


City of Dover, NH Municipal Stormwater Utility Feasibility Study

*City Council Workshop
January 5, 2011*



What did we recommend?

- The Feasibility Study Committee Recommends the formation of a stormwater utility for Dover
- Fee for Single Family home (if implemented per recommendation): \$7.10/month; remove this infrastructure expense from property tax rolls

Why should we care?

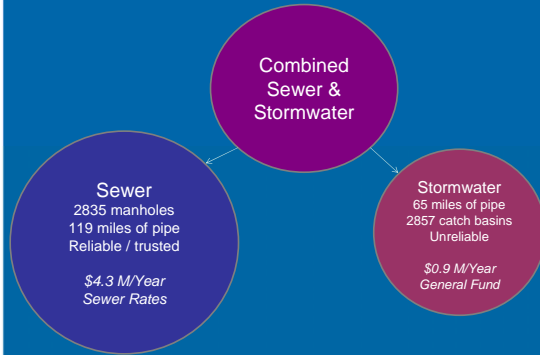
We Care Where The Water Goes	We Care How Much It Costs
<ul style="list-style-type: none"> •We want water in the pipes – not our basements •We want flowing water in the rivers – not stagnating in our yards •We want water levels to stay where man and nature try to balance them...with a little more input from man •Stormwater impacts our water quality 	<ul style="list-style-type: none"> •Repairing flooding damage is expensive – both for the city and the homeowner •Responding to flooding emergencies is expensive for the taxpayer •Ignoring is very expensive: EPA fines can run as high as \$50,000 per day

Thinking Long-Term

- Water quality regulation is coming
 - 65% of nutrient loading from nonpoint sources
 - Upcoming permit revision includes water quality monitoring
- EPA is expected to require stormwater treatment in a future permit

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Historical Context

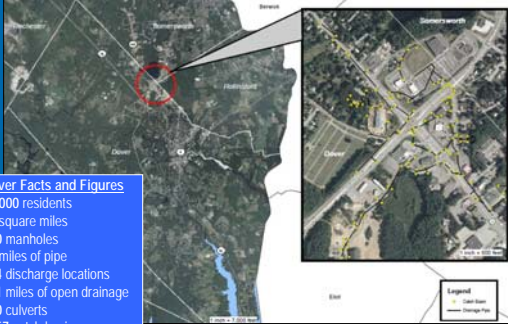


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Why reinvest in the system?



Dover Manages an Extensive System of Stormwater Infrastructure



Dover Facts and Figures

- 29,000 residents
- 29 square miles
- 650 manholes
- 65 miles of pipe
- 204 discharge locations
- 101 miles of open drainage
- 140 culverts
- 2857 catch basins

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Wait, why is the EPA involved?

- The city currently spends ~\$900,000/year in operating and maintaining the stormwater system
- EPA is mandating changes to our water management that will increase these costs by about 25%, bringing the total expense to ~\$1.2 million per year – 100% of which is paid for by Dover property taxes
- Ultimate \$2M level includes reinvestment

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Ad-Hoc Stormwater Committee

Appointed Members

- Jan Nedelka (Chairperson)
- Dorothea Hooper (Vice Chairperson)
- Chad Kageleiry
- Jay Stephens
- Dana Lynch
- Gary Green
- Raymond H. Bardwell
- Chris Nash
- Dennis Ciotti



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Committee Task

- Is there an alternative to paying out of the tax base?
- Yes – establish a utility
 - There is a great deal of flexibility within utility rates to determine what fees will be charged and why

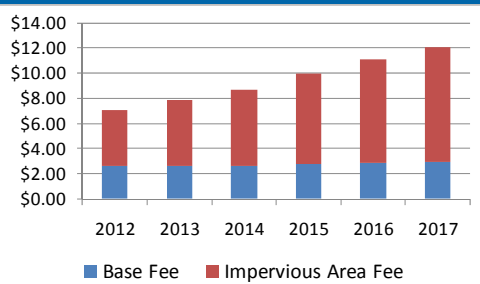
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Stormwater Utilities in NH

- Enabling Legislation
 - Fairly new
 - Not complicated (revised existing sewer legislation to include stormwater)
- Grant from the NH Department of Environmental Services
- Three other communities investigating stormwater utilities:
 - Manchester
 - Nashua
 - Portsmouth

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Recommended Rate

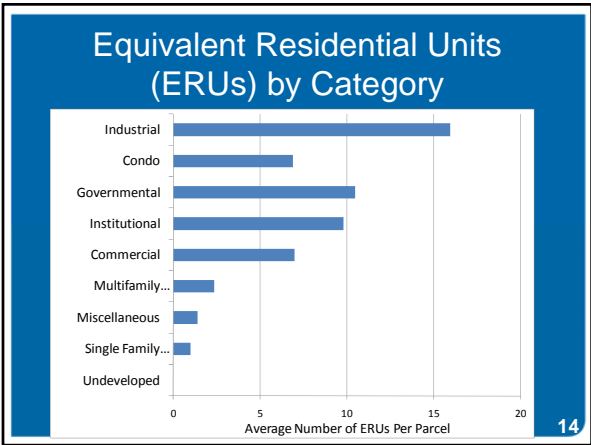


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Alternative Rate Methods Considered

Impervious Area	Impervious Area + Gross Area	Intensity of Development
<ul style="list-style-type: none"> Charge based on impervious area only 	<ul style="list-style-type: none"> Charge based on impervious area and a lesser charge for gross area 	<ul style="list-style-type: none"> Charge based on intensity of development (recognize green space)

