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RAFTELIS

WATER POLLUTION AND FLOOD REDUCTION STUDY: MEETING #3

March 30, 2023

AGENDA

- Introductions
- In the News
- Key Takeaways from Meeting #2
- Land Use and Impervious Cover Assessment
- Funding Alternatives
- Discussion
- Next Steps

IN THE NEWS

Petition to the U.S. Environmental Protection Agency to Exercise Residual Designation Authority Over Stormwater Discharges Contributing to Violations of Water Quality Standards in the Great Bay Estuary Watershed[1]

"[T]he eutrophic cycle is self-reinforcing and any delay could mean the difference between potential recovery or collapse of the [Great Bay estuary] ecosystem . . . ."

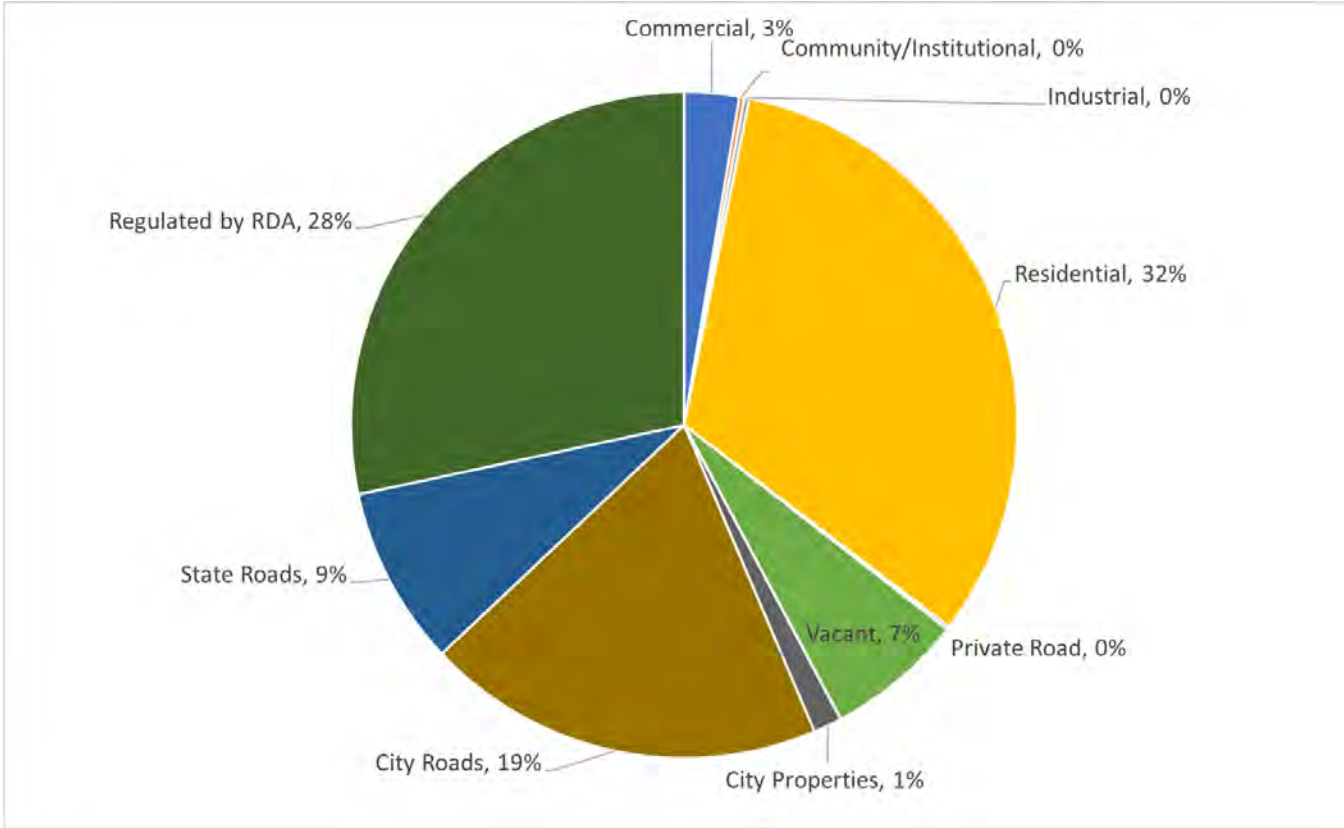
"[W]hat is certain is that large amounts of nitrogen contribute to water quality impairments throughout the Great Bay estuary, which is consistent with EPA's judgment that these waters have reached their assimilative capacity for nitrogen."

