



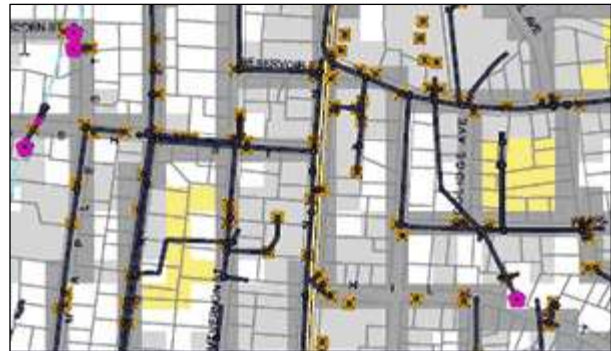
Stormwater Utilities: Funding Municipal Stormwater Programs

As the challenges and costs of managing stormwater continue to grow, many communities across the state and throughout the country are exploring stormwater utilities as a sustainable option for funding their stormwater management programs.

There are over 1,200 stormwater utilities nationwide, and in 2008, municipalities in New Hampshire were given legal authority to form stormwater utilities under [RSA 149-I](#). Under the statute, stormwater utilities must address flood and erosion control, water quality management, ecological preservation, and annual pollutant loads contained in stormwater discharges.

How Does a Stormwater Utility Work?

A stormwater utility generates funding through user fees that are typically based on the impervious surfaces (e.g., roofs, roads, driveways, parking lots) of each property within the stormwater utility district. Revenues generated from the user fees are placed in a dedicated fund to implement a stormwater program that directly supports maintenance and upgrades of existing storm drain systems, development of drainage plans, flood control measures, and water quality programs that service the users.



An example of a municipal stormwater drainage network shows the catch basins, pipes and outfall locations of the stormwater system.

Stormwater utilities are similar to the dedicated municipal funds for public water and sewer utilities. The funding from stormwater utilities can be used for catch basin cleaning, street sweeping, stormwater infrastructure upgrades, and a variety of other stormwater management activities, in addition to the administrative costs of running a stormwater program.

Benefits of a Stormwater Utility

- **Dedicated Funding Source**
Revenue generated by a stormwater utility can be used as a new, dedicated source of funds to supplement or replace the community's current stormwater management funding, enabling tax-based funding to be used for other community needs.
- **Sustainable Revenue**
Revenue generated by a stormwater utility is based on user fees and provides a constant, sustainable funding source that increases with the community's growth. Sustainable funding allows 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 staff development.

- **Shared Cost**
A stormwater utility more equitably shares the costs of stormwater management among the users of the stormwater system than a property tax-based system, and increases the number of properties contributing funding of the stormwater management system by including tax-exempt properties.
- **Improved Watershed Stewardship**
Through incentive programs that reduce user fees, a stormwater utility encourages better stormwater management, such as the use of low impact development practices (LID).
- **Facilitation of National Pollutant Discharge Elimination System (NPDES) Compliance**
Communities with a stormwater utility that are regulated under the Federal NPDES Stormwater Permitting Program are, financially, more readily able to comply with the specific permit conditions contained in their Municipal Storm Sewer System (MS4) Permits.
- **Address Existing Stormwater Issues**
Stormwater utilities provide dedicated funding to address the following stormwater issues and many more:
 - Flooding – New Hampshire is experiencing more frequent, significant rainfall events that have resulted in significant flooding and damage to infrastructure.
 - Water Quality – In New Hampshire, over 80% of the surface water quality impairments on the 2010 303(d) list of impaired waters are due, at least in part, to stormwater pollution.
 - Aging Infrastructure – Much of the stormwater infrastructure, e.g., pipes, culverts, and catch basins have been in the ground for more than 100 years and are in need of repair or replacement.

New Hampshire Stormwater Utility Feasibility Studies

In 2009, the New Hampshire Department of Environmental Services (NHDES) Watershed Assistance Grants Program provided funding from Clean Water Act Section 319 funds from the USEPA, for studies in Dover, Portsmouth, and Nashua to determine the feasibility of stormwater utilities as a funding source for their municipal stormwater programs. Feasibility studies help a municipality determine if pursuing a stormwater utility approach to funding is appropriate.



Feasibility studies and final reports are available from Dover, Nashua and Portsmouth. Contact Deborah Loiselle at Deborah.loiselle@des.nh.gov or (603) 271-1352.

Before beginning a feasibility study, a municipality can conduct a Does It Make Sense (DIMS) study. A DIMS study is a quick and low-cost exercise to determine if it makes sense to begin the process of stormwater utility development. In general, a DIMS study gathers and discusses the following information from municipal officials:

- Current stormwater-related activities and costs.

