# CLAIRE MADDEN

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#### **EDUCATION**

### Master of Environmental Science and Management (Expected June 2020)

The Bren School of Environmental Science & Management | University of California, Santa Barbara (UCSB)

Specializations – Water Resources Management & Environmental Data Science

Honors/Awards – Sustainable Water Markets Fellowship Recipient (\$43,257.50 awarded), Hagman Scholar

#### **Bachelor of Science in Community and International Development** (May 2016)

College of Agriculture and Life Sciences | University of Vermont (UVM)

Specializations - Ecological Economics, Food Systems, & Sustainable and Ethical Development Strategies Honors/Awards – Honors College Scholar, Cum Laude

#### RELEVANT WATER RESOURCES EXPERIENCE

Co-Project Manager & Finance Manager, Increasing Resilience Through Multi-Benefit Groundwater Recharge Client: Environmental Defense Fund (EDF) - Western Water Program, Santa Barbara, CA (4/19–5/20)

- Co-project manager working on building a decision support tool to assist Groundwater Sustainability Agencies throughout California in locating groundwater recharge projects in order to achieve multiple benefits
- Manage long-term project planning and scoping, assign tasks to ensure deadlines are met with a high quality of work, and facilitate communication between group members, advisor and client to ensure optimal outcomes
- Oversee quality control and all aspects of quality assurance in analytical techniques, implementation, results and interpretation as well as summarizing and reporting findings in both written and oral presentations

#### Water Data Analyst – AQUAOSO Technologies, Folsom, CA (Remote) (10/19–Present)

- Scrape and catalogue data included in Groundwater Sustainability Plans and prepare information to be used in economic risk analysis for farms in the Central Valley based on water demand and best management practices
- Write 3-page summaries of the information contained in 500+ page Groundwater Sustainability Plans including potential threats and opportunities related to implementation of a new groundwater management structure
- Estimate water budgets by crop type, parcel, water year, and water district, in order to further understanding of agricultural water risk and potential pumping restrictions impact on agricultural production

#### Graduate Student Researcher in Groundwater – The Bren School (UCSB), Santa Barbara, CA (6/19–12/19)

- Located, scraped, compiled, cleaned, and concatenated groundwater level monitoring data sets from 20+ countries around the world to facilitate a time series analysis of global changes in groundwater levels
- Wrangled 40+ individual datasets containing many millions of rows of data into a consistently formatted database containing records of groundwater level measurements for calculating a globally representative sample
- Performed spatial and statistical analysis using ArcGIS and RStudio to understand and visualize the relationship between the location of disadvantaged communities and dry domestic wells in California's Central Valley

#### **ADDITIONAL WATER PROJECTS**

## Study of the Legislative Process on Emerging Contaminants in the Water Supply (1/16-5/16)

Evaluated the political process for an emergent water contamination case in a policy memo. Interviewed 10 state legislators and a variety of stakeholders, and attended 20+ committee meetings and 16+ legislative hearings.

**Water Pollution Prevention Sustainable Development Project** (9/14–1/15)

Planned and executed a water quality testing and data analysis project in St. Lucia focused on outreach and education to mitigate causes of water pollution through integrated management and community stakeholder engagement.

#### ADDITIONAL EXPERIENCE

**Teaching Assistant – Department of Economics (UCSB)**, Santa Barbara, CA (1/19–4/19, 9/19–Present) **Paraeducator – South Burlington High School,** South Burlington, VT (9/17–6/18) Cheesemaker and Sensory Evaluation Coordinator – Shelburne Farms, Shelburne, VT (9/16–9/17)

#### SKILLS, ACTIVITIES, and ACCOMPLISHMENTS

Computing and Data Analysis: Microsoft Office (Word, PowerPoint, Excel), Google Suite, ArcGIS, RStudio Conferences: Sustainable Water Markets Symposium 2018 & 2019 (Presenter), River Network Colorado River Basin Water Trading Conference 2019, California Water Policy Conference 2019 (Presenter)