Concurrent Sessions

Concurrent Session A

Wednesday, November 5 | 10:30 am – 12:00 pm

	A1: Lake Management 1: Nutrient Dynamics	A2: Data and Information Dashboards	A3: Drinking Water	A4: Fisheries	A5: Climate / Stormwater / Hydrology 1
	Ballroom A	*Ballroom B*	*Ballroom C*	*Meeting Room 106-107*	*Meeting Room 202-204*
	Moderator: **Amy Smagula,** New Hampshire Department of Environmental Services, Concord, New Hampshire	Moderator: **Victoria Chraibi,** Tarleton State University, Stephenville, Texas	Moderator: **Megan Gokey,** Indianan University, Bloomington, Indiana	Moderator: **Craig Wolf,** GEI Consultants, Inc., Denver, Colorado	Moderator: **Danielle Wain,** 7 Lakes Alliance, Belgrade Lakes, Maine
10:35	**Water Exchanges and Phosphorus Flux Between a Reservoir and Eutrophic Littoral Zone** **James McCarty,** Beaver Water District, Lowell, Arkansas	**Art and Data for Action: Transforming Complex Data Into Engaging Solutions for Water Management Issues** **Season Martin,** Virga Labs, Tucson, Arizona	**Reducing the Impact of Climate Change and Eutrophication** **Carlos A. Gonzalez,** Guayama, Puerto Rico, USA	**Effects of Dam Removal on Migrating and Resident Fish Species in the Paulins Kill Watershed** **Grace Noll,** NJDEP, Trenton, New Jersey	**Protecting Headwater Streams to Build Long Term Resilience of Vermont's Lakes** **Kellie Merrell,** VTDEC, Montpelier, Vermont
10:55	**Biosolids Applications in the Upper St. Johns River Basin: Implications for Legacy Phosphorus Impacts to River Lakes and Headwater Marshes** **Joshua Papacek,** St. Johns River Water Management District, Palatka, Florida	**Two Landscape Analyses of Environmental Education Across the Southeastern U.S. Identify Strengths and Reveal Gaps** **Perry Thomas,** Kentucky Association for Environmental Education, Elizabethtown, Kentucky	**Delaware and Raritan Canal PFAS Passive Sampling Project** **Heather Desko,** New Jersey Water Supply Authority, Clinton, New Jersey	**Diadromous Fish Studies and FERC License Compliance on the Santee Cooper Project** **Carl Bussells,** Santee Cooper, Moncks Corner, South Carolina	**Aeration Benefits for Stormwater Wet Ponds: When to Choose Bottom Diffused Aeration vs Surface Aeration** **Trent Nelson,** Kasco Marine, High Point, North Carolina
11:15	**Tailoring Phosphorus Solutions: A Science-Guided, Adaptive Management Approach for Green Lake, Wisconsin** **Stephanie Prellwitz,** Green Lake Association, Green Lake, Wisconsin	**Discussion**	**Assessment of Effects of Speece Cone Hypolimnetic Oxygenation in San Pablo Reservoir, CA** **David Clidence,** Eco Oxygen Technologies, LLC, Indianapolis, Indiana		★ **Mass Accumulation in Aging Stormwater Wetlands and Maintenance Implications** **Amanda Van Pelt,** North Carolina State University, Raleigh, North Carolina
11:35	**Sediment Phosphorus Release From Two Large Shallow Estuaries Draining Into Green Lake** **Dendy Lofton,** Stantec, Houston, Texas		**Randomized Voluntary Assessment of Private Well Water Quality in the Pelican Group of Lakes Improvement District** **Moriya Rufer,** Houston Engineering, Maple Grove, Minnesota	**Discussion**	**First Year Performance of a Pump-Driven Flow-Through Stormwater Wetland vs. 10+ Year Performance of a Gravity-Fed Flow-Through Stormwater Wetland** **Vinicius Taguchi,** North Carolina State University, Raleigh, North Carolina

