City of Dover, NH

Ad Hoc Committee to Study Stormwater and Flood Resilience Funding

Findings & Recommendations Report

January 2022

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Prepared for:
City of Dover, NH Mayor and City Council

Prepared by:
The City of Dover, NH Ad Hoc Committee to Study Stormwater and Flood Resilience Funding

January 2022

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Acronyms

BMP: Best Management Practice
CIP: Capital Improvement Program
CWP: Center for Watershed Protection
EPA: US Environmental Protection Agency
ERU: Equivalent Residential Unit
FEMA: Federal Emergency Management Agency
IA: Impervious Area
MFR: Multi-family Residential
MS4: Municipal Separate Storm Sewer System
NCHP: New Hampshire Department of Environmental Services Coastal Program
NEEFC: New England Environmental Finance Center
NHCFR STAP: New Hampshire Coastal Flood Risk Science and Technical Advisory Panel
NHDES: New Hampshire Department of Environmental Services
NSFR: Non-single Family Residential
P3: Public-Private Partnership
PREP: Piscataqua Region Estuaries Partnership
SAFE: Secure, Adequate, Flexible, and Equitable
SFR: Single Family Residential
SLR: Sea-Level Rise
UNHSC: University of New Hampshire Stormwater Center

Glossary of Terms

Credit: A reduction in the amount of a stormwater and flood resilience utility fee charged to the owner of a particular property.

Equitable funding: Funding that is generated fairly. For example, individuals and entities contributing financially to City services have equal opportunity to receive proportional benefit from those City services. Additionally, any costs imposed on individuals or entities as a result of actions they have taken that necessitate City services should be directly related to the City's cost of providing such services.

Equivalent Residential Unit: A stormwater and flood resilience utility billing unit for the amount of stormwater runoff generated from the impervious area of the average single family residential property

in the City. It is a measure that serves to compare runoff generated by different types of properties. In Dover, 1 ERU = 3,430 square feet.

Impairment: Waters are assessed as impaired when an applicable federal water quality standard is not being attained.

Impervious area: Areas which prevent or impede the infiltration of stormwater. Common impervious areas include, but are not limited to, rooftops, buildings or structures, sidewalks, walkways, patio areas, driveways, parking lots, and other surfaces which prevent or impede the natural infiltration of stormwater runoff which existed prior to development.

Flood resilience: The ability of the City or stormwater system to proactively prepare for and bounce back (better) from hazardous events such as extreme precipitation, coastal storms, and long-term sea-level rise and associated flooding, rather than simply react and respond.

Non-single family residential property: A developed property that is not a single family residential property as defined herein including, but not limited to, such property as commercial and office buildings, industrial and manufacturing buildings, apartment buildings and other multi-family residential properties, and any other form of use not otherwise mentioned which is not a residential property, and which has private parking lots and private drives or roads.

Single family residential property: A developed property which serves the primary purpose of providing a permanent dwelling unit to a single family.

Stormwater and flood resilience utility: A dedicated funding mechanism to pay for a community's stormwater management and flood resilience activities. Much like an electric, gas, water, or sewer utility, the stormwater and flood resilience utility assesses a user fee based upon a measurable factor: how much stormwater runoff a property generates. Therefore, the fee is determined by assessing how much impervious area, such as rooftops or pavement, is on a property.

Stormwater runoff: Rainfall or meltwater that travels across natural lands or developed surfaces (i.e. impervious area).

Tax-exempt property: Specific types of properties that are not required to pay property taxes, including but not limited to, federal, state and municipal lands; faith based organizations, charitable organizations, and other nonprofit organizations.

1. Introduction

1.1 Background

The City of Dover, NH is home to over 30,000 people; enjoys a wonderful location among the Bellamy, Cocheco, Salmon Falls, and Piscataqua Rivers; and has a vibrant downtown. Because Dover is surrounded by a multitude of natural resources, the need for effective stormwater management is understandably high. Stormwater runoff, otherwise known as rainfall or meltwater that travels across rooftops, roads, parking lots, and other impervious surfaces, picks up and carries pollution, which ends up in local water bodies such as Willand Pond and the Great Bay Estuary, as well as groundwater aquifers that are used for drinking water. Heavy rainfall in the state has increased over the last several decades and is projected to continue increasing in frequency and intensity (NHCFR STAP 2019). Heavy rainfall can lead to excess stormwater runoff, which can also overwhelm the capacity of the City's storm drains and put public health and safety at risk due to inundated roads and public and private property. For example, the City has identified 24 critical facilities and transportation assets worth over $78 million in high flood risk areas alone (City of Dover 2018).

To reduce the risk of flooding and impacts to water quality, the City operates and maintains an extensive stormwater management system. Maintaining, operating, and constructing upgrades to this system is expensive and represents a significant, ongoing, and increasing cost to City taxpayers. Funding needs are also increasing due to aging and undersized infrastructure, increasing development and impervious surfaces, increasing flood risk, and regulatory requirements. As highlighted in Sections 3.3.2 and 3.3.3, Dover already has a growing list of deferred stormwater and flood resilience projects due to insufficient funding. Insufficient funding forces deferred action on projects, which can lead to those project costs growing. Immediate investment in stormwater and flood resilience infrastructure is necessary to avoid costs becoming insurmountable. The average residential property owner currently contributes approximately $58.04 from their property taxes to the Stormwater Program, but this amount would increase substantially if the stormwater management and flood resilience continues to be funded by the General Fund.

Thus, In August 2020, the Mayor and City Council adopted a resolution (R-2020.08.12-130) establishing the Ad Hoc Committee to Study Stormwater and Flood Resilience Funding (Committee) to investigate, study, and identify and make recommendations to the City Council concerning various funding opportunities that may exist with respect to existing needs and future stormwater and flood resilience management planning. The City Council Resolution establishing the Committee is available in Appendix A. Recognizing the importance of having a wide range of stakeholders with diverse perspectives participate in this process, Committee members were appointed with balanced representation from business owners; professional engineers; developers; commercial, residential, and tax-exempt property owners; and representatives of environmental advocacy interests, programs, and organizations. The Committee includes the following members:

- Bill Baber
- Raymond Bardwell
- David Degenais
- Marcia Gasses
- Eric George
- Paul Geraci
- Stephen Haight
- Vincent Hayes

- Chad Kageleiry
- Allan Krans
- Kenneth Mavrogeorge
- Jan Nedelka
- Otis Perry
- Cynthia Walter
- Dennis Shanahan (Chairperson; Council Liaison; ex-officio, non-voting)
- Peter Driscoll (ex-officio, non-voting)
- Gretchen Young (Staff Liaison; ex-officio, non-voting)

The Committee also received staffing support from the New Hampshire Department of Environment Services Coastal Program (NHCP), the Piscataqua Region Estuaries Partnership (PREP), the University of New Hampshire Stormwater Center (UNHSC), and the New England Environmental Finance Center (NEEFC).

The Committee held 14 meetings from November 2020-January 2022 to assess current and future stormwater management and flooding challenges, analyze the related cost of services, explore numerous funding options, and identify a potential funding solution that is sustainable, fair and equitable. Meeting minutes and recordings of each meeting can be found in Appendix B.

1.2 Purpose and Intended Use of Report

This Findings & Recommendations Report reflects the input and discussion generated during the Committee's 14 meetings. During the Committee meeting on September 27, 2021, the Committee voted 6 - 4 in favor of developing this report to the Mayor and City Council with the recommendation that they consider establishing a stormwater and flood resilience utility because it is the most equitable and practical option available. During the Committee meeting on January 10, 2022, the Committee voted unanimously (11 - 0) to approve this report and the recommendation for the City to consider pursuing a stormwater and flood resilience utility.

Similar to other common utilities based on use or impacts (e.g., water, sewer, electricity, etc.), stormwater and flood resilience fees are based on impervious area of each property, a proven surrogate for stormwater impacts (CWP 2003; PREP 2018). The Committee recognized that increasing costs for stormwater management and flood resilience cannot be met solely through supplemental funding sources such as grants and development fees, and repeated bonding would substantially add to debt service fees and weaken City bond ratings. Also, adequately funding the Stormwater Program through the General Fund would require a substantial increase in property taxes and/or reallocating General Funds away from other City services and programs. Since stormwater runoff and flooding impacts all property owners, a utility is a method by which everyone shares in expenses and benefits of stormwater management and flood resilience.

Although the Committee voted to recommend pursuing a stormwater and flood resilience utility, there are many details related to the development of a utility that require additional careful consideration. Furthermore, the Committee recognizes that decisions on these details and considerations require careful deliberation and feedback from the public and other stakeholders outside of the Committee in order for any proposed utility to be successfully implemented and effective. The importance of outreach must not be underestimated. New Hampshire municipalities that pursued a utility in the past did not dedicate the necessary time and resources to education and outreach, and as a result, utilities

were rejected amid public opposition. Lessons learned from these previous efforts are summarized in Section 4.7.

Thus it is important to note that this Report does not contain all of the answers to establishing a stormwater and flood resilience utility, but rather makes a case that the City should further pursue a utility based on the anticipated benefits.

2. Dover's Stormwater Program

Although Dover has a history of being proactive when it comes to stormwater, the current Stormwater Program budget alone falls short of the funding needed to address all of the City's stormwater management and flood resilience responsibilities. This section provides an overview of the various duties assigned to the Stormwater Program, the cost associated with these services, and unavoidable future increases in costs. More information on the impacts of stormwater runoff and how the City manages stormwater is available within the materials for Committee meeting #1 in Appendix B.

2.1 Stormwater Program Elements

The Stormwater Program is responsible for operating and maintaining an extensive public stormwater system, comprised of the following infrastructure assets:

- 65 miles of closed drainage pipe
- 101 miles of open drainage
- 450 stormwater discharge locations
- 140 culverts
- 100 drainage manholes
- 3,200 catch basins

Specific duties related to stormwater infrastructure maintenance include annual catch basin cleaning, illicit discharge detection and elimination, and responding to emergency resident service calls.

In addition to infrastructure maintenance, the City's Stormwater Program also provides the following services:

- Planning Board activities: City staff review subdivision and site plan applications and perform inspections of erosion control and stabilization measures.
- Grant funded initiatives: City staff complete stormwater management and flood resilience projects such as implementing the Berry Brook Watershed Management Plan and implementing recommendations of the Willand Pond Watershed Assessment and Alternatives Analysis, as well as pursue new grant opportunities.
- Capital Improvement Program (CIP) initiatives and general drainage improvements: The City's CIP budget typically includes modest funding for replacing and/or repairing aging drainage infrastructure (approximately $150,000/year), as well as street reconstruction projects that involve drainage components and require Stormwater Program staff expertise.
- Regulatory compliance: The City has longstanding requirements to meet the EPA Municipal Separate Storm Sewer System (MS4) Permit (EPA 2017) and new requirements to comply with the Great Bay Total Nitrogen General Permit (EPA 2020).
- Pollutant reduction: The City must maintain the City's Code to implement State and Federal requirements and continuously reduce the amount of contaminants that enter the region's waterways and the Great Bay Estuary. This involves work within Dover and also collaborations with regional partners such as the Municipal Alliance for Adaptive Management.

2.2 Current Costs of Services

Stormwater management costs are currently funded through general funds derived from local property taxes. Program operating expenses in Dover are typically budgeted in the following categories: Personnel Services, Purchased Services, Supplies, Capital Outlay, and Other Expenses. Table 1 presents an overview of current Stormwater Program operating expenses for FY21.

Table 1: Stormwater Program Operating Budget for FY21

Cost Category	Stormwater Program Expenses (FY21)
Personnel Services	$491,479
Purchased Services	$126,054
Supplies	$247,916
Capital Outlay	$152,500
Other Expenses	$1,500
Total Stormwater Program Operating Expenses	***$1,019,449***

In addition to operating expenses, the City also incurs stormwater related costs from projects included in the CIP budget, including street reconstruction renewal and replacement projects that include drainage improvements. The annual average historic capital expenditures from FY16-20 was $2,601,195. When added to the Stormwater Program average annual operating budget, stormwater management and flood resilience costs total approximately $3.5 million. Table 2 presents a summary of both FY16-20 operating budgets and capital expenditures.

Table 2: Historic Stormwater Expenditures

Stormwater Activity	FY16	FY17	FY18	FY19	FY20
Operating Budget					
Personal Services	$ 471,394	$ 475,981	$ 476,311	$ 487,662	$ 496,216
Supplies	$ 184,505	$ 189,302	$ 209,714	$ 219,876	$ 232,115
Capital Outlay	$ 151,250	$ 150,000	$ 150,000	$ 150,000	$ 152,500
Purchased Services	$ 4,863	$ 71,063	$ 71,273	$ 70,322	$ 104,913
Other Expenses	$ 1,000	$ 1,000	$ 1,500	$ 1,500	$ 1,500
Subtotal - Operating Budget	$ 873,012	$ 887,346	$ 908,798	$ 929,360	$ 987,244
Capital Expenditures					
Nelson St. Reconstruction	$ 138,447	$ -	$ -	$ -	$ -
Keating/Birchwood Reconstruction	$ -	$ 842,030	$ -	$ -	$ -
Richardson St. Reconstruction	$ -	$ 577,000	$ -	$ -	$ -
Mast Rd. Reconstruction	$ -	$ -	$ 182,000	$ -	$ -
Hanson St. Reconstruction	$ -	$ -	$ 120,000	$ -	$ -
Roberts Rd. Drainage	$ -	$ -	$ 575,000	$ -	$ -
Broadway Culvert Replacement	$ 103,000	$ -	$ -	$ 4,087,500	$ 4,255,500
Mt. Vernon St Reconstruction	$ -	$ -	$ -	$ 12,500	$ -
Chestnut Street Reconstruction	$ -	$ -	$ -	$ 160,000	$ -
Spur Rd. Reconstruction	$ -	$ -	$ -	$ -	$ 1,147,000
Elm/Belknap Reconstruction	$ -	$ -	$ -	$ -	$ 726,000
Community Trail Drainage	$ -	$ -	$ -	$ -	$ 80,000
Subtotal - Capital Expenditures	$ 241,447	$ 1,419,030	$ 877,000	$ 4,260,000	$ 6,208,500
TOTAL	**$ 1,114,459**	**$ 2,306,376**	**$ 1,785,798**	**$ 5,189,360**	**$ 7,195,744**
Annual Average Historic Operating Budget (FY16-20): $917,152					
Annual Average Historic Capital Expenditures (FY16-20): $2,601,195					
Annual Average Historic Total Stormwater Expenditures (FY16-20): **$3,518,347**					

2.3 Future Funding Needs

Stormwater management faces unavoidable increases in future costs due to aging infrastructure, increasing development, and federal regulatory requirements. Additionally, increasing flood risk will require additional funding for retrofitting existing infrastructure to handle changing conditions and implementing new flood resilience measures. Further exploration and assessment of these future costs is required in the early stages of pursuing a stormwater and flood resilience utility, but based on current information available in the City's FY22-27 CIP, the Committee estimates the City's annual Stormwater Program budget needs to be at least $3.5 million to address existing and meet future needs related to stormwater management and flood resilience.

Aging infrastructure

A sizable portion of the City's stormwater infrastructure is in need of immediate attention, which will require capital investment not currently budgeted. The condition of the entire closed drainage system is unknown, but through the Stormwater Program's asset management initiatives, the City continues to inspect critical drain pipe segments to identify potential issues. The City recently evaluated the condition of 226 drain pipe segments located near the City's heavily developed downtown area and identified 56 pipe segments (24.8%) with a moderate to high likelihood of failure.

Increasing flood risk

In 2006 and 2007, the Mother's Day and Patriot's Day floods led to severe and pervasive flooding in Dover (Figure 1 and 2). More recently, in March 2018, two Nor'easters caused major flooding and damage in coastal NH communities, resulting in a Presidential Disaster Declaration and request for public assistance totaling $3.3 million (FEMA 2018). Fortunately, Dover was not significantly impacted by those Nor'easters, but these events highlight the crucial need to prepare for more frequent and intense storms by investing in flood resilience actions that will save money, property, and most importantly, lives. Over the last 50 years, the National Climate Assessment (2018) has observed increasing rainfall intensity in the northeastern United States that exceeds increases observed in all other regions of the country. Furthermore, the New Hampshire Coastal Flood Risk Summary, Part I: Science (2019) reports extreme precipitation events will become more frequent, and the New Hampshire Coastal Flood Risk Summary, Part II: Guidance (2020) recommends planning for at least a 15% increase in extreme precipitation. As identified in the Climate Adaptation Chapter of the City of Dover Master Plan (2018), parts of the City's stormwater system are not sized to handle the volume of stormwater runoff from current and future storms.

These shifts in precipitation patterns are threatening the structural integrity of outdated, undersized stormwater infrastructure that cannot handle increased volumes of stormwater runoff, which could result in property loss, increased pollution loading to water bodies, and public safety issues such as road closures. As such, the NHDES Alteration of Terrain rules now require the design of projects under its jurisdiction and within coastal municipalities to increase precipitation amounts by 15% (Env-Wq 1503.08(I)). Construction of new infrastructure designed to handle and mitigate increased stormwater volumes is critical for both water quality and, more importantly, health and human safety.

Figure 1: Flooding of the Cocheco River at Henry Law Park, 2006

Figure 2: Cocheco River Dam, 2006

In additional to riverine and urban flooding, Dover is also vulnerable to coastal flooding from sea-level rise (SLR) and storm surge, which are necessary considerations of stormwater management planning. According to recent guidance developed by the New Hampshire Coastal Flood Risk Science and Technical Advisory Panel, New Hampshire communities should plan for 2.9-6.2 feet of sea-level rise by 2100 (Figure 3; NHCFR STAP 2020). Coastal flood risks exacerbate stormwater management and flood resilience challenges. For example, as sea levels rise, the drain pipes and outfalls that are meant to convey stormwater runoff to local waterbodies are at risk of being filled with seawater that is flowing inland. This could make it impossible for stormwater to flow freely though drainage pipes and lead to inland flooding. Dover has not seen diminished stormwater system capacity from SLR yet, but future sea-level rise projections could necessitate infrastructure adjustments to ensure the resilience of the stormwater system. Additionally, precipitation events that trigger flooding in rivers and streams or that cause localized, urban flooding can combine with coastal events, often leading to more widespread and prolonged flooding. Higher tides can also raise groundwater levels up to 2.5-3 miles inland from the coast (NHCFR STAP 2019). Groundwater rise could prevent infiltration from pervious surfaces, causing more stormwater runoff and increasing inland flood risk. However, the impact of SLR induced groundwater rise in Dover needs to be modeled and studied further to better understand the extent of this risk.

TIMEFRAME	HIGH TOLERANCE FOR FLOOD RISK	MEDIUM TOLERANCE FOR FLOOD RISK	LOW TOLERANCE FOR FLOOD RISK	VERY LOW TOLERANCE FOR FLOOD RISK
	Plan for the following RSLR estimate (ft)* *compared to sea level in the year 2000*			
	Lower magnitude, Higher probability	←	→	Higher magnitude, Lower probability
2030	0.7	0.9	1.0	1.1
2040	1.0	1.2	1.5	1.6
2050	1.3	1.6	2.0	2.3
2060	1.6	2.1	2.6	3.0
2070	2.0	2.5	3.3	3.7
2080	2.3	3.0	3.9	4.5
2090	2.6	3.4	4.6	5.3
2100	2.9	3.8	5.3	6.2
2110	3.3	4.4	6.1	7.3
2120	3.6	4.9	7.0	8.3
2130	3.9	5.4	7.9	9.3
2140	4.3	5.9	8.9	10.5
2150	4.6	6.4	9.9	11.7

Figure 3: Recommended Decadal Relative Sea Level Rise (RSLR) Estimates (in feet above 2000 levels) Based on RCP 4.5, Project Timeframe, and Tolerance for Flood Risk (NHCFR STAP 2020)

Regulatory requirements

Dover is one of many communities in the Great Bay Estuary watershed that are subject to two federal permits, the MS4 Permit (EPA 2017) and the Great Bay Total Nitrogen General Permit (EPA 2020), that require stormwater runoff pollutant reductions. Compliance with these permits will require improvements to existing stormwater infrastructure, installation of additional stormwater quality Best Management Practices (BMPs), and likely pollutant reductions from private property since reduction targets cannot be met through public property stormwater enhancements alone.

3. Recommended Funding Solution: Stormwater & Flood Resilience Utility

The Committee evaluated numerous funding options (General Fund/property taxes, various development fees, public-private partnerships, village districts, sewer user fees, grants, loans, and bonds) against the following criteria and determined a stormwater and flood resilience utility was the best option for the City to pursue.

- Secure: Funding is dependable over the long-term, predictable to the extent the City is able to plan and budget for the future effectively, and dedicated solely to stormwater management and flood resilience.
- Adequate: Funding generated will meet current costs and allows the City to maintain the level of service that residents expect.
- Flexible: Funding that can be adjusted (in terms of revenue and application) as needs fluctuate over time (e.g., funding used for today's traditional stormwater management activities, but also available for addressing flood risk that might be needed in the future).
- Equitable: Funding is generated fairly. For example, individuals and entities contributing financially to City services should have equal opportunity to receive proportional benefit from

those City services. Additionally, any costs imposed on individuals or entities as a result of actions they have taken that necessitate City services should be directly related to the City's cost of providing such services.

Many service-based programs in Dover have transitioned from property tax-based funding structures to fee mechanisms, or service charges, to ensure funding for those programs is adequate and generated equitably. For example, the City's water and sewer utilities charge customers based on water usage, and the City's Bag and Tag Program offsets recycling and solid waste management costs through garbage bag fees. More than 1,800 communities across the country use a similar approach to fund their stormwater management and flood resilience programs, often referred to as a stormwater utility. However, referring to this funding mechanism as a stormwater *and* flood resilience utility serves to highlight the undeniable connection between stormwater runoff and flooding in Dover, as well as the importance of adequate funding to manage stormwater effectively and reduce flood risk throughout the City, which are both critical City services that benefit all property owners.

3.1 What is a Stormwater Utility?

A stormwater utility is similar to the funding mechanism used for Dover's water and sewer utilities, in that it would create a new fund (i.e., an enterprise fund) for the Stormwater Program, and generate a stable source of revenue through user fees. Revenue collected through user fees would be stored in the enterprise fund, separate from the General Fund, and could only be spent on stormwater- and flood resilience-related activities.

However, unlike water and sewer utilities where water use can be metered for each property, stormwater runoff cannot be directly measured, and therefore, user fees are most often calculated based on total square feet of impervious area. The relationship between increased impervious area, increasing rates of stormwater runoff, degraded water quality, and heightened frequency of flooding is well established in scientific literature (CWP 2003; PREP 2018). Therefore, stormwater utility user fees are based on a property's contribution to the need for stormwater management.

As demonstrated in Figure 4, stormwater utilities are very common in the United States and can now be found within 41 states, including Maine, Vermont, Massachusetts, and Connecticut.

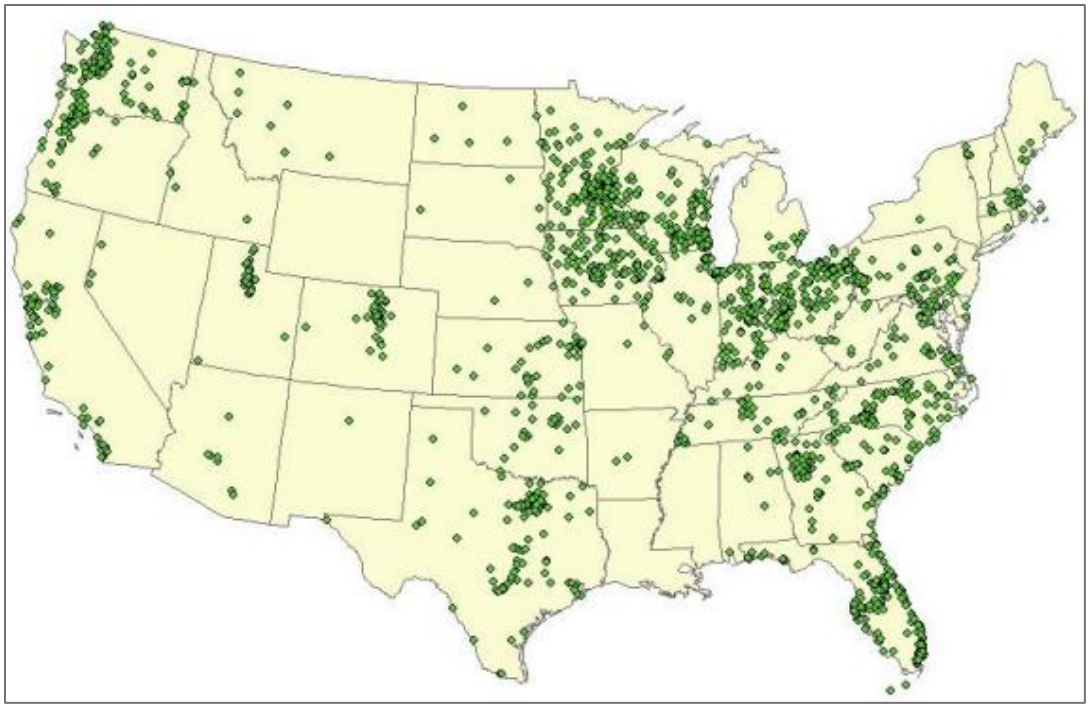


Figure 4: Stormwater Utilities in the U.S. (WKU 2021)

The first Stormwater Utility in New England was adopted by Chicopee, MA in 1998, and since that time more than 20 other New England communities have adopted Stormwater Utilities to pay for increasing stormwater-related costs in a fair and more equitable way. Each community has structured their stormwater utility slightly differently based on community-specific drivers including, but not limited to flooding issues, aging infrastructure, insufficient funding, regulatory requirements, and addressing drought and water supply issues. Alternative approaches to structuring a stormwater utility and important considerations related to the development of a stormwater utility are presented in Section 4.

Dover is not the only community currently considering a utility; Concord, NH recently completed a stormwater utility feasibility study and is currently exploring next steps (City of Concord 2020). Additionally, the Cities of Portsmouth and Rochester (along with the City of Dover) have committed to explore stormwater utilities as part of a settlement agreement with the Conservation Law Foundation (City of Portsmouth 2021). Despite the New Hampshire Legislature authorizing the creation of stormwater utilities in 2008, no stormwater utilities have been implemented in the state. In 2008 and 2009, Dover, Manchester, Nashua, and Portsmouth recognized stormwater management activities were underfunded, so they utilized funds from NHDES Watershed Assistance Grants to conduct stormwater utility feasibility studies (City of Dover 2011; City of Manchester 2008; City of Nashua 2011; City of Portsmouth 2011). Although a utility was deemed appropriate from a technical perspective in each case, none of the four municipalities implemented stormwater utilities primarily due to insufficient public outreach and education. Lessons learned about the critical importance of outreach throughout the process of developing a utility are discussed in more detail in Section 4.7.

3.2 Enabling Legislation

In New Hampshire, Stormwater Utility regulations are set forth in Title X, Chapter 149- I. Section 6 of this law authorizes the formation of a Stormwater Utility to collect fees for stormwater management; in particular, to address flood and erosion control, water quality management, ecological preservation, and

pollutants contained in stormwater discharge. Communities that establish stormwater utilities must also offer credits or fee abatements (see Section 4.6 of this Report for additional information about stormwater credits). As stated in Section 6-c, government property and non-profit organizations shall be subject to the fee structure.

3.3 Key Benefits of a Stormwater and Flood Resilience Utility

The Committee recognizes one of the most critical elements in developing a stormwater and flood resilience utility is to successfully demonstrate its need and benefits to build the necessary public and political support. The Committee has identified the following primary benefits of implementing a stormwater and flood resilience utility.

3.3.1 Equitable Distribution of Costs

Since New Hampshire does not have sales tax or income tax, real estate taxes (General Fund) provide most of Dover's revenue for public services and programs, which currently includes the Stormwater Program. Each taxpayer's contribution is related to property value instead of being based on the property's contribution to the need for stormwater management and increased flood resiliency. For example, currently 55% of the revenue for the Stormwater Program comes from residential property owners, but these properties account for only 25% of the City's impervious area. A stormwater user fee based on impervious area provides a more equitable approach to recover costs from all properties that contribute runoff, including tax exempt properties (government, faith-based institutions, etc.). When stormwater costs are recovered through property taxes, the tax-exempt properties do not contribute toward the cost of managing stormwater and increasing flood resiliency (Figure 5). In total, tax-exempt properties account for approximately 13% of all impervious cover in Dover. Furthermore, properties with high property values and relatively small amounts of impervious cover currently pay much more than their fair share to the Stormwater Program with respect to the amount of stormwater runoff they contribute (Figure 6).

- Annual portion of property taxes currently allocated to the Stormwater Program: **$0.00**
- Estimated total impervious area: **30,494 sq. ft.**

Figure 5: Example of a Dover Tax-Exempt Property's Current Funding Contribution to the Stormwater Program

- Annual portion of property taxes currently allocated to the Stormwater Program: **$586.79**
- Estimated total impervious area: **9,510 sq. ft.**

Figure 6: Example of a Downtown Commercial Property's Current Funding Contribution to the Stormwater Program

The stormwater and flood resilience utility must, by State Statute, also establish a credit system where customers may reduce their individual fee by making improvements to their property that reduce pollution from stormwater runoff and subsequently the City's stormwater obligations. The credit system rewards property owners who help to decrease the overall burden on the City's stormwater management responsibilities and obligations and, by extension, the City's stormwater-related expenses. This has a dual purpose in both reducing overall costs and reducing the amount of excess nitrogen, phosphorus, and other contaminants entering the waterways. More information on credit systems is provided in Section 4.6.

3.3.2 Dedicated and Sustainable Funding

An important distinction between stormwater utility fees and the General Fund is that fees are user based and tied to stormwater management and flood resilience services provided by the utility. The General Fund, on the other hand, is not tied to specific services and can be redistributed between City services (e.g., Police Department, Fire Department, Library, Parks and Recreation) on an as needed basis.

Once a stormwater and flood resilience utility is established, all of the revenue is dedicated to a separate utility fund. Therefore, the Stormwater Program would no longer compete with other General Fund programs for funding. When stormwater and flood resilience compete for dollars from the General Fund, many other services and projects with broad public support take precedence for funding, which can result in deferred planning, maintenance, and capital improvements. The City has not always been able to fully fund the Stormwater Program using the General Fund, resulting in over $5 million in deferred drainage improvement and flood resilience projects. Examples of deferred drainage improvement projects are provided in Table 3 and examples of deferred flood resilience projects are discussed below and provided in Table 4. These examples are not intended to serve as an exhaustive list; the total cost of deferred stormwater and flood resilience projects is likely much greater than $5 million.

Table 3: Deferred Drainage Improvement Projects

Drainage Project	Description	Status	Estimated Cost
Piscataqua and Rabbit Road Reconstruction	Piscataqua Rd is a thoroughfare to Rte. 4 and in need of repair. Rabbit Rd is a small road off of Piscataqua that needs improvements and due to their close proximity it makes sense to combine them.	Deferred Action. The road received a thin pavement overlay in the summer of 2017. The project remains in the City's CIP; but it has been moved out to FY 2027.	$ 1,000,000
Atlantic Avenue Reconstruction	This road is a main artery in and out of the City. Reconstruction is to replace the major drainage component of the road.	Deferred Action. This project remains in the City's CIP, currently projected for FY2026.	$ 1,500,000
TOTAL Cost of Deferred Drainage Improvement Projects			**$ 2,500,000**
More detail and information on estimated project costs can be found within the City's FY2022-2027 Proposed Capital Improvements Program			

A stormwater and flood resilience utility can be structured to fund all aspects of the City's Stormwater Program and can meet changing program and funding needs over time. This is accomplished by first determining the level of funding needed for stormwater and flood resilience services and then dividing that level of funding by the total amount of impervious area in the City, which equitably spreads out the total cost among all developed property owners based on the impervious area on their property. These dedicated funds can be used for stormwater and flood resilience operations, maintenance, capital improvements, planning, and permitting. Funds can pay for all related program expenses, including staff salaries, equipment and supplies, outside contractors, administration and overhead costs, matching funds for competitive state and federal funding opportunities, and more. Utilities also provide transparency and accountability, since the budget is based on services provided. Furthermore, section 10-a of NH's stormwater utility enabling legislation requires the governing body to communicate anticipated utility revenue and use of those funds.

3.3.3 Flood Resilience and Public Safety

As discussed in Section 2.3, Dover is vulnerable to urban, riverine, and coastal flooding, which can be caused by excessive rainfall, rapid snow melt, ice jams, dam breach or failure, storm surge, sea-level rise, and groundwater rise. Excessive rainfall has had a particularly substantial impact on the City, as evidenced by the Mother's Day Flood in 2006 and the Patriot's Day Flood in 2007. Smaller storms can and have had significant impacts to the City's public and private infrastructure as well (City of Dover 2018). With the frequency and magnitude of extreme precipitation events increasing and the best available science recommending municipalities plan for at least a 15% increase in extreme precipitation (NHCFR STAP 2020), the need to implement appropriate flood resilience actions and/or retrofit existing infrastructure to handle future conditions has also increased.

In 2018, as part of the development of the City's Multi-Hazard Mitigation Plan, a committee of 14 City emergency and planning staff identified a list of proposed flood resilience projects. Largely due to funding constraints and prioritization of other projects in the City's Capital Improvement Program, most

of these projects have been deferred. Specific flood resilience projects and estimated costs that have been deferred are listed in Table 4.

Table 4: Deferred Flood Resilience Projects

Project	Description	Status	Estimated Cost
Old Colony Drainage	Several homes have major flooding during heavy rain events. New drainage would resolve this problem.	Deferred Action. Other projects have taken precedent; this project has been deferred for 12 years.	$ 75,000
Outer Sixth Street Replace Bridge & Culvert	Major overflows during heavy rain events. Replace bridge and raise the road. Provide additional access in and out of the North End area of the City.	Deferred Action. In 2017, the City submitted this project to the NHDOT State aid bridge replacement program. Due to funding constraints, work is unlikely unless aid is granted.	$ 1,000,000
Raise County Farm Road	Maintain access to the Strafford County Complex, which includes the rest home, court, hospice care and jail.	Deferred Action. Due to funding constraints there has been no action taken. This is not currently in the City's CIP. It may hinge on receiving State aid assistance to replace the County Farm Bridge.	TBD
St. Thomas Street Drainage	Flooding occurs in this area due to the age of the infrastructure. Needs new design and reconstruction.	Deferred Action. Due to funding constraints there has been no action taken. This is not currently in the City's CIP.	$ 1,800,000
Install River Gauges	Gauges would be installed on bridges crossing major rivers to assist emergency personnel during flooding events.	Deferred Action. Due to funding constraints there has been no action taken.	$ 15,000 (per gauge)
TOTAL Cost of Deferred Flood Resilience Projects			**$ 2,890,000**

More detail and information on estimated project costs and potential losses can be found within these City resources:

- *FY2022-2027 Proposed Capital Improvements Program*
- *2018 Multi-Hazard Mitigation Plan Update*

Increasing financial capacity for flood resilience projects and improving drainage system performance is critical to prevent flooding and other impacts to homes, businesses, and public infrastructure in Dover. The installation of new infrastructure to retain stormwater runoff in developed areas of Dover will help address flooding issues, and in other areas, infrastructure upgrades will allow the stormwater system to better accommodate more severe weather events and runoff from the ever-increasing impervious area.

3.3.4 Drainage System Operation and Maintenance

Dover's stormwater infrastructure, portions of which date back as far as the late 1800s, is aging and in need of rehabilitation and replacement. The City, while maintaining existing drain pipes, catch basins, culverts, and other stormwater infrastructure in response to flooding and water quality issues, is facing a growing backlog of inspections, assessments, and maintenance needs as well as proactive drainage improvement projects. With stable, dependable funding generated on a monthly or quarterly basis through a stormwater and flood resilience utility, the City's Stormwater Program could proactively plan and budget for projects, thus avoiding costly, emergency repairs and ultimately saving the City money in the long-term. For example, rather than depending on the uncertainty of available funding from the City's CIP budget to replace an aging section of drain pipe, the City's Stormwater Program could use revenue generated by the utility to incrementally set aside funding over several years to ensure there will be adequate funding available when the project is ready for construction.

3.3.5 Water Quality and Recreation

Watersheds reach a tipping point around 10% impervious area, beyond which water quality impacts become increasingly severe (Mallin et. al. 2000). As of 2018, over 10% of land in Dover is impervious (PREP 2018). Large amounts of impervious area lead to increases in stream and river flows, resulting in flooding and erosion, and increased conveyance of pollution that negatively impacts public health, recreation, and the environment. For example, wastewater treatment facilities only account of 33% of all nitrogen loading in the Great Bay Estuary, and the remaining 67% of nitrogen loading is introduced by nonpoint sources such as stormwater runoff (PREP 2018).

Dover's water resources such as Willand Pond and the Bellamy, Cocheco, and Piscataqua Rivers are currently used for swimming, boating, and fishing, but pollutants found in stormwater runoff threaten these recreation opportunities. For example, on June 19, 2019, the New Hampshire Department of Environmental Services (NHDES) issued a cyanobacteria advisory for Willand Pond declaring the water unsuitable for wading or swimming and encouraged recreational users and their pets to avoid contact with the water (NHDES 2019). Furthermore, these and other local waterbodies such as the Great Bay Estuary have been deemed impaired for failing to meet Clean Water Act standards for fishing, swimming, or drinking due to water pollution (EPA 2018). Common pollutants found in stormwater runoff that can lead to water quality impacts are outlined in Table 5, and specific impairments to Dover's local water bodies are listed in Table 6.

Table 5: Common Stormwater Pollutant Impacts on Water Quality

Pollutant	Sources	Impacts
Nutrients (nitrogen, phosphorus, etc.)	Fertilizer, pet waste, agricultural waste	Harmful algal blooms, reduced dissolved oxygen levels
Sediments	Soil erosion, road sand	Carry contaminants, reduce water clarity, impact aquatic habitat
Toxics (heavy metals, volatile organics, etc.)	Petroleum products, grease, artificial surfaces	Poisonous to living organisms, persist in the environment
Chloride (salts)	De-icing salts, water softeners	Impact plans and animals in freshwater systems
Temperature	Runoff from water surfaces such as parking lots	Reduced dissolved oxygen affects ability for fish and other organisms to survive

Table 6: Select Impairments to Dover's Local Waterbodies as Identified in the EPA 303(d) List

Waterbody	Impairments
Bellamy River	• Chlorophyll-a • pH • Dissolved oxygen • Aluminum
Cocheco River	• 2-Methylnaphthalene • Acenaphthene • Acenaphthylene • Anthracene • Benzo(a)pyrene (PAHs) • Benzo[a]anthracene • Benzo[g,h,i]perylene • Chlorophyll-a • Chrysene (C1-C4) • DDD • DDE • DDT • Dibenz[a,h]anthracene • Dieldrin • Fluoranthene • Fluorine • Indeno[1,2,3-cd]pyrene • Naphthalene • Nitrogen • Dissolved oxygen • Phenanthrene • Pyrene • Polychlorinated biphenyls • Dioxin
Piscataqua River	• Polychlorinated biphenyls • Dioxin • Estuarine bioassessments
Salmon Falls River	• Chlorophyll-a • Dissolved oxygen • Nitrogen • pH • Polychlorinated biphenyls • Dioxin
Willand Pond	• Dissolved oxygen • pH

Improving stormwater management practices and increasing drainage system operation and maintenance can require significant cost but will reduce pollutants of concern entering Dover's valuable water resources. With adequate funding generated through a stormwater and flood resilience utility,

BMPs for controlling and treating stormwater runoff can be implemented (e.g., rain gardens, bioswales, porous pavement, etc.). This in turn improves local water quality, improves aquifer recharge for adequate water supply, and protects public health, recreation, and the environment.

4. Utility Development and Implementation Considerations

There are multiple considerations involved in the pursuit of a stormwater and flood resilience utility. This Report focuses on seven that are particularly important for conceptualizing what a utility in Dover could look like. Table 7 lists each of these primary considerations, as well as the Committee's recommendation for each consideration, which are discussed in more detail in the following sections.

Table 7: Primary Stormwater and Flood Resilience Utility Considerations and Options. Highlighted Options Indicate the Committee's Recommendations

Considerations	Options				
Fee Basis	Impervious area only	Gross area with runoff coefficients	Gross area with intensity of development factor	Other (e.g., number of rooms, water use, flat fee)	
Single Family Residential (SFR) Fee Structure	Flat fee	Tiered fee	Proportional fee		
Non-Single Family Residential (NSFR) Fee Structure	Flat fee	Tiered fee	Proportional fee		
Desired Funding Level	Operating budget	Capital projects	Set aside for future flood resilience initiatives	Consider all stormwater and flood resilience funding needs	
Exemptions	No exemptions	Public roads	Undeveloped land	Agricultural land	Other (e.g., public parks, other City owned land, non-profits)
Credits	Credits for improving stormwater quality	Credits for reducing stormwater quantity	Education credits	Other (e.g., elderly, low-income, residents with disabilities)	Combination of various credit options

4.1 Fee Basis

The decision on what information to use as a fee basis has significant implications regarding the equity of the utility, the cost of data collection, ease of administration, and legal and political defensibility. The

Committee examined multiple approaches for determining the basis of the utility fee, including a fee based on impervious area only, a fee based on impervious area and gross area, and a fee based on intensity of development. The Committee believes the City should charge solely on the basis of impervious area because impervious area is directly related to a property's stormwater impact, impervious area can be easily identified through aerial imagery and calculated for individual parcels using geospatial tools (e.g., ArcGIS), and this approach is the most straightforward and easiest for the public to understand. Furthermore, the overwhelming majority of stormwater utilities across the county use impervious area as the basis of their stormwater user fees (Black & Veatch 2021).

4.2 Rate Structure

Deciding how user fees should be structured is one of the most critical decisions involved with establishing a stormwater utility. This consideration has implications for many issues, including cost to property owners, ease of administration and understanding, and equity. There are numerous ways to customize a fee structure based on impervious area, and the City's goal should be identifying a fee structure that maximizes equitable distribution of costs and minimizes set-up and administration costs. In an effort to find the right balance, many communities have implemented different approaches for different property types. Rate structures are generally considered to be equitable as long as there is a connection between the fee and the demand placed on the drainage system. The general types of fee structures are described below, and the pros and cons of each are summarized in Table 8.

Flat fees: Each property owner pays the same fixed amount regardless of actual use of stormwater management services. Some communities, for instance, employ a flat fee for residential properties due to administrative simplicity in which all homeowners are charged the same amount. Residential properties make up the majority of utility customers in most communities, so a flat fee can significantly reduce the number of parcels and impervious area that needs to be mapped and updated over the long-term. However, flat fees are generally less equitable than tiered fees or proportional fees because the owner of a very small lot with minimal impervious area would be charged the same as the owner of a large lot with a significantly larger home and driveway.

Tiered fees: Properties are categorized by ranges of amount of impervious area. All properties within a category (e.g., small, medium, large) are charged the same fee, but the fee is different for each category. Tiered fees are more equitable than flat fees, but they do have relatively higher set up and administrative costs. Although this approach requires less precise impervious area mapping compared to proportional fees, impervious areas would still need to be mapped for each property, and therefore, a tiered fee may require the same set up costs as a proportional fee, which provides more equity.

Proportional fees: Fees are individually calculated for each property based on their specific impervious area. The impervious area of each property is calculated, an equivalent impervious unit is determined, and a rate per impervious unit is applied. This rate assessment process is described in more detail in Section 4.2.1 below. Although this approach is the most equitable, it also requires the most impervious area data collection and ongoing updating of that information, which may incur significant administrative expenses as customers reduce or increase impervious areas by relatively small amounts. However, a proportional fee structure could incentivize property owners to reduce their impervious area, which would reduce their impact on the stormwater system. Furthermore, the Committee has already completed a preliminary analysis of impervious area within each property in Dover, a summary of which is available in Appendix C.

Table 8: Pros and Cons of Different Utility Fee Structures

Fee Structure	Pros	Cons
Flat fee	• Reduces data collection needs • Requires only rough impervious area calculations • Easy to explain and administer	• Nexus between the fee and stormwater generated is relatively weak • May be challenged by property owners who feel they are subsidizing properties with more impervious area
Tiered fee	• More equitable than a flat fee • Use of tiers requires less precise impervious area mapping than a proportional fee	• Data collection is more time intensive and expense compared with a flat fee • Since collecting impervious area data is necessary to classify into tiers, it may be just as easy to use a proportional fee • Less equitable than a proportional fee
Proportional fee	• Easy to explain and calculate if accurate impervious area data is available • Most equitable due to the direct connection between the fee and impervious area (i.e., stormwater runoff generated) • Creates more of an incentive for property owners to reduce impervious area	• Requires the most impervious area data collection and ongoing updating of impervious area data* • May incur additional administrative expenses as property owners reduce or increase their impervious area **Data collection and preliminary analysis has already been completed and is summarized in Appendix C*

The Committee believes the City should adopt a proportional fee for both SFR and NSFR properties because it establishes a direct connection between a customer's rate and their impact on the stormwater system. This approach would also likely be seen as the most equitable option once rate payers are educated about the impact of imperious area. The City could also use the Committee's preliminary impervious area analysis to determine rates for each individual property owner, thus reducing set up costs. After the initial analysis of impervious area has been finalized, the City could determine the frequency with which impervious area data and subsequent utility rates should be updated. The Piscataqua Region Estuaries Partnership works to provide updated impervious area data for communities in NH's coastal watershed every five years, which would provide a consistent opportunity for the City to update their rates.

4.2.1 Equivalent Residential Unit Calculation

The key data required to establish a utility fee is impervious area per parcel. Generally, rate payers understand that building structures, paved areas, and other impervious surfaces generate an increased quantity and decreased quality of stormwater runoff. An Equivalent Residential Unit (ERU) represents the median amount of impervious area on a typical residential parcel and is commonly used to simplify how fees are assessed. Using this value as a common denominator, an ERU can be used to rationally categorize properties into tiers within a tiered fee approach, and/or can be used to calculate rates for individual properties under a proportional fee structure. This is a common method of establishing a stormwater fee structure as it is easily understood by most ratepayers. For example, under a proportional fee structure, if a property has five times more impervious area than the typical residential property, they would have five times the ERUs and would pay five times the fee charged to a typical residential property. Figure 7 provides an illustration of how the ERU is applied to different properties.

Figure 7: Illustration of ERU Application (not drawn to scale)

The University of New Hampshire Stormwater Center completed a preliminary stormwater and flood resilience utility fee assessment for the Committee to review, assuming the fee would be based on impervious area only. Findings from this analysis are presented below.

Parcel Data: The data used to estimate the City's equivalent residential unit (ERU) was obtained from NH GRANIT and last updated in 2020. This data is summarized in Table 9.

Table 9: Summary of Dover Parcel Data

Property Type	Number of Parcels
Single Family Residential (SFR)	6,152
Non-Single Family Residential (NSFR)*	2,467
TOTAL	**8,619**

**NSFR property types include: multifamily residential, commercial, industrial, and government owned properties*

Impervious Area (IA) Data: The IA data used to estimate the City's ERU was obtained from NH GRANIT. The data layer, titled "Impervious Surfaces in the Coastal Watershed of NH and ME, High Resolution - 2015," identifies human-made surfaces that do not allow water to permeate through them, and is intended to be used for water quality and management applications at large scales. The data was derived by interpreting 1-foot resolution, 4-band orthophotography, acquired in the spring of 2015, and delineating impervious features (NH GRANIT 2015). This data is summarized in Table 10.

