

## **Ana (“Mindy”) Morales-Williams**

81 Carrigan Drive, Aiken Center, Burlington, VT, 05405. (305)804-6675. mindymorales@gmail.com.  
<https://www.vermontlimnology.com>

### **Research Interests**

I am a limnologist specializing in phycology and biogeochemistry. My research focuses on phytoplankton community assembly and feedbacks with lake ecosystem function at local, regional, and global scales. My core research questions address linkages between fluctuations in functional biodiversity and ecosystem resilience to disturbance. I am interested in the role of disturbance in shaping ecosystem processes, including cyanobacteria bloom dynamics, land-water linkages, organic and inorganic carbon cycling, and energy transfer in aquatic ecosystems.

### **Education**

- 2016 Iowa State University, Ames, IA, USA  
Department of Ecology, Evolution and Organismal Biology  
Ph.D. co-major: Environmental Science; Ecology and Evolutionary Biology  
Dissertation: The phenology of cyanobacteria blooms and carbon cycling in eutrophic lake ecosystems
- 2011 Trent University, Peterborough, ON, Canada  
M.Sc. Environmental and Life Sciences, Concentration: Biogeochemistry  
Thesis: Trace element stoichiometry and organic matter cycling in the Kawartha Lakes
- 2009 Florida International University, Miami, FL, USA  
B.S. Biological Sciences
- 1998 Miami-Dade Community College, Miami, FL, USA

### **Professional Appointments**

- 2017- Assistant Professor, Rubenstein School of Environment and Natural Resources, University of Vermont
- 2016-2017 Research Affiliate, Rubenstein School of Environment and Natural Resources, University of Vermont
- 2016-2017 Grand Challenges Postdoctoral Fellow, Department of Ecology, Evolution, and Behavior, University of Minnesota, Twin Cities
- 2016- 2019 Adjunct Instructor, Division of Continuing Education, Iowa Lakeside Laboratory, University of Iowa

### **Awards and Honors**

**2022** National Science Foundation CAREER Award

**2015** Global Lake Ecological Observatory Network Fellow. Selective NSF-funded training program in network science.

**2013** *Gamma Sigma Delta*, Honor Society of Agriculture

### **Publications in review and revision**

Faghir Hagh, Soheyl\*, P. Amngostar\*, C.J. Williams, **A.M. Morales-Williams**, D. Huston, and T. Xia. A LoRa IoT fluorometer-nephelometer for discrete and continuous monitoring of water clarity, cyanobacteria, and algae levels. In review, *IEEE Sensors*.

Warner, Katelynn\*, M. Petrine\*, A. Bernich\*, A.W. Schroth, N.D. Wagner, B. Wei, G.L. Boyer, and **A.M. Morales-Williams**. Stoichiometric controls on cyanobacteria blooms and cyanotoxin production in two shallow, eutrophic bays. *In revision*.

Biberovic, Ismar\*, A.J. Heathcote, A. Lini, and **A.M. Morales-Williams**. Synergistic effects of multiple stressors on long-term environmental change in 78 northern temperate lakes. *In revision*.

Biberovic, Ismar\*, S.E. Diamond\*, A.J. Heathcote, A. Lini, and **A.M. Morales-Williams**. Diatom-based transfer functions for pH and total phosphorus in Vermont, USA lakes. In review (revised and resubmitted), *Journal of Paleolimnology*. Preprint: <https://www.researchsquare.com/article/rs-3098032/latest>

### **Peer-Reviewed Publications**

Faghir Hagh, Soheyl\*, P. Amngostar\*, A. Zylka, M. Zimmerman, L. Cresanti, S. Karins, J.P. O’Neil-Dunne, K. Ritz, **A.M. Morales-Williams**, C.J. Williams, D. Huston, and T. Xia. 2024. Autonomous UAV-mounted LoRaWAN system for real-time monitoring of harmful algal blooms (HABs) and water quality. *IEEE Sensors*. <https://doi.org/10.1109/JSEN.2024.3364142>.

