

- Upper-level course integrating groundwater flow, groundwater-surface water interactions, recharge, and groundwater responses to environmental change through quantitative analysis of real-world datasets.
- Developed laboratory and data-analysis exercises using Illinois and national hydrologic datasets, with an individual project integrating course concepts.

2026, Fall The Ocean, the Atmosphere, and Our Climate (EARTH 106)

- Introductory Earth systems course for non-majors examining oceanic, atmospheric, and climate processes and their interactions, with emphasis on contemporary environmental change.
- Adapted and expanded laboratory and field exercises centered on Lake Michigan and the Northwestern campus, integrating field observations, environmental datasets, and scientific communication.

Université du Québec à Montréal

Instructor of Record:

2023 Hydrogeology (SCT5312) [Instruction in French]

- Core undergraduate course in groundwater flow, aquifer properties, resource vulnerability, and groundwater-surface water interactions
- 27 undergraduate students; 36 hrs. of lectures and 24 hrs. of laboratory instruction
- Delivered lectures, designed and graded exams, and managed two M.Sc. teaching assistants responsible for laboratory exercises

2023–2024 Scientific Field Methodology (SCT2812) [Instruction in French]

- Responsible for one third of a 9-day summer field camp for first-year undergraduate students
- Led field-based instruction in hydrogeological concepts, streamflow measurements, water quality data collection, and scientific reporting

Teaching Assistant:

2020–2022 Hydrology (SCT6321) [Instruction in French]

- Teaching assistant for undergraduate hydrology course (Prof. Violaine Ponsin)
- Led laboratory sessions and evaluated student assignments

Course syllabi and instructional materials available upon request.

EMPLOYMENT

2016–2017 Surface Water Study Officer Agence de l'eau Seine-Normandie – Nanterre, France
(*French national water agency managing surface water and groundwater resources*)

- Evaluated impacts of methodological changes to surface water ecological and chemical status assessments under multi-index regulatory frameworks
- Led procurement and development of decision-support tools integrating laboratory data, geochemical background conditions, and metal-related ecological risk

MANUSCRIPTS IN PREPARATION

Harris, J. H., & Larocque, M. Estimating groundwater inflow to lakes with a water balance approach in cold, humid conditions. Manuscript in preparation for *Journal of Hydrology: Regional Studies*.

Harris, J. H., & Larocque, M. Hydrological sensitivity of a Canadian Shield lake catchment to climate change: Threshold-mediated processing controlling lake resilience. Manuscript in preparation for *Journal of Hydrology*.

CONFERENCE PRESENTATIONS

Harris, J. H., & Larocque, M. (2024, September). Threshold-mediated processes controlling lake resilience to climate change. Oral presentation at *GeoMontreal 2024*, Montreal, Canada.

Harris, J. H., Larocque, M., Gagné, S., & Lavoie Lavallée, S. (2023, July). Assessing the impact of climate change on the water budget of a Canadian Shield lake. Oral presentation at *IUGG General Assembly 2023*, Berlin, Germany.

Harris, J. H., Larocque, M., Gagné, S., & Lavoie Lavallée, S. (2022, December). Assessing the impact of climate change on the water budget of a Canadian Shield lake. Poster presentation at *Ouranos Symposium 2022*, Quebec City, Canada.

Harris, J. H., Larocque, M., Gagné, S., & Lavoie Lavallée, S. (2021, September). Simulation of a Canadian Shield lake hydrosystem and its vulnerability to climate and land cover changes. Poster presentation at *GeoNiagara 2021*, Niagara Falls, Canada.

Harris, J. H., Larocque, M., Lavoie Lavallée, S., & Gagné, S. (2019, July). Numerical simulation of groundwater contribution to a Canadian Shield lake water budget. Oral presentation at *IUGG General Assembly 2019*, Montreal, Canada.