Table 10: Summary of Impervious Area Data

Property Type	Total IA (sq. ft.)	Percent of Total
Single Family Residential	26,230,478	25%
Non-Single Family Residential	30,123,126	28%
Tax-exempt/nonprofit	9,018,743	8%
Municipal	4,100,604	4%
Roads	37,018,812	35%
TOTAL	**106,491,763 sq. ft. (2,445 acres)**	**100%**

ERU Calculation: The ERU is the median amount of IC on a typical SFR property. The analysis identified 151 SFR properties that had no IC, so the ERU calculation was based on the remaining 6,001 SFR properties. The median amount of IC within those 6,001 properties is 3,430 sq. ft. Therefore, in Dover, **1 ERU = 3,430 sq. ft.**

4.3 Desired Funding Level

Future stormwater program costs must be examined and better understood prior to establishing a stormwater and flood resilience utility to ensure the utility provides adequate funding and the fee structure is fair and logical. The City, with input from other stakeholders and the public, will need to determine which stormwater and flood resilience costs should be covered by the utility. For example, the City may choose to fund any combination of the Stormwater Program operating budget, stormwater and flood resilience CIP projects, or even earmarks for large infrastructure projects that may be needed in the future. The desired funding level will need to balance the cost of fees imposed on property owners and the current and future needs of stormwater management and flood resilience.

Based on a preliminary analysis of the current Stormwater Program operating budget, future stormwater and flood resilience projects proposed in the City's FY22-27 CIP, additional stormwater and flood response related staff expenses, and future flood risk projections, the Committee estimates the annual Stormwater Program budget needs to increase to $3,500,000. This increase corresponds to the observed annual operating budget of approximately $1 million with an additional $2.5 million, which is the annual average cost of stormwater management and flood resilience capital expenses over the past five years. This total allows for predicted increases in operating costs and targeted funds for large infrastructure projects.

4.4 Exemptions

As all properties with impervious area contribute to stormwater runoff, and that stormwater runoff must be controlled and conveyed once it leaves the property, the Committee believes the utility fee should apply to all developed properties, including public (State- and City-owned) roads and City-owned properties. The inclusion of roads, which make up 35% of the total impervious area in the City, and City-owned properties, which make up 6% of the total impervious area in the City, helps utility rates remain affordable for all property owners. The Committee recognizes that fees paid by the City would be paid with General Fund revenue, thereby placing an additional burden on property taxes. However, the Committee also believes charging fees to the City would also act as a financial incentive to foster stormwater system infrastructure improvements.

4.5 Hypothetical Utility Fee Scenario

As highlighted in previous sections, there are numerous approaches to setting up a utility based on the wide-range of considerations and options available. Based on the Committee's recommendations on fee basis, fee structure for SFR and NSFR properties, desired funding level, and exemptions, a preliminary rate estimate is provided below. Please note the hypothetical fee scenario presented in Table 11 is only one of countless scenarios that the City could implement, and changes to any of these primary considerations based on future input from elected officials and/or the public would directly affect the utility rate. Additional fee scenarios are available within the materials for Committee meeting #9 in Appendix B.

Table 11: Hypothetical Fee Scenario Based on Committee Recommendations

Fee Basis	SFR Rate Structure	NSFR Rate Structure	Annual Funding Level	Exemptions
IC only	Proportional	Proportional	$3.5 million	None

Table 12 below shows the monthly utility rates for SFR and NSFR properties that would be required to generate $3.5 million for the Stormwater Program. Keep in mind the City's ERU (i.e., the median amount of impervious area from SFR properties – as described in Section 4.2.1) of 3,430 sq. ft. does not change because it is independent from the considerations and options selected.

Under this fee scenario, SFR properties would be charged $9.39/ERU/month. The average single family home in Dover contains 1 ERU, so the average single family home would be charged $9.39/month. A single family home with 6,000 sq. ft. of impervious area (significantly more than the average single family home in Dover) would be assessed 2 ERUs and charged $18.79 per month (6,000/3,430 = 1.75 ERUs, rounded to the nearest integer, 2 ERUs x $9.39/ERU = $18.79).

Each NSFR property would also be charged $9.39/ERU/month. For example, a commercial property with 18,000 sq. ft. of impervious area would be assessed 5 ERUs and charged $46.97 per month (18,000/3,430 = 5.25 ERUs, rounded to the nearest integer, 5 ERUs x $49.37/ERU = $246.85/year).

Table 12: Preliminary Utility Rate Estimate Based on Committee Recommendations

# of SFR ERUs	# of NSFR ERUs	Total # of ERUs	SFR Rate/month	NSFR Rate/month
7,647	23,400	31,047	$9.39 per ERU	$9.39 per ERU

4.5.1 Utility Fee Scenario Compared to the General Fund

Figure 8 shows the general distribution of Dover's current source of revenue from property taxes. Note that no revenue is collected from tax-exempt properties, municipal land, or public roads under this scenario. However, if a utility fee is adopted, the burden is shifted dramatically, as shown in Figure 9. SFR properties would account for one-quarter of the revenue, as opposed to over half the General Fund. This demonstrates the more equitable distribution of cost under a utility fee, and how the revenue distribution matches the percent of impervious area in Dover.

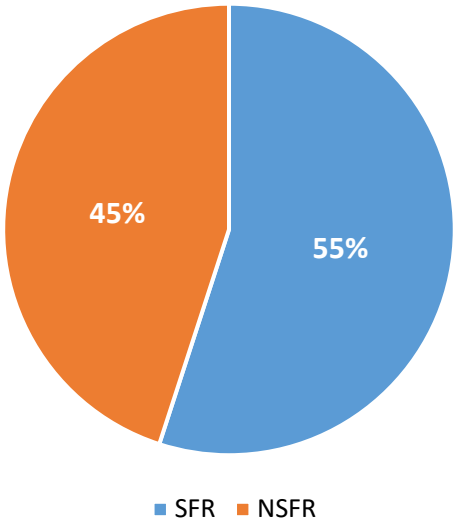


Figure 8: Revenue Distribution from Property Taxes

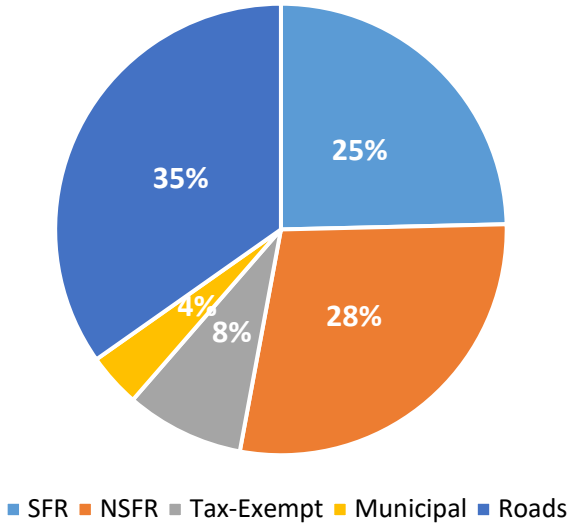
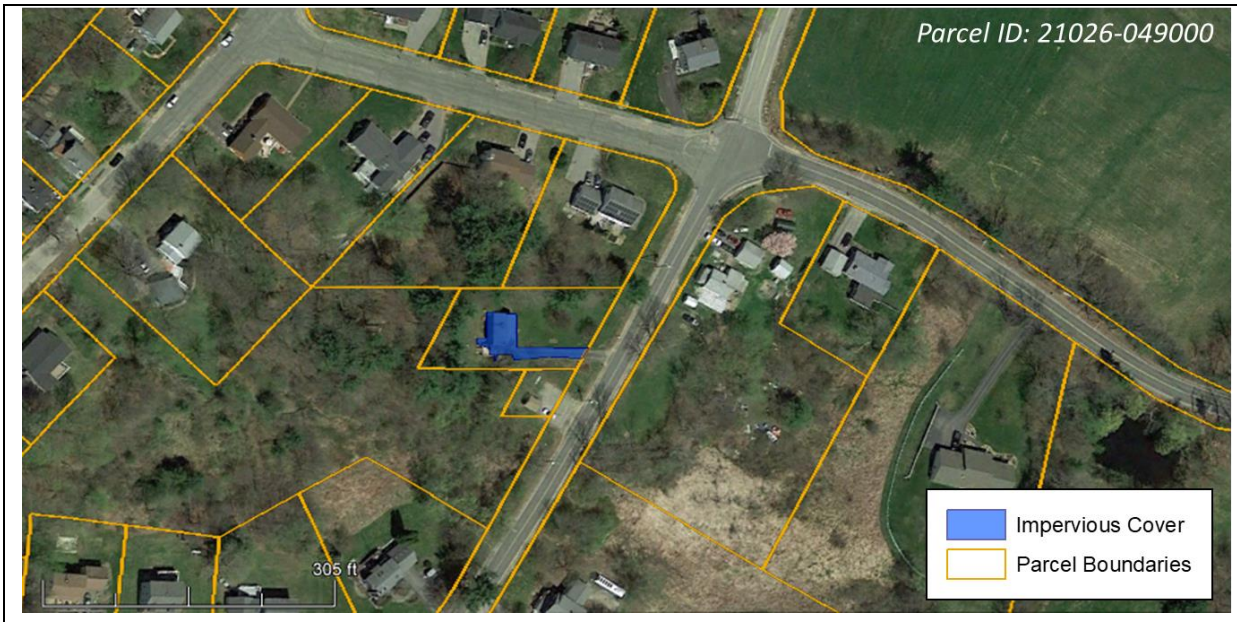


Figure 9: Revenue Distribution from Utility Fee Scenario

Figure 10 provides an example of a single family home in Dover and what the property owner would be charged under the fee scenario presented in Table 10. To fund a $3.5 million Stormwater Program, the property owner's utility fee would be $112.68/year ($9.39/month). However, in order to fund a $3.5 million Stormwater Program through the existing property tax mechanism, the property owner would be contributing approximately $216/year. Although the average single family homeowner would pay less for stormwater and flood resilience services under a utility compared to property taxes, some large commercial properties with significant amounts of impervious area that introduce more runoff to the stormwater system would pay more under a utility (Figure 11).



- Estimated total impervious area: 2,337 sq. ft.
- Total ERUs = 2,337 sq. ft./3,430 sq. ft. = 0.68, rounded to the nearest integer = 1 ERU
- Estimated annual utility fee to fund $3.5 million Stormwater Program: **$112.68**
- Estimated taxable value: $308,500
- Estimated annual portion of property taxes to fund $3.5 million Stormwater Program: **$216**

Figure 10: Comparison of a Utility and the General Fund for a Single Family Home

- Estimated total impervious area: 143,889 sq. ft.
- Total ERUs = 143,889 sq. ft./3,430 sq. ft. = 41.95, rounded to the nearest integer = 42 ERUs
- Estimated annual utility fee to fund $3.5 million Stormwater Program: **$4,732.56**
- Estimated taxable value: $4,601,800
- Estimated annual portion of property taxes to fund $3.5 million Stormwater Program: **$3,242**

Figure 11: Comparison of a Utility and the General Fund for a Car Dealership

Throughout the discussion and exploration of a stormwater and flood resilience utility, some Committee members have raised valid concerns related to the costs that would potentially be imposed on large commercial properties. Some members are particularly concerned that a utility could impose significant added operation costs to commercial property owners, which could reduce development interest in the City. In order to avoid this outcome, the credit system should be designed to present all property owners with cost-effective options for reducing their fee.

4.6 Credits

Stormwater utility regulations for New Hampshire are set forth in Title X, Chapter 149-I. Section 6-c of this law requires communities that establish stormwater utilities to offer credits or fee abatements based on on-site management of water quality impairment or peak runoff storage, or both. Additionally, the City may choose to provide credits based on social characteristics to ensure the utility is equitable for all.

4.6.1 Credit System Development

Credit systems are tailored to each community and offer property owners an opportunity to lower their stormwater utility fee. The credit system can be developed based on factors such as:

- The impact stormwater management actions implemented by property owners have on the City's stormwater management program requirements and costs
- Staff capacity to administer the credit program (i.e., reviewing credit applications and regular inspections of stormwater management actions), as outlined in steps 1-6 presented in Table 13
- Pre-existing stormwater management actions required to comply with development standards
- Social equity, including but not limited to, pre-existing tax credits based on income or disabilities

Table 13: Potential Credit System Implementation Process

Step 1	Step 2	Step 3	Step 4	Step 5	Step 6
Credits and qualifying stormwater management actions are defined and adopted along with the utility	Approved management actions already identified in inspection and maintenance reporting system and pre-existing tax credits are applied automatically	Property owners apply for credits	City reviews credit applications on a case-by-case basis	Approved credits are incorporated into billing system	Property owner provides proof of maintenance records and/or City inspects management actions to maintain the property owner's credit

4.6.2 Stormwater Management Performance-Based Credit

Credits must be awarded to property owners that reduce pollutant loading from their property and/or reduce the amount of stormwater runoff their property generates through implementation of stormwater control systems. In developing a credit system, the City would need to evaluate the following primary considerations:

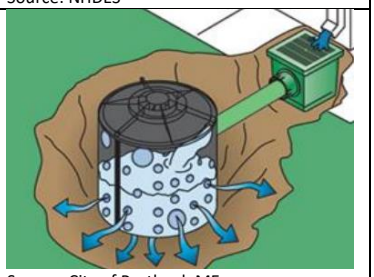
Property types eligible to receive credits: The Committee believes credits should be offered for both SFR and NSFR properties, which is common practice among most stormwater utilities in New England (City of Concord 2020). Some communities have chosen to limit credits to NSFR properties because the cost of reviewing credit applications and ensuring compliance could be significantly higher for SFR customers.

Maximum stormwater utility fee reduction: Communities typically offer a maximum reduction between 25-75% of the property owner's fee. However, some communities have made it possible for certain property owners to obtain a full credit of 100% (e.g., Portland, ME; Lewiston, ME). The Committee was not able to come to a consensus on the maximum fee reduction that should be offered, but based on Committee homework responses and further discussion during meetings, a majority of Committee members favor a maximum fee reduction of at least 50%. Some Committee members also suggested that properties creating stormwater management improvements that benefit areas beyond their own property should be able to obtain a full credit of 100%. For example, a development that creates a detention pond that accommodates runoff from a number of adjoining properties or a drywell that captures runoff from a public road benefits the City as a whole and may justify a full credit of 100%. Other Committee members expressed concerns that offering a full credit would not recognize the shared impact by stormwater on public property for which every property owner shares responsibility.

Qualifying stormwater management performance-based actions: Credits can be provided for actions that reduce the impact of stormwater runoff on the public stormwater system or provide an ongoing public benefit related to stormwater management. The Committee believes credits should be provided for both on-site stormwater treatment activates, as well as activities that reduce the quantity of stormwater runoff generated on the property.

Select examples of stormwater management actions that achieve stormwater quantity and/or pollutant reductions through the construction, operation, and maintenance of onsite structural controls are provided in Table 14. The amount of credit a property owner may be eligible for depends on the reductions in stormwater runoff rate, volume, and pollutants achieved. Some communities also offer credits for non-structural practices, such as parking lot sweeping and spill prevention planning. Further analysis of specific on-site stormwater controls and associated design standards will be required to determine the amount of credit a property owner can receive for implementing each unique stormwater control measure.

Table 14: Examples of Structural Controls Potentially Eligible for Performance-Based Credit

Cisterns are storage devices used to collect rainwater from roof downspouts for later reuse. They provide the benefit of reduced stormwater runoff and conservation of water. Stormwater collected in cisterns can typically be reused for such purposes as irrigation of lawns and gardens, wash water and other non-potable uses.	 Source: City of Portland, ME
Detention Ponds are impoundments designed to collect, detain and release stormwater runoff at a controlled rate. They provide treatment through the use of a permanent pool, which helps settle solids and associated pollutants.	 Source: NHDES
Drywells are comprised of seepage tanks set in the ground and surrounded with stone and are designed to intercept and temporarily store stormwater runoff until it infiltrates into the soil. Dry wells are particularly well suited to receive rooftop runoff entering the tank via an inlet grate or direct downspout connection.	 Source: City of Portland, ME
Infiltration chambers are structures designed to temporarily store runoff, allowing water to infiltrate into the ground. Treatment of runoff is provided by pollutants binding to soil particles beneath the chambers as water percolates into the subsurface.	 Source: NHDES

Permeable pavers are an alternative to paved surfaces that can decrease stormwater runoff. Permeable pavers consist of permeable interlocking or grid concrete pavers underlain by a drainage layer, allowing stormwater runoff to pass in between the paver surface and into an underlying stone reservoir, where it is temporarily stored and allowed to infiltrate into the underlying soils.	 Source: City of Portland, ME
Rain gardens are small, landscaped depressions that are filled with a mix of native soil and compost, and are planted with trees, shrubs and other garden-like vegetation. They are designed to temporarily store stormwater runoff and reduce runoff pollutant loads.	 Source: NHDES
Note: This is not an exhaustive list. Other types of low impact development (LID) and green infrastructure could qualify for credits as well. Additional examples are listed in the New Hampshire Homeowner's Guide to Stormwater Management.	

4.6.3 Social Equity Credits

To ensure the utility is equitable for all, the Committee recommends considering social equity credits according to the following eligibility requirements:

- Low-Income & Affordable Housing: Credits should be granted to SFR and multi-family residential (MFR) properties. In the case of SFR properties, the income level should be tied to existing property tax relief thresholds based on the Assessor's Office records. This minimizes the workload for both ratepayers and the utility since the City has already compiled this information. For MFR properties, the property owner should earn credit based on a percentage of units rented with documented conformance to United States Department of Housing and Urban Development low-income rate limits.
- Elderly/Senior Citizens: Credit should be automatically applied to a property owner's utility fee based on the Assessor's Office records of residents who currently qualify for the City's Elderly Property Tax Credit.
- Veterans: Credit should be automatically applied to a property owner's utility fee based on the Assessor's Office records of residents who currently qualify for the City's Veterans' Property Tax Credit.
- Disability: Credit should be automatically applied to a property owner's utility fee based on the Assessor's Office records of residents who currently qualify for the City's Disability Property Tax Credit.
- Blind: Credit should be automatically applied to a property owner's utility fee based on the Assessor's Office records of residents who currently qualify for the City's Blind Property Tax Credit.
- Deaf: Credit should be automatically applied to a property owner's utility fee based on the Assessor's Office records of residents who currently qualify for the City's Deaf Property Tax Credit.
- Tax-exempt/nonprofits: Credits should be considered for tax-exempt/nonprofits based on the social benefits they provide to the City.

If social equity credits are authorized, the revenue generated by the utility would decrease. Further analysis on the number of property owners eligible to receive social equity credits will be required to better understand the effect on utility revenue.

4.6.4 Potential Impact on Total Utility Revenue

To gauge the impact a credit system could have in Dover, the impact of credit policies in Portland, ME, Northampton, MA, and South Burlington, VT were analyzed and are summarized in Table 15. However, it is difficult to make comparisons across communities because each community has a different utility fee structure, credit policy, and may have allocated more or less resources towards educating the community on their respective credit systems. Additional examples of stormwater utility credit programs are available within the materials for Committee meeting #9 in Appendix B, and can also be found in the New England Stormwater Utility Survey compiled by Tighe & Bond (City of Concord 2020).

Table 15: Percentage of Properties Receiving Credits in Select New England Communities

Community	Year Utility Adopted	# of Billable Properties	# of Properties Receiving Credits	% of Properties Receiving Credits
Northampton, MA	2014	11,261	1,278	11.3%
Portland, ME	2016	21,837	199	<1%
South Burlington, VT	2005	7,305	17*	<1%
**Although only 17 properties currently receive credits in South Burlington, VT, two property owners (Burlington International Airport and Vermont Agency of Transportation) receive a combined credit for 1,929 ERUs, an annual value of approximately $166,710 if these ERUs were not credited.*				

Once all credits are authorized, and the revenue the utility is able to generate decreases, the community is then faced with the decision to either increase rates to maintain the desired funding level, or operate with a slightly reduced budget. This decision is different for each community and could depend on the scale of credits offered. In the case of South Burlington, VT, the City has not increased rates based on credits offered.

Throughout the Committee's exploration of credit systems, some Committee members raised concern that certain communities in New England do not appear to have successful credit programs based on the preliminary review summarized in Table 14 where very few property owners are taking advantage of credit programs offered by their community. The use of credits in other communities deserves further study to identify the best way to develop a credit system in Dover that would ensure all property owners have a realistic opportunity to reduce their utility rate. For example, depending on the types of stormwater management controls that are eligible for credits, it may not be cost-effective for property owners to make certain improvements, which would also diminish the potential for the City to achieve necessary pollutant reductions from private property. Given that a wide range of stormwater abatement options exist from low-cost to complex installations, the credit program would benefit from careful planning and outreach, as well technical expertise from external sources such as the UNH Stormwater Center.

4.7 Public Education and Stakeholder Outreach

Education and outreach are an essential part of the process as the City of Dover considers the development of a stormwater and flood resilience utility. Stakeholders should have the opportunity to learn about why the City is considering a utility, how fees could be structured, and the potential impact on stakeholders, as well as voice concerns during the process. The City will need to inform and seek input from both internal and external audiences to build support for a utility. The importance of public input and education prior to implementation cannot be stressed enough. Based on previous experiences in New Hampshire and around the country implementation of a utility is highly unlikely without proper outreach and education (EPA 2013). When Dover, Manchester, Nashua, and Portsmouth pursued stormwater utilities in 2008 and 2009, implementation was rejected amid public opposition. In each case, the municipality performed little to no public outreach. The experiences of these municipalities were well document, allowing the New Hampshire Department of Environmental Services to compile the following lessons learned (NHDES 2020):

- Involve the Public: The public must be involved from the very beginning. They should have the opportunity to learn about how a utility works, be able to ask questions, and voice concerns in order to make an educated decision on whether or not they think a 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 utility.
- Ensure Political Understanding and Support: It is essential that municipal decision makers fully understand the purpose and function of a 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 utility is necessary in order for both parties to feel confident supporting it.
- Provide Real Numbers and Full Disclosure: In order for the public to better understand how they would be personally impacted by a utility fee, actual examples of rates based on various rate structures should be developed and available for public review.
- Identify and Communicate the Need: It is important to identify and communicate local stormwater and flood resilience needs that could be funded with revenue from a utility fee. Highlighting examples of potential fixes to ongoing stormwater and flooding concerns focuses on the solutions.
- Consider Timing: During the exploration of a utility, use the process to identify the best time to move forward with getting approval. Be flexible and respond to external factors.
- Don't Assume Anything: No matter how aware your community is about stormwater and flooding and how much support appears to exist, do more communication and outreach than you think you need to.

4.7.1 Internal Outreach

It is critical that the education and outreach starts with City staff and elected officials. Several members of the City staff are already engaged in the process through their participation during Committee meetings, but performing outreach to those not directly involved is a necessary step. City Councilors, department heads, and staff should agree to support the Committee's recommendations before the City moves forward with further exploration the various considerations and options for structuring a utility. Meetings should be held with members of the City Council and City staff to explain the purpose of a Stormwater Utility, the overall expenses of the City's stormwater program, and how a stormwater fee may be set and collected. Support from City staff and elected officials will be essential to moving the process forward.

4.7.2 External Outreach

The Committee recognizes that engaging the public, commercial property owners, and tax-exempt property owners and receiving their input throughout the pursuit of a stormwater and flood resilience utility is vital. Each target audience will have different concerns, and input from each audience will be valuable in the exploration of a utility. For example, some Committee members have raised concerns that tax-exempt properties would potentially be unable to pay their utility fee because it would introduce a new expense to tight budgets. Furthermore, tax-exempt properties may have concerns about their ability to continue providing the current level of benefit to the City depending on how much they would be charged for their impervious area. The development of a robust outreach plan and education regarding credit options will be a critical and immediate next step if the City decides to proceed in pursuing a utility.

5. Alternative Funding Strategies Considered

Prior to voting to recommend a stormwater and flood resilience utility, the Committee explored alternative methods to fund stormwater that communities can and have employed, including the General Fund from property taxes, various fees and system development charges, public-private partnerships, village districts, sewer user fees, grants, loans, and bonds. To refine the list of potentially viable funding solutions, the Committee members completed multiple homework assignments to provide their thoughts on each funding method. Committee members differentiated between options they perceived as primary sources (i.e., funding methods that have the capability to generate the majority, if not all, of the stormwater program's funding needs) and supplemental sources (i.e., funding methods that can only be used to provide limited amounts of additional funding), identified advantages and disadvantages of each method, and ranked each option against secure, adequate, flexible, and equitable (SAFE) criteria. Advantages and disadvantages of each funding method identified by the Committee are summarized in the following sections. Committee member homework responses have been aggregated and are available in Appendix D.

5.1 General Fund

Property tax revenue contributes the greatest amount to Dover's general fund, and the Stormwater Program currently relies on that revenue to fund stormwater management activities. However, the Stormwater Program currently competes for adequate funding from the General Fund, and stormwater management improvements are typically considered low priority in comparison to other public services such as public safety and schools that also rely on revenue from property taxes. As a result, it is unlikely that the Stormwater Program would be able to grow as needed in the near future if the General Fund remains as its funding source. The City's tax cap would also likely prevent the property tax increase necessary to adequately fund the Stormwater Program. This system is also not equitable because the basis for determining property taxes – assessed property value – is not related to the cost of stormwater management for that property. Furthermore, tax-exempt properties in Dover do not currently support any of the costs of stormwater management, even though these properties are contributors of stormwater runoff.

Table 16: Advantages and Disadvantages of Funding Stormwater and Flood Resilience Through the General Fund

Advantages	Disadvantages
• Somewhat consistent from year-to-year • Existing mechanism • Simple to administer	• Competition for funds, which has already resulted in over $5 million of deferred stormwater and flood resilience projects • System is not equitable (does not fully reflect contribution of stormwater runoff)

5.2 Various Fee Mechanisms

Local governments have funded aspects of stormwater management through charging various fees for specific services, where fees collected have a clear connection to the activity being financed. For example, Dover uses plan review fees, permit fees, inspection fees, impact fees, and road excavation fees to offset related administrative and operational costs. Additional information on existing fees in Dover is available within the materials for Committee meeting #6 in Appendix B. Although these types of fees allow for more equitable and direct allocation of costs for services provided, the funding from these fees can vary significantly from year to year and is only generated at the start of a project. Therefore, these types of fees are unable to generate funds for operation and maintenance and should only be considered as supplemental sources of funding.

Table 17: Advantages and Disadvantages of Funding Stormwater and Flood Resilience Through Various Fees

Advantages	Disadvantages
• Specific permit and inspection fees allow for more direct allocation of costs for services provided • Addresses potential stormwater impacts related to new construction	• Level of funding is unpredictable and can vary significantly from year to year • Cannot fund larger projects or system-wide improvements • Determine an equitable rate for these fees can be difficult

5.3 Public-Private Partnerships

Public-Private Partnerships (P3s) are relatively common ways for the public and private sector to collaboratively deliver and maintain infrastructure projects. P3s can vary greatly from a community installing infrastructure on private land, to design-build contracting for a project on private land, or single contracts to deliver and maintain multi-year programs that achieve permit requirements. In some cases, contractual agreements between a public agency and a private sector entity allows for private sector participation in the financing, planning, design, construction, and/or maintenance of stormwater facilities for an agreed upon timeframe of 20-50 years. These arrangements are typically built around availability payments, which means the private partner does not get paid until infrastructure is installed and performs as expected. However, there are very few community examples of these arrangements, often called design-build-finance-operate-maintain agreements. The most prominent example comes from Prince George's County, MD, but this case study may not be transferable to Dover due to Dover's relatively much smaller size. The Committee recognizes that P3s are also not a long-term funding solution, because adequate funding is still required to sustain a P3. That being said, Dover should continue to collaborate with private-sector partners on stormwater infrastructure projects when it is cost-effective and appropriate to do so.

Table 18: Advantages and Disadvantages of Funding Stormwater and Flood Resilience Through P3s

Advantages	Disadvantages
• May be structured to require minimal to no initial cash outlay for public sector, assuming private sector partner is providing financing • Significantly leverages public resources • Shared risk with private sector	• Local revenue source needed to fund the partnership • Substantial education and socialization is required to manage public perceptions related to loss of control and escalated costs • Initial financing costs may be high

5.4 Village Districts

The NH Revised Statutes Annotated (RSA) 52 allows the formation of Village Districts to provide specialized services such as flood control and drainage. Funding for Village Districts are raised by taxes and/or fees within that District, and all properties that fall within the District must receive a direct benefit of the specialized service. For example, if a stormwater construction project benefits only a portion of the City, it could be funded by fees assessed only to properties within that area. Although some parts of the City with larger amounts of impervious area present more stormwater impacts than others, establishing a Village District may create an unequal burden of cost because revenue from other properties outside a Village District would not be contributing toward the management of stormwater runoff they generate.

Table 19: Advantages and Disadvantages of Funding Stormwater and Flood Resilience Through Village Districts

Advantages	Disadvantages
• Stable revenue for a portion of the City • Can be targeted for a specific purpose	• Not City-wide – revenue generated can only be used in the District • Complicates tax payments • Complicated decision making

5.5 Sewer User Fees

Some communities in New England that have combined sewer and stormwater systems use their sewer enterprise fund for stormwater management. This funding mechanism is problematic because it disproportionately puts the stormwater management cost burden on high sewer users instead of properties that generate the most runoff. Since Dover no longer has a combined sewer and stormwater system, it would not be equitable to fund stormwater management through sewer user fees.

Table 20: Advantages and Disadvantages of Funding Stormwater and Flood Resilience Through Sewer User Fees

Advantages	Disadvantages
• Existing mechanism • Ease of implementation • Ease of billing	• System is not equitable (disproportionately puts stormwater cost burden on high sewer users) • Sewer use is not directly related to stormwater program expenditures (a property's metered water flow usually bears no relationship to the stormwater runoff it generates)

5.6 Grants, Loans, and Bonds

Dover has a history of success with securing loans and bonds for large infrastructure projects and has also competed well for state funding opportunities such as the Clean Water State Revolving Loan Fund, New Hampshire Coastal Program Coastal Resilience Grants, and New Hampshire Department of Environmental Services Watershed Assistance Grants. In FY2020 alone, Dover was able to secure $321,000 in grants and debt forgiveness loans to offset expenses from a variety of projects including the Broadway culvert replacement, stormwater infrastructure asset management, and illicit discharge detection and elimination. Regardless of the primary funding method the City employs, City staff will continue to pursue these funding opportunities to offset stormwater management and flood resilience expenses, but these sources only provide one-time, supplemental funding for specific projects.

Issuing bonds to meet recurring stormwater system needs presents financial challenges. Financial concerns were evaluated by the City Finance Director, Dan Lynch. He projected that a one-time bond of roughly $2.5 million would likely not have an impact on the City's credit rating, but recurring issuance of a bond of that magnitude would result in a negative outlook and possibly a credit rating down grade, which would impact the interest rates the City obtains on debt issuance. Furthermore, issuing a substantial (e.g., $28 million) bond to cover multiple years of projects would likely exceed the City Council financial policy debt limit for the General Fund, exceed the City Council financial policy limit for the percentages of the budget that is expended for debt services, and negatively impact the City's credit ratings.

Table 21: Advantages and Disadvantages of Funding Stormwater and Flood Resilience Through Grants, Loans, and Bonds

Advantages	Disadvantages
• Existing sources available for supplemental stormwater related funding • Can support construction-ready projects	• One-time source of funds • Typically project-specific funds • Do not typically fund post-project operations and maintenance • Administrative requirements can be time-consuming • Recurring bonds add to debt service fees and could weaken City credit ratings

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Appendices

Appendix A: City Council Resolution Establishing the Ad Hoc Committee to Study Stormwater and Flood Resilience Funding

Appendix B: Committee Meeting Minutes, Presentations, and Materials

Appendix C: Summary of Preliminary Impervious Area Analysis by Property Type

Appendix D: Committee Homework Assignments and Aggregated Responses

Appendix A

City Council Resolution Establishing the Ad Hoc Committee to Study Stormwater and Flood Resilience Funding

CITY OF DOVER - RESOLUTION

Agenda Item#: 13.B.2.

CITY OF DOVER

Resolution Number: **R – 2020.08.12 – 130**
Resolution Re: Formation of Ad Hoc Committee to Study Stormwater and Flood Resilience Funding

WHEREAS: Stormwater (rainwater or meltwater) travels across rooftops, roads, parking lots and other impervious surfaces in the City of Dover; and

WHEREAS: The City of Dover's stormwater discharges are regulated by the United States Environmental Protection Agency's ("EPA") Small Municipal Separate Stormwater Sewer Systems ("MS4") permit; and

WHEREAS: Climate change is, or is expected to, result in increased coastal flooding, as confirmed by recent studies by the New Hampshire Department of Environmental Services ("NHDES") and other organizations; and

WHEREAS: The City Council conducted a workshop meeting on August 5, 2020, with a presentation by representatives of the NHDES and the Piscataqua Region Estuaries Partnership ("PREP"), during which NHDES and PREP outlined the need for communities, particularly those in the Seacoast region, to explore funding for the present and future management of stormwater and planning/responses to coastal flooding; and

WHEREAS: By this resolution, an ad hoc advisory committee is created, to be called the Committee to Study Stormwater and Flood Resilience Funding, in order to investigate, study, and identify and make recommendations to the City Council concerning various funding opportunities that may exist with respect to existing needs and future stormwater and flood resilience management planning.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND DOVER CITY COUNCIL THAT:

A Committee to Study Stormwater and Flood Resilience Funding is hereby established and will be an ad-hoc, advisory committee to the City Council composed of fourteen members as follows:

(a) Two City Councilors recommended by the Mayor and ratified by the City Council;

(b) Two citizens at large recommended by the City Council's appointments committee and ratified by City Council;

(c) Two business owners or representatives in Dover recommended by the City Council's appointments committee and ratified by City Council;

(d) Two developers in Dover recommended by the City Council's appointments committee and ratified by City Council;

(e) Two commercial property owners in Dover recommended by the City Council's appointments committee and ratified by City Council;

(f) Two residential property owners in Dover recommended by the City Council's appointments committee and ratified by City Council;

(g) Two representatives of environmental advocacy programs or organizations recommended by the City Council's appointments committee and ratified by City Council;

AND, FURTHER BE IT RESOLVED THAT:

The Committee to Study Stormwater and Flood Resilience Funding will meet regularly, as deemed advisable, to assist the City Council with reviewing data, options, and other information, and ultimately will recommend to the City Council and City Manager whether to pursue one or more funding options with respect to existing needs and future stormwater and flood resilience management planning.

AND, FURTHER BE IT RESOLVED THAT:

The Committee to Study Stormwater and Flood Resilience Funding shall author and submit a final, written report to City Council no later than March 31, 2021, summarizing its findings, potential options, and the Committee's ultimate recommendations.

AND, FURTHER BE IT RESOLVED THAT:

The Committee to Study Stormwater and Flood Resilience Funding shall consult with NHDES and PREP representatives as deemed necessary and advisable.

AND, FURTHER BE IT RESOLVED THAT:

The Committee to Study Stormwater and Flood Resilience Funding shall adopt rules to be approved by the City Council and elect a Chair and Vice Chair from its membership; 8 members of the Committee shall constitute a quorum, and the Committee to Study Stormwater and Flood Resilience Funding shall determine an appropriate meeting schedule.

AND, FURTHER BE IT RESOLVED THAT:

The Committee to Study Stormwater and Flood Resilience Funding is established for a period of one year from the date of this resolution's adoption and may be extended by further act of the City Council, barring which the Committee to Study Stormwater and Flood Resilience Funding shall automatically lapse and cease to exist.

AUTHORIZATION

Approved as to Funding:	Daniel R. Lynch Finance Director	Sponsored by:	Mayor Robert Carrier By Request
Approved as to Legal Form and Compliance:	Joshua M. Wyatt City Attorney		
Recorded by:	Susan M. Mistretta City Clerk		

Resolution Number: **R – 2020.08.12 – 130**
Resolution Re: Formation of Ad Hoc Committee to Study Stormwater and Flood Resilience Funding

DOCUMENT HISTORY:

First Reading Date:	08/12/2020	Public Hearing Date:	N/A
Approved Date:	08/12/2020	Effective Date:	08/12/2020

DOCUMENT ACTIONS:

Deputy Mayor Ciotti moved to substitute as a whole; seconded by Councilor Manley.
Roll Call Vote: 9/0.
Deputy Mayor Ciotti moved for the adoption of the substituted Resolution; seconded by Councilor Shanahan.
Roll Call Vote: 9/0.

VOTING RECORD Date of Vote: 08/12/2020	YES	NO
Mayor Robert Carrier	X	
Deputy Mayor Dennis Ciotti	X	
Councilor Michelle Muffett-Lipinski, Ward 1	X	
Councilor Deborah Thibodeaux, Ward 3	X	
Councilor Joshua Manley, Ward 4	X	
Councilor Dennis Shanahan, Ward 5	X	
Councilor Fergus Cullen, Ward 6	X	
Councilor John O'Connor, At Large	X	
Councilor Lindsey Williams, At Large	X	
Total Votes:	9	0
Resolution does pass.		

RESOLUTION BACKGROUND MATERIAL:
New Hampshire passed legislation in 2008 enabling communities to form a so-called stormwater utility by vote of the local legislative body. (*See* RSA 149-I:6-b & RSA 149-I:10-a). To date, no community in New Hampshire has formed such a utility.

In 2010, the City of Dover established an advisory, ad-hoc committee to study the feasibility of a stormwater utility (R-2010-.04.28.052). In 2011, that former committee completed its work. A resolution was introduced to establish a stormwater utility (R-2011.01.26-014), which failed to pass by vote on February 9, 2011. In November 2011, a final report was submitted to NHDES outlining the work of the City of Dover, including positive outcomes from the study. A copy of the November 2011 report can be accessed through this link.

Separate from stormwater, but related, are coast flooding risks, which NHDES has increasing called to the attention of communities in the Seacoast. By statute, NHDES has been instructed to study storm surge, sea-level rise, precipitation, and other relevant considerations commencing July 1, 2019 and every five years thereafter. *See* RSA 483-B:22. NHDES has since issued a series of publications outlining the science related to these issues and recommended planning initiatives, copies of which are available at the links below.

Below are several informational links from NHDES and the City of Dover's website providing additional information on stormwater and coastal flooding:

- https://www.des.nh.gov/organization/divisions/water/stormwater/utilities.htm
- https://www.des.nh.gov/organization/divisions/water/wmb/coastal/flood-risk-summary.htm
- https://www.dover.nh.gov/government/city-operations/planning/stormwater/

CITY OF DOVER - RESOLUTION

Agenda Item#: 13.B.2.

CITY OF DOVER

Resolution Number: **R – 2020.10.28 – 182**
Resolution Re: Repeal and Replace Ad Hoc Committee to Study Stormwater and Flood Resilience Funding

WHEREAS: Stormwater (rainwater or meltwater) travels across rooftops, roads, parking lots and other impervious surfaces in the City of Dover; and

WHEREAS: The City of Dover's stormwater discharges are regulated by the United States Environmental Protection Agency's ("EPA") Small Municipal Separate Stormwater Sewer Systems ("MS4") permit; and

WHEREAS: Climate change is, or is expected to, result in increased coastal flooding, as confirmed by recent studies by the New Hampshire Department of Environmental Services ("NHDES") and other organizations; and

WHEREAS: The City Council conducted a workshop meeting on August 5, 2020, with a presentation by representatives of the NHDES and the Piscataqua Region Estuaries Partnership ("PREP"), during which NHDES and PREP outlined the need for communities, particularly those in the Seacoast region, to explore funding for the present and future management of stormwater and planning/responses to coastal flooding; and

WHEREAS: After passing a resolution on August 12, 2020 (R-2020.08.12-130) forming a Committee to Study Stormwater and Flood Resilience Funding, it has become clear during the appointments committee process that certain amendments to the original resolution are warranted; and

WHEREAS: By this resolution, the City Council intends to repeal and reenact the original resolution with certain amendments, hereby creating an ad hoc advisory committee, to be called the Committee to Study Stormwater and Flood Resilience Funding, in order to investigate, study, and identify and make recommendations to the City Council concerning various funding opportunities that may exist with respect to existing needs and future stormwater and flood resilience management planning.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND DOVER CITY COUNCIL THAT:

R-2020.08.12-130 is repealed.

AND, BE IT FURTHER RESOLVED THAT:

A Committee to Study Stormwater and Flood Resilience Funding is hereby established and will be an ad-hoc, advisory committee to the City Council composed of seventeen members recommended by the City Council's appointments committee and ratified by City Council, with certain additional appointments requirements:

(a) One City Councilor member shall be appointed as recommended by the Mayor and ratified by the City Council (ex officio and non-voting); and

(b) One interested and experienced employee from the Dover School District may be appointed (ex officio and non-voting); and

(c) One Community Services Department liaison designee shall be appointed (ex officio and non-voting); and

(e) All remaining fourteen committee members shall be appointed by the Mayor subject to review of the Appointments Committee and approval of the City Council, shall have voting rights, and shall serve in an at large capacity with balanced representation from the following areas:

i. Residents;
ii. Business owners or representatives;
iii. Professional engineers;
iv. Developers;
v. Commercial property owners;
vi. Residential property owners; and
vii. Representatives of environmental advocacy interests, programs, or organizations.

AND, FURTHER BE IT RESOLVED THAT:

The Committee to Study Stormwater and Flood Resilience Funding will meet regularly, as deemed advisable, to assist the City Council with reviewing data, options, and other information, and ultimately will recommend to the City Council and City Manager whether to pursue one or more funding options with respect to existing needs and future stormwater and flood resilience management planning.

AND, FURTHER BE IT RESOLVED THAT:

The Committee to Study Stormwater and Flood Resilience Funding shall author and submit a final, written report to City Council no later than October 31, 2021, summarizing its findings, potential options, and the Committee's ultimate recommendations.

AND, FURTHER BE IT RESOLVED THAT:

The Committee to Study Stormwater and Flood Resilience Funding shall consult with NHDES and PREP representatives as deemed necessary and advisable.

AND, FURTHER BE IT RESOLVED THAT:

The Committee to Study Stormwater and Flood Resilience Funding shall adopt rules to be approved by the City Council and elect a Chair and Vice Chair from its membership; 8 members of the Committee shall constitute a quorum, and the Committee to Study Stormwater and Flood Resilience Funding shall determine an appropriate meeting schedule.

AND, FURTHER BE IT RESOLVED THAT:

The Committee to Study Stormwater and Flood Resilience Funding is established until the submission of its final, written report and may be extended by further act of the City Council, barring which the Committee to Study Stormwater and Flood Resilience Funding shall automatically lapse and cease to exist.

AUTHORIZATION

Approved as to Funding:	Daniel R. Lynch Finance Director	Sponsored by:	Mayor Robert Carrier By Request
Approved as to Legal Form and Compliance:	Joshua M. Wyatt City Attorney		
Recorded by:	Susan M. Mistretta City Clerk		

Resolution Number: **R – 2020.10.28 – 182**
Resolution Re: Repeal and Replace Ad Hoc Committee to Study Stormwater and Flood Resilience Funding

DOCUMENT HISTORY:

First Reading Date:	10/28/2020	Public Hearing Date:	N/A
Approved Date:	10/28/2020	Effective Date:	10/28/2020

DOCUMENT ACTIONS:

Deputy Mayor Ciotti moved for its adoption; seconded by Councilor Muffett-Lipinski.
Roll Call Vote: 7.0.

VOTING RECORD Date of Vote: 10/28/2020	YES	NO
Mayor Robert Carrier	X	
Deputy Mayor Ciotti	X	
Councilor Michelle Muffett-Lipinski, Ward 1	X	
Councilor Deborah Thibodeaux, Ward 3	X	
Councilor Joshua Manley, Ward 4	Absent	
Councilor Dennis Shanahan, Ward 5	X	
Councilor Fergus Cullen, Ward 6	X	
Councilor John O'Connor, At Large	Absent	
Councilor Lindsey Williams, At Large	X	
Total Votes:	7	0
Resolution does | does not pass.		

RESOLUTION BACKGROUND MATERIAL:

New Hampshire passed legislation in 2008 enabling communities to form a so-called stormwater utility by vote of the local legislative body. (*See* RSA 149-I:6-b & RSA 149-I:10-a). To date, no community in New Hampshire has formed such a utility.

In 2010, the City of Dover established an advisory, ad-hoc committee to study the feasibility of a stormwater utility (R-2010-.04.28.052). In 2011, that former committee completed its work. A resolution was introduced to establish a stormwater utility (R-2011.01.26-014), which failed to pass by vote on February 9, 2011. In November 2011, a final report was submitted to NHDES outlining the work of the City of Dover, including positive outcomes from the study. A copy of the November 2011 report can be accessed through this link.

Separate from stormwater, but related, are coast flooding risks, which NHDES has increasing called to the attention of communities in the Seacoast. By statute, NHDES has been instructed to study storm surge, sea-level rise, precipitation, and other relevant considerations commencing July 1, 2019 and every five years thereafter. *See* RSA 483-B:22. NHDES has since issued a series of publications outlining the science related to these issues and recommended planning initiatives, copies of which are available at the links below.

Below are several informational links from NHDES and the City of Dover's website providing additional information on stormwater and coastal flooding:

- https://www.des.nh.gov/organization/divisions/water/stormwater/utilities.htm
- https://www.des.nh.gov/organization/divisions/water/wmb/coastal/flood-risk-summary.htm
- https://www.dover.nh.gov/government/city-operations/planning/stormwater/

Appendix B

Committee Meeting Minutes, Presentations, and Materials

Committee Meeting #1

November 30, 2020

CITY OF DOVER

STORMWATER AND FLOOD RESILIENCE FUNDING COMMITTEE - MINUTES

Meeting Type: **Regular Meeting**
Meeting Location: **City Hall, Council Conference Room**
Meeting Date: **Monday, November 30, 2020**
Meeting Time: **5:30 PM**

1. **Attendance (Introductions)**

   Members present: Bill Baber, Ray Bardwell, David Dagenais (non-voting), Marcia Gasses, Eric George, Paul Geraci, Steve Haight, Vincent Hayes, Chad Kageleiry, Allan Krans (non-voting), Ken Mavrogeorge, Jan Nedelka, Otis Perry, Cynthia Walter, Peter Driscoll (Dover School District, ex officio), Dennis Shanahan (City Council, ex officio), Gretchen Young (Community Services, ex officio),

   Members Not Present (excused):

   Members Not Present (un-excused):

   Also Present: City Attorney Wyatt, Asst. City Attorney Perez, Ben Sweeney (NHDES Project Partner), Nathalie Morison DiGeronimo (NHDES Project Partner), Abigail Lyons (PREP Project Partner), Jamie Houle (UNH Stormwater Center), Martha Sheils (New England Environmental Finance Center)

2. **NEW BUSINESS**

   A. **Review Right to Know and Ethics**

   Attorney Wyatt presented the Right to Know and Ethics overview, also discussed voting and remote meeting procedures. Only seven voting members physically present, therefore need to designate an emergency meeting due to COVID by the Committee Chair.