Kirol, Ashton P.\*, **A.M. Morales-Williams**, D.C. Braun, C.L. Marti, O.E. Pierson, K.J. Wagner, and A.W. Schroth. 2024. Linking sediment and water column phosphorus dynamics to oxygen, temperature, and aeration in shallow eutrophic lakes. *Water Resources Research*. <https://doi.org/10.1029/2023WR034813>.

Reinl, Kaitlin, T.D. Harris, R.L. North, P. Almela, S.A. Berger, M. Bizic, S.H. Burnet, P. Urrutia-Cordero, H.P. Grossart, B.W. Ibelings, E. Jakobsson, L.B. Knoll, B.M. Lafrancois, Y. McElarney, **A.M. Morales-Williams**, U. Obertegger, I. Ogashawara, M.C. Paule-Mercado, B.L. Peierls, J.A. Rusak, S. Sakar, S. Sharma, J.V. Trout-Haney, J.J. Venkiteswaran, D.J. Wain, K. Warner\*, G.A. Weyhenmeyer, and K. Yokota. 2023. Blooms also like it cold. *Limnology and Oceanography Letters*. <https://doi.org/10.1002/lol2.10316>.

Volponi, Sabrina N\*, H.L. Wander\*, D.C. Richardson, C.J. Williams, D.A. Bruesewitz, S. Arnott, J.A. Brentrup, H.L. Edwards\*, H.A. Ewing, K. Holeck, L. Johnson\*, B.S. Kim\*,

**A.M. Morales-Williams**, N. Nadkarni\*, B.C. Norman, L. Parmalee\*, A. Shultis, A. Tracy\*, N.K. Ward\*, K.C. Weathers, C.R. Wigdahl-Perry, K Yokota. 2022. Nutrient function over form: Organic and inorganic nitrogen additions have similar effects on lake phytoplankton nutrient limitation. *Limnology and Oceanography*. doi:10.1002/lno.12270.

Diamond, Sydney E.\* , R. Harvey, A. Heathcote, A. Lini, and **A.M. Morales-Williams**. 2022. Decoupling of chemical and biological recovery from acidification in a montane lake, Vermont, USA. *Journal of Paleolimnology* 68: 427 – 422.

Reinl, Kaitlin, T.D. Harris, I. Elfferich\*, A. Coker\*, Q. Zhan\*, L. N. De Senerpont Domis, **A.M. Morales-Williams**, R. Bhattachayra, H.P. Grossart, R.L. North, J.N. Sweetman. 2022. The role of organic nutrients in structuring phytoplankton communities in a rapidly changing world. *Water Research*. 219: 118573.

Hrycik, Allison\*, S. McFarland, **A.M. Morales-Williams**, and J.D. Stockwell. 2022. Winter severity shapes spring plankton succession in a small, eutrophic lake. *Hydrobiologia*. 849: 2127-2144.

Reinl, Kaitlin\*, J.D. Brooks, C. Carey, T. Harris, B. Ibelings, **A.M. Morales-Williams**, L. deSenerpont Domis, K. Atkins, P. Isles, J. Mesman\*, R. North, L. Rudstam, J. A. A. Stelzer\*, J. Venkiteswaran, K. Yokota, Q. Zhan. 2021. Cyanobacterial blooms in oligotrophic lakes: shifting the high nutrient paradigm. *Freshwater Biology* 66: 1846-1859.

**Morales-Williams, A.M.**, A.D. Wanamaker, Jr., C.J. Williams, and John A. Downing. 2020. Eutrophication drives extreme seasonal CO<sub>2</sub> flux in lake ecosystems. *Ecosystems* <https://doi.org/10.1007/s10021-020-00527-2>.

McCullough, I.M., Dugan, H.A., K.J. Farrell, **A.M. Morales-Williams**, D. Roberts, F. Scordo, Z. Yang, S.L. Bartlett, S.M. Burke, J.P. Doubek, F.E. Krivak-Tetley, N.K. Skaff, J. C. Summers, P. C. Hanson, and K.C. Weathers. 2018. Dynamic modeling of organic carbon fates in lake ecosystems. *Ecological Modelling* 386: 71-82.

