

## Taylor Maavara, PhD

*Assistant Scientist*

Cary Institute of Ecosystem Studies

Millbrook, New York, USA

Email: maavarat@caryinstitute.org

### APPOINTMENTS

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Cary Institute of Ecosystem Studies, Millbrook, New York, USA

**Assistant Scientist** 2025-present

University of Leeds, Leeds, United Kingdom

**Visiting Scientist** | School of Geography & water@leeds 2024-present

**NERC Independent Research Fellow** | School of Geography & water@leeds 2022-2024

Yale University, New Haven, Connecticut, USA

**Postdoctoral fellow** | Hutchinson Fellow, Yale Institute for Biospheric Studies 2020-2022

School of the Environment 2019-2022

Lawrence Berkeley National Laboratory, Berkeley, California, USA

**Postdoctoral fellow** | Earth and Environmental Sciences Area 2017-2019

NSERC Postdoctoral Fellow 2018-2019

Université Libre de Bruxelles, Brussels, Belgium

**Affiliate researcher** | Department of Geoscience, Environment and Society 2018-2021

University of Waterloo, Waterloo, Ontario, Canada

**Graduate researcher** | Department of Earth and Environmental Sciences 2013-2017

NSERC postgraduate scholar 2014-2017

OGS postgraduate scholar 2013-2014

University of Waterloo, Waterloo, Ontario, Canada

**Undergraduate researcher** | Earth and Environmental Sciences 2011-2012

### EDUCATION

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University of Waterloo **PhD in Earth Sciences (Water)** 2017

Thesis: Perturbations to nutrient and carbon cycles by river damming

University of Waterloo **BSc (Honours) in Earth & Environmental Sciences** 2012

Specialization: Hydrogeology

### PUBLICATIONS

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#### PEER-REVIEWED PUBLISHED ARTICLES

**Maavara, T.**, Yuan, Z., Johnson, A.M., Zhang, S., Aho, K.S., Brinkerhoff, C.B., Logozzo, L.A., Raymond, P. River metabolism in the contiguous United States: A West of extremes. (2025). *Science* 390 (6773): 622-627.

Liu, M., Zhou, C., Zhang, Q., Bianchi, T., Mason, R., **Maavara, T.**, Wang, J., Wang, X., Raymond, R. Fish trawling and climate-related perturbations are remobilizing the largest marine mercury sinks. (2025). *Nature Sustainability* 8 (11): 1280-1293.