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Concurrent Session B

Wednesday, November 5 | 1:30 pm – 3:00 pm

	B1: Lake Management 2: Nutrient Dynamics	B2: Modeling 1	B3: Reservoir Management 1	B4: Aquatic Plant Assessments	B5: Climate / Stormwater / Hydrology 2
	Ballroom A	*Ballroom B*	*Ballroom C*	*Meeting Room 106-107*	*Meeting Room 202-204*
	Moderator: **Victoria Chraibi,** Tarleton State University, Stephenville, Texas	Moderator: **Danielle Wain,** 7 Lakes Alliance, Belgrade Lakes, Maine	Moderator: **Deena Hannoun,** Southern Nevada Water Authority, Henderson, Nevada	Moderator: **Chris Doyle,** Naiad Consultants, Lititz, Pennsylvania	Moderator: **Emily DiFranco,** Weston & Sampson, Portsmouth, New Hampshire
1:35	**Advances in Sediment Phosphorus Geochemistry** **Byran Fuhrmann,** Clean Water Help, Manila, Philippines	**Diagnosing the Impairment of Lake Osakis Using Multiple Lines of Inference** **Moriya Rufer,** Houston Engineering, Maple Grove, Minnesota	★ **Applying Backcasting to Identify Drivers of Potential Future Water Quality Challenges** **Eunice Ledres,** University of Nevada Las Vegas, Las Vegas, Nevada	★ **Assessing Invasive Watermilfoil Hybridization in Lake Champlain Basin** **Darian Paul,** SUNY Oneonta, Oneonta, New York	★ **Real-Time Control of Stormwater for Flooding and Water Quality Management** **Savannah Roth,** North Carolina State University, Raleigh, North Carolina
1:55	**Possible Littoral Influences on Phosphorus Dynamics in a Dimictic Wisconsin Lake** **William F. James,** University of Wisconsin – Stout, Center for Limnological Research and Rehabilitation, Menomonie, Wisconsin	**Modeling the Hydrodynamics of Karstic Landlocked Lakes. As It Applies to Seepage, Hydraulic Conductivity and Evapotranspiration** **William Evans,** E III Environmental Consulting, Grand Junction, Colorado	**A Balancing Act – How Duke Energy Manages the Catawba-Wateree River System of Reservoirs** **Brett Hartis,** Duke Energy Corporation, Charlotte, North Carolina	★ **Assessment of Watermilfoil (*Myriophyllum spp.*) Influence on Native Aquatic Plant Communities in the Lake Champlain Basin** **Caleigh Millette,** SUNY Oneonta, Oneonta, New York	**Retrofitting Urban Waterbodies for Improved Water Quality Performance** **Amber Ellis,** North Carolina State University, Wilmington, North Carolina
2:15	**Evaluation of Alternatives Formulations of Aluminum to Sequester Phosphorus** **Eli Kersh,** LakeTech, inc. Oakland, California and **Anja Brey,** East Bay Regional Park District, Orinda, California	**Discussion**	**Development and Application of an EFDC+ Taste and Odor Implementation for Predicting Geosmin Dynamics in Glenmore Reservoir, Calgary** **Mehrzad Shahidzadehasadi,** DSI, Auburn, Alabama	★ **Comparing Growth, Competition, and Management Options for Selected Vallisneria Species** **Anna Agi,** North Carolina State University, Raleigh, North Carolina	★ **The Significance of Large Storms on Pollutant Loading in Stormwater Control Measures** **Amanda Van Pelt,** North Carolina State University, Raleigh, North Carolina
2:35	**Discussion**		★ **Using Satellite Observations to Monitor Lake McMurtry's Water Volume Dynamics** **Narges Taravatrooy,** Environmental Science Graduate Program, Oklahoma State University, Stillwater, Oklahoma	**Application of a Multi-value Assessment Approach to Assess Macrophyte Response to Lake Management** **Raymond M. Newman,** University of Minnesota, St. Paul, Minnesota	**Update on Spent Lime as an Alternative for Sediment Phosphorus Inactivation** **Greg Wilson,** Barr Engineering Co., Minneapolis, Minnesota

