

Carlos D. Soto López
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School of Earth, Environment and Society
Bowling Green State University
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I. Academic Degrees

- | | |
|------|---|
| 2018 | PhD in Hydrology and Water Resources,
The University of Arizona, Tucson AZ |
| 2008 | MS in Hydrology and Water Resources
The University of Arizona, Tucson AZ |
| 2002 | BS in Environmental Sciences
Universidad de Puerto Rico, Rio Piedras PR |

II. Academic Positions

A. Teaching/Research Positions

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|----------------|---|
| 2022 - Present | Assistant Teaching Professor
Bowling Green State University, Bowling Green
OH |
| 2017 - 2022 | Adjunct Teaching Professor
Bowling Green State University, Bowling Green
OH |
| 2012 | Graduate Research Assistant
The University of Arizona, Tucson AZ |
| 2007 - 2011 | Teaching Assistant
The University of Arizona, Tucson AZ |
| 2005 - 2006 | Graduate Research Assistant
The University of Arizona, Tucson AZ |

B. Administrative Positions

III. Non-academic Positions

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|-------------|---|
| 2013 - 2014 | Senior Hydrogeologist
HydroGeoSense, Tucson AZ |
| 2003 - 2005 | GIS Project Manager
Geographic Mapping Technologies, San Juan PR |

2000 - 2003

GIS Analyst
Geographic Mapping Technologies, San Juan PR

IV. Teaching Experiences

A. Undergraduate Courses (number of individual sections taught)

ENVS 1010 - Introduction to Environmental Studies (12)

ENVS 3100 - Environmental Field and Lab Methods (8)

GEOL 1000 - Introduction to Geology (1)

SEES 3000 - Geospatial Science (8)

SEES 3230 - Introduction to Hydrology (2)

B. Undergraduate-Graduate Courses

C. Graduate Courses

D. Other Teaching

E. Thesis and Dissertation Students

1. Theses

-Richmond O. Said, MS Geology, 2025 (expected), BGSU (Co-Advised with Dr Vazquez-Ortega)

2. Dissertations

3. Membership on Dissertation Committees

4. Membership on Thesis Committees

-Richmond O. Said, MS Geology, 2025 (expected), BGSU (Co-Chair with Dr Vazquez-Ortega)

-Saratendra Bajal (MS Geology, 2025 (expected), BGSU (Thesis Committee and Research Advisor)

V. Curriculum Development

2023-2024

Worked as part of the Undergraduate Environmental Curriculum Committee to develop new majors and minors (Fall 2023 to Summer 2024)

2023

Revised and modified ENVS 3100 Laboratory Activities (Fall 2022)

2022

Revised and added SEES 3000 Reading Assignments and Online Quizzes (Fall 2022)

2022

Revised and modified ENVS 3100 Laboratory Activities (Fall 2022)

2021 Revised and modified ENVS 3100 Laboratory Activities (Fall 2021)

VI. Professional Development

2024 Small Teaching: Manageable Changes to Support Student Success Learning Community, Center for Faculty Excellence (Fall 2024)

2024 AI Made Easy: Prompt Writing Practice, Center for Faculty Excellence (09/5/2024)

2024 AI Made Easy: Prompt Writing for Instructors, Center for Faculty Excellence (09/3/2024)

2024 Search Committee Training (02/29/2024)

2023 BGSU Radiation Safety (11/28/2023)

2023 BGSU Laboratory Safety for PIs (11/27/2023)

2023-2024 Mentee, under the College of Arts and Sciences Faculty Mentoring Program (AY 2023-2024) with Dr Mathew Partin as mentor.

2022-2023 Mentee, under the College of Arts and Sciences Faculty Mentoring Program (AY 2022-2023) with Dr Andrew Kear and Dr Mathew Partin as mentors.

2022 A&S Introduction to Accessible Content Creation, BGSU's Center to Faculty Excellence Brown Bag Speaker Series (11/3/2022 12-1pm). How to create content that is accessible for all students utilizing ALI and Canvas for courses.

2019 15-Passenger Van Driver Safety Training.

2018-2019 SciFri Lunches

VII. Academic Advising

VIII. Research Interests

Surface hydrology
Sub-surface hydrology
Stream-aquifer interactions
Water Quality
Hydro geochemistry
Field and laboratory research
Geographic Information Systems (GIS)
Global Positioning Systems (GPS)

IX. Research Projects and Grants

A. Funded Grants

2022-2024 Vázquez-Ortega, A., **Soto C.D. (Co-PI)**, McCluney K., and others. Assessing Dissolved Reactive Phosphorus Sequestration onto Farm Soils Amended with Lake Erie Dredged Sediments: Implications on Hydrological Budgets and HAB Occurrences. Ohio Department of Higher Education Harmful Algal Bloom Research Initiative **\$748,105** Project period 2022-2024.

B. Pending Grants

C. Submitted Grants

2022 Vázquez-Ortega, A., **Soto C.D. (Co-PI)**, McCluney K., and others. Assessing Dissolved Reactive Phosphorus Sequestration onto Farm Soils Amended with Lake Erie Dredged Sediments: Implications on Hydrological Budgets and HAB Occurrences. Ohio Department of Higher Education Harmful Algal Bloom Research Initiative Submitted Summer 2022 **\$761,933**.

X. Publications or Equivalencies

A. Publications

1. Books

2. Journal Articles

a. Refereed Articles

2012 Meixner, T., Brooks, P., Hogan, J., **Soto, C.** and Simpson, S. (2012), Carbon and Nitrogen Export from Semiarid Uplands to Perennial Rivers: Connections and Missing Links, San Pedro River, Arizona, USA. *Geography Compass*, 6: 546-559. doi: 10.1111/j.1749-8198.2012.00510.x.

