

Brendan F. O’Leary

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ACADEMIC WORK EXPERIENCE

Post-doctoral Fellow, Center for Leadership in Environmental Awareness and Research (CLEAR), Wayne State University, Carol Miller Ph.D. & Glen Hood Ph.D., Detroit, MI 4/23 – Present

- Multiproject post-doc position within the Superfund Research Program
- Developing field and modeling methods to understand urban environmental exposure pathways

Program Coordinator, One Health Initiative and Center for Leadership in Environmental Awareness and Research (CLEAR), Wayne State University, Detroit, MI 8/21 – 4/23

- Help develop and establish the One Health Initiative
- Coordinated the submission and established the CLEAR research program– NIEHS P42 Grant

Research Assistant (PhD), Wayne State University, Carol Miller Ph.D., Detroit MI 1/18 – 8/21

- Interdisciplinary sustainability research program
- Research topics include urban water infrastructure, contaminant transport, and numerical modeling

Research Assistant (MS), Wayne State University, Lawrence D. Lemke Ph.D., Detroit MI 8/12 – 7/14

- Geostatistical modeling and mapping
- Airborne environmental contaminant analysis

Summer Research Assistant, Jennifer DeHart Ph.D., Meadville, PA 6/09 – 8/09

- Greenhouse Gas Pilot Grant participant, the Pennsylvania Dept. of Environmental Protection
- Greenhouse gas emissions reduction program, City of Meadville, PA

INDUSTRY WORK EXPERIENCE

Project Manager, Southwest Detroit Environmental Vision, Detroit, MI 5/18 – 8/18

- Analyzed and developed communication tools for the Clean Diesel Partnership
- Oversaw soil sampling of urban gardens in Detroit

Geologic Specialist 2, Arcadis U.S., Novi, MI 7/14 – 12/17

- Environmental remediation field projects including bedrock drilling and GSI monitoring
- Project management and international environmental regulations compliance

Sustainability Intern, Dairy Management Inc., Rosemont, IL 5/12 – 8/12

- Nutrient cycling effects on daily farm practices
- Strategy development for current and future ways to reduce dairy farm environmental impact

Environmental Intern, CONSOL Energy, Canonsburg, PA 5/11 – 8/11

- Surface water flow field monitoring over active mine sites
- Oversaw drilling and engineering contractors

Geologist/Industrial Engineer Intern, CONSOL Energy, Canonsburg, PA 5/10 – 8/10

- Structural mapping for underground roof/rib integrity rock units in coal mines
- Time studies for continuous and longwall underground mining machines at the mine face

EDUCATION

Ph.D. Dual Titled: Civil Engineering and Urban Sustainability 5/23

Wayne State University, Detroit, MI Chair: Carol Miller, PhD.

Dissertation: *Evaluating volatile organic compound exposure pathways in urban landscape Detroit, MI*

Master of Science: Geology 7/14
 Wayne State University, Detroit, MI Advisor: Lawrence D. Lemke, PhD.
 Thesis: *Evaluating spatial outliers and integrating temporal data in air pollution models for the Detroit-Windsor airshed*

Bachelor of Science, Double Major: Environmental Geology & Environmental Science 12/11
 Minor: Religious Studies
 Allegheny College, Meadville, PA
 Thesis: *The Relationship between Soil Characteristics, Disturbance and Historical Forest Patterns in Thurston County, Washington*

