Differences in Seasonal Habitat Selection
  - *Matthew Futia, University of Vermont. Additional Authors: Aaron Fisk, Ellen Marsden*
- Use of Genetic Tools to Assess Stocking Performance and Wild Recruitment in a Recovering Lake Trout Population
  - *Benjamin Marcy-Quay, University of Vermont. Additional Authors: Ellen Marsden*
- Assessing and Improving Landlocked Atlantic Salmon Restoration in Lake Champlain with Parentage Based Tagging
  - *Kurt Heim, U.S. Fish and Wildlife Service. Additional Authors: William Ardren*

## Track 2D: Streams, Rivers, and Floodplains Part 2

Adirondack D Classroom

### Moderator: Alain Rousseau

- Development of a Flood Forecasting System for Lake Champlain
  - *Daniel Titze, Cooperative Institute for Great Lakes Research, University of Michigan. Additional Authors: Dmitry Beletsky, James Kessler, Lacey A. Mason, Eric Anderson, Lauren Fry, Laura Read, William Saunders, Philip Chu, Jesse Feyen, Deborah Lee*
- Quantifying the Flow Buffering Capacity of Wetlands Using the Strahler Order – The Case Study of the Lake Champlain Basin
  - *Simon Lachapelle, Institut National de la Recherche Scientifique - Centre Eau Terre Environnement (INRS-ETE). Additional Authors: Stéphane Savary, Alain N. Rousseau*
- First Instance Inundated Area Mapping Using a Zero-Dimensional Model over Small Watersheds
  - *Camila Alejandra Gordon, Institut National de la Recherche Scientifique. Additional Authors: Zainab El Batti, Etienne Foulon, Alain N. Rousseau*
- Toward Establishment of Filtering Vegetated Buffers: Planning Process and Acceptance Factors
  - *Laurence Turmel-Courchesne, Université Laval. Additional Authors: Chaisse Leal, Laurie; Bourgeois, Bérenger; Morin, Guillaume; V. Guedessou Cedrick; J. Gumiere, Silvio; N. Rousseau, Alain; Poulin, Monique*

2:30pm-2:45pm: **Break & Networking**

2:45pm – 4:00pm: **Concurrent Session #3**

## Track 3A: “Lake Champlain Unfiltered”

Adirondack AB Theatre

### Moderator:

- Late career and newly retired environmental professionals share their experiences and guidance with students and early career professionals. Featuring a fantastic panel of experts:
  - Vicki Drew, retired USDA Natural Resources Conservation Service (NRCS) State Conservationist
  - Donna Parrish, retired, U.S. Geological Survey, Vermont Cooperative Fish and Wildlife Research Unit
  - Eric Perkins, retired US Environmental Protection Agency (EPA) water quality specialist

## Track 3B: Community Action

Montpelier BC Classroom

### Moderator: Aude Lochet

- An Innovative Collective Project to Improve the Water Quality of an Agricultural Watershed
  - *Etienne Foulon, Institut national de la recherche scientifique, Centre eau terre et environnement. Additional Authors: Alain N. Rousseau, Karine Dauphin, André Pion*
- Socio-economic Barriers and Opportunities Related to the Implementation of Agri-environmental Practices in Quebec (Canada)
  - *Faby Anne G Mimeault, Université du Québec en Outaouais. Additional Authors: Alejandra Zaga Mendez, Jérôme Dupras*
- Understanding Knowledge and Stewardship Actions of the Public Across the Lake Champlain Basin to Inform Future Outreach



- *Kris Stepenuck, University of Vermont. Additional Authors: Jane Kolodinsky, Michael Moser, Lori Fisher*
- Investigating Interventions to Increase Environmental Literacy among K-12 Teachers and BIPOC Students
  - *Jillian Kara, SUNY Plattsburgh. Additional Authors: Dr. Kimberly J Coleman*

### Track 3C: Phytoplankton and Data Collection

Adirondack C Classroom

#### Moderator: Ana M. Morales-Williams

- Changes in Lake Champlain Phytoplankton Community Composition and Distribution From 1970 to 2020
  - *Kayleen Snyder, Lake Champlain Research Institute. Additional authors: Timothy Mihuc*
- Algal Growth in Lake George, NY as an Indicator of Water Quality Impacts from Land Use – Analysis from 2020 and initial results from 2021
  - *Brea Arvidson, Lake George Association. Additional authors: Chris Navitsky*
- Developing low-cost cyanobacteria, algae, turbidity, and temperature sensor systems for water quality monitoring of Lake Champlain waterfront areas
  - *Clayton Williams, Saint Michael's College. Additional authors: Tian Xia; Jessica Sheridan; Wenzhe Chen; Ana M. Morales-Williams*
- A Shiny app for the interactive display of near real-time data from the Upper Saranac Lake Environmental Monitoring Platform
  - *Brendan Wiltse, Paul Smith's College Adirondack Watershed Institute*

