

Stormwater & Flood Resilience Utility Study Update

August 21, 2023

Agenda

Recap

Credit Modifications

Outreach Update

Implementation & Administration

Draft Ordinance

Timeline & Next Steps



Recap

- Proposed fee structure is consistent with Legislation
- All costs for stormwater program to fund
 - operations
 - existing and anticipated debt
 - cash-funded capital
 - reserve
- Fee structure based on Equivalent Residential Unit at \$13.32 per ERU
- Annually generate ~ \$4.5 Million
- No exempt property types
- Credits offered to all developed property



Single Family Credits

Credit Type	Description	Minimum Requirements	Credit Amount
Dripline Infiltration Trench	A stone-filled trench under the roof dripline to collect water from a roof allowing it to soak into the ground.	Dripline infiltration trench that manages runoff from at least 50% of roof and designed in accordance with NHDES standards*	Up to 25% credit for impervious area managed
Driveway Infiltration Trench	A stone-filled trench on the edge of a driveway to collect water from the driveway, allowing it to soak into the ground.	Driveway infiltration trench that manages runoff from at least 50% of driveway and designed in accordance with NHDES standards*	Up to 25% credit for impervious area managed
Dry Well	A stone-filled hole in the ground that collects runoff from gutter downspouts, roof valleys, and other areas where water concentrates and flows.	Dry well system in good working order with minimum volume to infiltrate 1 inch or greater of stormwater runoff and designed in accordance with NHDES standards*	Up to 25% credit for impervious area managed
Porous Pavement, Patio, Walkway	Pavement, walkway and patios areas engineered with a stone-filled reservoir underneath designed to store and infiltrate water.	Removal of at least 400 sq. ft. of existing impervious area with replacement of engineered porous pavement, patio or walkway and designed in accordance with NHDES standards*	Up to 25% credit for impervious area managed
Rain Garden	An excavated depression with a flat-bottomed garden that uses soil and plants to capture, absorb and infiltrate stormwater.	Construction of rain garden with minimum size of 100 sq. ft. and designed in accordance with NHDES standards*	Up to 25% credit for impervious area managed
Vegetative Buffer	A vegetated area along a waterbody that stabilizes the shoreline and provides wildlife habitat and shade. Buffers help slow down and clean stormwater runoff.	Minimum buffer width of 25 feet and increasing width with greater slopes and designed in accordance with NHDES standards*	10% credit
Public Participation	Homeowners that participate in a public project within the City specifically targeted at improving water quality, such as trash clean-up, tree planting or other water quality related events.	Must be City organized or sanctioned event. One credit per household for year during event.	10% credit
Manage Offsite Stormwater	Credit for parcels that receive and manage offsite stormwater. Constructed, maintained and approved stormwater control system or best management practices consistent with design standards outlined in the NHDES Stormwater Manual.	Must maintain on-site stormwater facility that is maintained and fully functioning as designed and permitted that meets local design standards and regulations.	Up to 50% credit for management of offsite impervious area equivalent to or exceeding onsite impervious area
Intensity of Development	Credit for parcels with high ratio of pervious to impervious area	Minimum parcel size of 2 acres with impervious area making up no more than 10% of total parcel area, with impervious area disconnected from stormwater system	25% credit
Nitrogen Pledge	Credit for homeowners who pledge to not use lawn fertilizer or to only use slow-release organic nitrogen.	Pledge to not use lawn fertilizer or to only use slow-release organic nitrogen.	5% credit during year of pledge

*Outlined in NHDES guidance "Soak Up the Rain"

Eligibility

All parcels with 1,600 sq. ft. or greater of impervious area

Maximum Credit

Maximum credit of 100% for Stormwater BMP and Offsite Stormwater Management

Contact Us

Engineering

Environmental

Facilities, Grounds And Cemeteries

Fleet Services

Highway

Permitting

Projects

Solid Waste And Recycling

Stormwater Management

Utilities

Wastewater

Water Quality

STORMWATER MANAGEMENT

WHAT IS STORMWATER

Stormwater is a valuable resource as it replenishes our groundwater and surface waters and sustains our drinking water, recreational and aquatic resources. It is also essential for our natural environment, farming and landscaped areas.

But when not properly managed, it can contribute to increased flooding and poor water quality conditions. When rainwater falls on rooftops, pavement and other impervious surfaces, the rainwater is restricted from soaking into the ground and instead runs across the land quickly. This rapid flow and excess volume can overwhelm storm drains and streams, resulting in more frequent and increased flooding. Also, as runoff flows across the land, it picks up pollutants along the way and discharges them into adjacent water bodies.