- Problems, issues, and needs.
- Program priorities necessary for change.
- Potential future costs.
- Ability to generate revenue and the advisability of a stormwater user fee.

If it is determined that it does make sense to pursue a stormwater utility, the next step is a more detailed feasibility study. A feasibility study typically involves the following steps:

- Development Workshops to involve municipal staff, elected officials, citizens and other partners in the process of identifying problems with the current stormwater program, needs for a future program, as well as to brainstorm advantages and disadvantages of adopting a stormwater utility. Involvement of key players early in this process allows for their input to be considered in subsequent steps and results in a higher likelihood of success.
- Stormwater Program Analysis and Planning to analyze the current stormwater program and envision a future stormwater program managed under a proposed stormwater utility.
- Compelling Case Development to identify advantages and disadvantages of adopting a stormwater utility.
- Education and Outreach Strategies to develop a plan for stormwater utility outreach with messages and methods to address barriers and achieve buy-in.
- Rate Methodology to identify data sources, data gaps and potential sources to fill the gaps.
- Rate Structure Analysis to provide a cost/revenue analysis using a range of proposed, potential utility rates and to identify what the rates will be based on (e.g., impervious area, land use, credit allowances)
- Billing Methodology to investigate billing system options and potential issues related to billing.
- Final Recommendations on whether it makes sense to pursue a stormwater utility.



Imagery and parcel data is used to create impervious surface maps, which are used to establish the rate methodology and fee structure.

Stormwater Utility Implementation

There are currently no stormwater utilities in place in New Hampshire; however, in 2009, the NHDES Watershed Assistance Grants Program provided funding from EPA Clean Water Act Section 319 funds to the City of Manchester to develop a plan for stormwater utility implementation. There are examples of

successful stormwater utilities in our neighboring New England states and many more across the country.

Typically, implementation of a stormwater utility involves the collection of user fees and credits or incentives for better stormwater management.

User Fees

Municipal stormwater utilities establish dedicated funds for stormwater based on user fees that range from as little as \$2.00 up to \$20.00 per month. User fees can be a flat rate for a given land use (e.g., residential), or can be based on an equivalent residential unit or ERU. An ERU is the median amount of impervious area on all single family parcels in the municipality. Often, single-family residential properties will be divided into tiers to be more equitable and cost-effective. A tiered approach based on 1 ERU = 2,400 square feet of impervious surface may look like this, for example:

Tier Type	Amount of Impervious Area (in square feet)	Number of ERUs
Small	< 1,800	0.67
Medium	1,801 – 3,200	1.00
Large	> 3,200	1.67

If a municipality sets a \$4.00 per ERU residential rate:

- A small property with 1,700 square feet of impervious cover would pay:
User fee = \$4.00 x 0.67 = \$2.68 per month or \$32.16 per year
(rate per ERU) (# ERUs)
- A medium property with 2,800 square feet of impervious cover would pay:
User fee = \$4.00 x 1.00 = \$4.00 per month or \$48.00 per year
(rate per ERU) (# ERUs)
- A large property with 3,300 square feet of impervious cover would pay:
User fee = \$4.00 x 1.67 = \$6.68 per month or \$80.16 per year
(rate per ERU) (# ERUs)

Credits and Incentives

Stormwater utilities can offer credits, such as reduced utility fee, for property owners that operate and maintain source controls or stormwater best management practices, such as a rain garden, on their properties to reduce the impact of stormwater runoff. Examples of credits are included with the example stormwater utilities below.

Users benefit from the reduction in fees and the improvement in stormwater management benefits the receiving waters throughout the watershed.



A rain garden is installed in the New Hampshire seacoast.

Example Stormwater Utilities in New England

Reading, Massachusetts Stormwater Enterprise Fund

ERU	= 2,552 square feet
Fee	Residential (single and duplex): flat fee of \$10 quarterly or \$40 annually. All Other Properties: \$39.84/ERU annually.
Credits/ Abatement	Residential and non-residential abatements up to 50% of total assessment for runoff – reduction and state-of-the-art stormwater treatment.
More Information	Reading Stormwater Abatements

Newton, Massachusetts Stormwater Utility

ERU	= 3,100 square feet
Fee	Residential: \$6.25/ERU quarterly or \$25.00/ERU annually. All Other Properties: \$37.50/ERU quarterly or \$150.00/ERU annually.
Credits/ Abatement	Residential and non-residential credits for on-site stormwater management systems and stormwater quality treatment. Elderly discount: reduced rate of \$4.38/ERU quarterly or \$17.52/ERU annually.
More Information	Newtown Impervious Rates

Lewiston, Maine Stormwater Utility

ERU	= 2,900 square feet
Fee	Residential (single family): flat fee \$40.00 annually. Residential (duplex): flat fee \$60.00 annually. All Other Properties: base rate of \$40.00 for the first 2,900 square feet of impervious cover plus \$0.045 per square foot for each additional square foot over 2,900, annually.