PUBLICATIONS

15. Straughen, J.K., Loveless, I., Chen, Y., Burmeister, C., Lamerato, L., Lemke, L.D., **O’Leary, B.F.**, Reiners, J.J., Sperone, F.G., Levin, A.M. and Cassidy-Bushrow, A.E. (2024) *The Impact of Environmental Benzene, Toluene, Ethylbenzene, and Xylene Exposure on Blood-Based DNA Methylation Profiles in Pregnant African American Women from Detroit*. International Journal of Environmental Research and Public Health, 21(3), p.256. <https://doi.org/10.3390/ijerph21030256>
14. **O’Leary, B.F.** (2023) *Evaluating volatile organic compound exposure pathways in urban landscapes Detroit, MI*. (Doctoral dissertation, Wayne State University). [Order No. 30309578].
13. **O’Leary, B.F.**, Hill, A.B., Linn, C., Lu, M., Miller, C.J., Newman, A., Sperone, G.F., and Zang, Q. (2023) *Exploring the association of Brownfield remediation status with socioeconomic conditions in Wayne County, MI*. Environmental Science and Pollution Research. 1-9. <https://doi.org/10.1007/s11356-023-26666-2>
12. Erickson, M., Hoysh, S., **O’Leary, B.F.**, Van Stempvoort, Dale, (In Review) *Chapter 6: Urban groundwater issues related to Great Lakes Water Quality*, Great Lakes Water Quality Agreement Annex 8 – Groundwater
11. Raheja, G., Harper, L., Hoffman, A., Gorby, Y., Freese, L., **O’Leary, B.F.**, Deron, N., Smith, S., Auch, T., Goodwin, M., Westervelt, D.M. (2022) *Community-based participatory research for low-cost air pollution monitoring in the wake of unconventional oil and gas development in the Ohio River Valley: Empowering impacted residents through community science*. Environmental Research Letters. 2022 May 25;17(6). <https://doi.org/10.1088/1748-9326/ac6ad6>
10. Steinman, A.D.; Uzarski, D.G.; Lusch, D.P.; Miller, C.; Doran, P.; Zimmnicki, T.; Chu, P.; Allan, J.; Asher, J.; Bratton, J.; Carpenter, D.; Dempsey, D.; Drummond, C.; Esch, J.; Garwood, A.; Harrison, A.; Lemke, L.D.; Nicholas, J.; Ogilvie, W.; **O’Leary, B.F.**; Sachs, P.; Seelbach, P.; Seidel, T.; Suchy, A.; Yellich, J. (2022) *Groundwater in Crisis? Addressing Groundwater Challenges in Michigan (USA) as a Template for the Great Lakes*. Sustainability 2022, 14, 3008. <https://doi.org/10.3390/su14053008>

9. **O'Leary, B.F.**, Hill, A.B., Akers, K.G., Esparra-Escalera, H.K., Lucas, A., Raoufi, G., Huang, Y., Mariscal, N., Mohanty, S.K., Tummala, C.M., Dittrich, T.M. (2022) *Air quality monitoring and measurement in an urban airshed: Contextualizing datasets from the Detroit Michigan area from 1952 to 2020*. Science of the Total Environment, Volume 809, 152120, <https://doi.org/10.1016/j.scitotenv.2021.152120>.
8. Teimoori, S.; **O'Leary, B.F.**; Miller, C.J. (2021) *Modeling Shallow Urban Groundwater at Regional and Local Scales: A Case Study in Detroit, MI*. Water, Volume 13, 1515. <https://doi.org/10.3390/w13111515>
7. Cassidy-Bushrow, A.E., Burmeister, C., Birbeck, J., Chen, Y., Lamerato, L., Lemke, L.D., Li, J., Mor, G., **O'Leary, B.F.**, Peters, R.M. and Reiners Jr, J.J., Gianluca Sperone, F., Westrick, J., Wiewiora, E., Straughen, J. K. (2021) *Ambient BTEX exposure and mid-pregnancy inflammatory biomarkers in pregnant African American women*. Journal of reproductive immunology, 145, 103305.
6. Miller, C.J., Runge-Morris, M., Cassidy-Bushrow, A.E., Straughen, J.K., Dittrich, T.M., Baker, T.R., Petriello, M.C., Mor, G., Ruden, D.M., **O'Leary, B.F.** and Teimoori, S., 2020. *A Review of Volatile Organic Compound Contamination in Post-Industrial Urban Centers: Reproductive Health Implications Using a Detroit Lens*. International Journal of Environmental Research and Public Health, Volume 17, Issue 23, 8755. <https://doi.org/10.3390/ijerph17238755>
5. Cassidy-Bushrow, A.E., Burmeister, C, Lamerato, L, Lemke, L.D., Mathieu, M., **O'Leary, B.F.**, Sperone, F.G., Straughen, J.K., Reiners, J.R. Jr. (2020) *Prenatal Airshed Pollutants and Preterm Birth in an Observational Birth Cohort Study in Detroit, Michigan, USA*, Environmental research, 189, 109845. <https://doi.org/10.1016/j.jri.2021.103305>
4. **O'Leary, B.F.**, Reiners J.J. Jr., Xu, X., Lemke, L.D. (2016) *Identification and influence of spatio-temporal outliers in urban air quality measurements*, Science of The Total Environment, Volume 573, Pages 55-65, ISSN 0048-9697. <https://doi.org/10.1016/j.scitotenv.2016.08.03>
3. Howard, J.L., **O'Leary, B.F.**, Shuster, W.D, (2015) *Corrigendum to "Experimental Order 1 soil survey of vacant urban land, Detroit, Michigan, USA*, Catena, Volume 126, 220–230, ISSN 0341-8162. <https://doi.org/10.1016/j.catena.2014.11.019>
2. **O'Leary, B.F.**, (2014) *Evaluating spatial outliers and integrating temporal data in air pollution models for the Detroit-Windsor airshed*. (Thesis, Wayne State University). ID: 1564791.
1. **O'Leary, B.F.** and Lemke, L.D. (2014) *Modeling Spatiotemporal Variability of Intra-Urban Air Pollutants in Detroit: A Pragmatic Approach*, Atmospheric Environment, Volume 94, Pages 417-427, ISSN 1352-2310. <https://doi.org/10.1016/j.atmosenv.2014.05.010>