   Motion: Gasses made a motion seconded by Haight, **to nominate Otis Perry as Chair pro tem**
   Roll call Vote: Motion passed 12-0

   Perry declared an emergency meeting allowing for remote attendance.

   B. **Review Operating Rules**

   Perry stated that members had received the procedures ahead of the meeting. Sweeney reviewed procedures. Krans noted that there should be some language regarding the remote meetings.

   Motion: Baber made motion seconded by Mavrogeorge, **to adopt Operating Rules with amendment that the Committee expects to meet frequently using the "Emergency" provisions of RSA 91-A:2,III(b)given the time limited nature of the Committee and the ongoing pandemic, as determined by the Chair.**
   Roll call Vote: Motion passed 12-0

C. Review Draft Committee Work Plan
Sweeney presented draft committee work plan.

Krans noted that the work plan was only focused on funding aspects of stormwater and should include operational and regulatory compliance decisions as well. Shanahan reviewed the City Council Resolution. Krans suggested that the Council revisit the committees charge.

Bardwell noted that regulatory agencies are overly burdening communities every time a renewal of a discharge permit is required.

D. Overview of City's previous efforts to explore alternative stormwater funding strategies
Young presented on previous stormwater funding efforts.

E. Overview of City's previous efforts to explore alternative stormwater funding strategies
Young presented on previous stormwater funding efforts.

F. Introduction to stormwater management in Dover
Young presented on stormwater management in Dover

G. Introduction to flood vulnerability in Dover
DiGeronimo presented on flood vulnerability in Dover

3. Citizens Forum
None present

4. Confirm Next Meeting Date
Next meeting is scheduled for December 21, 2020 at 5:30 pm

5. Chair pro tem Adjourned Meeting

Exploring Alternative Stormwater Funding Strategies: Previous Efforts in Dover

City of Dover Ad Hoc Committee to Study Stormwater and Flood Resilience Funding

Committee Meeting #1
November 30, 2020

Stormwater Funding Timeline

Does It Make Sense (DIMS) Study

Purpose: Gather information and determine the City's capacity for developing a stormwater utility

Findings

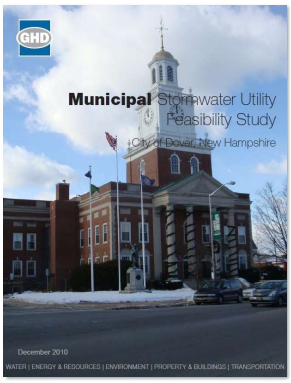
- Drivers: aging infrastructure, basement flooding, Willand Pond, future regulatory requirements
- Barriers to a utility: Public understanding and acceptance, capacity to enforce and manage
- Feasibility: Demographics and baseline information (population, impervious cover, etc.) appear conducive to a utility

Stormwater Utility Feasibility Study

Stakeholder committee created to serve in an advisory role to consultants and City staff

Committee members unanimously agreed:

- Budget increase was necessary to adequately fund stormwater management
- Establishing a utility would be the most equitable method



Outcome of Recommendations

Public hearing was held and dominated by small group of citizens strongly opposed to establishing a utility for the following reasons:

- Not wanting to be the first utility in NH
- Frustrated with unfunded federal mandates
- New MS4 permit was not issued yet
- Utility was perceived as a tax

Overwhelming negative response at public hearing caused City Council to vote against a utility

Building on Lessons Learned

- Have the right people at the table
- Establish shared values to guide decision making
- Involve the public
- Ensure political understanding and support
- Don't assume anything
- Take as much time as you need, but don't take longer than you need

Why Revisit Stormwater and Flood Resilience Funding?

Historical challenges still exist

- Aging infrastructure
- Water quality impairments
- Regulatory requirements

Better understanding future flood impacts

- Increasing extreme precipitation
- Sea-level rise
- Groundwater rise

Stormwater management and flood resilience face unavoidable increases in cost

Committee Focus: Then and Now

2010

Committee efforts and previous studies focused on one solution: stormwater utility

2020

Exploratory process to investigate all potential solutions and allow committee to reach consensus. No predetermined outcome

Committee Mission

Together with a diverse group of community stakeholders, investigate, evaluate, and recommend alternative stormwater and flood resilience funding strategies to address existing and future management needs

More Information

Stormwater Utility Feasibility Study

- https://www.des.nh.gov/organization/divisions/water/stormwater/documents/dover-final-report.pdf

Overview of Stormwater Utilities*

- NHDES: https://www.des.nh.gov/organization/divisions/water/stormwater/utilities.htm
- EPA: https://www3.epa.gov/region1/npdes/stormwater/assets/pdfs/FundingStormwater.pdf

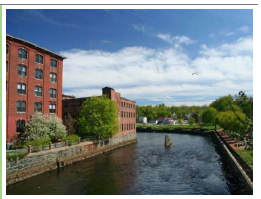
**Stormwater utilities will be covered in more detail at future committee meetings*

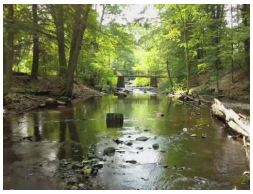
Introduction to Stormwater Management in Dover

City of Dover Ad Hoc Committee to Study Stormwater and Flood Resilience Funding

Committee Meeting #1
November 30, 2020

Stormwater Impacts Water Quality & Quality of Life





What is Stormwater Runoff?

Stormwater

Precipitation from rain or snowmelt that accumulates faster than the ground's infiltration capacity (ability of the ground to absorb water) resulting from:

- Impervious surfaces: paved areas and buildings
- Fully saturated soils below the ground surface
- Bedrock

Stormwater Runoff

Stormwater which flows across the ground surface or just below the ground surface

Need for Stormwater Conveyance

The stormwater system is meant to convey stormwater runoff:

1. Away from private property and public right-of-ways
2. To local water bodies, such as:
   - Cocheco River
   - Salmon Falls River
   - Bellamy River
   - Great Bay Estuary
   - Willand Pond

What is Stormwater Pollution?

Water Quality Impacts

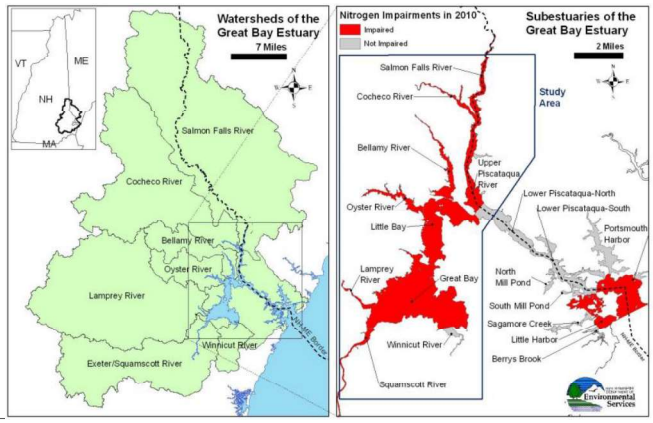
Pollutant	Sources	Impacts
Nutrients (nitrogen, phosphorus)	Fertilizer, wastewater effluent, pet waste	Algal blooms, reduced dissolved oxygen levels
Sediments	Soil erosion, road sand	Carry contaminants, reduce water clarity, impact aquatic habitat
Pathogens (viruses, bacteria, etc.)	Agricultural and pet waste, wastewater effluent, septic systems	Impacts drinking water, fish and shellfish consumption, recreation

Water Quality Impacts Cont.

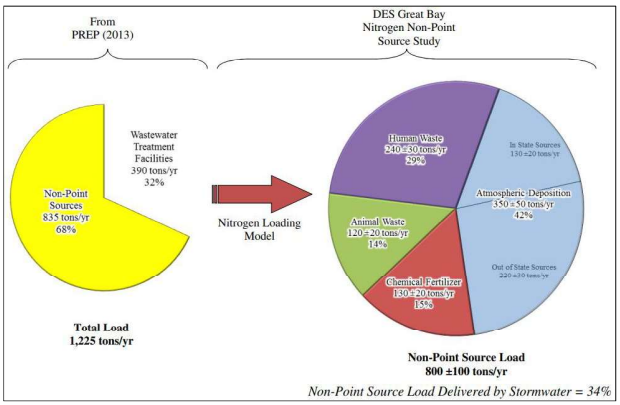
Pollutant	Sources	Impacts
Toxics (heavy metals, volatile organics, etc.)	Petroleum products, paints, herbicides, solvents, etc.	Poisonous to living organisms, persist in the environment
Chloride (salts)	De-icing salts, water softeners	Impact plants and animals in freshwater systems
Temperature	Runoff from warm surfaces such as parking lots	Reduced dissolved oxygen affects fish and other organisms



Local Impaired Water Bodies



Nitrogen Loads to Great Bay



Source: Great Bay Nitrogen Non-Point Source Study

Willand Pond

fosters.com
A Service of seacoastonline.com

2007 **Little remains from Willand Pond's glory days**

2008 **Toxic bloom likely at Willand Pond**

2011 **Mystery Lint at Willand Pond in Dover: Contamination worries rise as shoreline remains covered**

2019 **Dead fish prompt testing at Willand Pond**

2019 **Cyanobacteria advisory posted at Willand Pond**

Willand Pond

Water Quality Challenges

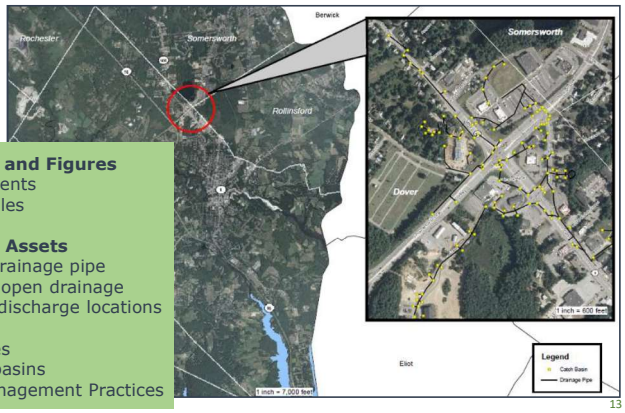
Vulnerable to cyanobacteria blooms caused by increased phosphorus levels resulting from:

- Excess precipitation and flooding
- Stormwater runoff from commercial parking lots

How Are We Managing Stormwater Today?



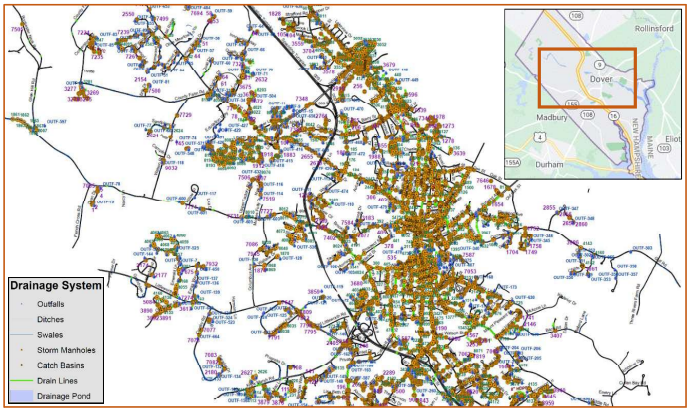
Extensive Stormwater System



Dover Facts and Figures
31,000 residents
29 square miles

Stormwater Assets
65 miles of drainage pipe
101 miles of open drainage
450 outfalls/discharge locations
140 culverts
100 manholes
3200 catch basins
100 Best Management Practices

Map of Stormwater Assets



Condition of Stormwater Assets

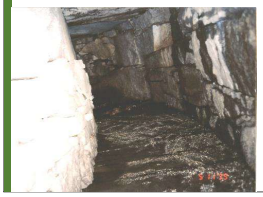
- Pipe segments assessed within the focus area: **226**
- Pipe segments with a "likelihood of failure" rating greater than 3: **56**

(Likelihood of failure rating from 1-5)



Broadway Culvert Replacement

- Investigations revealed partial collapse of existing stone box culvert underneath the railroad
- Existing culvert was undersized
- New culvert will be sized for future conditions and designed to reduce flooding



Summary of Stormwater Program Elements

Infrastructure maintenance
- Catch basin cleaning (approx. 50% of catch basins annually)
- Illicit discharge detection and elimination
- Responding to resident service calls
- Best Management Practice (BMP) maintenance

Planning board activities
- Reviewing subdivision and site plan applications
- Inspections of erosion control and stabilization measures

Grant funded initiatives
- Berry Brook
- Willand Pond

CIP initiatives and general drainage improvements

Regulatory compliance

Regulatory Requirements

Clean Water Act

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Permits for Clean Water NPDES

National Pollution Discharge Elimination System (NPDES)

- Administered by the Environmental Protection Agency (EPA)
- Requires permits for any discharge into water bodies

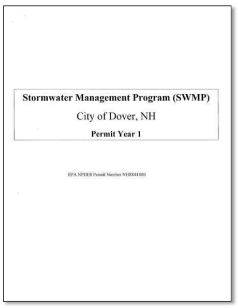
Municipal Separate Storm Sewer System (MS4) Permit

- Established to minimize harmful pollutants entering local water bodies
- Requires the City to implement minimum control measures

MS4 Permit Requirements

Six minimum control measures

- Public Education and Outreach
- Public Information and Participation
- Illicit Discharge detection and elimination
- Construction site stormwater runoff control
- Post construction stormwater management
- Pollution prevention and good house keeping in municipal operations


Stormwater Management Program (SWMP)
City of Dover, NH
Permit Year 1

DRAFT Great Bay Total Nitrogen General Permit

- Clean Water Act permit
- Draft was published in January 2020
- Aims to regulate discharge of nitrogen in Great Bay
- Would require City to achieve reductions in nitrogen loading at the wastewater treatment plant and/or from nonpoint sources

Permit not finalized, but could impose additional cost on communities

More Information

City of Dover Resources

- Stormwater management in Dover: https://www.dover.nh.gov/government/city-operations/planning/stormwater/

State of New Hampshire Resources

- NHDES stormwater management program: https://www.des.nh.gov/organization/divisions/water/stormwater/index.htm

Federal Resources

- EPA NPDES permit program: https://www.epa.gov/npdes

Other Resources

- PREP State of Our Estuaries: https://www.stateofourestuaries.org/2018-reports/sooe-full-report
- New England Environmental Finance Center: https://usmgis.maps.arcgis.com/apps/Cascade/index.html?appid=723a869ba1104f3186200b403ae44b58

Introduction to Flood Vulnerability in Dover

City of Dover Ad Hoc Committee to Study Stormwater and Flood Resilience Funding

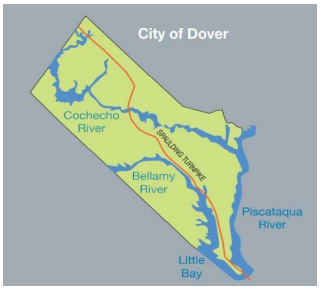
Committee Meeting #1
November 30, 2020

Flood Risk

Vulnerable to urban, riverine, and coastal flooding

Potential Causes

- Excessive rainfall
- Rapid snow melt
- Ice jams
- Dam breach or failure
- Storm surge
- Sea-level rise
- Groundwater rise

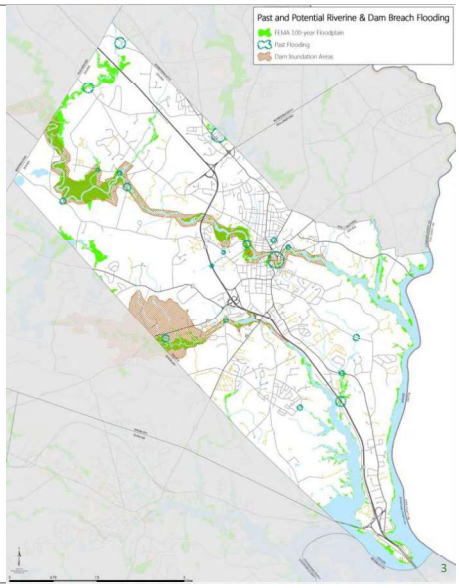


100-year Floodplain

Flooding can occur anywhere in the City, but more likely within 100-year floodplain

Smaller storms can still flood significant portions of the 100-year floodplain

Roughly 944 acres in Dover located within 100-year floodplain



Past Flood Events

- 1896 Bracewell Block Flood
- 1936 Flood Event
- 2006 Mother's Day Flood
- 2007 Patriot's Day Flood

} Two 100-year flood events within 11 months

Previously Impacted Areas

Transportation Corridors

- Central Ave.
- Washington St.
- New Rochester Rd.
- Middle St. over Canney Brook
- County Farm Rd. over Jackson Brook
- Blackwater Rd. over Blackwater Brook

Residential & Recreational

- Homes on Littleworth Rd.
- Madbury Apartments on Knox Marsh Rd.
- Willand Pond
- Henry Law Park

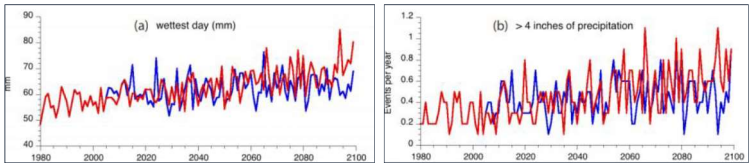

fosters.com
A Service of seacoastonline.com
2016
Flood waters close Dover Indoor Pool

Flooding is Projected to Increase: More Extreme Precipitation, Sea-Level Rise, and Groundwater Rise

Extreme Precipitation

Key Findings from NH Coastal Flood Risk Science Summary

- The frequency and magnitude of extreme precipitation events is projected to increase, especially in springtime



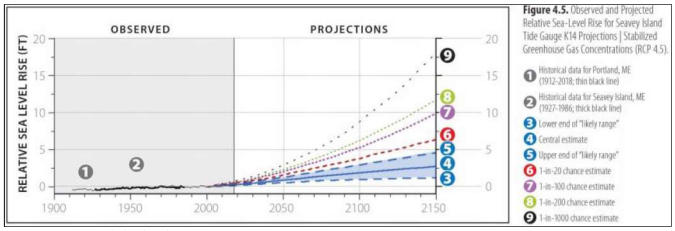
CMIP5 mean modeled historical (1980-2005) and projected future (2006-2099) for (a) annual maximum daily precipitation and (b) events greater than 4" at Portsmouth, NH under RCP 4.5 (blue) and RCP 8.5 (red) (from Burakowski et al., 2019).

Sea-Level Rise Projections

If greenhouse gas concentrations stabilize by 2100, relative sea level in coastal NH "likely" to rise by:

- **0.5-1.3 ft. by 2050** (but could exceed 2.9 ft.)
- **1.0-2.9 ft. by 2100** (but could exceed 8.7 ft.)

*Estimates are higher if we assume greenhouse gas concentrations will continue to grow



Source: NH Coastal Flood Risk Summary Part 1: Science

Climate Risk in the Seacoast (C-RiSe) Vulnerability Assessment

Sea-Level Rise Scenarios:
1.7, 4.0, and 6.3 ft.

Sea-Level Rise + Storm Surge:
1.7, 4.0, and 6.3 ft. + 100-yr storm

Public Infrastructure Impacted by Future Sea-Level Rise

Scenario used in analysis:
6.6 ft. with storm surge

Stormwater

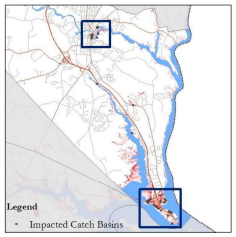
- **61** catch basins
- **10** manholes
- **65** stormwater outfalls

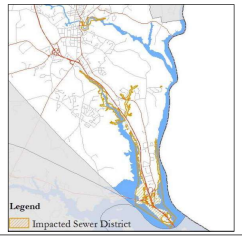
Sewer

- **7** pump stations
- **5.39** miles of sewer pipe

Transportation

- **5.54** miles of road





Source: Dover Climate Adaptation Master Plan Chapter (2018)

Groundwater Rise

Key Findings from NH Coastal Flood Risk Science Summary

Average groundwater levels are projected to rise as a percentage of sea-level rise up to 3 miles inland

- 66% of sea-level rise between 0-0.6 miles from coast
- 34% of sea-level rise between 0.6-1.2 miles from coast
- 7% of sea-level rise between 1.2-2.5 miles from coast
- 3% of sea-level rise between 2.5-3.1 miles from coast

Groundwater rise projections have not yet been mapped in Dover

Building Flood Resilience

Reducing Flood Risk

Categories of Action to Consider

AVOID

- Build new assets outside of at risk areas

RELOCATE

- Move assets outside of at risk areas

ACCOMODATE

- Disconnect impervious cover
- Elevate critical equipment
- Upsize drainage

PROTECT

- Build physical barriers
- Dry floodproof critical assets

More Information

City of Dover Resources

- C-RiSe Vulnerability Assessment (2017) http://strafford.org/cmsAdmin/uploads/CRiseMaps/Dover/Dover_Assessment_Report_020617.pdf
- Climate Adaptation Master Plan Chapter (2018) https://www.dover.nh.gov/Assets/government/city-operations/2document/planning/master-plan/Climate/Climate_Adaptation_Chapter_Certified.pdf
- Multi-Hazard Mitigation Plan Update (2018) http://www.strafford.org/cmsAdmin/uploads/hazmitplans/Dover_2018_Final_042318_ReducedSize.pdf
- City Flood Information brochure https://www.dover.nh.gov/Assets/government/city-operations/2document/planning/outreach/Floodplain/Flood%20Information%20Brochure.pdf

State of New Hampshire Resources

- NH Coastal Flood Risk Summary Part I: Science (2019) https://scholars.unh.edu/cgi/viewcontent.cgi?article=1209&context=ersc
- NH Coastal Flood Risk Summary Part II: Guidance (2020) https://scholars.unh.edu/cgi/viewcontent.cgi?article=1210&context=ersc
- NH Flood Hazards Handbook (2019) https://silverjackets.nfrmp.us/portals/0/doc/newhampshire/NH_Flood_Hazards_Handbook.pdf
- NH Coastal Viewer Mapping Tool https://nhcoastalviewer.unh.edu/

Committee Meeting #2

December 21, 2020

CITY OF DOVER

STORMWATER AND FLOOD RESILIENCE FUNDING COMMITTEE - MINUTES

Meeting Type:	**Regular Meeting**
Meeting Location:	**City Hall, Council Conference Room**
Meeting Date:	**Monday, December 21, 2020**
Meeting Time:	**5:30 PM**

Members present: Bill Baber, Ray Bardwell, David Dagenais, Marcia Gasses, Eric George, Paul Geraci, Steve Haight (arrived at 5:50), Vincent Hayes (arrived at 5:52), Chad Kageleiry, Ken Mavrogeorge, Jan Nedelka, Otis Perry, Cynthia Walter, Peter Driscoll (Dover School District, ex officio), Dennis Shanahan (City Council, ex officio), Gretchen Young (Community Services, ex officio),

Members Not Present (excused):

Members Not Present (un-excused): Allan Krans

Also Present: Ben Sweeney (NHDES/PREP Project Partner), Nathalie Morison DiGeronimo (NHDES Project Partner), Abigail Lyon (PREP Project Partner), Jamie Houle (UNH Stormwater Center)

1. Call to Order

Perry called the meeting to order at 5:30 PM. Meeting declared an emergency because a physical quorum is not reasonably practical based on the ongoing COVID-19 pandemic and the need to accommodate social distancing. Accommodations will include remote participation.

2. Old Business

A. Nomination/Appointment of Chair and Vice Chair

Motion: Gasses made a motion seconded by Baber, **to nominate Dennis Shanahan as Chair.**
Roll call Vote: Motion passed 11-0

Motion: Bardwell made a motion seconded by Gasses, **to nominate Otis Perry as Vice Chair.**
Roll call Vote: Motion passed 11-0

B. Review/approval of minutes from Monday, November 30, 2020

Motion: Perry made a motion, seconded by Dagenais, **to approve.**

The following amendments to the minutes were made:

- Bardwell noted that the minutes should reflect Krans's concerns that the charge of the committee will lead the City to the same result as the 2010 stormwater funding committee.
- Bardwell noted that the minutes should include the discussion about the committee's focus on stormwater funding versus operational decisions and/or regulatory compliance efforts for stormwater management.

- Bardwell noted that the minuets should reflect that commissioners feel that regulations are requiring excessively expensive operational changes every time the municipality renews discharge permits.
- Mavrogeorge noted a correction in meeting date.
- Lyon noted spelling corrections.

Vote: Motion to approve as amended passed 12-0

3. Meeting Purpose

Sweeney discussed the intent of this meeting is to review how stormwater is currently being funded in the city in order to gain an understanding of the current and future financial needs.

4. NEW BUSINESS

A. City stormwater and flood resilience/response cost of services

CS Staff Young and Storer presented on current stormwater operational, CIP, flood response and regulatory funding requirements. The presentation outlined where the funds come from and how they currently appear in the approved City Budget. Staff also projected stormwater funding needs for the next five years.

B. Introduction to funding options

Sweeney quickly outlined options for funding stormwater expenses, with the intention to dive deeper into those options at our next meeting.

5. MEMBER COMMENT AND CITIZEN FORUM

Bardwell asked what areas are regulated under the Great Bay Total Nitrogen General Permit, and if the State would be funding any aspects of compliance. Bardwell also asked if the City should be taking more innovative approaches to stormwater management. Shanahan stated that the Council has tasked this committee with reviewing funding options for stormwater compliance, and that there are other venues where more technical aspects of compliance are reviewed.

Walters asked about a credit program throughout the watershed that could be implemented to meet the Great Bay Total Nitrogen General Permit.

Baber asked for staff to share the Great Bay Total Nitrogen General Permit with the committee members.

Shanahan mentioned that an update on the Great Bay Total Nitrogen General Permit will be presented to City Council on January 6, 2021 at 7:00 PM, and encouraged committee members to attend to learn more about the permit.

Bardwell encouraged the committee to think outside of the funding options Sweeney presented when considering solutions for future stormwater management needs.

Mavrogeorge asked about additional information on funding stormwater management through public/private partnerships and multiple municipal partnerships.

Nedelka asked if there are any known flood hazard areas that are not included in the FEMA mapping. Young answered that there are areas of undersized infrastructure that are prone to localized flooding that would not be included in a flood map.

No members of the public were present to speak.

6. CONFIRM NEXT MEETING DATE, TOPIC, AND HOMEWORK ASSIGNMENTS

Shanahan noted that committee members should review the City's Stormwater Utility Feasibility Study, which was completed in 2010.

Shanahan asked staff to complete the following for the next committee meeting:

- Provide updated information on future funding needs, particularly for the Great Bay Total Nitrogen General Permit
- Provide the committee with information on the Great Bay Total Nitrogen General Permit (e.g., what communities are included)
- Look at ideas for working collaboratively with other municipalities in the watershed
- Review and update the committee on the FEMA flood mapping process and whether there are other flood prone areas in the City.
- Identify how much impervious cover in Dover is publicly owned

Next meeting scheduled for January 25th, 2021.

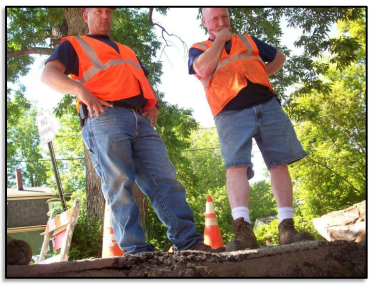
3. Chairman Shanahan Adjourned Meeting at 7:20 PM

Stormwater and Flood Resilience/Response Cost of Services

City of Dover Ad Hoc Committee to Study Stormwater and Flood Resilience Funding

Committee Meeting #2
December 21, 2020

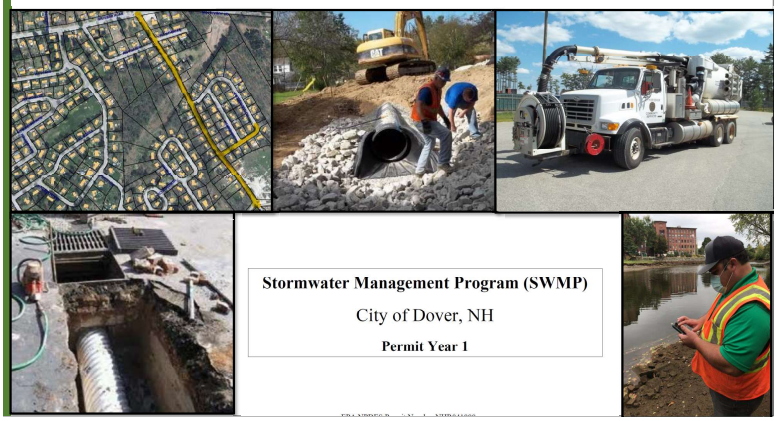
Stormwater Expenses



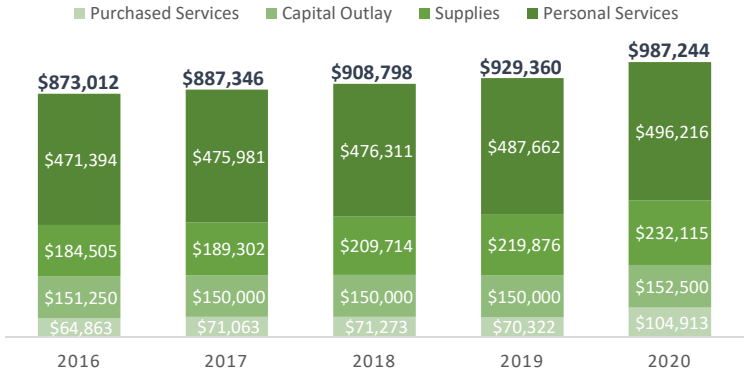
Operating Budget + Capital Projects + "Other" Expenses = Stormwater Costs All from General Fund

Operating Budget

FY 2021 Stormwater Operating Budget: **$1,019,449**



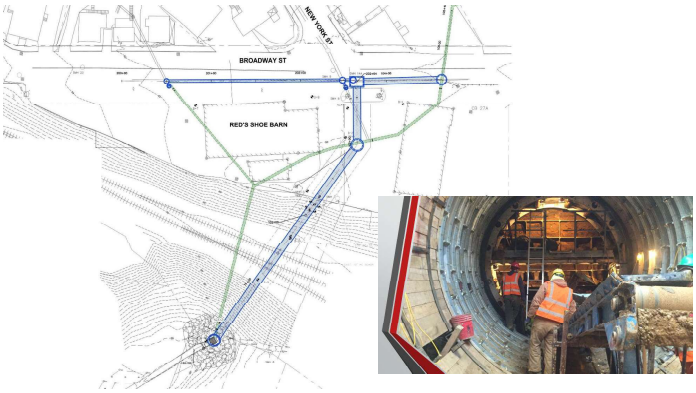
Recent Operating Budget Trend



Annual budget amounts from FY 2017-2021 can be found here: https://dovernh.vb2.visgov.com/expenses/

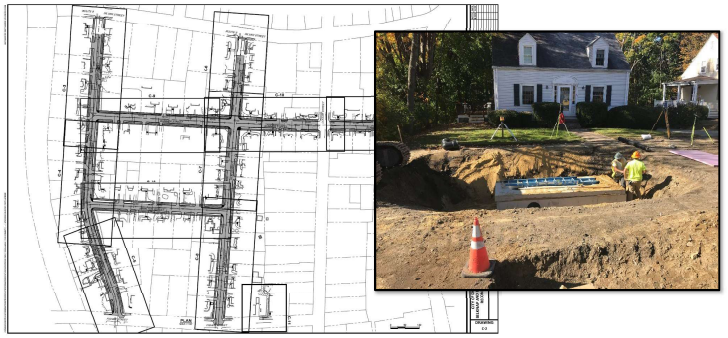
Stormwater Specific Capital Improvement Projects

Broadway Culvert under Railroad: ±**$8,400,000**



Stormwater Portions of Larger Capital Improvement Projects

Neighborhood Roadway and Utility Reconstruction:
Total Cost = ±**$4,270,000**
Stormwater Cost = ±**$726,000**



Stormwater in CIP

Fiscal Year	2016	2017	2018	2019	2020
Nelson Street	$140,000				
Keating/Birchwood		$842,000			
Richardson Drive		$577,000			
Mast Road			$182,000		
Hanson Street			$120,000		
Roberts Road			$575,000		
Broadway Culvert	$103,000			$4,200,000	$4,200,000
Mt. Vernon/ Grove/ Belknap				$368,650	
Chestnut Street				$160,000	
Spur Road					$1,147,000
Elm/Belknap					$726,000
Community Trail					$80,000
TOTAL	**$243,000**	**$1,419,000**	**$877,000**	**$4,728,650**	**$6,153,000**

Other Stormwater Related Expenses

City/Community Services Professional Staff Time

Fiscal Year	2016	2017	2018	2019	2020
TOTAL	$186,000	$210,500	$232,000	$239,000	$239,000

External Legal

Fiscal Year	2016	2017	2018	2019	2020
Total External Stormwater Related Legal Expenses	$123,000	$197,000	$177,000	$289,500	$592,000

Operating Budget + Other Operating Expenses

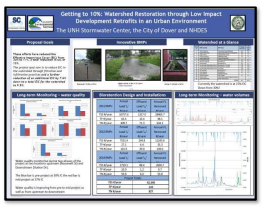
Fiscal Year	2016	2017	2018	2019	2020
Approved Operating Budget	$873,012	$887,349	$908,798	$929,360	$987,244
Stormwater CIP items	$243,000	$1,419,000	$877,000	$4,728,650	$6,153,000
CS Professional Staff Time	$186,000	$210,500	$232,000	$239,000	$243,000
External Legal	$123,000	$197,000	$177,000	$289,500	$592,000
TOTAL (Operating + Other)	**$1,425,012**	**$2,713,849**	**$2,194,798**	**$6,186,510**	**$7,975,244**

- Operating budget increasing between 2-3% annually (follows inflation rate)
- Total increases around 25% annually

Grants & Debt Forgiveness Loans

Fiscal Year	2016	2017	2018	2019	2020
Berry Brook	$30,000	$5,000			
Keating/Birchwood		$200,000			
Richardson Drive		$110,000			
Broadway Culvert				$200,000	$200,000
Chapel Street Planning				$75,000	
Community Trail					$16,000
Asset Management					$30,000
IDDE					$75,000
TOTAL	**$30,000**	**$315,000**	**-**	**$275,000**	**$321,000**

FY 2021-2027 Stormwater Specific Capital Projects



Fiscal Year	2021	2022	2023	2024	2025	2026	2027
General Drainage Improvements	$150,000	$200,000	$250,000	$300,000	$350,000	$400,000	$450,000
Catch Basin Spoils Facility	$3,500,000						
Tanglewood Drainage Improvements							$900,000
TOTAL	**$3,650,000**	**$200,000**	**$250,000**	**$300,000**	**$350,000**	**$400,000**	**$1,350,000**

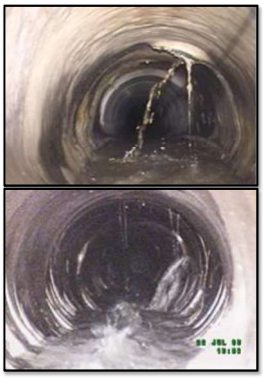
FY 2021-2027 Stormwater Portions of Other Capital Projects

Fiscal Year	2021	2022	2023	2024	2025	2026	2027
Court/Union/Middle		$50,000		$500,000	$425,000	$150,000	
Fifth Street & Grove Street		$25,000	$187,500	$62,500			
Oak/Ham/Ela		$112,500	$50,000	$87,500			
Atlantic Avenue						$225,00	$150,000
Horne Street						$62,500	
TOTAL	**-**	**$187,500**	**$237,500**	**$650,000**	**$425,000**	**$437,500**	**$150,000**

- Costs above are estimated at 25% of total capital project cost proposed in FY 2022-2027 CIP

FY 2022-2027
Inflow and Infiltration Management

PROJECT HISTORY	
FY 19	$300,000
FY 20	$300,000
FY 21	$300,000
PROPOSED BUDGET FY 2022-2027	
FY 22	$300,000
FY 23	$300,000
FY 24	$300,000
FY 25	$300,000
FY 26	$300,000
FY 27	$300,000
SIX YEAR TOTAL	**$1,800,000**



Photos: Envirosight https://inbound.envirosight.com/inflow-and-infiltration

FY 2022-2027

Great Bay Total Nitrogen General Permit Compliance

PROPOSED BUDGET FY 2022-2027	
FY 22	$500,000
FY 23	$1,700,000
FY 24	$400,000
FY 25	$400,000
FY 26	$400,000
FY 27	$400,000
SIX YEAR TOTAL	**$3,800,000**

FY 2022-2027 CIP: https://online2.dover.nh.gov/TempFiles/12041449519700_FY2022-FY2027%20CIP.pdf

Projected Future Funding Needs

Fiscal Year	2021	2022	2023	2024	2025	2026
Operating Budget (FY 2021 w/ 4% inflation) (capital outlay subtracted)	**$866,949**	**$901,627**	**$937,692**	**$975,200**	**$1,014,208**	**$1,054,776**
Stormwater Specific CIP Items	**$3,650,000**	**$200,000**	**$250,000**	**$300,000**	**$350,000**	**$400,000**
Stormwater Portions of CIP Items	-	$187,500	$237,500	$650,000	$425,000	$437,500
Stormwater/Sewer Items	$325,000	$925,000	$275,000	$275,000	$275,000	$275,000
Current CS Professional Staff Time	$252,720	$262,829	$273,342	$284,276	$295,647	$307,473
External Legal	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000
TOTAL (Operating + CIP + Other)	**$5,244,669**	**$2,626,956**	**$2,123,534**	**$2,634,475**	**$2,509,854**	**$2,624,749**

- Costs above are estimate 25% of I/I
- Costs above estimate 50% of Nitrogen General Permit

Costs Not Included in the Numbers

- Non Community Services staff time:
  - Planning
  - Legal
  - Finance
  - Fire/Police
  - City Manager and Executive Staff
- Work within TIF districts or public/private partnerships
- Flood Response or Climate Resiliency work

Past Flooding Costs

A single flood event cost =±$100,000

Future Climate Considerations

Potential Loss from Flooding

24 Critical Facilities and Key Resources identified within areas vulnerable to flooding

- 14 Bridges
- 4 Pump Stations
- 2 Critical Road Intersections

$78,072,582 total potential loss value estimate

Multi-Hazard Mitigation Plan Update 2018: http://www.strafford.org/cmsAdmin/uploads/hazmitplans/Dover_2018_Final_042318_ReducedSize.pdf

Summarizing Stormwater Costs

$1.0M/year to fund current stormwater operating budget

$2.6M/year average FY 2021 – 2027 additional cost

- Additional costs are either drawn from the general fund or sewer rates (only for sewer/stormwater hybrid capital projects)

How are Costs Currently Funded?

Most stormwater costs are funded through the General Fund

- Property tax everyone pays based on property value

Dover's average residential property tax bill (FY 2019): **$7,208**

- Stormwater program operating budget contribution: **$58.04** (approx. 0.8% of budget)

Competing funding needs

Sewer and Stormwater Comparison

Sewer

- 119 miles of pipe
- 2,835 manholes
- 20 pump stations
- WWTF (centralized treatment)

FY 2021 Budget: **$6,782,771**

Stormwater

- 65 miles of pipe
- 3,200 catch basins
- 450 outfalls
- 140 culverts
- 101 miles of open drainage
- 100 BMPs and growing (no centralized treatment)

FY 2021 Budget: **$1,019,449**

Where Do We Go From Here?

Sustainable funding is critical

- How will the City pay for future needs?
- What is the most equitable way to fund stormwater?
- Is the current funding model adequate?

More Information:

City of Dover Resources

- FY 2021 City Budget https://dovernh.vb2.visgov.com/expenses/
- Past Budgets https://www.dover.nh.gov/government/open-government/budget-revealed/past-budgets/
- Proposed Capital Improvements Program FY 2022-2027 https://online2.dover.nh.gov/TempFiles/12072018071332_FY2022-FY2027%20CIP.pdf

Committee Meeting #3

January 25, 2021

CITY OF DOVER

STORMWATER AND FLOOD RESILIENCE FUNDING COMMITTEE - MINUTES

Meeting Type:	**Regular Meeting**
Meeting Location:	**City Hall, Council Conference Room**
Meeting Date:	**Monday, January 25, 2021**
Meeting Time:	**5:30 PM**

Members present: Bill Baber, Ray Bardwell, David Dagenais, Marcia Gasses, Eric George, Paul Geraci, Vincent Hayes, Chad Kageleiry, Ken Mavrogeorge, Jan Nedelka, Cynthia Walter, Dennis Shanahan (Chair, City Council, ex officio), Gretchen Young (Community Services, ex officio)

Members Not Present (excused): Peter Driscoll (Dover School District, ex officio), Steve Haight, Otis Perry (vice chair)

Members Not Present (un-excused): Allan Krans

Also Present: Ben Sweeney (NHDES/PREP Project Partner), Nathalie Morison DiGeronimo (NHDES Project Partner), Abigail Lyon (PREP Project Partner), Jamie Houle (UNH Stormwater Center), Martha Sheils (New England Environmental Finance Center), Joanne Throwe (Throwe Environmental)

1. CALL TO ORDER

Chairman Shanahan called the meeting to order at 5:30 PM. Meeting declared an emergency because a physical quorum is not reasonably practical based on the ongoing COVID-19 pandemic and the need to accommodate social distancing. Accommodations will include remote participation.

2. REVIEW AND APPROVAL OF DECEMBER 21, 2020 MINUTES

Motion: Dagenais made a motion, seconded by Baber, **to approve as amended.**
Roll call Vote: Motion passed 11-0

The following amendments to the minutes were made:

- Bardwell noted that John Storer, Dover Community Services Director, provided background information during the presentation on the City's stormwater and flood resilience and response cost of services.

3. OLD BUSINESS

A. Updates on outstanding items from previous meeting

Young reminded members a presentation on the Great Bay Total Nitrogen General Permit was given to City Council on January 6, 2021, and a recording is available on Channel 22. Geraci mentioned Dover's ongoing exploration of an inter-municipal agreement to share permit implementation costs with other communities.

Sweeney presented preliminary results from a quick analysis of impervious cover (IC) in the City using data gathered from the UNH Stormwater Center. Houle clarified IC

includes all impervious surfaces, including roofs of buildings, driveways, roads, and other paved areas. Dagenais acknowledged that the IC data will likely need to be broken down to the parcel level in the future to better evaluate different funding strategies.

Houle acknowledged the committee will need to try to find a balance between getting started with the data available and capturing good questions that need more research versus waiting for perfect information – which never exists – to act.

Bardwell asked if the committee will explore how homeowners and developers could implement specific stormwater measures to get a credit on their financial contribution to the City's stormwater management services. Shanahan answered that nothing is excluded at this point, and that these good questions should continue to be captured to help flesh out recommendations as the committee starts evaluation specific funding options.

Shanahan asked about opportunities to learn from other communities who have explored alternative stormwater funding options. Young answered that guest speakers will be asked to attend and present on specific funding options at future meetings.

Young suggested the committee's work should be shared with other local communities.

Degenais encouraged collaboration with neighboring communities sooner rather than later, noting that Wentworth-Douglas Hospital's stormwater runoff mostly flows into Rollinsford.

Sweeney notified the committee that a map showing the FEMA 100-year floodplain and other areas in the City that have experienced flooding can be found in the shared online box folder. Baber mentioned that the FEMA flood maps do not reflect climate change impacts, and any available information on how climate may exacerbate flooding in Dover should be shared with the committee.

4. NEW BUSINESS

A. Overview of municipal stormwater and flood resilience/response funding options

Sweeney presented on municipal stormwater and flood resilience funding options and the advantages and disadvantages for each option.

B. Discussion on potential topics for next committee meeting

Sheils mentioned need to determine if current sources of funding are adequate and the need for dedicated sources of funding to pay for long term financing of capital projects.

Throwe discussed the how many communities in the country are facing stormwater funding challenges, how climate change impacts will continue to change stormwater

management, and why communities in Maryland are exploring climate resilience authorities to address stormwater and flooding issues. Throwe also expressed her thoughts that forming this committee was the right next step for the City.

Kageleiry asked how enterprise fund works. Sheils explained a stormwater utility is a great example, where funding is set aside in a dedicated fund, only to be used for stormwater activities, similar to sewer and water utilities which are also enterprise funds in the City.

Gasses asked if other states benefit from grants more than New Hampshire (NH), and if certain federal grants are even available for NH. Sheils answered that it varies for each state. Throwe added that federal grants are very competitive and communities need to show why they are unique.

Walter asked if dedicated funds generated from a stormwater utility could be used to satisfy matching fund requirements for grant opportunities. Throwe answered yes, and added that communities are not competitive unless they can show they have matching funds.

Throwe mentioned that each community is unique, and the funding option(s) the committee recommends has to fit with Dover to ensure it is sustainable.

Bardwell asked what alternative funding sources typically pay for, and encouraged prioritizing tangible projects that reduce pollutants over planning projects. Throwe answered that you have to be very clear about what you are spending your dedicated funds on regardless of the funding mechanism.

Houle asked what the City's primary stormwater needs are. Young answered that she perceived the needs as upgrading aging infrastructure, implementing BMPs, and achieving nitrogen reductions.

Baber asked if the Great Bay region is disadvantage because it does not have an entity like the Chesapeake Bay Commission. Throwe answered that you don't need a central entity.

Sheils mentioned communities are more powerful when they band together to go after funding. Dagenais added there is a gap in banding together with other communities and wonders if the committee needs to play a bigger role in bridging that gap.

Dagenais asked if Throwe or Sheils have any success stories of communities that have relied on their general fund for stormwater costs. Throwe and Sheils answered no because many City services compete for general funds and may be seen as higher priority.

Throwe suggested the committee should narrow down the list of funding options by discarding the options that will not work for Dover.

Throwe encouraged the committee to think about public-private partnerships, but also mentioned the need for a dedicated source of funding to work with the private sector.

Kageleiry mentioned the committee needs to know how many property owners would contribute to a stormwater utility, how much stormwater runoff those properties contribute, and which properties are tied into the City's closed drainage system. Houle added that the committee could be tasked with answering those technical questions.

Lyon mentioned that while the closed drainage system and flooding may be concentrated in the urban core, the entire community benefits from efforts to reduce nitrogen and activities that reduce flooding in the urban core. Therefore, Lyon encouraged the committee to think about the equity of only have residents and businesses in the urban core pay for stormwater.

Nedelka asked if legislation exists in NH that allows multi-municipality/regional entities to impose fees and/or taxes. Houle and Young answered the Southeast Watershed Alliance (SWA) is an example and is a legislatively enacted body that has the power to create legal jurisdictions over the coastal watershed. Mavrogeorge mentioned he was interested in learning more about SWA and the potential for a multi-municipality solution.

Mavrogeorge encouraged the committee to consider a stormwater funding solution that incorporates multiple funding options. Throwe agreed that a mix of funding sources is a good approach and suggested looking into a dedicated fund and then going after grants.

Gasses mentioned that sticking with the general fund should still be an option the committee considers, and the committee should look at all of the ways to involve the private sector.

Young mentioned an example of a public private partnership exists when developers have the opportunity to make off-site improvements elsewhere in the watershed to meet required pollutant reductions required for redevelopment in highly developed areas.

Nedelka contended that the existing distribution of stormwater costs is not equitable.

