



ISE-FP 2024 SCHEDULE OVERVIEW

ISE-FP Quebec 2024 SCHEDULE OVERVIEW					
Workshop venue: INRS, 490 de la Couronne, Québec, Qc, G1K 9A9, Canada					
Sunday may. 5					
Conference venue: Hôtel le Concorde, 1225 Cr du Général de Montcalm, Québec, QC G1R 4W6, Canada					
Timeslot	Speaker ready room (3rd floor)				
9:00-16:30	Workshop: INRS				
15:00-18:00	Kiosque installation: Concorde				
18:00- 20:00	Ice-Breaker and Registration desk open – Foyer in Level 3 Concorde				
Monday may. 6					
Timeslot	Speaker ready room (3rd floor)				
6:30-8:00	Breakfast served at Level 2 Jean-Paul Lemieux				
	Suzor-Côté Ballroom 1	Krieghoff Ballroom 2	Borduas Ballroom 3	Leduc-Fortin	Pilot
7:00-8:00	Registration desk open – Foyer				
8:00-10:30	Opening Ceremony, Plenary 1: Steve Cook and Plenary 2: Marianne Bachand				
10:30-11:15	Break	Break	Break	Break	Break
11:15-12:30	Session 1: Hydropeaking ecological impacts (5 slots)	Session 2: Recent advances in fish tracking techniques (5 slots)	Session 3: Environmental flows (5 slots)	Session 4: Optimizing fishway designs (5 slots)	Session 5: Habitat restoration (5 slots)
12:30-13:45	Lunch served at Level 2 Jean-Paul Lemieux				
13:45-15:30	Session 6: Fish protection at dams (7 slots)	Session 7: Tracking fish migrations (7 slots)	Session 8: Habitat connectivity at high flows (7 slots)	Session 9: Sustainable hydropower (7 slots)	Session 10: Advances in numerical methods 1 (7 slots)
15:30-16:00	Break	Break	Break	Break	Break
16:00-17:45	Session 11: Recent development in fish screening techniques (7 slots)	Session 12: Selective fish passage (7 slots)	Session 13: Hydrodynamics in fishway designs 1 (7 slots)	Session 14: Vegetation in ecohydraulics: Wetlands and coastal areas (7 slots)	Session 15: Fish passage: opportunities for funding and collaboration 1 (7 slots)
17:45-18:45	Posters session and kiosques – Foyer				

ISE-FP 2024

Tuesday may. 7

Timeslot	Speaker ready room (3rd floor)				
7:00-8:30	Breakfast served at Level 2 Jean-Paul Lemieux				
	Suzor-Côté Ballroom 1	Krieghoff Ballroom 2	Borduas Ballroom 3	Leduc-Fortin	Pilot
8:30-9:30	Plenary 3: Carole-Anne Gillis				
9:30-10:15	Break	Break	Break	Break	Break
10:15-12:15	Session 16: Understanding and managing aquatic habitats (8 slots)	Session 17: Environmental flows and aquatic organisms (8 slots)	Session 18: Integrating fish behavior in fish passage and exclusion (8 slots)	Session 19: Man-made & natural barriers (8 slots)	Session 20: Fish passage: opportunities for funding and collaboration 2 (8 slots)
12:15-13:45	Lunch served at Level 2 Jean-Paul Lemieux				
13:45-15:30	Session 21: Insights on thermal habitat (7 slots)	Session 22: Safe downstream passage (7 slots)	Session 23: Hydrodynamics in fishway designs 2 (7 slots)	Session 24: Eel migrations in regulated rivers (7 slots)	Session 25: IAHR
15:30-16:00	Break	Break	Break	Break	Break
16:00-17:45	Session 26: Restoring aquatic connectivity (7 slots)	Session 27: Advances in numerical methods 2 (7 slots)	Session 28: Vegetation in ecohydraulics (7 slots)	Session 29: Restoring aquatic organism passage (7 slots)	Session 30: TBD
17:45-18:45	ISE Business Meeting	Fish Passage SC meeting (meet in Foyer)			

Wednesday may. 8

Timeslot	Speaker ready room (3rd floor)				
7:00-8:30	Breakfast served at Level 2 Jean-Paul Lemieux				
	Suzor-Côté Ballroom 1	Krieghoff Ballroom 2	Borduas Ballroom 3	Leduc-Fortin	Pilot
8:30-9:30	Plenary 4: Theodore Castro Santos				
9:30-10:15	Break	Break	Break	Break	Break
10:15-12:15	Session 31: Working across the riverscape (8 slots)	Session 32: Innovative fish passage designs (8 slots)	Session 33: Fishway monitoring & evaluation 1 (8 slots)	Session 34: Fish locomotion in unsteady flow (8 slots)	Session 35: Modelling aquatic habitats (8 slots)
12:15-12:45	Get bagged lunch (Level 2 Jean-Paul Lemieux) and find where your tour leave from (Lobby)				
12:45~(16:00-17:00)	Visits and activities				
17:00-18:00	Free time				
19:00-22:30	Banquet (bar open at 18:00)				

Timeslot	Speaker ready room (3rd floor)				
7:00-8:30	Breakfast served at Level 2 Jean-Paul Lemieux				
	Suzor-Côté Ballroom 1	Krieghoff Ballroom 2	Borduas Ballroom 3	Leduc-Fortin	Pilot
8:30-10:30	Session 36: Aquatic habitat modelling and management (8 slots)			Session 37: Optimizing fishway designs (8 slots)	Session 38: Aquatic Habitat quality (8 slots)
10:30-11:00	Break	Break	Break	Break	Break
11:00-12:15	Session 39: Fishway monitoring & evaluation 2 (5 slots)			Session 40: Agricultural & urban habitats stream restoration (5 slots)	Session 41: Hydropeaking ecological impacts (5 slots)

