

Environmental Science Seminar
School of Public and Environmental Affairs
Thursday, January 26st at 4:00 p.m. in SPEA Rm 278

Presentation by:

Andrew Henderson, Ph.D.
Candidate for the Industrial Ecology/Life Cycle
Analysis Faculty Position in the School of Public and
Environmental Affairs

Title: Milk, Metals, and More: Integrating Life Cycle
Assessment, Water Treatment, and Sustainability

Abstract:

Being smart about sustainability requires a systems approach, such as that offered by Life Cycle Assessment (LCA). However, LCA requires a solid foundation in fundamental sciences to properly model the fate, transport, and effects of emissions. I will discuss case studies of ongoing work related to agriculture (for dairy) and metals to show the importance of such modeling for LCA. This macro-scale modeling is grounded in laboratory work related to groundwater remediation; in turn, this provides a starting point for developing new micro- and meso-scale approaches for sustainable water treatment.

Bio:

Andrew Henderson is a postdoctoral fellow in the Environmental Health Sciences Department in the School of Public Health at the University of Michigan (UM) in Ann Arbor. He received his Ph.D. in Environmental Engineering from the UM, where he studied alternative groundwater remediation approaches, particularly for treatment of heavy metals. His current work blends public health and engineering by aiming to improve treatment of non-organic compounds, like nutrients and heavy metals, in Life Cycle Impact Assessment.