

# Brandon Welch

72B Bradley, Burlington, VT 05401  
(508)-930-0885  
brandonwelch7@gmail.com

## Education

### University of Vermont

Burlington, Vermont

Environmental Science with Eco-Design Concentration

August 2012- May 2016

---

## Relevant Experience

### Fairewinds Energy Education, Burlington, VT

#### Research Intern

August 2015-December 2015

- Conducted objective research involving the viability of continued use of nuclear-powered energy versus wind and solar in the terms of sustainability and economic advantages.
- Produced a soon to be published paper titled, "Nuclear Energy: An Analysis of Total Carbon Emissions and Total Cost of Ownership versus Renewable Technologies"

### UVM Horticulture Farm, Burlington, VT

#### Curator/Landscape Management/Construction Management

June 2015-August 2015

- Curated the multiple collections throughout the 110 acre property, managed the construction of multiple projects, and managed the landscaping of the entire property.

### EcoMachine, Burlington, VT

#### Water Analyzer/Data Collector

June 2014-August 2014

- Tested the water throughout the EcoMachines different filtration stages for multiple facets of water quality, such as dissolved oxygen, turbidity, pH, settleable solids, and current (amps) using a variety of calibrators.
- 

## Relevant Research/Projects:

### Fairewinds Energy Education

August 2015 - Current

- Collected, analyzed, and synthesized data concerned with CO2 emissions and cost of nuclear power plants versus alternative energy sources.
- In the peer review process of publishing the resulting paper - *Nuclear Energy: An Analysis of Total Carbon Emissions and Total Cost of Ownership versus Renewable Technologies*

### Ecological/Hydrological Restoration of an Unstabilized Gully

January 2016 - May 2016

- Created a list of specific goals and objectives, submitted an RFP, a planting plan, and budget which was presented to the Burlington Department of Parks and Recreation and approved.
- The proposal was carried out and 473 trees were properly distributed throughout the damaged ecosystem along with the installation of erosion mitigating terraces.

### Greening of Aiken Initiative

January 2015 - May 2015

- Created interpretive signage to label the Aiken Research Center and the basic functions of the EcoMachine

### Pollution Management through Air, Land, and Water

August 2015 - December 2015

- Analyzed the chemical composition of rainwater from the watershed surrounding Maple and Pine Street (Burlington, VT)
- 

## Achievements, Skills, and Interests

- Biked from Boston, MA to Portland, OR in 2016, Hiked the Long Trail in 2014
- Water Sampling, Water Analysis, Tree Plotting, Skilled Photographer, Event Coordination, MS Excel, Powerpoint, Word, Adobe Photoshop, Adobe Lightroom, Matlab, Solidworks, Web Page Design, Minor Automotive repair, Carpentry
- Analytical, Personable, Systems Thinker, Adaptable, Creative, Decisive, Communicative, Driven
- Extensive Backcountry Backpacking, Photography, Olympic weightlifting, Cycling, Cooking, Fly fishing