Workshop venue: INRS, 490 de la Couronne, Québec, Qc, G1K 9A9, Canada

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May 5 (Sunday) Room/hours	
INRS	
9:00-16:30	Dam removal
9:00-16:30	Nature-like fishway design
9:00-16:00	PIT-tag
10:00-16:00	DYI Electronics
12:30-16:30	EcoEnet
13:00-16:00	MesoHABSIM
Concorde	
17:30-19:30	Registration desk - Foyer
18:00-20:00	Ice-Breaker - Foyer

May 6 (Monday) Room/hours	
6:30-8:00 Breakfast served at Level 2 Jean-Paul Lemieux	
7:00-8:00 Registration desk - Foyer	
8:15-10:30 Opening Ceremony - Ballrooms Plenary 1. Steve Cooke: Can ecohydraulics help to address the freshwater biodiversity crisis? Plenary 2. Marianne Bachand: Dealing with a flood of data by modelling the ecosystem response to water regulations in Canada's large water bodies	
10:30-11:15 Break - Foyer	
Suzor-Côté Ballroom 1 May 6	Session 1: Hydropeaking ecological impacts Chairs: Davide Vanzo
11:15	Hervé CAPRA Quantifying the impacts of hydropeaking on fish stranding and habitat selection
11:30	Joël Ronald Wittmann Validation of the Fish Escaping Routes Model to Quantify Fish Stranding Risk in Rapid Flow Alteration
11:45	Bryan Bozeman The ecological effects of sub-daily flow variability on riverine fishes: a systematic review
12:00	Mónica Basilio Hazas Hydropeaking indicators for groundwater systems
12:15	Philippe Baran Assessing morphoecological impacts due to hydropeaking in the Rhone-Mediterranean and Corsica river basins
Krieghoff Ballroom 2 May 6	Session 2: Recent advances in fish tracking techniques Chairs: Adrian Jordaan
11:15	Jean-Francois Senecal Observation of Sturgeons Habitat Use in relation to Ecohydrological Features and Ship Cooccurrences

11:30	Ianina Kopecki	A novel method to calculate 2D acoustic telemetry tracks: application example in high noise environment
11:45	Véronique Dubos	Oviduct tags and fine-scale acoustic telemetry can reveal timing, location and behavior of spawning in two Arctic salmonids
12:00	Daniel Deng	Next-Generation Miniature Transmitter Development for Fish Passage Monitoring
12:15	Daniel Deng	Lab-on-a-Fish
Borduas Ballroom 3 May 6	Session 3: Environmental flows	Chairs: Francisco Martinez Capel
11:15	Mathieu Roy	Integrated Social Economic Environmental (ISEE) system to evaluate flood mitigation measures: A Case study of the Lake Champlain - Richelieu River basin.
11:30	André St-Hilaire	Environmental flows in Québec: Planning the next research priorities
11:45	Martina Bussettini	Implementation of ecological flows in Europe
12:00	Yangwen Jia	Quantifying Impacts of Groundwater Exploitation on Baseflows and Environmental Flows of the Weihe River Using the WEP-L Model
12:15	Claudio Consuegra-Matinez	Practical study of environmental low determination for the Guayabero River and Quebrada La Reserva located in the AMEM, Colombia
Leduc-Fortin May 6	Session 4: Optimizing fishway designs	Chairs: Marc Mingelbier
11:15	Sylvie Tomanova	Macroroughness block ramp: an efficient solution to reduce the impact of weirs on fish circulation
11:30	Martin Hunt	Redesign and Rehabilitation of Fish Passage Systems of the Churchill Weir
11:45	Arif Wibowo	Improving fishway design through comprehensive biodiversity survey, a case study on irrigation weir at the Cibareno River, Java, Indonesia
12:00	Marq Redeker	How to best serve Sturgeon Steve? Design of fishways at the Iron Gate Dams on the River Danube using fish telemetry and CFD modeling
Pilot May 6	Session 5: Habitat restoration	Chairs: Eva Enders
11:15	Line Sundt-Hansen	Cross-disiplinary approach to assess bottlenecks for ecological condition of fish and aquatic invertebrates and recreation in a regulated river
11:30	Joachim Pander	The contribution of nature-like fish passes to fish diversity and the restoration of riverine habitats
11:45	Christin Kannen	Influence of the use of natural material on morphodynamics around instream structure on the example of a Triangular Pier
12:00	Abul Baki	Habitat complexity metrics around instream boulders in support of river restoration
12:15-13:45	Jean-Paul Lemieux	LUNCH (on-site)
Suzor-Côté Ballroom 1 May 6	Session 6: Fish protection at dams	Chairs: Sterling Watson
13:45	John Nestler	Optimizing a Novel Fish Protection System at a Pumped-Storage Hydropower Dam Using Failure Mode and Effects Analysis
14:00	John Burnett	An International Trend Toward Increased Fish Protection at Water Intakes and Diversions
14:15	Blane Bellerud	Protocol for Estimating Downstream Survival of Diadromous Fishes at Hydroelectric Facilities
14:30	Anita Moldenhauer	(Electrified) curved bar racks for safe downstream fish passage – a promising solution to improve protection and guidance for a wide range of fish species
14:45	Joachim Bretzel	Impingement susceptibility and approach velocity responses of freshwater fish and crustacean species at a wedge-wire protection screen
15 :00	Christian Haas	Protecting fish with a non linear electric field - electrical barriers as an effective measure for fish guidance at hydraulic structures
Krieghoff Ballroom 2 May 6	Session 7: Tracking fish migrations	Chairs: Val Ouellet
13:45	François Martignac	A toolbox to assess the spatio-temporal dynamics of Atlantic salmon recolonization after dam removal on the Sélune River (Normandy, France)
14:00	Armin Peter	Downstream migration of Atlantic salmon (<i>Salmo salar</i>) smolts in the Aare and Rhine Rivers in Switzerland