Sheils explained a stormwater utility brings in properties currently excluded from the tax base to pay into the stormwater program. Sheils added that before Portland, ME implemented a stormwater utility, a portion of the revenue generated from sewer use fees was used for stormwater costs, which was deemed inequitable because there were many car dealerships with huge parking lots that contributed a lot of stormwater runoff, but they only had one bathroom which kept their sewer use fee very low.

Mavrogeorge asked about the outreach efforts that occurred in 2010 related to implementing a stormwater utility, and mentioned the importance of letting the public know that a utility fee would offset their general fund contributions to the stormwater program. Nedelka answered that the messaging in 2010 was not done well and a lack of long-term public outreach was part of the reason a utility was not passed.

Lyon agreed the messaging is paramount, but noted the committee charge is to come up with recommendations to City Council, not to put forward any one particular funding mechanism for adoption. Lyon added that outreach will likely need to be a separate project with additional resources and support.

5. CITIZENS' FORUM

No members of the public were present to speak.

6. CONFIRM NEXT MEETING DATE, TOPIC, AND HOMEWORK ASSIGNMENTS

Shanahan asked committee members to evaluate the funding options Sweeney presented using the S.A.F.E. (Secure, Adequate, Flexible, and Equitable) criteria and to identify any funding options that should be discarded.

Next meeting scheduled for February 22, 2021.

7. ADJOURN

Chairman Shanahan Adjourned Meeting at 7:25 PM

Funding Options for Stormwater Management & Flood Resilience

City of Dover Ad Hoc Committee to Study Stormwater and Flood Resilience Funding

Committee Meeting #3
January 25, 2021

Consider the following question:

Which (if any) alternative funding options does the Committee consider a potentially viable option to pay for current and future stormwater and flood resilience/response costs, and therefore merits further exploration?

General Fund/Property Tax

- Existing funding mechanism for stormwater management in Dover
- Financing solution

Advantages
- Existing mechanism
- Simple to explain and administer

Disadvantages
- Competition for funds
- Potentially less equitable than other options

Fees

- Fees may be obtained from charging for various services, including:
  - permit reviews, plan reviews, new development impact fees, BMP inspection fees, etc.
- One-time source of funding

Advantages
- Funding is linked directly to the services provided

Disadvantages
- Funding not available for larger projects
- May become unreliable when development slows

System Development Charges

- New customers buy into existing stormwater conveyance/treatment infrastructure or contribute to infrastructure expansion costs if needed
- One-time source of funding

Advantages
- Recovers fair share of prior public investment
- Special services are paid for by recipients

Disadvantages
- Unpredictable
- Difficult to price accurately
- Challenging to administer

Stormwater Utility

- User fee based upon property owner usage of the stormwater system (i.e. volume of stormwater a property generates)
  - Typically calculated based on impervious cover
- Financing solution

Advantages
- Dedicated revenue
- Predictable
- Property owners can reduce fees
- All properties served contribute

Disadvantages
- Public acceptance can be difficult to achieve
- Can be challenging to administer

Sewer User Fees

- Fund stormwater management costs using revenue generated from sewer user fees
- Financing solution

Advantages
- Existing mechanism
- Predictable
- Ease of implementation

Disadvantages
- Not equitable
- Sewer use is not related to stormwater expenditures

Village Districts

- Revenue generated through taxes or fees applied only in a designated area of the City
  - All properties within the designated area must receive a direct benefit of the specialized service
- Financing solution for a portion of City

Advantages
- Stable revenue for a portion of the City
- Can be targeted for a specific purpose

Disadvantages
- Not City-wide
- Complicates tax payments
- Complicates decision making

Public-Private Partnership (P3)

- Allows private sector participation in financing, planning, design, construction, and maintenance of stormwater system
- Financing solution

Advantages
- Leverages public resources
- Shared risk

Disadvantages
- Local revenue source needed to fund partnership
- Initial costs may be high
- Public acceptance can be difficult to achieve

Grants, Loans, and Bonds

- Provides additional funding generally used for capital projects
- City already takes advantage of grants and low-interest loans when available
- One-time sources of funding

Advantages
- Allows City to complete projects sooner than revenue becomes available

Disadvantages
- Typically project-specific
- Typically do not pay for O&M costs

More Information

The following resources provide additional information on the funding options presented:

- Getting to Green: Paying for Green Infrastructure
- Funding Stormwater Programs
- Guidance for Municipal Stormwater Funding
- Evaluating Stormwater Infrastructure Funding and Financing Task Force Draft Report

STORMWATER FUNDING OPTIONS FOR COMMUNITIES

Funding Source	Description	Advantages	Disadvantages
General Fund	General fund is derived from local property taxes and is the basic source of funding for most municipal services and operations. Appropriations are approved on an annual basis.	• Consistent from year-to-year • Existing mechanism • Simple to explain and administer	• Competition for funds • System is not equitable (does not fully reflect contribution of stormwater runoff)
Fees	Revenue raised through charges for services such as inspections and permits Revenue raised through developer related fees are one-time charges linked with new development	• Specific permit and inspection fees allow for more direct allocation of costs for services provided • Certain fees can provide funding for long-term O&M • Addresses potential stormwater impacts related to new construction	• Funding not available for larger projects or system-wide improvements • Developer impact fees may be an unreliable source when development slows • Requires administrative framework to assess and manage
System Development Charges (SDCs)	SDCs (also known as connection fees, tie-in charges, and capitalization recovery fees) are one-time fees commonly charged to new customers connecting to a water or sanitary sewer system. In this way, new customers buy into the existing infrastructure, and/or the infrastructure expansion necessary to serve them. Municipalities could develop stormwater SDCs tied to the area of the customer's property.	• Recovers a fair share of prior public investment • Allows special services to be paid for by recipients	• Level of funding is unpredictable and can vary significantly from year to year • Can be challenging to administer • May be difficult to price accurately • Generally restricted to funding capital projects only
Stormwater Utility	A stormwater utility generates its revenue through user fees (most often calculated based on the amount of impervious cover on a property) and the revenues from the stormwater charges go into a separate fund (e.g., enterprise fund) that can only be used only for stormwater services.	• Dedicated funding source • Directly related to stormwater impacts • Sustainable, stable revenue • Rates can be set at a level that fully funds stormwater costs • Property owners can reduce fees • All properties served contribute	• Can be administratively intensive • Requires more effort to explain • Public acceptance can be difficult to achieve

Funding Source	Description	Advantages	Disadvantages
Sewer User Fees	Many communities in New England use their Sewer Enterprise Fund for stormwater management where the term "sewer" is broadly defined as wastewater and drainage in the local code. While there are similarities between sewer system management and stormwater management, there are additional costs to a stormwater management program that are not captured.	• Existing mechanism • Ease of implementation • Ease of billing	• System is not equitable (disproportionately puts stormwater cost burden on high sewer users) • Sewer use is not directly related to stormwater program expenditures (a property's metered water flow usually bears no relationship to the stormwater runoff it generates)
Village Districts/Special Assessment Districts/Local Improvement Districts	The NH Revised Statutes Annotated (RSA) 52 allows the formation of Village Districts to provide specialized services such as flood control, drainage, etc. Funding for Village Districts are raised by taxes and/or fees within that District, and all properties that fall within the District must receive a direct benefit of the specialized service. For example, if a stormwater construction project benefits only a portion of the City, it can be funded by fees assessed only to properties within that area.	• Stable revenue for a portion of the City • Can be targeted for a specific purpose	• Not City-wide – revenue generated can only be used in the District • Complicates tax payments • Complicated decision making
Public-Private Partnerships	Contractual agreement between a public agency and a private sector entity that allows for the private sector participation in the financing, planning, design, construction, and maintenance of stormwater facilities.	• May be structured to require minimal to no initial cash outlay for public sector, assuming private sector partner is providing financing • Significantly leverages public resources • Shared risk	• Local revenue source needed to fund the partnership • Substantial education and socialization is required to manage public perceptions related to loss of control and escalated costs • Initial financing costs may be high
Grants	State and federal grants provide additional funding for water quality improvements.	• Existing sources available for stormwater related funding • Does not require repayment	• Competitive • Typically, one-time, project-specific funds • Often requires a funding match • Does not fund post-project O&M

Funding Source	Description	Advantages	Disadvantages
Loans	Low-interest loans, such as Clean Water State Revolving Fund loans, are generally used for planning and capital projects	• Existing sources available for stormwater related funding • Offers low or no-interest financing	• One-time source of funds • Requires full repayment • Administrative requirements can be time-consuming
Bonds	Bonds are not a true revenue source, but are a means of borrowing money to finance capital projects. "Green" bonds are a designation of bonds dedicated to environmental projects, including clean water projects.	• Existing sources available for stormwater related funding • Can support construction-ready projects • Allows communities to complete large projects sooner than revenue becomes available • Spreads cost of capital projects over time, rather than having to pay up front	• May require approval for each issuance • Requires access to funding for full repayment • Interest costs can vary but will add to total project cost • May require significant administrative preparation to issue and for post compliance activities and disclosures

More information on the options presented above can be found within the following resources:

- Getting to Green: Paying for Green Infrastructure
- Funding Stormwater Programs
- Guidance for Municipal Stormwater Funding
- Evaluating Stormwater Infrastructure Funding and Financing Task Force Draft Report

Committee Meeting #4

February 22, 2021

CITY OF DOVER

STORMWATER AND FLOOD RESILIENCE FUNDING COMMITTEE - MINUTES

Meeting Type:	**Regular Meeting**
Meeting Location:	**City Hall, Council Conference Room**
Meeting Date:	**Monday, February 22, 2020**
Meeting Time:	**5:30 PM**

Members Present: Bill Baber, David Degenais, Marcia Gasses (arrived at 6:12 PM), Eric George, Paul Geraci, Steve Haight, Vincent Hayes, Chad Kageleiry, Ken Mavrogeorge, Jan Nedelka, Otis Perry, Cynthia Walter, Allen Krans, Peter Driscooll (Dover School District, ex officio), Dennis Shanahan (City Council, ex officio), Gretchen Young (Community Services, ex officio)

Members Not Present (excused): Ray Bardwell

Members Not Present (un-excused): None

Also Present: Ben Sweeney (NHDES/PREP Project Partner), Nathalie Morison DiGeronimo (NHDES Project Partner), Abigail Lyon (PREP Project Partner), Tom Swenson (NHDES Project Partner), Martha Shiels (New England Environmental Finance Center Project Partner)

1. **CALL TO ORDER**
   Councilor Shanahan called the meeting to order at 5:33 PM. Meeting declared an emergency because a physical quorum is not reasonably practical based on the ongoing COVID-19 pandemic and the need to accommodate social distancing. Accommodations include remote participation.

2. **ATTENDANCE** (follow remote participation procedures as needed)
   Councilor Shanahan called attendance (see members present listed above).

3. **REVIEW AND APPROVAL OF JANUARY 25, 2021 MINUTES**
   Motion: Nedelka made a motion to approve the minutes as presented; Degenais second
   Roll Call Vote: Motion passed (11 yes; 1 abstention; 0 no)
   No amendments suggested or made

4. **NEW BUSINESS**
   A. Review feedback from funding option homework assignment

   Sweeney presented a brief analysis of responses from the homework assignment from the previous meeting. The presentation included a summary of the responses for the following funding options: general fund, fee-based, system development charges, stormwater utility, sewer user fees, village districts, public-private partnerships (PPP), and grants, loans, and bonds. Members of the committee evaluated the options by assigning high, medium, or low ratings to the security, adequacy, flexibility, and equitability (S.A.F.E.) of each option. Individual responses were weighted (high=3,

medium=2, low=1) and totaled for each of the S.A.F.E. criteria to produce an overall score that would allow responses to be compared across the different funding options.

In addition to the funding options committee members rated, the following ideas were added to the discussion: combinations of options (e.g., general fund for operating costs and stormwater utility for capital expenditures or stormwater utility supplemented by grants and fees) and regional considerations (e.g., regional stormwater utility, intermunicipal credit trading system, and establishing a Great Bay Watershed Coalition to facilitate voluntary agreements and cost sharing among the 42 communities in the watershed).

B. Select funding options that merit further exploration during future meetings

Councilor Shanahan and Kageleiry suggested reviewing the eight options and discussing among the group which to consider for future meetings. Nedelka concurred. Baber raised the idea that funding options that warrant further investigation be considered as "primary funding sources" rather than those that could be used in combination with others (e.g., grants and the general fund).

Following discussion about the eight options the following decisions were made using an informal consensus-based process: Sewer fees, Village Districts, were tabled, and Stormwater Utilities, Fee Based/Impact Fees and System Development Charges, General Fund and Private-Public Partnerships (PPP) will be discussed at the March, April, and May meetings respectively.

Motion: Perry made a motion to approve the schedule as presented; Baber second
Roll Call Vote: Motion passed (13 yes; 0 abstention; 0 no)
Comments: Walter asked a clarifying question about the level of detail the committee can anticipate for future presentations about each of the funding options. Sweeney suggested the three meetings focus on the basics of each option and include guest speakers to share their experience and share different fee structures. The committee will then have the opportunity to prioritize options and assess how they could be implemented in the City.

5. OLD BUSINESS

A. Updates on outstanding items from previous meetings

Young shared more information about the Southeast Watershed Alliance (SWA). SWA was established to tackle regional issues and has some ability to raise funds. Dover has been a member since 2009. For additional information reach out to Young or Lyon.

6. **CITIZEN'S FORUM**
   None present

7. **CONFIRM NEXT MEETING DATE, TOPIC, AND HOMEWORK ASSIGNMENTS**
   Next meeting is scheduled for March 22, 2021 at 5:30 PM.

8. **ADJOURN**
   Councilor Shanahan declared the meeting adjourned.

Funding Options Homework – Combined Responses

City of Dover Ad Hoc Committee to Study Stormwater and Flood Resilience Funding

Committee Meeting #4
February 22, 2021

Keep in Mind

- Responses alone will not determine which funding options merit further exploration
- Purpose of the homework assignment was to encourage thought and start discussion
- S.A.F.E. criteria was used as a starting point, but there are other considerations to think about moving forward (feasibility, public acceptance, etc.)

General Fund

- Revenue generated by property taxes

Total Responses: 12 **Discards: 1**

RATINGS	ATTRIBUTES			
	Secure	Adequate	Flexible	Equitable
High	6	1	3	1
Medium	1	4	2	6
Low	4	5	5	3
COMBINED RATING	MEDIUM	MEDIUM-LOW	MEDIUM	MEDIUM

Fee-based

- Charging for permit reviews, plan reviews, new development impact fees, BMP inspection fees, etc.

Total Responses: 12 **Discards: 2**

RATINGS	ATTRIBUTES			
	Secure	Adequate	Flexible	Equitable
High	1	1	3	8
Medium	3	1	3	1
Low	6	8	4	1
COMBINED RATING	MEDIUM-LOW	LOW	MEDIUM	HIGH

System Development Charges

- New customers buy into existing stormwater infrastructure and/or contribute to expansion costs

Total Responses: 12 **Discards: 2**

RATINGS	ATTRIBUTES			
	Secure	Adequate	Flexible	Equitable
High	2	0	3	4
Medium	2	2	3	3
Low	6	8	4	3
COMBINED RATING	MEDIUM-LOW	LOW	MEDIUM	MEDIUM

Stormwater Utility

- User fee based on property owner usage of stormwater system (i.e. volume of stormwater a property generates)

Total Responses: 12 **Discards: 1**

RATINGS	ATTRIBUTES			
	Secure	Adequate	Flexible	Equitable
High	11	11	9	7
Medium	0	0	2	2
Low	0	0	0	2
COMBINED RATING	HIGH	HIGH	HIGH	MEDIUM-HIGH

Sewer User Fees

- Fund stormwater management costs using revenue generated from sewer user fees

Total Responses: 12 **Discards: 7**

RATINGS	ATTRIBUTES			
	Secure	Adequate	Flexible	Equitable
High	5	4	2	1
Medium	0	1	0	1
Low	0	0	3	3
COMBINED RATING	HIGH	HIGH	MEDIUM	MEDIUM-LOW

Village Districts

- Revenue generated through taxes or fees applied only in a designated area of the City

Total Responses: 12 **Discards: 9**

RATINGS	ATTRIBUTES			
	Secure	Adequate	Flexible	Equitable
High	1	0	0	0
Medium	1	1	0	2
Low	1	2	3	1
COMBINED RATING	MEDIUM	MEDIUM-LOW	LOW	MEDIUM-LOW

Public-Private Partnership (P3)

- Allows private sector participation in financing, planning, design, construction, maintenance of stormwater system

Total Responses: 12 **Discards: 4** **Need More Detail: 2**

RATINGS	ATTRIBUTES			
	Secure	Adequate	Flexible	Equitable
High	0	1	2	2
Medium	5	3	3	1
Low	1	2	1	3
COMBINED RATING	MEDIUM	MEDIUM	MEDIUM	MEDIUM

Grants, Loans, and Bonds

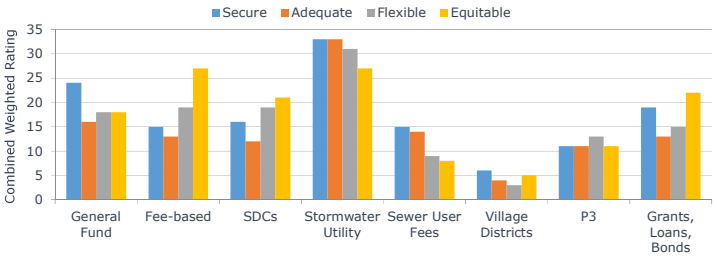
- Additional funding generally used for capital projects
- City already takes advantage of these opportunities

Total Responses: 12 **Discards: 0**

RATINGS	ATTRIBUTES			
	Secure	Adequate	Flexible	Equitable
High	1	0	0	5
Medium	4	2	5	2
Low	6	9	5	3
COMBINED RATING	MEDIUM-LOW	LOW	MEDIUM-LOW	MEDIUM

Comparison Based on SAFE Ratings

- All responses for each attribute were weighted (High=3, Med=2, Low=1, Discard=0) and added to come up with a combined rating
- Example: Combined weighted rating for General Fund Security=24
  - 6 said High, 1 said Med, 4 said Low, 1 discarded
  - (6 x 3) + (1 x 2) + (4 x 1) + (1 x 0) = 24



*Caveat: Not all attributes had the same number of responses (all either had 10, 11, or 12 responses)

Other Ideas

Combinations of Options

- General fund for operating costs, stormwater utility for capital expenditures
- Stormwater utility supplemented by grants and fees

Regional Considerations

- Regional stormwater utility
- Inter-municipal credit trading system
- Establish a Great Bay Watershed Coalition to facilitate voluntary agreements and cost sharing among the 42 NH communities in the watershed

Committee Meeting #5

March 22, 2021

CITY OF DOVER

STORMWATER AND FLOOD RESILIENCE FUNDING COMMITTEE - MINUTES

Meeting Type:	**Regular Meeting**
Meeting Location:	**City Hall, First floor conference room**
Meeting Date:	**Monday, March 22, 2021**
Meeting Time:	**5:30 PM**

Members Present: Ken Mavrogeorge, Ray Bardwell, Marcia Gasses (left at 6:58 PM), Bill Baber, Eric George, Jan Nedelka, David Degenais, Vincent Hayes, Paul Geraci, Steve Haight, Chad Kageleiry, Allan Krans, Cynthia Walter (arrived at 5:30 PM) Dennis Shanahan (City Council, ex officio), Gretchen Young (Community Services, ex officio), John Storer (Community Services, ex officio), Peter Driscoll (Dover School District, ex officio) (left at 6 PM).
Members Not Present (excused): Otis Perry
Members Not Present (un-excused): None

Also Present: Ben Sweeney (NHDES/PREP Project Partner), Nathalie DiGeronimo (NHDES Project Partner), Abigail Lyon (PREP Project Partner), Tom Swenson (NHDES Project Partner), Martha Shiels (New England Environmental Finance Center Project Partner), Nancy Gallinaro (Portland, ME, presenter), David Cedarholm (Concord, NH, presenter)

1. CALL TO ORDER

Councilor Shanahan called the meeting to order at 5:33 PM. Meeting declared an emergency because a physical quorum is not reasonably practical based on the ongoing COVID-19 pandemic and the need to accommodate social distancing. Accommodations include remote participation.

2. ATTENDANCE (follow remote participation procedures as needed)

Councilor Shanahan called attendance (see members present listed above).

3. REVIEW AND APPROVAL OF FEBRUARY 22, 2021 MINUTES

Motion: Nedelka moved to approve the minutes as presented; Krans second
Amendment(s): correct date in minutes from previous meeting.
Roll Call Vote: Yes-13; No-0; Abstain-0
Motion passed unanimously

4. NEW BUSINESS

Councilor Shanahan began with a brief introduction of the two presenters, David Cedarholm, City Engineer for Concord, NH and Nancy Gallinaro, Water Resources Manager for Portland, ME, before passing it over to Sweeney to start the presentations.

A. Overview of stormwater utilities and fundamental considerations for Dover

Sweeney presented an overview of stormwater utilities and shared specific information relevant to establishing a rate structure for a potential stormwater utility using estimates considered by the Stakeholder Committee for the City of Dover's Municipal Stormwater Utility Feasibility Study back in 2010.

Kageleiry asked how roads (both municipal and private) are factored into the rate calculation for a stormwater utility. Nedelka provided context from the Dover 2010 Committee that roadways were included in the 2010 rate structure estimates because public roads are a public good and contribute a large portion of the impervious cover in the city (highway and town roads). Homeowners' associations would have been charged for their private roads.

Degenais asked for clarification on why a stormwater utility would need to be established to create a dedicated source of funding for stormwater management project. Councilor Shanahan shared that the method of collecting funds (i.e., an enterprise fund like sewer and water) is what keeps the funding separate from the General Fund.

Krans raised the concern of communities being sued after establishing a stormwater utility and asked if there were any examples in New England (NH and ME). Sweeney shared that Lewiston, ME was sued, initially, but the ultimate ruling was in the municipality's favor because they included a credit system which allowed property owners to have control over their fees (rates charged). Krans cautioned the committee that the City should prepare for legal action if we move forward with a stormwater utility.

B. Exploring the feasibility of a stormwater utility in Concord, NH
Guest speaker: David Cedarholm, City Engineer, Concord, NH

Cedarholm presented an overview of the City of Concord's early efforts to explore the establishment of a stormwater utility. Concord worked with Tighe & Bond to conduct a feasibility study and established a City Working Group crossing City departments (engineering, finance, planning, and city leadership). Concord is exploring a stormwater utility to establish an equitable mechanism for raising revenue for stormwater management projects/expenses. Cedarholm emphasized that when you include tax-exempt properties, you reduce the burden on residential property owners for raising funds for stormwater projects. Concord is still in the early stages – project put on hold due to COVID-19 and economic impact. Next steps will include looking at rate structure options, determining the level of funding needed, establishing a billing and data management system, developing and adopting a stormwater utility ordinance, stakeholder outreach and education, and finally discussions with the state regarding their contribution to the fund.

Gasses emphasized the importance of whatever funding structure is established, that the City is encouraging improvements in stormwater in concert.

Kageleiry inquired further about an example – Concord Hotel – that Cedarholm presented asking if the stormwater utility formula Concord is considering would benefit urban

development (i.e., buildings with high levels and small footprints). Cedarholm responded that it would likely be different for each property, but a stormwater utility program would encourage forward and innovative thinking for stormwater management. Redevelopment provides opportunities for design updates to existing stormwater management. Kageleiry cautioned that this approach would disadvantage an industrial property that has a similar assessment for taxes (like the hotel example), but a larger footprint. Baber reminded the committee that the whole concept is to make a funding structure that is equitable and based on contribution.

Storer following up on Gasses point, added that as soon as you start to charge people you create an incentive for them to educate themselves about ways to reduce runoff (and the potential for credit reductions in the fee). Kageleiry asked about the process for credits. Mavrogeorge compared the approach to the trash bags in Dover – pay for trash bags as a way to incentivize recycling. A stormwater utility fee with a credit function could incentivize a property to install a stormwater system to reduce runoff and reduce fee.

Councilor Shanahan reiterated the importance of keeping the equitable component of a utility at the forefront of our minds for the remainder of the presentations and for future meetings and presentations on other funding options.

C. Establishing a stormwater utility in Portland, ME
Guest speaker: Nancy Gallinaro, Water Resources Manager, Portland, ME

Gallinaro provided an overview on the approach and implementation of a stormwater utility in Portland, ME back in 2016. Portland explored a utility to assist with compliance for an EPA administrative order and a consent order. In response to Krans' comment about preparing for lawsuits, Gallinaro shared that Portland has not faced any legal action since establishing their utility but agreed it's important to keep an eye on the legal side of things. Ultimately the goal of the Portland utility was a healthier environment, fair billing system, and accountable investments for stormwater system improvements and maintenance. Money savings was a key message for Portland through automatic savings on water and sewer bill (previous funding for stormwater management), as well as the opportunity to reduce a fee by reducing the impervious cover area on a property. Portland has not seen many residents take advantage of the credit reductions, but the City plans to increase outreach to residents, so they are aware of this incentive.

Kageleiry asked if Sweeney and the project team can estimate what the administration costs would be for the City of Dover and asked about what additional costs might be borne by setting up a new utility. Gallinaro offered to send numbers to Sweeney.

Krans asked for more clarification on whether a utility would mean a reduction in property tax for an individual property. Cedarholm said yes, but for residential or smaller business properties the reduction will be small because the stormwater utility fee will be small (e.g., $25 annually) and might not be noticed by a property owner (compared with a higher taxed property). Cedarholm added that a stormwater utility is not a reduction in the General Fund but a reallocation of funds that would normally go to stormwater management.

Kageleiry raised concerns about selling a stormwater utility to residential developments who are nowhere near a stormwater system. Storer emphasized the importance of communicating the City's responsibility to the Great Bay Total Nitrogen General Permit and how incentivizing private property owners to reduce runoff is a huge incentive for the City.

Geraci raised concerns about experiencing similar pushback from residents as the City Council faced when the idea of a city-wide mask mandate was suggested. Ultimately the decision was to table the issue and feels that may be the case if a stormwater utility is proposed – the issue may be tabled, and the General Fund will still be the default. Geraci suggested a separate line item in a water and sewer bill may be easier to adjust to.

Bardwell asked Gallinaro about the percentage of stormwater treated in Portland using the utility. Gallinaro shared that Portland is installing green infrastructure, large developments are implementing low impact development techniques, there is an aggressive street sweeping and catch basin cleaning program, and more. Gallinaro emphasized the importance of innovation.

Mavrogeorge emphasized the importance of messaging, sharing that even a drop of water that hits a gravel road is stormwater and needs maintenance and would hate for a utility to not be considered because of a messaging concern.

5. CITIZEN'S FORUM

None present.

6. CONFIRM NEXT MEETING DATE, TOPIC, AND HOMEWORK ASSIGNMENTS

Next meeting is scheduled for April 26, 2021 at 5:30 PM and will focus on fees and development charges.

7. ADJOURN

Councilor Shanahan declared the meeting adjourned.

Overview of Stormwater Utilities & Fundamental Considerations for Dover

City of Dover Ad Hoc Committee to Study Stormwater and Flood Resilience Funding

Committee Meeting #5
March 22, 2021

How Does a Stormwater Utility Work?

- User fees are charged to property owners based on the stormwater runoff their property generates
  - Most commonly assessed based on impervious cover
- Revenue generated goes into an enterprise fund, separate from the general fund
- Revenue can only be used only for stormwater activities

What Would a Utility Look Like?

Fundamental Considerations

- What rate structure should be implemented?
- Who is included and who (if anyone) is exempt?
- How much revenue is needed?
- What would rates be to meet revenue needs?
- How should rate modifiers and credits be applied?
- How would the utility be administered?

Rate Structure Options

Goal: Maximize equitable distribution of costs, and minimize set-up and administration costs

Common Rate Structures:

- **Flat fee**: A uniform fee is charged to all property owners
- **Tiered fee**: Properties are categorized into tiers based on amount of impervious cover
- **Proportional fee**: Fees are individually calculated for each property based on their specific impervious cover

Combinations of rate structures and variations based on property type are often implemented

Rate Structure Example

2010 Recommendations for Dover

- Single family residential (SFR) properties: Flat fee
- Non-SRF: Proportional fee calculated based on "Equivalent Residential Units" (ERU)
- All properties also charged a basic service fee

Equivalent Residential Unit (ERU)

ERU: Median quantity of impervious area for SFR properties

2010 ERU Estimate Calculation for Dover:

- Total number of SFR properties: 5,732
- Number of SFR properties sampled for the feasibility study: 56
- Total impervious area of sampled properties: 219,442 sq. ft.

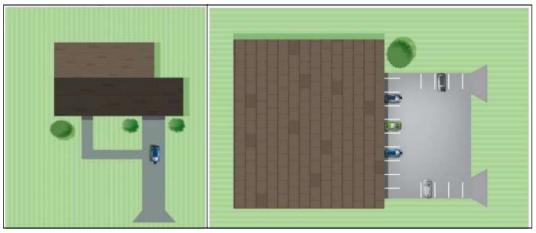
$$\text{Estimated ERU} = \frac{219{,}442 \text{ sq. ft.}}{56 \text{ sampled SFR properties}} = \mathbf{3{,}919 \text{ sq. ft.}}$$

Equivalent Residential Unit (ERU)

- Estimated ERU of 3,919 sq. ft. is then used as a unit of measure for assessing fees to non-SFR

Single Family Home (Flat Fee)

Commercial Property (Proportional Fee)



ERUs = 1

Assume Impervious Area = 15,000 sq. ft.
ERUs = 15,000/3,919 = 3.82 (rounded to 4)

Who Would Be Included?

Summary of 2010 Parcel Data

Category	Total # of Parcels	# of Parcels Sampled	% of Parcels Sampled	Total Category Area (Sq Ft)	Total Area Sampled (Sq Ft)	Impervious Area of Sample (Sq Ft)	Average Percent Impervious	Estimated Total ERUs	Average ERUs / parcel
Single Family Residential	5,732	56	1%	316,564,996	2,806,097	219,442	8%	5,732	1.0
Multifamily Residential	1,067	271	25%	34,295,092	5,946,838	1,670,980	28%	2,489	2.3
Condo	199	199	100%	45,001,509	45,001,509	5,361,258	12%	1,368	6.9
Commercial	375	325	87%	29,148,080	24,253,032	9,212,703	38%	2,613	7.0
Governmental	215	115	53%	88,498,821	62,471,470	4,035,172	6%	2,252	10.5
Industrial	123	109	89%	34,465,662	31,610,440	7,528,341	24%	1,960	15.9
Institutional	90	89	99%	19,737,893	19,721,710	3,435,953	17%	881	9.8
Undeveloped	471	1	0%	87,056,524	21,706	0	0%	0	0.0
Miscellaneous	46	46	100%	9,762,844	9,762,844	249,902	3%	64	1.4
TOTAL	**8,318**	**1,211**	**15%**	**674,266,685**	**211,330,909**	**31,713,750**	**15%**	**17,359**	**2.1**

Estimated total number of ERUs in 2010 = **17,359**

2021 Tax-Exempt Properties

How Much Revenue is Needed?

From Dec. 21, 2020 presentation on costs of services:

- FY16-20 annual average operating budget ≈ $1.0M
- FY16-20 annual average capital expenses ≈ $2.5M

From 2010 parcel data summary:

- Total estimated ERUs = 17,359

Potential fee scenario (*only one of many possible scenarios*)

	Monthly Fee per ERU	Estimated Revenue
Operating Budget	$4.80	$1.0M
Operating Budget + CIP items	$16.80	$3.5M

Consider Rate Modifiers & Credits

Rate Modifiers: adjustments to rates to account for special circumstances and enhance equity. Examples include:

- Senior citizen discount
- Low income discount

Credits: ongoing reductions in a property owner's fee that can be achieved for reducing demand on the stormwater system and/or reduce stormwater expenses

- Incentivizes property owners to reduce runoff and implement BMPs on their property

Stormwater Utility Administration

Consider staffing needs and responsibilities for:

- Data management
- Credit requests
- Customer service
- Billing

Additional Resources

Stormwater Utility Surveys

- Black and Veatch (2018) https://www.bv.com/sites/default/files/2019-10/18%20Stormwater%20Utility%20Survey%20Report%20WEB_0.pdf
- Western Kentucky University (2020) https://digitalcommons.wku.edu/cgi/viewcontent.cgi?article=1002&context=seas_faculty_pubs

Photo source: Concord Monitor, October 2016.
"Heavy rain causes street flooding in Concord area"

ESTABLISHING STORMWATER UTILITIES

A Status Report on the City of Concord's Progress

David Cedarholm, P.E., City Engineer, Concord, New Hampshire

MARCH 22, 2021

FUNDING CONCORD'S COMPETING PROGRAMS

Revenue for the General Fund comes primarily from property taxes.

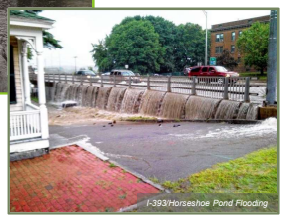
As the NH Sate Capital, 30% of properties in the City are tax-exempt and do not contribute to the General Fund.

FUTURE PROGRAM

Biggest program funding gaps are…

Capital improvements for better drainage system performance


Lincoln Street Flooding


I-393/Horseshoe Pond Flooding

O&M for Concord's extensive drainage system

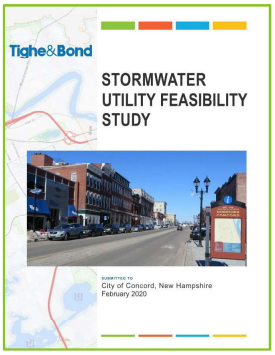
Need additional funding to improve level of service and complete these drainage improvement projects

STORMWATER UTILITY FEASIBILITY STUDY

City Working Group crosses many Departments

- Multiple meetings held in 2019 & 2020

- City of Concord
  - Engineering
  - Finance
  - Planning
  - City Manager & Deputy City Managers
  - General Services Director
  - GIS
- Tighe & Bond
- Raftelis Financial Consultants



STORMWATER UTILITY FEASIBILITY STUDY

- Equivalent Residential Unit (ERU)
  - Median impervious cover on typical residential lot
  - For Concord, 1 ERU = 2,760 SF

- 24% of the impervious cover in Concord is located on tax-exempt properties
  - Tax-exempt properties benefit from the municipal drainage system at no cost

EXISTING STORMWATER PROGRAM BUDGET

Stormwater Activity	Historic Expenditures FY14	FY15	FY16	FY17	FY18	FY19	Historic Expenditures Annual Average FY14-FY19
Capital Budget							
CIP #571: I-93/Horseshoe Pond Drainage Improvements	$ -	$ 120,000	$ -	$ -	$ -	$ -	$ 20,000
CIP #479: Storm Water Enterprise Mechanism	$ -	$ -	$ -	$ -	$ -	$ 60,000	$ 10,000
CIP #83: Storm Water Improvements	$ -	$ -	$ 400,000	$ 550,000	$ 540,000	$ 775,000	$ 378,000
CIP #78: Drainage Repairs as part of Highway Improvement Program	$ 35,000	$ 85,000	$ 85,000	$ 85,000	$ 85,000	$ 150,000	$ 88,000
Street Tree Planting Program *(Plan to fund in future program)*							
Vactor Truck *(Annualized Budget)*	$ 42,000	$ 42,000	$ 42,000	$ 42,000	$ 42,000	$ 42,000	$ 42,000
Street Sweeper *(Annualized Budget)*	$ 20,000	$ 20,000	$ 20,000	$ 27,000	$ 27,000	$ 27,000	$ 24,000
Other Vehicles & Equipment Replacement Program *(Annualized Budget)*	$ 58,000	$ 58,000	$ 58,000	$ 58,000	$ 58,000	$ 58,000	$ 58,000
Subtotal - Capital Budget	**$ 155,000**	**$ 325,000**	**$ 605,000**	**$ 762,000**	**$ 752,000**	**$ 1,112,000**	**$ 620,000**
Operating Budget							
Catch Basins							
Clean Catch Basin Tops	$ 15,348	$ 12,779	$ 18,885	$ 19,594	$ 16,559	$ 16,633	$ 17,000
Install Drywell/Catch Basin	$ 2,384	$ 4,826	$ 1,149	$ 8,511	$ 1,999	$ 3,774	$ 4,000
Catch Basin Maintenance Repair	$ 93,304	$ 76,155	$ 118,418	$ 68,786	$ 118,068	$ 94,947	$ 95,000
Sweeping							
Spring Cleanup Street Sweeping	$ 45,000	$ 48,000	$ 48,000	$ 49,200	$ 50,380	$ 51,700	$ 49,000
Spot Sweeping	$ 14,722	$ 21,377	$ 17,525	$ 19,717	$ 13,187	$ 17,306	$ 18,000
Sweeping Sidewalks	$ 9,710	$ -	$ 2,576	$ 3,402	$ 11,974	$ 5,532	$ 6,000
Drain System							
Install Under-Drain Pipe	$ -	$ 3,007	$ 25,828	$ -	$ 975	$ 5,962	$ 6,000
Culverts	$ 5,275	$ 6,169	$ 30,759	$ 18,473	$ 8,403	$ 13,816	$ 14,000
Ditching	$ 5,012	$ 27,125	$ 48,513	$ 16,037	$ 22,379	$ 24,333	$ 25,000
TV/Investigation Storm Maint.	$ 34,322	$ 58,912	$ 88,908	$ 84,633	$ 58,815	$ 65,118	$ 66,000
Subtotal - Operating Budget	**$ 226,000**	**$ 259,000**	**$ 401,000**	**$ 291,000**	**$ 303,000**	**$ 300,000**	**$ 300,000**
Subtotal Capital and Operating Budgets	**$ 381,000**	**$ 584,000**	**$ 1,006,000**	**$ 1,053,000**	**$ 1,055,000**	**$ 1,412,000**	**$ 920,000**
City Administration Fee *(0.5% Subtotal)*	**$ 2.000**	**$ 3.000**	**$ 5.100**	**$ 5.300**	**$ 5.300**	**$ 7.100**	**$ 5,000**
Total Expenditures	**$ 383,000**	**$ 587,000**	**$ 1,012,000**	**$ 1,059,000**	**$ 1,061,000**	**$ 1,420,000**	**$ 925,000**

EXISTING AVERAGE ANNUAL STORMWATER BUDGET = $925,000

STORMWATER UTILITY FEASIBILITY STUDY

- Concord's stormwater funding
  - Current General Fund FY14-19 average expenditures: **$925,000**
  - Projected FY21-25 average expenditures, including capital projects: **$1,562,000**
  - Consider maintaining existing level funding, funding an expanded future program, or a program with a reduced budget
- Rate structure options include:
  - **Flat fee**: Every property owner pays the same fee
  - **Tiered fee**: Properties are categorized into tiers based on the amount of impervious area (typically ERU-based)
  - **Proportional fee**: Properties are charged based on the amount of impervious area
  - Combinations of the above

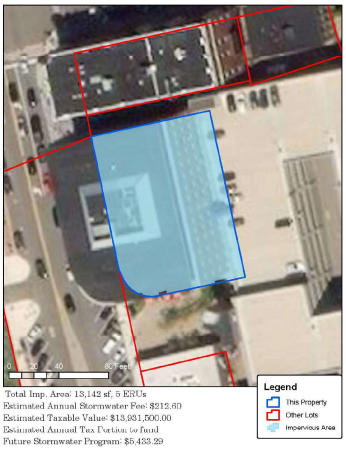
EXAMPLE STORMWATER FEES

- Example annual stormwater fees were calculated based on funding future stormwater budget
- Calculation assumes a flat fee for SFR and a proportional (per ERU) fee for NSFR
- Example annual stormwater fees (rounded):

Property Type	Fee for Level Funded Program	Fee for Full Future Program
Typical single family residential	$25	$43
Typical multifamily	$200	$340
Steeplegate Mall	$15,600	$26,300
State House	$450	$765
City of Concord	$64,300	$108,600

EVALUATE EXAMPLE PROPERTIES

MULTI-STORY COMMERCIAL



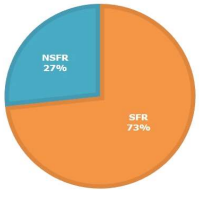
- Estimated Taxable Value: **$13,931,500**
- Estimated Annual Tax Portion to Fund the Existing Stormwater Program: **$3,216.33**

Existing "RAIN TAX"

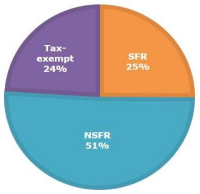
- Total Impervious. Area: **13,142 sf**, 5 ERUs
- Estimated Annual Stormwater Utility Fee to Fund the Future Program: **$212.60**

WHY MOVE FORWARD WITH A STORMWATER UTILITY?

- More equitable distribution of costs
  - **Property owners are currently paying a "Rain Tax" based on tax valuation instead of by how much stormwater they generate**
  - Utility Fee based funding of the stormwater program will make more General Fund revenue available
  - Tax-exempt properties would help to fund stormwater management
- Sustainable, dedicated funding for proactive stormwater management to help alleviate the monetary burden on the City's General Fund



Revenue distribution from property taxes



Revenue distribution from stormwater fee

SFR = Single Family Residential
NSFR = Non-Single Family Residential
(multifamily, commercial, governmental, institutional, etc.)

STORMWATER UTILITY NEXT STEPS

- Technical: advance stormwater utility elements
  - Refine rate structure
  - Level funded budget vs funding full program
  - Utility organization for implementation
  - Establish billing and data management system
  - Develop and adopt stormwater utility ordinance
- Political: Approach key audiences with patience
  - Timely stakeholder outreach and education
  - Discussions with the State
- Schedule: Recommend milestones
  - Define timeline for City Council input on policy decisions
  - Public outreach

ACKNOWLEDGEMENTS

- Concord City Council
- Tighe & Bond
  - Emily Scerbo, P.E.
  - Cassandra LaRochelle, P.E.
  - Adam Yanulis
- Raftelis Financial Consultants
  - Jennifer Tavantzis

THANK YOU!

CONTACT INFORMATION:

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Engineering Services Division
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Concord, NH 03101
(603) 255-8520
dcedarholm@concordnh.gov

PROJECTED STORMWATER EXPENDITURES

Stormwater Activity	Projected Expenditures FY20	FY21	FY22	FY23	FY24	Projected Expenditures Annual Average FY20-FY24
Capital Budget						
CIP #571: I-93/Horseshoe Pond Drainage Improvements	$ 500,000	$ 500,000	$ -	$ 400,000	$ -	$ 280,000
CIP #479: Storm Water Enterprise Mechanism	*Budget needed to finalize and adopt Stormwater Utility TBD*					
CIP #83: Storm Water Improvements	$ 300,000	$ 100,000	$ 650,000	$ 1,250,000	$ 1,250,000	$ 710,000
CIP #78: Drainage Repairs as part of Highway Improvement Program	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000
Street Tree Planting Program *(Plan to fund in future program)*	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000
Vactor Truck *(Annualized Budget)*	$ 42,000	$ 42,000	$ 42,000	$ 42,000	$ 45,000	$ 43,000
Street Sweeper *(Annualized Budget)*	$ 27,000	$ 27,000	$ 27,000	$ 27,000	$ 27,000	$ 27,000
Other Vehicles & Equipment Replacement Program *(Annualized Budget)*	$ 58,000	$ 58,000	$ 58,000	$ 58,000	$ 58,000	$ 58,000
Subtotal - Capital Budget	**$ 1,037,000**	**$ 837,000**	**$ 887,000**	**$ 1,887,000**	**$ 1,490,000**	**$ 1,228,000**
Operating Budget						
Catch Basins						
Clean Catch Basin Tops	$ 17,049	$ 17,475	$ 17,912	$ 18,360	$ 18,819	$ 18,000
Install Drywell/Catch Basin	$ 3,868	$ 3,965	$ 4,064	$ 4,165	$ 4,270	$ 5,000
Catch Basin Maintenance Repair	$ 97,316	$ 99,748	$ 102,242	$ 104,798	$ 107,418	$ 103,000
Sweeping						
Spring Cleanup Street Sweeping	$ 51,700	$ 52,993	$ 54,317	$ 55,675	$ 57,067	$ 55,000
Spot Sweeping	$ 17,738	$ 18,182	$ 18,636	$ 19,102	$ 19,580	$ 19,000
Sweeping Sidewalks	$ 5,670	$ 5,812	$ 5,958	$ 6,106	$ 6,259	$ 6,000
Drain System						
Install Under-Drain Pipe	$ 6,111	$ 6,264	$ 6,420	$ 6,581	$ 6,745	$ 7,000
Culverts	$ 14,161	$ 14,515	$ 14,878	$ 15,250	$ 15,631	$ 15,000
Ditching	$ 24,941	$ 25,565	$ 26,204	$ 26,859	$ 27,531	$ 27,000
TV/Investigation Storm Maint.	$ 66,746	$ 68,414	$ 70,125	$ 71,878	$ 73,675	$ 71,000
Subtotal - Operating Budget	**$ 306,000**	**$ 313,000**	**$ 321,000**	**$ 329,000**	**$ 337,000**	**$ 326,000**
Subtotal Capital and Operating Budgets	**$ 1,343,000**	**$ 1,150,000**	**$ 1,208,000**	**$ 2,216,000**	**$ 1,827,000**	**$ 1,554,000**
City Administration Fee *(0.5% Subtotal)*	**$ 6,800**	**$ 5,800**	**$ 6,100**	**$ 11,100**	**$ 9,200**	**$ 8,000**
Total Expenditures	**$ 1,350,000**	**$ 1,156,000**	**$ 1,215,000**	**$ 2,228,000**	**$ 1,837,000**	**$ 1,562,000**

Paying for Stormwater Management:

City of Dover NH
Ad Hoc Committee
March 2021

Clean Water – Clean Growth

- **Healthier Environment –** We are reducing polluted runoff and sewer spills into Casco Bay, for a healthy environment.
- **A Fair Billing System –** The current sewer charge will change to include a stormwater service charge that is more fair to residents and businesses
- **An Accountable Investment –** The stormwater service charge funds will only support stormwater system improvements and maintenance.

Portland's Wastewater System

Our Obligations

Clean Water Act

- National Pollutant Discharge Elimination System (NPDES).
  - EPA Combined Sewer Overflow Control Policy
  - EPA Sanitary Sewer Collection System and Dry Weather Overflow Policy
- Maine Pollution Discharge Elimination System (MEPDES)
  - Municipal Separated Storm Sewer Systems
  - Residual Designation Authority (Long Creek)

Maine Law

- Maine DEP, Chapter 570, Combined Sewer Overflow Abatement rules
- Combined Sewer Overflow Long Term Control Plan
- Urban Impaired Streams (4 in Portland)
- Provision for waiver where local program addresses stormwater

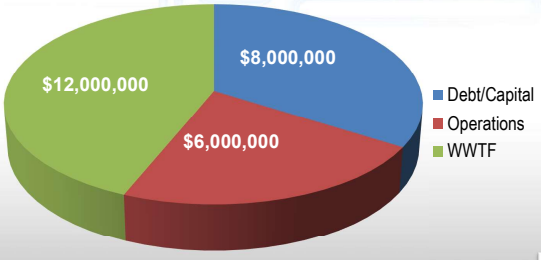
How Do We Pay Now?

