## WEDNESDAY, OCTOBER 9 – MORNING SESSIONS

	Seminar Room E	Seminar Room F	Seminar Room G	
	Great Lakes Remote Sensing	Fish, Fisheries & Management (1)	Saginaw Bay	
8:30	<u>J. Klassen</u> Lake Huron basin remote sensing: A Great Lakes Restoration Initiative collaboration	<b><u>S. C. Riley</u></b> Status and trends of the Lake Huron offshore demersal fish community, 1976-2018	<u>C. Stow</u> Saginaw Bay nutrients: Not that much has changed recently	
8:50	<b>K. Bosse</b> Seasonal patterns of Saginaw Bay inherent optical properties with implications for remote sensing	<u>N. Godby</u> Status of introduced salmonines in Lake Huron	A. Gatch Custodial maintenance of Lake Huron's natural spawning reefs	
9:10	<u>N. Luymes</u> Object-based approaches to map vernal pools in eastern Georgian Bay, Ontario	<b>T.A. Cwalinski</b> Lake Huron Atlantic salmon management program update	Contaminants D. Ager Overview of USEPA Great Lakes National Program Office Contaminant monitoring programs– Lake Huron focus	
9:30	M. Miller Mapping hydrological connections on Lake Huron to identify coastal wetlands	<b>M. Zink</b> Evaluating the success of Michigan DNR's Lake Huron Atlantic salmon stocking program	<u><b>M. Ripley</b></u> Fish contaminant advice for Great Lakes Native American communities using mobile technology	
9:50	M. Battaglia Monitoring Lake Huron coastal wetlands using synthetic aperture radar	<b>T.O. Brenden</b> A combined lakes Michigan and Huron Statistical catch-at-age model for chinook salmon		
10:10	Break			
10:30	<b>A.F. Poley</b> Improving land cover change detection techniques using Google Earth Engine	<b>S.M. Nowicki</b> Sea Lamprey control in Lake Huron	Economics & Sustainability           J. Empson Laporte           Looking at environmental solutions           using economic lenses: LEAN           principles to implement change and           manage risk	
10:50	A. Grimm A multi-disciplinary approach to Phragmites monitoring and management in Saginaw Bay	<b>E.S. Dunlop</b> Metabolic and growth response of lake trout strains to warmer temperatures	<u>S. Naylor</u> Ecologically sustainable net pen rainbow trout aquaculture in Lake Huron	
	C.N. Brooks	<u>S. Koproski</u>	<b>Outreach &amp; Communication</b>	
11:10	Quantifying effects of invasive Phragmites and Eurasian watermilfoil management with drones	Status of Lake Trout in Lake Huron 2018	<b>L.M. Fry</b> Lake Huron water levels: Historical context, current conditions, and related U.S. Army Corps of Engineers products	
11:30	<u><b>L. Spaete</b></u> The use of remote sensing to manage Minnesota state lands	<b>J.X. He</b> Dynamics of lake trout production in the main basin of Lake Huron	<u><b>K. Salazar</b></u> Tipping Point Planner: Addressing Great Lakes nutrient and habitat issues through collaborative planning	
11:50	Plenary featuring Mike Kelly, The Co	nservation Fund Great Lakes Office (Rh	ea Miller Recital Hall)	

12:50 Lunch (Marketplace at Doan)

