CAPITOL REGION COUNCIL OF GOVERNMENTS

Regional Stormwater Authority Feasibility Study

FINAL REPORT / January 26, 2026

This project has been funded by the Climate Resilience Fund administered by the Connecticut Department of Energy and Environmental Protection (CT DEEP).

CRCOG Capitol Region Council of Governments Working together for a better region. RAFTELIS CDM Smith RATH YOUNG PIGNATELLI INSIGHT MATTERS

January 26, 2026

Matthew W. Hart, Executive Director
Capitol Region Council of Governments
350 Church Street, Third Floor, Hartford, CT 06103

Subject: Draft Regional Stormwater Authority Feasibility Study Report

Dear Mr. Hart:

Raftelis, CDM Smith, and Rath Young Pignatelli (RYP) are pleased to provide this Regional Stormwater Authority Feasibility Study Report (Report) for the Capitol Region Council of Governments (CRCOG) to document the feasibility study and share opportunities and considerations related to regional stormwater management.

The major objectives of the study include the following:

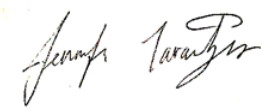
- Document current stormwater program and gap needs through a comprehensive program review and interview with each participating community;
- Identify and evaluate potential opportunities for centralized stormwater management to improve efficiency and address regional challenges;
- Estimate costs, revenue requirements, and potential rates for each municipality; and
- Gather feedback from municipal and CRCOG staff through Advisory Committee meetings and engage the public through education and outreach efforts.

The following municipalities were studied in detail as part of this effort: Bloomfield, Hartford, West Hartford, Rocky Hill, and New Britain.

The report summarizes the stormwater program review, financial analysis, estimated units of service and rates, public outreach and engagement efforts conducted during the study and proposes recommendations for future steps for implementation of individual stormwater utilities with opportunities for regional collaboration and shared services.

It has been a pleasure working with you. We thank Council of Governments staff, and each town for active participation in the Advisory Committee meetings and the support provided throughout this study.

Sincerely,



Jennifer Tavantzis, *Vice President*

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Abbreviations and Acronyms

Abbreviations/Acronyms	Definition
CAMA	Computer Assisted Mass Appraisal
CGS	Connecticut General Statutes
CIP	Capital Improvement Program
CRCOG	Capitol Region Council of Governments
CSO	Combined Sewer Overflow
CT DEEP	Connecticut Department of Energy and Environmental Protection
CT ECO	Connecticut Environmental Conditions Online
EDD	Economic Development District
ERU	Equivalent Residential Unit
FEMA	Federal Emergency Management Agency
FY	Fiscal Year
GIS	Geographic Information System
IA	Impervious Area
IDDE	Illicit Discharge Detection and Elimination
LUC	Land Use Code
MCM	Minimum Control Measure
MDC	Metropolitan District Commission
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
NSFR	Non-Single Family Residential
O&M	Operations and Maintenance
P.A.	Public Act (used in reference to legislation)
sq. ft.	Square Feet
SFR	Single Family Residential
SMP	Stormwater Management Plan
STAPLEE	Social, Technical, Administrative, Political, Legal, Economic, Environment
TMDL	Total Maximum Daily Load

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1. Executive Summary

The Capitol Region Council of Governments (CRCOG) engaged a consultant team of Raftelis, CDM Smith, and Rath Young Pignatelli (RYP) to conduct a Regional Stormwater Authority Feasibility Study to assess opportunities for regional collaboration in stormwater management. CRCOG member municipalities are facing mounting stormwater challenges driven by aging and undersized infrastructure, recurrent localized flooding, and regulatory requirements. These challenges are intensified by evolving precipitation patterns and climate change impacts, yet only one municipality in the CRCOG has a dedicated source of funding for stormwater management. Currently, most municipalities in the region fund stormwater management through their General Fund (property taxes), which compete for funding with other city priorities. Under Connecticut General Statutes § 22a-498, municipalities are authorized to establish stormwater authorities and levy fees based on Impervious Area (IA), which is a primary driver of stormwater runoff. A utility model provides a dedicated, equitable, and stable revenue stream that shifts the focus from reactive maintenance to *proactive* infrastructure resilience.

1.1 Study Purpose and Approach

Funded by the Connecticut Department of Energy and Environmental Protection's (DEEP) Climate Resilience Fund, this study evaluated the feasibility of a regional stormwater utility, as well as regional approaches to stormwater management. Five municipalities: Town of Bloomfield, City of Hartford, Town of West Hartford, Town of Rocky Hill, and Town of New Britain, participated in this study.

Individual analysis was conducted for each municipality, which included a review of existing stormwater programs and identification of gap needs, financial analysis of current and projected stormwater costs, and development of impervious area-based rate structures using Equivalent Residential Units (ERUs).

The study also included legal analysis of available options for regional management, a review of other regional structures, public engagement through surveys and community events, and importantly, a series of Advisory Committee meetings, through which key stakeholders reviewed, reacted to, and contributed to the analysis and key findings.

1.2 Key Findings

Current State of Stormwater Management: The study revealed significant variability in stormwater program funding and service levels across the participating municipalities. Most programs were rated as "Average" in meeting regulatory and operational requirements, with some municipalities falling below average in key areas. Most communities provided limited information about program needs or backlogs.

Opportunities for Regional Collaboration: The study identified numerous opportunities for regional cooperation that could reduce costs and improve service delivery, including: regional collaboration on Municipal Separate Storm Sewer System (MS4) required activities, such as to Illicit Discharge Detection and Elimination (IDDE) programs and public education and outreach; shared administrative services for stormwater utility billing and impervious area data maintenance; and even watershed-based capital improvement planning. CRCOG's existing structure as a Council of Governments positions it well to facilitate regional collaboration around stormwater management.