- The sewer charge is currently paying for sewer and stormwater management.
- The sewer charge is based on water use and does not account for stormwater runoff.
- The responsibility of clean water is solely on water users.

The current sewer charge pays for sewer, combined sewer overflow and stormwater management

What Do Service Charges Pay For?

Projected Sewer Revenue Needs: $26,000,000 in 2016



Where Will Future Investments be Made?

- Cost est. $170,000,000
- 15 million gallons of storage to reduce combined sewer overflows
- Improvements at sewage treatment plant
- New stormwater and sewer collection lines to reduce back-ups
- Stormwater system improvements

Why Have a Stormwater Service Charge?

- Stormwater carries pollution into Casco Bay and other important water resources.
- Stormwater management is regulated, complex and expensive.
- Stormwater runoff is related to impervious surface area and not to water use.
- **The current system to pay for stormwater management isn't fair or equitable**

~From Council Resolution July 1, 2010

How is Impervious Area Calculated?

- Each property evaluated to determine Impervious Area (IA)
- Average house = 2,200 Square Feet IA
- Each Billing Unit = nearest 1,200 SF
- 2021 rate = 6.75/1200sqft

All non-residential properties are billed by number of Billing Units or part thereof

How to Save Money?

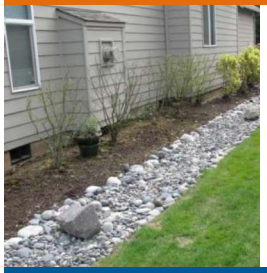
1. **Automatic savings on your water and sewer bill.**
2. **Savings by reducing the impact of your impervious area.**
3. **Credits for residents and business to save.**

Porous Pavement **Rain Garden – Dead River Property**

Stormwater Charge Credits - Residential

1. **Designed for low admin burden**
2. **Relatively simple for homeowners to navigate**

Credit manual: www.cleangrowthcleanwater.com/credits



Modified French Drain **Rain Garden**

Stormwater Charge Credits - Commercial

1. **Mirrors existing and past development standards**
2. **100% credit available**

Credit manual: www.cleangrowthcleanwater.com/credits

Porous Pavers **Rain Gardens**

- Questions?

Committee Meeting #6

April 26, 2021

CITY OF DOVER

STORMWATER AND FLOOD RESILIENCE FUNDING COMMITTEE - MINUTES

Meeting Type: **Regular Meeting**
Meeting Location: **City Hall, Council Conference Room**
Meeting Date: **Monday, April 26, 2021**
Meeting Time: **5:30 PM**

Members Present: Otis Perry, Ken Mavrogeorge, Ray Bardwell, Marcia Gasses, Bill Baber, Eric George, Jan Nedelka, David Dagenais, Vincent Hayes, Paul Geraci, Steve Haight, Chad Kageleiry, Cynthia Walter, Dennis Shanahan (City Council, ex officio), Gretchen Young (Community Services, ex officio), Peter Driscoll (Dover School District, ex officio).

Members Not Present (excused): Allan Krans

Members Not Present (un-excused): None

Also Present: Ben Sweeney (NHDES/PREP Project Partner), Nathalie DiGeronimo (NHDES Project Partner), Abigail Lyon (PREP Project Partner), Tom Swenson (NHDES Project Partner), Martha Shiels (New England Environmental Finance Center Project Partner), James Houle (UNH Stormwater Center Project Partner), Chris Parker (Assistant City Manager & Director of Planning, speaker), Dan Lynch (Finance Director, speaker)

1. **CALL TO ORDER**
   Councilor Shanahan called the meeting to order at 5:33 PM. Meeting declared an emergency because a physical quorum is not reasonably practical based on the ongoing COVID-19 pandemic and the need to accommodate social distancing. Accommodations include remote participation.

2. **ATTENDANCE (follow remote participation procedures as needed)**
   Councilor Shanahan called attendance (see members present listed above).

3. **REVIEW AND APPROVAL OF MARCH 22, 2021 MINUTES**
   Motion: Haight moved to approve the minutes as presented; Bardwell second with amendments as proposed.
   Amendment(s): header changed from "agenda" to "minutes," corrected spelling of Allan Krans and Cynthia Walter, and per Nedelka's suggestion the last sentence of the first paragraph on page 2 now reads "Homeowners' associations would have been charged for their private roads."
   Roll Call Vote: Yes-13; No-0; Abstain-1
   Motion carries.

4. **NEW BUSINESS**
   A. Overview of existing fees in Dover
   Parker outlined existing fees and costs associated with development including Plan Review Fees, Impervious Cover Fees, Permit Fees (including Conditional Use Fees), Inspection Fees, Impact Fees, and Road Excavation Fees. For each fee, Parker presented how the fees are calculated, how the revenue generated is used and where it goes

(General Fund), and whether any fees were designated for stormwater or other operations. Parker provided a matrix of each of the fees to committee members to review.

B. Discussion/Q&A on the use of fees to fund stormwater and flood resilience activities

Young asked when the impervious cover fee was established and if the implementation of the impervious cover fee was a result of the City recognizing the additional review needed for stormwater management on certain permits. Parker recalled it was around 2010 and mentioned the option to pursue a fee reduction for installing porous asphalt (pavement) and agreed with the need for additional technical review.

Kageleiry asked about the total for fees collected annually. Parker estimated planning fees at $130,000-$140,000 and building fees at $500,000 annually and offered to follow up with a more discrete number. Parker added that the City has a program to track the timing of the collection and use of impact fees with the goal of zeroing out the budget as early as possible. Fee calculation is periodically reviewed and will likely be updated in 2023.

Perry asked about investment fees and sewer and water fees. Parker responded by reminding the committee that Dan Lynch, Finance Director, will cover investment and impact fees later in the agenda. Parker added that there is often misunderstanding among the public about the differences between impact and investment fees.

Nedelka asked about revenue from current use land that supports projects with the Open Lands Committee. Parker shared the conservation fund receives revenue from two sources: 1) conversion of "current-use" land into developable land and 2) transfer of development rights (TDR) program.

Sweeney asked about Plan Review Fees, as an example, and whether other communities the City has surveyed charge a higher fee to ensure they cover operational costs and have some revenue to cover other activities. Parker said he is not aware of any example and reiterated that the fees are meant to cover technical review of a plan. Gasses, Parker, and Lynch raised concern over generating revenue with fees.

Mavrogeorge asked about calculating the impervious cover for the impervious cover fee and whether there were other considerations at that time. Parker shared the City Council questioned how accurate the City's fees were and whether they were covering costs associated with reviews which prompted the review.

Lynch provided an overview of water and sewer investment fees and impact fees including details on the calculation for each fee. Investment fees are added to a sewer capital and water capital reserve funds established by the City Council with the purpose to accumulate funds to pay for certain capital improvement projects. Young clarified if all funds were used for capital projects and none for operations. Lynch agreed. Councilor Shanahan added that these funds could be used for a water treatment plant project and that the intended use is forward thinking to make investments in the City.

Kageleiry raised a concern about the rational nexus between the fees that are charged for a project and the work that goes into the system that that burden might cause for a development in the south end of the City who could be charged a large investment fee for water and sewer. Kageleiry included that the fee collected may be used to repair a water main not connected to the developer's project and that this is a maintenance issue. Lynch responded saying at the time that person/property is connecting to the larger system, they are buying their share of equity into the system. Parker added that water and sewer are both city-wide systems.

Young asked when these fees were first charged. Lynch recalled 2001 was the earliest they were implemented but using a different methodology. Young asked if there was a decision at that time for the fees to only look forward. Lynch shared that at the time the goal was to not only fund development of the systems but also upkeep of the existing system, and that folks pay these fees when they are connected to a system (water or sewer) to contribute capital to keep the existing system and infrastructure or potential new infrastructure to sustain the systems for the City as a whole. Haight asked if the City operates at a net positive or net negative for the funds collected now. Lynch responded saying the City has the right amount currently budgeted with the collection of fees. In cases where more funds are needed, the City has utilized the Clean Water State Revolving Fund to pay for large projects with some principal forgiveness. Young added that if more funding was available, the City would consider developing more bedrock wells to support water infrastructure.

Haight raised the idea that for a brand-new stormwater system funds are needed for the development and operations and maintenance of that system. Kageleiry added that water and sewer fees are very defined and go to residents who have municipal water and sewer; stormwater would be more complicated because how do you charge for the use of stormwater especially if you're miles away from a stormwater system. Geraci reminded the committee that residents are already paying for these costs through the General Fund. Kageleiry added that that is the question, do we consider a new utility fee or adding a line item in the General Fund. Councilor Shanahan reminded the committee the need to discuss equity. Haight added that developers are required to treat stormwater onsite but

on the other side, remember that residents are driving on public, municipal roads and all residents benefit from stormwater management on those. Kageleiry raised the idea of a tiered system for urban core (entirely served by stormwater infrastructure), next outer rim (somewhat served), and remote (limited/no service) as a way to defend a potential rate structure and fee. Haight, Kageleiry, and Parker discussed the current City regulations requiring net zero stormwater management for development or better and the issue of establishing rules for charging a stormwater utility or fee. Dagenais echoed concerns stating that if a property has net zero stormwater runoff how can the City charge a utility. Kageleiry acknowledged that public roads were created for access to Indian Brook road and that those ultimately contribute to municipal stormwater infrastructure. Nedelka added that the last Stormwater Utility Committee (2010) used a base/flat fee for everyone to cover the public rights of way and then each property was assessed a second ERU based on impervious cover area/land use. The purpose being to create an opportunity for credits/reductions in fee based on homeowner improvements. Nedelka cautioned using a tiered approach based on development density – instead the base/flat fee and assessed fees treat everyone uniformly. Councilor Shanahan reminded the committee that we have an opportunity to dive deeper into this conversation in later meetings in August and September.

Kageleiry asked about General Fund revenue and whether the additional stormwater costs could be added on top of that revenue. Lynch estimated total tax revenue at 90 million. Young asked about the percentage of the total water budget that comes from the investment fees. Lynch responded saying in the operating budget there is no component funded by investment fees. Young asked how the levels were established and whether the investment fees could be doubled. Parker added the City uses the Capital Improvements Plan to identify what investments the City wants to make in water and sewer systems and the City could consider doing the same for stormwater. Currently when the City reviews road replacement projects, stormwater management is considered, and the City could carve out Stormwater Management as a distinct line item. Parker asked the committee what is worse, being told you're not going to have to do any stormwater management, but you have to pay an investment fee for a stormwater program or having no fee but being responsible for all stormwater management.

Parker summarized the concept of some residents being in favor of a user fee like water because there is a clear connection between turning on the tap and getting a bill. This raises the issue that if a resident doesn't use the service, do they have to pay? The other side is if a fee is created to generate the $3 million needed for a stormwater program, some residents will ask if their taxes will go down. However, other components of the General Fund budget could be increased because of the offset. Parker reminded the committee to consider that the City's current stormwater management program is not

keeping up with the magnitude of stormwater events and that current funds do not cover operations and maintenance costs the City incurs.

Kageleiry asked the committee about whether a tax-payer wants to see another bill (a fee or utility) or an increase on an existing bill (General Fund). Mavrogeorge reminded Kageleiry that the General Fund is not protected and there are competing interests for funding. Mavrogeorge added that this committee needs to consider a way to consistently fund stormwater. Sweeney reminded the committee to consider the lack of equity in the current structure (General Fund). Nedelka added that there are two forms of equity: 1) are we being fair from one house to the next and 2) equity in property use type. Nedelka stated that Dover does not have as many nontaxable properties as Concord, NH (as we learned at the previous meeting) which will impact the equity discussion.

5. OLD BUSINESS

Councilor Shanahan directed the committee to review questions raised from previous meeting that have now been answered. Questions and answers available in Box folder with meeting materials.

Sweeney gave an update on the parcel and impervious cover data. Young, Houle, and Sweeney are working with Dover City Staff to update the number of parcels and impervious cover acreage estimates to more accurately develop what a stormwater and flood resilience utility could look like today. Updated information will be provided at the June meeting.

6. CITIZEN'S FORUM

None present.

7. CONFIRM NEXT MEETING DATE, TOPIC, AND HOMEWORK ASSIGNMENTS

Next meeting is scheduled for May 24, 2021 at 5:30 PM and will focus on public private partnerships and the General Fund.

Councilor Shanahan reminded the committee to review the recommendations/summary report outline Sweeney provided.

Bardwell asked about discussing public information to share the work the committee has been doing with the public. Young suggested addressing that topic at the May meeting.

8. ADJOURN

Councilor Shanahan declared the meeting adjourned.

Fee Type	Plan Review Fee	Permit Fee	Inspection Fee	Impact Fee	Road Excavation Fee
What is the intended purpose of those fees?	To cover cost of review by staff	To cover the cost of issuing and monitoring the permit	To cover site inspection of work	To offset the impacts development has on capital infrastructure	To protect the roadway from degrading prematurely.
How are fee-based revenues distributed and what do they fund?	Placed in the General Fund to offset operating costs	Placed in the General Fund to offset operating costs	Placed in the General Fund to offset operating costs	Placed in a capital reserve account to be used to fund capital improvements	Placed in the General Fund to offset operating costs
How much revenue is allocated to stormwater/flood resilience?	Impervious surface is calculated and a plan review fee is assigned to it ($0.7/sf)	None	None	None	None
How does the City determine the rates for each fee?	Survey of costs associated with the review of plans and a survey of comparable commnities	Survey of costs associated with the review of plans and a survey of comparable commnities	Survey of costs associated with the inspection of sites	Review every 5 years, reviewing impact development has had on infrastrucure and what capital costs exists	Based upon actual cost to repair roadways
What are the limitations (if any) related to revenue generation and/or distribution?	Revenue is intended to be a user fee to reduce impact on tax payer for specific service	Revenue is intended to be a user fee to reduce impact on tax payer for specific service	Revenue is intended to be a user fee to reduce impact on tax payer for specific service	Cannot be used for operations or maintenance costs. Must be new infrastructure and must be spent within 6 years or returned	Intended to defray costs of maintaining a roadway and ensure the road conditions are impacted as minimally as possible.

Committee Meeting #7

May 24, 2021

CITY OF DOVER

STORMWATER AND FLOOD RESILIENCE FUNDING COMMITTEE - MINUTES

Meeting Type: **Regular Meeting**
Meeting Location: **City Hall, Council Conference Room**
Meeting Date: **Monday, May 24, 2021**
Meeting Time: **5:30 PM**

Members Present: Ray Bardwell, Marcia Gasses, Paul Geraci, Chad Kageleiry, Allan Krans, Ken Mavrogeorge, Cynthia Walter, Bill Baber, Jan Nedelka, Eric George, Vincent Hayes, Dennis Shanahan (City Council, ex officio), Gretchen Young (Community Services, ex officio)

Members Not Present (excused): Steve Haight, David Dagenais, Peter Driscoll (Dover School District, ex officio)

Members Not Present (un-excused): Otis Perry

Also Present: Ben Sweeney (NHDES/PREP Project Partner), Nathalie DiGeronimo (NHDES Project Partner), Abigail Lyon (PREP Project Partner), Katie Zink (NHDES Project Partner), James Houle (UNH Stormwater Center Project Partner), Michael Joyal (City Manager, speaker), John Storer (Community Services, ex officio)

1. **CALL TO ORDER**
   Councilor Shanahan called the meeting to order at 5:32 PM. Meeting declared an emergency because a physical quorum is not reasonably practical based on the ongoing COVID-19 pandemic and the need to accommodate social distancing. Accommodations include remote participation.

2. **ATTENDANCE (follow remote participation procedures as needed)**
   Councilor Shanahan called attendance (see members present listed above).

3. **REVIEW AND APPROVAL OF APRIL 26, 2021 MINUTES**
   Motion: Nedelka moved to approve the minutes with one amendment; Bardwell second with amendment as proposed.
   Amendment(s): Correct spelling of Nedelka
   Roll Call Vote: Yes – 11; No – 0; Abstain – 0
   Motion Carries.

4. **NEW BUSINESS**

   A. **Overview of public-private partnerships for stormwater**
   Sweeney shared a brief overview of public-private partnerships (P3s), how they have been used for stormwater management, and their limitations including an example from Prince George's County in Maryland (a 30-year partnership between the county and a private firm that resulted in 266 stormwater best management practices installed). Key takeaways included: long-term contracts commonly used in P3 agreements may not be suitable for Dover at this time, P3s are not a long-term funding solution (can reduce costs but do not generate revenue), and Dover has and will continue to use more traditional approaches to P3s when appropriate.

   Bardwell asked about the control of money flow in the Prince George's example and whether the county's proposal of $100 million went before a budget hearing before it was granted. Sweeney responded that he thinks so, and that a large piece of the P3 was the

private entity taking on a lot of the community outreach and engagement, but reminded Bardwell that P3s can vary greatly and that no one size fits all.

Councilor Shanahan asked about the responsibility after the 20-50-year contract established under the P3 and whether the private firm was an existing company or one that was created to work with the county. Sweeney responded that the private entity was already well established and reiterated that P3s are not a long-term solution and that at the end of the contract there could be a significant shift in how the stormwater program functions.

Krans asked about the reclamation of areas and whether the goal was to create a large scale treatment plan. Sweeney reiterated that the goal was to design and install best management practices (BMPs) and that the joint venture installed 266 BMPs.

Shanahan asked about responsibility for the discharge permit and whether the P3 transferred responsibility to the private entity. Sweeney offered to follow up, but pointed out that there is shared risk regarding the performance of the BMPs.

Kageleiry referenced nitrogen that almost seems like a secondary issue or benefit as a result of the stormwater work being completed and that the primary focus is to fix the deteriorating collection system. Kageleiry raised the concern that the committee's focus might not be on the $3 million a year for water quality.

Baber asked whether a 3rd party has studied the Prince George's example in regard to cost effectiveness and assessment. Sweeney shared that EPA has provided guidance to local governments on how these P3s can be established and that the Prince George's example only started in 2015 with a 30-year contract so there is a lot to learn as that contract matures. Sweeney also shared that other communities and states (Washington) have completed feasibility studies to see if there are communities in the state who may benefit from a similar agreement.

Kageleiry asked if there are other examples more comparable to the scale of Dover. Sweeney shared that he was not aware of smaller examples, but that there is a city in Pennsylvania who is exploring this approach but has not yet entered into a contract. Sweeney added that there are communities more comparable to Dover who are investigating this from a cost perspective but no concrete examples at this time.

Walter inquired about how Prince George's county used a more regional (county) approach to permit requirements. Sweeney shared that in NH the county government structure is not as strong as it is around the Chesapeake Bay. Prince George's county used a fee structure at the county level because of their existing government infrastructure.

Bardwell asked about having a private investor who wants to make a profit and whether that could end up being more expensive for the residents.

Joyal clarified that the P3 concept is trying to address a few needs including: 1) municipalities that do not have the resources in house to coordinate a project at this scale and may look to a private entity to bring those resources to bare (i.e., hire outside engineers and contractors); 2) some municipalities are constrained to finance these projects (not that they cannot pay for them, but they do not have the ability to fund them). P3s can offer an alternative way to contract with a private entity and bypass the need for issuance of debt – essentially paying a private entity like a vendor/contractor. Joyal responded to a previous question about permit responsibility and shared that the regulated entity (county or municipal) cannot pass its regulatory obligations onto another. Dover operates a stormwater system under the EPA and National Pollution Discharge Elimination System (NPDES) permit and Dover is the regulated entity. Dover could hire someone to help the city meet those requirements, but ultimate the City owns the requirements of the permit. Joyal also shared that he does not envision Dover recommending a partnership like the one in Prince George's county, MD because Dover has the ability to bring the resources to bare whether that is through outside contracts or issuing our own debt (at a cheaper rate than the private sector).

Bardwell asked about the long-term goal for the stormwater standards going forward when the waste water treatment facility permit is up for renewal. Sweeney responded saying that he is not aware of discussions about future permit requirements and that the NH Department of Environmental Services Coastal Program and the Piscataqua Region Estuaries Partnership (PREP) are both non-regulatory entities and cannot offer insight into what future permits might entail.

Walter asked clarifying questions about the Great Bay Total Nitrogen General Permit and the 23-year time frame for developing nitrogen management profiles and whether that meant the permit lasts for 23 years and related to P3s like the Dover wastewater treatment facility example if there was the same level of accessibility and transparency for public review. Joyal responded by saying there can be the same level of accessibility and transparency. The previous example in Dover had some open book finance provisions but because it was a private company the City was not fully apprised of all financial decisions. The private company was accountable to the City and the public to operate the plant but some aspects were proprietary.

B. Discuss how the alternative funding options explored thus far compare to funding stormwater through the General Fund

Joyal shared an overview of financing municipal operations for the City of Dover including how the finances work and a focus in on specific funding for stormwater management. Public Works (Community Services) draws from multiple funds/accounts including the General Fund, capital project funds, special revenue funds (grants), water fund, and sewer fund. Current funding ($27,456,623 for Community Services of which $1,096,444 is used for stormwater) accounts for staff, supervisor, crew, equipment (some shared costs), but does not include major projects that are administered or supervised by

the Community Services Department (those are budgeted under capital budgets). Joyal presented information about the sources of revenue for the General Fund including taxes (property taxes being the most significant source of revenue), yield taxes, timber cuts, ambulance services, recreational facilities, swim lessons, licenses and permits, copy fees, etc. as well as details about the City's tax cap.

Krans asked clarifying questions about funding under the "street" portion of the budget besides stormwater. Joyal clarified that the "streets" budget includes maintenance of pavement, guard rails, transportation, sidewalks, concrete, curbing, and street trees.

Kageleiry raised questions about $1 million for stormwater the previous estimate of $3.5 million anticipated need for stormwater. Young clarified that the $3.5 million calculation was for the operating budget but also the larger projects including capital projects. Joyal added that when the City builds structures there is a need to maintain them. In order to maintain infrastructure so it performs as intended the cost is closer to $3 million. Those dollars go toward cleaning out catch basins (almost 50% annually) but that more can be done which would add to the current $1 million budget. Projects like outfall improvements (vegetation management and ditch cleaning) are not capital projects. Kageleiry asked if those costs are not being covered under the current $1 million but could be in the estimated $3-3.5 million. Joyal confirmed.

Krans asked how a resident's life is going to be better if the City spends an additional $2 million on stormwater. Joyal answered saying stormwater management is about water quality and that environmental benefits are affected by water quality (i.e., food, habitat, recreation, etc.). Secondly, stormwater management improves safety (re: flooding) because the City needs to make sure when there are storm events that the stormwater is shedding off roadways and is not causing flooding or erosion of public and private lands. Stormwater is properly managed, but we must recognize that the City builds a lot of things and we have a lot of expectations for that infrastructure to operate properly which takes funding dedicated for maintenance. Walter asked about stormwater management benefitting infiltration and recharge of drinking water supplies and whether some of the unmet need is not just running the sewers but it is also getting the best management practices (BMPs) in the proper locations so more water can infiltrate and recharge aquifers. Joyal emphatically agreed.

Walter then asked about competing interests for the General Fund and whether Joyal felt contributions from the state were likely to improve. Joyal shared that right now we are in a cycle where the state is retracting funding across many areas (education being one of them) and that we should not depend on an increase in state funding. There is hope for federal funding as part of the stimulus package but that the City needs to support its own community.

Kageleiry inquired further about how the additional $2 million in stormwater funding may be spent and where the installation of new BMPs may take place. Young added that

the City has to get creative about where to install the new systems but one example is 120 acres of the urban core that drains to Henry Law Park. Kageleiry highlighted that the example is not an aquifer and Joyal added Willand Pond as an example. There is a road side industrial park and capturing all that stormwater and instead of sending it into a stream is an opportunity. Kageleiry asked if that would require land acquisition and Joyal suggested it could be a public private partnership (P3) opportunity. Joyal added that stormwater management is part of site plan reviews with the goal to retain stormwater on site as part of the solution. The plan is to make sure the City is doing that in targeted areas that would also benefit the aquifer (like Willand Pond). Young added the stormwater runoff at Stonewall Kitchen as another example.

Bardwell asked about the Committee's plan to recommend a two-phase approach – funding to bridge the gap between the current $1 million and the $3.5 million estimated. Shanahan suggested not focusing on the set figure but instead the goal is to do what the city needs to do to meet permit requirements while also doing the right thing. Shanahan added that it is not necessarily about the $2 million and reminded the committee to thin about the resilience aspect and the focus on equity.

Kageleiry shared that we have to figure out the best funding system to levy on the citizens of Dover and asked about the checks and balances that would be set in place for a stormwater utility. Joyal shared it would be the same process that the water and sewer utilities go through. Council votes on a full budget and water and sewer are part of that. They would determine whether the fee that is levied is appropriate. Kageleiry pressed further asking about how the rates would be increased and what mechanisms are in place to stop rates from increasing rapidly. Joyal reminded the committee that the budget is heavily scrutinized and that a new utility would be subject to the same. All levels of the budget get the same level of attention. Storer added that the City has the Dover Utility Commission and there is likely an intersection with a stormwater utility. Storer added that there should be more in-depth conversations and recommendations to the City Council and used the Solid Waste Advisory Committee as an example. Storer then responded to a previous question from Krans and shared that the Clean Water Act is regulatory driven and it is changing the way the City thinks about stormwater. The City's wastewater treatment facility should be proud that it is currently meeting the general permit but the new stormwater regulations are here and the City is working to navigate them.

Gasses inquired about the $2 million figure being discussed and Kageleiry noted that it was the gap identified between the current $1 million and the estimated $3.5 million needed. Joyal added that if nothing changes, as Storer pointed out, the City is operating regulated infrastructure and the City is required to meet those permits. The City is currently in compliance but as those things change and the infrastructure ages the costs are going to increase. Getting ahead of that and doing what the City can now will help offset future costs. Joyal noted that City Council will have to make some tough decisions about where that $2 million is going to come from.

Baber raised the concerns of flooding and whether the committee is looking at future costs in that area including the cost to possibly reloate sewage pumping stations. Joyal responded saying flood water resilience and preventing damage to private and public buildings and coastal water rise are currently being considered.

Geraci asked about the administrative expenses associated with creating a new utility. Storer responded saying that the administrative costs would be handled the same way as current overhead charges for solid waste, water, sewer, etc. A stormwater utility would require a dedicated inspector that reviews operations and maintenance plans. The optional credits will also need on site validation. These would incur additional costs.

Nedelka asked a clarifying question about the $1 million the City currently spends being non-capital budget expenditures and whether the $3.5 million is also non-capital. Sweeney responded that the $3.5 million is the operating budget of today plus the 5-year historic average of capital expenses that are connected to stormwater.

C. Discuss criteria for selecting the preferred funding option(s)

5. CONFIRM NEXT MEETING DATE, TOPIC, AND HOMEWORK ASSIGNMENTS
Next meeting is June 28, 2021, and to anticipate homework a few weeks ahead of time to assess the options presented. A reminder to the committee to check in on the framework of the report.

6. CITIZEN'S FORUM
None present.

7. ADJOURN AT 7:09 PM.
Councilor Shanahan declared the meeting adjourned.

Overview of Public-Private Partnerships (P3s) for Stormwater Management

City of Dover Ad Hoc Committee to Study Stormwater and Flood Resilience Funding

Committee Meeting #7
May 24, 2021

What are P3s?

- Relatively common way for the public and private sector to collaboratively deliver and maintain infrastructure projects
- Allows private sector participation in:
  - Financing
  - Planning
  - Operations & Maintenance
  - Design
  - Construction
- P3s can vary greatly
  - Municipality installing infrastructure on private land
  - Design-build contracting for a project on public land
  - Single contract to deliver and maintain multi-year programs that achieve permit requirements

Evolution of Stormwater P3s

- Driving down stormwater costs through design-build-finance-operate-maintain (DBFOM) agreements with private entities
  - Program-wide partnership rather than single site-specific project contract
  - Private partner time commitments (~20-50 years)
  - Built around "availability payments" – private partner does not get paid until infrastructure is available and performs as expected
  - Allows private partner to expedite installation of stormwater infrastructure throughout municipality
- Very few municipal examples

Case Study: Prince George's County, MD

- 30-year "Community Based" P3 started in 2015
- County invested $100 million during first three years to retrofit 2,000 acres of impervious cover
- Private partner funded 30-40% of program costs upfront
- Private partner manages design, construction, maintenance of stormwater BMPs
- After first three years:
  - 266 BMPs installed at 94 project sites to treat 2,000 acres of impervious
  - All performance targets exceeded

Enabling Conditions

- Meaningful implementation scale
  - Need economies of scale to drive down costs
- Local government appetite to transfer risk
- Sustainable and predictable revenue
  - Financial accountability is key for attracting affordable private financing

Key Takeaways

- Long-term contracts with private sector may not be suitable for Dover at this time
- P3s are not a long-term funding solution
- Dover has and will continue to use more traditional approaches to P3s when appropriate
  - Municipality installing infrastructure on private land
  - Design-build contracting for a project on public land

Additional Resources

- EPA overview on financing green infrastructure through a P3: https://www.epa.gov/G3/financing-green-infrastructure-community-based-public-private-partnerships-cbp3-right-you
- A Guide for Local Governments on Community Based Public-Private Partnerships: https://www.epa.gov/sites/production/files/2015-12/documents/gi_cb_p3_guide_epa_r3_final_042115_508.pdf
- Prince George's County Clean Water Partnership: https://thecleanwaterpartnership.com/

Committee Meeting #8

June 28, 2021

CITY OF DOVER

STORMWATER AND FLOOD RESILIENCE FUNDING COMMITTEE - MINUTES

Meeting Type: **Regular Meeting**
Meeting Location: **City Hall, Council Conference Room**
Meeting Date: **Monday, June 28, 2021**
Meeting Time: **5:30 PM**

Members Present: Ray Bardwell, David Degenais, Marcia Gasses, Paul Geraci, Chad Kageleiry, Ken Mavrogeorge, Cynthia Walter, Bill Baber, Jan Nedelka, Otis Perry, Steve Haight, Vincent Hayes, Dennis Shanahan (City Council, ex officio), Gretchen Young (Community Services, ex officio)

Members Not Present (excused): none

Members Not Present (un-excused): Allan Krans, Peter Driscoll, Eric George

Also Present: Ben Sweeney (NHDES/PREP Project Partner), Nathalie DiGeronimo (NHDES Project Partner), Abigail Lyon (PREP Project Partner), Tom Swenson (NHDES Project Partner), James Houle (UNH Stormwater Center Project Partner)

1. **CALL TO ORDER**
   Councilor Shanahan called the meeting to order at 5:31 PM.

2. **ATTENDANCE (members present and participating virtually)**
   Councilor Shanahan called attendance (see members present listed above).

3. **REVIEW AND APPROVAL OF MAY 24, 2021 MINUTES**
   Motion: Nedelka moved to approve the minutes; Bardwell second.
   Amendment(s): None
   Roll Call Vote: Yes – 13 No – 0; Abstain – 0
   Motion Carries.

4. **OLD BUSINESS**
   A. **Review of stormwater management and flood resilience costs**
   Sweeney provided an overview of the city's operating budget and capital expenses for stormwater management projects looking at historic and projected costs. The values presented were shared at a previous Stormwater and Flood Resilience Funding Committee meeting.

   Baber asked whether historic costs were normalized to 2020 dollars. Sweeney responded that values were not normalized and were pulled directly from approved budgets.

   Sweeney continued with an overview of potential lost value and project costs for flood mitigation projects pulling data from the 2018 Hazard Mitigation Plan update. The assessed costs included a list of projects recommended as part of the 2013 Hazard Mitigation Plan that as of 2018 the update are still deferred projects. Estimated value of deferred projects around $5.5 million.

   Councilor Shanahan asked about anticipated costs the City may incur as part of EPA Great Bay Total Nitrogen General Permit ($600k bond). Young and Sweeney shared those costs were estimated for permit compliance at $850,000 (50% of costs supported with stormwater funding; remaining 50% supported with wastewater funding).

Bardwell asked whether an increase in the CIP will be standard. Young responded saying the CIP will include a myriad of projects and won't be a standard increase. Projects will include design, engineering, construction of best management practices, outreach and education, data collection, and analysis so costs are not predetermined. Bardwell asked if mitigation of stormwater and wetlands would be included. Young responded that yes it could but there are not identified projects at this time. Court street is one potential – in design currently – that will include nutrient removal as part of the project.

B. Updated Stormwater Utility Rate Estimates

Sweeney walked through a handout provided to the committee illustrating potential stormwater utility scenarios and rates that had been discussed at previous committee meetings. Impervious cover data needed to develop scenarios was provided by the UNH Stormwater Center and was combined with 2020 parcel data from the city. Parcels were categorized as single family residential or non-single family residential (includes multi-family, commercial, and industrial properties). Impervious cover for the State and City roads were not included, and the analysis assumes these would be exempt. State and City roads make up around 35% of the impervious cover compared to 25% from single family residential. ERU calculated to 3,430 square feet (around 6,000 properties in the City).

Bardwell asked whether churches were included in the ERU calculation. Sweeney clarified that all tax-exempt properties – including churches – were included in the analysis, but that this would ultimately be a decision for the committee to discuss.

Kageleiry inquired about the 151 single family residential properties with no impervious cover and whether those were vacant lots. Sweeney shared that more analysis would be needed to answer that question as he has not looked at each individual property.

Degenais asked what the ERU calculation would be if tax-exempt properties were removed. Sweeney responded saying more analysis would be needed and the committee would need to make that determination.

Kageleiry asked about a focus on green space as a reciprocal to impervious cover. Sweeney shared that that is another way to structure a utility where the rate is not based solely on impervious cover but how much impervious cover compared to open space. Would require additional analysis and follow up with the UNH Stormwater Center to determine feasibility.

Sweeney shared more detail on the overview of utility scenarios related to common fee types including flat fees, tiered fees, and proportional fees. The analysis presented would implement a flat fee – each property charged 1 ERU – and a proportional fee for non-single family residential. Sweeney closed by reminding the committee that fees increase depending on the potential funding level (i.e., current operating budget, operating budget + small capital budget, etc.) and that the committee will need to weigh in on that decision.

Gasses asked about the administrative costs associated with these fee scenarios. Young responded saying the city is estimating 2.5 FTE which could include a part-time inspector, part-time for administration at public works fielding calls, and part-time for water and sewer billing – some of these positions have been filled. Young does not anticipate a large increase in administrative costs.

Bardwell asked about who and how is the impervious cover area identified and the costs associated with that data collection and analysis. Kageleiry responded saying it is dependent on the ERU established and less on the specific impervious cover for each parcel. Nedelka added the number is a solid average instead of needing to assess every value, but that multi-family homes are more complicated. Decisions will include who pays (i.e., condo associations). Kageleiry add detail stating multi-tenant 5 story building would have more tenants, but less impervious cover as compared to many tenants in a 2-story building (larger impervious cover footprint). Nedelka responded that having the condo association handle payment and billing among tenants keeps the calculation simple for the city.

Kageleiry asked about credit for large green space. Young shared that the city is having the same discussion with EPA about credit for conservation on stormwater permits.

Baber asked about the percentage of known state-owned roads, and potential for the state to contribute to the stormwater utility. Sweeney shared the breakdown of city vs. state roads is not available at this time and would require additional analysis.

Walter shared that she has seen other examples from towns that use tiered fees to nonprofits and churches pay a different ERU rate to offer credits or reduction in rates. She also asked about examples of credits for having pervious surfaces and collection or infiltration systems. Walter made a request for additional resources.

Gasses stated that she things the single-family residential fee will be hard to sell and suggested starting with commercial properties. Kageleiry and Nedelka raised an inequitable distribution concern.

Bardwell inquired about who determines the rates annually. Nedelka responded that the rates would be determined the same way as water and sewer – before the City Council. Bardwell added that residents likely do not realize how those rates are calculated until a bill arrives.

Gasses reminded the committee of the importance of the overall picture. Kageleiry added that the perception could be that a utility is a way for the City to collect additional funds given and work around the tax cap. Krans stated that would be the same path the previous committee went down ten years ago. Kageleiry raised a point that perhaps a utility is less palatable than a 1% increase in the tax bill. Walter reminded the committee of the equity considerations and that we may be asking citizens who already pay taxes to pay an additional fee, but the City would also be asking tax-exempt properties to contribute to solving the problems we all bear the burden of. Kageleiry asked if the same point would be observed if people said they were already paying that expense through roads. Perry asked if the city

would pay into the utility. Kageleiry asked if the 35% of impervious cover included municipal buildings. Young responded saying use of the ERU and the general fund you would be charged a reduction outside of the general fund. Nedelka agreed that there is hardship, and that schools and community buildings have a lot of impervious cover. Those expenses would come out of the tax property dollars. Some rate payers may see no – or little – difference between tax bill and utility bill but large commercial property owners and large nonprofits would see an increase because they represent a larger share of the impact. Kageleiry asked about how new development would be charged when stormwater impact does not increase on a site.

Walter added that EPA and Tetra Tech are beginning to estimate infiltration to groundwater supplies – EPA is putting numbers to those benefits. Not revenue but something the city would benefit from potentially on permits and for drinking water recharge. Kageleiry asked for the study.

Degenais asked about large commercial properties that have already developed strategies to mitigate stormwater and potential credit mechanisms.

5. NEW BUSINESS

A. Review funding option evaluation homework responses

Sweeney shared an overview of homework from the previous committee meeting with a focus on funding sources identified as primary – stormwater utility and general fund.

Baber commented that a utility could be a more equitable option for funding stormwater management projects if thoughtfully and carefully done.

Bardwell inquired about the Massachusetts examples provided and whether they are models the city could use moving forward. Sweeney said yes but reminded the committee that each community is unique and may not have the same number of parcels as Dover or have an urban downtown core both of which would impact a fee structure.

Geraci raised the topic of equity again stating that we not only want to have things equitable for how things are today, but to also affect positive change by improving flood resilience and water quality and hopefully improving the quantity of drinking water. Geraci suggested reaching out to the Conservation Commission to see what other programs could support conservation.

Councilor Shanahan summarized the homework responses and discussion and suggested the committee eliminate fee based, grants, loans, bonds, and public private partnerships from consideration for primary sources of funding. The remaining options are general fund and stormwater utility. Councilor Shanahan suggested that the committee explore stormwater utilities in greater detail. Kageleiry clarified that the committee would have a stormwater draft plan in hand for the July meeting and whether the committee would be voting to move forward with pursuing a utility. Nedelka suggested the outline could be used to test whether

the committee thinks a stormwater utility could be something to pursue and then leave time to refine the details. Sweeney and the project team agreed to draft an outline. Shanahan and Gasses asked about outreach and Sweeney responded that Lyon and DiGeronimo offered to draft an outreach outline to share with the committee by August.

Walter asked about if and how supplemental sources (fees, grants, and loans) could downsize the goal for the funding needed to be covered by a potential stormwater utility. Walter added that she was surprised by the cost estimates for vulnerability and $6 million in deferred costs; recommending that people should be alerted to these vulnerabilities. Councilor Shanahan echoed some of Walter's comments stating that funding will likely come from a few pots.

Baber made a statement about available data and the potential to be extremely equitable when determining rates paying particular attention to not overburden the homeowner with a modest home and small lot compared with a homeowner with a larger home and larger lot. Kageleiry asked about a coverage ration standard asking specifically about how a small house on a large lot would be assessed. Baber raised concern about jumping to a simple fee structure too early and suggested starting with something inherently equitable to begin with for a stronger ground.

Mavrogeorge asked about the draft stormwater utility plan and whether it would include some of these other components – accounting for inspections.

Gasses raised the concern that this will be an additional cost for a homeowner. Geraci asked about whether a utility would reduce part of a homeowner's tax bill. Kageleiry stated that not likely as the taxes will always go to the cap. Overall a homeowner would be charged more money and that the General Fund will be spent inclusive of stormwater or not and the question really becomes is the additional cost worth it. Perry shared his experience with the bag-and-tag program Dover implemented for trash collection. Previously trash collection was paid for out of the General Fund before being transferred to a fee-based structure where you pay for what you use (e.g., a resident said he put out 14 bags of clippings which ultimately helped sell the program because it illustrated that some residents were receiving a greater service for trash collection than others but paying the same rate). The program also parallels the water and sewer utility where fees are assessed based on water use and estimated sewage. The program is equitable because residents on septic do not have to pay that fee. Perry suggested there may be parallels on using a stormwater utility and trying to figure out a way to give credit where credit is due.

Nedelka suggested a path forward which could include a base fee that would include roads making the argument that they are common goods. Then use ERU calculation and credits for additional fee (credits would not be applied to the base fee). Mavrogeorge echoed an interest in the inspections and credit piece and asked about whether there could be a credit for property shifted to current use (i.e., put into conservation and not just left as open space).

Walter suggested the committee revisit the idea of voting up or down for a utility and instead approach a middle ground. A draft could include baseline absolute needs and then use three models with different kinds of solutions to Baber's point about achieving equity and simplicity at the same time. Use equity, simplicity, and salability to evaluate the different solutions. Walter pointed out that it might be too early for the committee to determine whether to continue pursuing a stormwater utility. Councilor Shanahan reminded the committee that there are two more meetings to deliberate on the selection of options for the recommendations report and doesn't see a hard up or down decision for a few more months.

Geraci asked about other municipal examples and if Sweeney could compile some resources for the committee to review. Sweeney and Young agreed to pull together a list of resources for the committee.

6. **CONFIRM NEXT MEETING DATE, TOPIC, AND HOMEWORK ASSIGNMENTS**
   Next meeting is July 26, 2021, and Councilor Shanahan asked the committee to review the resources Sweeney and Young pull together in reference to Geraci's comment above.

7. **CITIZEN'S FORUM**
   None present.

8. **ADJOURN AT 7:06 PM.**
   Councilor Shanahan adjourned meeting.

STORMWATER COST OF SERVICES

Historic Stormwater Expenditures

Stormwater Activity	FY16	FY17	FY18	FY19	FY20
Operating Budget					
Personal Services	$ 471,394	$ 475,981	$ 476,311	$ 487,662	$ 496,216
Supplies	$ 184,505	$ 189,302	$ 209,714	$ 219,876	$ 232,115
Capital Outlay	$ 151,250	$ 150,000	$ 150,000	$ 150,000	$ 152,500
Purchased Services	$ 4,863	$ 71,063	$ 71,273	$ 70,322	$ 104,913
Other Expenses	$ 1,000	$ 1,000	$ 1,500	$ 1,500	$ 1,500
Subtotal - Operating Budget	$ 873,012	$ 887,346	$ 908,798	$ 929,360	$ 987,244
Capital Expenditures					
Nelson	$ 138,447	$ -	$ -	$ -	$ -
Keating/Birchwood	$ -	$ 842,030	$ -	$ -	$ -
Richardson	$ -	$ 577,000	$ -	$ -	$ -
Mast Road	$ -	$ -	$ 182,000	$ -	$ -
Hanson Street	$ -	$ -	$ 120,000	$ -	$ -
Roberts	$ -	$ -	$ 575,000	$ -	$ -
Broadway	$ 103,000	$ -	$ -	$ 4,087,500	$ 4,255,500
Mt. Vernon	$ -	$ -	$ -	$ 12,500	$ -
Chestnut Street	$ -	$ -	$ -	$ 160,000	$ -
Spur Road	$ -	$ -	$ -	$ -	$ 1,147,000
Elm Belk	$ -	$ -	$ -	$ -	$ 726,000
Community Trail	$ -	$ -	$ -	$ -	$ 80,000
Subtotal - Capital Expenditures	$ 241,447	$ 1,419,030	$ 877,000	$ 4,260,000	$ 6,208,500
TOTAL	**$ 1,114,459**	**$ 2,306,376**	**$ 1,785,798**	**$ 5,189,360**	**$ 7,195,744**

Annual Average Historic Operating Budget (FY16-20): $917,152
Annual Average Historic Capital Expenditures (FY16-20): $2,601,195
Annual Average Historic Total Stormwater Expenditures (FY16-20): **$3,518,347**

Projected Stormwater Expenditures

Stormwater Activity	FY21	FY22	FY23	FY24	FY25
Operating Budget					
Personal Services*	$ 491,479	$ 511,138	$ 531,584	$ 552,847	$ 574,961
Supplies*	$ 247,916	$ 257,833	$ 268,146	$ 278,872	$ 290,027
Capital Outlay	$ 152,500	$ 200,000	$ 250,000	$ 300,000	$ 350,000
Purchased Services*	$ 126,054	$ 131,096	$ 136,340	$ 141,794	$ 147,465
Other Expenses*	$ 1,500	$ 1,560	$ 1,622	$ 1,687	$ 1,755
Subtotal - Operating Budget	$ 1,019,449	$ 1,101,627	$ 1,187,692	$ 1,275,200	$ 1,364,208
Capital Expenditures					
Catch Basin Spoils Facility	$ 3,500,000	$ -	$ -	$ -	$ -
Great Bay General Permit†	$ 250,000	$ 850,000	$ 200,000	$ 200,000	$ 200,000
Court/Union/Middle‡	$ -	$ 50,000	$ -	$ 500,000	$ 425,000
Fifth Street & Grove Street‡	$ -	$ 25,000	$ 187,500	$ 62,500	$ -
Oak/Ham/Ela‡	$ -	$ 112,500	$ 50,000	$ 87,500	$ -
Horne Street‡	$ -	$ -	$ -	$ -	$ 62,500
Subtotal - Capital Expenditures	$ 3,750,000	$ 1,037,500	$ 437,500	$ 850,000	$ 687,500
TOTAL	$ 4,766,949	$ 2,139,127	$ 1,625,192	$ 2,125,200	$ 2,051,708

Annual Average Projected Operating Budget (FY21-25): $1,189,635
Annual Average Projected Capital Expenditures (FY21-25): $1,352,500
Annual Average Projected Total Stormwater Expenditures (FY21-25): **$2,542,135**

**Projections for FY22-25 were developed by applying an estimated annual 4% inflation rate based on FY21 approved budget.*
†Stormwater portion of costs shown are 50% of total permit compliance cost estimate; remaining 50% is allocated to the Sewer Fund. Costs are only preliminary estimates; more precise costs of permit compliance TBD.
‡Stormwater portion of street reconstruction project costs shown are 25% of the total capital project cost estimate.