## WEDNESDAY, OCTOBER 9 – AFTERNOON SESSIONS

	Seminar Room E	Seminar Room F	Seminar Room G
	Harmful Algal Blooms	Fish, Fisheries & Management (2)	Land To Lake Connections
2:00	<b>D. Gill</b> Assessing community need for a Saginaw Bay harmful algal bloom forecast	<b>E. Adams</b> Fish eggs and larval drift near the St. Marys River Rapids, MI	<b>R.A. Williams</b> Mapping the historic coastlines of Lake Huron and the Great Lakes Region
2:20	<u>M. Rowe</u> Development of a harmful algal bloom transport forecast for Saginaw Bay, Lake Huron	<b>J.X. He</b> Stock assessment of lake whitefish in Michigan waters of southern Lake Huron	<b>S. Johnson</b> Forests for lakes: Science, restoration, and lessons learned
	Habitat & Species	D.J. Stanton	R. Shaffer
2:40	<u>S. Parker</u> Lake Huron protected areas	DNA fingerprinting of walleye <i>(Sander vitreum)</i> from Saginaw Bay: Genetic effects of stocking	Conservation practices (i.e., BMPs) to reduce nonpoint source pollution in the Lake Huron Basin
3:00	<u><b>A. Ania</b></u> Buhl Dam area restoration: A partnership success story	<b>D.G. Fielder</b> Dynamics of the recovered Saginaw Bay walleye population	<b>B. Wickerham</b> Comparison of conservation cost share approaches in Saginaw Bay watershed: Pay for practice vs. pay for performance
3:20	<u>M.J. Gass</u> Reef restoration in Saginaw Bay: Improving habitat through partnerships	J.R. Bence Commentary on fish community objectives for Lake Huron	<b><u>C. Rachol</u></b> Assessing agricultural best management practices at the edge- of-field scale in Saginaw River basin
3:40	Break		
	<u>A. Moerke</u>	Coregonine Ecology & Mgmnt (1)	Great Lakes Beach Association (1)
	Habitat and fish responses to		
4:00	Habitat and fish responses to restoration of flow in the Little Rapids, St. Marys River AOC	<b>E.S. Dunlop</b> Dynamics and sustainability of lake whitefish in Lake Huron	<b><u>C.M. Goodman</u></b> Tribute to Partners in the Great Lakes Beach Association
4:00 4:20	restoration of flow in the Little	Dynamics and sustainability of lake	Tribute to Partners in the Great
	restoration of flow in the Little Rapids, St. Marys River AOC <u>P. Chow-Fraser</u> Climate-associated changes in the structure and function of coastal	Dynamics and sustainability of lake whitefish in Lake Huron C.L. Davis Overview of whitefish status and management in Ontario waters of	Tribute to Partners in the Great Lakes Beach Association T. Rule Western Upper Peninsula flood
4:20	restoration of flow in the Little Rapids, St. Marys River AOC           P. Chow-Fraser           Climate-associated changes in the structure and function of coastal habitats in Georgian Bay           D.R. Pearsall           Blue Accounting: Tracking investments and progress on key Great Lakes issues, with a focus on	Dynamics and sustainability of lake whitefish in Lake HuronC.L. Davis Overview of whitefish status and management in Ontario waters of Lake HuronA.T. Duncan The ecological knowledge of the S- augeen Ojibway Nation regarding	Tribute to Partners in the Great Lakes Beach Association T. Rule Western Upper Peninsula flood emergency response
4:20	restoration of flow in the Little Rapids, St. Marys River AOC P. Chow-Fraser Climate-associated changes in the structure and function of coastal habitats in Georgian Bay D.R. Pearsall Blue Accounting: Tracking investments and progress on key Great Lakes issues, with a focus on coastal wetlands J.P. Ludwig Stable isotopes confirm huge diet differences in cormorants across	Dynamics and sustainability of lake whitefish in Lake HuronC.L. Davis Overview of whitefish status and management in Ontario waters of Lake HuronA.T. Duncan The ecological knowledge of the S- augeen Ojibway Nation regarding the status of ciscoes in Lake HuronD. Wells Spatial variation in lake whitefish larvae growth and density in Saginaw Bay and Thunder Bay,	Tribute to Partners in the Great Lakes Beach AssociationT. Rule Western Upper Peninsula flood emergency response(continued)

7:00 Public Meeting featuring Jane Keon (Rhea Miller Recital Hall)

## THURSDAY, OCTOBER 10 – MORNING SESSIONS

	Seminar Room E	Seminar Room F	Seminar Room G
	General	Coregonine Ecology & Mgmnt (2)	Great Lakes Beach Association (2)
8:30	<u>S.C. Riley</u> The state of Lake Huron in 2017	<u><b>R.L. DeBruyne</b></u> St. Marys River Rapids area provides valuable habitat for coregonine reproduction	<b>S.L. Belontz</b> The deposition and accumulation of microplastics in benthic sediments of Lake Huron
8:50	<b><u>A. Ertel</u></b> Lake Huron's binational partnership for community stormwater readiness	<b>R.L. Eshenroder</b> Status of cisco in Lake Huron	<u><b>C. Hakala</b></u> Talking poop with the public: Examples of healthy swimming outreach
9:10	<u>L. Greer</u> Lake Huron National Shoreline Management Study	<b>T.P. O'Brien</b> Spatial distribution and habitat use of Lake Huron ciscoes	<b>T. Edge</b> Sewage cross-connections to stormwater outfalls that impact recreational waters in Lake Ontario
9:30	(continued)	<u>W. Stott</u> Genetic Analysis of cisco <i>(Coregonus artedi)</i> population structure in Lake Huron	<b>D. Beauchamp</b> Implementing the new federal CSO public notification rule
9:50	<u>H. Siersma</u> Changes in sediment texture may inhibit the recovery of <i>Hexagenia</i> spp. in Saginaw Bay, Lake Huron	<u><b>C. Olds</b></u> Cisco re-introduction efforts in Lake Huron	Panel Discussion Q&A session will cover public communication strategies and health risks related to combined sewer overflow (CSO) discharges.
10:10	Break		
	Water Quality Monitoring Programs	2017 CSMI Reporting (1)	Great Lakes Beach Association (3)
10:30	<u><b>K. Cissell</b></u> Incorporating students and STEM teachers in a multi-year Saginaw Bay watershed monitoring program	<u><b>S. Shivarudrappa</b></u> Current state and long-term trends of Lake Huron benthos	<u><b>C. Robinson</b></u> The contribution of dirty sand to FIB water quality exceedances at two adjacent freshwater beaches
10:50	<u>N. Manning</u> The Heidelberg Tributary Loading Program: Lessons learned after 44 years	<u><b>T. Angradi</b></u> Towards improved benthic monitoring of the Great Lakes using underwater video	<b>S. Rakhimbekova</b> The role of groundwater-lake interactions on the delivery of pollutants to nearshore waters of the Great Lakes
11:10	<b>D.R. Pearsall</b> Pursuing a coordinated tributary and nearshore monitoring initiative for the Saginaw Bay watershed	<u>S. Bayba</u> Effects of <i>Dreissena</i> on benthos of Lake Huron	<b>L.R. Fogarty</b> Distinguishing onshore and offshore sources of <i>E. coli</i> to beaches
11:30		<u>A. Elgin</u> Regional, seasonal, and depth differences in quagga mussel growth	Overview of Student Poster Competition
11:50	A Conversation with the Council of the Great Lakes Region and International Association for Great Lakes Research featuring <b>Mark Fisher</b> , CEO of CGLR (Banquet Hall)		