SELECTED FUNDED RESEARCH AND GRANT PARTICIPATION

1. **Environmental Protection Agency (EPA): People, Prosperity, Planet** (09/2020 – 09/2021, \$25,000) *GSI-Informed Urban Groundwater Monitoring Networks*
Role: Co-Investigator
Activities: Directed an interdisciplinary team of graduate students to pilot assessment methods of urban green stormwater infrastructure.
2. **Erb Family Foundation** (01/2021 – 12/2021, \$80,000): *Audit and Mapping of Air Monitors in Wayne County*
Role: Co-Investigator
Activities: Oversaw a \$40,000 subgrant award to WSU for auditing Wayne County’s air monitoring program and developing software to pull public air quality data from community air monitors.
3. **National Institute of Environmental Health Sciences (NIEHS) P42: Center for Leadership in Environmental Research and Awareness** (\$11,200,000)
Role: Program Coordinator
Activities: Helped facilitate the application and program development of a new Superfund Research Program at Wayne State University. Research activities include spatial modeling of subsurface contamination and fieldwork in urban brownfields.
4. **Erb Family Foundation: Healthy Urban Waters**
Role: Graduate Research Assistant
Activities: Performed urban groundwater field research, developed GIS urban soil and groundwater maps, and helped with WSU Healthy Urban Water programing.

PROFESSIONAL PRESENTATIONS with ABSTRACTS

- O’Leary, B.F.**, Straughen, J.K., and Cassidy-Bushrow, A.E (2024) *From Vision to Impact – Collaborative Science for the Common Good*, 2024 Annual Symposium CLEAR Collaborations: Expanding Connections. Detroit, MI.
- O’Leary, B.F.**, Hood, G.R., Miller, C.J., Black, S.M., (2024) *Investigating Groundwater Contamination through Phytoscreening in Neighborhoods of the Great Lakes Region*, Shared Lakes: One Water, One Health. IAGLR's 67th Annual Conference on Great Lakes Research. Windsor, ON.
- O’Leary, B.F.**, Hood, G.R., MacDonald Gibson, J., Long, H.C., Miller, C.J., and Wager, Y. (2024) Sampling strategies and numerical models to understand subsurface vapor intrusion exposure pathways and risk. 2024 Battelle Chlorinated Conference. Denver, CO.
- O’Leary, B.F.**, Hood, G.R., Lu, M., Bunting, E., Zhang, Q., Hossain, M., Sperone, G.S., Miller, C.J., Hussain, Y., Wu, T., Melkonian C., (2024) *Integrating Fieldwork Approaches to Uncover the Environmental Health Impact of Brownfields on Urban Communities*. Climate Change and Environmental Justice: Engaging Diverse Teams. NIEHS Partnerships for Environmental Public Health. Durham, NC.
- O’Leary, B.F.** (2023) *Urban sampling strategies and numerical models to understand subsurface vapor intrusion exposure pathways – WSU Superfund Center*. American Institute of Professional Geologists – Michigan Chapter. Ann Arbor, MI.