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Concurrent Session C

Wednesday, November 5 | 3:30 pm – 5:00 pm

	C1: Lake Management 3: Aluminum	C2: Modeling 2	C3: Reservoir Management 2	C4: AIS Animals	C5: Climate / Stormwater / Hydrology 3
	Ballroom A	*Ballroom B*	*Ballroom C*	*Meeting Room 106-107*	*Meeting Room 202-204*
	Moderator: **Amy Smagula,** New Hampshire Department of Environmental Services, Concord, New Hampshire	Moderator: **Deena Hannoun,** Southern Nevada Water Authority, Henderson, Nevada	Moderator: **Byran Fuhrmann,** Clean Water Help, Quezon City, Philippines	Moderator: **Mark Heilman,** SePRO, Carmel, Indiana	Moderator: **Moriya Rufer,** Houston Engineering, Detroit Lakes, Minnesota
3:35	**Internal Loading, Sediment Phosphorus Dynamics, and Limnological Lake Response During Alum Management of a Shallow Oxbow Wisconsin Lake** **William F. James,** University of Wisconsin – Stout, Center for Limnological Research and Rehabilitation, Menomonie, Wisconsin	**The Baseline Conditions Characterization: A Comprehensive Overview of NY Great Lakes Sub-basin Environmental Conditions** **Alexis Davis,** NYS Department of Environmental Conservation and New York State Water Resources Institute at Cornell University, Syracuse, New York	★ **Impact of Drying and Re-flooding on Nutrient and Metal Release From a Eutrophic Reservoir Sediment** **Clara Garyga,** Univ. Savoie Mont Blanc, Thonon-les-Bains, France	**Muscling Golden Mussels in the Golden State** **Stephen McCord,** McCord Environmental, Davis, California	**Management of Lake Okeechobee Outflows: Balancing Options** **R. Thomas James,** South Florida Water Management District, West Palm Beach, Florida
3:55	**Lessons Learned From a Decade of Using Aluminum Sulfate (Alum) in Shallow Lakes in Minnesota** **Joseph Bischoff,** Barr Engineering, Co., Minneapolis, Minnesota	**Development of a Macrophyte Assessment Tool for Lakes Within the Lake Champlain Basin** **Kellie Merrell,** Vermont Department of Environmental Conservation, Montpelier, Vermont	**Evaluating How the Fluctuating Elevations in Lake Powell and Lake Mead Have Interacted to Influence the Colorado River Inflow, Water Quality and Movement Through Lake Mead** **Roslyn Flanagan,** Southern Nevada Water Authority, Las Vegas, Nevada	**Approaching 20 Years of Quagga Mussels in Lake Mead, Arizona-Nevada** **Todd Tietjen,** Southern Nevada Water Authority, Las Vegas Nevada	**Surface Water Temperature Defies Climate Change in Some Pennsylvania Lakes** **Rick Shema,** Pocono Lake Environmental Observation Network, Lakeville, Pennsylvania
4:15	**Changes in Nutrient Cycling in a Deep Stratified Central Florida Lake Following Alum Sediment Inactivation** **Harvey Harper,** Environmental Research & Design, Inc., Belle Isle, Florida	**Lake Stratification Response to Reduced Water Transparency Across a Spectrum of Maine Lakes** **Danielle Wain,** 7 Lakes Alliance, Belgrade Lakes, Maine	**Evaluating the Potential for HABs in a Pennsylvania, USA Reservoir After Upstream Abandoned Mine Drainage Remediation** **Luanne Steffy,** Susquehanna River Basin Commission, Harrisburg, Pennsylvania	**Latest Updates on Management of Invasive Mussels** **David Hammond,** Earth Science Labs, Inc., Larkspur, California	★ **Characterizing the Under-Ice Turbulent Boundary Layer at Trout Lake, WI** **Aude Claire Moats,** UC Davis, Davis, California
4:35	**Clearing the Waters: Rethinking Limits and Monitoring for Alum Treatments** **Laura Diemer,** FB Environmental Associates, Dover, New Hampshire	**Advancing Point-Intercept Data Analysis for Submerged Aquatic Vegetation Survey** **Dan Stich,** State University of New York at Oneonta, Oneonta, New York	**Hydrodynamic and Virtual Tracer Analysis of Richland-Chambers Reservoir Using 2D CE-QUAL-W2 and 3D AEM3D Models for Water Supply Management** **Nabin Basnet,** Plummer Associates, Fort Worth, Texas	**Community Trophic Structure Within Reservoirs Change in the Presence of Invasive Chinese Mystery Snail (*Cipangopaludina chinensis*) and Northern Crayfish (*Faxonius virilis*)** **Mark Poesch,** University of Alberta, Edmonton, Alberta, Canada	**Resilient Stormwater Planning and Implementation - Using Urban Lakes for Real-Time Flood Control** **Emily DiFranco,** Weston & Sampson, Reading, Massachusetts