FLOOD RESILIENCE PROJECT COST ESTIMATES & POTENTIAL LOSS VALUE

Potential Loss Value of Critical Facilities from Flooding

Critical Facilities	Flood Risk*	100% of Combined Structure Value
14 Bridges	FEMA Floodplain, Past Flooding, & Sea-Level Rise (6.3 ft. w/ storm surge)	$ 75,168,000
4 Pump Stations	Past Flooding & Sea-Level Rise (6.3 ft. w/ storm surge)	$ 2,343,723
1 Water Supply (Hughes Well)	FEMA Floodplain	$ 560,859
TOTAL Value of Critical Facilities Located in Areas Vulnerable to Flooding		**$ 78,072,582**

**As part of the City's 2018 Multi-Hazard Mitigation Plan Update, a GIS-based analysis was completed to determine which critical facilities intersected with the FEMA floodplain, past flooding areas identified from previous hazard mitigation plan updates, or the 6.3 ft. of sea-level rise with storm surge.*

Deferred Flood Mitigation Projects Identified in the 2018 Multi-Hazard Mitigation Plan Update

Mitigation Project	Description	Status	Estimated Cost
Piscataqua and Rabbit Road Reconstruction	Piscataqua Rd is a thoroughfare to Rte. 4 and in need of repair. Rabbit Rd is a small road off of Piscataqua that needs improvements and due to their close proximity it makes sense to combine them.	Deferred Action. The road received a thin pavement overlay in the summer of 2017. The project remains in the City's CIP; but it has been moved out to FY 2027.	$ 1,000,000
Atlantic Avenue Reconstruction	This road is a main artery in and out of the City. Reconstruction is to replace the major drainage component of the road.	Deferred Action. This project remains in the City's CIP, currently projected for FY2026.	$ 1,500,000
Old Colony Drainage	Several homes have major flooding during heavy rain events. New drainage would resolve this problem.	Deferred Action. Other projects have taken precedent.	$ 75,000
Outer Sixth Street Replace Bridge & Culvert	Major overflows during heavy rain events. Replace bridge and raise the road. Provide additional access in and out of the North End area of the City.	Deferred Action. In 2017, the City submitted this project to the NHDOT State aid bridge replacement program. Due to funding restraints, work is unlikely unless aid is granted.	$ 1,000,000
Raise County Farm Road	Maintain access to the Strafford County Complex, which includes the rest home, court, hospice care and jail.	Deferred Action. Due to funding restraints there has been no action taken. This is not currently in the City's CIP. It may hinge on receiving State aid assistance to replace the County Farm Bridge.	TBD
St. Thomas Street Drainage	Flooding occurs in this area due to the age of the infrastructure. Needs new design and reconstruction.	Deferred Action. Due to funding restraints there has been no action taken. This is not currently in the City's CIP.	$ 1,800,000
Install River Gauges	Gauges would be installed on bridges crossing major rivers to assist emergency personnel during flooding events.	Deferred Action. Due to funding restraints there has been no action taken.	$ 15,000 (per gauge)
TOTAL Cost of Deferred Flood Mitigation Projects			**$ 5,390,000**

More detail and information on estimated project costs and potential losses can be found within these City resources:

- *FY2022-2027 Proposed Capital Improvements Program*
- *2018 Multi-Hazard Mitigation Plan Update*
- *FY2016-2021 Proposed Capital Improvements Program*

Parcel Data

The data used to estimate the City's equivalent residential unit (ERU) was obtained from NH GRANIT and last updated in 2020. The data was then crossed referenced with the City's parcel data for accuracy.

Property Type	Number of Parcels
Single Family Residential (SFR)	6,152
Non-Single Family Residential (NSFR)*	2,467
TOTAL	**8,619**

**NSFR property types include: multifamily residential, commercial, industrial, and government owned properties*

Impervious Cover (IC) Data

The IC data used to estimate the City's ERU was obtained from NH GRANIT. The data layer, titled "Impervious Surfaces in the Coastal Watershed of NH and ME, High Resolution," was produced in 2015.

Property Type	Amount of IC (sq. ft.)	% of Total IC
Single Family Residential (SFR)	26,195,899	25%
Non-Single Family Residential (NSFR)	43,280,185	40%
State and City Roads	37,410,199	35%
TOTAL	**106,886,283**	**100%**

Equivalent Residential Unit (ERU) Calculation

The ERU is the median amount of IC on a typical SFR property. The analysis identified 151 SFR properties that had no IC, so the ERU calculation was based on the remaining 6,001 SFR properties. The median amount of IC within those 6,001 properties is 3,430 sq. ft. Therefore, **1 ERU = 3,430 sq. ft.**

Rate Structure Example

Common rate structures include:

- Flat fee: A uniform fee is charged to all property owners.
- Tiered fee: Properties are categorized into tiers based on their amount of IC. All properties within a tier are charged the same fee, but the fee is different for each tier. An ERU may be used to determine the fee for each tier.
- Proportional fee: Fees are individually calculated for each property based on their specific IC.

Many stormwater fee structures use a combination of these approaches. The example below implements the flat fee approach for SFR properties and the proportional fee approach for NSFR properties, by applying the following rules:

1. Set each SFR property as 1 ERU.
2. Establish the number of ERUs for each NSFR parcel by dividing the impervious area on each parcel by the ERU value (3,430 sq. ft.) and rounding up to the nearest integer. For example, a commercial property with 18,000 sq. ft. of impervious cover would be assessed 6 ERUs (18,000/3,430 = 5.25, rounded up to the nearest integer, 6).

Property Type	Number of Billable ERUs*	% of Total ERUs
SFR	6,001	32%
NSFR	12,618	68%
TOTAL	**18,619**	**100%**

**This billable ERU estimate assumes all State and City roads would be exempt from a utility, but the Committee may recommend and/or the City may opt to bill for some or all of those roads. Additionally, this billable ERU estimate assumes that each NSFR parcel would be billed a stormwater fee, but the Committee may recommend and/or the City may opt to exempt some parcels.*

Potential Fee Scenarios

Desired revenue must be determined to identify an estimated stormwater utility fee per ERU. The table below summarizes the range of charges and estimated revenue needed for various levels of service.

Potential Funding Level Examples	Annual Revenue	Fee per ERU per month*	Fee per ERU per year*
Current Operating Budget	$1.0M	$4.56	$54.75
Operating Budget + Small Capital Budget ($1M)	$2.0M	$9.04	$108.46
Operating Budget + Small Capital Budget ($1M) + Set-aside for Flood Resilience Projects ($500k)	$2.5M	$11.28	$135.32
Operating Budget + Moderate Capital Budget ($2M)	$3.0M	$13.51	$162.17
Operating Budget + Large Capital Budget ($3M)	$4.0M	$17.99	$215.88
**It's important to recognize these fee estimates are only a handful of many fee scenarios and the annual cost would need to be further evaluated as part of developing a utility.*			

Preliminary Comparison of Stormwater Utility Fee and General Fund Contributions

For FY2021, the approved Stormwater Program operating budget is $1,019,449. According to Dover's Visual Budget, the average residential property tax bill is $7,208. Therefore, the average residential property currently contributes $58.04 to the Stormwater Program operating budget through the General Fund. Based on the ERU calculation and rate structure example outlined above, an annual stormwater utility fee for a typical SFR property would be approximately $54.75 to cover the Stormwater Program operating budget. It's important to recognize this comparison does not account for other stormwater related expenses (e.g., capital costs, Community Services professional staff time, stormwater utility administration, etc.), and the $54.75 from a utility fee may not necessarily replace the $58.04 from the tax bill.

Examples of Select Stormwater Utilities in New England Communities

There are currently 24 municipalities in New England that have adopted a stormwater utility, and more than half of those municipalities adopted their utility within the last five years. Each municipality is unique and they each have different stormwater and flood resilience needs, which causes ERUs, annual fees, and revenue to vary.

Municipality	ERU	Annual SFR Fee	Annual Revenue	2017 Population
Dover, NH*	3,430	$54.75	$1.0M	30,901
Portland, ME	3,200	$75.60	$5.2M	66,715
Augusta, ME	2,700	$99.60	$1.6M	18,626
Burlington, VT	2,670	$79.20	$1.9M	42,453
Colchester, VT	4,356	$52.00	$730k	17,309
Chelmsford, MA	N/A – Tiered Fee	$40.00	$1.0M	35,067
Shrewsbury, MA	3,200	$90.00	$1.8M	36,716
Northampton, MA	N/A – Tiered Fee	$66.18	$2.0M	28,593
Chicopee, MA	2,000	$100.00	$1.5M	55,515
Fall River, MA	2,800	$160.00	$4.7M	89,420
New London, CT	1,000	$30.00	$1.9M	27,147
**The Dover, NH example is meant for comparison only. This ERU is based on one of many possible scenarios that is not necessarily the proposed scenario. Additionally, the FY21 operating budget was used a placeholder because a desired funding level has yet to be selected.*				
Please note that the data presented here is for informational purposes only and is a combination of publicly available information compiled by Tighe&Bond as of June 30, 2019 and survey data collected by Western Kentucky University as of summer 2020.				

Committee Meeting #9

July 26, 2021

CITY OF DOVER

STORMWATER AND FLOOD RESILIENCE FUNDING COMMITTEE - MINUTES

Meeting Type:	**Regular Meeting**
Meeting Location:	**City Hall, Council Conference Room**
Meeting Date:	**Monday, July 26, 2021**
Meeting Time:	**5:30 PM**

Members Present: Ray Bardwell, David Degenais, Paul Geraci, Chad Kageleiry, Ken Mavrogeorge, Cynthia Walter, Bill Baber, Jan Nedelka, Otis Perry, Steve Haight, Vincent Hayes, Dennis Shanahan (City Council, ex officio), Gretchen Young (Community Services, ex officio), Peter Driscoll (Dover School District, ex officio), Eric George

Members Not Present (excused): Marcia Gasses, Allan Krans

Members Not Present (un-excused): None

Also Present: Ben Sweeney (NHDES/PREP Project Partner), Nathalie DiGeronimo (NHDES Project Partner), Tom Swenson (NHDES Project Partner), James Houle (UNH Stormwater Center Project Partner)

1. **CALL TO ORDER**
   Councilor Shanahan called the meeting to order at 5:31 PM.

2. **ATTENDANCE (members present and participating virtually)**
   Councilor Shanahan called attendance (see members present listed above).

3. **REVIEW AND APPROVAL OF MAY 24, 2021 MINUTES**
   Motion: Nedelka moved to approve the minutes; seconded by Bardwell.
   Amendment(s): None
   Roll Call Vote: Yes – 12; No – 0; Abstain – 0
   Motion Carries.

4. **NEW BUSINESS**

   A. **Presentation of stormwater utility options and considerations**
   Sweeney provided an overview of various considerations and decision points involved in the establishment of a stormwater utility, including fee basis, rate structures for different property types, desired funding level for the stormwater program, exemptions, and discounts. Sweeney also shared four possible stormwater utility scenarios that show how rates would change based on different fee structures for single family residential (SFR) and non-single family residential (NSFR) properties.

   Perry asked for clarification about the "operating budget funding level" and whether revenue from a stormwater utility would go into an enterprise account. Sweeney clarified that the operating budget funding level describes the roughly $1M operating budget from the stormwater program in FY21, and explained that the utility scenarios show what rates would need to be to generate that $1M amount, which would be kept in an enterprise fund.

   Young reminded everyone how the City estimated stormwater funding costs of $3.5M that were presented during the second Committee meeting on December 21, 2020.

Kageleiry asked how common extremely expensive projects are, and whether the Broadway culvert reconstruction project costs are inflating cost estimates. Young answered that project was factored into cost estimates because those projects do happen, and it is helpful to have a buffer built into those estimates because there are other expenses that were not accounted for.

Baber acknowledged the need for the Committee to identify their high-level goals, giving examples of the level of equity achieved and the costs that should be included in a potential utility, because there are many additional details and decisions surrounding a utility that would require additional analysis after the Committee process. Degenais pointed out that a goal should be identify the amount of funding that needs to be generated. Nedelka added that City Council will ultimately decide whether to fund the current operating budget amount, capital projects, and/or resilience projects. Bardwell suggested the goal should be limiting nitrogen in the Great Bay Estuary. Walter added that a primary goal should be better water management that maximizes stormwater infiltration into groundwater aquifers to address drought.

Kageleiry asked how a utility would capture revenue from properties that manage their stormwater and prevent negative impacts. Mavrogeorge suggested that those properties would still pay something because those property owners would still see a benefit from stormwater and flood resilience actions taken elsewhere in the City.

Bardwell mentioned the dam on the Bellamy River acted as a big detention pond, but expressed frustration that it was torn down.

Shanahan summarized the discussion and reminded everyone that the important issues Committee members have raised will be included in the Committee's recommendations report.

Sweeney reiterated that the stormwater utility scenarios presented are only hypothetical examples used to help the Committee conceptualize what a utility could look like. Sweeney provided more detail on each of the four scenarios (1: Flat fee for SFR and proportional fee for NSFR; 2: Flat fee for SFR and tiered fee for NSFR; 3: Tiered fee for SFR and proportional fee for NSFR; 4: Proportional fee for SFR and proportional fee for NSFR) and assumptions made for each scenario (fee would be based only on impervious cover, public roads would be exempt, and no discounts would be offered).

Mavrogeorge pointed out that each scenario has a different level of equity based on the fee structure applied to SFR and NSFR properties, where a flat fee is less equitable than a proportional fee.

Shanahan asked if each property's impervious cover would need to be assessed for tiered and proportional fee structures. Sweeney answered yes, which means each scenario has different start-up costs.

Walter asked about the amount of impervious cover within City owned parcels. Sweeney answered that approximately 6% of all impervious cover in the City is within City owned parcels.

Baber suggested that if the Committee recommends a utility, it would need to hold up in court, and therefore it needs to be as equitable as possible.

Walter asked about the difficultly level of identifying the impervious cover for each individual property. Sweeney said that it could be done within a certain level of accuracy. Young added that the City could calculate the total number of ERUs for each property to calculate utility rates.

Geraci asked how the amount of impervious cover on each property is identified. Sweeney answered that characteristics of land cover can be identified by Light Detection and Ranging (Lidar), which is a method that involves aircrafts using a variety of pulsed lasers to collect information about a specified area.

B. Presentation of stormwater utility credit policy examples

Sweeney presented an overview of stormwater utility credit systems, including the legal requirement that credits are offered if a utility is established, the types of stormwater controls that could be eligible for credits, steps to implementing a credit system, and maximum fee reduction considerations.

Bardwell asked who determines the credits. Sweeney answered that the City has the final say and would determine credit amounts based on the quantity of runoff reduced and/or the level of water quality improvements achieved by qualifying stormwater controls installed by the property owner.

Perry asked about rates increasing for other property owners when a certain number of property owners receive credits. Baber mentioned that rates would likely not increase once credits are applied because those property owners receiving credits are taking some of the stormwater management burden off of the City.

C. Determine if a consensus exists on general recommendations with a potential vote by the Committee

Kageleiry expressed interest in having more discussion on merits or downfalls of sticking with the General Fund because most of the Committee's energy seems to have been spent on a utility.

Walter mentioned the importance of equity in the Committee's decision and shared an example of a local church that does not pay for stormwater management, but could implement a rain garden to reduce their utility rate while also providing needed flood storage for their parking lot. Haight suggested the challenge is maintaining those stormwater controls; the church could implement rain gardens and get credits for first year or so, but it would need to be maintained in order for the church to continue receiving credits, and maintenance has a cost.

Degenais stated that nonprofits give back to society and the community in other ways, so we should not say that they are not paying their fair share. Dave also mentioned that the Committee has been too focused on how a utility would impact SFR properties when they would actually be impacted the least.

Driscoll mentioned that the focus seems to be on SFR properties because this is a very political issue and SFR property owners will be the ones contacting their City Councilors.

Kageleiry reminded everyone that a utility is a difficult sell and mentioned the uncertainty of the City being receptive to another tax.

Haight shared discussions he had with six other residents that all say they do not want to pay another tax and how he has struggled to explain that a utility is not actually a tax, especially when taxes would not be reduced as a result of implementing a utility.

Shanahan reminded the Committee that a vote will have to take place sometime in the next several months, but that won't happen tonight. Shanahan then asked the members what they would like to explore in future meetings.

Degenais said he would like to stop talking about stormwater utilities and instead have a discussion around why the General Fund would not work.

Kageleiry suggested having more discussion about why there is a need for additional funding and the reality that the City may not have additional funding for stormwater in any given year, which is sometimes just business.

Baber mentioned the City is under pressure to meet regulatory requirements, and a utility could be an equitable way to generate the amount of additional funding that is needed.

Walter said she is in favor of spending time to explore what the property tax increase would need to be to meet stormwater and flood resilience needs. Walter added that a utility may not cause as much of a cost increase.

Perry suggested the Committee should discuss both the General Fund and a utility. Perry added that the City has other utilities that work well, but the Committee hasn't discussed the details of a stormwater utility enough to decide whether or not it would be better than the General Fund.

Mavrogeorge said he is inclined to dive deeper into the details of a utility because it has the potential for incentivizing good behavior on private property through the credit system. Mavrogeorge added that he fears the City would not be able to incentivize good behavior if they stick with the General Fund.

Bardwell suggested the Committee give equal time to further discuss the General Fund and a stormwater utility. Bardwell also asked about the cost to discharge potable water at the City's wastewater treatment facility because then the City may no longer need a discharge permit.

5. CONFIRM NEXT MEETING DATE, TOPIC, AND HOMEWORK ASSIGNMENTS

The next meeting is on August 23, 2021.

6. CITIZEN'S FORUM
None present.

7. ADJOURN AT 7:25 PM.
Councilor Shanahan declared the meeting adjourned.

STORMWATER UTILITY CONSIDERATIONS, OPTIONS, AND SCENARIOS

Primary Considerations and Options

There are multiple considerations involved in the establishment of a stormwater utility, but this document focuses on six that are particularly important for determining utility rates. The table below lists each of these considerations, with a series of possible options posed for each.

Considerations	Option A	Option B	Option C	Option D	Option E
Fee Basis	Impervious cover only	Gross area with runoff coefficients	Gross area with intensity of development factor	Other (e.g., number of rooms, water use, flat fee)	
Single Family Residential Fee Structure	Flat fee	Tiered fee	Proportional fee		
Non-Single Family Residential Fee Structure	Flat fee	Tiered fee	Proportional fee		
Desired Funding Level	Operating budget	Capital projects	Set aside for flood resilience projects	Various combinations of options A, B, and C	
Exemptions	No exemptions	Public roads	Undeveloped land	Agricultural land	Other (e.g., public parks, other City owned land, non-profits)
Discounts	No discounts	Low income	Senior citizens	Faith-based organizations	Other (e.g., schools, other tax-exempt properties)

Possible Scenarios

There are numerous approaches to setting up a utility based on the wide-range of considerations and options available. A small subset of possible scenarios and preliminary rate estimates for each scenario are provided below. Due to current data availability limitations, the scenarios provided primarily highlight changes to SFR and NSFR rate structures and the resulting changes to utility rates. All four scenarios provided assume the fee would be based only on impervious cover (IC), public roads would be exempt, and no discounts would be offered (discounts are not the same as credits, which would likely be offered to all property owners). Additional data analyses would need to be conducted to explore additional scenarios.

Summary of Scenarios Presented in this Document

Scenario	Fee Basis	SFR Rate Structure	NSFR Rate Structure	Funding Level	Exemptions	Discounts
1	IC only	Flat	Proportional	Operating Budget	Roads	None
2	IC only	Flat	Tiered	Operating Budget	Roads	None
3	IC only	Tiered	Proportional	Operating Budget	Roads	None
4	IC only	Proportional	Proportional	Operating Budget	Roads	None

The following tables show the annual utility rates for SFR and NSFR properties required to cover the cost of the City of Dover's Stormwater Program Operating Budget for FY21 (approximately $1M) for each of the four scenarios listed in the table above. Keep in mind that the City's ERU of 3,430 sq. ft. does not change because it is independent from the considerations and options selected for each scenario (ERU = median amount of impervious cover within SFR properties).

SCENARIO 1: Flat Fee for SFR & Proportional Fee of NSFR

# of SFR Parcels	# of NSFR ERUs	Total # of ERUs	Funding Level	SFR Rate/year	NSFR Rate/year
6,001	12,618	18,619	$1M	$53.71 per SFR	$53.71 per ERU

Key Takeaways:

- Each SFR property would be charged a flat fee of $53.71 per year.
- Each NSFR property would be charged $53.71 per ERU per year. For example, a commercial property with 18,000 sq. ft. of impervious cover would be assessed 5 ERUs and charged $268.55 per year (18,000/3,430 = 5.25, rounded to the nearest integer, 5 ERUs x $53.71/ERU = $268.55/year).

SCENARIO 2: Flat Fee for SFR & Tiered Fee of NSFR

# of SFR Parcels	# of NSFR Parcels	Total # of Parcels	Funding Level	SFR Rate/year	NSFR Rate/year		
					Parcels/Tier	**IC (sq. ft.)**	**Rate/Tier**
6,001	2,127	8,128	$1M	$53.71 per SFR	Tier 1: 531	<2,888	$49.02
					Tier 2: 532	2,888 - 4,891	$101.55
					Tier 3: 532	4,891 - 12,294	$194.23
					Tier 4: 532	>12,294	$925.11

Key Takeaways:

- Each SFR property would be charged a flat fee of $53.71 per year.
- Each of the 531 NSFR properties in the City with less than 2,888 sq. ft. of IC would be charged a flat fee of $49.02 per year. Each of the 532 NSFR properties in the City with 2,888 - 4,891 sq. ft. of IC would be charged a flat fee of $101.55 per year. Each of 532 NSFR properties in the City with 4,891 - 12,294 sq. ft. of IC would be charged a flat fee of $194.23 per year. Each of the 532 NSFR properties in the City with greater than 12,294 sq. ft. of IC would be charged a flat fee of $925.11 per year.

SCENARIO 3: Tiered Fee for SFR & Proportional Fee of NSFR

# of SFR Parcels	# of NSFR ERUs	Total # of ERUs	Funding Level	SFR Rate/year			NSFR Rate/year
				Parcels/Tier	IC (sq. ft.)	Rate/Tier	
6,001	12,618	18,619	$1M	Tier 1: 1,500 Tier 2: 1,500 Tier 3: 1,500 Tier 4: 1,501	<2,505 2,505 - 3,430 3,430 – 4,904 >4,904	$27.86 $40.75 $55.30 $90.85	$53.71 per ERU

Key Takeaways:

- Each of the 1,500 SFR properties in the City with less than 2,505 sq. ft. of IC would be charged a flat fee of $27.86 per year. Each of the 1,500 SFR properties in the City with 2,505 – 3,430 sq. ft. of IC would be charged a flat fee of $40.75 per year. Each of 1,500 SFR properties in the City with 3,430 – 4,904 sq. ft. of IC would be charged a flat fee of $55.30 per year. Each of the 1,501 SFR properties in the City with greater than 4,904 sq. ft. of IC would be charged a flat fee of $90.85 per year.
- Each NSFR property would be charged $53.71 per ERU per year. For example, a commercial property with 18,000 sq. ft. of impervious cover would be assessed 5 ERUs and charged $268.55 per year (18,000/3,430 = 5.25, rounded to the nearest integer, 5 ERUs x $53.71/ERU = $268.55/year).

SCENARIO 4: Proportional Fee for SFR & Proportional Fee of NSFR

# of SFR ERUs	# of NSFR ERUs	Total # of ERUs	Funding Level	SFR Rate/year	NSFR Rate/year
7,637	12,618	20,255	$1M	$49.37 per ERU	$49.37 per ERU

Key Takeaways:

- Each SFR property would be charged $49.37 per ERU per year. For example, a single family home with 6,000 sq. ft. of impervious cover would be assessed 2 ERUs and charged $98.74 per year (6,000/3,430 = 1.75, rounded to the nearest integer, 2 ERUs x $49.37/ERU = $98.74).
- Each NSFR property would be charged $49.37 per ERU per year. For example, a commercial property with 18,000 sq. ft. of impervious cover would be assessed 5 ERUs and charged $246.85 per year (18,000/3,430 = 5.25, rounded to the nearest integer, 5 ERUs x $49.37/ERU = $246.85/year).

Summary of Estimated Utility Rates for Each Scenario

Scenario*	Funding Level	SFR Rate/year	NSFR Rate/year
Scenario 1: Flat SFR & Proportional NSFR	$1M	$53.71 per SFR	$53.71 per ERU
Scenario 2: Flat SFR & Tiered NSFR	$1M	$53.71 per SFR	Tier 1: $49.02 per NSFR Tier 2: $101.55 per NSFR Tier 3: $194.23 per NSFR Tier 4: $925.11 per NSFR
Scenario 3: Tiered SFR & Proportional NSFR	$1M	Tier 1: $27.86 per SFR Tier 2: $40.75 per SFR Tier 3: $55.30 per SFR Tier 4: $90.85 per SFR	$53.71 per ERU
Scenario 4: Proportional SFR & Proportional NSFR	$1M	$49.37 per ERU	$49.37 per ERU

**It is important to recognize each scenario provides a different level of equity. In general, flat fees are less equitable than tiered fees, which are less equitable than proportional fees. However, complexity and data collection needs also vary and may justify the selection of a less equitable fee structure.*

Utility Rates with the Inclusion of Roads

The four scenarios presented above assumed public roads would be exempt from the stormwater utility, but the Committee may recommend and/or the City may opt to charge for the IC of some or all roads. Public roads contain approximately 35% of all IC within the City. Therefore, the inclusion of roads in utility rate calculations would reduce the rate per ERU. The table below compares the rates between the previously presented Scenario 1 and a modified version of Scenario 1 that includes public roads. The IC from public roads includes State and City owned roads. Additional data analyses would need to be conducted to show the breakdown in ownership.

SCENARIO 1: Flat Fee for SFR & Proportional Fee of NSFR

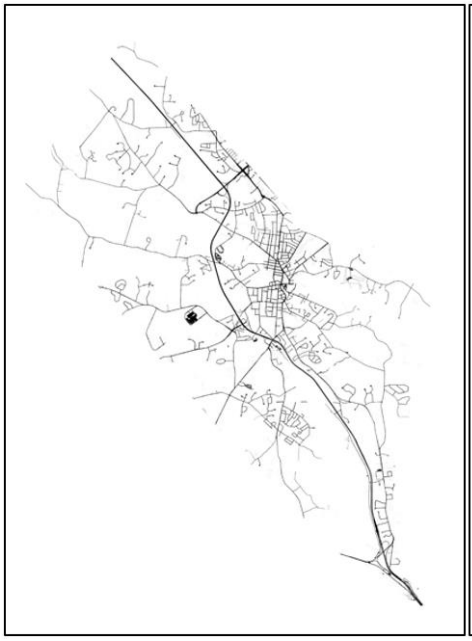
# of SFR Parcels	# of NSFR ERUs	Total # of ERUs	Funding Level	SFR Rate/year	NSFR Rate/year
6,001	12,618	18,619	$1M	$53.71 per SFR	$53.71 per ERU

MODIFIED SCENARIO 1: Flat Fee for SFR & Proportional Fee of NSFR – Including Public Roads

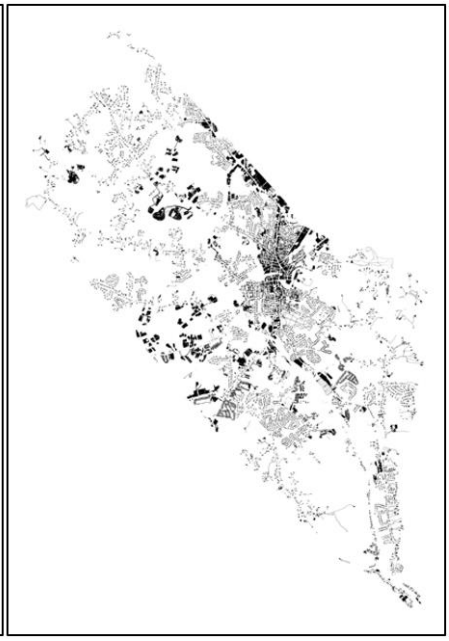
# of SFR Parcels	# of NSFR ERUs	Total # of ERUs	Funding Level	SFR Rate/year	NSFR Rate/year
6,001	23,411 **10,793 from roads*	29,412	$1M	$34.00 per SFR	$34.00 per ERU

Breakdown of IC in the City of Dover: Roads Versus Parcels (SFR and NSFR)

Roads: 35% of all IC

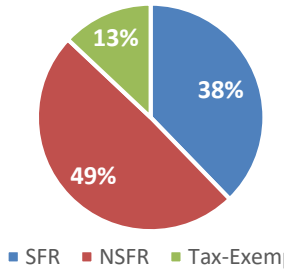


Parcels: 65% of all IC

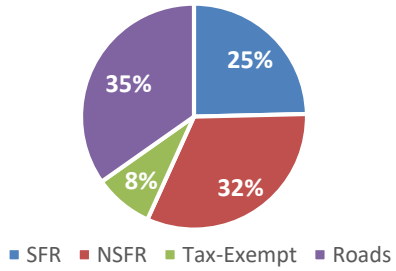


Breakdown of IC in the City of Dover: SFR, NSFR, and Tax-exempt

Total IC Excluding Roads



Total IC Including Roads



OVERVIEW OF STORMWATER UTILITY CREDIT SYSTEMS

Criteria for Stormwater Utilities (RSA 149-I:6-c, III)
Stormwater utility regulations for New Hampshire are set forth in Title X, Chapter 149-I. Section 6-c of this law requires municipalities that establish stormwater utilities to offer credits or fee abatements based on on-site management of water quality impairment or peak runoff storage, or both.

Credit System Development
Credit systems are tailored to each community and offer property owners an opportunity to lower their stormwater utility fee. The system is developed based on factors such as:

- The impact stormwater management actions implemented by property owners have on the City's stormwater management program requirements and costs
- Staff capacity to administer the credit program (i.e., reviewing credit applications and regular inspections of stormwater management actions)
- Pre-existing stormwater management actions required to comply with development standards

Potential Credit System Implementation Process

Step 1	Step 2	Step 3	Step 4	Step 5	Step 6
Credits and qualifying stormwater management actions are defined and adopted along with the utility	Approved management actions already identified in inspection and maintenance (I&M) reporting system are applied automatically	Property owners apply for credits	City reviews credit applications on a case-by-case basis	Approved credits are incorporated into billing system	Property owner provides proof of maintenance records and/or City inspects management actions to maintain the property owner's credit

Primary Credit System Considerations

- Property types eligible to receive credits: Most stormwater utilities in New England offer credits to both single family residential (SFR) and non-single family residential (NSFR) properties. However, some communities have chosen to limit credits to NSFR properties because the cost of reviewing credit applications and ensuring annual compliance could be significantly higher for a SFR customer than the total cost of the stormwater utility fees over several years.
- Maximum stormwater utility fee reduction: Municipalities typically offer a maximum reduction between 25-75% of the property owner's fee. However, some communities have made it possible for certain property owners to obtain a full credit of 100% (e.g., Portland, ME; Lewiston, ME).
- Qualifying stormwater management actions: Credits can be provided for actions that reduce the impact of stormwater runoff on the public stormwater system or provide an ongoing public benefit related to stormwater management.

Common Stormwater Management Actions that Qualify for Credits
The most common stormwater management actions that qualify for credits are those that achieve stormwater quantity and/or pollutant reductions through the construction, operation, and maintenance of onsite structural controls (select examples are provided in the following table). The amount of credit a property owner may be eligible for depends on the reductions in stormwater runoff rate, volume, and pollutants achieved. Some municipalities also offer credits for non-structural practices, such as parking lot sweeping and spill prevention planning. Municipalities have also offered education credits to private and public schools that teach their students about the importance of water quality and the need to reduce stormwater runoff.

Examples of Structural Controls

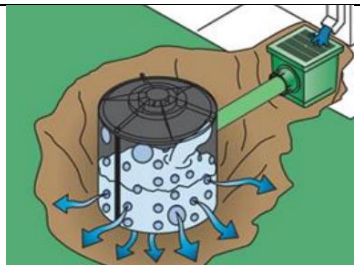
Cisterns are storage devices used to collect rainwater from roof downspouts for later reuse. They provide the benefit of reduced stormwater runoff and conservation of water. Stormwater collected in cisterns can typically be reused for such purposes as irrigation of lawns and gardens, wash water and other non-potable uses.

Source: City of Portland, ME

Detention Ponds are impoundments designed to collect, detain and release stormwater runoff at a controlled rate. They provide treatment through the use of a permanent pool, which helps settle solids and associated pollutants.

Source: NHDES

Drywells are comprised of seepage tanks set in the ground and surrounded with stone and are designed to intercept and temporarily store stormwater runoff until it infiltrates into the soil. Dry wells are particularly well suited to receive rooftop runoff entering the tank via an inlet grate or direct downspout connection.

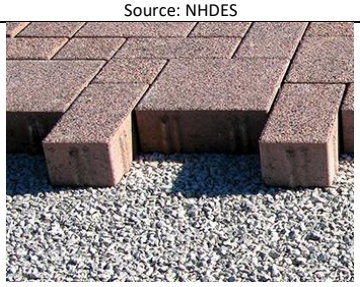


Source: City of Portland, ME

Infiltration chambers are structures designed to temporarily store runoff, allowing water to infiltrate into the ground. Treatment of runoff is provided by pollutants binding to soil particles beneath the chambers as water percolates into the subsurface.

Source: NHDES

Permeable pavers are an alternative to paved surfaces that can decrease stormwater runoff. Permeable pavers consist of permeable interlocking or grid concrete pavers underlain by a drainage layer, allowing stormwater runoff to pass in between the paver surface and into an underlying stone reservoir, where it is temporarily stored and allowed to infiltrate into the underlying soils.



Source: City of Portland, ME

Rain gardens are small, landscaped depressions that are filled with a mix of native soil and compost, and are planted with trees, shrubs and other garden-like vegetation. They are designed to temporarily store stormwater runoff and reduce runoff pollutant loads.

Source: NHDES

Note: This is not an exhaustive list. Other types of low impact development (LID) and green infrastructure could qualify for credits as well. Additional examples are listed in the New Hampshire Homeowner's Guide to Stormwater Management.

Credit Systems from Other New England Municipalities

Municipality	Eligible Properties	Maximum Credit*
Bangor, ME	Properties with ≥ 4,000 sq. ft. of impervious cover	80%
Burlington, VT	NSFR only	50%
Colchester, VT	NSFR only	50%
Lewiston, ME	All properties	100%
Longmeadow, MA	All properties	50%
Newton, MA	All properties	25%
Northampton, MA	All properties	50%
Portland, ME	All properties	100%
Reading, MA	All properties	50%
Shrewsbury, MA	All properties	50%
**Maximum credits may vary for different property types.*		

Stormwater Utility Case Studies and Surveys

Case Studies

The list of communities below is a small subset of communities in New England that have implemented a stormwater utility or are currently considering the feasibility of a stormwater utility. The communities selected highlight a wide-range of stormwater utility structures that have been used, but there are several other approaches and variations to these structures that are not shown in these examples.

Portland, ME

- Fee Basis: Impervious cover only
- Single Family Residential Rate Structure: Proportional fee
- Non-Single Family Residential Rate Structure: Proportional fee
- Additional Information:
    - Stormwater Service Charge Webpage
    - Stormwater Service Charge Program Summary
    - List of "Sustainable Stormwater Funding Task Force" Recommendations

Lewiston, ME

- Fee Basis: Impervious cover only
- Single Family Residential Rate Structure: Flat fee (one fee for all single family and mobile homes, and one slightly higher fee for all duplexes)
- Non-Single Family Residential Rate Structure: Hybrid (Flat fee for up to 1 ERU, plus a proportional fee for impervious cover that exceeds 1 ERU)
- Additional Information:
    - Stormwater Utility Webpage
    - Stormwater Utility Frequently Asked Questions Brochure

Northampton, MA

- Fee Basis: Hybrid (different for single family residential and non-single family residential properties)
- Single Family Residential Rate Structure: 4 tiered fee (based on impervious cover only)
- Non-Single Family Residential Rate Structure: Proportional fee (based on hydraulic area where runoff from both impervious and pervious surfaces are calculated)
- Additional information:
    - Stormwater and Flood Control Utility Webpage
    - Frequently Asked Questions (pg. 2 gives a description of the hydraulic area calculation)
    - Stormwater Ad Hoc Advisory Task Force Recommendations Report

Concord, NH*

- Fee Basis: Impervious cover only
- Single Family Residential Rate Structure: Flat fee
- Non-Single Family Residential Rate Structure: Proportional fee
- Additional Information:
    - Stormwater Utility Feasibility Study (Appendix A (pg. 44) provides more detail on numerous other stormwater utilities implemented throughout New England)

**A stormwater utility feasibility study was conducted for Concord in 2020, but the City has not implemented a utility. Fee basis and rate structures listed above were presented in the feasibility study.*

Surveys

The following resources provide findings from nationwide surveys of communities that have implemented a stormwater utility.

- Black & Veatch Stormwater Utility Survey Report (2021): Provides findings (reported in aggregate) on how communities have set up their utility (see section 4 on rate structures and billing (pg. 31) and section 5 on credits and incentives (pg. 42)).
- Western Kentucky University Stormwater Utility Survey (2020): Provides the rate structure (fee type), ERU, monthly fee, year the utility was established, and population for each of the 1,807 stormwater utilities they were able to identify in the U.S. (starting on pg. 11, categorized by state).

Committee Meeting #10

August 30, 2021

CITY OF DOVER

STORMWATER AND FLOOD RESILIENCE FUNDING COMMITTEE - MINUTES

Meeting Type:	**Regular Meeting**
Meeting Location:	**City Hall, Council Conference Room**
Meeting Date:	**Monday, August 30, 2021**
Meeting Time:	**5:30 PM**

Members Present: Bill Baber, Paul Geraci, Steve Haight, Vincent Hayes, Chad Kageleiry, Ken Mavrogeorge, Jan Nedelka, Otis Perry, Cynthia Walter, Allen Krans, Ray Bardwell, Dennis Shanahan (City Council, ex officio), Gretchen Young (Community Services, ex officio),

Members Not Present (excused): David Degenais, Marcia Gasses, Eric George, Peter Driscoll

Members Not Present (un-excused): None

Also Present: Ben Sweeney (NHDES Coastal Program Project Partner) Abigail Lyon (PREP Project Partner), Martha Shiels (New England Environmental Finance Center Project Partner), Jamie Houle (UNH Stormwater Center Project Partner)

1. **CALL TO ORDER**
   Councilor Shanahan called the meeting to order at 5:30 PM. Accommodations include remote participation.

2. **ATTENDANCE** (follow remote participation procedures as needed)
   Councilor Shanahan called attendance (see members present listed above).

3. **REVIEW AND APPROVAL OF JULY 26, 2021 MINUTES**
   Motion: Perry made a motion to approve the minutes as presented; Baber second
   Roll Call Vote: Motion passed (11 yes; 0 abstention; 0 no)
   No amendments suggested or made

4. **NEW BUSINESS**
   A. Revisit and come to a consensus on the Committee's goals

   Sweeney presented an overview of the agenda for the meeting including the plan to revisit and review the goal of the committee, the charge, and the criteria that the committee discussed and used to evaluate the funding options thus far. Sweeney reminded the committee that the recommendations report is not intended to put forth a funding solution that is ready for implementation, but rather a chance to put forth a favorable option with specific questions and/or considerations that need answering before proceeding with implementation.

   Krans was in favor of this approach to put forth a solid plan to move the ball forward and outline the next steps. Krans recognized this approach is less traditional than those of previous advisory groups. Sweeney responded saying the level of detail and specificity

included in the recommendations report will depend on the recommendation put forth by the committee. For example, if a stormwater utility is the recommended option there will be detail about credits and rate structures the committee supports. Councilor Shanahan supported this approach of providing detail about credits. Nedelka cautioned around interpreting the guidance too liberally and not making any decisions.

Sweeney continued with a review of the goals and different priorities that have unavoidable costs. Sweeney also reminded the committee of the criteria that was used to evaluate funding options earlier in the committee's process. Criteria included: secure, adequate, flexible, and equitable, primary vs. secondary sources of funding, and feasibility and ease of implementation. Councilor Shanahan recognized the comment from a previous meeting about frustrations among committee members to not be focused on eliminating sources of contamination and requested that Young provide a brief update during the meeting about the City of Dover's involvement in the Municipal Alliance for Adaptive Management (MAAM) with respect to the Great Bay Total Nitrogen General Permit.

B. Compare advantages and disadvantages of meeting increased stormwater and flood resilience costs through the General Fund vs. a Stormwater Utility

Sweeney presented on the two proposed funding options (the General Fund and a stormwater utility) and described the costs under each option. The General Fund does not currently meet the previously identified stormwater management need of $3.5 million. If the General Fund was to be the preferred option, the City has limited options for increasing revenue to meet those costs. Options include issuing a bond, increasing property taxes up to the tax cap, or reallocating existing General Fund money which would require cuts in other programs. Disadvantages of the General Fund include competing priorities, and Sweeney pointed to examples of deferred projects due to budget constraints.

Haight asked if the budget estimates for stormwater in the General Fund included roads. Sweeney clarified that the amounts do not currently reflect roads, but would be worth looking into the inclusion of state roads.

Krans asked for examples and Sweeney presented a number of examples to illustrate what a stormwater utility fee might look like vs. what the tax might be if increased to cover costs (using $3.5m budget) assuming the tax increase would not exceed the tax cap. Krans asked why the committee was comparing to property taxes if the messaging is that a stormwater utility is not a tax. Nedelka added that all are not equal but it provides the

committee with a way to compare the two approaches. Councilor Shanahan added that the confusion lies in the terminology used – "fee" vs. "tax."

Krans and Haight asked about the overall budget including whether the General Fund for stormwater would decrease and if the budget included things beyond operating costs. Young added that the amount does not take into account other things beyond operating budget and that the estimate of $3.5million is based on 10 years of previous expenditures. The conversation continued with an explanation of how the City currently pays for projects with bonds. Haight added that those monies that are bonds are not taken from the General Fund. Perry added that for certain projects the sewer and water utility pays for those bonds. Perry also shared the example of pay-as-you-throw garbage the City currently implements. Haight reminded the committee that residents have a choice to buy into that program. Baber shared that a stormwater utility would lend itself to opportunities for residents to reduce their fees by implementing actions. Young added that as part of the Municipal Alliance for Adaptive Management (MAAM) approach to meeting the Great Bay Total Nitrogen General Permit a lot of the reductions are going to come from private properties. Right now, using the General Fund to support stormwater, there is no incentive to ask someone to implement a best management practice on their property. A utility will create the incentive and will lead to reductions in nitrogen and cost savings for the City. Krans (1) asked if the City was fined for not having adequate treatment. Young answered no, but unclear of the cost to renew the current permit. The cost is the compliance in keeping the wastewater treatment facility operating at the quality that it is. The facility works so well but with a steady flow and it struggles during peak flows. Nedelka asked that if the City does have to build a stormwater treatment plant, how does that get paid for. Haight added that at that point a utility commission says that's a big budget for approval and the City will have to generate an enormous amount of money. Perry added that the question is not if we do it but how we do it. Walter asked Sweeney to return to the presentation to present the examples he provided.

Sweeney walked through examples of anticipated costs for funding stormwater management through the General Fund with the $3.5million budget vs. costs for the same budget through a stormwater utility.

Bardwell asked about how home valuation would impact the utility or property taxes. Haight answered saying the homeowner would pay more under the General Fund scenario but it would not matter under a stormwater utility. Sweeney added that the margins become greater the higher tax value you have because you would pay a higher tax to the General Fund but the stormwater utility would stay the same. Councilor Shanahan shared that it potentially makes the utility regressive. Geraci added that water and sewer bills are not based on property value.

Following the commercial property example, Sweeney commented that almost the entire parcel is impervious area and that they would pay a lot less with the General Fund approach. Kageleiry asked if the property had a recent parking extension with a new stormwater system installed if credits would be issued under a utility scenario. He added that until we know what the crediting system will look like it is hard to evaluate the funding options and that if a property owner handles their stormwater responsibly they should not be charged. Sweeney clarified that all examples presented are pre-credit. Young shared with the committee that this particular property did the bare minimum in terms of stormwater management and if there had been a utility and an incentive to do more there would have been more reductions possible. Baber added that one of the reasons the utility is attractive is the opportunity for crediting. Kageleiry agreed but expressed concern about not knowing how a credit would be applied or administered. Nedelka cautioned the committee to not let perfect be the enemy of the good and that the reality is that even if the committee recommends a credit structure there will be changes. Kageleiry added that we need to figure out how durable the stormwater cash flow is going to be if credits are implemented. Councilor Shanahan reminded the committee that they are reviewing if there is a feasible option for funding stormwater and the City Council will then determine next steps.

Walter raised two points about the car dealership and the church: 1) implement a multi-year staging so that people that are faced with a new or high bill could arrange a plan with the expertise of UNH and others to install a practice to get credit; or 2) implement a 05 or low interest loan that could be applied to help with costs.

Sweeney continued with the example of the church. Kageleiry asked if there is a real desire in the City to reduce nitrogen. Young responded saying the real benefit of a utility is that folks will install and maintain stormwater systems; something the City is currently struggling with.

Mavrogeorge commented that if the committee recommends sticking with the General Fund that there are no credits available to residents or property owners. But with a utility there are opportunities for incentivizing good behavior. For the church example there may be opportunities to implement a private public partnership to support stormwater best management practice installations to improve water quality in lieu of paying the utility. Kageleiry added that the upside of not doing the work and just paying the fee is that money stays in the utility and instead of improvements on private property the money will support other stormwater projects. Kageleiry added, however, asking if at the end of the day the City is any closer to reaching the nitrogen reduction goals. Young

added that it gets the City closer. Perry added that if you stick with the General Fund you are not any closer and you're incentivizing no one.

Walter asked about the first ¼ inch of rain containing nitrate and whether capturing the first ¼ inch can make a large dent in nitrogen reduction. If the City asks property owners to capture the first ¼ in it might not be as expensive and could see a large reduction in nitrogen. Mavrogeorge added that there are ways to implement smaller practices and still see a benefit. He added that he's leaning toward the utility option because it incentivizes good behavior. Mavrogeorge shared that there is a similar program under the General Fund for solar and getting credit on your taxes. Perry added that it's because the solar panels are not reflected in your property evaluation. Mavrogeorge added that it does add value to your property, however. Krans asked about if roofs would be included in these calculations. Young said that yes, all impervious cover would be included. Sweeney shared that there are credits in some places for capturing runoff from roofs. Nedelka shared that there is no current enabling legislation for property tax credits for improvements on your property.

C. Determine if a consensus exists on general recommendations with a possible vote by the Committee

Councilor Shanahan offered to entertain a motion to make this committee's initial recommendation on the feasible funding strategy. The committee responded that there are too many questions remaining to make that determination. Bardwell asked whether the City was going to be nitrogen neutral. Young added more context about the MAAM and the Great Bay Total Nitrogen General Permit. She shared the City's efforts to study the Great Bay Estuary in partnership with UNH and PREP, working on reductions in the City, educating other communities, etc.

Walter suggested that there is more than we need to understand a stormwater utility vs. the General Fund, but asked Sweeney and the committee to consider two questions. 1) how would a utility vs. the General Fund play into the costs of doing this vs. the General Fund grinding away at the EPA permits; and 2) how does a stormwater utility factor into debt? Walter reminded the committee that if the City needs the money the City will get and spend the money, but if we can wait and avoid debt services that is a big advantage.

Kageleiry raised his concern again about not making a decision before we know more about the crediting structure. Krans added that his recommendation is for a utility that has a crediting system for single family residential properties on ¼ acre lots and that too much focus has been on credits for large parking lots. Perry shared that we need to know

how much those credits will impact the budget. Geraci asked Sweeney to share examples from other communities to see what impact credits have on the overall budget.

Perry asked if the stormwater utility would be part of the existing utility commission or another commission. Nedelka cautioned the committee to not get too caught up in the discussion of credits deteriorating the revenue and likened this process to the property tax levy. Nedelka offered to make a motion recognizing that the committee has been provided sufficient information to move forward. Councilor Shanahan asked Nedelka to hold such motion until the following meeting. Baber added that a stormwater utility option with opportunity to offer relief. Kageleiry responded saying the recommendation as it currently stands is too vague and that the City Council needs to have some defense to answer questions about "what is this" and "how is it equitable?" Mavrogeorge asked to spend more time filling in the details of the recommendation. Councilor Shanahan responded saying the committee should talk more about outreach, impact of the credits, opportunities for incentivizing good behavior, and the overall level of funding. Nedelka added that if the committee is not comfortable making a solid recommendation the City Council will likely respond not in favor.