- O'Leary, B.F.**, Hood, G.R., Lu, M., Bunting, E., Zhang, Q., Hossain, M., Sperone, G.S., Miller, C.J., Hussain, Y., Wu, T., Melkonian C., (2023) *Use of Innovative Methods to Uncover Hidden Stories of Legacy Brownfield Sites*, Superfund Research Program Annual Meeting 2023, Albuquerque, NM.
- O'Leary, B.F.**, Hood, G.R., Miller, C.J., Wager, Y. (2023) *Neighborhood-scale sampling strategies and numerical models to understand subsurface environmental exposure pathways*, Sustainable Detroit Forum 2023, Detroit, MI.
- O'Leary, B.F.** (2023) *Building aboveground strategies to identify and address belowground hot spots for VOC vapor intrusion in complex urban settings*, Center for Leadership in Environmental Awareness and Research Advisory Board Meeting, Detroit, MI.
- O'Leary, B.F.**, Salah, H., Straughen, J., Thompson, L. (2023) *Volatile Organic Compound Learnshop*. Great Lakes Bioneers Detroit Conference. Detroit, MI.
- O'Leary, B.F.**, Westrick J., Salah, H., Linn, C. (2023) *Center for Leadership in Environmental Awareness and Research Bioneers Tour*. Great Lakes Bioneers Detroit Conference. Detroit, MI.
- O'Leary, B.F.**, Hood, G.R., Miller., C.J. (2023) *Phytoscreening and Modeling VI in Urban Centers*. Brownfields 2023, Detroit, MI.
- O'Leary, B.F.**, Miller, C.J., Selegean, K.J., Hood, G.R (2022) *Exploring the differences between alternative VOC sampling methods at abandoned urban brownfield locations*. Superfund Research Program Annual meeting, Raleigh, NC, Superfund Research Program
- O'Leary, B.F.**, Miller, C.J., Selegean, K.J., Hood, G.R. (2022) *Urban groundwater pollution: Using vegetation to evaluate impacts*. Joint Aquatic Sciences Meeting, Grand Rapids, MI.
- O'Leary, B.F.**, Hill, A.B., Linn, C., Lu, M., Miller, C.J., Newman, A., Sperone, G.F., and Zang, Q. (2022) *Environmental remediation at leaking underground storage tanks: Exploring spatial patterns in Wayne County, MI*, American Geophysical Union Fall Meeting, Chicago, Illinois, American Geophysical Union, Abstract ID: GH15B-0460., <https://ui.adsabs.harvard.edu/abs/2022AGUFMGH15B0460O/abstract>
- O'Leary, B.F.**, Miller, C.J., Dittrich, T.M., Hood, G.R., Papuga, S.A. and Shuster, W. (2021) *Evaluating volatile organic compound exposure pathways and risk in a variably saturated, urban landscape*. American Geophysical Union Fall Meeting, New Orleans, LA, American Geophysical Union.
- O'Leary, B.F.**, Esparra-Escalera, H., Lucas, A., Raoufi, G., (2021) *Designing a Community Science Platform: Detroit AirNet; EDRA52; University of Detroit Mercy; Detroit, MI*
- O'Leary, B.F.** (2021) *A community science approach to assessing the water chemistry of tributaries in the Mahoning River Watershed*; Dr. Ray's Energy & Environment Speaker Series; Youngstown State University, Youngstown, OH
- Linn, C., **O'Leary, B.F.** (2021) *Interdisciplinary Research on the Hydrosocial Cycle in Southeast Michigan*. Presented online at the Society for Applied Anthropology Annual Conference.
- O'Leary, B.F.**, and Miller, C.J., (2020) *Exploring mechanism and pathways of VOC migration beneath Detroit's urban landscape*, Superfund Research Program, Texas A&M University, College Station, Texas
- O'Leary, B.F.**, Anderson, L., Armstrong, F., Fowler, D., Ludwig, D., Harper, L., McLean, C., Spiese, C., Stolz, J., (2020) *Assessing the water chemistry of tributaries in the Mahoning River Watershed, Youngstown, Ohio*, American Geophysical Union Fall Meeting, San Francisco, California, American Geophysical Union, Abstract ID: H110-0005, <https://agu.confex.com/agu/fm20/meetingapp.cgi/Paper/771489>
- O'Leary, B.F.**, Teimoori, S., and Miller, C.J., (2020) *Evaluating neighborhood-scale urban groundwater in Detroit, MI*. Wayne State University Graduate Research Symposium, Wayne State University, Detroit, MI