- South, J., Stubbington, O., Kaiser-Reichel, A., Bossman, E., Singh, N., Methembu, M., Voysey, M. D., **Maavara, T.**, O'Brien, G., Masenya, K., Khosa, D. Rapid establishment and impact assessment of Redclaw crayfish (*Cherax quadricarinatus*) invasion in the Kruger National Park, South Africa. (2025). *Aquatic Conservation: Marine and Freshwater Ecosystems* 35: e70184.
- Alcott, L.J., **Maavara, T.** (2025). GC Insights: The Anthro-Pokécene: Environmental impacts echoed in the Pokémon world. *Geoscience Communication* 8: 47-50.
- Brown, L.E., **Maavara, T.**, Chen, X., Zhang, J., Klaar, M., Orah Moshe, F., Ben-Zur, E., Stein, S., Grayson, R., Carter, L., Levintal, E., Gal, G., Ziv, P., Tarkowski, F., Pathak, D., Khamis, K., Barquín, J., Philamore, H., Gradilla Hernández, M.S., Arnon, S. (2024). Integrating sensor data and machine learning to advance the science and management of river carbon emissions. *Critical Reviews in Environmental Science & Technology* 1-24: DOI: 10.1080/10643389.2024.2429912.
- Liu, D., Chen, Q., **Maavara, T.**, Zhang, J., Chen, Y. (2024). Nitrogen cycling in reservoir drawdown areas and the impacts on water quality. *Global Biogeochemical Cycles* 38: e2024GB008136.
- Rosentreter, J., Alcott, L.J., **Maavara, T.**, Sun, X., Zhou, Y. Planavsky, N., Raymond, P. (2024). Revisiting the global methane cycle through expert opinion. *Earth's Future* 12: e2023EF004234.
- Tian, H., Pan, N., Thompson, R.L., Canadell, J.G., Suntharalingam, P., Regnier, P., Davidson, E.A., Prather, M., Ciais, P., Muntean, M., Pan, P., Winiwarter, W., Zaehle, S., Zhou, F., Jackson, R.B., Bange, H.W., Berthet, S., Bian, Z., Bianchi, D., Bouwman, A.F., Buitenhuis, E.T., Dutton, G., Hu, M., Ito, A., Jain, A.K., Jeltsch-Thömmes, A., Joos, F., Kou-Giesbrecht, S., Krummel, P.B., Lan, X., Landolfi, A., Lauerwald, R., Li, Y., Lu, C., **Maavara, T.**, Manizza, M., Millet, D.B., Mühle, J., Patra, P.K., Peters, G.P., Qin, X., Raymond, R., Resplandy, L., Rosentreter, J.A., Shi, H., Sun, Q., Tonina, D., Tubiello, F.N., van der Werf, G.R., Vuichard, N., Wang, J., Wells, K.C., Western, L.M., Wilson, C., Yang, J., Yao, Y., You, Y., Zhu, Q. (2024). Global Nitrous Oxide Budget 1980-2020. *Earth System Science Data* 16: 2543-2604.
- Bouskill, N., Newcomer, M., Carroll, R., Beutler, C., Bill, M., Brown, W., Conrad, M., Dong, W., Falco, N., **Maavara, T.**, Newman, A., Sorensen, P., Tokunaga, T., Wan, J., Wainwright, H., Zhu, Q., Brodie, E., Williams, K. H. (2024). A tale of two catchments: Causality analysis and isotope systematics reveal mountainous watershed traits that regulate the retention and release of nitrogen. *JGR: Biogeosciences* 129: e2023JG007532.
- Li, Y., Tian, H., Yao, Y., Shi, H., Bian, Z., Shi, Y., Wang, S., **Maavara, T.**, Lauerwald, R., Pan, S. (2024). Increased nitrous oxide emissions from global lakes and reservoirs since the pre-industrial era. *Nature Communications* 15: 942.
- Villalobos, Y., Canadell, J. G., Keller, E. D., Briggs, P., Bukosa, B., Giltrap, D.L., Harman, I., Hilton, T.W., Kirschbaum, M.U.F., Lauerwald, R., Liang, L.L., **Maavara, T.**, Mikaloff-Fletcher, S.E., Rayner, P.J., Resplandy, L., Rosentreter, J., Metz, E., Serrano, O., Smith, B. (2023). A comprehensive assessment of anthropogenic and natural sources and sinks of Australasia's carbon budget. *Global Biogeochemical Cycles* 37 (12): e2023GB007845.
- Aho, K., **Maavara, T.**, Cawley, K., Raymond, P. (2023). Inland waters as nitrous oxide sinks: Observations and modeling reveal nitrous oxide undersaturation is prevalent in inland waters. *Geophysical Research Letters* 50: e2023GL104987.
- Rosentreter, J., Laruelle, G.G., Bange, H.W., Bianchi, T.S., Busecke, J.J.M., Cai, W.-J., Eyre, B.D., Forbrich, I., Kwon, E.Y., **Maavara, T.**, Moosdorf, N., Najjar, R.G., Sarma, V.V.S.S., Van Dam, B., Regnier, P. (2023). Coastal vegetation and estuaries collectively reduce global warming. *Nature Climate Change* 13: 578-587.