Dugan, H.A., S.L. Bartlett, S.M. Burke, J.P. Doubek, F.E. Krivak-Tetley, N.K. Skaff, J.C. Summers, K.J. Farrell, I.M. McCullough, **A.M. Morales-Williams**, D. Roberts, F. Scordo, Z. Ouyang, P.C. Hanson, and K.C. Weathers. 2017. Salting our freshwater lakes. *Proceedings of the National Academy of Sciences* **114**(17) 4453-4458. <https://doi.org/10.1073/pnas.1620211114>.

**Morales-Williams, A.M.**, A.D. Wanamaker, Jr., and J.A. Downing. 2017. Cyanobacterial carbon concentrating mechanisms facilitate sustained CO<sub>2</sub> depletion in eutrophic lakes. *Biogeochemistry* **14**: 2865-2875. DOI: 10.5194/bg-14-2865-2017.

Williams, C.J., P.C. Frost, **A.M. Morales-Williams**, J.H. Larson, W.B. Richardson, A.S. Chiandet, and M.A. Xenopoulos. 2015. Human activities cause distinct dissolved organic

matter composition across freshwater ecosystems. *Global Change Biology*. DOI: 10.1111/gcb.13094.

Larson, J.H., P.C. Frost, M.A. Xenopoulos, C.J. Williams, **A.M. Morales-Williams**, J. Vallazza, J.C. Nelson, and W.B. Richardson. 2014. Controls over spatial variation in dissolved organic matter change along the river to lake transition. *Ecosystems*. **17**(8): 1413-1425, DOI: 10.1007/s10021-014-9804-2.

### **Non-Peer Reviewed Publications and Reports**

Mance, David and **A.M. Morales-Williams**, “Blooming Diatoms” 2022, *In Vermont Almanac: Stories From and For the Land*, vol III. D. Mance, P. White, V. Barlow, A. Peberdy, eds. For the Land Publishing, Corinth, VT. p. 140.

Schroth, A.W, **A.M. Morales-Williams**, A. Kirol, and K. Stepenuck. 2022. UVM 2021 Lake Monitoring Report to Vermont DEC.  
[https://dec.vermont.gov/sites/dec/files/wsm/lakes/docs/CarmiMonitoringReport2022\\_Submission.pdf](https://dec.vermont.gov/sites/dec/files/wsm/lakes/docs/CarmiMonitoringReport2022_Submission.pdf)

Schroth, A.W, **A.M. Morales-Williams**, A. Kirol, and K. Stepenuck. 2021. University of Vermont Lake Carmi Monitoring 2020 Preliminary Report to the Vermont Department of Environmental Conservation Lakes and Ponds Program.  
<https://dec.vermont.gov/sites/dec/files/wsm/lakes/docs/UVM%202020%20Lake%20Carmi%20Interim%20Monitoring%20Report%20for%20VT%20DEC.pdf>

Lee, Sylvia and **A.M. Morales-Williams**. 2018. Phycological Research Consortium supports algal research and training. *Limnology and Oceanography Bulletin*. **27**(1): 29-30, DOI: 10.1002/lob.10222.

### **Fellowships and Grants**

**2023-2026** USGS Water Cycle Center, invited proposal. The role of extreme hydrologic events in the amplification of phytoplankton blooms and freshwater carbon cycling. PI. Collaborator: Pablo E. Gutiérrez Fonseca (Co-PI, UVM). **\$498,300, current** (start date 4/1/24).

**2023-2028** National Science Foundation, Macrosystems Biology NEON enabled science (DEB), Collaborative Research: MRA: On thin ice- implications of shorter winters for the future of freshwater phytoplankton phenology and function. Co-PI. Collaborators: Rebecca North (U of Missouri, PI), Meredith Holgerson (Cornell, Co-PI), Isabela Oleksy (U of Colorado-Boulder, Co-PI), David Richardson (SUNY-New Paltz, Co-PI). **\$2,490,122** (UVM \$538,82), **current**.