According to water quality data collected and published by the NH Department of Environmental Services (NHDES), more than 80% of the water quality impairments in our lakes, rivers and streams are due at least in part to excess stormwater runoff.

IMPERVIOUS COVER

What happens when land becomes more impervious?

- Increased risk of flooding;
- More contaminants and nutrient wash into our waterways;
- Stormwater runoff has contributed to declining water quality in some of our most highly-valued water resources including Willand Pond and the Bellamy, Cochecho, and Isinglass rivers;
- These rivers all drain into the Great Bay Estuary, which is not only a major recreational asset for boating and anglers but supports a significant regional economic and ecological resource for commercial fisheries and aquaculture.

INCREASING REGULATIONS

Like other New Hampshire Communities, the City is faced with having to conduct more stormwater management activities to comply with two stormwater-related permits issued by the U.S Environmental Protection Agency (EPA).

Municipal Separate Storm Sewer System (MS4) Permit - initially released in 2003 and renewed in 2017 requires the following:

- A City Stormwater Management Plan and Operations and Maintenance Plan;
- More frequent catch basin cleaning and street sweeping;
- Inspections and sampling of all 450 outfalls;

Public Outreach

City Website

Online Storymap

Question Form

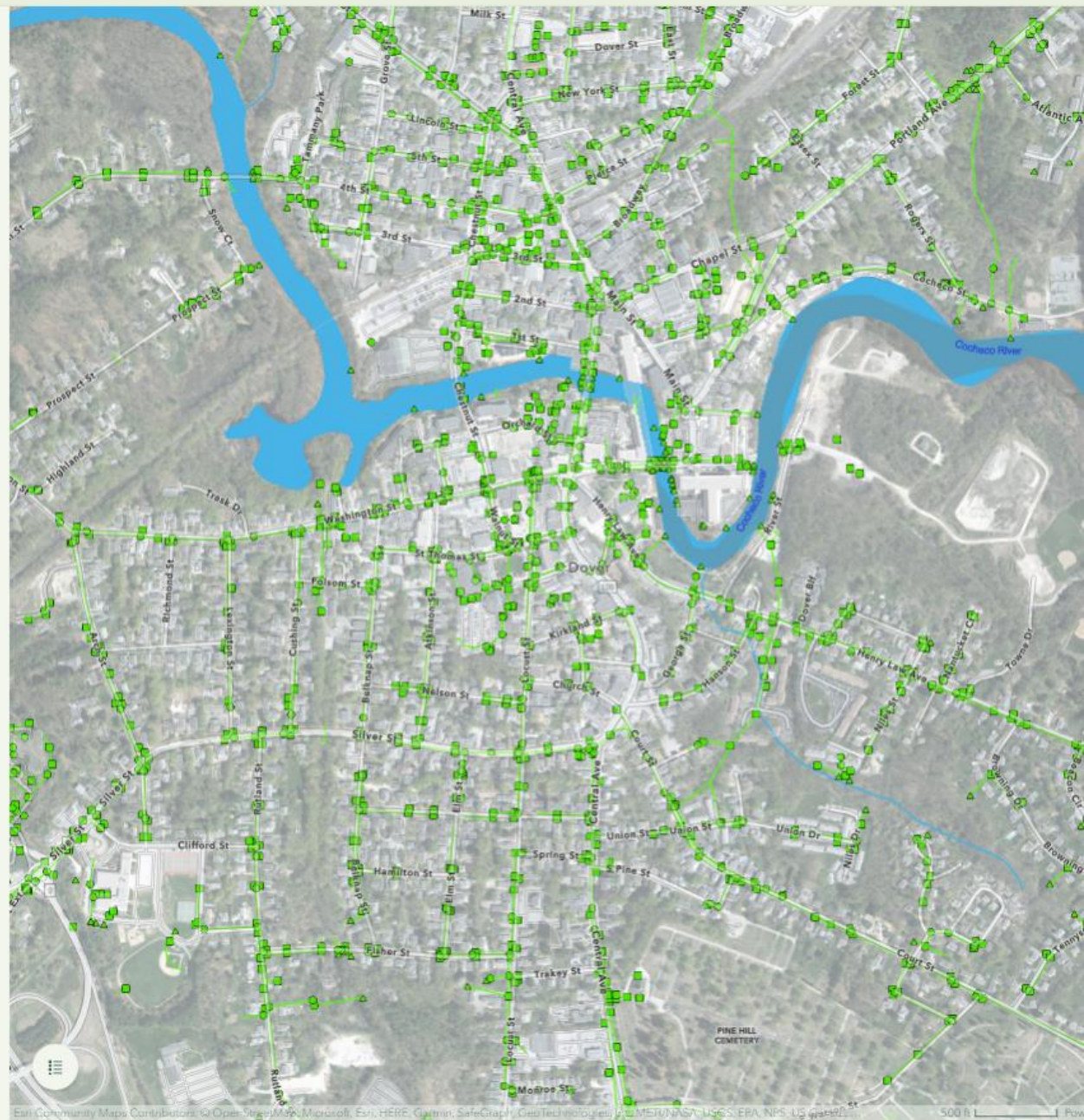
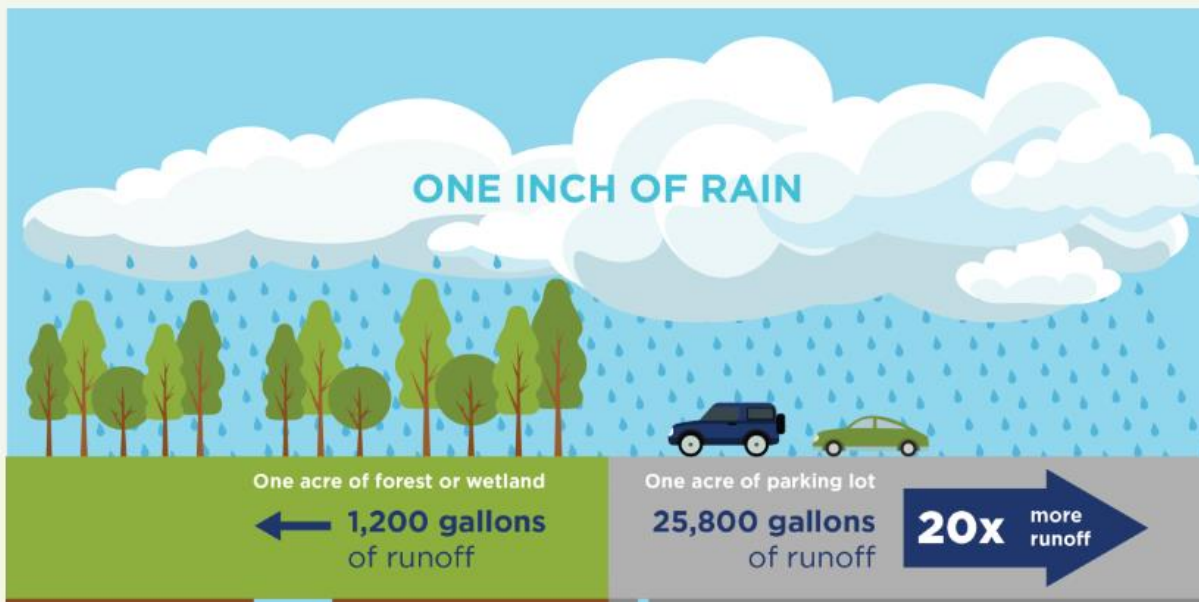
What is Stormwater?

Why is it so important to manage?

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How will Dover Benefit from a Stormwater and Flood Resilience Utility Program?



As the City continues to grow, City Council seeks to create a stormwater and flood resilience utility as a more sustainable and fairer way to fund the growing list of stormwater and flood resilience needs. The following provides information in response to frequently asked questions about the potential benefits of a proposed utility program and a basic comparative assessment using several property examples to show how an estimated utility fee would compare to the estimated property tax portion currently used to pay for annual stormwater and flood resilience costs. If enacted as currently envisioned, the utility would begin at the start of the 2025 fiscal year on July 1, 2024.

2nd Public Informational Workshop | Tuesday, October 17 | 5:30 pm

The City of Dover will host a Public Informational Workshop to discuss the proposed fee structure and various crediting options associated with a stormwater and flood resilience utility. The workshop will be held in **Room 305 of the McConnell Center** and will provide information about the proposed utility fee structure and available credit options followed by a breakout session to solicit public feedback on how best to implement it.