Public Sentiment: A public survey conducted in July 2025 with over 450 respondents (primarily from West Hartford) revealed strong support for regional approaches, with 64% of respondents supporting their municipality creating a utility with other local municipalities to jointly manage stormwater or share costs.

More than half of respondents were willing to pay $5-20 per month for stormwater management. However, the survey also identified significant opportunities for public education about stormwater management and funding needs.

Feasibility Assessment: Using the STAPLEE (Social, Technical, Administrative, Political, Legal, Economic, Environmental) framework, the study concluded that a regional approach to stormwater management is technically, legally, and administratively feasible for the Capitol Region municipalities. Connecticut's enabling legislation (CGS §22a-498) provides the legal authority for municipalities to establish stormwater utilities and collect fees. Other mechanisms exist for coordination between municipalities. However, political will and local champions would be important components to support implementation at this time, particularly within the relatively small study group. While Advisory Committee members expressed interest in some shared services, conversations revealed more hesitancy than enthusiastic support for moving forward immediately.

Key concerns include a perception that regionalization means a loss of local control as well as the need for more engagement with elected officials and the public to study the concept further.

1.3 Conclusion

This study concludes that both individual stormwater utilities and regional collaboration are viable strategies for improving and funding stormwater management in the Capitol Region. While technical and legal feasibility is clear, implementation at the regional level will require strong political support and local champions. In the near term, shared services through interlocal agreements may be a practical approach, with CRCOG positioned to provide administrative coordination and facilitate economies of scale. Establishing a permanent stormwater committee and engaging elected officials will be critical to sustaining momentum and preparing communities for future utility implementation. These steps will lay the groundwork for a scalable regional framework that can evolve as interest and necessity grow.

2. Introduction

2.1 Background and Purpose

The Capitol Region Council of Governments (CRCOG) received funding from the Connecticut Department of Energy and Environmental Protection's Climate Resilience Fund to conduct a comprehensive Regional Stormwater Authority Feasibility Study. CRCOG engaged Raftelis, CDM Smith, and Rath Young Pignatelli, PC (RYP) to assess the feasibility of developing a stormwater utility in one or more municipalities within the CRCOG Region, by identifying opportunities for regional collaboration, evaluating the benefits or impacts of changing the way stormwater management is funded, and understanding the perspectives and concerns of municipalities, stakeholders, and the public.

> **Throughout this document, the term "utility" is used in lieu of "authority;" though they are intended to be used interchangeably.**

CRCOG is a voluntary association of 38 municipalities in the Greater Hartford region, established pursuant to state statute. CRCOG also hosts the region's federally-mandated Metropolitan Planning Organization (MPO) and the region's Economic Development District (EDD). Governed by a Policy Board that is made up of the chief elected official of each town, CRCOG is focused on initiating and implementing regional programs to benefit each community and the region.

All CRCOG member municipalities are grappling with mounting stormwater challenges that are driven by mandated water quality requirements and water quantity/flood control. Stormwater management provides an opportunity for regional collaboration, which could be facilitated through the CRCOG due to the regional nature of stormwater management and water quality goals, and because many of the member communities are facing similar needs to enhance their stormwater programs and invest in stormwater infrastructure. While the specific issues may differ from town to town, common themes emerge: aging and undersized infrastructure, combined sewer overflows, recurrent localized flooding, and limited capacity to meet Municipal Separate Storm Sewer System (MS4) permit requirements. These pressures are growing, as are the challenges associated with addressing them on an individual community basis. CRCOG believes that regional collaboration—sharing solutions, data, and the necessary financial investment—can ease these burdens while creating significant cost efficiencies for municipalities.

CRCOG's 2023 Strategic Playbook identified stormwater management as a key opportunity for regional collaboration. The Playbook includes a goal to develop a long-term plan to significantly improve stormwater infrastructure across the region and a specific action to explore the potential for regional solutions, including stormwater utilities. In line with that direction, this project was intended to introduce municipalities and stakeholders to the stormwater utility model, evaluate the feasibility of establishing a regional utility, and examine additional collaborative approaches that could strengthen stormwater management across the region.

Within the study, the project budget enabled five municipalities to be full participants, allowing their stormwater programs to be evaluated and serve as case studies for establishing stormwater utility fees. The five municipalities are Bloomfield, Hartford, New Britain, Rocky Hill, and West Hartford, each of which has either a partially separate or a fully separate storm sewer system. The MS4 in each municipality is regulated under the National Pollutant Discharge Elimination System (NPDES) MS4 permit. The MS4 permit requires each permittee to implement six minimum control measures to reduce pollution in stormwater leaving the

jurisdiction. These regulatory requirements, as well as operations and maintenance (O&M) activities such as street sweeping and catch basin/pipe cleaning, equipment, infrastructure upgrades, and capital costs for flood mitigation are major cost drivers in the region.

Currently, stormwater costs in four of the five studied communities are primarily funded out of their respective general funds. Establishing a dedicated source of funding is necessary to shift towards more proactive programs. As discussed below, the Connecticut legislature passed enabling legislation that allows any municipality the ability to develop a "stormwater authority" and levy fees based on factors such as impervious surface, land use types, and property value. Since the legislation was passed, the City of New London established a stormwater utility in 2018 following a limited pilot program supported by the CT DEEP.[1] Later, the City of New Britain implemented a stormwater utility in FY 2023.

2.2. Process

This feasibility study included regular meetings of an Advisory Committee, municipal stormwater management program evaluations and revenue requirement analysis, public outreach activities and events, and associated analyses.

