

Agenda - Waterview

8:30 **Check-in / Poster set up – NY arrivals, Atrium**

8:30 – 9:45 **Continental Breakfast, Atrium**

9:00 **Check-in / Poster set up – CT arrivals, Atrium**

9:15 **Welcome! Main Ballroom**

Opening Remarks by Dr. Rebecca Shuford, director NYSG, Dr. Sylvain De Guise, director CTSG, Dr Mark Tedesco, director LISS Office, US EPA

9:30-10:30 **Parallel Sessions I**

I A: Clean Waters and Healthy Watershed, Soundview Room, Moderator: Syma Ebbin

1. *Spatial and Temporal Patterns of Groundwater-transported Nitrogen Loading From Watersheds on the North Shore of Long Island Sound.* Janet Barclay, Madeleine Holland, John Mullaney (U.S. Geological Survey, New England Water Science Center)
2. *Nylon Microfibers Develop a Distinct Plasticsphere but Have No Apparent Effects on the Gut Microbiome of the Blue Mussel, *Mytilus edulis*.* Hannah I. Collins, Tyler W. Griffin, Bridget A. Holohan, and J. Evan Ward (University of Connecticut)
3. *Maximizing Nitrogen Bioextraction in Long Island Sound via the co-Cultivation of Seaweeds with Bivalves.* Michael H. Doall, and Christopher J. Gobler (Stony Brook University)
4. *Comparative Phytoplankton Assemblage Responses to Nitrogen Form Between the Long Island Sound Mainstem and Shore: Implications for Ecosystem Management.* Dianne I. Greenfield, Mariapaola Ambrosone, and Georgie E. Humphries (Advanced Science Research Center at the Graduate Center, City University of New York)

I B: Sound Science and Inclusive Management, Harborview Room, Moderator: Lane Smith

1. *Stakeholder Perceptions of Oyster Services: A Mixed Methods Approach to Mapping Services to Improve Management Efficiency.* Joshua Drew, Grace Grimes (State University of New York, College of Environmental Science and Forestry), and L. Jen Shaffer (University of Maryland)
2. *Oyster Habitat Restoration and Monitoring: Establishing Spawner Sanctuaries Using Habitat Suitability and Larval Transport Models.* Christopher J. Gioia, Aaren S. Freeman, and Ryan B. Wallace (Adelphi University)
3. *Continuous Water Quality Monitoring in the Norwalk River Estuary.* Kaitlin Laabs (US Geological Survey)
4. *Long Island Sound Seafloor Habitat Mapping Initiative Beyond Phase III.* DeAva Lambert (Connecticut Department of Energy and Environmental Protection)

I C: Sustainable and Resilient Communities / Thriving Habitats and Abundant Wildlife, The Grill, Moderator: Sylvain De Guise

1. *Triploid Oysters at Greater Risk of Mortality During Early Developmental Periods, but Perform Equally as Well in the Field.* Christopher Brianik (Stony Brook University), Gregg Rivara, Michael Patricio (Cornell Cooperative Extension), Dina Proestou (USDA ARS National Cold Water Marine Aquaculture Center), Ming Liu (Morgan State University), Ximing Guo (Rutgers University), Emmanuelle Pales Espinosa, and Bassem Allam (Stony Brook University)

2. *Educating About Long Island's Coastal Bluffs.* Kathleen Fallon (New York Sea Grant)

3. *Compound Flood Hazard Across Long Island and Long Island Sound: Analyzing the Convergence of Heavy Rainfall, Storm Surge, and Groundwater Using 50 Years of Historical Records.* Robin Glas (U.S. Geological Survey), Archi Howlader (Akima Systems Engineering), Liv Herdman, Salme Cook, and Kristina Masterson (U.S. Geological Survey)

4. *Assessing Present and Future Coastal Flooding Risk for Long Island, NY, and Long Island Sound (NY/CT), USA.* Salme Cook, and Liv Herdman (U.S. Geological Survey)

I D: Thriving Habitats and Abundant Wildlife, Main Ballroom, Moderator: Rebecca Shuford

1. *Genomic Resources to Support Shellfish Conservation, Restoration and Aquaculture in New York and the Region.* Bassem Allam (Stony Brook University)

2. *Combining Monitoring Data to Understand Availability of Saltmarsh Sparrow Breeding Habitat and Breeding Success at Long Island Marshes.* Sam Apgar, Suzanne Paton, Jonah Saitz, Mackenzie Payne, and Alison Kocek (USFWS Southern New England Coastal Program)

3. *Use of Historic Underwater Imagery to Assess Stability and Change in Boulder Habitat Communities Over Decadal Periods.* Peter J. Auster (University of Connecticut, Mystic Aquarium), Robert DeGoursey, Ivar Babb (University of Connecticut), Christian Conroy (University of New Haven), Catherine Matassa (University of Connecticut), and Roman Zajac (University of New Haven)