- Maavara, T.**, Brinkerhoff, C., Hosen, J., Aho, K., Logozzo, L., Saiers, J., Stubbins, A., Raymond, P.A. (2023). Watershed DOC uptake occurs mostly in lakes in summer and in rivers in winter. *Limnology & Oceanography* 68 (3): 735-751.
- Lauerwald, R., Allen, G. H., Deemer, B. R., Liu, S., **Maavara, T.**, Raymond, P., Alcott, L., Bastviken, D., Hastie, A., Holgerson, M. A., Johnson, M. S., Lehner, B., Lin, P., Marzadri, A., Ran, L., Tian, H., Yang, X., Yao, Y., Regnier, P. (2023). Inland water greenhouse gas budgets for RECCAP2: 2. Regionalization and homogenization of estimates. *Global Biogeochemical Cycles* 37: e2022GB007658.
- Lauerwald, R., Allen, G. H., Deemer, B. R., Liu, S., **Maavara, T.**, Raymond, P., Alcott, L., Bastviken, D., Hastie, A., Holgerson, M. A., Johnson, M. S., Lehner, B., Lin, P., Marzadri, A., Ran, L., Tian, H., Yang, X., Yao, Y., Regnier, P. (2023). Inland water greenhouse gas budgets for RECCAP2: 1. State-of-the-art of global scale assessments. *Global Biogeochemical Cycles* 37: e2022GB007657.
- Shi, W., **Maavara, T.**, Chen, Q., Zhang, J., Ni, J., Tonina, D. (2023) Spatial patterns of diffuse greenhouse gas emissions from cascade hydropower reservoirs. *Journal of Hydrology* 619: 129343.
- Battin, T., Lauerwald, R., Bernhardt, E., Bertuzzo, E., Gómez Gener, L., Hall, R., Hotchkiss, E., **Maavara, T.**, Pavelsky, T., Ran, L., Raymond, P., Rosentreter, J.A., Regnier, P. (2023). River ecosystem metabolism and carbon biogeochemistry in a changing world. *Nature* 613: 449-459.
- Liu, S., **Maavara, T.**, Brinkerhoff, C., Raymond, P. (2022). Global controls on DOC reaction versus export in watersheds: A Damköhler number analysis. *Global Biogeochemical Cycles* 36: e2021GB007278.
- Sabur, M.A., Parsons, C., **Maavara, T.**, Van Cappellen, P. (2022). Effects of pH and dissolved silicate on phosphate mineral-water partitioning with goethite. *ACS Earth and Space Chemistry* 6 (1): 34-43.
- Liu, S., **Maavara, T.**, Yang, X., Brown, L.E. (2022). Editorial: Riverine biogeochemistry under increasing damming: Processes and impacts. *Frontiers in Environmental Science* 10: 863255.
- Xu, R., Tian, H., Pan, N., Thompson, R., Canadell, J., Davidson, E., Nevison, C., Winiwarter, W., Shi, H., Pan, S., Chang, J., Ciais, P., Dangal, S., Ito, A., Jackson, R., Joos, F., Lauerwald, R., Lienert, S., **Maavara, T.**, Millet, D., Raymond, P., Regnier, P., Tubiello, F., Vuichard, N., Wells, K., Wilson, C., Yang, J., Yao, Y., Zaehle, S., Zhou, F. (2021). Magnitude and uncertainty of nitrous oxide emissions from North America based on bottom-up and top-down approaches: informing future research and national inventories. *Geophysical Research Letters* 48: e2021GL095264.
- Liu, M., Zhang, Q., **Maavara, T.**, Liu, S., Wang, X., Raymond, P.A. (2021). Rivers as the largest source of mercury to coastal oceans worldwide. *Nature Geoscience* 14: 672-677.
- Maavara, T.**, Logozzo, L., Stubbins, A., Aho, K., Brinkerhoff, C., Hosen, J., Raymond, P.A. (2021). Does photomineralization of dissolved organics matter in temperate rivers? *Journal of Geophysical Research: Biogeosciences* 126: e2021JG006402.
- Newcomer, M. E., Bouskill, N. J., Wainwright, H., **Maavara, T.**, Arora, B., Siirila-Woodburn, E. R., Dwivedi, D., Williams, K. H., Steefel, C. I., Hubbard, S.S. (2021). Hysteresis patterns of watershed nitrogen retention and loss in United States hydrological basins. *Global Biogeochemical Cycles* 35 (4): e2020GB006777.
- Maavara, T.**, Siirila-Woodburn, E.R., Maina, F., Maxwell, R.M., Sample, J., Chadwick, K.D., Carroll, R., Newcomer, M.E., Dong, W., Williams, K.H., Steefel, C.I., Bouskill, N.J. (2021). Modeling geogenic and atmospheric nitrogen through the East River Watershed, Colorado Rocky Mountains. *PLOS One* 16 (3): e0247907.

