GAINING PUBLIC SUPPORT WITH YOUR STORMWATER UTILITY: THE CITY OF DOVER



October 5, 2022

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City of Dover, NH

Approx. 33,000 people and quickly growing

29 square miles

Served by a single WWTF

Bordered to the south by the Great Bay and brackish rivers

Freshwater rivers, streams, brooks and wetlands throughout

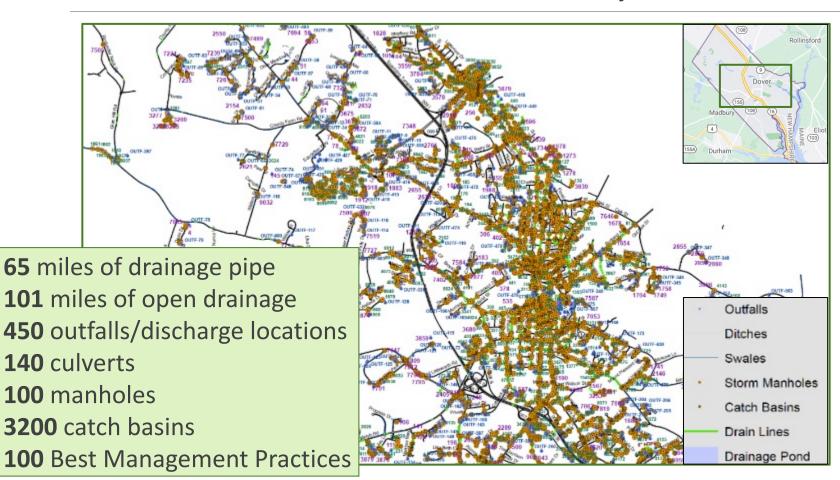


City of Dover, NH





Dover's Stormwater System



Unavoidable Increases in Cost

Increasing Development

- Dover is one of NH's fastest growing cities
- New buildings and parking lots prevent infiltration of stormwater
- Can cause increases in flooding and water pollution

Aging Infrastructure

- 25% of drain pipes in downtown have a moderate to high likelihood of failure
- Older pipes are not sized to handle stormwater volumes from current or future storms









Increasing Flood Risk

Past Flood Events

- 2006 Mother's Day Flood
- 2007 Patriot's Day Flood

Two 100-year flood events within 11 months

Future Impacts

- New Hampshire Coastal Flood Risk Summary, Part II: Guidance (2020)
 recommends planning for at least a 15% increase in extreme
 precipitation and 2.9-6.2 ft. of sea-level rise by 2100
- Funding is needed to retrofit infrastructure to handle changing conditions









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

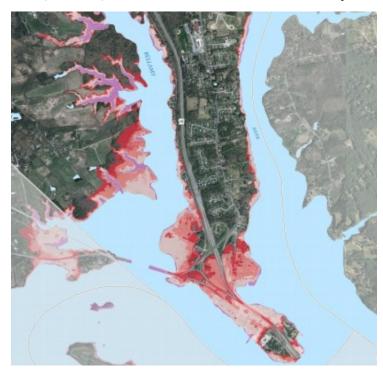
Sea-Level Rise Scenarios:

1.7, 4.0, and 6.3 ft.



Sea-Level Rise + Storm Surge:

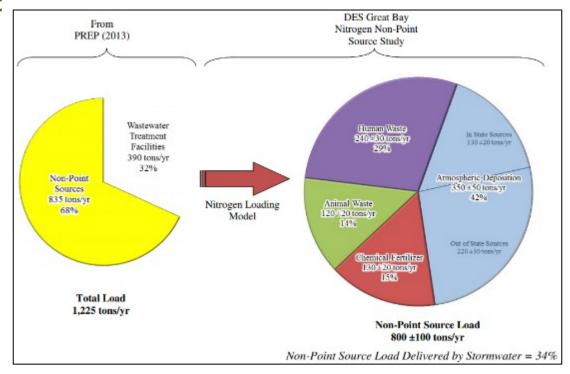
1.7, 4.0, and 6.3 ft. + 100-yr storm



New Regulatory Requirements

EPA Great Bay Total Nitrogen General Permit

- City must reduce nitrogen loading into Great Bay
- City must increase investment in stormwater treatment
- Compliance may require nitrogen reductions from private property