4. *Structure, Function, and Resilience of Long Island Sound's Restored Salt Marshes in a Warming World.* Sarah C. Crosby (The Maritime Aquarium at Norwalk)

10:30 **Break - transit to session II**

10:40-11:40 **Parallel Sessions II**

II A: Clean Waters and Healthy Watershed, Soundview Room, Moderator: Syma Ebbin

1. *Multifarious Environmental Influences on High Fecal Indicator Bacteria Concentrations Along Connecticut Beaches.* Luke Glass, Michael M. Whitney, and Peter Linderoth (University of Connecticut)

2. *Quantifying and Forecasting the Seasonal and Spatial Extent of Hypoxia in Long Island Sound.* James Hagy (US EPA Center for Environmental Measurement and Modeling), Anna Lisa Mudahy (Oak Ridge Institute for Science and Education), Cayla Sullivan (EPA Region 2), and James Ammerman (NEIWPCC Long Island Sound Office)

3. *Methane and Nitrous Oxide Distributions and Sea-Air Fluxes in Western Long Island Sound*. Cara C. M. Manning, Anagha Payyambally, and Josie L. Mottram (University of Connecticut)

II B: Sound Science and Inclusive Management, Harborview Room, Moderator: Lane Smith

1. *Long Island Sound (LIS) Dynamic Spatially Referenced Regression on Watershed Attributes (SPARROW) Model*. Richard Moore, Laura Hayes, Craig Brown, and Richard Smith (USGS)

2. *Observing Marine Life and Their Environment*. Jackie Motyka, Cameron Thompson, and Austin Pugh (NERACOOS)

3. *Surface Sediment Distribution and Chemical Composition Revealed by the Long Island Sound Seafloor Habitat Mapping Project*. Frank O. Nitsche, Timothy C. Kenna (Lamont-Doherty Earth Observatory of Columbia University), and Cecilia McHugh (Queens College, City University of New York)

4. *Long-Term Effects of Adaptation (≥ 150 generations) to Ocean Warming and Acidification in the Calanoid Copepod, *Acartia tonsa**. Lisa A. Piastuch (University of Connecticut), Edin Sission (Connecticut College), James A. deMayo (University of Colorado), Michael Finiguerra, and Hans G. Dam (University of Connecticut)

II C: Sustainable and Resilient Communities, The Grill, Moderator: Sylvain De Guise

1. *Equitable Access to Long Island Sound Waterfront and Beaches Through On-Demand Mobility*. Anil Yazici, and Elizabeth Hewitt (Stony Brook University)

2. *The Ocean Identity (OI) Survey: A Valid and Reliable Measure of Human Connections to Ocean Environments*. Miriah M. R. Kelly, Bri Perigyi, Chris Budnick, (Southern Connecticut State University), Jo-Marie Kasinak (Sacred Heart University), Emma McKinley (Cardiff University), and Jamie M.P. Vaudrey (University of Connecticut)

3. *Enhancing Coastal Resilience in Long Island Sound using the Northeastern Association of Coastal Ocean Observing System's Sensor Network*. Anna Simpson, Tom Shyka, Jake Kritzer, and Katy Bland (NERACOOS)

4. *Piloting the Ocean Identity Survey with Project Limulus*. Graham Templeman, Jo-Marie Kasinak, Emma McKinley, and Miriah M. R. Kelly (Southern Connecticut State University)

II D: Thriving Habitats and Abundant Wildlife, Main Ballroom, Moderator: Rebecca Shuford

1. *Natural Size-Structure Recovery in a Harvested Intertidal Oyster Reef, Fence Creek, CT*. Zachary Siper, Stephen R. Durham (Cornell University), and Gregory P. Dietl (Paleontological Research Institution and Cornell University)

2. *Seabed Effects of Extensive and Extended Mechanical Shellfish Harvesting in Oyster Bay Harbor, Long Island, New York*. Jason Mueller and Roger D. Flood (Stony Brook University)

3. *Assessing Human Impact on Historically Monitored *Zostera marina* Habitat and Future Restoration Sites within the Peconic Estuary*. Kristen Hutz (Stony Brook University)

4. *How Sediment Texture Affects Porewater Chemistry and Above Ground Plant Biomass in Salt Marsh Sediment Additions*. Madeline P. Kollegger, Nicolette Nelson, Madeleine

Meadows-McDonnell, Franco Gigliotti (University of Connecticut), Min Huang (Connecticut Department of Energy and Environmental Protection), Chris S. Elphick, Beth A. Lawrence, and Ashley M. Helton (University of Connecticut)

11:40 Break - transit to Panel Discussion, Main Ballroom

11:45-12:30 Panel Discussion: Research to Serve Management.