Kageleiry asked about voting at the following meeting and whether it would include members calling in or be limited to members present. Councilor Shanahan said it would include members calling in.

5. **CITIZEN'S FORUM**
   None present

6. **CONFIRM NEXT MEETING DATE, TOPIC, AND HOMEWORK ASSIGNMENTS**
   Next meeting is scheduled for September 27, 2021 at 5:30 PM.

7. **ADJOURN**
   Motion: Perry; Second: Geraci
   Councilor Shanahan declared the meeting adjourned.

Revisiting Committee Goals

City of Dover Ad Hoc Committee to Study Stormwater and Flood Resilience Funding

Committee Meeting #10
August 23, 2021

City Council Charge

"Review data, options, and other information, and ultimately recommend to the City Council whether to **pursue** one or more funding options."

City Council Resolution Establishing the Ad Hoc Committee is available here.

Committee Recommendations

"We think _____ is a potentially viable funding solution, and the City needs x, y, and z to move forward."

Key Components of the Committee's Report:

- Justification for recommended funding solution
- Decision points for City Council
- Next steps

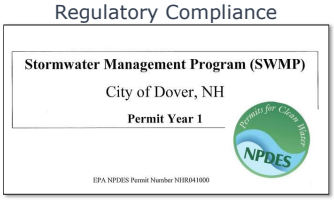
Committee Goals

Local Water Quality

Aging Infrastructure

Flooding

Regulatory Compliance



Committee Goals

Draft Goal Statement:

Explore stormwater management and flood resilience funding options, and identify which option(s) could achieve sustainable, equitable funding to improve local **water quality**, address **aging infrastructure**, reduce **flood risk**, and maintain **regulatory compliance**.

Evaluation Criteria

Including, but not limited to:

- S.A.F.E.
  - Secure
  - Adequate
  - Flexible
  - Equitable
- Primary vs. supplemental sources of funding
- Feasibility & ease of implementation
- Broader benefits and/or impacts to the community

Committee Discussion

Please share any thoughts, comments, or suggestions on the following:

- Interpretation of the Committee's charge
- Scope of the recommendations report
- Committee Goals
- Funding option evaluation criteria

Further Assessment and Comparison of the General Fund and a Stormwater & Flood Resilience Utility

City of Dover Ad Hoc Committee to Study Stormwater and Flood Resilience Funding

Committee Meeting #10
August 23, 2021

Funding Needs & Options

- How could the City meet stormwater and flood resilience funding needs?
- What options are available?

Estimated Stormwater & Flood Resilience Costs

$3.5M

General Fund & Other Existing Mechanisms

Options the City Could Consider:

Issuing a Bond

Increasing Property Taxes

Reallocating General Fund Revenue

- *Requires reducing other program budgets (e.g., Paving, Library, Outdoor Pool, etc.)*

Risks with the General Fund

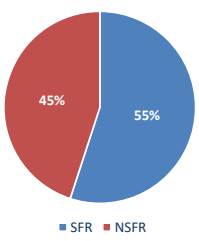
Competing Priorities & Budget Uncertainty

- Does not allow for long-term planning
- Stormwater projects in CIP can and have been deferred
  - Projects end up costing more in the future
  - Deferred drainage improvements:
    - Ela Street
    - Ham Street
    - Floral Avenue
    - Brick Road

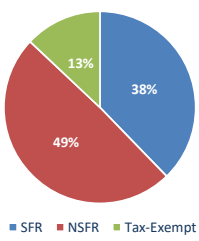
Potential Alternative: Stormwater & Flood Resilience Utility

Revenue Distribution: Property Tax vs. Utility

Current Property Tax Revenue



Potential Utility Revenue (Proportional Fee Structure)



Comparing Costs

How would a utility fee compare to a tax increase for various property types in Dover?

Assumptions:

- Desired funding level is $3.5M
- Other City program budgets are held constant
- Tax increase would not exceed the tax cap
- Stormwater utility rate structure: Proportional fee for SFR and NSFR properties

Single Family Home

Estimated total impervious cover: **2,337 sf; 1 ERU**
Estimated annual stormwater utility fee to fund $3.5M stormwater program: **$173**

Estimated taxable value: **$308,500**
Estimated annual portion of property taxes to fund $3.5M stormwater program: **$216**

Car Dealership

Estimated total impervious cover: **143,889 sf; 42 ERUs**
Estimated annual stormwater utility fee to fund $3.5M stormwater program: **$7,258**

Estimated taxable value: **$4,601,800**
Estimated annual portion of property taxes to fund $3.5M stormwater program: **$3,242**

Church

Estimated total impervious cover: **30,494 sf; 9 ERUs**
Estimated annual stormwater utility fee to fund $3.5M stormwater program: **$1,555**

Estimated taxable value: **$0**
Estimated annual portion of property taxes to fund $3.5M stormwater program: **$0**

Commercial Property

Estimated total impervious cover: **9,510; 3 ERUs**
Estimated annual stormwater utility fee to fund $3.5M stormwater program: **$518**

Estimated taxable value: **$2,915,200**
Estimated annual portion of property taxes to fund $3.5M stormwater program: **$2,054**

Hotel

Estimated total impervious cover: **61,799 sf; 18 ERUs**
Estimated annual stormwater utility fee to fund $3.5M stormwater program: **$3,110**

Estimated taxable value: **$4,834,300**
Estimated annual portion of property taxes to fund $3.5M stormwater program: **$3,406**

Data References

City of Dover Property Tax Rates:
https://www.dover.nh.gov/government/city-operations/finance/tax-assessment/property-tax-rates/

City of Dover Maps and Property Record Cards:
https://www.dover.nh.gov/services/online-services/maps-prcs/

Impervious Surfaces in the Coastal Watershed of NH and ME, High Resolution – 2015:
https://granit.unh.edu/cgi-bin/nhsearch?dset=imperv2015/imperv2015_coastal

Committee Meeting #11

September 27, 2021

CITY OF DOVER

STORMWATER AND FLOOD RESILIENCE FUNDING COMMITTEE - MINUTES

Meeting Type: **Regular Meeting**
Meeting Location: **City Hall, Council Conference Room**
Meeting Date: **Monday, September 27, 2021**
Meeting Time: **5:30 PM**

Members Present: Bill Baber, Paul Geraci, Chad Kageleiry, Ken Mavrogeorge, Jan Nedelka, Cynthia Walter, Allen Krans, Ray Bardwell, David Degenais, Eric George, Dennis Shanahan (City Council, ex officio), Gretchen Young (Community Services, ex officio),

Members Not Present (excused): Steve Haight, Otis Perry, Marcia Gasses

Members Not Present (un-excused): Peter Driscoll

Also Present: Ben Sweeney (NHDES Coastal Program Project Partner), Abigail Lyon (PREP Project Partner), Martha Shiels (New England Environmental Finance Center Project Partner), Jamie Houle (UNH Stormwater Center Project Partner), and Tom Swenson (NHDES Project Partner)

1. **CALL TO ORDER**
   Councilor Shanahan called the meeting to order at 5:32 PM. Accommodations include remote participation.

2. **ATTENDANCE** (follow remote participation procedures as needed)
   Councilor Shanahan called attendance (see members present listed above).

3. **REVIEW AND APPROVAL OF AUGUST 30, 2021 MINUTES**
   Motion: Baber made a motion to approve the minutes as presented; Degenais second
   Roll Call Vote: Motion passed (10 yes; 0 abstention; 0 no)
   Amendment: typo on page 4 "or 2) implement a 05 or low interest loan..." Should be "or 2) implement a zero or low interest loan…"

4. **NEW BUSINESS**
   A. Assess the potential impact of stormwater utility credits

   Sweeney presented an overview of a handout showing the distillation of the impact of credits on a stormwater utility program. He added that it is challenging to compare credit policies and the percentage of properties receiving credits from community to community. Examples included Northampton, MA, South Portland, ME, and Burlington, VT. Credits ranged from 11% to less than 1%.

   Bardwell asked if the less than 1% reflected residents not applying for credits. Sweeney confirmed and reminded the committee that Gallinaro's presentation about the utility in South Portland, ME highlighted that the city could be doing more outreach about the credits available. Kageleiry raised the concern that so few people are taking advantage of

credits because it is not worth doing. Krans asked about credits for senior citizens or residents with low income housing and echoed Kageleiry's statement. Walter responded to Kageleiry that she looked into credit options and found ones that are available and affordable and gave the example of up to 25% credit for a 100 square foot rain garden. She added that these examples are just a snap shot and that the committee should hold back and not conclude that the percentages of credits implemented are not a reflection on whether residents feel it is worth pursuing. Degenais asked about large landowners who have already paid to install best management practices for stormwater, stating that there needs to be a mechanism for those folks to receive credit. He added that the 1% might be low but it could include large contributors. Kageleiry asked about the percentage of properties in Dover that meet the new stormwater standards. He presumed that most properties will have to renovate and retrofit to get credits – and that becomes a calculation to determine if it is worth doing. Sweeney pointed out that looking at the number of properties in South Burlington, VT the committee should look at the number of ERUs that are receiving credit. He added that the question to the committee is whether or not the utility rate should increase per ERU or whether the City could operate with a slightly reduced budget. South Burlington, VT gave out a total of $250,000 in credits and did not raise rates. Kageleiry asked what percentage of the $250,000 is their stormwater budget. Sweeney offered to follow up.

Sweeney walked through a hypothetical example for the City using the model South Portland, ME used. It includes a two pronged approach 1) water quality management and 2) water quantity management – if you meet both local and state stormwater quality policies a rate payer could receive 60% credit and an additional 10% for meeting quantity. Kageleiry asked how communities rationalize if a contemporary project is built to the standards that there is not 100% credit off the bat. Young shared that standards only account for 60% of nitrogen removal not 100%. Bardwell asked about Portland's plan to build tanks to hold stormwater. Young reminded Bardwell that Portland is different because they have a combined stormwater sewer system.

Sweeney walked the committee through an example property (Aldi) using the hypothetical credit system – rate would be $2,571 under a stormwater utility with credits vs. $6,428 with no credits. Kageleiry was surprised by the $6,428 rate before credits and expressed concern about properties that own a lot of pavement or impervious cover and how much they would be asked to pay. He cautioned the committee that it could result in limited development and economic litigation. Nedelka reminded Kageleiry that a credit system would be implemented to factor in equity. Walter added that the committee should consider a multi-year establishment program to allow businesses to prepare for a multi-thousand stormwater utility or impact fee. Bardwell stated he felt the committee's decision was to recommend or not recommend a utility and not to determine who

receives credits. Walter disagreed and said the committee gets to decide what a utility is and can define how fast it could be implemented. Councilor Shanahan stated that if the City pursues a utility there have to be credits and that the committee is looking at "what do credits mean" and "what are the orders of magnitude." Krans agreed with Councilor Shanahan but added that if the committee pursues the examples laid out that it is possible only large newly developed land would receive credit and it might not be economically feasible for older properties to gain credit.

Baber reminded the committee that they have not discussed the wastewater treatment facility and EPA permit process. He added that there will be incentives for the City to give credits because they want to incentivize change. Kageleiry stated that he is not sure a stormwater utility is the most equitable way to raise funds to address flood resilience and upgrades in existing stormwater systems. He added that there are administrative costs associated with a stormwater utility. Councilor Shanahan asked if not a utility then where. Degenais added that imposing fees could impact development. Nedelka responded saying he did not think Degenais was wrong but that the City is facing regulatory pressure and the "cost will drive businesses out of town" is a call the City has heard before. He added that properties that were not originally designed to treat 50% of the nitrogen are still in the City and are having an adverse impact that we as a community have to bear the burden on. He closed saying that large areas of impact will have a cost associated with them and the most the committee can do is try and come up with a fair and balanced way to deal with it. Councilor Shanahan offered the alternative to use the General Fund to raise the funding needed to address stormwater and flood resilience. He shared that the General Fund is based on property tax assessment and the amount the City has to collect and each property owners pays a portion based on their assessed property value. For stormwater there are properties that are much more impactful than others. Property taxes do not consider the impact a property has. Degenais stated that this is a City problem and it could belong in the General Fund. He then asked if a tax-based system was implemented would the increase be more than the proposed $6,500 for Aldi under a stormwater utility with no credits. He continued stating that if under the General Fund model the rate would be closer to $2,000 that would be more sellable. Kageleiry echoed saying stormwater and flood resilience is a city-wide situation and every property owner paying a tax bill would say the approach was tough but more equitable because the rate is the same for everyone and it would not add administrative burden. Nedelka stated that that approach fails to take into account the inequitable distribution of the contribution of stormwater. Kageleiry disagreed. Sweeney stated that under a utility some properties would see an increase but single family residential properties would see a reduction in costs as would smaller parcels in the downtown core that might be entirely impervious cover but because they have a high tax value they would pay less under a utility. Kageleiry commented that multi-story condominiums are the problem and are getting a

huge tax break under a utility and are discouraging green space. Young stated that it is more about discouraging sprawl. Nedelka agreed with Kageleiry that this is a community wide issue but that if the problem child we're facing is impervious cover and the associated runoff then the areas of large impervious cover are the trouble makers. Kageleiry continued stating that if it is a city-wide problem he does not see why the City can't take care of it and everybody pays for it. Mavrogeorge stated but not everybody pays for it. Developments and condos are going up – property owners will pay but a lot of incoming residents aren't contributing. The City owns schools that will be part of this. He added that it is about broadening the base and not hitting everyone like the General Fund. Baber stated that he understands the pain that a utility might cause but to say that a utility is inequitable flies in the face of what a utility is. People have to understand why the City would pursue a utility and feel it's a fair way to do it. Everyone will be facing similar problems. Dover tends to be ahead of the curve and sometimes that's a good thing because we can save costs. Bardwell raised the issue of who would administer a utility and added the committee's charge is to determine if there is a feasible option for funding stormwater and the City Council determines what comes next. He recommended implementation many years out. Walter asked to return to Ben's presentation.

Sweeney continued with a review the desired level of funding for stormwater management and flood resilience at $3.5 million ($1m for operating and $2.5m for capital expenditures) and then walked through the Aldi example with different rate structures (proportional fee and tiered fee). He concluded be sharing that South Burlington, VT charges a utility on state roads and shared a potential similar scenario for Dover. Under this scenario the ERU rate would only drop 80 cents. Baber asked if any community has based credits on estimated cost savings, and asked that Sweeney and Houle come up with an estimate for a best management practice and the credit it could receive. Sweeney said it depends on the credit policy implemented. Krans asked whether the stormwater utility would include the schools and municipal buildings. Sweeney stated that is a question for the committee to determine if City infrastructure is included. Young stated that is how the City handles sewer fees. Sweeney reminded the committee that if the City pays everyone is essentially contributing because it would be paid for through the City's budget (General Fund).

B. Discuss General Fund and Stormwater Utility Impacts on Bonding and City Debt.

Sweeney connected with Dan Lynch (City Finance Director) to ask about using the General Fund to pay for future stormwater and resilience expenses. Lynch shared that if the City issued a bond for the $2.5million gap in funding City would need to approve it and the average single family residential would increase $17. It would also have an impact on the City's credit rating but a continued bond issuing would have an impact and

would affect the rates available for the City for future borrowing. If the City allocated $2.5m for principal and interest costs, the City could authorize $28m for bonding because principal and interest would be $2.5m and that increase in the General Fund would be funded through additional property taxes which would increase by $200. Bonding that $28m would exceed the City Council's debt limit for the General Fund and for the percentage of the budget that is expended on debt services. Krans asked about borrowing $2.5m in successive years vs. borrowing $28m in one year and the impact if would have. Sweeney said the $28m bond wouldn't spend the funds in one year, but would spread them out. Nedelka asked if the $2.5m figure was based off of $3.5m and $2.5 m of that is capital investment. Sweeney answered saying the $2.5m is capital and the City would not bond for operations – that's the $1m from the General Fund (current). Krans asked about the 73 communities with stormwater utilities and whether and when EPA is going to require Dover to build a new wastewater treatment facility. Councilor Shanahan said he does not see a new wastewater treatment facility in the near future and that if the status quo remains there is no plant in the next 6 year capital improvements plan (CIP). Sweeney reminded Krans that he keeps referencing 73 communities with utilities but that is just the number who participated in one survey. There are well over 1,000 communities who have implemented stormwater utilities. Sweeney continued stating that needs and drives to implement those utilities are depended on the age of infrastructure, flooding, regulatory pressure, and requirements and that some are not facing any regulatory requirements. Walter asked to address two more future questions: 1) what might we have to do to have a bond or what we might have to do in terms of repairs. Also need to account for meeting EPA's 23-year plan requirements for nitrogen and water pollution abatement. Part of the adaptive management plan and agreement is that if the City does not meet those guidelines through expenses (new expenses) and does not meet some of those goals then we have a requirement of a $100m sewer upgrade. Walter asked the committee to consider safety and security of property and people and shared that residents are currently experiencing flooded basements. The City needs to plan for the future and accumulate something equivalent to the $28m without taking out a bond. Councilor Shanahan added that these are details the committee hasn't covered and are important for properly financially planning for the City. Kageleiry commented that wastewater treatment facility costs would likely come out of the sewer fee. Councilor Shanahan said yes, but maybe that the funds could be comingled. Baber asked if any communities that have a stormwater utility have a common utility commission. Sweeney offered to follow up. Kageleiry asked about City staff to administer a utility. Young responded saying it will likely be 1.5 FTE positions. 0.5 in water and sewer billing and 1 in inspections and oversight. Kageleiry commented that with over 8,500 properties in the City incentivizing everyone to have a separate review plan and inspection during construction would overwhelm staff responsible for inspections and argues the job is more like 4-5 employees which would increase administrative costs. Young disagreed.

Walter suggested one way to ease inspection requirements is to include it in the application process and have a professional provide some of the resources. Young acknowledged that follow up and permit compliance has to improve. Krans pointed out that Northampton published in their annual report that they have 11 FTE and 33 part time employees suggesting that it incentivizes not having a robust crediting system. Nedelka agreed with Chad about overhead and staffing but suggested that part of the 1.5 FTE comes from when major projects are developed and improvements are reviewed. Kageleiry continued to argue that the 1% of credits implemented in the example communities shows that credits do not do a whole lot for property owners otherwise more people would take advantage of them. Nedelka responded saying that the 1% that take advantage of the credits do so because it is financially useful to them. Mavrogeorge pointed out that many of the inspections will be on small systems and will be quick – could do many in one day. He likes the phased in approach to give folks an opportunity to plan out long term (i.e., rethink parking spaces). Baber added that the crediting systems don't seem complicated and that it's ultimately a cost benefit issue. Credits should be based on the return to the community. Administrative costs are just part of the costs. Degenais raised the hospital scenario which has a very detailed stormwater management program. He proposed that if the hospital is charged a $6,000 utility fee on top of inspections why would they do the inspections? Arguing that they would be paying $6,000 to maintain stormwater and then would get hit with an additional fee for the impervious pavement. Geraci stated that he can't see the committee debating whether or not to implement credits and that if the City decides to pursue a stormwater utility they have to include credits. He added that he likes Walter's suggestion of a phased approach.

Krans asked for a straw vote to see where the committee stands. Walter asked for a draft document and suggested that if the committee votes on something they vote to continue a recommendation for the General Fund or a stormwater utility. She added that ultimately it is the City Council that makes the decision – likely some years from now. Bardwell added that the goal was to find more money to support stormwater and flood resilience projects and the committee can't tell City Council that half the committee is in favor and half is not. Sweeney reminded the committee that they are charged with presenting a recommendations report by the end of October. Councilor Shanahan responded saying the date is flexible.

Nedelka raised that if there is a majority vote on one item it does not mean the dissenting voices are not important. He added that the City Council needs to continue cooperative efforts and to push our neighboring communities to participate in meeting EPA compliance. Kageleiry agreed with Allen about taking a straw vote. Krans added that the straw vote does not lock you in and that everyone on the committee will have a chance to see the final report and see what is included for the justification before making a final

decision. Councilor Shanahan entertained a motion. Discussion about types of motions from committee members. Baber raised the need for outreach and communications. Lyon commented that City Council is not implementing a utility as a result of the recommendations report and that outreach would be best conducted after the City Council's decision.

Motion: Baber motioned to charge the project partner staff to begin a report to support the decision of a stormwater utility that takes into consideration the need for credits as required by State statute and recommends implementation be staggered and the report be concise. Councilor Shanahan added that the final report won't be provided to the City Council before approved by the committee. Bardwell asked if there is an option to veto the report. Councilor Shanahan responded saying it will pass on majority vote. Kageleiry asked if the motion fails would the next vote to be preparing a document to support maintaining the stormwater funding out of the General Fund. Councilor Shanahan responded saying the second vote would be moot with a positive vote on the first one unless a member of the approving group votes to reconsider. Walter suggested avoid all of that and to make a motion asking for a document to be drafted that would support a utility adding that considerations of not only credits but also business disincentives, considerations of business issues, and the value of something associated with consideration for the General Fund as well. Councilor Shanahan summarized that the draft report will include vocalized considerations for the General Fund and Stormwater Utility. Krans agrees with the proposed motion but added the desire to preserve a minority report. Amended motion: Request the staff draft a recommendations report to the City Council for a stormwater utility and consider the outlined ideas, notation that the report won't be passed to City Council before a final majority vote and will allow minority to provide a minority report. Baber so moved. Degenais seconded.
Motion passed (6 yes; 4 no; 4 absent members not voting).
Bill Baber – yes
Paul Geraci – yes
Chad Kageleiry – no
Ken Mavrogeorge – yes
Jan Nedelka – yes
Cynthia Walter – yes
Allen Krans – no
Ray Bardwell – no
David Degenais – no
Eric George – yes

Kageleiry asked if the absent members will be allowed to vote in the final. Councilor Shanahan responded saying yes if they are in attendance.

5. CITIZEN'S FORUM
None present

6. CONFIRM NEXT MEETING DATE, TOPIC, AND HOMEWORK ASSIGNMENTS
Next meeting is scheduled for October 25, 2021 at 5:30 PM.

Bardwell asked whether there will be an opportunity to review the full report and vote at the next meeting. Kageleiry suggested another session to edit the report. Councilor Shanahan suggested reviewing a preliminary executive report and does not anticipate the committee will vote at the next meeting. Walter asked if the report could include considerations for the need for public outreach and cautioned the report being posted without any context for the public. Degenais suggested a presentation be give when the committee delivers the recommendations report. Walter asked that the report include a frequently asked questions section so the public does not have to wade through many pages to understand what is going on.

7. ADJOURN
Motion: Nedelka; Second: Kageleiry
Councilor Shanahan declared the meeting adjourned.

REVISITING THE DESIRED FUNDING LEVEL FOR STORMWATER & FLOOD RESILIENCE

Desired Funding Level: $3.5M (approx. $1M for operating budget and $2.5M in capital expenditures). Additional detail is provided within the cost of services presentation from Committee Meeting #2 on December 21, 2021.

Potential Annual Utility Revenue Based on the Success of a Credit Program

Estimated Billable ERUs: Pre-Credits*	Success of Credit Program	Estimated Billable ERUs: Post-Credits	Potentially Utility Revenue**
20,255	No ERUs credited	20,255	$3,500,000
	1% of ERUs credited	20,052	$3,465,000
	5% of ERUs credited	19,242	$3,325,000
	10% of ERUs credited	18,229	$3,150,000

**Assumes a proportional rate structure SFR and non-single family residential NSFR properties, and does not include state or municipal roads*
***Based on a monthly utility rate of $14.40/ERU*

Estimated Utility Rates to Meet Desired Funding Level based on different fee structures for single family residential (SFR) and non-single family residential (NSFR) properties

Fee Structure	Funding Level	SFR Rate/month*	NSFR Rate/month*
Flat SFR & Proportional NSFR	$3.5	$15.67 per SFR	$15.67 per ERU
Flat SFR & Tiered NSFR	$3.5	$15.67 per SFR	Tier 1: $14.30 per NSFR Tier 2: $19.68 per NSFR Tier 3: $56.65 per NSFR Tier 4: $269.82 per NSFR
Tiered SFR & Proportional NSFR	$3.5	Tier 1: $8.13 per SFR Tier 2: $11.89 per SFR Tier 3: $16.13 per SFR Tier 4: $26.50 per SFR	$15.67 per ERU
Proportional SFR & Proportional NSFR	$3.5	$14.40 per ERU	$14.40 per ERU

**Rate calculations did not include ERUs from state or municipal roads*

Estimated Utility Rates with the Inclusion of State Roads based on a proportional fee structure for SFR and NSFR properties

# of SFR ERUs	# of NSFR ERUs	# of ERUs from State Roads*	Total # of ERUs	Funding Level	SFR & NSFR Rate/month
7,637	12,618	1,079	21,334	$3.5M	$13.67 per ERU

**The number of ERUs from state roads is a rough estimate (10% of IC from all roadways in the City) that would need to be analyzed further if included in a utility*

IMPACT OF CREDITS ON STORMWATER AND FLOOD RESILIENCE UTILITY FEES

IMPACT ON TOTAL UTILITY REVENUE POTENTIAL

To gauge the impact a credit policy could have in Dover, the impact of credit policies in Portland, ME, Northampton, MA, and South Burlington, VT were analyzed. However, it is difficult to make comparisons across communities because each community has a different utility fee structure, credit policy, and may have allocated more or less resources towards educating the community on their respective credit policies.

Table 1: Percentage of Properties Receiving Credits in New England Communities

Municipality	Year Utility Adopted	# of Billable Properties	# of Properties Receiving Credits	% of Properties Receiving Credits
Northampton, MA	2014	11,261	1,278	11.3%
Portland, ME	2016	21,837	199	<1%
South Burlington, VT	2005	7,305	17*	<1%
**Although only 17 properties currently receive credits in South Burlington, VT, two property owners (Burlington International Airport and Vermont Agency of Transportation) receive a combined credit for 1,929 ERUs, an annual value of approximately $166,710 if these ERUs were not credited.*				

Nationwide Survey Findings

In 2021, Black & Veatch conducted a survey of 73 municipalities that have adopted a stormwater utility. 76% of survey respondents indicated that only 1%-5% of their properties currently receive credits.

Would Utility Rates Increase Once Credits Are Provided?

Once credits are authorized, the revenue a utility generates will decrease. The municipality is then faced with the decision to either increase rates to maintain the desired funding level, or operate with a slightly reduced budget. This decision is different for each community and could depend on the scale of credits offered. In the case of South Burlington, VT, the City has not increased rates based on credits offered.

IMPACT ON NON-SINGLE FAMILY RESIDENTIAL PROPERTIES

A modified version of the Portland, ME Stormwater Utility Credit Policy was used to gauge the potential impact credits could have on individual properties in Dover if a stormwater utility is established. The use of this credit policy is not intended to be a recommendation, and only serves to show how a property owner's fee would change under one of many different credit policies that exist in New England communities.

For non-single family residential (NSFR) properties, Portland's credit policy offers:

- Basic water quality management credit (50%) and basic water quantity management credit (10%) for stormwater controls that **meet** state and local regulations
- Extra water quality management credit (up to an additional 25%) and extra water quantity management credit (up to an additional 15%) are available for stormwater controls that **exceed** state and local regulations.

Therefore, NSFR properties may receive a maximum credit of 100% of their stormwater and flood resilience utility fee. Specific credit requirements for each credit type are provided below in Table 2.

Example: ALDI Supermarket Development

The site is abutted by Central Avenue to the northeast and Glenwood Avenue to the northwest, and contains ALDI Supermarket, Newburyport Bank, Chipotle, Firehouse Subs, and Sport Clips (see aerial image of the parcel in yellow below). The stormwater management design for this site utilizes BMPs including street sweeping, sediment forebays, deep sump and hooded catch basins, subsurface gravel filters, and infiltration basins.

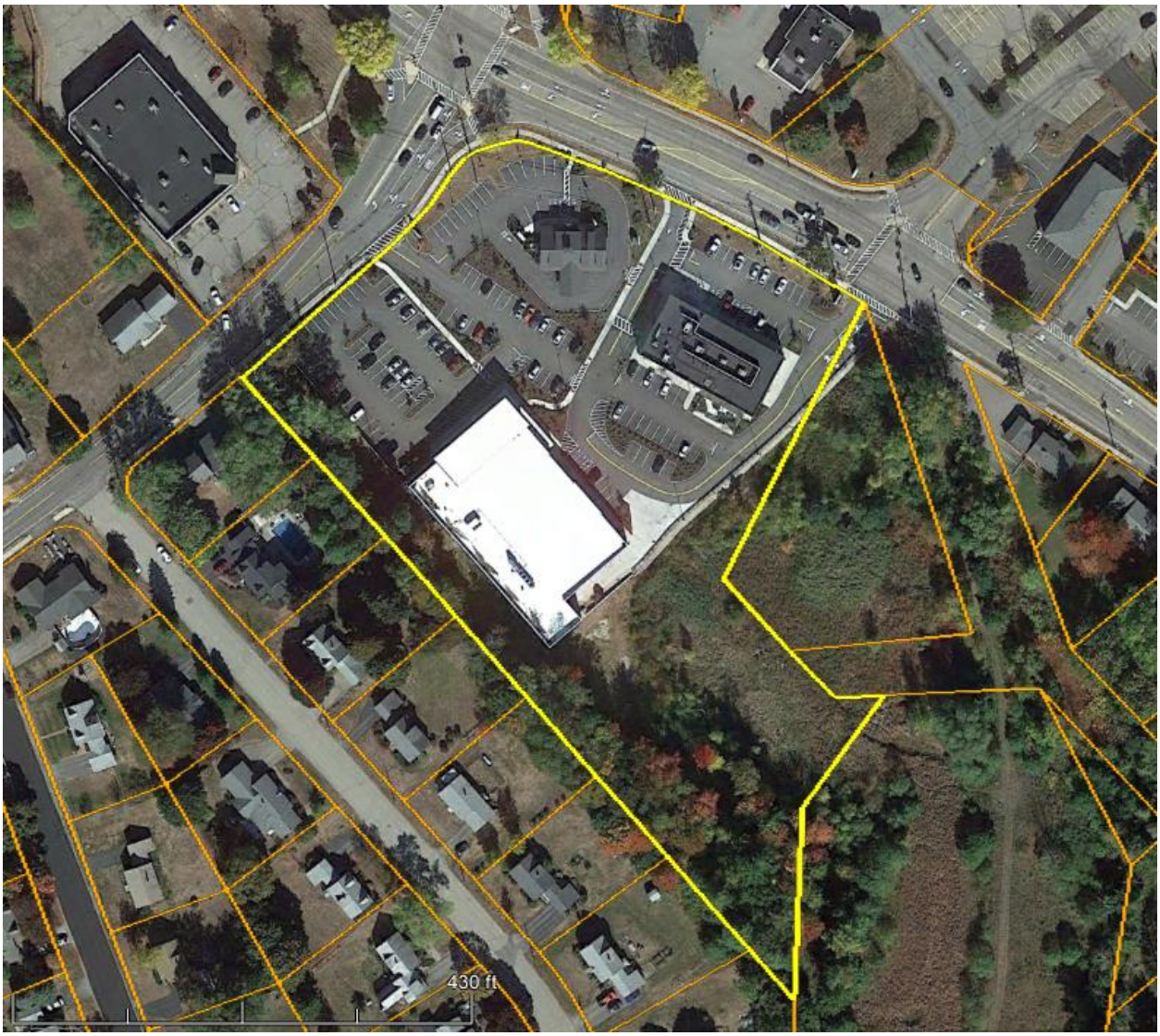


Figure 1: ALDI Supermarket Development (yellow parcel boundary)

Table 2: ALDI Development – Credits Offered Under Credit Policy Modeled After Portland, ME

Credit Type	Credit Standards	Standards Met?	Portion of IC Treated to Standard	Credit Received
Basic Water Quality *Available credit: 50%*	Is runoff of impervious surfaces treated to provide 80% removal of total suspended solids, 50% removal of total nitrogen, and 50% removal of total phosphorus, as required within Dover's Site Development Design Criteria?	✓	100%	50%
Basic Water Quantity *Available credit: 10%*	Are stormwater conveyance practices sized appropriately to convey the 10-year, 24-hour storm event without overtopping or causing flooding on the property, as required within Dover's Site Development Design Criteria?	✓	100%	10%
Extra Water Quality *Available credit: up to 25%*	Is runoff of impervious surfaces treated to provide greater than 90% removal of total suspended solids, greater than 60% removal of total nitrogen, and greater than 60% removal of total phosphorus?	✗	0%	n/a
Extra Water Quantity *Available credit: up to 15%*	Are stormwater conveyance practices sized appropriately to convey the 25-year, 50-year, or 100-year 24-hour storm event without overtopping or causing flooding on the property?	✗	0%	n/a
			Total Credit Received	**60%**

**Stormwater management design details used to determine whether or not credit requirements are met was retrieved from the project drainage report prepared by TEC, Inc. in November 2017.*

Estimated Annual Utility Fee of Fund $3.5M Stormwater Program Before and After Credits

- Estimated total impervious cover: 127,599 SF; 37 ERUs
- Estimated utility fee **before** credits: **$6,428.13**
- Estimated utility fee **after** credits (60% credit received): **$2,571.25**

Estimated Annual Portion of Property Taxes Fee of Fund $3.5M Stormwater Program

- Estimated taxable value: $4,002,600
- Estimated annual portion of property taxes: **$2,819.82**

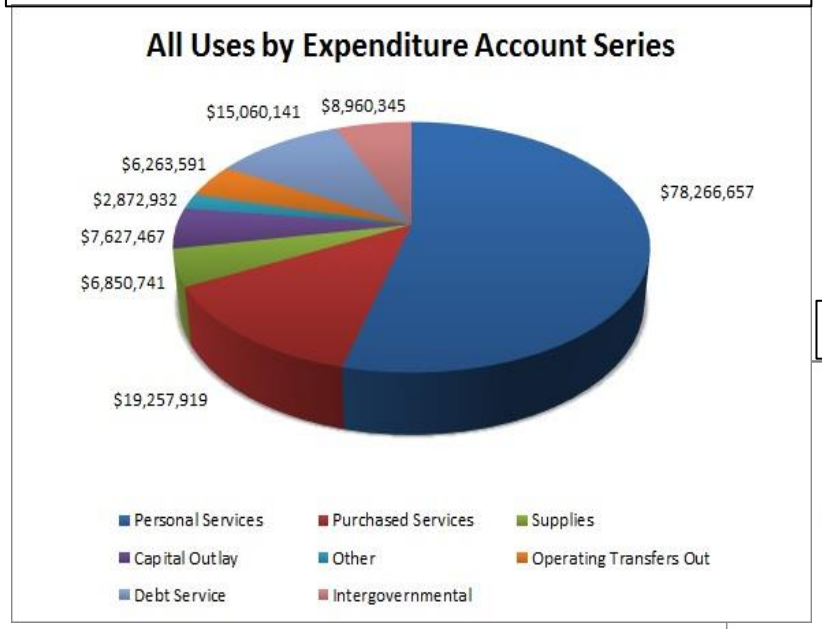
Comparison Table by Cynthia Walter 9-19-21 (Items in **bold** are concepts mentioned in prior discussions)

	Water Fund	Sewer Fund	Stormwater & Flood Resilience (SFR) Fund- Possible Plan	General Fund role in paying for Stormwater/Flood control - Current system
Basis of Fees	# Gallons Used	# Gallons Used	Stormwater Impact based on **Impervious Cover** w/o any Infiltration BMP	NA – Annual **budget revision budget shifts spending** for all services, including Stormwater/Flood work
Who pays costs?	All w tap	All w sewer	**All property owners**	**Only taxpayers pay** for stormwater/flood control
Rate Adjustments?	Yes, Pool form		**Yes** –Residents vs. Business vs. Non-profits - Credit for Stormwater Infiltration BMPs	**None** –e.g., taxes are same for large vs. small impervious cover on similar properties
Incentives to control water?	Yes, can lower bill		**Yes** - credit for verifiable stormwater infiltration BMPs	**No incentives** for property owners to install stormwater infiltration BMPs
Offset costs of EPA Adaptive Management (AM)?	No. Focus is on wells & water quality	No. Focus is on WWTP	Yes – Stormwater management offsets some AM costs **and** effective stormwater management means we will **not have to pay $100 M for WWTP upgrade**	**City pays all** adaptive management costs and all stormwater & flood control costs
Council reviews spending & rates?	Yes & Utility Commission	Yes & Utility Commission	Yes & as part of Utilities Commission?	**Tax cap** & **annual budget shifts priorities** each year for Education, Public Safety, Public Services, etc.
Council reviews CIP?	Yes	Yes	Yes	**Stormwater/Flood projects compete** with all other services, including Education, e.g., IT, school restoration.
Funds collected for capital improvements?	Yes $ __M (operations= $6.5 M)	Yes $__M (operations = $9 M)	Possible – **this reduces loans & debt service costs** for planned and emergency projects	**Stormwater/Flood projects compete** with more obvious needs, e.g., street and bridge repairs require most of $50 M CIP for 2022-7
Debt Service Fees?	No?	No?	Only if projects exceed income & "trust" fund	**Yes** Debt Service **$15 M (10% of city budget)** for 2019 Debt will be **41%** of financing for CIP 2022-7
Customer Opinions	No info	No info	**Over 66%** of 73 Stormwater Utilities said their customers rated fees as affordable/acceptable	**Sentiment against General Fund increase** (e.g., budget hearings, LTE's)

The Cost of Loans: Debt Services

Debt Service Costs: $15 M = 10% of City Budget in 2019 (and decreasing slowly)
Debt Financing: 41% of future CIP financing 2022-2027

Dover Budget Revealed Example from 2019 – Total $145M



Dover CIP 2022-2027

How can we decrease the need to spend money on debt services for infrastructure loans?

Dedicated capital improvement funds

<u>Examples:</u>

Water Utility: $___ M Capital "Trust" Fund and $ 6.5 M allocated budget 2022

Sewer Utility: $ ___ M Capital "Trust" Fund and $ 9 M allocated budget 2022

Stormwater & Flood Resilience Utility (possible plan):
$_____ Capital "Trust" Fund
$ 1 M annual operating budget

Information collected from Dover City website by Cynthia Walter, Ph.D.
August, 2021

POTENTIAL IMPACTS ON CITY DEBT AND BONDING

Summary of Feedback Provided by Dan Lynch, City of Dover Finance Director

Question 1: The current stormwater operating budget is approximately $1M, but the annual stormwater and flood resilience funding need is estimated to be $3.5M. If the City issued a bond for the additional $2.5M, what impact would that have on the City's debt and bond rating?

Answer:

- City Council approval would first be required to issue a $2.5M bond
- Annual payment on a single $2.5M bond (assuming a 20-year term and interest rate of 2.42%) would result in principal payment of $125,000 and interest of $60,500, for a total of $185,000
- Payment of the principal and interest alone would result in the average single family residential tax bill increasing by $17.56
- A single $2.5M bond would likely not have an impact on the City's existing credit ratings
- A recurring issuance of a $2.5M bond would result in a negative outlook and possibly a credit rating down grade, which would impact the interest rates the City obtains on debt issuance

Question 2: If the City allocated $2.5M in General Funds for the principal and interest cost of floating a bond, how much funding would potentially be available to fund stormwater and flood resilience projects and what impact would that have on the City's debt and bond rating?

Answer:

- City Council could authorize $28M for bonding because the annual principal and interest payment on a $28M bond would be roughly $2.5M (assuming a 20-year term and 3.42% rate)
- An increase of $2.5M in the General Fund budget to be funded through additional property tax levy would result in the average single family residential tax bill increasing by $207.53
- Bonding $28M would:
    - Exceed the City Council financial policy debt limit for the General Fund
    - Exceed the City Council financial policy limit for the percentage of the budge that is expended on debt service
    - Negatively impact the City's credit ratings

Committee Meeting #12

October 25, 2021

CITY OF DOVER

STORMWATER AND FLOOD RESILIENCE FUNDING COMMITTEE - MINUTES

Meeting Type:	**Regular Meeting**
Meeting Location:	**City Hall, Council Conference Room**
Meeting Date:	**Monday, October 25, 2021**
Meeting Time:	**5:30 PM**

Members Present: Bill Baber, Ray Bardwell, David Degenais, Eric George, Paul Geraci, Steve Haight, Chad Kageleiry, Allen Krans, Ken Mavrogeorge, Jan Nedelka, Cynthia Walter, Dennis Shanahan (City Council, ex officio), Peter Driscoll, (School Department, ex officio), Gretchen Young (Community Services, ex officio),

Members Not Present (excused):

Members Not Present (un-excused): Otis Perry, Marcia Gasses

Also Present: Ben Sweeney (NHDES Coastal Program Project Partner), Jamie Houle (UNH Stormwater Center Project Partner), and Tom Swenson (NHDES Project Partner), John Storer (Director of Community Services)

1. **CALL TO ORDER**
   Councilor Shanahan called the meeting to order at 5:32 PM. Accommodations include remote participation.

2. **ATTENDANCE** (follow remote participation procedures as needed)
   Councilor Shanahan called attendance (see members present listed above).

3. **REVIEW AND APPROVAL OF AUGUST 30, 2021 MINUTES**
   Motion: Krans made a motion to approve the minutes as presented; Nedelka second
   Roll Call Vote: Motion passed (9 yes; 1 abstention; 0 no)
   Amendment: with amendments

4. **NEW BUSINESS**
   A. **Overview of draft deliverables:**
      i. **Summary of Recommendations**

Sweeney presented an overview of the Summary of Recommendations, intent is to be more high-level overview, with the full report to include more in depth information. Bardwell discussed the need for added staffing and outreach and citizen education ahead of implementation of a utility. Kageleiry stated that the outreach should not attempt to disguise the fact that this will be an additional cost to a property owner. Shanahan noted that staffing and education will be crucial next steps as is outlined in the full report. Sweeney reviewed that South Portland had hired one additional staff member whose responsibility it was to provide customer service and answer questions, especially at the beginning, and one part-time person to inspect. Nedelka noted much of this was addressed in the full report. Some members noted that he had not had the opportunity to review the full report. Walter noted that the summary document did not indicate a need

for staffing, both for a utility and for permit compliance in general, and asked if that could be added. Krans noted that the summary document is probably going to be the only thing that most people read, and recommends adjustments to the layout. Krans noted that the first point in the summary document should address the urgency and magnitude of funding need for stormwater and flood resiliency. Committee discussed who the audience is and recommended a separate document for general public. Committee discussed difference between tax and user fee. Walter reiterated the need to highlight the urgency, differed maintenance, safety of others, and the fact that there is an impact from properties on other residents. Degenais asked that healthcare providers be considered for a credit along with others such as non-profits and faith based institutions. Krans asked if any potential credits should be included in document if nothing specific is recommended. Waters suggested an FAQ document. Committee discussed weather specific recommendations for credits should be included. Houle asked if it made sense to get too into the weeds with the credits when the commitment to the utility has not been officially made by the City Council. He also reminded the committee that the City has already committed to major stormwater investment by contract with CLF and EPA. Young stated that there are some potential opportunities, such as requiring state owned roadway and other impervious infrastructure to pay a fee, that have not been confirmed, therefore finalizing numbers is premature at this point. Sweeney noted that ballpark estimates have been presented in previous meetings and are included in the full report. Baber noted that a few things have been left out, including groundwater and drinking water protection and climate adaptation that the Council approved master plan has already identified as need. Kageleiry asked Storer if the funds were guaranteed, would he prefer to use general fund over utility for ease. Storer responded that times have changed, and that the way we are operating today cannot be the way we operate into the future. He acknowledged the added burden of running a utility, but also indicated that many smaller best management practices scattered throughout the city, as is incentivized by a utility, is a more effective way of managing stormwater. Krans pointed out again the importance of highlighting the need in the beginning of any document that is presented to the council. Shanahan noted that the meeting time has passed, and asked what was left to do on the summary document, prior to starting full review of the detailed document. He noted that homework would be provided to members and asked that all members review the full document and get comments to Ben. Also noted that Sweeney is looking for recommendations on how to present a minority report.

i. Comprehensive Findings & Recommendations Report

Time did not allow for this item.

B. Discuss draft deliverable revisions:

i. **Where is more information needed?**
ii. **What information is missing?**
iii. **What needs to be removed?**

Time did not allow for this item.

C. Discuss integration of minority input into Findings & Recommendations Report.

Time did not allow for this item.

5. CITIZEN'S FORUM

None present

6. CONFIRM NEXT MEETING DATE, TOPIC, AND HOMEWORK ASSIGNMENTS

Next meeting is scheduled for November 22, 2021 at 5:30 PM.

7. ADJOURN

Motion: Nedelka; Second: Baber
Councilor Shanahan declared the meeting adjourned at 7:20.

Committee Meeting #13

November 22, 2021

CITY OF DOVER

STORMWATER AND FLOOD RESILIENCE FUNDING COMMITTEE - MINUTES

Meeting Type: **Regular Meeting**
Meeting Location: **City Hall, Council Conference Room**
Meeting Date: **Monday, November 22, 2021**
Meeting Time: **5:30 PM**

Members Present: Bill Baber, Paul Geraci, Steve Haight, Chad Kageleiry, Ken Mavrogeorge, Jan Nedelka, Otis Perry, Cynthia Walter, Allen Krans, Ray Bardwell, Eric George, Dennis Shanahan (City Council, ex officio), Gretchen Young (Community Services, ex officio), Peter Driscoll (ex-officio)

Members Not Present (excused): David Degenais, Marcia Gasses

Members Not Present (un-excused): None

Also Present: Ben Sweeney (NHDES Coastal Program Project Partner) Abigail Lyon (PREP Project Partner), Martha Shiels (New England Environmental Finance Center Project Partner), Jamie Houle (UNH Stormwater Center Project Partner)

1. **CALL TO ORDER**
   Councilor Shanahan called the meeting to order at 5:33 PM. Accommodations include remote participation.

2. **ATTENDANCE** (follow remote participation procedures as needed)
   Councilor Shanahan called attendance (see members present listed above).

3. **REVIEW AND APPROVAL OF OCTOBER 25, 2021 MINUTES**
   Motion: Krans made a motion to approve the minutes as presented; Nedelka second
   Page 2 amendment "weather" to "whether"
   Roll Call Vote: Motion passed with amendment (11 yes; 0 abstention; 0 no)

4. **NEW BUSINESS**
   A. Review homework responses and consensus indicated on utility set up considerations.

   Sweeney reviewed homework response from the committee including preferences for which options would be the most equitable including fee structures, exemptions, discounts, credit system considerations, and qualifying stormwater management actions. Sweeney included these considerations into the draft committee deliverables to see what the rate could be but acknowledged this is subject to change based on further discussion and questions among the committee.

   Kageleiry asked about credits for larger scale low-income HUD related properties and whether a distinction needs to be made and if it would include someone who owns a manufactured home (trailer). Sweeney responded saying the executive summary document suggests in the case of single-family residential properties the income level should be tied to tax abatement thresholds that already exist. For multifamily properties

the credits should be tied to the number of tenants are in the HUD program. And that if those living in a manufactured home (trailer) meet existing tax abatement thresholds they should be included.