-U.S. EPA, November 24, 2020, Response to Comments for Great Bay Total Nitrogen Permit

Pursuant to 40 C.F.R. § 122.26(f)(2), Conservation Law Foundation ("CLF") hereby petitions the U.S. Environmental Protection Agency ("EPA") to exercise residual designation authority ("RDA") under 40 C.F.R. § 122.26(a)(9)(i)(D) to regulate under the National Pollutant Discharge Elimination ("NPDES") permitting program the following categories of unpermitted discharges located in the New Hampshire portion of the Great Bay estuary watershed, on the ground that they are contributing to violations of state water quality standards in the estuary: (1) non-*de minimis* stormwater discharges from commercial, industrial, and institutional properties located in communities regulated under the New Hampshire Small Municipal Separate Storm Sewer System ("MS4") General Permit[2] and having 0.75 acres or more of impervious cover, and (2) non-*de minimis* discharges from commercial, industrial, and institutional properties located in

IN THE NEWS

- Applicable to:
  - 88% of Commercial Impervious Area (32% parcels)
  - 91% of Community/Institutional Impervious Area (54% parcels)
  - 96% of Industrial Impervious Area (67% of parcels)



IN THE NEWS

LOCAL

CLF asks EPA to regulate stormwater runoff into Great Bay. Dover and Portsmouth object.

Jeff McMenemy Portsmouth Herald

Published 5:02 a.m. ET March 11, 2023

View Comments

PORTSMOUTH — A new effort by the Conservation Law Foundation to persuade federal environmental officials to increase regulations on stormwater runoff to prevent pollution in Great Bay could mean additional costs for area businesses.

Stormwater pollution occurs when rainwater or melting snow runs across parking lots, roads or rooftops, picking up pollutants along the way.

The CLF filed a petition with the Environmental Protection Agency in mid-February asking it to use its powers under the Clean Water Act — known as Residual Designation Authority (RDA) — to regulate stormwater runoff from large commercial, industrial and institutional properties in the Great Bay watershed.

KEY TAKEAWAYS FROM MEETING #2

- Public knowledge about stormwater is limited
  - Need to invest time in education of City Council and property owners
- Reviewed City stormwater/drainage budget ($1.7M)
- Residential and Commercial land uses have greatest amount of impervious area in City
  - What percentage of impervious cover is owned/maintained by the City including roads?
- To support the full stormwater/drainage budget, the annual fee for a single-family resident would be $64.44 ($5.37/month)
- Need more information on billing and enforcement for properties that are not serviced by City water or sewer
- Need a more accurate way to estimate stormwater budget