Panelists: Michele Golden (NYSDEC), Jonathan Hoffman (NYCDEP), Bill Lucey (Long Island Soundkeeper / Save the Sound), Nancy Seligson (LISS CAC NY Co-chair), Brian Thompson (CTDEEP)

Panel Moderator: Mark Tedesco (EPA/LISS)

12:30-1:00 Pick up Lunch and head to tables/plenary. Main Ballroom.

1:00-2:00 Lunch Plenary, Main Ballroom

Dr. Phil Levin (White House Office of Science & Technology Policy and U.S. Global Change Research Program), *Moving Knowledge to Action for People and Nature: Musings From a Recovering Ecologist*

2:00-2:30 Poster Session, Atrium

2:25 Break - transit to session III

2:30-4:00 Parallel Sessions III

III A: Clean Waters and Healthy Watershed, Soundview Room, Moderator: Penny Vlahos

1. *Modeling Stratification and Hypoxia in Long Island Sound Using Generalized Additive Models.* Anna Lisa Mudahy (Oak Ridge Institute for Science and Education), and James Hagy (US EPA Center for Environmental Measurement and Modeling)
2. *Carbonate System Parameters in Long Island Sound Waters.* Erich Nitchke, Samantha Rush (University of Connecticut), Katie O'Brien-Clayton (Connecticut Department of Energy and Environmental Protection), and Penny Vlahos (University of Connecticut)
3. *Tracing the Fate of Phytoplankton-Derived Nitrogen Through Oysters: Effects on Recycling, Denitrification, and Burial.* Peter Ruffino, and Craig Tobias (University of Connecticut)
4. *Actionable Satellite Water-Quality Data Products in LIS for Improved Management and Societal Benefits.* Jonathan Sherman (NOAA CoastWatch), Maria Tzortziou (The City College of New York, CUNY), Joaquim Goes (Lamont Doherty Earth Observatory, Columbia University), Melanie Abecassis (University of Maryland), Elizabeth Staugler (Florida Sea Grant), and Veronica Lance (NOAA CoastWatch)
5. *The Impacts of Two Macroalgae Species, *Ulva sp.* and *Gracilaria sp.* on the Growth and Survivorship of Eastern Oyster, *Crassostrea virginica*.* Laine Sylvers, Margot A. Eckstein, Bradley McGuire, Michael Doall, and Christopher J. Gobler (Stony Brook University)
6. *Integrating Spatial Modeling of Household Fertilizer Behavior with Nitrogen Transport Models to Inform Nonpoint Nutrient-Reduction Programs.* Jamie Vaudrey, David Dickson,

Qian Lei-Parent (University of Connecticut), Robert J. Johnston, Tom Ndebele (Clark University), David Newburn, Derek Wietelman (University of Maryland), and Haoluan Wang (University of Miami)

III B: Sound Science and Inclusive Management / Thriving Habitats and Abundant Wildlife, Harborview Room, Moderator: Jim Ammerman

1. *Science to Impactful Management – Are We Making the Connection?* Paul E. Stacey (Footprints In The Water, LLC), and Chester Arnold (University of Connecticut)
2. *Connectivity Considerations within Long Island Sound.* Robert Wilson, and Han Sun (Stony Brook University)
3. *New LIS Hydrodynamic/Water Quality Model Development and Dissolved Oxygen Modeling.* Andy Thuman (HDR), Gregory Wilkerson, Abdulai Fofanah, David Lipsky (NYCDEP), Rich Isleib, Mikayla Reichard, Bin Wen, Ruta Rugabandana (HDR), Melissa Duvall, Mark Tedesco (USEPA), and Carl Cerco (USACE)
4. *Using Oxygen Stable Isotopes to Assess Respiration – the Conspiracy of Mixing and Other Things.* Craig R. Tobias (University of Connecticut), Mark Altabet (University of Massachusetts), and James O'Donnell (University of Connecticut)
5. *Scallop (Argopecten irradians irradians) Health in a Changing Climate.* Sivanna Q. Trainer (Stony Brook University), Harrison Tobi (Cornell Cooperative Extension), Annabelle Dominguez, Guillaume Cacot, Emmanuelle Pales Espinosa (Stony Brook University), Stephen Tettelbach Cornell (Cooperative Extension), and Bassem Allam (Stony Brook University) - Thriving Habitats and Abundant Wildlife
6. *Spatial Trends in Benthoscape Structure and Infaunal Communities in Long Island Sound.* Roman Zajac (University of New Haven), Peter Auster (University of Connecticut, Mystic Aquarium), Ivar Babb (University of Connecticut), Christian Conroy (University of New Haven), Lauren Stefaniak (Coastal Carolina College), Shannon Penna, Dena Chadi, Nicole Govert, Cortney Schneeberger, and Olivia Walton (University of New Haven) - Thriving Habitats and Abundant Wildlife

