# Tunnel Vision

By Derek M. Berg

One-dimensional storm water policy misses opportunity & limits innovation

Throughout our lives, we are taught that expanding our skills, maximizing our options and diversifying are good things. I suspect most would be hard-pressed to find anyone who has not been cautioned since childhood to avoid the potential for calamity that accompanies putting all of one's eggs in a single basket. Yet here we are, seemingly rational and well-educated storm water professionals, content to march down a narrow path with a singular focus.

I will be the first to raise my hand and state that the concepts of runoff reduction, low impact development (LID) and green infrastructure (GI) are sound and represent vital tools in our long-running fight against the perils of urban runoff. However, I cannot help scratching my head as I watch policymakers, environmental organizations, academics and other influencers strap blinders on and assume these concepts are the only tools we should even consider deploying.

One of the central goals of utilizing LID and GI is preventing and retaining runoff on site. This is an excellent strategy when it is feasible to do so, but the reality is there often are constraints, particularly in highly urban areas, that make retaining the entire water quality volume on site infeasible. It is of critical importance that we avoid mandating an LID/GI-fits-all approach to storm water policy, and instead collectively recognize that in instances where various site constraints make LID/GI impractical or even impossible, we need a well-vetted set of alternative solutions to manage and treat urban runoff. To succeed in the fight against storm water runoff, we need strong-but-flexible regulations to clearly define water quality goals, as well as a sound and thorough process to vet and identify BMPs capable of meeting those goals.

When prescriptive regulations mandate runoff be retained on site without providing flexibility or identifying solutions for situations when it is not feasible to do so, it paves the road to frustration and missed opportunity. When prescriptive standards make development on constrained sites impractical, developers are more likely to pursue projects away from urban areas where land is cheaper and constraints are less likely. This is a perfect recipe for sprawl, creation of new impervious surfaces and further degradation of receiving waters.

We should make onsite retention of runoff our first line of defense, but we also should define clear water quality treatment standards to which we adhere when onsite retention alone is not enough. We also should make every effort to encourage development in existing urbanized areas and preserve undeveloped suburban and rural spaces. Clear treatment standards must identify the pollutants of concern, and load reduction BMPs must be capable of protecting receiving waters. They also must identify a path for BMP evaluation and acceptance, ideally rooted in robust long-term field monitoring.

The Stormwater Testing and Evaluation for Products and Practices initiative being championed by the Water Environment Federation, U.S. Environmental Protection Agency and many other stakeholders may bring such a process to the national stage. In the meantime, localized programs like the state of Washington Department of Ecology's Technology Acceptance Protocol-Ecology provide a wealth of information on innovative BMP performance.

When we implement clear-but-flexible regulations, we expand our BMP toolbox, encourage innovation and investment in the next generation of BMPs, and most importantly, protect and restore receiving waters. SWS

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