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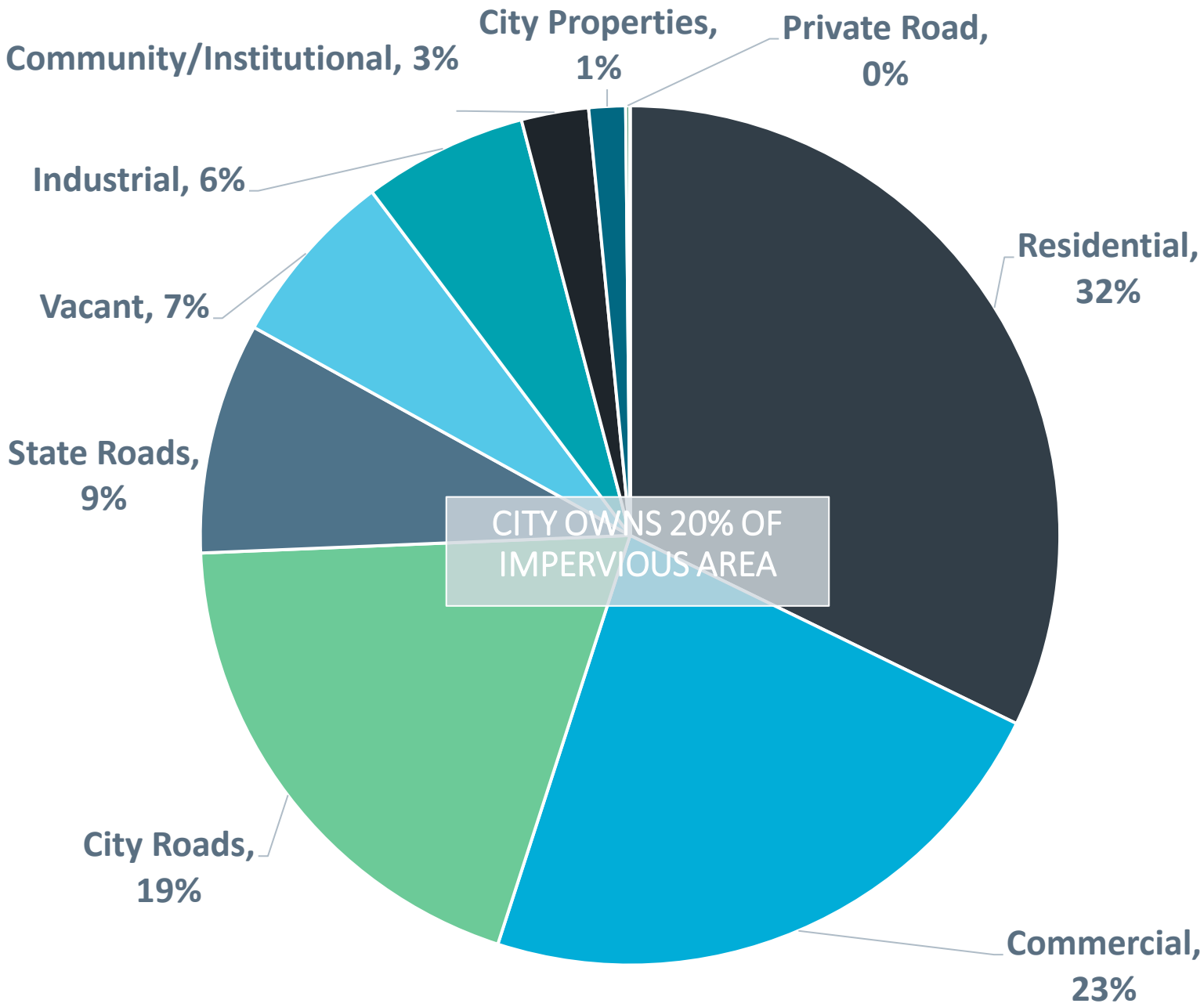
IMPERVIOUS AREA ASSESSMENT



