Christian J. Lundy

EDUCATION

Expected 2029	**PhD- Geosciences & Biogeochemistry**, The Pennsylvania State University Advisor: Dr. Rachel Housego Thesis: Stabilization of Wastewater-Derived Phosphorus in a Florida Keys, USA Karstic Aquifer
2022	**Bsc. Geology**, Summa Cum Laude, Hope College Minor- Environmental Science

RESEARCH INTERESTS

Coastal hydrogeology, anthropogenic contamination, groundwater-surface water interactions, sediment and pollutant transport, watershed remediation.

HONORS AND AWARDS

Brian G. Katz Environmental Research Grant, Geological Society of America, 2026
Biogeochemistry Assistantship, Penn State Institute of Energy and the Environment, 2026-2027
Pat Farrell Graduate Student Scholarship, State College Choral Society, 2026
Lenker Scholarship, Penn State Geosciences Department, 2026
Richard R. Parizek Graduate Fellowship, Penn State Geosciences Department, 2025
Centennial Research Travel Award, Penn State College of Earth and Mineral Sciences, 2025
Charles E. Knopf, Sr., Memorial Scholarship, Penn State Geosciences Department, 2025
Eagle Scout, Boy Scouts of America Troop 109 (Okemos, MI), 2016

PUBLICATIONS

Philben, M., DeVries-Zimmerman, S., Behrens, G., Kane, E., **Lundy, C**. Iron Availability Regulates Carbon Accumulation and Methane Production in a Lake Michigan Interdunal Wetland. *Wetlands* 44, 115 (2024). https://doi.org/10.1007/s13157-024-01870-z.

PRESENTATIONS

C. Lundy, E. Spielman-Sun, L. Kump, M. Ingalls, and R. Housego. “Stabilization of Wastewater-Derived Phosphorus in a Florida Keys, USA Karstic Aquifer.” Pennsylvania State University Department of Geosciences Graduate Symposium, University Park, PA. Apr. 2026.

C. Lundy, E. Spielman-Sun, L. Kump, M. Ingalls, and R. Housego. “Stabilization of Wastewater-Derived Phosphorus in a Florida Keys, USA Karstic Aquifer.” Penn State Water Conference, University Park, PA. Mar. 2026.

C. Lundy, R. Housego, and M. Ingalls. “Stabilization of Wastewater-Derived Phosphorus in a Florida Keys, USA Karstic Aquifer.” Pennsylvania State University Department of Geosciences Graduate Colloquium, University Park, PA. Apr. 2025.

TEACHING EXPERIENCE

Graduate Teaching Assistant, 2024-2026
The Pennsylvania State University Department of Geosciences

- Held office hours twice weekly and assisted with grading for an undergraduate hydrogeology course of 35 students. Assisted with occasional demonstrations.

- Taught two laboratory sections of an introductory geology course concurrently to approximately 50 undergraduate students. Instructed students in basic geological topics and directed students through activities.
- Held office hours weekly and assisted with grading for an asynchronous, online general education water science course of approximately 80 students.

Graduate Teaching Assistant, 2025-2026
International Geobiology Course, Pennsylvania State University
- Assisted with the International Geobiology Course at Penn State, including XAFS analysis of samples at the Stanford Synchrotron Radiation Lightsource (SSRL), geochemical analysis of surface water and porewater samples, and leadership of the instruction of 14 students in a field hydrology lesson.

RESEARCH EXPERIENCE

Graduate Research Assistant, 2024-Present
Housego Lab, Pennsylvania State University Department of Geosciences
- Conducts hydrogeology research focusing on groundwater contamination in coastal aquifers using a combination of field, laboratory, and computational methods. Experience includes XAFS analysis at the Stanford Synchrotron Radiation Lightsource (SSRL), mixed-density numerical modeling (FEFLOW), and geochemical modeling (PHREEQC).

Undergraduate Research Assistant, 2020-2022
Philben Lab, Hope College Department of Geological and Environmental Sciences
- Characterized microbial decomposition of Sphagnum moss and analyzed nutrient availability in a hydrologic system to determine the effects of climate change on carbon sequestration in peat bogs. Mentored by Dr. Michael Philben.

PROFESSIONAL EXPERIENCE

Environmental Geochemist, 2022-2024
WSP USA Inc.
- Assisted in environmental regulatory compliance for industrial sites through performance of sampling, data analysis, statistical comparison, and reporting. Experienced in field geology techniques such as groundwater and soil sampling equipment/technology and sediment core processing/logging. Data analysis techniques include the use of Rstudio, Sanitas statistical software, Geographic Information Systems (GIS), and Geochemist's Workbench. Reporting and client interaction experience demonstrates strong scientific communication abilities.

SERVICE AND OUTREACH

- Recruitment Committee Co-Chair, Pennsylvania State University Department of Geosciences, 2026
- Treasurer & Mentorship Committee Chair, Association for Women Geoscientists (Penn State Chapter), 2025-2026
- Geosciences Department Representative, Pennsylvania State University College of Earth and Mineral Sciences Graduate Student Council, 2025-2026
- Volunteer Field Trip Guide, State College Area School District Elementary Schools, 2025

- Camporee Volunteer, Boy Scout Troop 88, Millheim PA, 2025

SKILLS

- Field sampling techniques, including EPA Low-Flow groundwater sampling
- Groundwater modeling (FEFELOW)
- Geochemical modeling (Geochemist's Workbench, PHREEQC)
- Coding Languages: R