### Track 3D: Municipal/Developed Lands Infrastructure

Adirondack D Classroom

#### Moderator: Jill Sarazen

- Subsurface horizontal-flow gravel wetlands in Vermont – permitting, performance, and chloride concerns
  - *Andres Torizzo, Watershed Consulting Associates. Additional authors: Eric Roy, Donna M. Rizzo, Nisha Nadkarni*
- Subsurface horizontal-flow gravel wetlands in Vermont – material selection impacts on performance
  - *Eric Roy, University of Vermont. Additional authors: Marcos Kubow, Andres Torizzo, and Donna M. Rizzo*
- Nitrate Reduction from Woodchip Bioreactor Technology at a Small Community Treatment Plant
  - *Chris Navitsky, Lake George Waterkeeper. Additional authors: Jim Sutherland, PhD; Kathy Suozzo, P.E.*

### 4:00pm – 5:00pm: Poster Session & Conference Reception

Green Mountain Ballroom

During the conference reception, non-alcoholic drinks and snacks will be provided and for those wishing to have an alcoholic beverage there will be a bar that accepts credit/debit card payments.

#### Posters:

- Bird and pollinator friendly farming practices co-benefit clean water, healthy soils, and climate solutions in the Lake Champlain Basin
  - *Cassandra Wolfanger, Audubon Vermont and Lake Champlain Sea Grant*
- Statistical meta-analysis of agricultural BMPs and BMP group performance
  - *Brendan Lombard, Undergraduate Researcher. Additional Authors: Dr. Elizabeth Doran*
- Temporal effect of green manure use on soil microbial community in field cropping systems
  - *Thiago Gumiere, Université Laval. Additional Authors: Carl Lalonde-Haman, Jhemson Brédy, Silvio J. Gumiere, Caroline Halde, Cedrick V. Guedessou, Etienne Foulon, Alain N. Rousseau*
- Characterization of Viral and Bacterial Dynamics in Lake Champlain Cyanobacterial Harmful Algal Blooms
  - *Briana Gifty and Johson Atanga, Middlebury College. Additional Authors: Erin Eggleston*
- Wool and Water: Environmental Education through Participatory Fiber Arts
  - *Michale Glennon, Paul Smith's College Adirondack Watershed Institute*
- Baseline Phosphorus Monitoring in Preparation for a Watershed Action Plan for Lake St. Catherine
  - *Andrew Vermilyea, Castleton University. Additional Authors: Chris Ciccarelli*
- Consequences of Winter Thaw and High-Flow Events on Nutrient Loading into the Lake Champlain Basin
  - *Sonya Vogel, University of Vermont. Additional Authors: Carol Adair, Meghan Taylor, Andrew Schroth*
- Using a variety of diet tracers can help managers stay one step ahead of the next big invasion

- *Ariana Chiapella, University of Vermont. Additional Authors: Jason Stockwell, Martin Kainz, Ellen Marsden*
- Artistic Interpretations on How Pollution Impacts the Lake Champlain Watershed
  - *Jill Serrano Michalsky, BluSeed Studios*
- Our Scrumptious Lake: Phyto-tastic!
  - *Sandy Murphy, Independent Literacy Consultant and Tutor.*
- Paleolimnological data synthesis to assess and predict long-term ecological change in Vermont inland lakes
  - *Ismar Biberovic, University of Vermont. Additional Authors: Ana Morales-Williams*
- Assessing Internal Phosphorus Loading in Lake Carmi in Response to Whole Lake Aeration
  - *Ashton Kiroi, University of Vermont. Additional Authors: Andrew Schroth*
- Invasive Predatory Cladocerans Alter Lake Champlain Zooplankton Community
  - *Zachary Cutter, Lake Champlain Research Institute. Additional Authors: Tim Mihuc, Luke Myers*
- Predictive Modeling of Road-salt Related Chloride Pollution within Aquatic Systems of the Adirondack Park and Associated Watersheds
  - *Jesse Rock, Brendan Wiltse*
- Long Term, High Frequency Measurements of Environmental Soil Parameters Illustrate the Relationship Between Soil CO<sub>2</sub> Emissions and Winter Warming Conditions and Variable Snowpack in Lake Champlain Riparian Zones
  - *Meghan Taylor, University of Vermont. Additional Authors: Carol E. Adair; Andrew Schroth; Dustin Kincaid*