12:50 Lunch (Marketplace at Doan)

## THURSDAY, OCTOBER 10 – AFTERNOON SESSIONS

	Seminar Room E	Seminar Room F	Seminar Room G
	Nutrient & Lower Food Web	2017 CSMI Reporting (2)	Great Lakes Beach Association (4)
2:00	<u>J. Pauer</u> Lake Huron nutrients: We collected the lake data, now we need loadings and model results	<u>S.E. Daniel</u> Great Lakes DNA Barcode Reference Library: Mollusca, Annelida, and minor phyla	<u>Members of the GLBA</u> Beach 101
2:20	K.A. Bockwoldt Long-term and spatial trends in nutrients and seston stoichiometry in Lake Huron	<u><b>D. Wells</b></u> Estimating <i>Mysis</i> density and catch avoidance using the MOCNESS in Thunder Bay, Lake Huron	<u>J. Kinzelman</u> Overview of beach sanitary surveys
2:40	<u>J. Watkins</u> Status of lower trophic levels in Lake Huron	<b>P. Glyshaw</b> Examining fine-scale zooplankton distribution in Lake Huron using a LOPC and traditional net tows	<b>R. Haugland</b> Development of a recreational beach notification value for an <i>E.</i> <i>coli</i> qPCR method for the State of Michigan
3:00	<u><b>M.B. Nevers</b></u> Great Lakes <i>Cladophora</i> assessment: Conditions in Lake Huron	<b>D.B. Bunnell</b> Spatial variation in zooplankton productivity and rainbow smelt energetic condition	<u><b>N. Isaacs</b></u> Using rapid molecular based assays to monitor water quality at select Berrien County beaches
3:20	<b>F. McCarthy</b> Anthropogenic impact over the last millennium: Evidence from algal and zooplankton microfossils	<b>B. Crimmins</b> Lake Huron CSMI contaminants and food web markers: Great Lakes fish monitoring and surveillance program	J. Rose The IJC Centennial Study: Microbial source tracking across the Great Lakes
3:40	(continued)	A. Oppliger Larval fish assemblages and species dispersal in Lake Huron during 2017	<b>C. Hakala</b> Announcing dates/location of the 2020 Great Lakes Beach Association
4:00	Break		
	Aquatic Invasive Species	2017 CSMI Reporting (3)	Great Lakes Beach Association (5)
4:20	<b>G. Wright</b> Update of an early detection and monitoring program for non-native fishes in Lake Huron	M. Cubbage Quantifying spatio-temporal variation in environmental conditions for larval fish in Lake Huron	Members of the GLBA Rapid Methods for Enterococci, <i>E.</i> <i>coli</i> , and others (swimmers itch)?
4:40	<b>B.C. Cahill</b> Towards an adaptive management framework for European frog-bit ( <i>Hydrocharis morsus-ranae</i> L.) management	<u>L. Eaton</u> Larval fish dynamics from the 2017 Lake Huron CSMI	Human Markers: HF183, HumM2, b. theta
5:00	J.V. Marcaccio Assessing the impact of grass carp on the ecology of coastal wetlands of eastern and northern Georgian Bay	<b>H.A. Vanderploeg</b> Organization of the pelagic food web in Saginaw Bay, Thunder Bay, and offshore Lake Huron	Livestock-Mammal Markers: pig, cow, bovine, dog, horse, others?
		K. Kierczynski	Bird Markers: goose, gull, duck?
5:20		Spatial patterns and seasonal trends of Lake Huron predator diets	
5:20 5:40	<b>CSMI Summary Session</b> with pizza ar	trends of Lake Huron predator diets	

6:45 **Movie Night:** Documentary Screening of *Making Waves: Battle for the Great Lakes*