2.2.1. Advisory Committee

As part of the study, CRCOG convened an Advisory Committee, which included the study participants, observing municipalities, and key stakeholder groups (Table 1). The five study participants, shown as "Analyzed" in the map below, were Bloomfield, West Hartford, Hartford, New Britain, and Rocky Hill. Five additional communities ("Observing") were not studied but participated as full contributing members of the Advisory Committee. The consultant team facilitated seven Advisory Committee sessions, which focused on reviewing and discussing the analyses and feasibility concepts.

[1] https://portal.ct.gov/-/media/deep/water/nps/swgp/sudinlidpdf.pdf

Figure 1. Map of Capitol Region Municipalities, including Project Advisory Committee Members

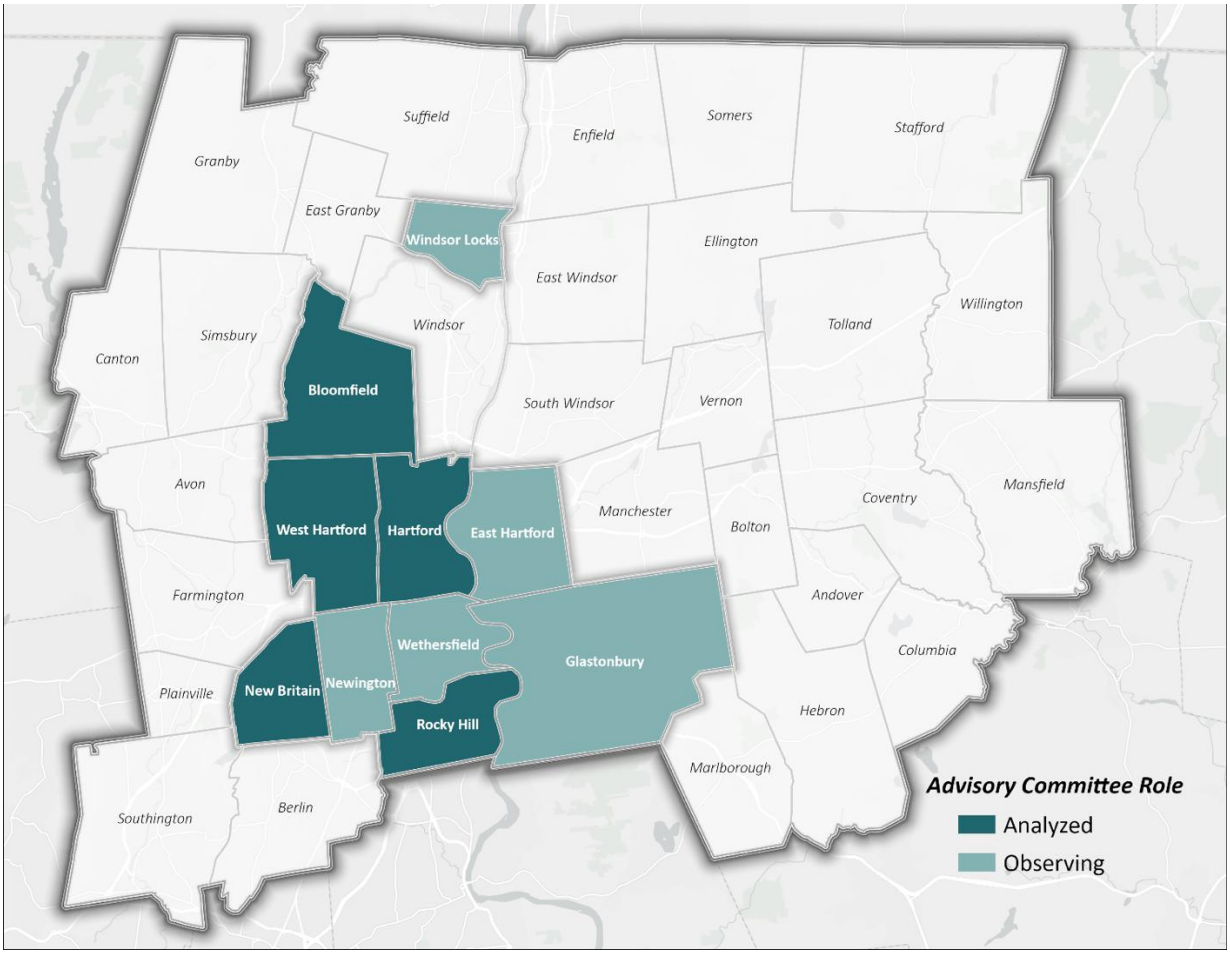

Table 1. Project Advisory Committee Members

Municipalities		Regional Partners
Bloomfield	Newington	Chatham Health District
East Hartford	Rocky Hill	Metropolitan District (MDC)
Glastonbury	West Hartford	Rivers Alliance of Connecticut
Hartford	Wethersfield	
New Britain	Windsor Locks	

2.2.2. Review and Analysis

CDM Smith conducted a detailed evaluation of the stormwater programs for the five study participants, and identified gap needs to enhance their existing programs. RYP provided input regarding available alternatives within the current legal and regulatory framework. Raftelis estimated fee funding units of service and developed a financial model to calculate estimated stormwater user fee rates under different funding scenarios based on stormwater program revenue requirements for each municipality.

This report outlines the program review, methods for the financial analysis and units of service development, opportunities for regional collaboration, outcomes from communications and engagement efforts, recommendations for further public outreach, and key considerations for implementation.

3. Stormwater Utilities and Regionalization

3.1 Stormwater Utility Overview

A stormwater utility establishes a dedicated, equitable funding mechanism for stormwater management. More than 2,000 utilities operate across 42 states, collecting user fees that are typically managed through an enterprise fund to support operations, maintenance, and capital projects. Unlike general taxes or water and sewer fees—which are not charged based on factors that impact the stormwater system—stormwater utility fees are based on demand on the stormwater system, most commonly measured by impervious area (IA). IA strongly correlates with runoff volume and water quality impacts, making it the industry standard for rate structures in the U.S. and Canada. This dedicated funding source enables municipalities to prioritize flood mitigation and water quality improvements without competing for limited general funds.