- Brinkerhoff, C., Raymond, P.A., **Maavara, T.**, Ishitsuka, Y., Aho, K., Gleason, C. (2021). Lake morphometry and river network controls on evasion of terrestrially sourced CO<sub>2</sub>. *Geophysical Research Letters* 48 (1): e2020GL090068.
- Tian, H., Xu, R., Canadell, J.G., Thompson, R.L., Winiwarter, W., Suntharalingam, P., Eric A. Davidson, E.A., Ciais, P., Jackson, R.B., Janssens-Maenhout, G., Prather, M.J., Pan, N., Regnier, P., Shi, H., Tubiello, F.N., Zaehle, S., Arneth, A., Battaglia, G., Sarah Berthet, S., Bopp, L., Bouwman, A.F., Buitenhuis, E.T., Chang, J., Chipperfield, M., Dangal, S.R.S., Dlugokencky, E., Elkins, J., Eyre, B.D., Hall, B., Ito, A., Joos, F., Landolfi, A., Laruelle, G.G., Lauerwald, R., Li, W., Lienert, S., **Maavara, T.**, MacLeod, M., Millet, D.B., Olin, S., Pan, S., Patra, P.K., Raymond, P.A., Ruiz, D.J., van der Werf, G.R., Vuichard, N., Wang, J., Wells, K.C., Wilson, C., Yang, J., Yao, Y., Zhou, F. (2020). A comprehensive quantification of nitrous oxide sources and sinks. *Nature* 586: 248-256.
- Maavara, T.**, Akbarzadeh Z., Van Cappellen, P. (2020). Global dam-driven changes to riverine N:P:Si ratios delivered to the coastal ocean. *Geophysical Research Letters* 47 (15): e2020GL088288.
- Maavara, T.**, Chen, Q., Van Meter, K., Brown, L., Zhang, J., Ni, J., Zarfl, C. (2020). River dam impacts on biogeochemistry. *Nature Reviews Earth & Environment* 1: 103-116.
- Lauerwald, R., Regnier, P., Figueiredo Souza, V., Enrich-Prast, A., Bastviken, D., Lehner, B. **Maavara, T.**, Raymond, P. (2019). Natural lakes are a minor global source of N<sub>2</sub>O to the atmosphere. *Global Biogeochemical Cycles* 33: 1564-1581.
- Akbarzadeh, Z., **Maavara, T.**, Slowinski, S., Van Cappellen, P. (2019). Effects of damming on river nitrogen fluxes: a global analysis. *Global Biogeochemical Cycles* 33: 1339-1357.
- Maavara, T.**, Lauerwald, R., Laruelle, G.G., Akbarzadeh, Z., Bouskill, N.J., Van Cappellen, P., Regnier, P. (2019). Nitrous oxide emissions from inland waters: Are IPCC estimates too high? *Global Change Biology* 25 (2): 473-488.
- Maavara, T.**, Slowinski, S., Rezanezhad, F., Van Meter, K., Van Cappellen, P. (2018). The role of groundwater discharge fluxes on Si:P ratios in a major tributary to Lake Erie. *Science of the Total Environment* 622-623: 814-824.
- Maavara, T.**, Lauerwald, R., Regnier, P., Van Cappellen, P. (2017). Global perturbations of organic carbon cycling by river damming. *Nature Communications* 8: 15347.
- Van Cappellen, P., **Maavara, T.** (2016). Rivers in the Anthropocene: Global scale modifications of riverine nutrient fluxes by damming. *Ecohydrology and Hydrobiology* 16 (2): 106-111.
- Maavara, T.**, Parsons, C.T., Ridenour, C., Stojanovic, S., Dürr, H.H., Powley, H.R., Van Cappellen, P. (2015). Global phosphorus retention by river damming. *PNAS* 112 (51): 15603-15608.
- Maavara, T.**, Hood, J.L.A., North, R.L., Doig, L.E., Parsons, C.T., Johansson, J., Hudson, J.J., Lucas, B.T., Liber, K., Vandergucht, D.M., Van Cappellen, P. (2015). Reactive silicon dynamics in a large prairie reservoir (Lake Diefenbaker, Saskatchewan). *Journal of Great Lakes Research* 41: 100-109.
- Maavara, T.**, Dürr, H.H., Van Cappellen, P. (2014). Worldwide retention of nutrient silicon by river damming: From sparse data set to global estimate. *Global Biogeochemical Cycles* 28 (8): 842-855.

### FREELANCE JOURNALISM

- South, J., Brown, L., **Maavara, T.** (2024). The surge in hydroelectric dams is driving massive biodiversity loss. *The Conversation*. URL: <https://theconversation.com/the-surge-in-hydroelectric-dams-is-driving-massive-biodiversity-loss-230895>.
- Maavara, T.** (2023). Frozen relief: Akshayuk Pass. *Trails Magazine*. Issue IV. Available in print only.