**2023-2024** Vermont Water and Lake Studies Center, USGS, Identifying the environmental drivers of toxic and non-toxic cyanobacteria strain abundance in two eutrophic bays of Lake Champlain. PI with PhD candidate Katelynn Warner. \$29,722 (**\$14,861** federal; \$14,861.00 non-federal match), **current**.

- 2023-2024** Vermont Water and Lake Studies Center, USGS, The influence of artificial aeration on nitrogen fixation and nutrient limitation of phytoplankton in Lake Carmi, VT. PI with M.S. student Maria Alfaro. \$29,722 (**\$14,861** federal; \$14,861.00 non-federal match), **current**.
- 2023-2026** USGS, CIROH: Advancing water quality monitoring and prediction capability of USGS NGWOS Program with satellite and drone sensing technologies. Co-PI. Collaborators: Hongxing Liu (U of Alabama, PI), Andrew Schroth (UVM Geology, Co-PI), Asim Zia (UVM CEMS, Co-PI), Sagy Cohen (U of Alabama, Co-PI), Yuehan Lu (U of Alabama, Co-PI), Lei Wang (Louisiana State University, Co-PI). **\$229,998, current**.
- 2022-2027** National Science Foundation (DEB-ES, PCE, EPSCoR), CAREER: Lakes on a changing landscape: A disturbance phenology for phytoplankton communities and ecosystem function. PI. **\$809,321, current**.
- 2021-2022** Vermont DEC, Quantifying and predicting the response of Lake Carmi water quality to aeration. Co-PI. Collaborators: Andrew Schroth (UVM Geology, PI), Kristine Stepenuck (UVM RSEN, Co-PI). **\$200,000, previous**.
- 2021-2022** Vermont Water and Lake Studies Center, USGS, Paleolimnological data synthesis to predict long-term ecological change in Vermont inland lakes, PI. **\$76,485** (\$25,125 federal; \$51,420.72 non-federal match), **previous**.
- 2021-2022** Vermont Water and Lake Studies Center, USGS, Vermont cyanobacterial harmful bloom ecology and toxin biosynthesis gene activity: a path to novel management strategies. Co-PI. Collaborator: Erin Eggleston (Middlebury College, PI). **\$69,721** (\$23,121 federal; 42,544.04 non-federal match), **previous**.
- 2020-2021** Vermont DEC, Quantifying and predicting the response of Lake Carmi water quality to aeration. Co-PI. Collaborators: Andrew Schroth (UVM Geology, PI), Kristine Stepenuck (UVM RSEN, Co-PI). **\$100,000, previous**.
- 2020-2024** McIntire-Stennis (USDA), Dynamic forest-stream interactions: experimental acceleration of late-successional stream functions and resistance to flood disturbance. Co-PI. Collaborators: William Keeton (UVM RSEN, PI), Breck Bowden (UVM RESNR, Co-PI), Jarlath O'Neil-Dunne (UVM RSEN, Co-PI) **\$560,021, current**.
- 2019-2020** Vermont DEC, Quantifying and predicting the response of Lake Carmi water quality to aeration. Co-PI. Collaborators: Andrew Schroth (UVM Geology, PI) and Kristine Stepenuck (UVM RSEN, Co-PI). **\$150,000, previous**.
- 2019-2021** Lintilhac Foundation, Building and testing low-cost cyanobacteria and algae

sensors along Burlington's waterfront. Co-PI. Collaborators: Clayton Williams (St. Michaels College, PI) and Tian Xia (UVM CEMS, Co-PI). **\$28,500, previous.**

**2019-2020** Vermont Water and Lake Studies Center, USGS, Response of phytoplankton communities to recovery from acidification in Vermont lakes. PI. **\$10,000, previous.**

**2017-2018** Minnesota Water Resources Center, USGS, Assessing the role of buffer strips in nutrient and organic matter export and mitigation of harmful algal blooms. Co-PI. Collaborator: James Cotner (UMN, PI) **\$30,000, previous.**

**2017** Association for the Sciences of Limnology and Oceanography Early Career Travel Grant, **\$500, previous.**

**2017** Friends of Lakeside Laboratory: Renewed funding for Phycological Research Consortium bi-annual workshops at Iowa Lakeside Laboratory. Co-author with Sylvia Lee, US EPA. **\$5,000, previous.**