Stormwater utility revenues are often allocated to activities mandated under the Municipal Separate Storm Sewer System (MS4) Permit, issued pursuant to the U.S. Environmental Protection Agency's National Pollutant Discharge Elimination System (NPDES). In Connecticut, numerous municipalities operate under the MS4 General Permit, which governs stormwater discharges from designated storm sewer systems. At the time of this report, compliance with this permit requires each permittee to develop and implement a Stormwater Management Plan (SMP) detailing strategies to meet regulatory obligations, including the six Minimum Control Measures (MCMs) outlined in Table 2 on the following page.

Table 2. Six Minimum Control Measures for MS4 Permits

Minimum Control Measure	Description[2]
Public Education and Outreach	• Requires development and implementation of a public education and outreach program to target stormwater pollutants
Public Involvement and Participation	• Details methods for soliciting and responding to public input in the development of the Stormwater Management Plan (SMP) and Annual Reports
Illicit Discharge Detection and Elimination (IDDE)	• Addresses how permittee identifies, tracks, and eliminates non-stormwater illicit discharges and dumping • Provides protocol for field work, mapping, and community input to detect and eliminate illicit discharges
Construction Site Stormwater Runoff Control	• Details the legal authorities and actions required to manage construction site runoff
Stormwater Management in New Development and Redevelopment	• Requires permittee to update design regulations, policies, and standards to include Low Impact Development (LID) measures or post-construction stormwater retention • Requires the development of a program to ensure inspection and long-term maintenance of stormwater facilities
Pollution Prevention and Good Housekeeping for Municipal Operations	• Details requirements for maintenance of MS4's property, operations, and equipment, and employee training • Requires a retrofit program to reduce directly connected impervious area through redevelopment projects

3.2. Legal Feasibility Analysis and Considerations

The Connecticut legislature initially approved development of a stormwater authority pilot program in 2007. See Section 22a-497, P.A. 07-154, S.1, effective June 25, 2007. The law was subsequently amended to authorize more municipalities to more widely adopt and implement stormwater authorities or utilities. See 2024 Conn. Gen. St. 22a-498, as amended in 2019 (P.A. 19-0194, S. 4), 2021 (P.A. 21-0115, S.1), and 2022 (P.A. 22-0118, S.137). The legislation specifically authorized any municipality within the state to develop a stormwater authority and levy fees based on factors such as impervious surface, land use types, and property value.[3] Since these two pieces of legislation passed, as discussed below, the cities of New Britain and New London established stormwater utilities.

[2] National Pollutant Discharge Elimination System (NPDES) General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems Fact Sheet – Draft March 2025 (https://portal.ct.gov/-/media/deep/water_regulating_and_discharges/stormwater/municipal/2025-03-21-draft-ms4-general-permit-fact-sheet.pdf). Accessed December 11, 2025

[3] See 2024 Conn. Gen. St. §22a-498, (a), (b). This provision allows any municipality by ordinance adopted by its legislative body to designate any existing board or commission or establish a new board or commission as a stormwater entity. The purposes of the stormwater entity are set forth in subsection (b) including reference to the geographic boundaries of the

The underlying purpose of this study is to evaluate the feasibility of creating a stormwater authority authorized pursuant to 2024 Conn. Gen. Stat. §22a-498. The provisions of this law specifically authorize a municipality, through an ordinance adopted by its legislative body, to form a new board or commission as a stormwater authority for that municipality.[4] The goals are to develop a stormwater program, provide public education and outreach related to stormwater management activities, provide for administration of stormwater management, establish geographic boundaries, and recommend the imposition of a fee upon real properties, subject to certain limits, to fund necessary stormwater management activities. See 2024 Conn. Gen. St. §22a-498, (b)(1-5). Key provisions of the law authorize creation of a fee based upon impervious use, as well as provisions that must provide credits and partial fee reductions based upon certain land uses and implementation of measures that result in lower concentrations of stormwater pollution.[5] Reductions for certain land use types include farms, forest open space, and property owned by state government or political subdivisions, where stormwater authority fees can only be assessed upon the impervious surfaces within those properties that discharges to a municipal storm system.[6] There are also limits on fees assessed against certain health care and hospital properties. Finally, the statute provides that a municipality or municipalities may enter into a contract with a regional entity, such as CRCOG, to accomplish the provisions of the statute subject to CT DEEP Commissioner approval. See 2024 Conn. Gen. St. §22a-498, (f). The provisions of this act do not explicitly authorize the creation of a regional entity to establish a stormwater utility that would serve a number of municipalities; this would likely require an amendment to the legislation.[7] However, as noted above, the act does contemplate a municipality or municipalities contracting with an established regional entity to accomplish the goals of running a stormwater utility and collecting those fees. This language is broad and could be accomplished through intermunicipal agreements authorized by the respective legislative bodies of each municipality.

In addition to the legislation, CRCOG and its member communities can find support to develop and implement stormwater management ordinances in the ordinances established by the Cities of New Britain[8] and New London.[9] CRCOG and its member communities are also authorized to implement joint municipal or multi-jurisdictional approaches to stormwater management, including shared resources such as vehicles, equipment, or potentially staffing through interlocal or intermunicipal agreements. See CGS Section 7-7-

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stormwater authority district. See §22a-498(b)(4). The legislation further allows any established authority, with approval by the DEEP commissioner, to enter into contracts with any municipal or regional entity to accomplish the purposes of the act. See §22a-498(f).

