Meagan Brown

meagan_brown@ucsb.edu | Personal Website | GitHub | LinkedIn | Oakland, CA

EDUCATION

Master of Environmental Data Science (June 2023)
Bren School of Environmental Science & Management – University of California, Santa Barbara
Highlighted Coursework: Analytical Workflows and Scientific Reproducibility, Data Management, Team Science Collaboration, Ethics & Bias in Environmental Data, Statistics for Environmental Data, Data Visualization and Communication, Spatial Analysis, Remote Sensing, Machine Learning
Leadership: Diversity, Equity, and Inclusion (DEI) Committee Representative (9/22 – 6/23)
Awards: Environmental Data Science Scholarship (January 2022)

Bachelor of Science in Environmental Studies (June 2021)
University of California, Santa Barbara (UCSB)
Emphasis: Geographic Information Systems (GIS)
Highlighted Coursework: Hydrology, Exploring Water Data, Water Resources Management, Water Policy, Geographic Information System (GIS) Application in R, GIS for Environmental Data Applications
Leadership: Treasurer, Zero Waste Committee (5/20 – 6/21)
Awards: Edison Research Scholarship (May 2020)

MASTER'S DATA SCIENCE GROUP PROJECT

Assessing Wildfire Risk in California's Groundwater Dependent Ecosystems (1/23 – 6/23)
Role: Data Manager | Client: The Nature Conservancy, Jack & Laura Dangermond Preserve
- Utilized statistical analyses to quantify if there is a correlation between groundwater and wildfire
- Worked with large geospatial data in R (i.e., remote sensed burn severity and modeled fire threat)
- Developed a reproducible workflow hosted on GitHub
- Managed the development, organization, and tracking of project data
- Designed and presented a 15-minute talk to communicate key findings to a diverse public audience

DATA ANALYSIS & WATER RESEARCH EXPERIENCE

Environmental Data Scientist, Pathways Climate Institute, San Francisco, CA (9/23 – Present)

United States/California Water Research Assistant, Dr. Perrone & Jasechko – UCSB (6/21 – Present)
- Conducting spatial analysis using ArcGIS Pro to inform EJ and water resources research interests
- Gathering spatial data online for CA water jurisdiction boundaries, water quality contaminants, etc.
- Recording water supply portfolio breakdowns for US cities with populations great than 500,000
- Collecting spatial data online for each US state's water system boundaries

Mapping Intern, City of Santa Barbara Environmental Services, Santa Barbara, CA (11/21–8/22)
- Developed interactive and static maps using ArcGIS Online (FieldMaps, Workforce, Survey123, Story Maps, and Dashboards) to highlight City programs and progress over time
- Participated in meetings to discuss the team's need for a more streamline workflow
- Assisted in establishing integrations between multiple data management platforms including Salesforce and Excel

DATA ANALYSIS & WATER RESEARCH EXPERIENCE – Continued

Stakeholder Equity Researcher – The Nature Conservancy (6/21 – 8/22)
- Analyzed 100+ groundwater sustainability plans to extract insights into groundwater user equity
- Collaborated with several NGOs to provide comment letters with recommendations
- Mapped vulnerable stakeholders of interest (disadvantaged communities, drinking water, etc.)
- Work resulted in a publication to Nature Communications that I am a co-author on

Groundwater Stakeholder Equity Senior Thesis, Dr. Perrone – UC Santa Barbara (10/20 – 5/21)
Project Title: "Who decides when the wells run dry"
- Explored 7 Groundwater Sustainability Plans (GSPs) for stakeholder equity and representation
- Developed maps in R to visualize groundwater basins and agency boundaries for context
- Presented final thesis project to 30+ students, faculty, and guests over zoom

COMMUNITY ENGAGEMENT & COLLABORATION

Water Policy Intern – Public Policy Institute of California (PPIC), San Francisco, CA (6/23 – 8/23)
- Collaborated with California water districts to improve PPIC's groundwater recharge survey
- Participated in meetings with users of groundwater including urban, ag, and domestic

Diversity, Equity, Inclusion (DEI) Committee Rep., UC Santa Barbara, Bren School (9/22 – 6/23)
- Summarized DEI findings in reports and presentations to the committee
- Hosted focus groups with students to gain feedback, address concerns, and enact positive changes

Hack2O Mentor Event, Exploring Water Data, UC Santa Barbara, Env. Studies Dept. (11/17/22)
- Mentored a group of four undergraduate students in a water data wrangling course
- Students used R to clean USGS water data and produce a figure for an analysis of their choice

Environmental Justice Symposium Flash Talk, UC Santa Barbara, Bren School (May 2022)
Presentation Title: "Challenges in Underserved Community Mapping Data in California"
- Presented environmental justice research findings to 30+ students, faculty, and guests
- Communicated complex data to a diverse audience
- Received a small award from an audience vote for best presentation

Community Engagement Coordinator, Gravity Water, Santa Barbara Chapter, CA (6/20 to 12/20)
- Engaged local businesses to raise funds for water systems in Nepal and Vietnam schools
- Developed and coordinated projects to successfully cultivate partnerships and raise funds

ADDITIONAL EXPERIENCE

Barista, Shift Leader – Coffee Bean & Tea Leaf, Santa Barbara Airport (2/18 to 3/20)
Lead Water Quality Monitor – UC Natural Reserve System, Coal Oil Point Reserve (6/19 to 9/19)

SKILLS

Data Analysis / Management / Visualization: R (RStudio), Python (Anaconda & Jupyter), ArcGIS Pro, ArcGIS Online Suite, SQL, HTML, Bash, GitHub
Languages: English (native), Spanish (Intermediate, actively working toward fluency)