DEPARTMENTAL AND RESEARCH GROUP PRESENTATIONS

Harris, J. H. (2023, September). Evaluating the resilience of Lake Papineau hydrology to climate change pressures. Oral presentation at the *Kenauk Institute Annual Conference*, Montebello, Canada.

Harris, J. H. (2023, April). Évaluation de l'impact du changement climatique sur le bilan hydrique d'un lac du Bouclier canadien [Assessing the impact of climate change on the water budget of a Canadian Shield lake]. Oral presentation in the *Midis-Aquatiques Seminar Series*, GRIL Research Group, Université du Québec à Montréal, Montreal, Canada.

Harris, J. H. (2023, March). Assessing the impact of climate change on the water budget of a Canadian Shield lake. Poster presentation at the *Geotop Student Meeting 2023*, Geotop Research Center, Université du Québec à Montréal, Montreal, Canada.

Harris, J. H. (2022, September). Quantifying the contribution of groundwater to the water budget of a Canadian Shield lake. Oral presentation at the *Kenauk Institute Annual Conference*, Montebello, Canada.

Harris, J. H. (2021, May). Simulation de l'hydrosystème d'un lac du Bouclier canadien et sa vulnérabilité aux changements climatiques [Simulation of a Canadian Shield lake hydrosystem and its vulnerability to climate change]. Oral presentation at the *GRIL Research Group Annual Symposium*, Université du Québec à Montréal, Montreal, Canada.

Harris, J. H. (2021, March). Simulation of a Canadian Shield lake hydrosystem and its vulnerability to climate change. Poster presentation at the *Geotop Student Meeting 2021*, Geotop Research Center, Université du Québec à Montréal, Montreal, Canada.

Harris, J. H. (2018, March). Résilience hydrologique d'un lac du Bouclier canadien et apports d'eau souterraine à ses milieux humides [Hydrological resilience of a Canadian Shield lake and groundwater contributions to its wetlands]. Oral presentation at the *Geotop Student Meeting 2018*, Geotop Research Center, Université du Québec à Montréal, Montreal, Canada.

TECHNICAL REPORTS

Harris, J. H. (2016). *Valorisation des traitements de données existants pour la détermination de la robustesse de l'état des cours d'eau du bassin Seine-Normandie* [Leveraging existing data processing methods to assess the robustness of river ecological status in the Seine-Normandy basin]. Technical report prepared for Agence de l'eau Seine-Normandie, Nanterre, France (98 pp.).

Prepared as part of an M.Sc. internship, Université d'Avignon. Available upon request.

Harris, J. H. (2015). *Étude préliminaire à la construction d'un modèle hydrodynamique de nappe sur le territoire du Comtat et du nord des Alpilles* [Preliminary study for the development of a groundwater flow model for the Comtat region and northern Alpilles]. Technical report prepared for Syndicat Intercommunal du Canal des Alpines Septentrionales, Saint-Rémy-de-Provence, France (31 pp.).

Prepared as part of an M.Sc. internship, Université d'Avignon. Available upon request.

MEDIA AND OUTREACH

Harris, J. H., & Larocque, M. (2024). Groundwater's invisible role in sustaining lakes. *The Conversation*. <https://doi.org/10.64628/AAP.mf4wxhn7v>

Radio-Canada. (2022, July 24). Le bilan hydrique, un outil de gestion des lacs [Water balance, a tool for lake management] [Audio broadcast]. *Les années lumière*.

FIELD CAMPAIGNS

Summers 2019–2020: Radon sampling along the Kinonge River, Kenauk Reserve, Montebello, Canada.

- Mentored M.Sc. students in site selection and data acquisition protocols.
- Assisted in field logistics and sample collection.

PROFESSIONAL AFFILIATIONS

Geotop Research Center

geotop.ca/en

GRIL (Interuniversity Research Group in Limnology)

gril.uqam.ca

International Association of Hydrogeologists – Canadian National Chapter

iahcnc.ca