14:15	Mark Yeldham	Severn Unlocked? The response of two anadromous fishes to catchment scale barrier mitigation in the River Severn revealed using acoustic telemetry
14:30	Olivia Simmons	The influence of hydraulic conditions on Atlantic salmon swimming behaviour at a hydropower dam
14:45	Katrina Cook	Should I Stay or Should I Go? Advance and Retreat Movements of Migratory Bull Trout at the Site C Dam Fishway
15:00	Céline Le Pochon	The recovery of extinct Allis shad (<i>Alosa alosa</i>) in the navigated Seine River: what are the best routes for spawning migrations?
15:15	Mikel Cherbero	Environmental cues and phenological variations in spawning migration of Allis shad (<i>Alosa alosa</i>)
Borduas Ballroom 3 May 6	Session 8: Habitat connectivity at high flows	Chairs: Mathias Collins
13:45	Paul Demuth	Flood refugia availability in a locally widened river reach
14:00	Brian Wardman	Enhancing Habitat and Reducing Flood Risk
14:15	Dan Gibson-Reinemer	Flooding allows rapid long-distance movements by native and invasive fish species in the Mississippi River
14:30	Jonathan Bolland	A global perspective on fish passage and protection at flood-relief pumping stations
14:45	Zachary Sherker	Fish and Floods: Floodgate and culvert remediations to improve salmon access to critical juvenile rearing habitat
15:00	Patrick Holzapfel	An energy-based approach to quantify habitat connectivity between functional fish habitats considering steady-state hydrodynamic flow fields in fluvial ecosystems
15:15	Megan DiNicola	High Flows Dictate Subadult Freshwater Mussel Suitable Habitat Patterns In an Engineered River
Leduc-Fortin May 6	Session 9: Sustainable hydropower	Chairs: Hervé Capra
13:45	Atle Harby	Environmental design of hydropower regulated rivers
14:00	Ana T. Silva	Atlantic salmon (<i>Salmo salar</i>) conservation and sustainable Hydropower in Norway: downstream passage solutions
14:15	Daniel Hayes	Ecohydraulic studies in the context of a hydropower project in Uzbekistan, Central Asia
14:30	Frédéric Burton	Aménagement d'une frayère en eau vive en aval du barrage de Saint-Timothée (fleuve Saint-Laurent)
14:45	Marie-Pierre Gosselin	Hydropower related hydromorphological alterations in freshwater pearl mussel (<i>Margaritifera margaritifera</i>) rivers: impacts, knowledge gaps and potential mitigation measures.
15:00	Joe Rathbun	Dams and Clams; Dam Removals and Freshwater Mussel Relocations
15:15	Véronique Gouraud	Method to identify effective hydropeaking mitigation measures: lessons learnt from site studies
Pilot May 6	Session 10: Advances in numerical methods 1	Chairs: André St-Hilaire
13:45	Mulugeta Genanu Kebede	Remote Sensing-based River Discharge Estimation for a Small River Flowing Over the High Mountain Regions of the Tibetan Plateau
14:00	Melina Sattelmeier	Analyzing Relative Influences of Pumped-Storage Hydroelectricity Operations and Reservoir Characteristics on Hydraulic Conditions
14:15	Marcela Politano	Numerical investigations of supersaturated water transport downstream of a hydropower plant in Norway
14:30	Dominic Lagrois	Effects of ecohydraulic properties on acoustic propagation in the fresh waters of the St. Lawrence River, Canada
14:45	Anders Andersson	Hydraulic modelling of seasonal flow variations in regulated Nordic rivers
15:00	Mohammad Golestani Eraghi	Impact of rainfall spatio-temporal variability on rainfall-runoff and flood modelling in the Selke catchment
15:15	Mariana Acosta	Non Darcy Turbulent Flow in Porous Media Study
15:30-16:00	Break - Foyer	

Suzor-Côté Ballroom 1 May 6	Session 11: Recent development in fish screening techniques	Chairs: Andrew Goodwin
16:00	Stefan Hoerner	Towards a reliable and validated toolbox to replace live fish tests for the assessment of injury and mortality during downstream passage
16:15	Aljon Salalila	Development of the Sensor Fish Suites for Hydropower and Marine Hydrokinetic Technologies
16:30	Eric De Oliveira	Fish species recognition based on morphological and swimming pattern on acoustic videos
16:45	Helmut Mader	The development of an AI-based automated 24/7/365 fish monitoring system
17:00	Pedro Romero-Gomez	Combining Sensor- and Simulation-based Assessments of Fish Passage through Hydro Turbines
17:15	Philippe Hamel	Investigation of computational fluid dynamics and autonomous device methods to estimate fish mortality in a hydroelectric turbine
17:30	Jeffrey Tuhtan	Smart Fish Counter Software for the Automated Monitoring of Fish Species and Body Length
Krieghoff Ballroom 2 May 6	Session 12: Selective fish passage	Chairs: Jessica Stanton
16:00	Daniel Zielinski	Exploration of the science supporting selective connectivity at fish migration barriers
16:15	Mahmoud Abdelbaky	Comparative swimming performance of Brook Trout, White Sucker, and Sea Lampreys in a baffled channel
16:30	Dencil Mathew	Baffle designs to improve selective passage in sea lamprey barriers
16:45	Kassandra Reynolds	Hydraulic and hydrologic characteristics of effective sea lamprey barriers
17:00	David Smith	Assessing Invasive Carp Response to Three-Dimensional Geometric Structures with Known Hydrodynamic Flow Patterns
17:15	Avery Schemmel	Assessing Zebra Mussel Impact on Fishway Efficiency: McNary Lock & Dam Case Study
17:30	Ambroise Percheron	Rehabilitation of the Davis Diversion Intake: A novel environmental solution
Borduas Ballroom 3 May 6	Session 13: Hydrodynamics in fishway designs 1	Chairs: Bryan Sojkowski
16:00	Lucas Stiles	3D CFD Modeling – A Cornerstone of the Fish Passage Design Process
16:15	Robin Andersson	Simplifying Faunapassage Outlet Positioning: A Hydraulic Approach
16:30	Sebastian Schwindt	Fish passage and flood safety: multi-model perspectives
16:45	Philipp Werner	Experimental analysis of climate change influenced flows on an adapted vertical slot pass
17:00	Haitao Liu	A study on the connection mode of fish upstream passage in the dam downstream water reducing reach of hydropower station
17:15	Damien Calluaud	Vertical double slot fishways flow: influence of geometry, slope and discharge
17:30	Vincent Autier	Designing Technical Upstream Fishways Capable of Adjusting to Changing Environmental Conditions
Leduc-Fortin May 6	Session 14: Vegetation in ecohydraulics: Wetlands and coastal areas	Chairs: Valérie Tremblay
16:00	Jacob Stolle	Seasonal change in wave attenuation through Canadian saltmarshes
16:15	Antoine Maranda	Machine Learning Elevation Correction Model for Coastal Wetlands in the Laurentian Great Lakes.
16:30	Rémi Gosselin	Extracting local physical variables for wetlands response modelling from large-scale climatic predictions of the Great Lakes
16:45	Dominic Thériault	AI-Powered Modeling for Assessing the impact of changing water levels on Great Lakes Coastal Wetlands