For additional updates, news, public meetings, or other City communications, visit: <http://www.dover.nh.gov/government/city-operations/community-services/stormwater-management/>

Comparison of Estimated Annual Utility Fee vs. Property Tax

Based on an annual stormwater and flood resilience cost of \$4.5 million, the following provides a comparison of the potential annual stormwater utility fee versus the estimated amount of annual property tax that would be assessed on various property types. The estimated utility fee is based on the number of Equivalent Residential Units (ERUs), which is calculated by dividing the total impervious area by 3,200 square feet. These examples are intended to provide a general basis for assessing how the proposed utility might affect your situation based on your property type and estimated amount of impervious area.

Property Examples	Single-Family Home	Commercial	Agricultural	Residential HOA		
Impervious Area (sq. ft)	1,500	12,000	10,700	580,000	7,000	128,800
ERUs	0.5	4.0	3.0	179.0	2.0	40
Est. Annual SW Fee ¹	\$80	\$640	\$480	\$28,611	\$320 ³	\$160 ⁴
Est. Property Tax Amount ²	\$180	\$1,220	\$360	\$11,380	\$265	\$200

Notes:

- The estimated stormwater fee is based on the amount of impervious area on the property and the proposed fee structure subject to City Council approval.
- The property tax amount is based on the estimated assessment value provided in Dover City Assessor online MapGeo property database and the portion of the FY24 City tax rate that would be used to fund \$4.5 million in annual stormwater and flood resilience costs. These estimated fees do not include available credit options that could reduce fees by as much as 50% subject to City Council approval.
- This property would be eligible for a 25% low density credit as well as other credit options available to all properties that could reduce the estimated annual stormwater utility fee by as much as 50% or more depending on eligibility criteria and contingent on City Council approval.
- Estimated fee and property tax amount reflects a per unit cost for each residence in the HOA.

Public Outreach

Fact Sheet with example property types

- Single-family homes
- Commercial
- Agricultural
- Homeowner Association Communities

Promote Public Workshop October 17th

List of Frequently Asked Questions

Administration Considerations

01

Adjustment / Appeal

Policy and Process

Fixing incorrect stormwater fee determination

Permanent changes to property attributes (i.e., removal of impervious area)

02

Credits

Policy and Process

Application, fee, inspection, maintenance and renewal

03

Billing

Linkage between property and utility account

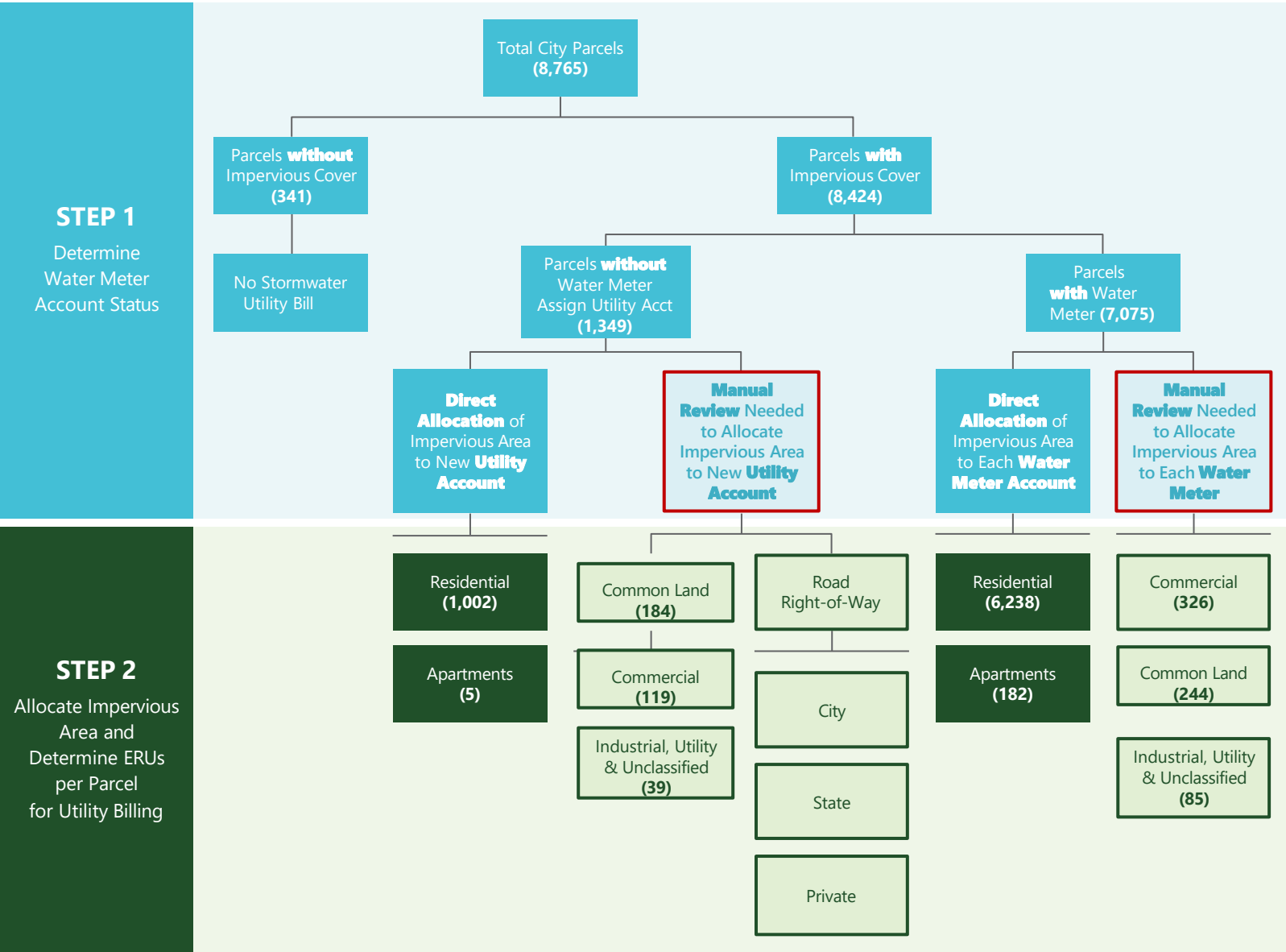
Separate bills for properties without utility service