Credits/ Abatement City Stormwater System Impact Credits and Permit Improvement Credits.

More Information [Lewiston Stormwater Utility](#)

South Burlington, Vermont Stormwater Utility

ERU = 2,700 square feet

Fee Residential (single family, duplexes, triplexes): flat fee \$4.50 monthly.
All Other Properties: fee based on the amount of impervious cover.

Credits/ Abatement Up to 50% credits for qualifying non-single residential properties for:

- Properties that construct and maintain Stormwater Treatment Practices (STPs) as defined in the Vermont Stormwater Management Manual.
- Public and private schools that educate and inform their students about the importance of stormwater and water quality.
- Municipal separate storm sewer systems that comply with the MS4 permit issued by the State of Vermont. In addition, non-single family residential properties (non-MS4 supporting entities) that, due to federal requirements, perform best management practices (BMPs) specifically intended to reduce impacts on non-point source stormwater runoff and/or provide an ongoing public benefit related to stormwater management are also eligible to receive this credit.

More Information [South Burlington Stormwater](#)

Resources/Links

- [Stormwater Utility Enabling Legislation](#)
- [New Hampshire Legislative Commission to Study the Issues Relating to Stormwater](#)

**NH Stormwater Utility Feasibility Studies Lessons Learned:
Don't Assume Anything**

In 2009, the NHDES Watershed Assistance Grants Program provided funding from EPA Clean Water Act Section 319 funds for studies in Dover, Portsmouth and Nashua to determine the feasibility of stormwater utilities as a funding source for their municipal stormwater programs. Feasibility studies help a municipality determine if pursuing a stormwater utility approach to funding is appropriate. The results of the studies and the experiences of the participants were documented throughout the process. Summaries of the lessons learned include:

1. **Involve the Public:** The public must be involved from the very beginning. They should have the opportunity to learn about how a stormwater utility works, be able to ask questions, and voice concerns in order to make an educated decision on whether or not they think a stormwater utility is a good option for their municipality. Without public support, it is very unlikely that there will be the political support to pursue and approve a stormwater utility.

- Invite the public, including the highest potential rate payers, to informational meetings and to participate on utility working groups.
 - Encourage early involvement in establishing that there is a stormwater funding need before the actual funding method is determined.
2. Ensure Political Understanding and Support: It is essential that municipal decision makers fully understand the purpose and function of a stormwater utility in order to be able to speak about it to their constituents and answer any questions that arise. Open communication between the public and political leaders about a stormwater utility is necessary in order for both parties to feel confident supporting it.
 - Have a meeting with the local press up front to explain the program and identify gaps in information.
 - Include local decision makers in on determining the best way to fund a stormwater program.
 - Continuously identify additional stakeholders for outreach efforts.
 - Ensure all supporters communicate why they support the stormwater utility and invite them to speak at public forums.
 3. Provide Real Numbers and Full Disclosure: In order for the public to better understand how they would be personally impacted by a stormwater utility fee, actual examples of rates based on various rate structures should be developed and available for public review.
 - Make the rate structure, potential revenue from fees, tax offset, potential fee abatement, and other economic factors public and easily available.
 - Don't base your program costs or needs on hypothetical situations.
 4. Identify and Communicate the Need: It is important to identify and communicate local stormwater needs that could be funded with revenue from a stormwater fee. Highlighting examples of potential fixes to ongoing stormwater concerns focuses on the solutions.
 - Make messages about impacts *from* stormwater, not stormwater.
 - Present a compelling case related to local issues or concerns.
 5. Consider Timing: During a stormwater utility feasibility study, use the process to identify the best time to move forward with getting approval. Be flexible and respond to external factors.
 - If there is a stormwater or flooding problem the funding will help fix, identify and respond to related events.
 - If program costs are based on draft permit requirements, wait for the final permit to come out.
 - Consider elections and the best time for incumbents or candidates to support the funding program.
 - Consider the local economic situation and avoid recent downturns.
 6. Don't Assume Anything: No matter how aware your community is about stormwater and how much support appears to exist, do more communication and outreach than you think you need to.

Contact Us

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