**2016** Friends of Lakeside Laboratory: Renewed funding for Phycological Research Consortium bi-annual workshops at Iowa Lakeside Laboratory. Co-author with Sylvia Lee, US EPA. **\$4,500, previous.**

## **Professional Experience**

### ***Professional Service***

- Peer reviewer for *Limnology and Oceanography*, *Limnology and Oceanography Letters*, *Biogeosciences*, *Inland Waters*, *Water Resources Research*, *Scientific Reports*, *Biogeochemistry*, *Aquatic Sciences*, *Geophysical Research Letters*, *Journal of Geophysical Research*, *Ecosphere*, *Legislative-Citizen Commission on Minnesota Resources*, *Lake Champlain Basin Program Implementation Grants*, *Minnesota Sea Grant*, *Iowa Water Center*, *National Science Foundation Division of Environmental Biology* (proposal review and panel service).
- Committees and organizations: RSENR Graduate Standards Committee (Chair), UVM RSENR IDEA Committee, UVM SACNAS (faculty advisor), Lake Champlain Basin Program Technical Advisory Committee, GLEON Steering Committee, Phycological Research Consortium

### ***Mentorship Activities***

- Graduate students: Sydney Diamond (MSc 2020), Ismar Biberovic (MSc 2023), Katelynn Warner (PhD), Maria Alfaro (MSc), Rachel Cray (PhD), Edouard Rugema (PhD), Kelsey Colbert (MSc),
- Graduate student committees: Allison Hyrick, Natalie Flores, Wilton Burns, Ben Block, Lindsey Pett, Abigail Rec, Ashton Kirol, Kaleb Jones, Stephen Peters-Collaer, Adebukola Aborigo, Anna Schmidt, Lindsey Carlson

- Undergraduate research interns: Lianne Parmalee, MacKenzie Michaels, Nisha Nadkarni, Ismar Biberovic, Lindsay VanFossen, Hannah Randall, Sarah Lindner, Alex Bernich, Margaret Polifrone, Rachael Dochinger, Harry Kraut, Miriam Rose, Morgan Doersch
- Undergraduate senior thesis students: Sarah Wasserman (advisor), Megan Petrine (advisor), Calvin McClellan (committee), Abby Hodson (committee), Aaron Shavitz (committee), Lexi Zagarola (co-advisor), Evan Choquette (committee)

### ***Teaching and Curriculum Development***

\*indicates new course development

<b>2024</b>	Phytoplankton Ecology*, UVM
<b>2023</b>	Ecology of Freshwater Algae*, UVM
<b>2021</b>	Ecology, Ecosystems, and Environment, UVM
<b>2020</b>	Water as a Natural Resource, UVM
<b>2020-</b>	Applied Ecology, Environment, and Society, UVM
<b>2019-</b>	Phycology*, UVM
<b>2017-18</b>	Facilitator: Race and Culture in the Natural Resources, UVM
<b>2017-</b>	Limnology, UVM*
<b>2016</b>	Ecology of Algal Blooms, Iowa Lakeside Laboratory*
<b>2016</b>	Field Limnology, Iowa Lakeside Laboratory*
<b>2016</b>	Identification of Aquatic Organisms (online course), Iowa State (ISU)
<b>2015</b>	Freshwater Ecology Laboratory (online course)*, ISU
<b>2012-15</b>	Freshwater Ecology Laboratory, ISU
<b>2014-15</b>	Principles of Biology II Laboratory, TA, ISU
<b>2011</b>	Global Change in Aquatic Ecosystems Seminar, TA, Trent University
<b>2010</b>	Limnology Laboratory, TA, Trent University
<b>2010</b>	Invertebrate Biology Laboratory, TA, Trent University
<b>2009</b>	Methods of Biological Inquiry Laboratory, TA, Trent University

### **Scientific Presentations**

\*Only first author, not collaborator or student presentations, listed here

**Morales-Williams, A.M.,** R. Bhattacharya, J. Trout-Haney, et al. 2023. Are blooms increasing? Global cross-scale trends in freshwater phytoplankton blooms. *Association for the Sciences of Limnology and Oceanography Aquatic Sciences Meeting*, Palma de Mallorca, Spain.