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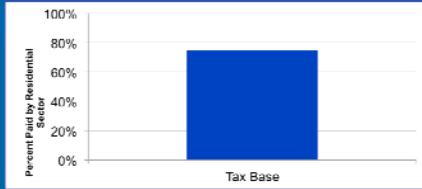
Base Fee and Roads

- Stormwater is a community issue, and roads are a community good
 - Roads account for approximately 25% of the impervious area in Dover
- Base fee includes
 - About 50% of the impervious contribution from roads
 - Utility administrative functions

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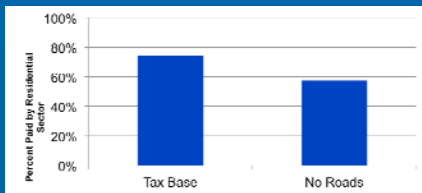
Residential Share of Payments

Today: 74%



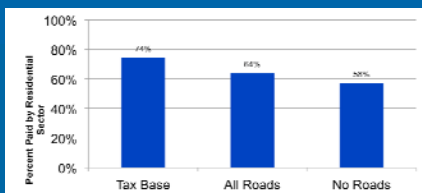
Residential Share of Payments

Impervious Area ONLY: 58%



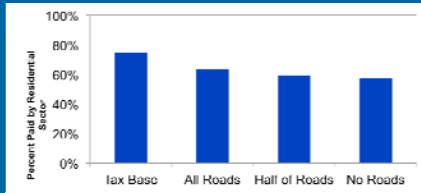
Residential Share of Payments

Add Roads: 64%



Residential Share of Payments

Only include half the roads:60%



Credits

- Residential and non-residential properties eligible for credits for:
 - Water Quality Improvement: credit for reducing loading or concentration of pollutants
 - Non-Structural Treatment: credit granted for non-structural volume and velocity reductions
- Details to be developed by DUC

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Summary of Recommendations

Rec. 1	Rec. 2	Rec. 3	Rec. 4	Rec. 5
Establish Utility as Funding Mechanism & Capture Offset to General Fund	Structure Utility Rates to Generate Approx. \$2.0 M / Year in Revenue	Structure Fee on Impervious Area, with a Base Charge and Credit Scheme	Bill User Fee with Water and Sewer	Phase in User Fee Over a Six-Year Period to Minimize Impact and Allow for Outreach

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Implementation Steps

1. Prepare and Adopt Utility Formation Ordinance
2. Assemble Committee to Advise on Program Implementation
3. Implement Public Outreach Campaign
4. Develop Formal Financial and Rate Policies and Procedures

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Implementation Steps

5. Refine Financial Plan
6. Develop a Credit Manual with DUC Involvement
7. Develop Billing Policies and Procedures
8. Rate Structure Adopted by DUC
9. Integrate Water, Sewer, and Stormwater Billing



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Questions?



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Extra Slides

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Penalties for Noncompliance - 40 CFR 122.41

Negligent Violations

- Any person who violates any permit condition or limitation or requirement faces:
 - Civil penalties up to \$25,000 per day for each violation
 - Criminal penalties of \$2,500 to \$25,000 per day, imprisonment of up to 1 year, or both
 - Subsequent convictions: criminal penalties of up to \$50,000 per day of violation, imprisonment of up to 2 years, or both

Known Violations

- Criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for up to 3 years, or both
- Subsequent conviction: criminal penalties of up to \$100,000 per day of violation, or imprisonment of up to 6 years, or both

Known violation with risk of imminent danger, death, or serious injury:

- Fine of up to \$250,000 or imprisonment of up to 15 years, or both
- Subsequent conviction: fine of up to \$500,000, imprisonment of up to 30 years, or both

Organization violating the imminent danger provision

- Fine of up to \$1,000,000, \$2,000,000 for subsequent convictions

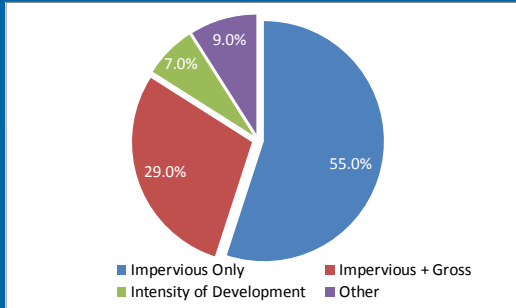
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Future Funding Needs

Budget Item	2011	2012	2013	2014	2015	2016
Current Level of Service	\$900,116	\$900,116	\$900,116	\$900,116	\$900,116	\$900,116
Catch Basin Spoils Facility	\$30,000	\$150,000				
NPDES Permit Compliance	\$136,000	\$192,000	\$191,000	\$231,000	\$281,000	\$281,000
Spoils Management & Disposal		\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Utility Implementation & Administration	\$80,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Needs Assessment	\$100,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Rehabilitation / replacement	\$686,400	\$686,400	\$686,400	\$686,400	\$686,400	\$686,400
Other Investments	\$67,484	\$6,484	\$157,484	\$117,484	\$67,484	\$67,484
TOTAL COST	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000

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Most Defensible Rate Structures Utilize Impervious Area



Impervious Area Includes:

- Private streets
- Rooftops
- Parking Areas
- Driveways
- Sidewalks
- Other hard surfaces



“Credits” May be Granted to Offset Costs

