

Improving water quality for multiple benefits

June 2017 Snapshot

Is it possible to make a pretty nice downtown area even nicer, all while making the water cleaner? That's just what a new study by The Riley – Purgatory – Bluff Creek Watershed District sets out to do.

The *Downtown Chanhassen BMP Retrofit Assessment*, paid for by a BWSR Clean Water Fund Accelerated Implementation Grant, gives the city and the Watershed District ideas for places to build stormwater treatment features in the existing downtown area. Known as retrofits, these features are inserted into streets, parking lots, and boulevards with a primary goal of reducing pollution to downstream Rice Marsh Lake and Lake Riley in Chanhassen and Eden Prairie. Retrofits are important for downtown areas like Chanhassen because they add stormwater treatment in areas that don't have space to build traditional treatment facilities like ponds.

Retrofits – and example of which could involve the re-design of an entire streetscape – often use special soil mixes and plants to improve filtration and reduce runoff. But these practices are not just for clean water. Raingardens, tree trenches, and stormwater planters can add biodiversity and habitat for pollinators, provide shade for parking lots and sidewalks, and improve the overall aesthetics of the area while providing traffic calming, adding places to sit, and generally drawing people in. Permeable pavement and underground storage combine parking areas and stormwater treatment in a way that a pond just can't do, giving multiple benefits on valuable real estate. The assessment also suggests stormwater re-use to save energy and conserve valuable drinking water, and enhancing the existing stormwater ponds with iron-enhanced sand to absorb soluble phosphorus, one of the main water quality culprits. Public education is threaded throughout, helping people connect with water as they move through the city.



The idea behind the assessment is that as the City continues to grow and change, redevelopment and street reconstruction will provide opportunities to enhance water management as infrastructure is re-built. This will require the City and the Watershed District to continue working together and with developers to identify potential projects that can benefit water. The assessment identifies potential funding sources and a framework for evaluating BMP locations as opportunities to insert water management in re-development and street reconstruction arise.

“We just completed the assessment this spring, and it's already helped us identify three places we can improve stormwater management in downtown Chanhassen,” said Claire Bleser, RPBCWD Administrator. “This is a great technical resource for targeting projects in a priority area, and it also helps us communicate with our partners about our vision for improving the downtown area as we work to make the District's lakes cleaner.”