17:00	Graham Hill	Restoring coastal ecosystems, rematriating landscapes, and contributing to coastal resilience
17:15	Samantha Chan	Utilizing Drone Imagery to Predict Coastal Protection Provided by Vegetation
Pilot May 6	Session 15: Fish passage: opportunities for funding and collaboration 1	Chairs: Michelle Lennox
16:00	Nick Anderson	Barriers to Fish Passage and Historic Investments under the Bipartisan Infrastructure Law
16:15	Gillian O'Doherty	Fish Passage and Habitat Connectivity: Federal Highway Administration
16:30	Arianna Ramirez	Fish Passage and Habitat Connectivity: U.S. Fish and Wildlife Service
16:45	Brian Kelder	Fish Passage and Habitat Connectivity: National Marine Fisheries Service
17:00	Nancy Munn	Restoration of climate-smart fish passage as a tool in species recovery in the Pacific Northwest
17:15	James Turek	Scaling-Up Community-Based Fish Passage Restoration through the Bipartisan Infrastructure Law and Inflation Reduction Act: Successes and Challenges in Southern New England
17:30	Dana McCoskey	Working with the Water Power Technologies Office to advance fish passage science and technologies
17:45-18:45	Poster session and kiosques – Foyer (see list after the program)	

May 7 (Tuesday) Room/hours		
7:00-8:30	Breakfast served at Level 2 Jean-Paul Lemieux	
7:30-8:30	At breakfast, find the AFS-BES/ASCE-EWRI Joint Committee on Fisheries Engineering and Science's table for the an informal recruitment meeting	
7:00-8:15	Registration desk – Foyer If you have not registered yet after this time, please do so in the secretariat room or find a member of the organizing committee (green name tag) to help!	
8:30-9:30	Intro - Ballrooms Plenary 3: Carole-Anne Gillis: A Western scientist in Gespe'gewa'gi – An unlearning journey	
9:30-10:15	Break - Foyer	
Suzor-Côté Ballroom 1 May 7	Session 16: Understanding and managing aquatic habitats	Chairs: Francine Mejia
10:15	Gregory Pasternack	Near-Census Evaluation of Anadromous Salmonid Cover Types In A Regulated Gravel River
10:30	Mathias Chabal	Predicting bed material size along Atlantic salmon rivers from LiDAR data
10:45	Simon Joly-Naud	Formation and persistence of cool-water zones in Atlantic salmon river pools
11:00	Yaqi Luo	Response of macroinvertebrate communities to the environmental patterns in highland river networks
11:15	Francesca Padoan	On the generality of the Habitat Suitability Indexes of brown trout (<i>Salmo trutta</i> L.) in relation to ecohydraulic variables
11:30	José Lorduy	Habitat suitability index of the Bocachico (<i>Prochilodus magdalena</i> ; Steindachner 1879) in the Bajo Sinú large swamp and Betancí swamp, Córdoba, by the implementation of a hydrodynamic and water quality model.
11:45	Maxime Brousseau	Concilier la nature et le développement : Gestion innovante des barrages de castors pour la préservation de l'habitat de la tortue mouchetée
12:00	Jonathan Czuba	Effects of dam hydropeaking on juvenile freshwater mussel settling

Krieghoff Ballroom 2 May 7	Session 17: Environmental flows and aquatic organisms	Chairs: TBD
10:15	Mathias Collins	Historical occurrence and predictions for environmental streamflows important for diadromous fish
10:30	Bruno Mendonca	Brook trout (<i>Salvelinus fontinalis</i>) as a model anadromous species to evaluate water withdrawal effects in a groundwater-driven coastal watershed.
10:45	Robert Milhous	Beneficial Use of Water for Environmental Needs
11:00	Luiz G. M. Silva	A novel methodology to study the effect of environmental flow conditions on early life stage Salmonids
11:15	Marie-Pierre Gosselin	Towards the next level of environmental flows for fish: Introducing the work of the International Energy Agency-Hydro Task 19 Hydropower and Fish 2.0.
11:30	Véronique Gouraud	Towards a characterization and classification of the ecological impacts of thermopeaking
11:45	Simon Führer	A multi-stressor framework to study effects on cyprinid fish populations in Austrian rivers
12:00	Mengzhen Xu	Assessing the Effects of Environmental Factors on Filtration Rate of Golden Mussel (<i>Limnoperna fortunei</i>)
12:15	Piotr Parasiewicz	Developing environmental flows for fish community macrohabitat types with help of MesoHABSIM model
Borduas Ballroom 3 May 7	Session 18: Integrating fish behavior in fish passage and exclusion	Chairs: Steve Cook
10:15	Andy Goodwin	Toward near- and real-time prediction of fish passage and guidance with ELAM theory-informed generative AI
10:30	Scott Miehl	Field and lab evaluations of downstream migratory behavior of juvenile sea lamprey and use of white light as a potential guidance cue.
10:45	Fabio Tarena	Artificial light at night affects fish passage rates in two small sized cyprinids
11:00	Vindhyawasini Prasad	Assessment of bubble screens as a dispersal barrier to control the movement of drifting invasive grass carp (<i>Ctenopharyngodon idella</i>) eggs
11:15	Jessica Stanton	Underwater acoustic deterrent effects on invasive carp behavior downstream of a navigation lock
11:30	Guangning Li	Experimental study on fish behaviors affected by local color inside a fishway
11:45	Kendra Vorenkamp	Quantifying the schooling benefit of small-bodied fish for optimal fishway design
Leduc-Fortin May 7	Session 19: Man-made & natural barriers	Chairs: Adrian Jordaan
10:15	Scott Hinch	A conservation physiological perspective on dam passage by fishes
10:30	Fielding Montgomery	Effects of rail infrastructure on Pacific salmon and steelhead habitat connectivity in British Columbia
10:45	Morgan Wright	The rockslide that blocked salmon migration in the Fraser River, British Columbia
11:00	Morgan Wright	The search for hydraulic barriers to salmon migration in a bedrock river
11:15	Lindsay Davis	Examining the Hydraulics of a Series of Clustered Alternating Vortex Rock Weirs with Drone-based Image Velocimetry
Pilot May 7	Session 20: Fish passage: opportunities for funding and collaboration 2	Chairs: Nick Anderson
10:15	Kelly Hughes	Merging infrastructure asset management surveys with fish barrier identification
10:30	Paul Matson	Building a national-scale dataset of fish passage facilities at hydropower developments in the United States
10:45	Nick Mazany-Wright	The Canadian Aquatic Barriers Database: tools to support freshwater connectivity restoration and management decisions
11:00	Gillian O'Doherty	Evolution of Best Practices for Aquatic Organism Passage at Waterway-Roadway Crossings