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Concurrent Session D

Thursday, November 6 | 9:00 am – 10:30 am

	D1: Lake Management 4: Lanthanum 1	D2: HABs 1: Drivers of Blooms	D3: AIS Spread Prevention	D4: Water Quality 1
	Ballroom A	*Ballroom B*	*Ballroom C*	*Meeting Room 106-107*
	Moderator: **Steve Lundt,** Metro Water Recovery, Denver, Colorado	Moderator: **Laura Diemer,** FB Environmental Associates, Lebanon, Maine	Moderator: **Dendy Lofton,** Stantec, Weaverville, North Carolina	Moderator: **Max Maynard,** New Hampshire Department of Environmental Services, Concord, New Hampshire
9:05	**The Growing Role of Critical Minerals in Environmental Protection** **Gregory Page,** Neo Water Treatment, Denver, Colorado	★ **Benthic Cyanobacterial Mats Intensify Nitrogen Recycling in Eutrophic Lake Sediments** **Archana Venkatachari,** University of South Carolina, Columbia, South Carolina	**Lessons Learned & Recreational Patterns After 4 Years of Voluntary Boat Inspection Program on Candlewood Lake, CT** **Neil Stalter,** Candlewood Lake Authority, Sherman, Connecticut	**Curiouser and Curiouser: An Unusual Visit From the Clear Water Phase in Eutrophic Lake Elsinore, Southern California** **Alex Horne,** University of California, Berkeley, California
9:25	★ **Environmental Risk Assessment of Lanthanum Based Phosphorus Binders** **Karin Finsterle,** Wageningen University and Research, Wageningen, The Netherlands	★ **Where There's Smoke: Analyzing Wildfire Impacts on Freshwater Lakes** **AyoOluwateso Coker,** Stanford University, Stanford, California	**Unraveling Ballast Discharge Invasion Risk Using Mesocosms** **Abigail E. Latanich,** University of MN - Natural Resources Research Institute, Duluth, Minnesota	**Lake Aeration and Bioaugmentation to Improve Water Quality and the Ecological Health of Lake Sheridan in Northeastern Pennsylvania** **Ed Molesky,** Aqua Link Lake Management, Doylestown, Pennsylvania
9:45	**Effects of Zeolite and Lanthanum-Based Clays on Growth and Microcystins of the Cyanobacterium*Microcystis aeruginosa*** **Miquel Lurling,** Wageningen University, Wageningen, Gelderland, The Netherlands	★ **Integrating Water Quality and Meteorological Data to Understand Cyanobacterial Bloom Dynamics in Bantam Lake** **Nasrin Sultana,** Western Connecticut State University (WCSU), Danbury, Connecticut	**Building Capacity to Prevent AIS in the Columbia River Basin** **Jacob Utrie,** CD3 Systems, Wauwatosa, Wisconsin	**Lake Chemistry Data Do's and Don'ts** **Byran Fuhrmann,** Clean Water Help, Manila, Philippines
10:05	**First Whole-Lake Application of a Newly Developed 10% Lanthanum-Modified Clay (Zeofixer/LimnoPLUS) in Europe** **Maíra Mucci,** Wageningen University and Research, Wageningen, the Netherlands and Limnological Solutions International (LSI), Utrecht, the Netherlands	**Discussion**	**Macrophyte Encounter Rates on Watercraft Using Boat Launches in the Finger Lakes Region of New York State** **Sam Beck-Andersen,** Finger Lakes Institute, Hobart and William Smith Colleges, Geneva, New York	**Discussion**

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Concurrent Session E

Thursday, November 6 | 11:00 am – 12:30 pm

	E1: Lake Management 5: Lanthanum 2	E2: HABs 2: Reservoir HABs	E3: AIS Control 1: Connecticut River Hydrilla	E4: Water Quality 2
	Ballroom A	*Ballroom B*	*Ballroom C*	*Meeting Room 106-107*
	Moderator: **Danielle Wain,** 7 Lakes Alliance, Belgrade Lakes, Maine	Moderator: **Deena Hannoun,** Southern Nevada Water Authority, Henderson, Nevada	Moderator: **Chris Doyle,** Naiad Consultants, Lititz, Pennsylvania	Moderator: **Max Maynard,** New Hampshire Department of Environmental Services, Concord, New Hampshire
11:05	**Iron-Coated Lanthanum: A New Material for Sediment Phosphorus Management** **Byran Fuhrmann,** Clean Water Help, Manila, Philippines	**The Impacts of a Chelated Copper Treatment on the Phytoplankton Community in Manasquan Reservoir** **Melissa Mazzaro,** New Jersey Water Supply Authority, Clinton, New Jersey	**The Spread of Connecticut River Hydrilla Continues** **Gregory Bugbee,** The Connecticut Agricultural Experiment Station, Department of Environmental Science and Forestry, New Haven, Connecticut	**Assessing Stationary in a Changing World: Leveraging the Power of a Long-Term Water Quality Monitoring Program for Decision Makers in a Municipal Water Utility** **Eric Camm,** City of Calgary, Calgary, Alberta, Canada
11:25	★ **Characterization and Phosphorus Binding of Iron-Coated Lanthanum for Sediment Management** **Darrell Harry,** North Carolina State University, Raleigh, North Carolina	★ **Cyanobacteria Bloom Dynamics in a South Carolina Reservoir** **Emily Bores,** University of South Carolina, Columbia, South Carolina	**Connecticut River Hydrilla Research & Demonstration Program: Summary of Site Selection and Field Demonstration Planning** **Keith Hannon,** US Army Corps of Engineers, New England District, Concord, Massachusetts	**Assessing the Health of the Great Lakes Through the State of the Great Lakes Report** **Jacob Orlandi,** Canada Water Agency, Burlington, Ontario, Canada
11:45	**Sediment Phosphorus Mitigation in a Recreationally Important Texas Reservoir Impacted by Benthic Cyanobacterial Mats** **Alexis Fischer,** EutroPHIX, Carmel, Indiana	**Algae Management in Service Water Reservoirs: Identification and Control Strategies** **Trellany Roberts,** Alabama Power Company, Calera, Alabama	**Development of Management Strategies for a New Hydrilla Invasion on the Connecticut River** **Benjamin Sperry,** US Army Corps of Engineers – Engineer Research and Development Center, Gainesville, Florida	**Oklahoma Lake Trends** **Jordon Henderson,** Oklahoma Water Resources Board, Oklahoma City, Oklahoma
12:05	**Discussion**	★ **Wargo Pond: Whole System Characterization Through Community Collaboration to Design Tailored HAB Restoration** **Claire Paul,** Western Colorado University, Gunnison, Colorado	**The Potential for Classical Biological Control of Connecticut River Hydrilla** **Jeremiah R. Foley,** Connecticut Agricultural Experiment Station, New Haven, Connecticut	**Identifying Sources of Error in Linked Models Used to Forecast Salinity on the Lower Colorado River** **Kevin Bierlein,** Hydros Consulting, Boulder, Colorado