4:45pm – 6:15pm: **Film Screenings & Conference Reception, continued**

**Adirondack AB Theatre**

During the conference reception, non-alcoholic drinks and snacks will be provided and for those wishing to have an alcoholic beverage there will be a bar that accepts credit/debit card payments. The film screenings will be followed by a Q&A Panel Discussion.

**Films:**

- **Connected, A Journey Through the Champlain Adirondack Biosphere Network (CABN)** (~ 8 minutes)
  - *This film celebrates the partners working to build a more sustainable future for communities across the Champlain Basin and the Adirondack Mountains. It was directed by Lia Nydes and produced in partnership with the National Park Service and the Center for Environmental Filmmaking, American University.*
- **NO OTHER LAKE (Lake Champlain Film)** (~40 minutes)
  - *Motivated by a desire to better understand his home watershed, Jordan Rowell embarks on a two-week kayaking trip along the 120-mile length of Lake Champlain, stopping along the way to talk to a wide range of characters about the future of their shared basin. Set 50 years after the passage of the Clean Water Act, NO OTHER LAKE is both a celebration of the unique beauty of Lake Champlain and a confrontation with its greatest challenges. This adventure-conservation documentary strives to inspire people to better connect with the natural world around them, see issues from a different point of view, and get involved with stewardship efforts happening close to home.*

## Day 2: Tuesday 5/24/2022

### 9:30am – 10:30am: Day 2 Keynote Addresses

**Adirondack AB Theatre**

- **Round Goby Threat to Lake Champlain and the Champlain Canal** – Shawn Good, Vermont Fish and Wildlife Department and Meg Modley Gilbertson, LCBP
- **The Gunboat Spitfire: Local History, National Significance** – Susan Evans McClure and Chris Sabick, Lake Champlain Maritime Museum

### 10:30am – 11:00am: Break & Networking

### 11:00am – 12:15pm: Concurrent Session #4

#### Track 4A: Diversity, Equity, Inclusion, Public Access

**Adirondack AB Theatre**

Presentation by Dr. Maria Mercedes Avila, Assistant Professor of Pediatrics, Adjunct Assistant Professor of Nursing, the University of Vermont and Chair of Vermont Department of Health's Health Disparities and Cultural Competence Committee

#### Track 4B: Road Salt: A Contaminant of Emerging Concern

**Montpelier BC Classroom**

##### **Moderator: Eric Moody**

- Understanding winter maintenance practices of basin communities
  - *Kris Stepenuck, UVM. Additional Authors: Ruth Smtih and Kristina Hartzell*
- An Environmental Monitoring Program to Evaluate the New York State Department of Transportation Road Salt Reduction Pilot Program in the Lake George Drainage Basin
  - *Jim Sutherland, Lake George Association. Additional Authors: Chris Navitsky, Brea Arvidson*
- Regional pollution of groundwater by road salt in the Adirondack Park
  - *Dan Kelting, Paul Smith's College Adirondack Watershed Institute. Additional Authors: Corey Laxson and Elizabeth Yerger*
- Multi-decadal monitoring reveals salinization impacts of road de-icing salt application in the Lake Champlain watershed
  - *Will Sutor, University of Vermont. Additional Authors: Matthew C. H. Vaughan, Ana M. Morales-Williams, Brendan Wiltse*

#### Track 4C: Cyanobacteria

**Adirondack C Classroom**

##### **Moderator: Peter Isles**

- Deciphering the diversity and role of bacteriophage in Lake Champlain
  - *Nana Ankrah, SUNY Plattsburgh. Additional Authors: Luke Myers, Ashley Barkley*
- Linking Comprehensive Monitoring with a 3D Coupled Hydrodynamic-Aquatic Ecosystem Model to Evaluate Alternatives for Controlling Internal Phosphorus Loading in Missisquoi Bay, Lake Champlain
  - *Andrew Schroth, UVM. Additional Authors: Ashton Kirol, Meghan Arpino, Clelia Marti, Ken Wagner, Dave Braun*
- Artificial aeration alters Cyanobacteria functional diversity and stability but not dominance in Lake Carmi, VT
  - *Ana M. Morales-Williams, University of Vermont Rubenstein School of Environment and Natural Resources. Additional Authors: Maria Alfaró, Jeremy Howland, Ashton Kirol, Austin Wilkes, and Andrew Schroth*
- Effects of Disturbance on Phytoplankton Communities in Two Eutrophic Bays of Lake Champlain
  - *Katelynn Warner, University of Vermont. Additional Authors: Andrew Schroth, Ana M. Morales-Williams*