- Maavara, T.** (2023). 10 tips for a comfortable and snug winter campsite. *Explore Magazine*. URL: <https://www.explore-mag.com/10-Tips-for-a-Comfortable-and-Snug-Winter-Campsite>.
- Maavara, T.** (2023). Misery loves a solo trip. *Explore Magazine*. Fall 2023 issue. Available in print only.
- Maavara, T.** (2023). New Brunswick's best fall hikes. *Explore Magazine*. URL: <https://www.explore-mag.com/New-Brunswick-Best-Fall-Hikes>.
- Maavara, T.** (2023). How to paddle the Yukon River. *Explore Magazine*. URL: <https://www.explore-mag.com/How-to-Paddle-the-Yukon-River>.
- Maavara, T.** (2023). How to poop in the outdoors. *Explore Magazine*. URL: <https://www.explore-mag.com/How-to-Poop-in-the-Outdoors>.
- Maavara, T.** (2023). My dad set an example of how to work yourself to death – and how not to. *CBC First Person*. URL: <https://www.cbc.ca/news/canada/first-person-taylor-maavara-work-life-balance-1.6789506>.
- Maavara, T.** & Alcott, L. (2023). The Legend of Zelda: A Link to Learning Hydrology? *EGU Hydrological Sciences*. URL: <https://blogs.egu.eu/divisions/hs/2023/04/05/the-legend-of-zelda-a-link-to-learning-hydrology/>.
- Maavara, T.** (2023). Winter backcountry hygiene tips for pees, poops and periods. *Explore Magazine*. URL: <https://www.explore-mag.com/Winter-Backcountry-Hygiene-Tips-for-Pees-Poops-Periods>.
- Maavara, T.** (2018). Bara Shigri Glacier: The fastest melting glacier in India. *Indian Mountaineer* 53: 18-23. Available in print only.
- Van Cappellen, P. & **Maavara, T.** (2017). Dams and global environmental change. *Pan-European Networks: Science & Technology* 23: 214-215.

## FUNDING AND AWARDS

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▪ NERC Pushing the Frontiers (co-I) (£773,193 GBP)	2024-2027
▪ NERC Independent Research Fellowship (£568,659 GBP)	2022-2027
▪ Hutchinson Fellowship, Yale Institute for Biospheric Studies (\$134,000 USD)	2020-2022
▪ NSERC Postdoctoral Fellowship (\$105,000 CAD)	2018-2020
▪ W.B. Pearson Medal, University of Waterloo	2018
▪ Outstanding Achievement in Graduate Studies Award, University of Waterloo	2017
▪ Faculty of Science nominee for Alumni Gold Medal, University of Waterloo	2017
▪ NSERC Postgraduate Scholarship – Doctoral (\$63,000 CAD)	2014-2017
▪ President's Graduate Scholarship (\$10,000 CAD x 5 awards), University of Waterloo	2013-2017
▪ Canadian Geophysical Union Student Travel Grant	2015
▪ World Wetlands Day Symposium Stantec Graduate Student Poster Prize	2015
▪ Ontario Graduate Scholarship (\$15,000 CAD)	2013-2014
▪ University of Waterloo Senate Graduate Scholarship (\$1500 CAD)	2013

## PRESENTATIONS

### INVITED SEMINARS

- “Where do you come from, where do you go? Tracking riverine carbon across scales.” (2026). Yale Institute for Biospheric Studies, **Yale University**, USA.