11:15	Craig Mount	Update on the Provincial Fish Passage Program in British Columbia, Canada
11:30	William Twardek	Collaboration between fish passage scientists and engineers: Insights from an international questionnaire
12:15-13:45	Jean-Paul Lemieux	LUNCH (on-site)
Suzor-Côté Ballroom 1 May 7	Session 21: Insights on thermal habitat	Chairs: Christian Torgersen
13:45	Francine Mejia	Closing the gap between science and management of cold-water refuges in rivers and streams
14:00	Batistin Bour	Détection de refuges thermiques en rivière par drone/Thermal refuge identification using drone
14:15	Baptiste Marteau	Unravelling summer thermal habitat conditions in salmonid-bearing rivers using infrared thermal mapping
14:30	Eisinhower Rincon	Deriving distributed daily flow and water temperature time series in data-sparse region: Case study the Northern Quebec region.
14:45	Nicolas Francisco Gamarra	Numerical Modeling of Stream Temperature in a Regulated Section of the Lech River
15:00	Davide Vanzo	Too hot to handle: modelling thermal dynamics in a residual-flow Alpine river
15:15	Mostafa Khorsandi	Assessing the surface downward longwave irradiance models using ERA5 input data for station and watershed scales in Canada
Krieghoff Ballroom 2 May 7	Session 22: Safe downstream passage	Chairs: Adrian Jordaan
13:45	Sterling Watson	Improved turbines for fish passage: a timely innovation for today's hydropower fleet
14:00	Jesse Wechsler	Juvenile Alewife Passage through a Compact Hydropower Turbine Designed for Fish Safety
14:15	Eric De Oliveira	LIFE4FISH project: Improvement of downstream migration success through successive HPP in the channelized River Meuse
14:30	Falko Wagner	Quantitative Behavioral Analysis of Fish Passage: A Laboratory Study of Hydraulic Conditions Relevant to Turbine and Pump Inlets
14:45	Linus Kaminski	Evaluation of Downstream Fish Passage Design Criteria across Weirs using Numerical Simulations
15:00	David F. Vetsch	Evaluation of downstream fish passage measures for a run-of-river hydropower plant with pondage
Borduas Ballroom 3 May 7	Session 23: Hydrodynamics in fishway designs 2	Chairs: Daniel Zielinski
13:45	François-Xavier Cierco	Design of a fish pass influenced by regulated hydraulic works
14:00	Tyler Kreider	Shikellamy NLF: Value of Pre- and Post-Construction Site Investigations
14:15	Marcela Politano	Spillway deflectors design at sinop dam with a three-phase flow numerical model
14:30	Gordon Clark	Application of hydrodynamic models of varying complexity for assessment of upstream passage and habitat suitability of smelt (<i>Osmerus mordax</i>) under pre- and post-construction conditions for dam removal on the Jones River in Kingston, MA.
14:45	Adrian Strain	Computational Fish Dynamics: Using 3D hydrodynamic numerical models to assess and design fish passage facilities
15:00	Seth Schweitzer	Large scale, high resolution, image-based flow velocity measurements for fish management applications
Leduc-Fortin May 7	Session 24: Eel migrations in regulated rivers	Chairs: Valérie Tremblay
13:45	Hervé CAPRA	Determining the downstream migration routes of silver eels through a run-of-river hydroelectric scheme on the lower Rhône River (France)
14:00	Alexandre Guindon	Juvenile American eel tracking using acoustic telemetry at the Carillon hydro-electric facility
14:15	Felix Eissenhauer	A mark-recapture approach to estimate the population size and demographics of American eel elvers (<i>Anguilla rostrata</i>) arriving at a dam in a large river
14:30	Jenna Rackovan	Downstream Passage Evaluation to Restore American Eel in the St. Croix River, Maine