Krans raised the idea of property tax abatement is for senior citizens or low-income. Councilor Shanahan added that additional populations qualify for property tax abatement including the elderly, certain disabilities, and age, but that the list is worth revisiting. Krans added that for multi-unit properties the Dover Housing Authority in collaboration with the Housing Finance Authority can run a report to identify those eligible and that the task would not fall to City staff. Kageleiry asked about a landlord who accepts section 8 housing would receive discounts and if they would be eligible for partial discounts. Krans suggested using HUD specific funded housing instead of "affordable" housing. Baber added that if the discount is tied to those who already qualify for low-income tax credits then the City would already know who is eligible. Perry stated that some low-income folks will not be paying for any of this and the landlord may be the one receiving the discount. Kageleiry asked that the language be more encompassing and requested to see a budget that would reflect that estimate. Sweeney stated that based on the homework responses the committee proposed calculating impervious cover for each property (single-family and multi-family residential). Kageleiry stated further that he wants to know how much funding will ultimately be collected with exemptions and discounts in place. Nedelka commented that the committee is accidently co-mingling two populations: 1) people that own and 2) people that rent, and that manufactured home parks are a combination of both. Nedelka added that for the low-income discount would target the homeowners and the burden should be on homeowners to apply for it. In the case of trailers if the homeowner owns the trailer they could apply for credit. Kageleiry asked whether the homeowner who owns the trailer gets taxed on a rented lot. Perry responded saying yes, real estate tax and the same goes for the person who owns the land. Krans reminded the committee that low-income people are a small portion of the overall number of those impacted by a utility. Councilor Shanahan asked whether the committee does not want to disincentivize affordable housing or to incentivize affordable housing? Kageleiry suggested that the committee recommend a credit system in such a way that it could earn points toward a credit; to focus on credits instead of exemptions. Young cautioned the committee from developing a complicated program to not over burden staff. Councilor Shanahan recommended tying discounts to the existing qualifying criteria of age, disability, and income in the City. Walter suggested the committee review the Northampton example Sweeney provided as they have a clearer method for discounts. Baber asked Krans if he considered the difference between exemptions and credits. Krans responded saying he was willing to compromise on credits but that exemptions would be better. Kageleiry asked if the same crediting formula could be available to all property owners stating that everyone is due some relief. He suggested that HUD rents could be

one criteria. Krans stated he agreed with Kageleiry but added that a credit system is designed for those who are mitigating the problem, but the discounts are not for folks mitigating. Kageleiry cautioned that the crediting system could grow too large and stated he was not in favor of a utility but wants whatever is recommended to be efficient. Young suggested the committee articulate that it is a priority of the committee to implement something administratively streamlined. Kageleiry stated that certain property owners shouldn't be paying as much and they are recognized as groups who should be treated differently. Baber stated that the benefit of a single category is that it is easier to communicate the program to constituents. Haight commented saying no matter how you look at this you have so much money you have to spend to maintain stormwater and that no matter the credits or exemptions the total number still exists. He added that if the City decides to pursue a utility you still need to have the same amount of money and that with credits and exemptions it is no longer equitable. Kageleiry stated that the credit system gives a property owner the opportunity to reduce or eliminate your payment and that he voted for the opportunity to apply for 100% credit. He added that by law he is required to demonstrate zero impact and that if can prove he met this design standard that he should receive 100% credit. Krans reminded the committee that the City gives credits now for property taxes. Haight added that as a result property taxes go up. Kageleiry commented that if a program is established people will start seeking credits but at least new projects are not adding to an existing problem. Even in newer projects there is no stormwater impact and there is an enormous amount of money going to the General Fund. These newer projects already satisfy the stormwater regulations and should not be taxed. Older projects would be getting some relief.

Walter raised the Northampton example again pointing to how they incentivize older projects that capture stormwater so that they incentivize maintaining and upgrading what they have already done. Kageleiry asked what percentage of Northampton residents apply for credits. Krans stated 11%. Walter clarified that the 11% is by numbers and not acres and that we do not know how it is working or if it is working. Haight asked if a crediting program would mean some of the stormwater budget would come from the General Fund. Perry stated that no instead you would change the utility rate. Haight responded saying that is placing the burden on those already paying. Baber said that if a property performs up to an amount you can get that credit but that it's not likely a property would receive 100% credit. Nedelka clarified Haight's concern stating the concern is with legacy properties who will feel the system is unfair because they have stormwater that cannot be improved. Haight responded saying he understands the incentive of reducing impervious cover and getting credit but there is a certain amount that you cannot get rid of and asked if the $3.5m gap in funding is still needed if all properties reduced their impervious cover. Nedelka responded to Haight's statement saying that just as everyone present who pays property taxes sees an increase in taxes to subsidize those receiving relief, we would

anticipate a similar increase that we've decided is acceptable. He continued stating the credit system is one the committee is legally obligated to do but that it also makes the program more fair and palatable. He added that the committee is charged to come up with general calculations and to emphasize what we feel is important. Kageleiry clarified that he was talking about whether the committee can agree that instead of having all categories in multiple places that they could be in one place – one place to direct folks looking for relief. Krans raised a point that there are really two categories: 1) mitigation and 2) individual circumstances and suggested the committee retain that distinction. Councilor Shanahan summarized the conversation that the committee is recommending credits that can be in as many cases as possible in existing criteria (property tax exemption credits) and that two categories exist (physical and financial). Physical is what you do to improve water quality and if you go above and beyond you could be considered for substantial credits. There was general agreement among the committee.

Sweeney offered to incorporate the considerations into the report. Krans added his interest in a credit for the once in a lifetime developer who develops a state-of-the-art systems and takes care of their stormwater on site. Kageleiry stated the credit language as currently written reflects that and that developers are required to have no downstream impact. Young clarified that when a developer implements a best management practice for phosphorus, nitrogen, or total suspended solids to meet City requirements there is a 40% reduction so there is still an increase in impact.

Geraci reminded the committee that the City Council will have the ultimate decision and will get push back from residents and developers. He asked if a person was getting a break on their property tax, but they won't get a break under the utility would that be a problem. Kageleiry responded saying whatever is giving them the discount or break on the property tax should be included in the credit language. Perry added that the City has two examples in water/sewer utility and solid waste and that neither of those systems have any exemptions or credits for any kind of income requirements. The difference, he continued, is that we have a situation where there are different classes of users based on the characteristics of their use and that's what the committee should focus on. Geraci asked if the City starts moving more things out of the general fund into more utility based fees are we going to say there are no longer discounts for the elderly? Perry responded saying if we want to do that we should stay with the general fund/property taxes and that he's not sure it is fair to people who are putting their money into a new development. Kageleiry reminded the committee that 40% of the impervious cover is from the municipality and will stay in the general fund. Bardwell added that the committee is trying to design a fee structure at a finer scale and we should take what we have to the council and recognize it is going to take an engineering team and another committee to determine what fee structure works best. We need to agree on a package to send to the

Council. Councilor Shanahan agreed that while the committee is talking details, the committee needs to put together principles to present to the City Council. Kageleiry commented that it is hard to get behind the process without understanding what the committee is recommending. Baber responded saying the committee is determining what is worth crediting from a social perspective. Baber continued saying the committee should address how the City's properties are handled, mainly the roads. If they are not exempt then the bill will be paid out of the General Fund but maybe that is the equitable way to deal with that and to improve incentives. Nedelka commented that one of the reasons to exempt the City streets was to incentivize the municipality to come up with ways to save stormwater when we make major capital improvements.

B. Discuss integration of minority input into the Committee recommendations report

Sweeney raised the concerns and limitations from the committee and wants to ensure they are captured in the final report so the Council is presented with the comprehensive thoughts of the committee.

Bardwell presented a drafted motion for a report to the City Council that incorporates some of this discussion and recommended a public hearing be held before presenting to the City Council.

Kageleiry asked if there can be a referendum question for just property owners. Nedelka and Perry responded no. Perry commented that he didn't realize this was associated with the Great Bay Clean Water Act and thought it was a way to streamline the City's stormwater management system. Kageleiry explained the two are linked. Haight stated this is where this all stems from; old infrastructure, mandate for nitrogen and phosphorus, and finally stormwater. George asked why the City hasn't been putting money way for this before. Krans recommended acknowledging the tax light appearances of the utility. Councilor Shanahan reminded the committee that the property tax will not include the $3.5m for stormwater. Kageleiry stated under the tax cap that $3.5m will get allocated elsewhere quick. Baber raised the idea of communicating this in tandem with the federal regulations saying it is a new program created at the request of the committees to create a more creative and less expensive way of dealing with nitrogen and water quality in the Bay. The other path – through the wastewater treatment facility – is exorbitantly expensive. He shared that EPA has given the City a longer timeline and is working with the City to come up with creative options. If the City fails to take this opportunity we will face higher costs in the future.

Geraci directed the committee to the FAQ document and commented that is does a great job addressing questions about how this utility is different than a tax. Nedelka asked

Bardwell to share his letter with Sweeney. Geraci suggested a sample survey of the community to gauge public opinion. Walter asked that the $3.5m be better explained in the larger document as it is in the summary and FAQ. She then asked about timing for communications and outreach. Councilor Shanahan said if the new council gets the recommendations from this committee and the City Council decides to proceed that would trigger a 9–12-month outreach plan. Kageleiry commented that the report currently recommends a utility but that there was discussion tonight of a bifurcation program with the City's piece staying in the general fund. Councilor Shanahan stated that is the type of high-level principle based recommendation that should go to the council. Young reminded the committee that they supported that in the homework as well.

C. Review substantial revisions to the Committee deliverables

Sweeney updated the committee on the three deliverables:

- FAQ document – encouraged committee to look through it and identify any missing pieces; the FAQ will be the more public facing document;
- Executive summary of the recommendations report
- Recommendations report

Councilor Shanahan asked if anyone needed a hard copy for review. No one responded.

Sweeney asked if the committee can vote on recommendations at the next meeting. Lyon asked when the City Council is anticipating receiving the report. Councilor Shanahan said there is a flexible deadline and it will be more important to provide enough time to allow for as much participation is possible.

5. CITIZEN'S FORUM

Kean McDermott – resident of 128 Back River Road attended. No comments.

6. CONFIRM NEXT MEETING DATE, TOPIC, AND HOMEWORK ASSIGNMENTS

Next meeting is scheduled for January 10, 2022 at 5:30 PM.

7. ADJOURN

Motion: Perry; Second: Nedelka
Councilor Shanahan declared the meeting adjourned.

Committee Meeting #14

January 10, 2022

CITY OF DOVER

STORMWATER AND FLOOD RESILIENCE FUNDING COMMITTEE - MINUTES

Meeting Type: **Regular Meeting**
Meeting Location: **McConnell Center, Room 305**
Meeting Date: **Monday, January 10, 2022**
Meeting Time: **5:30 PM**

Members Present: Bill Baber, Paul Geraci, Chad Kageleiry, Ken Mavrogeorge, Jan Nedelka, Cynthia Walter, Ray Bardwell, David Degenais, Eric George, Dennis Shanahan (City Council, ex officio), Gretchen Young (Community Services, ex officio), Otis Perry, Steve Haight

Members Not Present (excused): Marcia Gasses, Allen Krans, Peter Driscoll

Members Not Present (un-excused): None

Also Present: Ben Sweeney (NHDES Coastal Program Project Partner), Abigail Lyon (PREP Project Partner), Jamie Houle (UNH Stormwater Center Project Partner), and Tom Swenson (NHDES Project Partner)

1. **CALL TO ORDER**
   Councilor Shanahan called the meeting to order at 5:41 PM. Accommodations include remote participation.

2. **ATTENDANCE** (follow remote participation procedures as needed)
   Councilor Shanahan called attendance (see members present listed above).

3. **REVIEW AND APPROVAL OF NOVEMBER 22, 2021 MINUTES**
   Motion: Nedleka made a motion to approve the minutes as presented; Perry second
   Roll Call Vote: Motion passed (11 yes; 0 abstention; 0 no)

4. **NEW BUSINESS**
   A. Review substantial revisions to Committee deliverables

   Sweeney thanked the committee for their input and feedback on deliverables to ensure they are accurate and reflect the committee's discussion to date. Main revisions to the report and summary of the report included an emphasis of the importance of stormwater management in the face of flooding, acknowledgement that following the report the City should conduct a robust outreach and public input process and the recommendation to explicitly state as such in the deliverables, and that recommendations for a crediting program should include performance-based and social equity credits using existing property tax credits already on file with the City to ease implementation.

   Degenais asked to revisit the idea of social credits and to include considerations for churches and hospitals that fill a social need. Baber said that they aren't included because they are not currently exempt from other utilities and George responded that while not exempt from a utility they are exempt from property taxes. Kageleiry stated it was work a

discussion given the role that health care and churches play in the City, but cautioned from exemptions. Nedelka shared Kageleiry's sentiment and suggested further discussion. He raised the idea that while nonprofits and other charitable organizations are not exempt from water or sewer, those people also have impervious surface which is how the committee is suggesting calculations for stormwater runoff. Nedelka suggested that institutions in a position to support education around stormwater management should be eligible for additional credits. Kageleiry cautioned the idea of earning credits from providing educational resources and added that he felt for profit healthcare should not be eligible. Degenais repeated the idea that institutions providing a social benefit should receive credit. Baber responded saying the proposed credits are not complete exemptions but instead are partial credits and recommended a similar approach for the institutions discussed. Perry raised a concern that the committee is talking about reducing the contribution based on something that has nothing to do with the situation itself. He also asked if credits were available to the blind, what about nonprofits who help the blind but are paying rent that ultimately pays into the utility. Kageleiry suggested the committee include considerations for credits in the recommendations report with the idea of digging in more when the language is developed for a crediting system. Degenais added that the absence of nonprofits and healthcare institutions is more telling than including them in some way. Nedelka added that a future committee or the City will be charged with figuring out the credits, but that the committee has the influence now to say there are others who are worth considering in a crediting system. Nedelka was supportive of language that says something about nonprofit credit opportunities. Perry recommended that the future group charged with making the final system work consider organizations and individuals who have statutory rights to exemptions. Mavrogeorge pointed in the report that this might be a place where nonprofit or health care institution could be another level of eligible credit. It would give the opportunity for additional benefits that would be eligible for credits. Councilor Shanahan pointed to page 31 for social equity credits and the summary at the bottom to say that if the utility is authorized additional analysis on credits is needed. He drafted a suggestion for a new bullet that said, "credits should be applied to property owners or certain nonprofit owners in recognition of the social benefit they give to the community." Nedelka added that it should be tweaked to say the social benefit on their ability to contribute to the discourse, to the public knowledge of the stormwater and flood resilience issue. Kageleiry argued that was the wrong direction. Perry stated the committee was conflating business credits with social credits. Degenais suggested that in the report where the social qualifiers are listed that nonprofit healthcare and churches be included to keep that door open. Walter agreed stating she had no issue with the simple addition Degenais suggested. Walter also suggested – though not for the report – that the project team and the City explore previous NHDES and EPA outreach programs to build off existing resources and use them to learn more about crediting options. She asked for a rough calculation if the

committee was to open the door to the previously mentioned institutions; how much property and what is the volume of impervious cover. Baber argued the committee was comparing apples to oranges and raised Perry's point again that the groups being discussed are not currently exempt from any utilities (e.g., the blind do not receive exemptions on water bill). He continued saying the committee decided to include school districts and the City to incentivize stormwater practices and improvements and that it does not make sense to exempt nonprofits if public ones are subject to the utility. Kageleiry added that as currently proposed there is nothing preventing a healthcare group from seeking credits and that they do not need a specific mention for their ability to seek credits. Degenais disagreed stating that the absence of their inclusion makes it a greater uphill battle. George stated that full exemption is not on thes table. Perry said that any institutions with a physical presence have to deal with stormwater and would be eligible for a credit just as anyone else. Councilor Shanahan and Sweeney summarized the proposed suggestion into a statement under social equity credits that added "nonprofit healthcare and faith-based organizations…" Nedelka recommended simplifying it to "nonprofits." Geraci said he would not vote in favor of Degenais' suggestion and that he would like to see a more general recommendation to the City Council who will determine who might get a break. Kageleiry said that anyone can go for credits, but the committee should say the City should not be able to. Bardwell reminded the committee of their basic charge to recommend a utility or let the funding continue to come from the General Fund. He recommended the report say a credit system should be thoroughly reviewed but cautioned the committee about too much administrative review may be needed and would counteract the funds raised by a utility. Mavrogeorge suggested that instead of saying "providing" change it to "considering" to soften the language. Councilor Shanahan summarized the updated suggestion to change "providing" to "considering" and to include some verbiage that represents nonprofit organizations. Geraci suggested the report (page 25) list "tax exempt/nonprofit) under the list of property tax exempt entities. Walter said that most credits listed in the summary report recommend automatically, and do not specify the amount of credit. She suggested that for tax-exempt/nonprofit that the word "automatic" be replaced to include consideration by experts. Mavrogeorge added the suggestion of "credits should be applied" to "credits would be applied" and expressed no concern of the term "automatic." Sweeney summarized the edit to "tax-exempt/nonprofit: credits should be considered for tax-exempt/nonprofits based on the social benefits they provide to the City." Nedelka added that the City should be eligible for performance-based credits. Baber added that "tax-exempt/nonprofits" should exclude political nonprofits. Mavrogeorge asked if this is all the committee wants the City to consider or if they should keep the door open for other ones. Kageleiry responded saying any property owner could still apply for credits that are performance based. Councilor Shanahan entertained a motion to approve the amended draft as articulated.

Motion: Degenais made a motion to approve the amended addition as presented; Perry second
Roll Call Vote: Motion passed (10 yes; 0 abstention; 1 no)

B. Committee vote on acceptance of findings and recommendations report

Bardwell asked if the committee would see the final draft before the final vote or if the plan was for a recommendation and vote this evening. Councilor Shanahan responded saying the plan was for a vote tonight. Geraci asked about reflecting changes in the other deliverables. Sweeney responded that all updates would be reflected in all deliverables. Nedelka recommended an edit to table 4 on page 18 about notable deferred projects (e.g., Old Colony Drainage that was added to the CIP 12 years ago.) Kageleiry asked if every delayed project warranted a comment. Nedelka conceded and agreed it was a friendly amendment.

Motion: Baber moved to approve the report as amended; Perry asked about submission to City Council. Baber amended the motion to say approve and submit the report as amended. Perry second.
Discussion: none
Vote: Motion passed (11 yes; 0 abstention; 0 no)

C. Discuss presentation of recommendations to City Council

Councilor Shanahan let the committee know the City and project team have had a few preliminary conversations about the presentation to City Council. He added that his recommendation would be to convene a workshop with City Council with the Committee in attendance as well as Gretchen Young and John Storer. This would initiate the second phase to get the public on board and that the presentation is the first step of that public process.

Kageleiry added that as the word gets out the committee should emphasize that it took 14 months of discussions and negotiating. The commercial property owners are going to get hit pretty hard but including the City was an important feature in mitigating the cost to the average homeowner. Important to show the City is paying their fair share.

Walter asked about the Committee can put stormwater issues in addition to stormwater and flooding funding in front of other boards. She recommended meeting with stakeholders so there is a place to answer their questions. Councilor Shanahan added that it aligns well with what Bardwell suggested – that this is a regional problem and to shine a spotlight on the great work the City is doing through the Municipal Alliance for

Adaptive Management. Young responded saying this will be a topic for discussion at the Seacoast Stormwater Coalition and recommended bringing it to the Dover Utilities Commission, Planning Board, Conservation Commission, etc. Baber suggested the City and Committee work with the City's media services to produce a video explaining what a utility is. Committee in agreement.

5. **CITIZEN'S FORUM**
   None present

6. **CONFIRM NEXT MEETING DATE, TOPIC, AND HOMEWORK ASSIGNMENTS**
   Wait to hold the next meeting, get the report together and a conversation with the City Council. Anticipated workshop with City Council in February 2022.

7. **ADJOURN**
   Motion: Nedelka; Second: Haight
   Councilor Shanahan declared the meeting adjourned at 6:47PM.

Appendix C

Summary of Preliminary Impervious Area Analysis by Property Type

Summary Table by Class *(does not include roads)*					Tax Exempt/Nonprofit			Single Family Residential			Commercial, Multi-Family, Other			Municipal		
Total:		**8,140**	**69,472,951**	**20,255**	**278**	**9,018,743**	**2,629**	**6,006**	**26,230,478**	**7,647**	**1,762**	**30,123,126**	**8,782**	**94**	**4,100,604**	**1,196**
Percent of Total:		**100%**	**100%**	**100%**	**3%**	**13%**	**13%**	**74%**	**38%**	**38%**	**22%**	**43%**	**43%**	**1%**	**6%**	**6%**
State Class	**Class Description**	**Parcels**	**Area (sf)**	**ERUs**	**Parcels**	**Area (sf)**	**ERUs**	**Parcels**	**Area (sf)**	**ERUs**	**Parcels**	**Area (sf)**	**ERUs**	**Parcels**	**Area (sf)**	**ERUs**
13	Mixed Use - Primarily Residential	25	224,448	65	-	-	-	25	224,448	65	-	-	-	-	-	-
31	Mixed Use - Primarily Commercial	17	187,592	55	-	-	-	-	-	-	17	187,592	55	-	-	-
101	Single Family Res	5981	26,006,030	7,582	-	-	-	5,981	26,006,030	7,582	-	-	-	-	-	-
102	Condo	39	108,351	32	-	-	-	-	-	-	39	108,351	32	-	-	-
103	Manuf. Home	16	143,178	42	-	-	-	-	-	-	16	143,178	42	-	-	-
104	Two Family	526	2,140,345	624	-	-	-	-	-	-	526	2,140,345	624	-	-	-
105	Three Family	153	694,378	202	-	-	-	-	-	-	153	694,378	202	-	-	-
109	Accessory Buildings	33	464,108	135	-	-	-	-	-	-	33	464,108	135	-	-	-
111	Apt Conversions 4+	254	1,544,888	450	-	-	-	-	-	-	254	1,544,888	450	-	-	-
112	Garden Apartments	58	2,895,711	844	-	-	-	-	-	-	58	2,895,711	844	-	-	-
113	Independent Senior Apts.	1	138,751	40	-	-	-	-	-	-	1	138,751	40	-	-	-
114	Mixed Use 1st Flr -Townhouse apts upper	12	278,367	81	-	-	-	-	-	-	12	278,367	81	-	-	-
121	Boarding House	2	10,736	3	-	-	-	-	-	-	2	10,736	3	-	-	-
125	Res Assisted Living	1	6,272	2	-	-	-	-	-	-	1	6,272	2	-	-	-
130	Res Developable Land	86	249,774	73	-	-	-	-	-	-	86	249,774	73	-	-	-
131	Res MargDevlpbl Land	8	4,807	1	-	-	-	-	-	-	8	4,807	1	-	-	-
132	Res Unbuildable Land	15	27,303	8	-	-	-	-	-	-	15	27,303	8	-	-	-
140	Childcare-Res	4	55,563	16	-	-	-	-	-	-	4	55,563	16	-	-	-
300	Hotels	4	276,455	81	-	-	-	-	-	-	4	276,455	81	-	-	-
302	Inns	3	47,737	14	-	-	-	-	-	-	3	47,737	14	-	-	-
303	Rtl/Ofc 1st Flr, Apts upper	46	394,260	115	-	-	-	-	-	-	46	394,260	115	-	-	-
304	Nursing Home & Asst Living	5	471,127	137	-	-	-	-	-	-	5	471,127	137	-	-	-
305	Hosp. Private/veterinary	4	191,879	56	-	-	-	-	-	-	4	191,879	56	-	-	-
306	Mixed Res/Comm	3	14,436	4	-	-	-	-	-	-	3	14,436	4	-	-	-
307	Commercial Bldg	18	445,474	130	-	-	-	-	-	-	18	445,474	130	-	-	-
310	Rtl Oil Storage	1	59,037	17	-	-	-	-	-	-	1	59,037	17	-	-	-
313	Lumber Yard	1	170,373	50	-	-	-	-	-	-	1	170,373	50	-	-	-
314	Truck Terminal	2	182,606	53	-	-	-	-	-	-	2	182,606	53	-	-	-

State Class	Class Description	Parcels	Area (sf)	ERUs	Parcels	Area (sf)	ERUs	Parcels	Area (sf)	ERUs	Parcels	Area (sf)	ERUs	Parcels	Area (sf)	ERUs
315	Dock Yards	3	19,712	6	-	-	-	-	-	-	3	19,712	6	-	-	-
316	Comm Whse	17	561,608	164	-	-	-	-	-	-	17	561,608	164	-	-	-
317	Mini-Storage	3	235,029	69	-	-	-	-	-	-	3	235,029	69	-	-	-
321	Hardware Store	1	190,424	56	-	-	-	-	-	-	1	190,424	56	-	-	-
322	Convenience Store	55	1,420,095	414	-	-	-	-	-	-	55	1,420,095	414	-	-	-
323	Shopping Mall	5	1,024,270	299	-	-	-	-	-	-	5	1,024,270	299	-	-	-
326	Rest/Clubs	29	735,086	214	-	-	-	-	-	-	29	735,086	214	-	-	-
331	Auto S S&S	5	497,527	145	-	-	-	-	-	-	5	497,527	145	-	-	-
332	Auto Repair	9	159,976	47	-	-	-	-	-	-	9	159,976	47	-	-	-
333	Gas Station/Conv Str	5	139,924	41	-	-	-	-	-	-	5	139,924	41	-	-	-
334	Gas St w/ Service	9	166,714	49	-	-	-	-	-	-	9	166,714	49	-	-	-
335	Car Wash	4	113,602	33	-	-	-	-	-	-	4	113,602	33	-	-	-
336	Parking Garage	2	20,129	6	-	-	-	-	-	-	2	20,129	6	-	-	-
337	Parking Lot	36	530,756	155	-	-	-	-	-	-	36	530,756	155	-	-	-
340	Office Bldg	68	1,784,771	520	-	-	-	-	-	-	68	1,784,771	520	-	-	-
341	Bank Bldg	9	345,189	101	-	-	-	-	-	-	9	345,189	101	-	-	-
343	Office Conversoin	2	18,333	5	-	-	-	-	-	-	2	18,333	5	-	-	-
349	Medical Office Bldg	2	65,544	19	-	-	-	-	-	-	2	65,544	19	-	-	-
352	Commercial Day Care	5	120,579	35	-	-	-	-	-	-	5	120,579	35	-	-	-
353	Frantnl Org	4	128,453	37	-	-	-	-	-	-	4	128,453	37	-	-	-
355	Funeral Home	2	44,995	13	-	-	-	-	-	-	2	44,995	13	-	-	-
364	Theater	1	8,970	3	-	-	-	-	-	-	1	8,970	3	-	-	-
369	Other Cultural	1	18,939	6	-	-	-	-	-	-	1	18,939	6	-	-	-
376	Gyms	3	185,290	54	-	-	-	-	-	-	3	185,290	54	-	-	-
380	Golf Course	1	155,596	45	-	-	-	-	-	-	1	155,596	45	-	-	-
384	Marinas	3	84,898	25	-	-	-	-	-	-	3	84,898	25	-	-	-
386	Campground/MH Park	7	1,757,071	512	-	-	-	-	-	-	7	1,757,071	512	-	-	-
390	Commercial Land	27	773,459	225	-	-	-	-	-	-	27	773,459	225	-	-	-
391	Comm Marginally Dvlpbl Land	10	20,693	6	-	-	-	-	-	-	10	20,693	6	-	-	-
392	Comm Un-Dvlpbl Land	6	10,285	3	-	-	-	-	-	-	6	10,285	3	-	-	-
393	Comm Residual Land	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
394	Apartment Land	1	1,963	1	-	-	-	-	-	-	1	1,963	1	-	-	-
399	Minor Commercial in Res nhbd	1	11,822	3	-	-	-	-	-	-	1	11,822	3	-	-	-

State Class	Class Description	Parcels	Area (sf)	ERUs	Parcels	Area (sf)	ERUs	Parcels	Area (sf)	ERUs	Parcels	Area (sf)	ERUs	Parcels	Area (sf)	ERUs
400	Factory	17	2,355,916	687	-	-	-	-	-	-	17	2,355,916	687	-	-	-
401	Ind Whses	46	2,131,485	621	-	-	-	-	-	-	46	2,131,485	621	-	-	-
402	Ind Office	5	2,082,230	607	-	-	-	-	-	-	5	2,082,230	607	-	-	-
404	R-D Facil	2	198,410	58	-	-	-	-	-	-	2	198,410	58	-	-	-
410	Sand & Gravel	4	421,613	123	-	-	-	-	-	-	4	421,613	123	-	-	-
422	Electric Plant	1	17,162	5	-	-	-	-	-	-	1	17,162	5	-	-	-
423	Electric ROW	3	3,004	1	-	-	-	-	-	-	3	3,004	1	-	-	-
424	Electric Substation	4	95,917	28	-	-	-	-	-	-	4	95,917	28	-	-	-
427	Gas Storage	1	126	0	-	-	-	-	-	-	1	126	0	-	-	-
430	Tele Exch Station	2	26,415	8	-	-	-	-	-	-	2	26,415	8	-	-	-
433	Rad/Tv Tower	2	68,263	20	-	-	-	-	-	-	2	68,263	20	-	-	-
440	Ind Developable Land	9	87,024	25	-	-	-	-	-	-	9	87,024	25	-	-	-
441	Ind Marg Dev Land	3	18,492	5	-	-	-	-	-	-	3	18,492	5	-	-	-
442	Ind Unbuildabale Land	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
502	Dams	1	1,252	0	-	-	-	-	-	-	1	1,252	0	-	-	-
600	Vacant Land	3	6,428	2	-	-	-	-	-	-	3	6,428	2	-	-	-
610	Vacant Land	3	9,433	3	-	-	-	-	-	-	3	9,433	3	-	-	-
700	Vacant Land	1	22,716	7	-	-	-	-	-	-	1	22,716	7	-	-	-
710	Vacant Land	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
718	Vacant Land	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
900	US Govt	6	108,077	32	6	108,077	32	-	-	-	-	-	-	-	-	-
901	State	29	565,032	165	29	565,032	165	-	-	-	-	-	-	-	-	-
902	County	3	863,870	252	3	863,870	252	-	-	-	-	-	-	-	-	-
903	Municipal	94	4,100,604	1,196	-	-	-	-	-	-	-	-	-	94	4,100,604	1,196
904	Private School	4	647,546	189	4	647,546	189	-	-	-	-	-	-	-	-	-
905	Prvt Hosp Charity	12	738,129	215	12	738,129	215	-	-	-	-	-	-	-	-	-
906	Church & Associated	33	742,403	216	33	742,403	216	-	-	-	-	-	-	-	-	-
908	Housing Authority	17	488,384	142	17	488,384	142	-	-	-	-	-	-	-	-	-
910	Charitable	6	211,324	62	6	211,324	62	-	-	-	-	-	-	-	-	-
911	Common Lands (mstr cards)	164	4,617,732	1,346	164	4,617,732	1,346	-	-	-	-	-	-	-	-	-
920	Non Profit	4	36,246	11	4	36,246	11	-	-	-	-	-	-	-	-	-
930	Exempt Tracer, may have a/r	5	18,581	5	-	-	-	-	-	-	5	18,581	5	-	-	-
999	New parcel for following year	2	3,449	1	-	-	-	-	-	-	2	3,449	1	-	-	-

Appendix D

Committee Homework Assignments and Aggregated Responses

Stormwater and Flood Resilience Funding Options

Please use the following table to lay out your thoughts on the options listed. As a reminder, more information on these options is available within the stormwater funding options matrix. I propose that we use the "S.A.F.E." criteria (see definitions below) and also indicate if any of the options should be discarded.

For each option, rate the attribute as LOW, MEDIUM, or HIGH. We will combine your thoughts to develop a consensus on which options we will investigate further. If you see that one option is unworkable, note that in the "DISCARD?" column. Add any other options for consideration in the last row. Please email your completed worksheet to Benjamin.Sweeney@des.nh.gov by **February 15, 2021**.

Defining "S.A.F.E."

- Secure – Dependable over the long-term, predictable to the extent the City is able to plan and budget for the future effectively, and dedicated solely to stormwater management and flood resilience.
- Adequate – Funding generated will meet current costs and allows the City to maintain the level of service that residents expect.
- Flexible – Funding that can be adjusted (in terms of both amount and application) as needs fluctuate over time (e.g., funding used for today's traditional stormwater management activities, but also available for addressing urban, riverine, and coastal flood risk that might be needed in the future).
- Equitable – Funding is generated fairly.

OPTION	**ATTRIBUTE**				**DISCARD?**
	SECURE	**ADEQUATE**	**FLEXIBLE**	**EQUITABLE**	
1. General fund (funds raised by property taxes)	*Example: I rate the General Fund's "security" as _____ because _____.*	*Example: I rate the General Fund's "adequacy" as _____ because _____.*	*Example: I rate the General Fund's "flexibility" as _____ because _____.*	*Example: I rate the General Fund's "equitability" as _____ because _____.*	
2. Fee-based (permit/planning fees, impact fees, etc.)					

3. System development charges (new customers buy into existing stormwater infrastructure)					
4. Stormwater utility (user fees based on a measured quantity, e.g., impervious surface)					
5. Sewer user fees (user fee based on sewer usage, typically measured by water consumption)					
6. Village districts (taxes and/or fees targeted at a certain designated area)					
7. Public-private partnership					

8. Grants, loans, bonds					
9. Other					

COMPILED RESPONSES TO HOMEWORK ASSIGNED ON JANUARY 25, 2021

GENERAL FUND

Total Responses: 12
Votes to Discard Option: 1

Ratings	Attributes			
	Secure	**Adequate**	**Flexible**	**Equitable**
High	6	1	3	1
Medium	1	4	2	6
Low	4	5	5	3
Combined Rating	Medium	Medium-Low	Medium	Medium

FEE-BASED

Total Responses: 12
Votes to Discard Option: 2

Ratings	Attributes			
	Secure	**Adequate**	**Flexible**	**Equitable**
High	1	1	3	8
Medium	3	1	3	1
Low	6	8	4	1
Combined Rating	Medium-Low	Low	Medium	HIGH

SYSTEM DEVELOPMENT CHARGES

Total Responses: 12
Votes to Discard Option: 2

Ratings	Attributes			
	Secure	**Adequate**	**Flexible**	**Equitable**
High	2	0	3	4
Medium	2	2	3	3
Low	6	8	4	3
Combined Rating	Medium-Low	Low	Medium	MEDIUM

STORMWATER UTILITY

Total Responses: 12
Votes to Discard Option: 1

Ratings	Attributes			
	Secure	**Adequate**	**Flexible**	**Equitable**
High	11	11	9	7
Medium	0	0	2	2
Low	0	0	0	2
Combined Rating	HIGH	HIGH	HIGH	MEDIUM-HIGH

SEWER USER FEES

Total Responses: 12
Votes to Discard Option: 7

Ratings	Attributes			
	Secure	**Adequate**	**Flexible**	**Equitable**
High	5	4	2	1
Medium	0	1	0	1
Low	0	0	3	3
Combined Rating	HIGH	HIGH	MEDIUM	MEDIUM-LOW

VILLAGE DISTRICTS

Total Responses: 12
Votes to Discard Option: 9

Ratings	Attributes			
	Secure	**Adequate**	**Flexible**	**Equitable**
High	1	0	0	0
Medium	1	1	0	2
Low	1	2	3	1
Combined Rating	MEDIUM	MEDIUM-LOW	Low	MEDIUM-LOW

PUBLIC-PRIVATE PARTNERSHIP (P3)

Total Responses: 12
Votes to Discard Option: 4
Votes for More Information: 2

Ratings	Attributes			
	Secure	**Adequate**	**Flexible**	**Equitable**
High	0	1	2	2
Medium	5	3	3	1
Low	1	2	1	3
Combined Rating	MEDIUM	MEDIUM	MEDIUM	MEDIUM

GRANTS, LOANS, AND BONDS

Total Responses: 12
Votes to Discard Option: 0

Ratings	Attributes			
	Secure	**Adequate**	**Flexible**	**Equitable**
High	1	0	0	5
Medium	4	2	5	2
Low	6	9	5	3
Combined Rating	MEDIUM-LOW	LOW	MEDIUM-Low	MEDIUM

Evaluating Stormwater and Flood Resilience Funding Options

Please use this worksheet to share your thoughts on the funding options we have explored over the past three months. You may find it helpful to review past presentation slides and additional resources that have been uploaded here.

For each option listed below, please complete the following:

PART 1 – Indicate whether you think the funding option is a *primary* source of funding or a *supplemental* source of funding by placing a checkmark in the corresponding box. Primary sources of funding should have the capability to generate the majority, if not all, of the stormwater program's funding needs, whereas supplemental sources can only be used to provide limited amounts of additional funding.

PART 2 – Identify any advantages and disadvantages of the funding option. You also have the opportunity to adjust your ratings of the secure, adequate, flexible, and equitable (SAFE) attributes now that we know more about each funding option. As you did in the previous homework assignment, please rate each SAFE attribute as LOW, MEDIUM, or HIGH (feel free to use L, M, or H to save space).

PART 3 – Provide any concerns and/or additional questions you have about the funding option.

We will combine your thoughts to develop a consensus on a refined list of options during the June 28th meeting, which will help prepare you to make final recommendation decisions during the July 26th meeting. Please email your completed worksheet to Benjamin.Sweeney@des.nh.gov by **Friday, June 18, 2021**.

	PART 1		PART 2						PART 3	
OPTION	PRIMARY	SUPPLEMENTAL	ADVANTAGES	DISADVANTAGES	S	A	F	E	CONCERNS	QUESTIONS
General Fund										
Stormwater Utility										
Fee-based (permit/planning fees, impact fees, investment fees, etc.)										
Public-Private Partnership										
Grants, Loans, and Bonds										

COMPILED RESPONSES TO HOMEWORK ASSIGNED ON MAY 24, 2021

GENERAL FUND

Funding Source Type	Votes
Primary	3
Supplemental	6

Advantages	Disadvantages
• Already exists • Everyone is familiar with this form of funding • Easiest sell to taxpayers • All taxpayers contribute • Budget goes through public hearing process	• Budget allocation is unreliable • Tax cap limits available funding • Current funding level is inadequate • Tax exempt properties do not pay • Stormwater will always have to compete for funding with more immediate needs

	Secure	Adequate	Flexible	Equitable
High	2	1	2	0
Medium	2	3	2	3
Low	4	4	4	5

Concerns
• Relying on the General Fund could put permit compliance in jeopardy • Does not provide secure revenue stream • Takes away funding that is needed for other community services • Infrastructure improvements will continue to be underfunded through General Fund • Unfair distribution of costs to taxpayers for stormwater management • Project costs and needs may increase faster than tax revenues, placing more strain on the budget

Questions
• How can we clarify shared costs for programs and projects where multiple funding sources are used? For example, during a road reconstruction project that involves drainage work, how can we be more transparent about the amount of funds being used from the General Fund, fees, and/or grants?

STORMWATER UTILITY

Funding Source Type	Votes
Primary	9
Supplemental	1

Advantages	Disadvantages
• Everyone pays • Provides reliable, consistent, dedicated funding that allows for long-term planning • Predictable expenses for ratepayers • Designed to meet funding needs • Improves fairness because fees correlate to impact; the more stormwater you contribute, the more you pay • Incentivizes residents and businesses to implement stormwater BMPs • Isolating costs of stormwater management in a utility provides transparency to ratepayers • Decreases pressure on the General Fund • Dedicated funding makes Dover more competitive for additional grant funding • Ability for property owners to reduce their fee by implementing BMPs	• Set up and administration costs could be high • Requires a tremendous amount of public outreach to build consensus • Taxpayers would perceive a utility as an additional tax • Could be confusing • Time consuming credit and inspection process • Determination of impervious surfaces on each property could be contentious

	Secure	Adequate	Flexible	Equitable
High	8	7	7	5
Medium	0	1	0	3
Low	0	0	1	0

Concerns

Public Education & Outreach:

- Unless a utility will improve lives of individual taxpayers, introduction of a utility to the taxpayers will fail. Only if individual taxpayers are convinced that a new utility will save money in the long run will the concept of a utility prevail.
- Implementation requires persuasion, which will only be successful if it answers the question "how will life be better and cost-effective with the adoption of a utility?" Merely issuing a report will not be persuasive.
- Public and businesses are unaware of stormwater costs, consequences of underfunding, benefits of adequate funding for stormwater, and unfair distribution of costs

Equity:

- Some inequities do arise. Do we live with them or make a model so complex that it's difficult to understand?
- In the quest to be equitable, do we make it more confusing and drive up administration costs?

Questions

- How would eligibility and criteria for credits be determined?
- How do stormwater utilities monitor the performance of stormwater management systems that qualify for credits?

FEE-BASED

Funding Source Type	Votes
Primary	0
Supplemental	10

Advantages	Disadvantages
• Already established some fee mechanisms • Good option for funding system upgrades that might result from a specific development • Allows creative partnerships for mitigation and improvements in new development • Offsets cost of oversight and City staff time	• Could discourage future development • Not a predictable or reliable revenue source from year to year • Not able to fund large scale capital projects • Insufficient funding source by itself • Limitations on use of funds

	Secure	Adequate	Flexible	Equitable
High	3	0	2	4
Medium	0	1	3	1
Low	5	7	3	3

Concerns
• Any increase in fees could increase barriers to creating more affordable housing

PUBLIC-PRIVATE PARTNERSHIP

Funding Source Type	Votes
Primary	0
Supplemental	6
Not a Funding Source	3

Advantages	Disadvantages
• Currently implemented on an as needed basis • Works well for specific infrastructure projects	• Potential increased costs to taxpayers to allow needed profits for private entity • Giving private entity control over City services can result in a loss of transparency • Not guaranteed that agreements with private sector can be reached

	Secure	Adequate	Flexible	Equitable
High	0	0	2	1
Medium	2	4	1	1
Low	4	2	3	4

Concerns
• This is not a true funding source; it's a different way to implement a stormwater program • Tough to sell length of commitment and cost of partnership unless private sector covers large percentage of costs

GRANTS, LOANS, AND BONDS

Funding Source Type	Votes
Primary	0
Supplemental	9

Advantages	Disadvantages
• Good way to generate additional funding • City has good track record of securing grants • City can design a project to fit a particular need, assuming there are appropriate grant opportunities or acceptable options for loans or bonds	• Grants are competitive and not a guaranteed or steady source of funding • Excessive borrowing can create illusion of low-cost improvements with long-term adverse consequences • Insufficient funding source by themselves

	Secure	Adequate	Flexible	Equitable
High	2	0	2	5
Medium	1	1	1	0
Low	4	6	4	2

Concerns
• Other municipalities are increasing grant seeking efforts; consequently, we have to run faster just to stay in the same place

Comments
• City staff are active in all these options, and thus we are not likely to have substantially more revenue from these sources on a regular basis • Grants – particularly those with no/few strings attached – should always be pursued • Loans and bonds will always be necessary financing tools

Considerations for Developing a Stormwater and Flood Resilience Utility

Instructions: Please review the primary considerations and related options for setting up a utility (table 1) and establishing a credit system (table 2). In each table, indicate your preferred option(s) for each consideration in the fourth column. Please add comments in the fifth column to justify your selection, or use this column to suggest other options not listed in the table. Details on each consideration can be found by following the links provided within the "More Information" column. We will compile your responses to develop a consensus on the preferred option(s) for each consideration. Once you've completed the worksheet, please submit your feedback to Benjamin.r.sweeney1@des.nh.gov (please note my new email address has a "1" at the end; I no longer receive emails sent to my old email address) by **Monday, November 8, 2021.**

Table 1: Utility Set Up

Considerations	Options	More Information	Preferred Option(s)	Comments
Single Family Residential (SFR) Fee Structure	A. Flat fee B. Tiered fee C. Proportional fee	Definitions of fee structure options and hypothetical examples of utility rates are presented in the draft report under sections 4.2 and 4.6 respectively		
Non-Single Family Residential (NSFR) Fee Structure	A. Flat fee B. Tiered fee C. Proportional fee	Definitions of fee structure options and hypothetical examples of utility rates are presented in the draft report under sections 4.2 and 4.6 respectively		
Exemptions	A. No exemptions B. State-owned roads C. City-owned roads D. City-owned properties E. Low-income F. Senior citizens G. Educational institutions H. Faith based organizations I. Health care institutions J. Nonprofits K. Other (*please specify*)	Exemptions are discussed in section 4.4 of the draft report.		
Discounts	A. No exemptions B. State-owned roads C. City-owned roads D. City-owned properties E. Low-income F. Senior citizens G. Educational institutions H. Faith based organizations I. Health care institutions J. Nonprofits K. Other (*please specify*)	Discounts are discussed in section 4.5 of the draft report.		

Table 2: Credit System Set Up

Considerations	Options	More Information	Preferred Option(s)	Comments
Property Types Eligible to Receive Credits	A. All property owners B. Only single family residential property owners C. Only non-single family residential property owners	Credits are discussed in section 4.7 of the draft report. The potential benefit of credits for a site-specific property in Dover using a modified version of the Portland, ME Stormwater Utility Credit Policy was explored through this handout provided to the Committee during the meeting on September 27, 2021. Tighe & Bond conducted a New England Stormwater Utility Survey as part of Concord's Stormwater Utility Feasibility Study. See Appendix A (pg. 44) for an overview of the various credit systems municipalities have implemented.		
Maximum Fee Reductions	A. 25% B. 50% C. 75% D. 100%			
Qualifying Stormwater Management Actions	A. Water quality management actions B. Water quantity management actions C. Education on stormwater and flood resilience (*these credits are typically reserved for academic institutions*)			

COMPILED RESPONSES TO HOMEWORK ASSIGNED ON OCTOBER 29, 2021

Yellow highlight: Options that received a majority of respondent votes

Utility Set Up Considerations – Number of respondents: 9

Considerations	Options	Committee Member "Votes"
Single Family Residential (SFR) Fee Structure	A. Flat fee	2
	B. Tiered fee	1
	C. Proportional fee	6
Non-Single Family Residential (NSFR) Fee Structure	D. Flat fee	0
	E. Tiered fee	1
	F. Proportional fee	8
Exemptions	A. No exemptions	6
	B. State-owned roads	2
	C. City-owned roads	3
	D. City-owned properties	2
	E. Low-income	1
	F. Senior citizens	1
	G. Educational institutions	0
	H. Faith based organizations	0
	I. Health care institutions	0
	J. Nonprofits	0
Discounts	A. No discounts	2
	B. State-owned roads	0
	C. City-owned roads	0
	D. City-owned properties	0
	E. Low-income	6
	F. Senior citizens	3
	G. Educational institutions	2
	H. Faith based organizations	1
	I. Health care institutions	1
	J. Nonprofits	1

Credit System Set Up – Number of respondents: 8

Considerations	Options	Committee Member "Votes"
Property Types Eligible to Receive Credits	A. All properties	7
	B. Only SFR properties	1
	C. Only NSFR properties	0
Maximum Fee Reductions	A. 25%	1
	B. 50%	3
	C. 75%	2
	D. 100%	2
Qualifying Stormwater Management Actions	A. Water quality actions	8
	B. Water quantity actions	8
	C. Education on stormwater and flood resilience	3