

**The theory of the problem:** Experience based learning is a valuable tool in academia, but there are available opportunities that are not being utilized. There is a need to bridge the gap between what is learned in the classroom and how to apply that knowledge in the field. It is also necessary for instructors to have the support and resources needed to implement opportunities for students that go beyond the classroom. This is especially important for students of disciplines that involve considerable work in the field at the professional level, such as landscape architecture, engineering, and the natural sciences.

**The theory of change:** LandStudies, Inc. has designed and built nearly 100 green infrastructure sites in Pennsylvania, with approximately 30 located in the Lititz area (Lancaster County). We propose an academic learning platform that allows educators and students to experience these real-life projects through a hands-on healthy watershed tour. The tour is designed to support the study of watershed basics, restoration approaches and principals, and how they can be applied to meet regulatory and environmental goals. Tours are customizable to reach multiple academic disciplines and fit into existing coursework.

#### Tour Sites Demonstrate:

- Alternative stormwater management techniques
- Groundwater infiltration in karst geology
- Nutrient and sediment pollution reduction
- Water quality improvement to meet municipal MS4 and TMDL requirements
- Pollution reductions in accordance with the Chesapeake Bay Watershed Implementation Plan
- Increased stormwater attenuation to potentially reduce localized peak flooding

#### Tour Features:

- Quantified water quality and quantity benefits
- Ecological restoration with environmental and regulatory benefits
- Cost-benefit analysis for each project
- Comparison of various techniques
- Lessons learned

**The theory of action:** The first step in the effort is for RiverStewards and/or LandStudies to coordinate with faculty at institutes of higher education to discuss how the tours can be used as an academic learning platform to bring applied learning to their students. Existing connections at schools such as Millersville University, Elizabethtown College, Franklin and Marshall University, and others will help to get the first few faculty members onboard to act as a pilot for future tours. We will work with the faculty to outline the tour stops, define what their objectives for the tour are, determine how it can be incorporated into existing coursework, and choose the date and time. The tours will be financed through several means: existing funds set aside for the academic courses, a nominal fee to the school to pay for meals (if needed) and transportation (if school vehicles are not used), and grant funds and/or sponsorships sought out by RiverStewards. After a few tours have been given, LandStudies, RiverStewards, and SEI will work together to refine the process and reach out to new schools to gain their interest in a tour of their own.