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Concurrent Session F

Thursday, November 6 | 2:00 pm – 3:30 pm

	F1: Lake Management 6: Alternative Approaches	F2: HABs 3: Control	F3: AIS Control 2	F4: Water Quality 3
	Ballroom A	*Ballroom B*	*Ballroom C*	*Meeting Room 106-107*
	Moderator: **Byran Fuhrmann,** Clean Water Help, Quezon City, Philippines	Moderator: **Emily Mayer,** New Jersey Department of Environmental Protection, Ewing Township, New Jersey	Moderator: **Chris Doyle,** Naiad Consultants, Lititz, Pennsylvania	Moderator: **Josh Buonpane,** New Hampshire Department of Environmental Services, Concord, New Hampshire
2:05	**Iron and Aeration to Control Internal Phosphorus Loading From Organic Phosphorus in Lake Bottom Sediments** **Keith Pilgrim,** Barr Engineering Company, Minneapolis, Minnesota	**Advanced Understanding of Peroxide and Peroxyacetic Acid Use for Controlling HABs** **West Bishop,** EutroPHIX/SePRO, Whitakers, North Carolina	★ **Overcoming the Challenge of Aquatic Weed Management in Flowing Systems in North Carolina** **Kara Foley,** North Carolina State University, Raleigh, North Carolina	**Strategies for Seasonal Monitoring of Temperature & Dissolved Oxygen** **Julie Stahl,** Duke Energy, Huntersville, North Carolina
2:25	**A Calcium Peroxide-Based Product and Its Impact on Sediment Phosphorus Retention and Other Water Quality and Biological Parameters** **Kate Waters-Hart,** Oase, Andover, Hampshire, United Kingdom & Oase, Hörstel, Germany	**Preparing to Dredge a Cyanobacteria Hotspot in a Lacustrine Portion of the Sacramento-San Joaquin Delta** **Ellen Preece,** California Department of Water Resources, Sacramento, California	★ **Field Demonstrations of Reduced Rate Combination Treatments for Control of Hydrilla in Lake Seminole** **Amber Riner,** ORISE US Army Corp of Engineers Environmental Laboratory, Gainesville, Florida	★ **Modeling Physical and Biochemical Process of Lake Atitlán, Central America's Deepest Lake** **Juan Bocel,** University of Nevada, Reno, Reno, Nevada
2:45	**Sustainable De-eutrophication of Nine Lakes Across the Eastern US Using a Photocatalyst** **Christopher J. Gobler,** Stony Brook University, Stony Brook, New York	**In-Season and Overwintering Cyanobacteria Control Methods in Reservoirs Using Liquid and Granular PAA/Hydrogen Peroxide** **Tom Warmuth,** BioSafe Systems, East Hartford, Connecticut	**The Use of Grass Carp to Manage Vegetation in a Southern Reservoir: Balancing on the High Wire.** **Kenneth Wagner,** Water Resource Services, Inc., Wilbraham, Massachusetts	**Stratification Monitoring on a Budget** **Tony Thorpe,** University of Missouri, Columbia, Missouri
3:05	**Restoration of Aquatic Ecosystems Using TryMarine Technology** **David Beasley,** SOLitude Lake Management, Charlottesville, Virginia	**Using Adaptive Management to Restore Lakes Impacted by Cyanobacteria** **Presenter TBD,** Aquatechnex, LLC, Bellingham, Washington	**Discussion**	★ **Quantifying Differential Cooling in Deep Oligotrophic Lakes** **Julie Critchfield,** Civil and Environmental Engineering University of California Davis, Tahoe Environmental Research Center University of California Davis, Davis, California