III C: Sustainable and Resilient Communities / Clean Waters and Healthy Watersheds / Marine Debris, The Grill, Moderator: Kamazima Lwiza

1. *Assessing Pluvial Flood Risk in Areas Surrounding Long Island Sound Using Multi-Criteria Decision Making and Iterative Ensemble Smoothing.* Rob Welk, Liv Herdman, Kalle Jahn, Robin Glas, Kristina Masterson, and Salme Cook (U.S. Geological Survey)
 2. *Investigating Suspension-Feeding Invertebrates as Bioindicators of Microplastics.* Kayla M. Mladinich (NOAA Office of Education), Bridget A. Holohan, Sandra E. Shumway, and J. Evan Ward (University of Connecticut) – Clean Waters and Healthy Watersheds
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3. *What headway are we collectively making to implement the Long Island Sound Marine Debris Action Plan?* Nancy Balcom (Connecticut Sea Grant / University of Connecticut), Kathy Bunting-Howarth (New York Sea Grant / Cornell University) – Marine Debris

4. *Working Together in the Long Island Sound: Lessons Learned and Accomplishments of the Long Island Sound Lobster Trap Recovery & Assessment Partnership.* Scott Curatolo-Wagemann (Cornell Cooperative Extension), Sarah Crosby (The Maritime Aquarium of Norwalk), Bill Lucey (Save the Sound), Callie Scheetz (Project Oceanology), and David Hudson (Remote Ecologist) – Marine Debris

5. *Developing Education and Outreach to Foster Awareness of Synthetic Microfibers Leakage From Laundry Systems Into the Marine Environment.* Catherine Prunella, Katherine Bunting-Howarth (New York Sea Grant / Cornell University), Jonathan Ronn, and Beizhan Yan (Lamont Doherty Earth Observatory, Columbia University)

III D: Thriving Habitats and Abundant Wildlife, Main Ballroom, Moderator: Melissa Duvall

1. *Can the Creation of Sediment Hummocks Support Saltmarsh Sparrow Recovery?* Nicolette Nelson, Franco Gigliotti, Madeline Kollegger, Olivia Lemieux (University of Connecticut), Blaire Steven (The Connecticut Agricultural Experiment Station), Min Huang (Connecticut Department of Energy and Environmental Protection), Beth Lawrence, Ashley Helton, and Chris Elphick (University of Connecticut)

2. *What's That Smell?! A Salt Marsh Restoration Case Study for Educators.* Beth Lawrence (University of Connecticut), Ly Williams (Smithtown High School), Larissa Graham (Connecticut National Estuarine Research Reserve), and Madeline Kollegger (University of Connecticut)

3. *Oyster Health and Restoration in Long Island Sound - Observations of Changing Water Chemistry.* Isaiah Mayo, Mariah Kachmar, Kyra Lenderman, Kelly Roper, Genevieve Bernatchez, Mark Dixon, LTJG Tyler Houck, Meghana Parikh, and Katie McFarland (NOAA Fisheries, Northeast Fisheries Science Center, Milford Laboratory)

4. *Evaluating Changes in Suitable Habitat and Biogeography of Cold and Warm Adapted Species in a Changing Long Island Sound.* Yong Chen, Robyn Linner, Claire Ober, Stephanie Arsenaault, Krystina Braid, Sarah Praisner, (Stony Brook University), Kurt Gottschall (Connecticut Department of Energy and Environmental Protection), Kim McKown, and John Maniscalco (NYS Department of Environmental Conservation)

5. *Increasing Black Sea Bass Abundance in Long Island Sound.* Hannes Baumann, and David Riser (University of Connecticut)

6. *Is Drought the New Fad Diet? Effect of Entrapment on Size, Body Condition, and Growth Rates of Juvenile Anadromous Alewives.* Michael Burgess, Katherine King (University of Connecticut), Ryan Adams (Connecticut Department of Energy and Environmental Protection), James Knighton, and Eric Schultz (University of Connecticut)

4:00 Conclusion, Main Ballroom, and board shuttle to ferry

Closing Remarks by Dr. Rebecca Shuford, director NYSG, Dr. Sylvain De Guise, director CTSG, Dr. Jim Ammerman, Long Island Sound Study Science Coordinator

4:10 Adjourn/Departure (shuttle departs)

4:10 – 4:25 Shuttle to Ferry

4:45 Ferry to Bridgeport

6:30 Next Ferry to Bridgeport

Safe travels home!