Manually review parcels and allocate impervious area as necessary

04

Workflow Processes

Manage appeals and adjustments, credits, and billing questions (intake, review, billing modifications, response)



■ The parcel impervious cover should be directly associated with and allocated to the water meter account holder of the parcel without having to review

Manual review of the parcel impervious cover may be required to allocate the area to each water meter account where multiple entities or account holders on same parcel share impervious area

Parcel data current as of March 6, 2023
Water meter data current as of June 13, 2023



HOA Example #1

46 Units within Community

Common land impervious area = 248,336 sf (light purple)

Number of ERUs: $(248,336 / 3,200) = 78$ ERUs

Annual Total Community Stormwater Bill: \$12,467

Divided per Unit: SW Bill \$271/year w/out credits

Average Assessed Value: \$550,000 / unit

Approx. Property Tax for SW Costs: \$360/year

HOA Example #2

39 units within Community

Common land impervious area = 129,783 sf

Number of ERUs: $(129,783 / 3,200) = 41$ ERUs

Annual Total Community Stormwater Bill: \$6,553

Divided per Unit: SW Bill = \$168/year w/o credits

Average Assessed Property Value: \$300,000 / unit

Approx. Property Tax for SW Costs: \$197/year



Ordinance

 CITY OF DOVER	CITY OF DOVER - ORDINANCE	
	Ordinance Number: O – yyyy.mm.dd -	Agenda Item#:
	Ordinance Title:	
	Chapter:	
	Section:	

The City of Dover Ordains:

1. PURPOSE

The purpose of this ordinance is to create a Municipal Stormwater Utility for the City of Dover and discharges of stormwater within same, as authorized by RSA 149-I:6, I-a et seq., “for the proper maintenance and operation of the stormwater system or stormwater utility and any appurtenant structures, and to promote flood control and erosion control, water quality management, ecological preservation, management of annual pollutant load contained in stormwater discharge, and municipal compliance with applicable state and federal stormwater laws and regulations.”

