



RHODE ISLAND GREEN INFRASTRUCTURE COALITION

NATURE AT WORK NEWS



Brian Kuchar with Horsley Witten Group reviews maintenance requirements with participants at the October 10 training in Roger Williams Park.

We often underinvest in infrastructure maintenance. As a result, roads, bridges, water and wastewater systems and other essential infrastructure are too often in poor condition.

Stormwater infrastructure is no exception. It takes time and money to map stormwater systems, regularly inspect pipes, look for illegal cross connections, clean catch basins and maintain the other components of the stormwater system. When the stormwater system is primarily underground, the lack of maintenance only shows up during storms when the system clogs, backs up and floods nearby streets. But when the stormwater system is a green infrastructure system, with gardens, swales and other above ground features, poor maintenance can result in overgrown, unsightly projects that quickly incite public complaints.

To better understand the challenges of green infrastructure maintenance, the Green Infrastructure Coalition organized a maintenance training at Roger Williams Park on October 10, 2017. The training was a partnership among the City of Providence Parks Department, URI NEMO and the Horsley Witten Group. Save The Bay and Groundwork Rhode Island were also key partners. Additional green infrastructure maintenance training was provided in October by the URI Coastal Resources Center/RI Sea Grant. These trainings were in Warwick and Newport on October 26 and 27 and were planned in partnership with the Cities and the University of New Hampshire Stormwater Center, as part of a National Fish and Wildlife project on coastal green infrastructure.



Jamie Houle with the University of New Hampshire Stormwater Center describes maintenance requirements for the new green infrastructure installation at the Newport Gateway Center.

Based on these trainings, the GIC has developed recommendations for improved maintenance:

1. GI projects should be designed with maintenance in mind. In fact, the people who will be responsible for the maintenance should be part of the design team.
2. Design the project knowing what types of maintenance equipment is available to the owner. For example, do not install a forebay that requires cleaning with a vacuum truck if the owner does not have this equipment. If the maintenance staff will rely on shovels, design the sediment collection area so that shovel cleaning is as easy as possible.
3. Design GI systems with easy to clean and effective sediment collection on the front end. Sediment clogs soil and limits the effectiveness of green infrastructure infiltration. Maintenance of the rain garden, swale, etc. will be much easier if sediment is regularly captured during routine trash pickups and mowing before it enters the features.
4. Engage the maintenance staff who will ultimately be responsible for the green infrastructure. Let them know where the green infrastructure installations are located and discuss maintenance with them. Adjust the maintenance requirements with their input.

5. Green infrastructure plantings will change over time. These are living systems and the plantings will evolve. Let them. But design the site and level of maintenance based on the location, preference of the owner and the public, and a realistic maintenance expectation. A more manicured look may be best for a highly visible public park, while a naturalized look with volunteer flowing “weeds” may be fine for low-use areas.

6. Public education is a key component of green infrastructure maintenance. Public acceptance – including understanding what healthy GI looks like across all seasons – is essential.

Maintaining green infrastructure is important as we build excitement for “Nature At Work” throughout Rhode Island. Stay abreast of this work by joining the GIC’s maintenance sub-committee! Contact Meg Kerr (mkerr@asri.org) for more information.

Nature At Work is a newsletter designed and distributed by the [Rhode Island Green Infrastructure Coalition](#) to bring more green space news to our cities and encourage the use of nature to clean, protect, and cool our neighborhoods. Because of climate change, we are seeing increased heat impacts in our city, especially where there are fewer trees, as well as issues with flooding and polluted runoff in our neighborhoods.

Meg Kerr is the Senior Director of Policy at the Audubon Society of Rhode Island and a founder of the the RI Green Infrastructure Coalition.

The Green Infrastructure Coalition is a collaborative of more than 40 non-profit organizations, businesses, and government agencies focused on using nature to reduce stormwater pollution. We develop projects to demonstrate the powerful role nature can play to create healthier urban environments. We promote policies to create sustainable funding for stormwater management and green infrastructure solutions. And we connect a wide range of partners to share lessons learned in the Providence Metro area and Aquidneck Island.