[4] See 2024 Conn. Gen. St. §22a-498, (a).

[5] These provisions provide for partial fee reductions in the form of credits for reductions for certain types of land types (farms, forest open space, and property owned by state government or political subdivisions), reductions for disconnection of impervious area, or use of best management practices or structures on property to reduce the concentration of pollution in stormwater discharges. See 2024 Conn. Gen. St. §22a-498, (c)(1)(A),(B),(C), and c(2).

[6] See 2024 Conn.Gen.St. §22a-498(c)(2).

[7] Special Act 25-11 (effective Oct 1, 2025) recently authorized non-contiguous towns to join the Hartford Metropolitan District Commission. Legislation could be proposed to amend the MDC charter (rather than form a new one) and to authorize the MDC (amendment to the definition of "municipality" under §22a-498(g) to include metropolitan district commissions) to form a stormwater utility. That may also create an option for regional towns and/or cities to form a new metropolitan district (§7-333 to §7-339) to implement a stormwater utility under this section. The definition of "municipality" under §22a-498(g) could also be amended to specifically include Regional Councils of Governments to authorize the implementation of a regional stormwater utility, rather than accomplish the goals via contract with municipalities as currently authorized.

[8] New Britain Ordinance, Chapter 23, Article III, Sec. 23-136 (2022)

[9] New London Ordinance, Chapter 21, Article, Sec. 21-176-179 (2024)

148cc10, and CGS Sections 7-339a-7-339I. Any multi-jurisdictional approaches established through interlocal or intermunicipal agreements will need approval and adoption by the local town or city governmental bodies.[11]

CRCOG member communities have options to either establish individual stormwater management utilities within their own cities or towns, utilizing CRCOG's regional resources for management and/or implementation of all or part of an established stormwater utility. Shared resources can also be established through member communities through inter-local or intermunicipal agreements for stormwater management.

3.3 Regional Stormwater Management

Stormwater runoff, flooding, and water quality impacts transcend political boundaries (see Figure 2 below) as hydrologic processes are governed by watershed conditions rather than political jurisdictions. Upstream stormwater management practices directly influence downstream water quality and flood risk. Within the Capitol Region, many municipalities face common challenges, including aging infrastructure, compliance obligations under Municipal Separate Storm Sewer System (MS4) permits, and increased flooding driven by evolving precipitation patterns. Legacy systems, such as Hartford's partially combined sewer and stormwater network, present additional complexity. When these systems exceed capacity during significant rainfall events, combined sewer overflows can occur, adversely impacting water quality not only within Hartford but also in adjacent communities such as Towns of Rocky Hill, East Hartford, Wethersfield, and Glastonbury. Furthermore, stormwater contributions from upstream municipalities exacerbate flooding and pollutant loading downstream, underscoring the need for coordinated, inter-municipal management strategies.

Some CRCOG members around the Hartford area are already being served by a regional water management agency: the Metropolitan District (MDC), which provides regional water and sewer services.

> **Similar to MDC's approach to water and sewer services, regional collaboration focused on stormwater could enhance efficiency, reduce costs, and improve overall stormwater management.**

Municipalities possess varying levels of experience and technical capacity in stormwater management. Collaborative approaches can leverage these diverse capabilities to develop innovative, cost-effective strategies for achieving regulatory and performance objectives. Regional cooperation also enables the execution of large-scale infrastructure projects that would be financially or operationally infeasible for individual municipalities acting alone.

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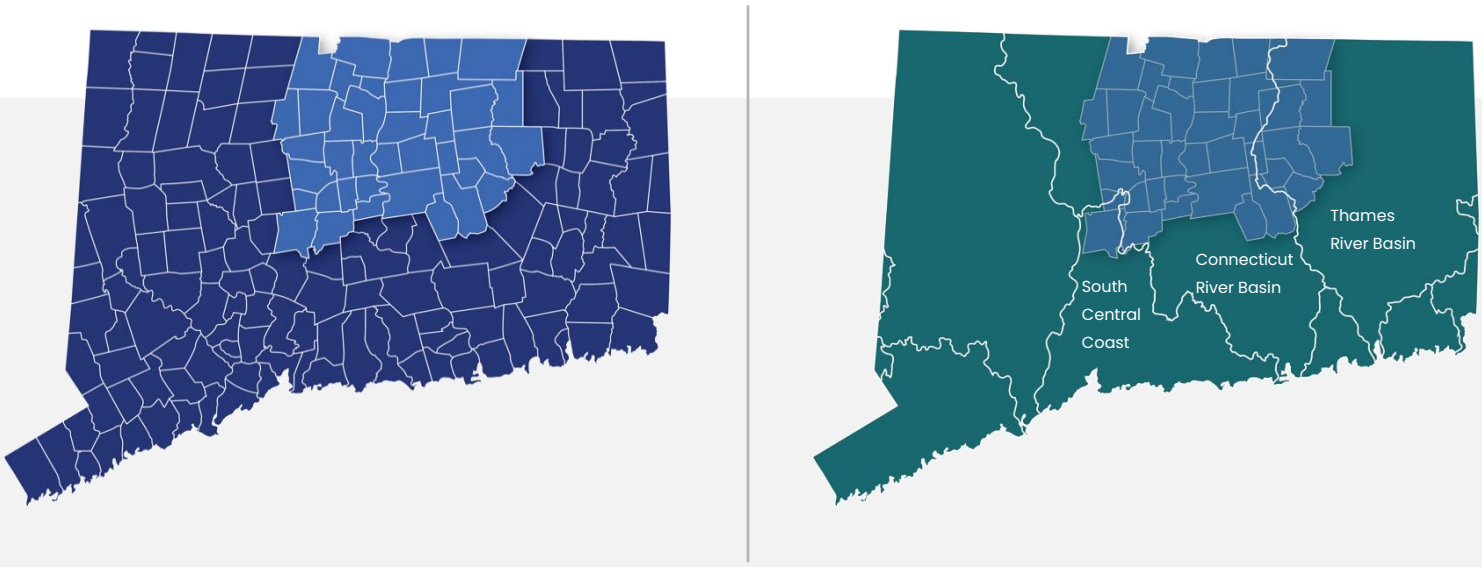
[10] This statute authorizes two or more municipalities to "jointly perform any function that each municipality may perform separately." Each municipality would be required to adopt an ordinance to approve the agreement for joint performance of municipal functions, must include a provision for withdrawal and review by the legislative body every five years. See CGS Section 7-148cc.

