



By Benjamin H. Grumbles

“A cynic is one who knows the cost of everything and the value of nothing,” wrote Oscar Wilde. When it comes to water infrastructure, we need more enthusiasm and less cynicism. Investing in these often unseen and chronically underappreciated community assets makes sense, saves dollars, grows jobs (somewhere between 20,000 and 46,000 per \$1 billion invested) and improves the quality of life.

There’s growing support for increased federal taxpayer investment in water infrastructure as part of economic stimulus and annual appropriations bills. That’s good news if it’s done right and focuses on sustainable methods and “green” infrastructure projects, as well as innovative public-private partnerships.

I hope the rush to invest more federal funds will not undermine the fiscal discipline, true-cost pricing and sustainability the country has been working so hard to strengthen since the Clean Water and Drinking Water State Revolving Funds were established decades ago, and since the U.S. Environmental Protection Agency (EPA) launched its sustainable infrastructure initiative in 2002. Sustainability isn’t just about money. It includes better management of existing assets (think “fix it first”), true-cost pricing for water/wastewater rates, water efficiency through efforts like EPA’s WaterSense program and more holistic, watershed-based approaches for wet-weather flows.

There should also be environmental safeguards—which some will undoubtedly call “green strings”—to ensure stimulus funds aren’t subsidizing growth or reducing the resiliency of watersheds and wetlands. In one form or another, green infrastructure projects should be part of an economic stimulus package itself or the implementation plan that follows.

What’s green infrastructure? Check out EPA’s website, www.epa.gov/waterinfrastructure to learn more about this growing green movement, which includes utilities, environmental organizations, citizens, businesses and governments. It involves using natural systems and practices to help or replace gray infrastructure to reduce sewer overflows, storm water runoff and the urban heat-island effect, as well as increase the beauty and livability of neighborhoods and cities.

At my request while I was EPA assistant administrator, Joe Superneau, the chair of the American Public Works Association’s Water Resources Management Committee, provided a list of potential barriers to greater use of green infrastructure:

Education. “There is a need to educate the public about the costs and benefits of implementing green infrastructure solutions, especially at a time when there is increased competition among worthy projects such as road/bridge repair or other municipal needs.” (EPA is spreading the word that low-impact development can save capital construction costs and has the numbers to prove it, but only in limited case studies and with an audience that is still relatively small.)

Lack of definition. Who will define key terms to help detail-hungry practitioners? (The EPA can and should only do so much.)

Economics, or “a lack of understanding of the long-term maintenance costs of implementing green infrastructure solutions. Private development installs a majority of infrastructure and is primarily profit-driven; there is a need to link this technology to profits.”

Lack of design standards. “Most current standards or design manuals that are adopted by municipalities do not yet support green solutions. Additionally, the technology and best management practices have not been time-tested.”

Leadership/champions. “Political leadership is not really interested in life-cycle or maintenance costs because these will be someone else’s problem.”

Acceptance/skepticism of green agenda. “There are trade-offs for installing green infrastructure solutions that may result in both benefits and detriments (e.g., porous/permeable pavements have rougher surfaces and may not be ideal for rollerblading but allow for infiltration and lower plowing costs in the winter).”

Regulatory enforcement incentives. “EPA regulators do not provide incentives to implement green storm water projects to reduce storm water runoff entering combined sewer overflow systems. Therefore, such projects are not given serious consideration by the engineers or the communities.” (I know EPA has made progress with this barrier in the last few years, but it needs to increase its efforts.)

This is a good list. All of us, including the new administration and Congress, have important and challenging work ahead. I’m confident the EPA will continue to play a big role in promoting the progress and partnerships of the last several years, but the key will be to tackle the challenges with an even greater degree of energy and innovation.

Working together, governments, businesses and citizens can create opportunities for and remove barriers to green infrastructure. That should be good news on the waterfront, as well as the job front, even for the skeptics and cynics. www

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Stimulating and Sustaining Green Infrastructure

Addressing potential barriers to increased implementation