- Linn, C., **O'Leary, B.F.**, and Akemann, C., (2020) *Interdisciplinary Urban Sustainability Research: Seeking Comprehensive Knowledge About Groundwater Contamination and Its Effects on Drinking Water Quality in SE Michigan*. Society for Applied Anthropology Annual Meeting, Albuquerque, New Mexico
- O'Leary, B.F.**, Teimoori, S., and Miller, C.J., (2019) *Using an urban water budget to understand urban shallow groundwater processes for sustainable neighborhood development*, American Geophysical Union Fall Meeting, San Francisco, California, American Geophysical Union, Abstract ID: GH13D-1074,
- O'Leary, B.F.**, Cassidy-Bushrow, A.E., Lemke, L.D., Sperone, F.G., Straughen, J.K., Reiners, J.J. Jr., (2019) *Airshed Benzene, Toluene, Ethylbenzene and Xylenes (BTEX) and Preterm Births in Detroit*, Superfund Research Program, Seattle, Washington
- Teimoori, S., **O'Leary, B.F.**, and Miller, C.J., (2019) *Characteristics and health implications of Detroit's Shallow Groundwater*, Superfund Research Program, Seattle, Washington
- O'Leary, B.F.**, Teimoori, S., and Miller, C.J., (2019) *Developing an urban water budget and groundwater models in Detroit, MI*, Great Lakes Water Authority Symposium, Detroit, Michigan
- O'Leary, B.F.**, Linn, C., and Akemann, C., (2019) *Groundwater in SE Michigan: Understanding groundwater processes for sustainable urban development*, Detroit Sustainability Forum, Detroit, Michigan
- O'Leary, B.F.** (2019) *Understanding urban water flow: Neighborhood scale shallow groundwater migration*, Healthy Urban Waters Symposium: A Dip in the Water, Detroit, Michigan
- O'Leary, B.F.**, Teimoori, S., and Miller, C.J., (2019) *Characterization of Shallow Groundwater in Detroit: Recovery Park*, Society of Environmental Toxicology and Chemistry, Toronto, Canada
- O'Leary, B.F.**, Teimoori, S., and Miller, C.J., (2019) *Characterization of Shallow Groundwater in Detroit: Environmental and Hydraulic Considerations*, Reno, Nevada, Abstract: https://www.sedhyd.org/2019/openconf/modules/request.php?module=oc_program&action=view.php&id=354&file=1/354.pdf
- O'Leary, B.F.** and Miller, C. J., (2019) *Characterization of Shallow Groundwater in Detroit: Environmental and Hydraulic Considerations*, International Association of Great Lakes Research, Brockport, New York
- Miller, C.J., **O'Leary, B.F.**, Kashian, D.R., and Zhang, Y.L., (2019) *Tailoring sustainability training for urban environmental research*, International Association of Great Lakes Research, Brockport, New York
- O'Leary, B.F.**, (2019), *Recovery Park Groundwater*, A Dip in the Water: Health Urban Water Symposium, Wayne State University, Detroit, Michigan
- O'Leary, B.F.** (2019) *Learn EJSCREEN: Environmental Justice Screening and Mapping Tool*, Wayne State University, Detroit, Michigan
- O'Leary, B.F.**, Miller, Carol J., Striz Calnin, Maggie, Sagovac, Simone, (2018) *Michigan Clean Diesel Collaborative: Improving air quality through community driven initiatives in Southwest Detroit*, American Geophysical Union Fall Meeting, Washington D.C., American Geophysical Union, Abstract ID: 446875 Abstract: <https://agu.confex.com/agu/fm18/meetingapp.cgi/Paper/446875>
- Miller, Carol J., **O'Leary, B.F.**, Kashian, Donna, and Guerra-Lopez, Ingrid, (2018) *Center for Leadership in Environmental Awareness and Research (CLEAR): Bridging the elements of ecology, health, education, and outreach in an urban context*; American Geophysical Union, Washington D.C., American Geophysical Union, Abstract ID: 464852, Abstract: <https://agu.confex.com/agu/fm18/meetingapp.cgi/Paper/464852>
- O'Leary, B.F.**, Rios, O., Aregbesola, O., Papuga, S., Miller, C.J., (2018) *Spatial Considerations in Quantifying the Risk of VOC Exposure via Vapor Intrusion, Water at Wayne Symposium*, Detroit, MI