[11] Public entities may develop and enter into inter-local agreements, subject to approval by their respective legislative bodies, to provide for a number of shared services, equipment and other assets. See CGS Sections 7-339a through 7-339l. In reading the provision of §22a-498(f), they could also contract with a regional entity such as CRCOG to accomplish the goals of their stormwater utilities.

Figure 2. Municipal and Watershed Boundaries in CT, with CRCOG Communities Highlighted



Municipal Boundaries vs. **Natural Watershed Boundaries**

Figure 3. Spectrum of Regional Stormwater Collaboration

During Advisory Committee meetings, CRCOG representatives outlined strategies to facilitate regional collaboration and shared services. The Committee noted that regional funding mechanisms may be more politically viable if they mitigate local opposition, emphasize visible public stormwater improvements, and leverage expertise from municipalities with established stormwater utilities. Identified opportunities for shared services include:

Opportunities that exist without the implementation of a stormwater utility:

- **Stormwater System Mapping:** Regional mapping services would enable comprehensive asset inventories and reduce costs through shared consulting and technical resources.

- **Illicit Discharge Detection and Elimination (IDDE):** Regionalized IDDE training and monitoring would promote consistency across municipalities and allow for innovative detection methods (e.g., DNA tracing, canine detection). Shared monitoring infrastructure would improve water quality oversight and reduce local administrative burden. Under a regional entity model, transferring IDDE responsibilities could further alleviate public pressure on municipal staff.
- **Public Education and Outreach:** Consolidating outreach efforts would ensure consistent messaging, broaden community engagement, and improve accessibility through shared resources and multilingual materials.
- **Equipment Sharing:** Developing intermunicipal agreements for seasonal equipment sharing, including maintenance and storage protocols, could reduce capital expenditures and improve service delivery.
- **Street Sweeping and Catch Basin Cleaning:** Expanding regional procurement through CRCOG's Capitol Region Purchasing Council or contracting services at scale could enhance operational efficiency and cost-effectiveness.

Opportunities that would benefit the development of a utility:

- **Stormwater Fee Administration:** Establishing a centralized billing and administration framework to streamline fee calculation, billing, and impervious area updates. This approach would reduce duplication of effort and improve accuracy compared to individual municipal systems.
- **Impervious Area (IA) Data Management:** Coordinated IA tracking supported by advanced geospatial technologies could enhance data quality and update frequency. CRCOG, with existing GIS capabilities, could provide these services under a cost-recovery model funded by stormwater revenues. Municipalities may also adopt standardized processes for monitoring IA changes through development permits.

In addition to operational efficiencies, regional collaboration offers significant advantages for capital improvement programs (CIP). A watershed-based (or intermunicipal) approach to CIP planning would enable sustainable, cost-effective solutions, improve prioritization, and increase competitiveness for state and federal funding opportunities. This model typically results in higher approval rates for regulatory funding and greater access to grant programs.

3.4. Other Utilities' Experience

3.4.1. Regional Utilities

To support the Advisory Committee's evaluation of regional approaches, the consultant team presented case studies demonstrating successful multi-jurisdictional stormwater management frameworks implemented outside Connecticut. Examples included the Northeast Ohio Regional Sewer District (OH), which operates a centralized regional utility, and the Granville-Person Cooperative Stormwater Services (NC), which employs an interlocal governance model to coordinate stormwater programs across multiple jurisdictions.

Northeast Ohio Regional Sewer District

The Northeast Ohio Regional Sewer District (District) is an example of a centralized utility with 63 members, including the City of Cleveland. The District provides sewer and stormwater services regionally through large-scale conveyance infrastructure and wastewater treatment plants, and it also supports local

stormwater projects via a community cost share program. Stormwater fees, which are billed on the District bill at the same rate for all communities, generate about $53M annually, with 25% ($13.25M) of the revenue going to the community cost share program. The District has been in existence since the creation of the Clean Water Act and was focused on wastewater services until successfully implementing the regional stormwater utility in 2016.

Granville-Person Cooperative Stormwater Services

Granville-Person Cooperative Stormwater Services is an example of a less centralized governance approach via interlocal agreements. It is a collaboration between five jurisdictions including Granville and Person counties, which are fairly rural in nature, and two towns and one city, all located within the Upper Falls Lake watershed in North Carolina. The major cost driver for intensified stormwater management needs in these rural communities are watershed-specific regulations associated with nutrient management in Falls Lake, which serves as the main source of drinking water for the City of Raleigh, North Carolina's capital. The five communities collaborate through interlocal agreements and share billing, collections, administrative, and advisory services. Their close work with the local watershed association, the Upper Neuse River Basin Association, provides a venue for collaboration on regulatory matters with the NC Department of Environmental Quality and coordination with other communities in the Upper Falls Lake watershed subject to the same regulatory pressures. Revenues from the joint stormwater utility allow these five communities to participate in this coordination effort and also to execute local stormwater projects. Each municipality has community-specific stormwater rates, which are set by each jurisdiction to meet their own revenue requirements. However, these stormwater fees are billed jointly on county tax bills.

