

Green Dream



Larry Levine

Green infrastructure
for municipal
& commercial
properties

Adding green infrastructure to commercial or municipal properties can have multiple benefits. *SWS* Managing Editor Mary Beth Nevulis spoke with Larry Levine, senior attorney for the Natural Resources Defense Council (NRDC) to learn how businesses can benefit from green infrastructure (GI).

Mary Beth Nevulis: What are some benefits that commercial or municipal properties can gain by installing GI?

Larry Levine: There is an array of benefits that a property owner can reap, ranging from increased rents and property values to energy savings, storm water fee credits and other financial incentives, and reduced infrastructure costs. NRDC found that in many cases, there are real dollar values that can be put on these benefits that add up to millions of dollars in savings for a property owner. Additionally, many municipalities around the country have ways to reduce storm water fees, either by reducing the impervious area or by using GI to capture runoff from the impervious area before it hits the sewer system. One example of this is Philadelphia, where you can avoid up to 80% of the fee by managing the first inch of runoff on site.

Nevulis: Where should a business or property owner start after making the decision to move toward GI, in both retrofits and new construction?

Levine: In new construction, you have the opportunity to build in design features from the start, which is the most cost-effective way to do it. One example NRDC found was a project to build a Whole Foods in Raleigh, N.C. If the project team had gone with traditional storm water management methods, it would have used up so much of the site area that they would not have been able to build the project with the square footage they felt it needed to be profitable. What they did instead is use a combination of a cistern for rainwater harvesting—the water from which then was used for internal

building water needs—and bioswales and other infiltration features that allowed them to devote less space on the site to storm water management. Designing around these concepts from the start made a difference to their bottom line.

For retrofits, there is a range of ways, from simple to elaborate, to use GI. Tree planting is at the simplest end of the range, and brings storm water and energy benefits. When a parking lot is being repaved, think about using permeable pavement, or bioswales along the perimeter or planted islands in the middle of the parking lot, as a way to give the runoff a place to go while also beautifying the property. Sometimes there are local incentives available for GI retrofits; for example, King County, Wash., will pay a builder 50% of the cost of the retrofit, up to \$20,000. Green roofs can provide insulation and also reduce heating and cooling costs and costs of an HVAC system.

Nevulis: What is your response to critics of GI?

Levine: A lot of GI is site-specific in the design considerations, and so it is important for a property owner to rely on qualified professionals to assess the options. More often than not, there are going to be viable options for GI on a property, but not every practice will work on every site. The underlying principal is to retain storm water on site wherever possible. If you do not have runoff, you do not have pollution in runoff. The concept of GI is really the concept of reducing the amount of runoff from a site; wherever you can do it will help protect water quality. **SWS**

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