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Concurrent Session G

Thursday, November 6 | 4:00 pm – 5:30 pm

	G1: Lake Management 7: Lanthanum Derivatives	G2: HABs 4: Cyanotoxins	G3: AIS/Aquatic Plant Infestations	G4: Water Quality 4
	Ballroom A	*Ballroom B*	*Ballroom C*	*Meeting Room 106-107*
	Moderator: **Byran Fuhrmann,** Clean Water Help, Quezon City, Philippines	Moderator: **Emily Mayer,** New Jersey Department of Environmental Protection, Ewing Township, New Jersey	Moderator: **Victoria Chraibi,** Tarleton State University, Stephenville, Texas	Moderator: **Josh Buonpane,** New Hampshire Department of Environmental Services, Concord, New Hampshire
4:05	**Integrating Phosphorus Sequestration Approaches Into Water Quality Management of Moses Lake, WA** **Ryan Van Goethem,** EutroPHIX, Spokane, Washington	**Assessing Microcystin Risks in Groundwater Wells Linked to Surface Water Harmful Algal Blooms: A Case Study in New Jersey** **Rob Newby,** New Jersey Department of Environmental Protection, Trenton, New Jersey	**Invasive Vegetation Removal on Utah Lake: A Decade Long Story That Is Still Being Written** **Addy Valdez,** Utah Lake Authority, Provo, Utah	**Strategic Cuts, Measurable Gains: Cattail Harvesting to Improve Reservoir Water Quality** **Erin Stewart,** LRE Water, Denver, Colorado
4:25	**Automated Inline Phosphorus Mitigation in an Urban Stream in Florida** **Pamela Dugan,** EutroPHIX, Carmel, Indiana	★ **Environmental Monitoring in Underserved Areas: Public Health Threats in Urban Waters** **Kyleigh Johnson,** Virginia Commonwealth University, Richmond, Virginia	**Aquatic Invasives in New Jersey: From Small Creatures to Big Impacts** **Alice Belskis,** NJDEP Bureau of Freshwater and Biological Monitoring, Ewing, New Jersey	**Catalytic Performance of Cow-Dung Sludge in Water Treatment Mitigation & Conversion of Ammonia Nitrogen into Nitrate** **Lokesh Kumar,** Delhi Jal Board, Government of National Capital Territory Delhi, India
4:45	★ **Efficiency of Novel Modified Clays to Tackle Eutrophication and Preventing Cyanobacteria Blooms** **Erick Drummond Oliveira Dias,** UERJ Rio de Janeiro, Brazil and WUR, Wageningen, Gelderland The Netherlands	**Benthic Cyanobacterial Mat Anatoxin Production: A Lurking Maryland Threat** **Catherine Wazniak,** Maryland Department of Natural Resources, Annapolis, Maryland	**Emerging Techniques for Management of Invasive Submersed Aquatic Plants** **Mark Heilman,** SePRO, Carmel, Indiana	**Challenges Facing the Great Salt Lake & Utah Lake Watersheds** **Addison Valdez,** Utah Lake Authority, Provo, Utah
5:05	**Discussion**	**Evaluating Emergency Department Utilization Data to Identify Effects of Cyanobacterial Harmful Algal Blooms in Lake County, California: Methodologic Challenges and Barriers** **Susan Paulukonis,** Tracking California, Berkeley, California	**Managing Plants and Expectations at Lake Thoreau, Reston, VA** **Ben Rhoades,** Reston Association, Reston, Virginia	**Discussion**