IMPERVIOUS AREA BY PROPERTY TYPE

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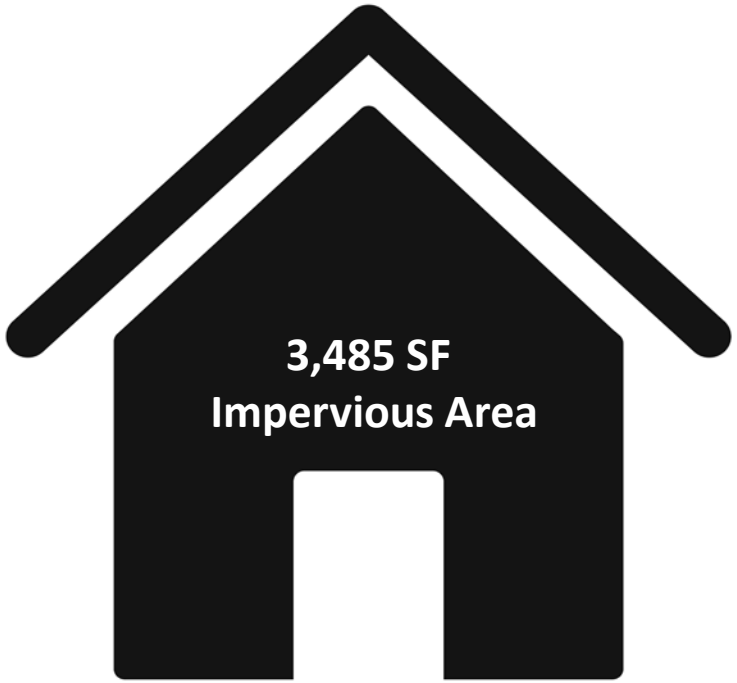
LAND USE AND IMPERVIOUS AREA ASSESSMENT

Parcel Type	# of Parcels	Total IA* (Acres)	Avg. IA per parcel (Sq. Ft.)	Median IA per parcel (Sq. Ft.)
Commercial	438	700	69,651	17,701
Community/Institutional	52	78	65,203	36,588
Duplex	508	51	4,345	3,653
Industrial	75	190	110,467	58,614
Multi-Family	1,157	201	7,572	731
Road (Private)	4	5	50,250	53,364
Single Family	9,062	725	3,485	2,640
Triplex	134	14	4,620	4,269
Undeveloped	10	0	1,299	387
Vacant	1,199	206	7,490	-
Water	33	0	182	-
City Properties	162	42	11,397	
City Roads	-	596	-	-
State Roads	-	268	-	-
TOTAL	**12,834**	**3,076**		

**IA = Impervious Area*

FUNDING ALTERNATIVES

Average Single-Family Home



Equivalent Residential Unit (ERU)

- 1 ERU – all single-family parcels up to 3 units (duplexes and triplexes)
- All non-single-family parcels (NSFP) would be assessed an amount of ERUs based on the parcels total impervious area

Example:

Commercial Parcel: 17,701 sf of impervious area

$$\text{No. of ERUs} = \frac{17{,}701 \text{ sf IA}}{3{,}485 \text{ sf}} = 5 \text{ ERUs}$$

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ESTIMATED ANNUAL REVENUE REQUIREMENTS

$350,627
(20% of total budget)

Expenditure Category	Existing	Additions	Total
Salaries and Benefits	$505,615	-	$505,615
Operations and Maintenance	$53,810	-	$53,810
Vehicles and Equipment	$105,341	-	$105,341
MS4 Compliance	$181,938	$238,000	$419,938
GBTN GP Compliance [(a)]	-	$61,932	$61,932
Drainage CIP Projects	$606,500	-	$606,500
Total Annual Cost	**$1,453,203**	**$299,932**	**$1,753,135**

