

Small Things



By James Lenhart

Taking incremental steps toward major change

It probably is not news to you, but I think it is going to take a long time to clean up our polluted storm water runoff. In fact, some may argue that all the efforts we are taking are only slowing the process down instead of making a dent. After all, it took us a long time to screw it up and my guess is it will take much longer to fix it.

I am not aware of many studies done on a watershed scale showing long-term improvements in receiving water quality by the implementation of watershed scale storm water control measures over time. Sometimes I think improvement will be a differential process, one small differential step after another, incrementally improving water quality, imperceptible and immeasurable in the probabilistic world in which we live.

So I sometimes think about incrementally small things that we all can do. These small things start with our personal practices that keep pollutants out of the runoff altogether. They include the more obvious ones, like washing your car in the driveway and careful use of fertilizers and pesticides, and the not-so-obvious ones, like using a leaf blower to move the dust down the street versus sweeping it up and placing it in your green bin or in a place where it will not get in the runoff.

I am a victim of my profession. I find myself looking into catch basins, checking outfalls and mentally doing myriad small incremental improvements to the landscape to increase infiltration and

reduce pollutant generation. I recently noted that a particular department of transportation modified an intersection and placed a significant median in the roadway to allow for pedestrians and manage traffic. What struck me was that the entire median was surfaced with concrete. I question why, for a few dollars more, did they not place a perimeter drain using super pervious paver that drains into a gravel base? Clearly the pollutant load would be low, and almost 100% of the flow would be infiltrated ver-

“ Sometimes I think improvement will be a differential process, one small differential step after another, incrementally improving water quality ... ”

sus running over the edge of the curb and onto the pavement. This indicated to me that a simple mind-set and paradigm shift is needed to make the thought of con-

tinuous differential improvement, which has been used so successfully in manufacturing, part of how we consider the environment in all aspects of our designs.

Consider the whole notion of retrofit. In areas like the Chesapeake Bay, it is estimated that \$30 billion will be spent to (maybe) meet the regulatory requirements. How are we going to do that? Are we going to do classical, survey, P-design, permitting, F-design (plan, profile, specs, etc.), construction staking, as-builts, etc., which can be costly? **SWS**

James H. Lenhart, P.E., D. WRE, is chief technology officer - storm water for Cortech Engineered Solutions. Lenhart can be reached at jlenthart@conteches.com.