- “*Greenhouse gas emissions from inland waters.*” (2023). School of Engineering and Sciences, **Tecnológico de Monterrey in Guadalajara**, Guadalajara, México.
- “*River dam impacts on nutrient cycles.*” (2021). **Grand Riverkeeper Labrador** Mitacs Knowledge Sharing Session, Labrador, Canada (online).
- “*Worldwide nitrous oxide emissions from inland waters.*” (2021). Department of Marine Sciences Seminar Series, **University of Connecticut at Avery Point**, USA (online).
- “*Worldwide nitrous oxide emissions from inland waters.*” (2021). **Society for Canadian Limnologists**, Limnoserries seminar, Canada (online).
- “*Global dam-driven changes to nutrient stoichiometry in inland waters.*” (2020). Environmental Science Seminar, O’Neill School of Public and Environmental Affairs, **Indiana University**, USA (online).
- “*Nitrous oxide emissions from inland waters: Are IPCC estimates too high?*” (2020). Yale Institute for Biosphere Studies Seminar Series, **Yale University**, USA.
- “*Worldwide alterations to nutrient and carbon cycling by river damming.*” (2019). Euro-FLOW ITN summer workshop, **University of Leipzig**, Germany.
- “*Worldwide alterations to nutrient and carbon cycling by river damming.*” (2019). School of Geography seminar series, **University of Leeds**, UK.
- “*Nutrient modeling in the era of climate change: Simplifying watershed-scale models for better climate response prediction.*” (2018). **China University of Geosciences**, Wuhan, China.
- “*Global changes to nutrient and carbon cycles by river damming.*” (2018). Center for Eco-Environmental Research (CEER), **Nanjing Hydraulic Research Institute**, University of Nanjing, China.
- “*Nitrogen cycling in mountain watersheds: Scaling challenges in the era of climate change.*” (2018). Microbial Bioenergetics Workshop, **University of Waterloo**, Canada.
- “*Worldwide alterations to nutrient and carbon cycles by river damming.*” (2018). Department of Earth, Ocean and Atmospheric Sciences Colloquia, **University of British Columbia**, Vancouver, Canada.
- “*Global modification to nutrient and carbon cycles by river damming.*” (2016). Centre for Applied Geoscience, **Eberhard Karls Universität Tübingen**, Germany.

## CONFERENCES AND SYMPOSIA

- (Invited) “*Recent developments integrating connected non-lotic and ephemeral water bodies into the Pulse-Shunt Concept.*” (2024). T. Maavara, K. Aho, C. Brinkerhoff, L. Logozzo, L. Brown, W.H. McDowell, P. Raymond. **EGU Annual Meeting**, Vienna, Austria.
- (Invited speaker and panelist) “*Global dam-driven impacts to biogeochemical cycles in river networks and coastal zones.*” (2024). **Water Connect**, Tecnológico de Monterrey, Guadalajara, México.
- (Invited) “*Nitrous oxide emissions from dam reservoirs: Novel approaches to estimate global fluxes.*” (2023). **1<sup>st</sup> IAHR International Conference on Global Water Security & 4<sup>th</sup> International Forum on Water Security and Sustainability**. Jintan/Changzhou, Hohei, China.
- (Invited) “*Watershed DOC uptake occurs almost entirely in lakes and reservoirs: A new model for connected river, lake, and reservoir DOC cycling.* (2022). T. Maavara, C. Brinkerhoff, J. Hosen, K. Aho, L. Logozzo, J. Saiers, A. Stubbins, P.A. Raymond. **AGU Fall Meeting**, Chicago, Illinois.

