



UNH Sustainability Institute

Sustainability Fellowship Stormwater Preparedness Amherst, MA

The Town of Amherst, MA, is a 27.7 square mile valley plateau surrounded by hills with a rich agricultural history and a diverse population of approximately 35,000. One aspect of climate adaptation that Amherst—like other communities across New England—is facing is the challenge of changing (and increasing) patterns of storm-water run-off. As more intense rainfall events become more frequent, cities and towns are faced with the need to update their infrastructure systems to accommodate these changing patterns.

The Stormwater Preparedness Fellow will work with the town's Department of Public Works, engineering staff and Sustainability Coordinator on an assessment for the Town, identifying infrastructure needs and adaptive strategies that will allow Amherst to ensure continuity of vital services and systems in the face of more frequent and intense rainfall events resulting from climate change.

Specific tasks will include the following:

- Identifying vulnerable areas/infrastructure within one to two sub-basins (e.g. drainage structures that need to be re-sized, etc)
- Researching tools and strategies employed by other communities for dealing with similar vulnerabilities. Identify existing resources to support such strategies.
- Developing specific recommendations for ameliorating these vulnerabilities (i.e., if system components need to be replaced, identifying and listing the specs for the replacement components)
- Creating a report documenting the vulnerabilities, recommended preparedness strategies, and resources available to support the recommended strategies
- Presenting findings and recommendations to internal and external stakeholders

This project provides an excellent opportunity to gain a real-world understanding of municipal infrastructure design, function, and challenges attributable to climate change. It is a chance to make a lasting and direct contribution to sustainability in Amherst—and, since this is a challenge that communities across New England are facing, a chance to develop materials and methodologies that other municipal governments can emulate.

Location: Town of Amherst

Time commitment: 40 hours per week, June 5-August 18, 2017

Compensation: \$6000 stipend

Desired Qualifications:

- An academic background in related field/s (e.g. civil/environmental engineering, planning, etc)
- An understanding of (and, ideally, experience working with) municipal stormwater design.
- Demonstrated ability and comfort in synthesizing complex systems.
- Excellent analytical and problem-solving skills.
- Strong communication skills.
- Strong GIS and other relevant technological skills

UNHSI Sustainability program eligibility:

Graduate students, exceptional undergraduate students, and recent graduates are eligible. We will encourage, but not require, an academic sponsor or reference for each fellow, and where possible we will ask that course credits are awarded.

Supervision, Training, Mentoring and Evaluation

This fellow will receive direct supervision from the Department of Public Works staff in coordination with the Sustainability Coordinator, as well as mentoring and extensive professional development offerings from UNHSI.

Fellows will be expected to participate in three MANDATORY events:

- A three-day, two-night orientation in Durham, NH, May 31st- June 2nd. Lodging and food are provided; Fellows are responsible for any associated travel costs.
- Midterm project presentations to UNHSI staff, faculty and relevant project partners (can be done remotely).
- A summative evaluation and feedback session at the end of their placement.

Apply by February 17th at www.sustainableunh.unh.edu/sustainability-fellows