Rios, O., Papuga, S., Sperone, G., Miller, C.J., **O’Leary, B.F.**, Aregbesola, O., (2018) Spatial Considerations in Quantifying the Risk of VOC Exposure via Vapor Intrusion, Water at Wayne Symposium, Detroit, MI

O’Leary, B.F. and Lemke, L.D., (2015) *Identification and influence of spatial outliers in air quality measurements*; American Geophysical Union Fall Meeting, San Francisco, California, American Geophysical Union, Abstract ID: 80581 Abstract: <http://fallmeeting.agu.org/2015/abstract/identification-and-influence-of-spatial-outliers-in-air-quality-measurements/>

O’Leary, B.F.; Miller, C.J.; Katrib, L.T.; Abkenar, S.M.; Pruehs, A.M.; Alighalehbabakhani, F.; Wayne, A.M.; Fowler, S.; Steis, J.D.; Afzal, M.; and Baskaran, M., (2014), *Groundwater/Surface Water Interactions in Lake St. Clair Watershed*, 4th Annual AIPG Workshop on: The Groundwater/Surface Water Interface – Characterization, Evaluation and Compliance, Roscommon, Michigan

O’Leary, B.F., Abkenar, S.M, (2014) *Using GIS technology to prepare and process data for groundwater modeling at Lake St. Clair Metropark*, IMAGIN Conference, Livonia, Michigan
Abstract: http://www.imagin.org/awards/sppc/2014/papers/brendan_oleary_s_mohsen_sadatiyan.pdf

O’Leary, B.F., Lemke, L.D., (2013) *Modeling Spatiotemporal Variability of Intra-Urban Air Contaminants in the Detroit Airshed: A Pragmatic Approach*, GSA Annual Meeting and Exposition, Denver, Colorado. Geological Society of America. Abstracts with Programs. Vol. 45, No. 7, p.664
Abstract: <https://gsa.confex.com/gsa/2013AM/webprogram/Paper229265.html>

SERVICE

Academic Courses Designed:

Pharmacology 7650: Volatile Solvents in the Environment (Winter 2020)

- Self-designed course taught with co-T-RUST students on volatile organic compounds (VOC). VOC environmental impact and public health was addressed

Conference Sessions Chaired:

O’Leary, B.F. and Vasquez, A. (2022) *One Health in Great Lakes Urban Ecosystems*. Joint Aquatic Sciences Meeting, Grand Rapids, MI.