Wyoming Valley Sewer Authority

CRCOG invited a guest speaker from Wyoming Valley Sewer Authority, PA (Authority) to present to the Advisory Committee on June 26, 2025 and discuss the Authority's experience with setting up and managing a regional stormwater program and utility. Similar to the Northeast Ohio Regional Sewer District described above, the Authority was originally created to manage wastewater regionally. The Authority is made up of 32 municipalities that are collaborating to meet joint MS4 permit compliance. Prior to 2016, none of the 32 municipalities were in compliance with their MS4 permits, which led the Pennsylvania Department of Environmental Protection (DEP) to work with the municipalities to achieve compliance in an effective and economical way. The Authority acts as the permit administrator and the co-permittee, so it has internal expertise and staff to do most of the work to meet the requirements of the permit's six minimum control measures. Municipalities are still responsible for some efforts such as good housekeeping tasks. Regional collaboration for mapping, equipment, permit compliance, and other shared services has saved resources for the participating communities compared to trying to achieve compliance individually and has allowed smaller communities to improve stormwater management in ways they would not be able to on their own. Additionally, the Authority has been able to leverage the collaborative nature of the endeavor to secure $4-5M in grants in the last several years to pay for equipment and projects. The services the Authority provides to each municipality are driven by the proportion of fee revenue that is contributed by each community. Part of the collected revenues are set aside in a savings account for each municipality that can be used for capital projects. The stormwater rate, which is set by the Authority's Board of Directors, is an impervious area-based rate that is uniform across all participating municipalities. The guest speaker stated that 90% of the Authority's customers pay $4.80/month, which is one of the lowest stormwater fees in Pennsylvania.

3.4.2. Existing Stormwater Utilities in Connecticut

Raftelis connected with representatives from the Cities of New London and New Britain, both of which have established stormwater utilities. The interviews broadly covered topics related to drivers for establishing the stormwater utility, the implementation process, and the lessons learned from the implementation as well as the administration of the utility to date.

New London

New London was the first municipality in Connecticut to implement a stormwater utility. Following a 2010 study on stormwater utility districts and the City's strategic plan, the Mayor directed the development of a utility in 2017 to address aging drainage infrastructure, localized flooding, and anticipation of stricter enforcement of the MS4 permit.

> **Funding stormwater needs via a tax increase was not a feasible option as the City had many tax-exempt properties and an overburdened tax base relative to its average income.**

Implementation was guided by a 10-member task force representing key stakeholders. Analysis was conducted in-house by staff with rate and GIS expertise, and integration into the existing water/sewer billing system minimized logistical challenges. The task force met monthly for six months and unanimously recommended utility adoption.

Public engagement for utility implementation included three forums supported by a limited outreach budget of approximately $5,000. Messaging emphasized the principle of cost responsibility—customers paying proportionally for their impact on the stormwater system—along with transparency regarding cost drivers and fairness, particularly the inclusion of tax-exempt properties under the fee model. Comparative analyses of tax-based versus fee-based funding and the availability of stormwater credits were highlighted to demonstrate equity and customer control. Feedback was largely positive, and the utility was approved with first billing issued in October 2018 following a 15-month implementation process.

Since implementation, New London has realized significant benefits, including a stable and predictable funding stream of now $1.8 million annually, dedicated stormwater staffing, and operational efficiencies through resource sharing with water and sewer utilities. The utility has enabled focused efforts on flooding mitigation and compliance with MS4 permit requirements. Approximately 75–80% of revenues support system maintenance, while capital projects are debt-financed, with the utility assuming full responsibility for future stormwater-related debt.

From New London's perspective, key considerations for municipalities evaluating stormwater utility implementation include:

1. Assess local conditions—such as prevalence of tax-exempt properties and existing tax burden—to determine feasibility.
2. Secure political support and develop clear, compelling messaging on the rationale and benefits of a utility.
3. Optimize implementation by balancing in-house and consultant resources based on staff expertise.
4. Adopt a simple rate structure and credit program to minimize administrative complexity.
5. Establish a dedicated stormwater enterprise fund to ensure transparency and accountability.

New Britain

New Britain implemented its stormwater utility, known as the Clean Water Fund, following a 2021 feasibility study. The utility was launched within six months of the decision to proceed, with billing commencing at the start of FY 2023. Prior to implementation, stormwater program costs were split between the General Fund and Sewer Fund. Transitioning to a dedicated fee structure provided a stable funding source for MS4 compliance, enhanced flood mitigation, and expanded preventative maintenance, including an aggressive catch basin cleaning program. The fee model also enabled billing of tax-exempt properties, reducing reliance on property taxes and avoiding potential tax increases.

Public outreach was limited due to the compressed timeline but emphasized the equity of a fee-based approach compared to tax funding. The utility fee was integrated into existing water and sewer bills.

The Clean Water Fund generates approximately $2.6 million annually, with roughly 75% allocated to operations and MS4 compliance and 25% to contracted services and capital projects. Capital improvements have been funded through pay-as-you-go and reserves, with future projects expected to require debt financing.

The rate structure is simple: $6.25 per quarter per 1,000 square feet of impervious area (IA). For residential properties, IA is limited to building footprints to reduce data maintenance requirements; IA updates occur through site plan reviews for larger projects.

From New Britain's standpoint, key considerations for municipalities evaluating stormwater utility implementation include:

1. Carefully assess billing mechanisms to ensure efficiency.
2. Address complexities in customer categories such as multi-owner properties and associations.
3. Confirm billing scope before rate setting to avoid revenue shortfalls.
4. Adopt a straightforward rate structure and credit program to minimize administrative burden.
5. Establish a dedicated enterprise fund for transparency and accountability.