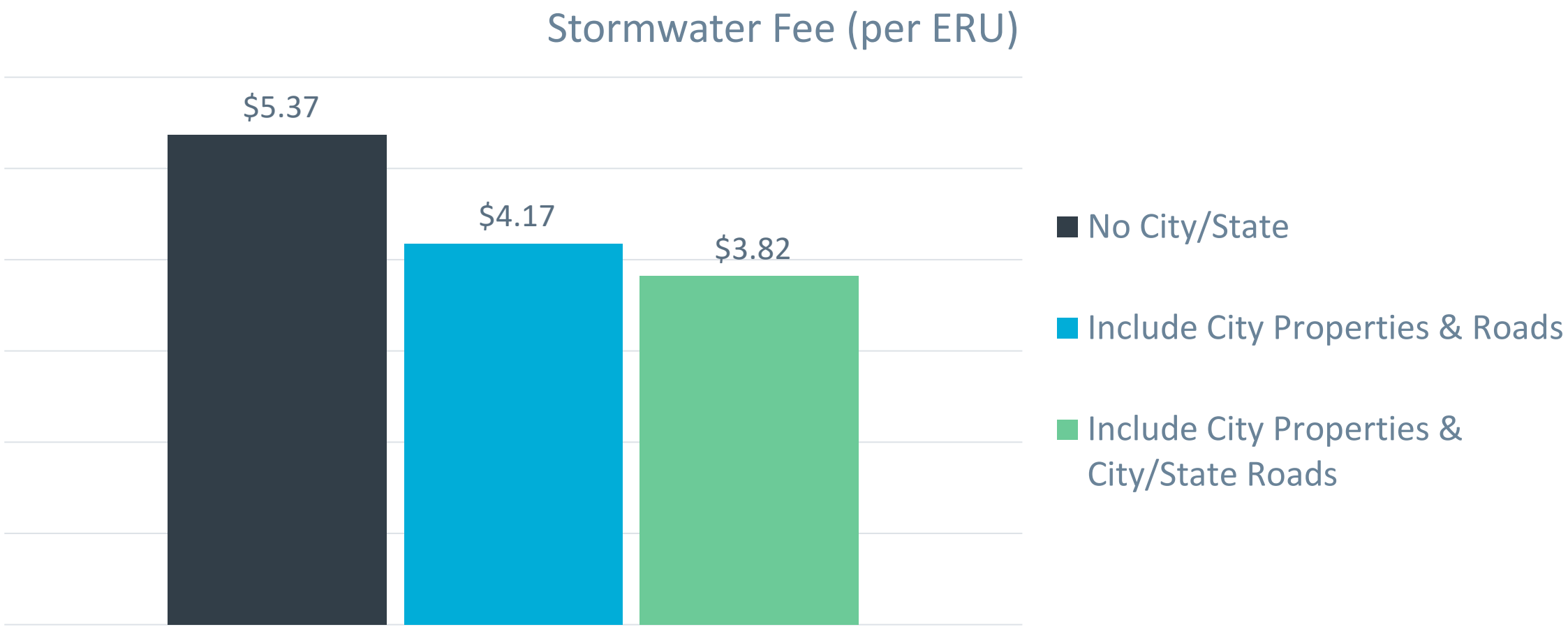
(a) Previously funding 100% by sewer, proposed 50/50 split

CREATE SEPARATE STORMWATER DIVISION/FUND

- Proposal to set up a special revenue fund in FY24
  - Existing allocated funding would be routed from General Fund
  - Create a stormwater division under Public Works Department (like water and sewer)

ADVANTAGES	DISADVANTAGES
• Non-lapsing fund (unspent dollars rollover to next year) • Improved tracking of stormwater costs	• Budget requires annual approval from City Council • 100% funded through general fund revenue

IMPACT OF ADDITIONAL IMPERVIOUS AREA



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FUNDING ALTERNATIVES

FUNDING ALTERNATIVES

- General Fund
- Stormwater User Fee
- Other Fee Mechanisms
- Public-Private Partnerships
- Village Districts
- Grants, Loans, and Bonds

GENERAL FUND

Property tax revenue is the greatest contributor to the General Fund. Current stormwater costs rely on this revenue source.

ADVANTAGES	DISADVANTAGES
• General governmental revenue source – includes all taxable properties • Appropriations specific to program activity • Can accommodate one-time costs • Has capacity to fund entire stormwater program	• Generally not dedicated for long-term use: unless a program is established by governing body • Tax-based budgets are subject to reallocation • Taxes have no relationship to stormwater service and facility demands • Generally not adequate to sustain multi-year funding for infrastructure projects

STORMWATER USER FEE

A stormwater user fee could be established to recover all, or a portion, of annual stormwater revenue requirements.