2011 **Soto-López, C. D.,** Meixner, T., & Ferré, T. P. A. (2011). Effects of measurement resolution on the analysis of temperature time series for stream-aquifer flux estimation. *Water Resources Research*, 47(12). doi:10.1029/2011WR010834.

3. Editorships of Journals

4. Book Reviews

5. Abstracts

2012 Meixner, T., **Soto, C. D.,** Ajami, H., Turner, D., Richter, H., & Dominguez, F. (2012, December). Water Presence in an Arid and Semi-arid River: Pattern, causes, mechanisms, and change. In AGU Fall Meeting Abstracts

2010 **Soto, C. D.,** Meixner, T., & Ferré, T. A. (2010, December). Effects of measurement resolution and random measurement error on temperature-based estimates of vertical stream-aquifer flux. In AGU Fall Meeting Abstracts.

2007 **Soto-López, C. D.,** & Meixner, T. (2007, December). Subsurface Stream Processes and Spatiotemporal Controls on Nutrient Cycling Upper San Pedro River, AZ. In AGU Fall Meeting Abstracts.

6. Reports

a. Published

b. Unpublished

XI. Papers Read to Professional Societies

XII. Service

A. School

2024 SEES Administrative Assistant Search Committee Member.

2022-Present SEES School Faculty Citizen.

2022-Present Environmental Sciences Major Committee Member.

2022-Present	SEES Environmental Sciences Cluster committee member, meet several times during the year to fill out reports (SAC).
2023	Merit Review Committee Chair. Chair of the SEES 2023 merit review committee tasked with evaluating SEES peers merit packets and submitting and submitting scores to SEES Director
2023	SEES Director Succession Committee Member
2022-2024	ENVS1010 Service-Learning Coordinator for 6 Academic Semesters (Spring 2023- Spring 2024)
2022-2023	Recruitment of Graduate Students (MS Geology) to fill a Research Assistant Position, related to the HABRI Grant (Fall 2022-Present).
2022	Merit Review Committee Member. Member of the merit review committee tasked with evaluating SEES peers merit packets and submitting a score to the Merit committee Chair.
2022-2023	SEES Faculty Representative for Preview Day (10/29/2022, 10/28/2023).
2022	Served as the SEES unit liaison for BGSU's Center for Faculty Excellence Brown Back Speaker Series on the Introduction to Accessible Content Creation. Specifically, I attended the presentation and then brought the knowledge back to unit by sharing information and content with the rest of the SEES faculty verbally on our faculty meeting of (11/18/2022) and via email (11/19/2022).
B. College	
2022-2024	BGSU A&S Distinguished Teaching Award Committee member: Member of the committee responsible for selecting BGSU Distinguished

Teaching Award with a three-year appointment
(AY 2022-2024)

C. University

- 2023 Honors College Annual Collective Dialogues, Session planner and facilitator: Planned for and submitted a discussion session for the Honors College Collective Dialogues. For this activity, I had to prepare for a self-contained 1-hr guided discussion of a current or ethical dilemma facing your area of study, positioning the student's undergraduate education within the context of the broader world. The topic of Water Scarcity (8/17/2023).
- 2022 Honors College 13th Annual Collective Dialogues, Session planner and facilitator: Planned for and submitted a discussion session titled "Water Scarcity" for the Honors College Collective Dialogues. For this activity, I curated a set of readings and videos so that students could prepare for a guided discussion around the topic of Water Scarcity (11/2/2022, 8/17/2023).

D. Professional

- 2024-Present Member of Open Professionally Aligned Integrated Curricula: Quantitative Subsurface Hydrogeology (OPAIC). Collaborating with academics and professionals, we are building a curriculum roadmap that will prepare students for a career in subsurface hydrology or further graduate education (Fall 2024 - Present)
- 2022-Present Member of the Lake Erie and Aquatic Research Network (LEARN). A group of field stations, scientific laboratories and diverse researchers within Ohio working together to promote collaborative research, education, and networking to address the challenges and opportunities facing Ohio's freshwater

resources. H2Ohio, Ohio Sea Grant's Learn Program. (Fall 2022-Present)

2022 Elsevier Academic Press survey on Hydrology courses: Participated on a survey directed to faculty members that teach courses related to hydrology (Fall 2022).

2015 Reviewer for Journal of Hydrology

E. Community

2024 HABRI Project Field Demonstration Day for Dredge Research and Innovation in Farming Team (DRIFT) committee, May 22, 2024.

2024 HABRI Project Field Demonstration Day for Ohio Soil and Water Conservation Districts - Summer Supervisor School for Northwest Ohio July 23, 2024.

2023 BG HS Student Honors Biology Research Co-advisor and supervisor (Fall 2023)

2018 CRIM Elementary School - Present to 1st and 2nd graders an activity on water quality (Fall 2018)

XIII. Research or Professional Consultantships

XIV. Membership in Professional Organizations

XV. Honors and Awards

A. Membership in Honor Societies

B. Awards

2012-2013 Louise Foucar Marshall Foundation Fellow, University of Arizona.

2009 Honorable Mention, Ford Foundation Pre-Doctoral Fellowship, University of Arizona.

2009 Excellence Performance at the Student Interface as a Teacher Assistant, College of Engineering University of Arizona.

2008 Honorable Mention, Ford Foundation Pre-Doctoral Fellowship, University of Arizona.

2006-2010 National Science Foundation Graduate Research Fellow, University of Arizona.

2005 Ivanhoe Fellowship, University of Arizona.

- 2005 Honorable Mention, National Science Foundation
Graduate Research Fellowship, University of
Arizona.
- 2003 Summer Research Scholar, Summer Research
Institute, University of Arizona.

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