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Concurrent Session H

Friday, November 7 | 8:30 am – 10:00 am

	H1: Carolina Bay Lakes	H2: HABs 5: Monitoring Advances	H3: Citizen Science	H4: Oxygenation
	Ballroom A	*Ballroom B*	*Ballroom C*	*Meeting Room 106-107*
	Moderator: **Victoria Chraibi,** Tarleton State University, Stephenville, Texas	Moderator: **Byran Fuhrmann,** Clean Water Help, Quezon City, Philippines	Moderator: **Holly Waterfield,** SUNY Oneonta Biological Field Station, Cooperstown, New York	Moderator: **Ken Wagner,** Water Resource Services, Wilbraham, Massachusetts
8:35	**A History of Carolina Bays and the Bay Lakes of the North Carolina Coastal Plain** **Diane Lauritsen,** LIMNOSCIENCES, Mount Pleasant, South Carolina	**A Multivariate Analysis of Phytoplankton Assemblages and Environmental Variables in Chautauqua Lake, New York** **Emily Palmer,** Enviroscience Inc, Stow, Ohio	★ **Volunteer Monitors and Knowledge-Sharing: Communication Trends in Long-Term Lake Monitoring Programs** **Sabrina Koetter,** University of Vermont, Burlington, Vermont	**Impact of High Flow Propeller Pumps on the Oxic State of Water Over Reservoir Sediments** **Tom C. Hausenbauer,** Limnetics Corporation, Mishawaka, Indiana
8:55	**Monitoring the Long-Term Success of Invasive Aquatic Plant Management Activities at Two Carolina Bay Lakes** **Rob Richardson,** North Carolina State University, Raleigh, North Carolina	**Characterizing Phytoplankton Community and Phosphorus Cycling in a Eutrophic Lake Through a Cyanobacteria Bloom** **Matthew Farragher,** 7 Lakes Alliance, Belgrade, Maine	**SMLA Dock Watch Program – Early Warning System Under Construction** **Keri Green,** Smith Mountain Lake Association, Moneta, Virginia	**Oxygenation Saturation Technology: How Oxygen Blanketing of the Sediments Controls Harmful Algal Blooms (HABs)** **Paul Gantzer,** Clarity Resources Group, Madison, Wisconsin
9:15	**White Lake, North Carolina: Increasing pH, Increasing TN, and Increasing Productivity** **Linda Ehrlich,** Spirogyra Diversified Environmental Services, Burlington, North Carolina	**From Pixels to Protection: Remote Sensing for Effective HAB Monitoring** **Edward Albada,** EOMAP, Santa Barbara, California	**Using Remote Sensing and Citizen Science to Monitor Lake Volume Changes** **Grant Parkins,** University of North Carolina at Chapel Hill, Chapel Hill, North Carolina	**Impacts of Nanobubble Treatment on Dissolved Oxygen Dynamics in Lakes** **Shane Hoyt,** Moleaer, Hawthorne, California
9:35	**Management Challenges for the Bay Lakes of North Carolina** **Diane D. Lauritsen,** LIMNOSCIENCES, Mount Pleasant, South Carolina	**An Innovative, Machine Learning Based Approach for HAB Indicators** **James Riddle,** Woolpert Inc., Columbia, South Carolina	**Techniques, Tips and Tricks for Successful Citizen Science Programs** **Keri Green,** Smith Mountain Lake Association, Moneta, Virginia	**The Effect of Two Mitigation Efforts on a Shallow Eutrophic Urban Lake** **Eli Kersh,** LakeTech, inc. Oakland, California and **Anja Brey,** East Bay Regional Park District, Orinda, California