- (Invited keynote) “*Watershed carbon cycling: Surprises and reassurances from recent modelling efforts.*” (2022). **14<sup>th</sup> International Symposium on Ecohydraulics (ISE2022)**. Nanjing, China (online).
- “*Does photomineralization of dissolved organics matter in temperate inland waters?*” (2021). T. Maavara, L. Logozzo, A. Stubbins, K. Aho, C. Brinkerhoff, J. Hosen, P.A. Raymond. **AGU Fall Meeting**, New Orleans, Louisiana.
- “*Modeling mountain nitrogen cycling at the watershed-scale.*” (2019). T. Maavara, E. Siirila-Woodburn, R. Maxwell, J. Sample, J. Wan, T. Tokunaga, D. Chadwick, M. Newcomer, R. Carroll, K. Williams, C. Steefel, N. Bouskill. **Gordon Research Conference**; Catchment Science: Interactions of Hydrology, Biology and Geochemistry. New Hampshire, USA.
- (Invited presenter and panelist) “*Integrated hydroshed modelling: Simplifying watershed nutrient models for better climate response prediction.*” (2018). **3<sup>rd</sup> Annual International Water Environment Management Summit**, Nanjing, China.
- “*Modeling nitrogen sources, sinks and transformations in a mountain watershed under changing climate.*” (2018) T. Maavara, N. Bouskill, B. Arora, E. Siirila-Woodburn, J. Sample, R. Couture, M. Newcomer, L. Foster, R. Maxwell, K. Williams, C. Steefel. **Goldschmidt**, Boston, Massachusetts.
- “*River damming drives global changes to coastal nutrient limitation.*” (2018) T. Maavara, Z. Akbarzadeh, P. Van Cappellen. **Association for the Sciences of Limnology and Oceanography (ASLO) Summer Meeting**, Victoria, British Columbia.
- “*Global perturbation of organic carbon cycling by river damming.*” (2017) T. Maavara, R. Lauerwald, P. Regnier, P. Van Cappellen. **10<sup>th</sup> International Carbon Dioxide Conference**, Interlaken, Switzerland.
- (Invited) “*Spatiotemporal drivers of Si:P stoichiometry in the Grand River Watershed, Ontario, Canada.*” (2017) T. Maavara, S. Slowinski, F. Rezaeehad, K. Van Meter, P. Van Cappellen. **International Association of Great Lakes Research (IAGLR) Annual Meeting**, Detroit, Michigan.
- “*Damming drives global shift from heterotrophy to autotrophy in river systems.*” (2016) T. Maavara, R. Lauerwald, P. Regnier, P. Van Cappellen. **Goldschmidt**, Yokohama, Japan.
- “*Is hydropower really green? Modifications to the global carbon cycle by river damming.*” (2016). Water Institute Research Symposium, **University of Waterloo**, Canada.
- “*Nutrient stoichiometry in the Grand River watershed: The role of groundwater silicon.*” (2016) S. Slowinski, T. Maavara, F. Rezaeehad, P. Van Cappellen. **International Association of Great Lakes Research (IAGLR) Annual Meeting**, Guelph, Ontario.
- “*Can retention by dams counterbalance anthropogenic phosphorus loading to rivers?*” (2015) T. Maavara, P. Van Cappellen. **Goldschmidt**, Prague, Czech Republic.
- “*A long-term sink for nutrient silicon in Canada’s most threatened river system.*” (2015) T. Maavara, J.L.A. Hood, R.L. North, L.E. Doig, C.T. Parsons, J. Johansson, J.J. Hudson, B.T. Lucas, K. Liber, D.M. Vandergucht, P. Van Cappellen. **AGU-CGU Joint Assembly**, Montreal, Québec.
- “*Can retention by dams counterbalance anthropogenic phosphorus loading to rivers?*” (2015) T. Maavara, P. Van Cappellen. **Water Institute Research Symposium**. University of Waterloo, Ontario.
- “*Modelling global nutrient retention by river damming: phosphorus and silicon.*” (2014) T. Maavara, H.H. Dürr, P. Van Cappellen. **European Geosciences Union Annual Meeting**. Vienna, Austria.
- “*Global retention of nutrient silica by dammed reservoirs.*” (2014) T. Maavara, H.H. Dürr, P. Van Cappellen. **World Wetlands Day Symposium**, University of Waterloo, Ontario.

- “*Global retention of nutrient silica in reservoirs.*” (2014) T. Maavara, H. Dürr and P. Van Cappellen. **Canadian Geophysical Union Hydrology & Biogeosciences Eastern Student Conference.** University of Toronto, Ontario.
- “*Retention of phosphorus and silicon by river damming.*” (2013) T. Maavara, H. Dürr and P. Van Cappellen. **96<sup>th</sup> Canadian Chemistry Conference and Exhibition,** Québec, Québec.
- “*Global-scale modifications of nutrient phosphorus and silicon fluxes by river damming.*” (2013) T. Maavara. **Canadian Geophysical Union, Biogeosciences/Hydrology sections student meeting,** Wilfrid Laurier University, Waterloo, Ontario.

## EDITORSHIPS

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| ▪ Associate Editor for <i>Global Biogeochemical Cycles</i> (AGU journal)       | 2020-2023 |
| ▪ Guest editor for special issue of <i>Frontiers in Environmental Sciences</i> | 2020-2021 |

## MEDIA COVERAGE (selected)

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- *KUNR Public Radio (NPR Mountain West)*, Nov. 20, 2025: <https://www.kunr.org/local-stories/2025-11-20/western-rivers-pulling-carbon-atmosphere-surprising-scientists>
- *Scientific American*, Nov 1, 2021: <https://www.scientificamerican.com/article/rivers-dump-mercury-into-coastal-fisheries/>
- Interviewed on Mornings with Simi Sara, CKNW 980 Vancouver News radio, Oct. 7, 2020. Clip available at time 1:32:00: <https://omny.fm/shows/the-simi-sara-show/political-polls-farming-salmon-nitrous-oxides-affe>.
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