14:45	Jesse Waldrip	Continued Search for the Silver Bullet for Silver Eels
15:00	Jean-François Dumont	Temporary : American eel habitat connectivity : the Quebec action plan
Pilot May 7	Session 25: IAHR	Chairs: Gregory Pasternack
13:45	Greory Pasternack	How to write a good paper for an International Scientific Journal: The Example of the Journal of Ecohydraulics and other IAHR journals
15:30-16:00	Break-Foyer	
Suzor-Côté Ballroom 1 May 7	Session 26: Restoring aquatic connectivity	Chairs: Val Ouellet
16:00	Mariana Unda	An approach to integral ecological connectivity in terrestrial and aquatic landscapes
16:15	Roman Zurek	Restoration of the ecological continuity of the Vistula River and the lower stretches of the Soła and Skawa rivers on 165 km distance – issues and successes.
16:30	Gizachew Teshome	Diversity, abundance and spatiotemporal distribution of Labeobarbus species in below and above irrigation dam of the Megech River, Lake Tana sub-basin, Ethiopia
16:45	Bijoy Kumar Ghosh	Hydraulic impact on fish migration in a sariakandhi fish pass of Bangladesh.
17:00	Mahmoud Omer Mahmoud Awadallah	Physical habitat diversity and connectivity in response to varying sediment supply in an Alpine river widening
17:15	Kyu Jin KIM	A study on the longitudinal continuity assessment method of Korean rivers considering the swimming ability of fish living in Korea
17:30	Miriam Lebeau	Restoring aquatic connectivity for culturally significant species at risk in the Restigouche River watershed
Krieghoff Ballroom 2 May 7	Session 27: Advances in numerical methods 2	Chairs: André St-Hilaire
16:00	David F. Vetsch	An experimental study on seed dispersal by hydrochory in an alpine river floodplain
16:15	Binbin Wang	Development, evaluation, and application of a three-dimensional egg drift model (SDrift) for invasive carps in the Lower Missouri River
16:30	Binbin Wang	Suspension of surrogate carp eggs in grid-modulated jet-stirred turbulence
16:45	Shigeya Maeda	Impact of Nest Size on Deposition of Detached Filamentous Algae within Fish Nests in an Agricultural Drainage Canal: Application of a 3D Hydrodynamic Model
17:00	John Chapman	How do we consider the settling velocity of organic material?
17:15	Jose Carlos Ramirez	Optimal Design of Stormwater Sewer Collectors in Sewer Networks
17:30	Li Gu	The Dispersion of Municipal Wastewater Effluent in a Fjord-type Estuary
Borduas Ballroom 3 May 7	Session 28:Vegetation in ecohydraulics	Chairs: Luiz da Silva
16:00	Un Ji	Quantifying patchiness effect of emergent woody riparian vegetation on reach-scale flow resistance
16:15	Inga Prüter	The Livelihood Diversification Strategies, Landscaping of A Typical Fish Farms in Gwagwalada Abuja Nigeria.
16:30	Eunkyung Jang	Implementation of the three-dimensional shape of woody riparian vegetation using remote sensing imagery
16:45	Jiwon Ryu	Analysis of physical and geometric characteristics for emergent riparian vegetation patches using UAV spatial information
17:00	Jiaqi Liu	Reproduction of suspended sediment transport in partially vegetated alluvial channels: effects of using different 2D eddy viscosity models
17:15	Ana Santos	¿Intensive care in complex swamps? Path of diagnosis and care considering local experts and scientists
Leduc-Fortin May 7	Session 29: Restoring aquatic organism passage	Chairs: Danielle Frechette
16:00	Cailey McCutcheon	Make it FAST: A field-based tool for rapid fish passage assessment

16:15	Shane Scott	Aquatic Organism Passage (AOP) Solutions at Culverts and Fish Barrier Management in North America
16:30	Christian Fox	Identifying Cost-Optimized Road-Stream Crossing Barrier Removals
16:45	Justin Duncan	Review of emerging regulatory and policy tools and a prescription for successful aquatic habitat restoration at scale
17:00	Andrew Anderson	Whiskey Creek - a tale of never ending barriers
17:15	Anna Mallonee	Quiota creek fish passage program: would updated guidelines have improved resiliency of fish passage designs?
17:30	Michael Chelminski	Dam Removal and Upstream Fish Passage
17:45-18:45 TC on Ecohydraulics meeting-Suzor-Côté Ballroom 1		
17:45 Fish Passage – SC (meet in Foyer)		

May 8 (Wednesday) Room/hours		
7:00-8:30	Breakfast served at Level 2 Jean-Paul Lemieux	
8:30-9:30	Intro - Ballrooms Plenary 4. Theodore Castro Santos: Shadowboxing the Anthropocene: the emergent, divergent, and evolving challenges of fish passage	
9:30-10:15	Break - Foyer	
Suzor-Côté Ballroom 1 May 8	Session 31: Working across the riverscape	Chairs: Normand Bergeron
10:15	Christian Torgersen	Riverscape approaches in practice: Perspectives and applications
10:30	Katrina Vaughan Cook	Connecting a river to it's estuary: A conservation success story for juvenile Chinook Salmon
10:45	Simon Geist	Getting a handle on the influence of longitudinal connectivity on fish population dynamics
11:00	Wouter van de Bund	A method for characterising free-flowing rivers in Europe combining assessments at catchment and local scale
11:15	Beatriz Negreiros	Multi-dimensional river connectivity analyses leveraged by a database approach
11:30	Edward Dilks	eDNA metabarcoding as a tool for assessing spatial distributions of fish communities in a heavily fragmented UK river
11:45	Nick Lapointe	Conservation successes from the application of a watershed connectivity restoration planning process
12:00	Donné Mathijssen	Examining the benefits for fish after 31 years of improving water quality, connectivity, and habitat diversity in a novel ecosystem
Krieghoff Ballroom 2 May 8	Session 32: Innovative fish passage designs	Chairs: Jesus Morales
10:15	Boyd Kynard	Performance of a New Alternating Side-Baffle Fishway at Passing Diverse Potamodromous and Diadromous Fishes
10:30	Scott Miehl	Test of Archimedes screw style fish lift for passage of non-jumping migratory fish species.
10:45	Kimberly Capone	Evaluation of the Fishheart Hydraulic Fishway for Passing American Shad Upstream at a Hydropower Dam
11:00	William Peirson	Tube Fishway Attraction and Transport of Salmonids Upstream Over Dams and Weirs
11:15	Brett Pflugrath	An Evaluation of the Stralkin Helix: a Novel Bi-directional Fish Passage System
11:30	Leticia Carrero-Díez	Uphill flow rock ramps: A new fish friendly ladder. Design, modelling, and monitoring of the first experience in Spain.
11:45	Janine Bryan	Fish passage technology design to assist fish guidance via flow modulation
12:00	Michael Messina	Technology Benefiting Nature – Multi-Species Fish and Elver Passage at Low-Head Dams