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Concurrent Session I

Friday, November 7 | 10:30 am – 12:00 pm

	I1: Lake Sediments	I2: HABs 6: Strategic Integration	I3: Community Engagement and Water Management	I4: Topics in Lake Management
	Ballroom A	*Ballroom B*	*Ballroom C*	*Meeting Room 106-107*
	Moderator: **Victoria Chraibi,** Tarleton State University, Stephenville, Texas	Moderator: **Emily Mayer,** New Jersey Department of Environmental Protection, Ewing Township, New Jersey	Moderator: **Holly Waterfield,** SUNY Oneonta Biological Field Station, Cooperstown, New York	Moderator: **Stephen McCord,** McCord Environmental, Inc., Davis, California
10:35	**The Design and Implementation of a Successful Dredging Project** **Stephen J. Souza,** Clean Waters Consulting, LLC, Ringoes, New Jersey	**A Digital Tool to Combat Harmful Algal Blooms (HABs)** **Ibrahim Busari,** Clemson University, Clemson, South Carolina	**Understanding and Resuscitating an Unloved Lake: Utah Lake** **Sam Braegger,** Utah Lake Authority, Provo, Utah	**Regional and International Lake Management Differences From a Nomad's Perspective** **Byran Fuhrmann,** Clean Water Help, Manila, Philippines
10:55	**Restoring Aquatic Health – A Guide to Muck Remediation** **Trevor Henderson,** Airmax Inc. Armada, Michigan	**A Practitioner-Informed Decision Tree for Selecting Harmful Cyanobacteria Bloom Control and Mitigation Techniques** **Ellen Preece,** California Department of Water Resources, Sacramento, California	★ **Gender Mainstreaming** **Gelito Inácio Franco Sululu,** Commonwealth Youth Climate Change Network, Lichinga City, Niassa Province, Mozambique	**Fishing for Solutions: Commercial Harvesting of Non-game and Exotic Fishes as a Nutrient Removal Strategy for Select Florida Lakes** **Randy Fink,** St. Johns River Water Management District, Palatka, Florida
11:15	**A Sediment Record of Watershed Pollution From Oil Refineries and Agriculture in Dickinson County, Texas** **Victoria Chraibi,** Tarleton State University, Stephenville, Texas	**Monitoring Harmful Algal Blooms: An Evaluation of Where, What, and How Often to Sample** **Euan Reavie,** University of Minnesota Duluth, Duluth, Minnesota	**Community-Driven Flood Mitigation in Wilson, NC: The Process Is the Product** **Vinicius J. Taguchi,** North Carolina State University, Raleigh, North Carolina	★ **Negotiating Change in the African Great Lakes: Fishers' Knowledge, Adaptive Strategies, and Governance Gaps in Lake Victoria's Muhuru Bay and Migingo Island, Kenya** **Edwin Wagah,** Institute of Environmental Studies, Doctoral School of Environmental Sciences, ELTE Eötvös Loránd University, Budapest, Hungary
11:35	**Discussion**	**Early Prediction of Harmful Algal Blooms Using Deep Learning Models** **Jyoti Neupane,** Department of Agricultural Science, Clemson University, Clemson, South Carolina	**Exploring Opportunities and Challenges of Using Biological Indicators in Local Management Decisions: A Watershed Case Study** **Laura Bates,** University of Wisconsin-Madison, Madison, Wisconsin	**How the Past Informs the Future of Lake Management** **Kenneth J. Wagner,** Water Resource Services, Wilbraham, Massachusetts

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Concurrent Session J

Friday, November 7 | 1:30 pm – 3:00 pm

	J1: Tech Options	J2: HABs 7: Tech Spotlight: Innovations	J3: Lake Ecology	J4: Emerging Contaminants
	Ballroom A	*Ballroom B*	*Ballroom C*	*Meeting Room 106-107*
	Moderator: **Heather Desko,** New Jersey Water Supply Authority, Clinton, New Jersey	Moderator: **Amy Smagula,** New Hampshire Department of Environmental Services, Concord, New Hampshire	Moderator: **Jeremy Deeds,** Maine Department of Environmental Protection, Augusta, Maine	Moderator: **Victoria Chraibi,** Tarleton State University, Stephenville, Texas
1:35	**Developing a Framework for Surface Algae and Cyanobacteria Bloom Surveys Using Drone Technology** **Carissa Wilkerson,** Southern Nevada Water Authority, Henderson, Nevada	**The Case for the Integration of Molecular Cyanobacterial Assays Into Water Monitoring Programs** **Mark Van Asten,** Phytoxigene, Inc, Akron, Ohio / University of NSW, Sydney, NSW, Australia	**Biological Assessment in the Littoral Zone: Macroinvertebrates As Indicators of Lake Shoreland Disturbance** **Jeremy Deeds,** Maine Department of Environmental Protection, Augusta, Maine	**Microplastics Analysis Using Flow Imaging Microscopy** **Polly Barrowman,** Yokogawa Fluid Imaging Technologies, Scarborough, Maine
1:55	**Automated *In Situ* Nutrient Monitoring to Inform Assessment, Prescription, and Implementation of Water Quality Management** **Vince Kelly,** GreenEyes, Easton, Maryland	**How Algae Sensors Work** **Brock Houston,** In-Situ Inc, Saint Petersburg, Florida	**Square Peg, Round Hole: Developing a Data Structure for NLA Habitat Data in the Water Quality Exchange** **Brandi Easton,** Oklahoma Water Resources Board, Oklahoma City, Oklahoma	★ **Microplastic Accumulation in Wet Detention Ponds: Monitoring, Mapping, and Management** **Morgan Chaudry,** Clemson University, Georgetown, South Carolina
2:15	**Discussion**	**What's Unclear About Clear Lake? A Spatial Study of a Harmful Algal Bloom** **Zachary Henderson,** Xylem, Yellow Springs, Ohio	**Discussion**	★ **Examining the Impact of Emerging Contaminants on Phytoplankton Communities in a Managed Reservoir: Lake Murray, SC** **Catherine Schlenker,** University of South Carolina, Columbia, South Carolina
2:35		**Discussion**		**Monitoring PFAS in Urban Colorado Drinking Water Reservoirs** **Caleb Owen,** City of Thornton, Colorado

★ Denotes that the lead author is a student.