

Stormwater Utilities: Benefits and Possibilities

Does your community need increased funding for stormwater issues?
What is this nationwide craze called a stormwater utility?

What is Stormwater? Stormwater is runoff from rain or snowmelt that runs off impervious surfaces such as rooftops, paved and gravel roads, driveways, parking lots, and other hard surfaces storm drains. Along the way, this runoff picks up debris, sediment and pollutants such as oil and grease, harmful bacteria, fertilizers, toxic chemicals, and other contaminants that are harmful to both people and aquatic life. A common misconception is that water running off of streets and into storm drains goes directly to a wastewater treatment plant. This is not the case in the majority of our separated storm sewer systems. From the storm drains, the runoff flows directly into our streams, lakes, rivers, and wetlands. In addition, impervious surfaces increase the amount of stormwater runoff, which can result in stream channel erosion downstream and the release of nutrient laden sediment to downstream surface waters.

What is a Stormwater Utility? A stormwater utility is a user fee that pays for maintenance, improvements to the stormwater drainage system and other stormwater program activities. This fee is similar to other utility fees for water and sewer. Just as residences and businesses pay a fee for the amount of water they use and the amount of wastewater they discharge, a stormwater utility charges property owners based on the amount of stormwater generated on their property.

Stormwater Utility Fees. The City of South Burlington formed Vermont's first stormwater utility in 2005 to provide dedicated funding for its stormwater management program. This funding is provided through the stormwater user fee that all developed properties in South Burlington pay. The fee is based on the amount of impervious surface (e.g., rooftop, driveway, roadways, etc.) located on the property. The more impervious surfaces a property has, the more stormwater runoff it generates, thereby placing an increased demand on the stormwater system.

The square footage of impervious surface on a property is determined using a careful analysis of satellite imagery. In order to determine the fee, the total impervious area is divided by the Equivalent Residential Unit, or ERU. An ERU is the average impervious area on a residential property; in South Burlington, this value is calculated to be 2,700 square feet. Properties classified as "single-family residential" are charged a flat fee. As of July, the annual fee was \$78.48 for single-family homes, \$39.24 for duplexes, and \$26.16 for triplexes. All other developed property (e.g., condominiums, businesses, institutions, and government) is assessed a fee based on the actual amount of impervious surface on the property. The stormwater utility user fee is included with the sewer and water bills that are sent each quarter to all developed properties in the city.

Benefits of a Stormwater Utility. Revenue generated by a stormwater utility can be used as a new, dedicated source of funds to supplement or replace a community's current stormwater management funding, allowing tax-based funding to be used for other purposes. This constant and sustainable revenue which increases with the community's growth, permits municipal stormwater programs to operate on a stable basis to support staff, maintain existing infrastructure, and adopt long-term planning for capital investments, maintenance enhancement, and public education and outreach. In

addition, stormwater utilities share the costs of stormwater management among the users of the stormwater system more equitably than a property tax-based system, and increase the number of properties that fund the stormwater management system by including tax-exempt properties.



Street sweeper, City of South Burlington

Through incentive programs that reduce user fees, a stormwater utility can promote improved stormwater management by using green stormwater infrastructure and low impact development practices. Stormwater utilities can engage the community through various outreach and education projects that increase the public's knowledge of how stormwater pollutes, how green stormwater treatment practices work, and what community members can do to help.

Communities with stormwater utilities are financially better able to comply with the specific permit conditions contained in their Municipal Separate Storm Sewer System (MS4) permits and/or other applicable federal National Pollutant Discharge Elimination System (NPDES) permits. Communities with stormwater utilities can provide the long-term and strategic planning required by environmental regulations like the Lake Champlain Phosphorus TMDL (total maximum daily load) and the Stormwater Impaired Stream TMDL promulgated by the U.S. Environmental Protection Agency and State of Vermont Department of Environmental Conservation. Finally, a stormwater utility can provide dedicated funding to address stormwater issues specific to the community it serves, such as water quality impairments, repairing and replacing aging infrastructure, and flood control.

Inter-Municipal Stormwater Management Agreements. Last summer, the South Burlington stormwater utility entered into an inter-municipal stormwater agreement with the Town of Shelburne. Tom DiPietro, South Burlington’s Deputy Director of Public Works, and Chris Robinson, Shelburne’s Water Quality Superintendent, recently discussed this agreement at the Vermont Town and City Management Association fall conference.

DiPietro said that the agreement benefits South Burlington by allowing more efficient utilization of its equipment – its street sweepers, for example, are parked for much of the year. Shelburne helps pay for the stormwater utility’s equipment – including street sweepers, a vacuum truck, excavators, a dump truck, pickup trucks, and myriad mowers and attachments – thereby allowing South Burlington to hire additional staff. The agreement also allows South Burlington to share the expertise it has learned in the 11 years the utility has been functioning and improve the coordination between neighboring municipalities. “Watersheds cross political boundaries,” said DiPietro. “Municipalities need to work together to find the most effective solutions.”

The agreement allows Shelburne to forgo adding staff and equipment and provides an opportunity to partner with an industry leader while retaining local control. South Burlington supplies Shelburne with equipment and a labor force, as well as technical expertise in permitting, design review, and management policies. “It’s the economy of scale,” said Robinson. “Why reinvent the wheel?”

Shelburne is working to develop similar policies and procedures that mimic those of South Burlington. This work will set the stage for a potential transfer of stormwater management responsibilities to South Burlington’s stormwater utility. This will involve developing regulations, inspection reports, and annual reporting, among other management considerations. The current, more limited agreement was approved by the Shelburne Selectboard and the South Burlington City Council. According to Robinson, Shelburne will need to get community buy-in for a full transfer in the future.

Conclusion. Management of stormwater runoff has become an increasingly important responsibility for local governments. More and more, communities across the nation are examining the option of stormwater utilities to fund comprehensive stormwater management. Recently enacted federal and state stormwater regulations, combined with aging drainage infrastructure, are compelling local governments to develop and implement creative stormwater management solutions and funding mechanisms.

More information about South Burlington’s stormwater utility is posted at <http://sburlstormwater.com/>. The inter-municipal stormwater agreement between South Burlington and Shelburne is posted [here](#).

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