Borduas Ballroom 3 May 8	Session 33: Fishway monitoring & evaluation 1	Chairs: Daniel Deng
10:15	Juan Francisco Fuentes-Pérez	Advancing Fishway Management: Shaping the Future of Fishway Monitoring
10:30	David Nijssen	Comparison of methods to determine the efficiency of multispecies fishways
10:45	Moon Seong Hee	Investigating the effectiveness of fishways installed on 16 weirs in large rivers in S. Korea
11:00	Panos Panagiotopoulos	A large-scale passage evaluation for multiple fish species: lessons from 82 fishways in the Netherlands
11:15	Luiz Silva	Quantifying fish passage efficiency at hydropower plants in the Upper Rhine River catchment in Switzerland.
11:30	Nich Burnett	Four years of monitoring upstream fish passage at Site C, a new hydroelectric dam in British Columbia, Canada
11:45	Shokoofeh Abbaszadeh	Bio-inspired robotic fish for assessment of injury risks during the fish passage
Leduc-Fortin May 8	Session 34: Fish locomotion in unsteady flow	Chairs: Theodore Castro-Santos
10:15	Katharina Bensing	Hydrodynamic detection, ranging and imaging: the role of the fish body in ethohydraulics
10:30	Florence Gibouin	Swimming kinetics of fish in different turbulence conditions
10:45	Sam Steele	Sprinting Capabilities of Yellowstone Cutthroat Trout in a Swim Chamber
11:00	Misheel Bold	Evaluating effect of temperature on swimming performance of freshwater fish to design fishways in Korea
11:15	Ianina Kopecki	Estimating fish swimming speed using non-invasive backpack sensors in a laboratory flume at high flow velocities
11:30	Kamal Prasad Pandey	FishPath Project: Behavioral Responses of Atlantic Salmon Smolts to Vertical Eddies
11:45	Adam Grodek	Movement and behavior of minnows in experimentally derived complex, turbulent flows
12:00	Joschka Wiegler	Improving fish pass design via understanding fish swimming patterns in challenging flow
Pilot May 8	Session 35: Modelling aquatic habitats	Chairs: Davide Vanzo
10:15	Eva Enders	Insights on a cumulative effects modelling approach for the prioritisation habitat restoration efforts
10:30	Daniele Tonina	Mapping salmon rearing carrying capacity at the riverscape: The role of fish size, multi-life stage interactions, and fish behavior
10:45	Francisco Martinez-Capel	Habitat assessment in present and climate change scenarios for native fish in the Júcar River (Antella, Spain)
11:00	Shinji Fukuda	Effect of flow intermittence on fish fauna in an agricultural channel network in Tokyo, Japan
11:15	Samuel Valman	Operationalizing the hyper-temporal benefits of CubeSats through artificial intelligence to provide new opportunities for measuring and monitoring geomorphic change in rivers.
11:30	Karine Smith	Investigating fluvial processes in an ice-covered riffle-pool sequence
11:45	Beatrice Pinna	River habitat modeling for the entire macroinvertebrate community
12:00	Justus Hargett	Predicting embeddedness from bankfull shear velocity across entire gravel-bedded river networks
12:15-12:45	Jean-Paul Lemieux	LUNCH (to go) – you can either use the room or take your lunch to eat at destination depending on the visit you choose
12:45	Technical tours depart from lobby – find your visit	
18:00-22:30	Banquet starts 19hrs, bar open at 18hrs	

May 9 (Thursday) Room/hours		
7:00-8:00	Breakfast served at Level 2 Jean-Paul Lemieux	
Borduas Ballroom 3 May 9	Session 36: Aquatic habitat modelling and management	Chair: Marianne Bachand
08:30	Donatella Termini	Early-Warning of climate change disturbance in rivers by means of freshwater mussels' response
08:45	Cameron Stevens	A habitat-based solution for spawning salmonids in a regulated sub-Arctic river in the Northwest Territories, Canada
09:00	Zhonglong Zhang	CE-QUAL-W2 Hydrodynamic and Water Quality Simulation Capabilities in Support of Reservoir Operation and Management
09:15	Iana Kopecki	Conflict between canoeing and fish habitat – A habitat-based assessment approach
09:30	Nicolas Guillemette	Analysis of Dredged Sediment Impacts on Water Quality and Aquatic Habitats in the St-Lawrence Estuary
09:45	Christian Haas	Best practice for effective camera monitoring in river ecosystems - using cameras in open water to determine fish behavior and migrations
Leduc-Fortin May 9	Session 37: Optimizing fishway designs	Chairs: Guillermo R. Giannico
08:30	Bjorn Lake	Goldilocks and the three fishways - Our attempt to design a fish ladder that is just right.
08:45	Sean Bennett	Fishway Design for the Emerald Shiner (<i>Notropis atherinoides</i>) in the Upper Niagara River, New York
09:00	Filipe Romão	Cyprinid Passage Performance Thresholds: Exploring literature recommendations
09:15	Cornelia Schütz	Fishway bottleneck: Passage of an entrance slot by small-bodied fish
09:30	Lina Focht	Effect of Velocity Fluctuations on Vertical Slot Passage of Small Non-Salmonid Fish
09:45	Panos Panagiotopoulos	Unraveling socio-ecological complexities in improving fish migration: Understanding fishways as heterogeneous networks
10:00	Tracey Steig	Insights into Migration Success of Alewife Through a Hydro-Facility using Complementing Technologies
Pilot May 9	Session 38: Aquatic Habitat quality	Chairs: Carole-Anne Gillis
08:30	Mostafa Khorsandi	Assessing the surface downward longwave irradiance models using ERA5 input data for station and watershed scales in Canada
08:45	Todd Buxton	Promoting diurnal thermal stratification in river pools for water management, species conservation, and fish passage in a warming climate
09:00	Sandrine Picotte	Cumulative Impacts of Pollutant Discharges: Exploring Thermal Refuges in the Rimouski River Ecosystem
09:15	Markus Noack	Riverbed clogging - functional relationships between governing key parameters
09:30	Jean N Namugize	Water quality and sediment monitoring in the Nile basin countries
09:45	Mathewos Kebede	Impacts of water hyacinth (<i>Eichhornia crassipes</i>) on the diversity and abundance of fishes and littoral macroinvertebrates in Koka Reservoir, Ethiopia
10:00	Morihiro Harada	Spatio-temporal distribution of flood disturbance and community response in a mountainous river system in Central Japan
10:15	Muhammed .A. Oyinlola	Unveiling the Complex Interplay: Evaluating Hydrothermal Exposure Risks for Key Aquatic Species in the Nechako River System, British Columbia, Under Climate Change
10:30 - 11:00	Break - Foyer	
Borduas Ballroom 3 May 9	Session 39: Fishway monitoring & evaluation 2	Chairs: Bjorn Lake
11:00	Ryan Hill	Limitations of non-volitional upstream passage for alewife (<i>Alosa pseudoharengus</i>) and blueback herring (<i>Alosa aestivalis</i>)
11:15	Matt Blank	Westslope Cutthroat Trout Passage Through Scaled Denil Fishways
11:30	Alejandro Perez	Fish Passage in the Belo Monte Fishway, Amazon River Basin, Brazil
11:45	Etienne Cormier	Saint-Jean River in Quebec - Salmon Fishway design, construction and performance monitoring work