Mannix, Devin, **O’Leary, B.F.**, Davis, Julianne, Birkenholtz, Trevor, (2020) *Bridging Divides in Social and Hydrologic Science: Integrative Practices and Stakeholder Participation in Hydrologic Research I*; American Geophysical Union Fall Meeting, San Francisco, California, American Geophysical Union

Mannix, Devin, **O’Leary, B.F.**, Davis, Julianne, Birkenholtz, Trevor, (2020) *Bridging Divides in Social and Hydrologic Science: Integrative Practices and Stakeholder Participation in Hydrologic Research II Posters*; American Geophysical Union Fall Meeting, San Francisco, California, American Geophysical Union

Akemann, C., **O’Leary, B.F.**, and Linn, C., (2019) *Furthering Interdisciplinary Urban Groundwater Quality and Urban Sustainability Research*, Society of Environmental Toxicology and Chemistry, Toronto, Canada

O’Leary, B.F., Linn, C., and Akemann, C., (2019) *Furthering Interdisciplinary Urban Groundwater Quality and Urban Sustainability Research*, International Association of Great Lakes Research, Brockport, New York

Professional Society Membership and Positions:

American Geophysical Union Hydrology: Student Section Subcommittee	2020
American Institute of Professional Geologists: Secretary – WSU Chapter	2013
American Geophysical Union	

American Institute of Professional Geologists
International Association of Great Lakes Research

STEM Community Outreach:

- O'Leary, B.F.**, Haniya Yusuf, S., Kakaris-Porter, D., and Selegan, K. (2022) *A5. Tour: Urban water management and green stormwater infrastructure at Wayne State University*; The 16th Annual Great Lakes Bioneers Detroit Conference; University of Detroit Mercy; Detroit, MI
- O'Leary, B.F.**, Dabney, B., Hartrick, J., Linn, C., and Serreyn, M (2021) *GSI-Informed Urban Groundwater Monitoring Networks*; Connecting water with our world: A community conversation around stormwater and resilience, Hamilton Rainscape, Detroit, MI
- O'Leary, B.F.**, Dabney, B., Hartrick, J., Linn, C., and Serreyn, M. (2021) *A2. Tour: GSI-Informed Urban Groundwater Monitoring Networks at WSU*; The 16th Annual Great Lakes Bioneers Detroit Conference; University of Detroit Mercy; Detroit, MI

RELEVANT SKILLS AND WORK EXPERIENCES

Programs

Boring Log programs – gINT and LogPlot

Computer Language – R-Programming

Geostatistical and numerical modeling programs – 4-Dim, Earth Volumetric Studio (EVS), Hydrus 1-D, Mining Visualization System (MVS), SGeMs, SpaceStat, Surfer, Visual Modflow Classic, Visual Modflow Flex, VLEACH.

Graphical Information Systems – ESRI ArcGIS Platform

MS Office – proficient with all Office programs including Access, Excel, SharePoint, and Visio.

Project Work

Drilling – Oversight of bedrock rotosonic drilling and shallow surface direct push drilling.

Ground Water Sampling – Oversight of multi-week ground water sampling including site wide gauging, low flow, and ultra-low flow sampling

Facility Sampling – Environmental sampling of decommissioned auto plants including truss work, concrete slabs, and wipe samples of miscellaneous equipment.

Pump Test – Multi-week Oversight of Multistage pump test that included extraction step testing, constant rate extraction testing, constant rate injection testing, and extraction/injection (DGR) testing.

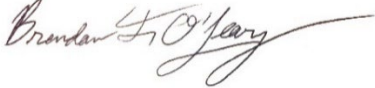
Ecosystems Center, Marine Biological Laboratory, Woods Hole, MA – Project at the Marine Biological Laboratory and Brown University: Studied terrestrial and aquatic ecosystems.

AWARDS and EXTRACURRICULAR ACTIVITIES

American Geophysical Union: Outstanding Student Presenters Mini-Award	2021
Ecology Center – Detroit AirNet Subcontract Award	2020
EPA: People, Prosperity, and Planet SU840160	2020-2021
American Geophysical Union - TEX Community Science Fellowship	2019-2022
Illinois-Indiana Sea Grant - Environmental Educator Stipend	2019
American Geophysical Union Celebrate 100 Grant	2019
Tau Beta Pi – Honor Society	2019-2023
WSU Transformative Research in Urban Sustainability Training – NSF-Grant	2018-2019
WSU Department of Geology Student Merit Award	2013
United State Fencing Association - Foil Rating E	2011
Highland Bagpipes, Paula Bauer Music Award	2008-2011

Uilleann Bagpipes, First Place Midwest Regional Competition

2008

Signature: 

Date: 7/10/2024