

## Christopher Bareither



---

**Email:** bareither@wisc.edu

**Advisor:** Craig Benson, Tuncer Edil, and Mort Barlaz (NCSU)

**Previous Education:**

BS in Geological Engineering at University of Idaho in 2004, MS in Geological Engineering at University of Wisconsin-Madison in 2006

**Program:** Geological Engineering

**PhD Project:**

Compression behavior and mechanisms of municipal solid waste in bioreactor landfills

**Research Focus:**

My research focus includes two primary directions: (1) scale comparisons of compression behavior of municipal solid waste (MSW) between field and laboratory and (2) identifying and separating mechanical and biological components of compression of MSW. In June 2007 a cylindrical lysimeter, 8-m-tall by 2.4-m-diameter, was filled with 27.2 Mg of MSW and instrumented to monitor total stress, settlement, temperature, liquid outflow, moisture content, and positive and/or negative pore pressure. In the laboratory, various sized compression cells, ranging from 64 mm to 300 mm in diameter, are instrumented and monitored for settlement, temperature, influent and effluent volumes, and gas generation and composition. In addition to the two primary directions of my research, an overarching objective of the project is to use data from all the various tests to compare predictive capabilities of existing MSW settlement models and generate sets of detailed model parameters for use in the landfill industry.

**Outside Interests:**

Engineers without Borders (El Salvador Project), running, soccer, snowboarding, skateboarding, and just about anything that gets me outside.