ADVANTAGES	DISADVANTAGES
• Dedicated funding source (no competing needs) • Allows for more robust and flexible financial planning, leading to sustainable long-term funding source for operational and capital needs • Stronger relationship to stormwater service and facility demands than property taxes	• Customer impacts due to the establishment of a new cost recovery mechanism • More comprehensive customer outreach and communication is required • Bill pay enforcement issues • Risk of legal challenge

OTHER FEE MECHANISMS

Use of plan review fees, permit fees, inspection fees, and impact fees to offset related administrative and operational costs.

ADVANTAGES	DISADVANTAGES
• Direct allocation for service provided • Regulatory enforcement tool	• Variable level of annual funding – function of economy/development • Insufficient funding to support entire stormwater program cost • Typically can not support post-construction operation and maintenance

COMMUNITY BASED PUBLIC PRIVATE PARTNERSHIPS

A performance-based partnership between a local government and a private entity that exists to build and upgrade critical infrastructure. The local government determines the performance requirements based on the community's goals and objectives. The private entity acts as the single point of accountability to deliver performance requirements by awarding programmatic contracts to local, small, and minority contractors. The goal of a community-based partnership is to keep program dollars local and empower small and minority owned businesses. Projects can be delivered faster and at a lower cost, contributing to a more equitable future for the community.

ADVANTAGES

- Accelerates implementation of water quality treatment practices
- Reduces costs of retrofits
- Faster project delivery
- Engagement with the private sector/private property owners
- Project risk is transferred from municipality to private sector
- Leverage innovative design and construction techniques

DISADVANTAGES

- New practice, not widely used yet in United States (California, Chesapeake Bay)
- Sometimes have higher financing costs
- Procurement process can be complex
- Agreements may limit flexibility

FEDERAL AND STATE FUNDING (GRANTS AND LOANS)

Grants may be used to pay all the costs of a project or may be a cost share mechanism that requires some level of local participation, or "match." The local match may be hard dollars or soft match, such as the fair market value of in-kind services such as staff time, facilities, or other resources. City frequently pursues grants and loans through Clean Water State Revolving Fund and New Hampshire Department of Environmental Services.

ADVANTAGES	DISADVANTAGES
• Existing sources available for supplemental stormwater related funding • Can support construction ready projects • Low-cost loans	• One-time source of funding • Typically, project-specific funding • May not support funding of all aspects of project (planning, design, construction, maintenance) • Administrative requirements are time consuming • Opportunities can be very limited • Timing rarely coincides with priorities • Many grants cannot be used for NPDES compliance

GENERAL OBLIGATION BONDS

Bonding is not a revenue source but a borrowing mechanism. Using bonds funding for major capital improvements may be expedited relative to procuring funds through the annual budget process. Many communities prefer not to incur long-term debt if it can be avoided and will utilize pay as you go financing for all capital improvement projects, or they will use a combination of bonding and pay as you go to limit the amount of long-term debt.

ADVANTAGES	DISADVANTAGES
• Allows spending for projects sooner than would otherwise be possible • Flexibility in design of debt service	• Recurring bonds add to debt service fees and could weaken credit rating • Restriction on use or reallocation of funds

FEASIBILITY STUDY

- Serve as the business plan
  - Recommend establishing a Stormwater Division
  - Recommend a dedicated fund to track spending
  - Recommend robust public outreach and education campaign
- Identify program goals
- Strategy for achieving the goals over a realistic timeframe
- Identification of stormwater management needs
  - Update based on new NPDES permit
- Type and magnitude of costs required
- Resource requirements
- Timing considerations for implementation

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QUESTIONS

NEXT STEPS

Begin writing up feasibility study

Presentation to City Council (date, timing)

Next meeting