**Morales-Williams, A.M.,** M. Alfaro, J. Howland, A. Kirol, A. Wilkes, and A. Schroth. 2022. Artificial Aeration alters cyanobacteria diversity and stability in Lake Carmi: Results from 4 years of monitoring. *Lake Champlain Research Conference*, Burlington, VT.

**Morales-Williams, A.M.,** A. Kirol, A. Schroth, and K. Stepenuck. 2022. Lake Carmi phytoplankton monitoring updates. *Vermont Department of Environmental Conservation Lake Carmi Coordination Meeting*.

- Morales-Williams, A.M.** 2022. Understanding phytoplankton response to disturbance across space and time. *Federation of Vermont Lakes and Ponds*. Invited.
- Morales-Williams, A.M.** 2022. Understanding phytoplankton response to disturbance across space and time. *Northeast Algal Society Meeting*, Burlington, VT. Invited plenary.
- Morales-Williams, A.M.,** J. Howland, A. Wilkes, A. Kirol, and A. Schroth. 2021. Artificial aeration alters cyanobacteria community diversity and stability but not dominance in a eutrophic lake. *Association for the Sciences of Limnology and Oceanography Aquatic Sciences Meeting* (virtual).
- Morales-Williams, A.M.,** C. Sheik, A. Kellerman, and J.B. Cotner. 2019. Seasonal synchrony of chemical and microbial diversity across lake trophic gradients. *Association for the Sciences of Limnology and Oceanography Aquatic Sciences Meeting*, San Juan, Puerto Rico.
- Morales-Williams, A.M.,** K.J. Farrell, I.M. McCullough, D. Roberts, F. Scordo, Z. Ouyang, Dugan, H.A., S.L Bartlett, S.M. Burke, J.P. Doubek, F.E. Krivak-Tetley, N.K. Skaff, J.C. Summers, P.C. Hanson, and K.C. Weathers. 2016. Source or sink: integrating biogeochemical, trophic, and landscape processes to model lake carbon budgets (Poster). *Association for the Sciences of Limnology and Oceanography Aquatic Sciences Meeting*, Hawaii.
- Morales-Williams, A.M.,** A.D. Wanamaker, Jr., and J.A. Downing. 2015. Eutrophication amplifies carbon cycling in lakes (Poster). *Global Lake Ecological Observatory Network Meeting (GLEON 17)*, Chuncheon, South Korea.
- Morales-Williams, A.M.,** C.J. Williams, A.D. Wanamaker, Jr., and J.A. Downing. 2015. Carbon processing in lakes is altered more by hydrologic permeability than by land-use. *Association for the Sciences of Limnology and Oceanography Aquatic Sciences Meeting*, Granada, Spain.
- Morales-Williams, A.M.,** A.D. Wanamaker, Jr., and J.A. Downing. 2014. Bicarbonate uptake could maintain *Microcystis* dominance in eutrophic lakes. *Joint Aquatic Sciences Meeting, Portland, Oregon, U.S.A.*
- Morales-Williams, A.M.,** A.D. Wanamaker, Jr., and J.A. Downing. 2013. Stable isotopic evidence of phytoplankton bicarbonate uptake in eutrophic lakes. *Association for the Sciences of Limnology and Oceanography Aquatic Sciences Meeting*, New Orleans, U.S.A.
- Morales-Williams, A.M.** and J.A. Downing. 2012. Sustained atmospheric CO<sub>2</sub> uptake in anthropogenically eutrophic lakes. *Association for the Sciences of Limnology and Oceanography Aquatic Sciences Meeting*, Lake Biwa, Otsu, Japan.



**Morales, A.M.,** C.J. Williams, M.A. Xenopoulos and P.C. Frost. 2011. Assessing the role of dissolved organic matter in the community structure and stoichiometry of lake pico and nanoplankton. *American Society of Limnology and Oceanography Aquatic Sciences Meeting*, San Juan, Puerto Rico, USA.