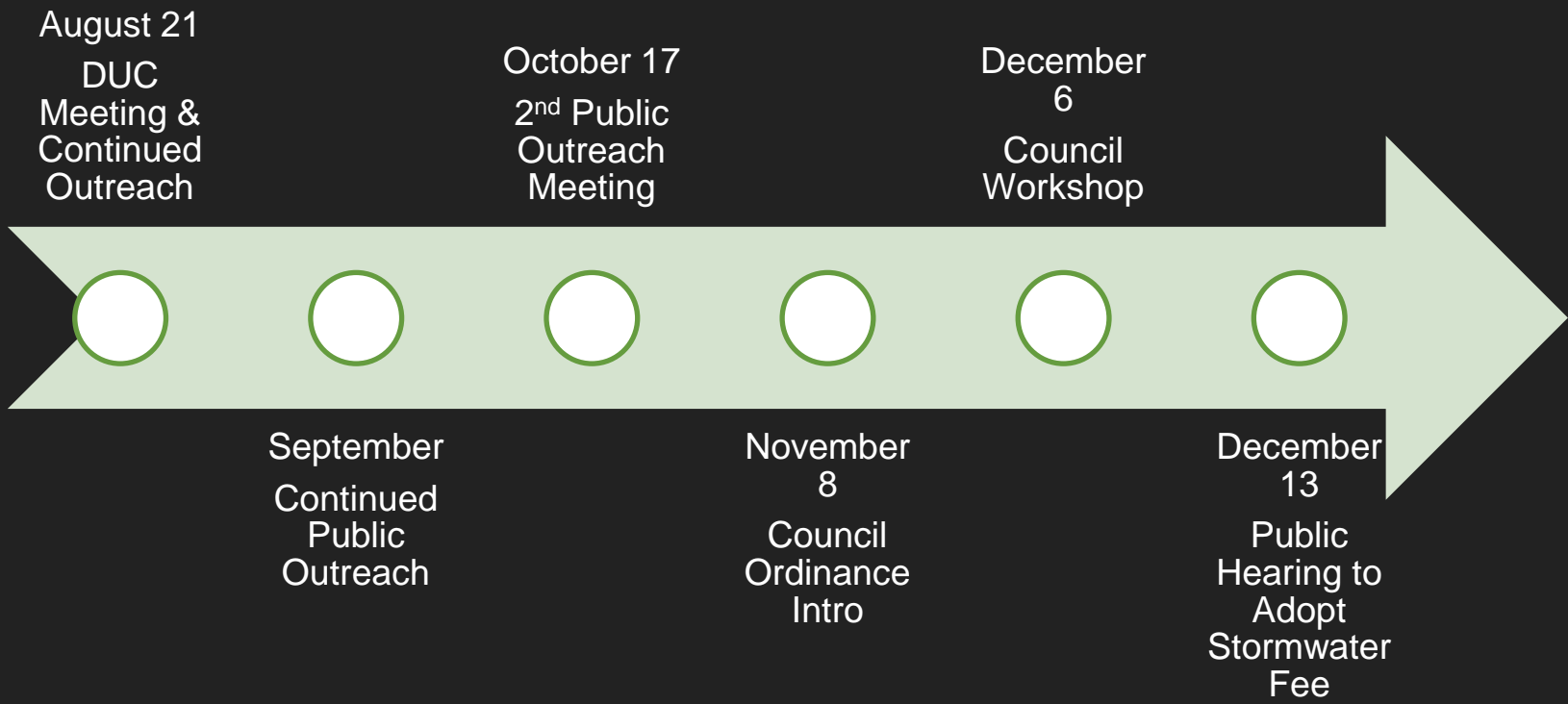
2. AMENDMENT

Chapter 123 entitled “Municipal Stormwater Utility” is hereby enacted as follows:

Section. 123-1 Formation and purpose

A. The City Council finds that, as supported by scientific literature and policies promulgate by environmental regulators, impervious surfaces harm water quality by creating and exacerbating conveyance of pollutants via stormwater runoff. As stormwater travels, stormwater runoff picks up oil, chemicals, bacteria, sediment, and other pollutants and deposits them into local water bodies. Stormwater runoff has contributed to the impairment of Willand Pond and the Bellamy, Cocheco, Salmon Falls, Piscataqua Rivers, and other water bodies. Additionally, heavy rainfall can lead to excess stormwater runoff, which can overwhelm the capacity of the City’s storm drains, causing water to inundate roads and public and private property. Reducing stormwater runoff aids public safety and can prevent flooding related traffic disruptions and residential basement flooding. Reducing stormwater runoff also reduces the volume of stormwater that

Timeline



Implementation Steps in Next Phase (January – June)

1. Identify/hire staff to manage Utility fee
2. Develop billing database
3. Create workflow for billing, credit applications & appeals
4. Implement consistent processes for handling appeals/questions/credits
5. Add bill to utility billing system
6. Establish key messaging and customer service training