Competing Funding Needs

Dover residents urge school budget restraint

\$15.2M proposed for Dover capital projects



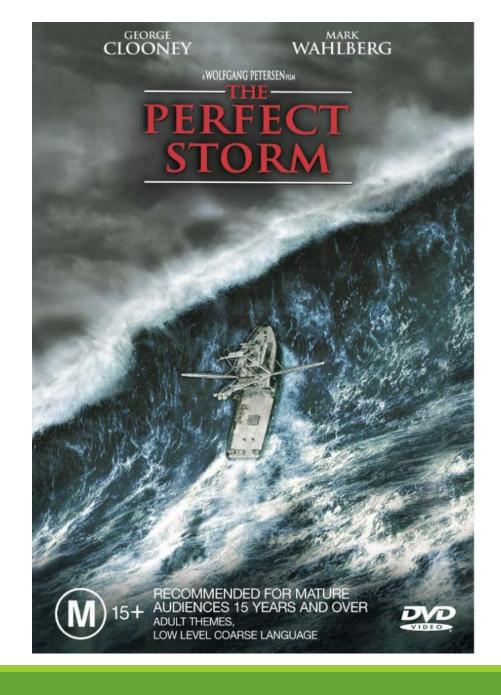
E BUY PHOTO

HIDE CAPTION

Members of the Dover City Council and Planning Board meeting for a workshop Wednesday for the unveiling of the fiscal year 2020 Capital Improvement Program, which kicks off the 2020 budget season. [Brian Early/Fosters.com]

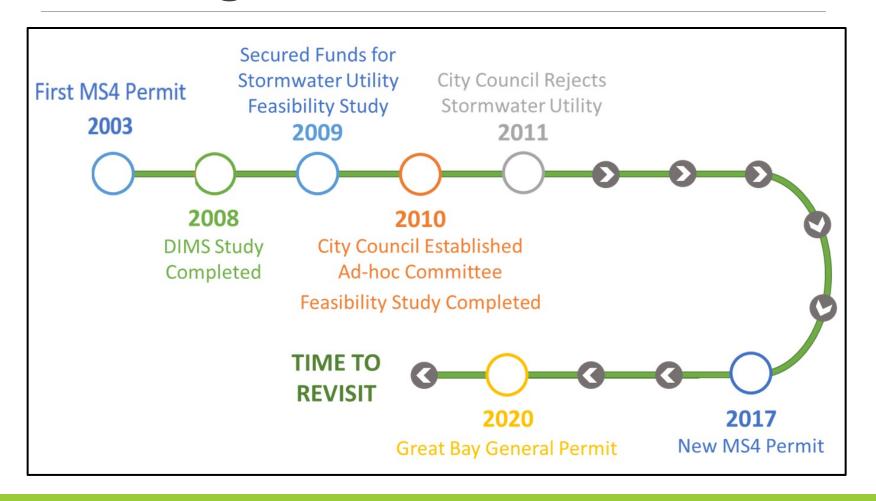


the School Board Tuesday night to help keep the city budget under the tax cap, questioining the need the new budget. [Image from video via city of Dover]





Building on Previous Efforts



5-Step Process

- Assess Funding Needs Related to Stormwater and Flood Resilience
 Know your current assets, future needs, and capital and operating budget
- 2 Create a Stormwater and Flood Resilience Funding Task Force Generate community and political support for funding solutions
- Consider Funding Strategies

 Evaluate funding options and establish criteria to choose the best option
- 4 Launch Stormwater and Flood Resilience Funding Program
 Establish a dedicated source of funding to support future needs
 - Post-Implementation Sustainability Measures

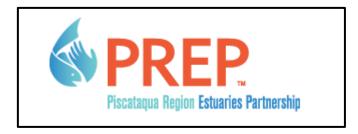
 Ensure ongoing transparency to the community

Dover Partnerships

NOVEMBER 2020: City Council establishes Dover's Ad Hoc Committee to Study Stormwater & Flood Resilience Funding











Stormwater & Flood Resilience Funding Ad Hoc Committee

An EXPLORATORY, STAKEHOLDER-DRIVEN process



The Right People at the Table

Diverse committee with 17 members representing various interests:

- Business representatives
- Developers
- Residential property owners
- Commercial property owners
- Tax-exempt property owners
- Environmental groups
- City Councilors
- City staff

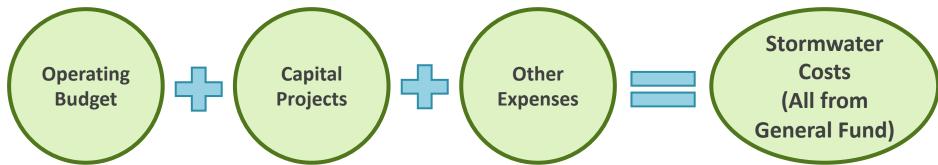


Committee Workplan

- 1. Overview of stormwater program and funding needs
- 2. Review funding options
- Narrow down the list and select the preferred funding option
 - Use shared values & homework assignments to come to consensus
- 4. Address technical, administrative, and logistical details of the preferred funding option

Expenses for Stormwater & Flood Resilience





Recent Operating Budget Trend



1

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	L,419,030	\$	877,000	\$ -	4,260,000	\$ 6	5,208,500
TOTAL	\$:	1,114,459	\$ 2	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)

Over \$5M in Deferred Projects

Project	Description	Estimated Cost			
Piscataqua and Rabbit Road	Piscataqua Rd is a thoroughfare to Rte. 4 and				
Reconstruction	in need of repair. Rabbit Rd is a small road off	\$ 1,000,000			
	Piscataqua that needs improvements.				
	This road is a main artery in and out of the				
Atlantic Avenue Reconstruction	City. Reconstruction is to replace the major	\$ 1,500,000			
	drainage component of the road.				
	Several homes have major flooding during				
Old Colony Drainage	heavy rain events. New drainage would	\$ 75,000			
	resolve this problem.				
Outer Sixth Street Replace	Major overflows during heavy rain events.	\$ 1,000,000			
Bridge & Culvert	Replace bridge and raise the road.	\$ 1,000,000			
	Flooding occurs in this area due to the age of				
St. Thomas Street Drainage	the infrastructure. Needs new design and	\$ 1,800,000			
	reconstruction.				
	Gauges would be installed on bridges crossing	\$ 15,000			
Install River Gauges	major rivers to assist emergency personnel				
	during flooding events.	(per gauge)			
TOTAL Cost of Deferred Drain	TOTAL Cost of Deferred Drainage and Flood Resilience Projects				

^{*}Not an exhaustive list of deferred projects

Funding Options Considered

AN EXPLORATORY PROCESS WITH NO PREDETERMINED OUTCOME



General Fund/Property Tax

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

Advantages

- · Existing mechanism
- Simple to explain and administer

- 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

- 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

- 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

- 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

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

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

- 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 lowinterest loans when available
- One-time sources of funding

Advantages

 Allows City to complete projects sooner than revenue becomes available

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

Committee "Homework"

	PA	RT 1		PART 2					PA	RT 3
OPTION	PRIMARY	SUPPLEMENTAL	ADVANTAGES	DISADVANTAGES	s	A	F	E	CONCERNS	QUESTIONS
General Fund	V		- EMIER SELL TO TAX PAYERS - WILL CAPTURE MORE REVENUE ADJUSTARLE WORK/BUDGET	pproved		H	M	M	Possible, but unlikely, of funding commitment from City buyet	EQUITABLE VALUE UNCEPTRIN WITH "BONUS POINTS" ESTABLISHED
Stormwater Utility	V		COMM.TTED FUNDS	- prope Duernerd - Difficult "Ne" TAX " to sell - will be contained Time Consuming Bonus Inspectus	H	M	H	Μ	PANDORAS BOX	EDUTABLE VALUE UNCERTAIN WITHOUT RATIONAL NEXCS ESTAPLISHED
Fee-based (permit/planning fees, impact fees, investment fees, etc.)			" Found Money"	Unreliable, insufficient by itself	H	L	H	H		3
Public-Private Partnership			probably more efficient process than public work	OTHORN		2.	Н	н		
Grants, Loans, and Bonds		V	Nice Supplement. Found money	Unreliable, insufficient by itself	Н	L	Н	Н	2	

Committee "Homework"

