



Falling Into Place

Gaining perspective on storm water trends and tightening regulations

As storm water engineer for the city of Puyallup, Wash., Mark Palmer is responsible for implementation of the Phase II National Pollutant Discharge Elimination System (NPDES) permit issued by the Washington State Department of Ecology. Here he shares with SWS Managing Editor Elizabeth Lisican his opinions on storm water issues and trends close to his community and beyond.

Elizabeth Lisican: Describe your experiences implementing the Phase II NPDES Permit.

Mark Palmer: I joined the city of Puyallup as the storm water engineer during the third year of the current NPDES permit. The city's approach to implementation has been to spread the effort across many divisions, which has been very effective to date. Our education and outreach program has been successful—not only reaching a large audience with our message about low-impact development (LID) and rain gardens but also putting functional projects in the ground, making a positive, direct effect on storm water quality.

One trend I'm noticing is a move to more regionally coordinated efforts and cooperation. Our South NPDES Coordinators meeting, initiated by our planner Tim Parham, has been an important source of information sharing for typically short-staffed small municipalities.

Lisican: What are some of the most immediate challenges the industry is facing, and what are some opportunities?

Palmer: In the Puget Sound region, our biggest challenge is overcoming over 100 years of development that did not address storm water quality and quantity. To successfully rehabilitate Puget Sound, we must aggressively retrofit existing development as well as improve how we address storm water in new development. Until retrofitting including public roads—becomes a commonplace occurrence, we will be fighting an uphill battle.

One opportunity may be discovering that LID measures such as porous asphalt or pervious concrete might actually have a lower life-cycle cost than standard road construction through less storm water infrastructure, less waterproofing maintenance such as chip sealing, and a more durable road section through thicker, more conservative design.

Lisican: What storm water management goal is Puyallup currently working toward? What major projects are you focusing on?

Palmer: We have set a goal of "disconnecting" 9 million gal of storm water a year through implementation of LID projects throughout the city for the coming year. We're currently about one-third of the way there.

With the rain gardens installed already this year; two more neighborhood events planned for later this year; a porous maintenance road project in Clarks Creek Park; our Porous Alley Initiative; our 8th Avenue NW LID Retrofit Project; and some private projects coming on board, we should easily meet our goals in this area.

Lisican: What trends do you see developing as the storm water industry continues to evolve?

Palmer: One trend I've been seeing, which might come from more widespread enforcement of private storm water system maintenance, is the development of more storm water maintenance management companies providing a service for businesses, industry and residential developments required to maintain and report the maintenance levels to their local jurisdiction.

While not typically onerous, most of these organizations are not in the primary business of maintaining storm ponds—and don't want to be. They will be seeking out companies that can help them fulfill their requirements cost-efficiently. **SWS**

Mark Palmer is storm water engineer for the city of Puyallup, Wash. Palmer can be reached at mpalmer@ci.puyallup.wa.us or 253.435.3606.

Elizabeth Lisican is managing editor of *Storm Water Solutions*. Lisican can be reached at elisican@sgcmail.com or 847.391.1012.

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