#### Track 4D Functioning Floodplain Initiative Part 1

**Adirondack D Classroom**

##### **Moderator: Roy Schiff**

- Developing tools to restore floodplain function in Vermont's Lake Champlain Basin – Overview of the Vermont Functioning Floodplain Initiative
  - *Gretchen Alexander, Vermont DEC. Additional Authors: Roy Schiff, SLR International; Evan Fitzgerald, Fitzgerald Environmental; Kristen Underwood, University of Vermont; Mike Kline, Fluvial Matters; Jody Stryker, Stone Environmental*

- Integrating Stream Geomorphic Data to Improve Floodplain Mapping Using a Probabilistic Low-Complexity Hydraulic Model
  - *Kristen Underwood, University of Vermont. Additional Authors: Stephanie Drago, Jeremy E. Matt, Rebecca M. Diehl*
- Variability in the magnitude of sediment and phosphorus deposition on floodplains in the Lake Champlain Basin can inform basin planning
  - *Rebecca Diehl, University of Vermont. Additional Authors: Kristen Underwood, Stephanie Drago, Don Ross, Beverley Wemple*
- Predicting Stream Power from a Low Complexity Hydraulic Model
  - *Jeremy Matt, University of Vermont. Additional Authors: Rebecca M. Diehl, Kristen L. Underwood, Elizabeth M.B. Doran, Ali Javed, Stephanie Drago, Rachel M. Seigel, Donna M. Rizzo*

12:15pm – 1:15pm: **Lunch Buffet & Poster Session, continued**

**Green Mountain Ballroom**

1:15pm – 2:30pm: **Concurrent Session #5**

**Track 5A: Cultural Heritage in the Lake Champlain Basin**

**Adirondack AB Theatre**

**Moderator: Katie Darr**

- 'Our Best Endeavors:' Temperance, Prohibition, and Smuggling in Champlain Valley
  - *Susan McClure, Lake Champlain Maritime Museum*
- War and Enslavement in the Champlain Valley
  - *Matthew Keagle, Fort Ticonderoga*

**Track 5B: Lake Champlain Federal Partners Climate Change Initiative**

**Montpelier BC Classroom**

The Lake Champlain Federal Partners Workgroup invites conference attendees to join this meeting space to learn, ask questions, and share feedback about current Basin-wide climate change initiatives.

**Track 5D: Functioning Floodplain Initiative Part 2**

**Adirondack D Classroom**

**Moderator: Roy Schiff**

- A method to classify headwater reaches for stream and floodplain project crediting under the Lake Champlain phosphorus TMDL
  - *Scott Lawson, University of Vermont. Additional Authors: Kristen L. Underwood, Stephanie Drago, Gretchen Alexander, Roy Schiff, Mike Kline*
- Expanding the Vermont Functioning Floodplain Initiative (FFI) to include Instream and Floodplain Habitat Protection and Restoration Potential
  - *Elizabeth Doran, Civil & Environmental Engineering, University of Vermont. Additional Authors: Roy Schiff, Mike Kline, Kristen Underwood, Rebecca Diehl*
- The Vermont Functioning Floodplain Initiative: Crediting River Corridor Projects for Total Phosphorus Attenuation for the Lake Champlain TMDL
  - *Roy Schiff, SLR International. Additional Authors: Mike Kline, Fluvial Matters; Evelyn Boardman, Fitzgerald Environmental; Evan Fitzgerald, Fitzgerald Environmental, LLC*
- The FFI Web Application – Translating Research Outcomes into Project Planning, Implementation, and Tracking of River and Floodplain Reconnection
  - *Jody Stryker, Stone Environmental. Additional Authors: Barbara Patterson, Nick Floersch, Gretchen Alexander, Roy Schiff, Evan Fitzgerald, Evelyn Boardman, Kristen Underwood, Mike Kline*