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 <u>stormwater funding options matrix</u>. 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 <u>LOW, MEDIUM, or HIGH.</u> 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 <u>Benjamin.Sweeney@des.nh.gov</u> 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		DISCARD?			
OFTION	SECURE	ADEQUATE	FLEXIBLE	EQUITABLE	DISCARD:
1. General fund	Example: I rate the	Example: I rate the	Example: I rate the	Example: I rate the	
(funds raised by	General Fund's	General Fund's	General Fund's	General Fund's	
property taxes)	"security" as	"adequacy" as	"flexibility" as	"equitability" as	
	because	because	because	because	
	Secure as long as the				
	tax base is secure.	Yes	Yes, as it is controlled	Not entirely as some	
			by City Council on	taxpayers may not	
			advice of staff	make any contribution	
				to the need for storm	
				water control	

Committee "Homework"

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 Ut	Jp
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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	FLAT FEE	Fair for all. Zasy to Abminister.
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	TIERED FEE	Large Commercial Properties already pay enormous properties. It is equitable the this edded tax is thered
Exemptions	A. No exemptions B. State-owned roads C. City-owned properties E. Low-income F. Senior citizens G. Educational institutions H. Faith based organizations J. Nonprofits K. Other (please specify)	Exemptions are discussed in section 4.4 of the <u>draft report</u> .	A - NO EXEMPTIONS	Simplifies administrated which will reduce cost cost sounds goes town Foxing problem. Easy to detend as
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 <u>draft report</u> .	A-No EXEMPTIONS	Simplifies administrate Sauss Cost Equitable

Compiled Responses

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

ublic 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?

COMPILED RESPONSES TO HOMEWORK ASSIGNED DURING MAY 24, 2021 COMMITTEE MEETING

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		

te i	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?

Meeting #10 Deeper Dive into Utility

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	Fee per ERU
		per month*	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) +	\$2.5M	\$11.28	\$135.32
Set-aside for Flood Resilience Projects (\$500k)			
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.

Evaluating Example Properties: Single Family Residential



- 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: \$113
- Estimated taxable value: \$308,500
- Estimated annual portion of property taxes to fund \$3.5 million Stormwater Program: \$216

Evaluating Example Properties: Car Dealership



- 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: \$4,733
- Estimated taxable value: \$4,601,800
- Estimated annual portion of property taxes to fund \$3.5 million Stormwater Program: \$3,242

Evaluating Example Properties: Downtown Commercial

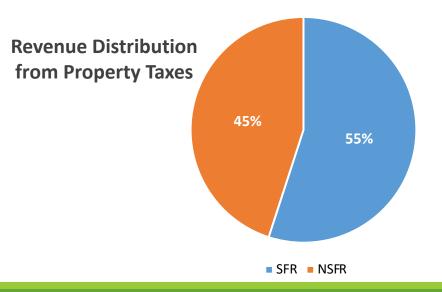


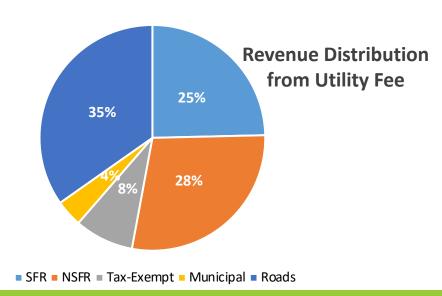
- Estimated total impervious area: 9,510 sq. ft.
- Total ERUs = 9,510 sq. ft./3,430 sq. ft. = 2.77, rounded to the nearest integer = 3 ERUs
- Estimated annual utility fee to fund \$3.5 million Stormwater Program: \$338
- Estimated taxable value: \$2,915,200
- Estimated annual portion of property taxes to fund \$3.5 million Stormwater Program: \$2,054

Cost Distribution

More Equitable Distribution of Costs

- Property owners currently pay based on tax valuation instead of how much stormwater runoff they generate
- Tax-exempt properties would help to fund the Stormwater Program
- Utility based funding for the Stormwater Program will make more General Fund revenue available for other needs





Committee Recommendations

UNANIMOUS SUPPORT for the recommendation of a stormwater and flood resilience utility



That's unanimous then

Ad-Hoc Committee's vision for a Stormwater & Flood Resilience Utility

- Similar to water and sewer utilities
- User fees charged to property owners based on total square feet of impervious area (rooftops, driveways, sidewalks, roads, etc.)
- Revenue generated goes into an enterprise fund, separate rom the General Fund
- Revenue can ONLY be used for stormwater and flood resilience activities