12 :00	Christian Haas	Beyond the surface: exploring fish dynamics with camera based monitoring
Leduc-Fortin May 9	Session 40: Agricultural & urban habitats stream restoration	Chairs: Eva Enders
11:00	David Bidelspach	Awe Restoration – “Ecosystem Restoration in Urban Stream Management Corridors to Stimulate Mental Health Treatment and Community Revival”
11:15	Peter Flödl	Particle-bound pollutants and river restoration - challenges and insights
11:30	David Gould	Building a Municipal Stream and Wetlands Restoration Program
11:45	Juan Escajadillo	Integration of Fluvial Hydraulics, Plan Formulation Process and Bioengineering Measures for Riverbank Stabilization along a River Bend-Case Study
12:00	Renée Gravel	Small streams in agricultural landscape : an undervalued source of restauration sites?
Pilot May 9	Session 41: Hydropeaking ecological impacts	Chairs: Patricia Johnston
11:00	Robert Naudascher	Repeated hydropeaking reveals fine scale movement responses of juvenile fish
11:15	Yann Le Coarer	Horizontal ramping rates to link hydropeaking and fish densities
11:30	Maria João Costa	Examining native fish attraction to artificial flow refuges of differing geometries and upon the presence of the invasive bleak (<i>Alburnus alburnus</i>) amidst pulsed flows
11:45	Jean-Michel Matte	Response of juvenile Atlantic salmon to artificial flow downstream of an hydroelectric dam
12:00	Brent Mossop	Lessons learned from reach-scale channel modifications in a large river: balancing multiple objectives at the Site C Clean Energy Project
END – Thank you so much to you all!		

Poster number	Presentation Title	Presenter
1	sAlmon	Theo Malone
2	Kivi and the fish: a new sensor for parametrising near bed hydro-morphological parameters	Georgios Maniatis
3	American Eel passage in New York State: the current restoration landscape and potential for future mitigation measures at hydroelectric projects in significant waterways of the Great Lakes and Mid-Atlantic United States	John Wiley
4	Aménagement de frayères et mise en valeur de la ouananiche dans le réservoir Romaine-4	Nicolas Ouellet
5	Projet Innocuité : validation des ouvrages de dévalaisons, poissons et sensors	Vincent mataix
6	Experimental and numerical study of traditional Taiwan diversion dike	Chung-Ta Liao
7	Development of a multispecies fishway for warmwater species - A case study and template for further projects	Keelan Jacobs
8	Experimental investigation of screw-based upstream and downstream passage	Franz Geiger
9	Large-bodied fish movement within Lake Winnipeg and its surrounding obstructed and semi-obstructed tributaries	Travis Durhack
10	Branch Pond Fishway Design and Construction	Alex Coulling
11	Dave's Creek Substation Flood Mitigation Repairs	Kacy Grundhauser
12	A novel index for vulnerability assessment of archaeological sites to flood hazard: Development and a practical application in the Waban-Aki nation, Canada	Khalid Oubennaceur
13	Assessing Phenol Pollution and Developing a Conservation Plan for the African Bony Tongue Fish (<i>Heterotis niloticus</i>) in the Epe River, Lagos Nigeria	Excellence Akeredolu
14	Assessment of land use and land cover change and their impact on the water quality of streams in Limbe Municipality, Cameroon	Betelhem Asmare Melese
15	Modelling interactions between hydropower management and climate change impacts on stream temperature in peri-Alpine streams	David Dorthe
16	Conservation and Management Challenges and Opportunities for Diadromous Fish in Licensing of Hydropower Projects	Nick Anderson
17	Eco-environmental Flow Assessment of the Weihe River and its tributaries: From eco-hydrological analysis to negotiations of stakeholders	Chunfeng Hao
18	Artificial eco-environmental water supplement in recent 20 years in China	Yaqin Qiu
19	HyPeak: an international network on hydropeaking research, practice and policy	Markus Noack
20	Flood flows as a natural tool of river restoration: fish habitat and hyporheic flow	Francisco Martinez-Capel
21	Lake Saint-Pierre ecosystem rehabilitation : examples of habitat restoration and management adaptation in an agricultural context	Marianne Théberge
22	Have changes in habitat, hydrology and temperature contributed to the decline of northern pike in the Quebec portion of the St. Lawrence River?	Marc Mingelbier
23	Succession of fish diversity in a large-scale floodplain restoration at the Danube River over a 10-year period	Elisabeth Winter
24	Effect of different distributions of flexible vegetation on lateral dispersion at the apex section of a meandering bend	Donatella Termini

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