**Morales, A.M.** and P.C. Frost. 2010. Optical properties of DOM and their relationships with dissolved trace metals in shallow lakes of southern Ontario, Canada. *American Geophysical Union Fall Meeting*, San Francisco, CA, USA.

**Morales, A.M.** and P.C. Frost. 2010. Spatial distribution and optical properties of dissolved organic matter in the Kawartha Lakes of southern Ontario, Canada. *Joint Aquatic Sciences Summer Meeting, American Society of Limnology and Oceanography and North American Benthological Society*, Santa Fe, New Mexico, USA.

### **Invited Lectures and Seminars**

**Morales-Williams, A.M.** 2022. Understanding phytoplankton response to disturbance across space and time. *Federation of Vermont Lakes and Ponds*.

**Morales-Williams, A.M.** 2022. Pleanry: Understanding phytoplankton response to disturbance across space and time. *Northeast Algal Society Meeting*, Burlington, VT

**Morales-Williams, A.M.** 2018. The greening of our inland waters. Vermont Department of Environmental Conservation Lakes and Ponds Division Brown Bag Seminar.

**Morales-Williams, A.M.,** C. Sheik, A. Kellerman, and J. Cotner. 2017. Linking chemical complexity and microbial diversity across the land-water interface. RSENR fall seminar series.

**Morales-Williams, A.M.** 2017. Lakes as sentinels: networks and emerging sensor technologies. UVM Legislative Summit.

**Morales-Williams, A.M.,** A.D. Wanamaker, Jr., C.J. Williams, and J.A. Downing. 2016. Eutrophication drives extreme seasonal CO<sub>2</sub> flux in lake ecosystems. *Chinese Society of Limnology*, Hainan, China.

**Morales-Williams, A.M.** 2015. Causes and consequences of cyanobacteria blooms in lakes. Iowa Lakeside Laboratory Faculty Lecture Series, Milford, IA.

**Morales-Williams, A.M.,** C. Rzonca, and M.J. Lannoo. 2015. Automated Water Quality Monitoring of West Lake Okoboji, Phase II Funding Proposal. Okoboji Foundation Board of Directors Meeting, Okoboji, IA.

**Morales-Williams, A.M.** 2012. What triggers algal blooms in lakes? Iowa Lakeside Laboratory, Conservation Conversations, Milford, IA.

**Morales, A.M.** 2010. Algae in the Kawartha Lakes. Kawartha Lakes Stewards Association Annual Spring Meeting, Bobcaygeon, ON.

### **Media and Outreach**

Lake Champlain Basin Program, “Meet the Scientist” video series.

<https://www.lcbp.org/news-andmedia/media2/video/meet-the-scientist-video-series/>

Experts: Flooding Impacted Lake Champlain, Barre-Montpelier Times Argus, 2023:

[https://www.timesargus.com/211/experts-flooding-impacted-lake-champlain/article\\_f3c5738b-3268-5a15-b758-66083ba9770b.html](https://www.timesargus.com/211/experts-flooding-impacted-lake-champlain/article_f3c5738b-3268-5a15-b758-66083ba9770b.html)

Algae blooms prompt advisories for two New Hampshire bodies of water, WCAX, 2022:

<https://www.wcax.com/2022/06/06/algae-blooms-prompt-advisories-two-bodies-water/>

Burlington Beaches re-open after closure caused by cyanobacteria, Vermont Digger, July 2021:

<https://vtdigger.org/2021/07/14/burlington-beaches-reopen-after-closure-caused-by-cyanobacteria/>

Cyanobacteria blooms close all of Burlington’s public beaches, Vermont Digger, July 2021:

<https://vtdigger.org/2021/07/12/cyanobacteria-blooms-close-all-of-burlingtons-public-beaches/>

### **Society Memberships**

Association for the Sciences of Limnology and Oceanography

Geological Society of America

Phycological Society of America

Phycological Research Consortium

European Geosciences Union