Ad-Hoc Committee's vision for a Credit System

Credits must be offered to allow reductions of a property owner's rate

The Committee recommends considering the following types of credits:

- Performance-based: on-site reductions of stormwater runoff volume and/or pollutants
 - Drywells
 - Infiltration chambers
 - Permeable pavers
 - Rain gardens
 - Other types of green infrastructure improvements
- Social equity: based on existing property tax relief programs
 - Low-income and affordable housing
 - Elderly/Senior citizens
 - Veterans
 - Disability
 - Blind/Deaf
 - Tax-exempt/Nonprofit

City Council Approval

FEBRUARY 2, 2022: City Council voted 6-3 in favor of accepting the Committee's recommendations

 Staff have been directed to begin outreach, finalize impervious area analysis, and develop the credit system

No commitment has been made to adopt a utility yet

- The Ordinance Committee must review and approve first
- City Council will hold another vote to adopt the utility once public outreach has been completed

Next Steps

Convene Project Team and Key Stakeholders

Secure Funding Through NHDES Grant/Loan Programs

Public Outreach and Education

- Develop and implement public outreach plan (9-12 month process)
- Allow the public to shape the structure of the utility
- Learn from similar (successful or not) outreach efforts

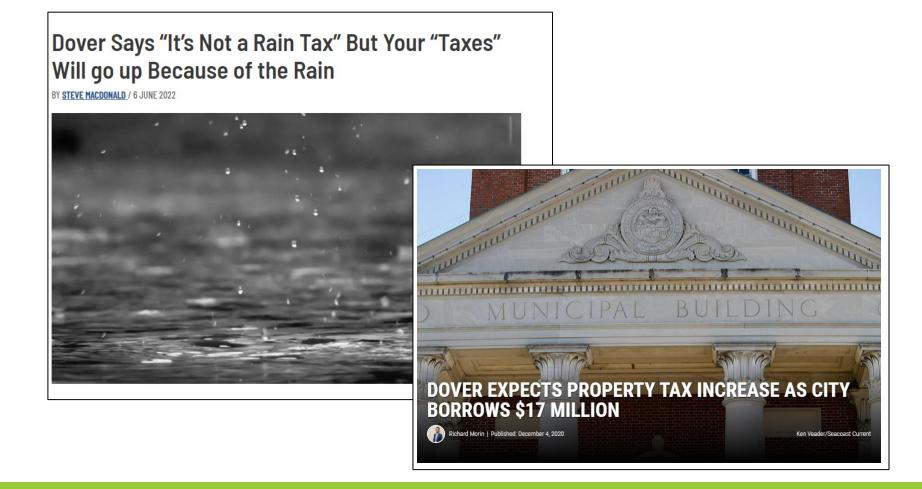
Technical Elements

- Develop the credit system
- Finalize impervious area analysis and calculate individual fees

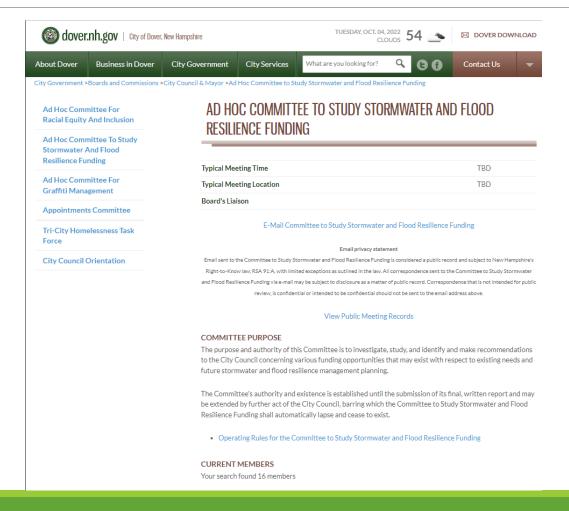
Administrative & Logistical Elements

- Determine billing process
- Identify customer service and other staffing needs

More Hurdles



More Info





THANK YOU!

Gretchen Young, PE
City of Dover, NH
G.Young@dover.nh.gov