4. Program Evaluation

4.1. Program Review and Interviews

The feasibility study began with an in-depth review of the existing stormwater programs for the five participating municipalities:

Bloomfield is somewhat centrally located within the CRCOG area (see Figure 1). With a population of 21,535 (2020 census) and an area of 26.2 square miles, Bloomfield is suburban. The Farmington River forms the northern border adjacent to the more rural area of the Town. The northern and western sections are more rural, with the southern and eastern sections more densely populated. The drainage infrastructure within Bloomfield is separated, which means that the entire Town falls under the MS4 permit.

Hartford is the capital of Connecticut with a population of 121,057 (2020 census), the most populous city in the CRCOG area. The city is 18.0 square miles bounded by the Connecticut River to the east, Windsor and Bloomfield to the north, West Hartford to the west, and Wethersfield and Newington to the south (see Figure 1). Hartford has a combination of separated and combined systems that are all tributary to the Connecticut River. The combined systems within the City are maintained by the MDC. The drainage

infrastructure within the City is maintained by both the City and MDC, making the responsibilities of the various MS4 permit requirements confusing and not well defined. The flood control infrastructure in Hartford (levees, pumps, conduits, and flood control structures) is regulated by the Greater Hartford Flood Commission, which is made up of members from Hartford, Bloomfield, West Hartford and Newington. The City funds the operations and maintenance of the HFC flood control facilities.

New Britain is located in the southwest corner of the CRCOG area (see Figure 1). With a population of 74,135 (2020 census) and an area of 13.4 square miles, it consists of both suburban and urban areas. The drainage infrastructure within New Britain is separated, which means that the entire City falls under the MS4 permit. New Britain is the only participating municipality that already has a stormwater utility (see Section 3.4.2).

Rocky Hill is located west of the Connecticut River and is one of the municipalities that form the southern boundary of the CRCOG (see Figure 1). With a population of 20,845 (2020 census) and an area of 13.8 square miles, Rocky Hill is both rural and suburban. Rocky Hill is known as a bedroom community with many residents commuting to either Hartford to the north or New Haven to the south. The drainage infrastructure within Rocky Hill is separated, which means that the entire Town falls under the MS4 permit.

West Hartford is located just west of Hartford (see Figure 1). With a population of 64,083 (2020 census) and an area of 22.3 square miles, West Hartford is predominantly suburban. The majority of the waterbodies within West Hartford flow through Hartford and are tributary to the Connecticut River. The vast majority of West Hartford's drainage system is separated and therefore falls under the MS4 permit.

Each of the five participating municipalities were evaluated with respect to their existing stormwater program. The evaluation approach involved:

- **Document Review:** Examining MS4 Stormwater Management Plan, MS4 Annual Report, Geographic Information System (GIS) data, CT DEEP stormwater audits, Stormwater Capital Improvement Projects (CIP) Plans, and flood studies and evaluating compliance with regulatory requirements.
- **Stormwater Checklist Development:** Creating a standardized tool to assess program components.
- **Interviews:** Conducting interviews with municipal staff to understand current practices, challenges, and perceived gaps.
- **Budget Development:** Compiling and analyzing existing stormwater budgets and actual expenditures, including annual operations and maintenance (O&M), CIP, and a detailed breakdown of employee salaries and the percentage of work dedicated to stormwater activities.
- **Existing Conditions Analysis Technical Memorandum:** Documenting the findings of the initial assessment.

The program evaluation covered four key areas: program management, regulatory compliance, operations and maintenance, and capital improvement projects (Figure 4). These four key areas are described in more detail below.

Figure 4. Existing Condition Evaluation

Program Management

- Master Planning
- Compliant Response
- Development Review

Regulatory Compliance

- MS4 Permit Requirements (6 minimum control measures)
- Total Maximum Daily Load (TMDL) Compliance

Operations and Maintenance

- Street Sweeping
- Catch Basin and Pipe Cleaning

Capital Improvement Projects

- System Upgrades & Replacement
- Stormwater Flooding Studies

4.1.1 Program Management

Each municipality was evaluated with respect to how they manage their stormwater program and assets. This category includes how the municipality responds to complaints, reviews and approves development applications, manages the assessment of their assets, and plans for modifications to the stormwater program. Each municipality was evaluated based on typical performance compared to other municipalities in CT on a four-point scale of Proactive, Average, Below Average, and Poor.

4.1.2 Regulatory Compliance

As discussed in Section 3, the MS4 permit requires participating municipalities to develop and implement stormwater regulations, standard operating procedures, programs, and improvements to address the quality of stormwater discharging to their receiving waters. In order to do this, the permit requires municipalities to develop and implement best management practices to improve the discharge of stormwater in each small MS4, in accordance with the permit's six minimum control measures (MCMs).

Each small MS4 was required to develop a Stormwater Management Plan (SMP) in 2017 that described how they plan to meet the permit requirements for each MCM. After review of each municipality's SMP and annual reports that described what measures were completed to meet the permit requirements, CDM Smith evaluated compliance efforts for each MCM required under the MS4 permit.

Regulatory compliance efforts for each participating municipality were rated based on the following criteria:

- "Proactive:" performing all MCM requirements and within the schedule identified in the stormwater management Plan (SMP)
- "Average:" performing the majority of the MCM requirements (typically miss one to two requirements) and close to the schedule identified in the SMP
- "Below Average:" performing some of the MCM requirements (typically miss three to four requirements) and missing the SMP schedule
- "Poor:" minimal progress or not performing any best management practices (BMPs) in the respective MCM

4.1.3 Operations and Maintenance

During the interviews, CDM Smith obtained information about the operations and maintenance (O&M) of the municipal stormwater systems. Each municipality was evaluated with respect to how they assess, manage, track, and document their O&M activities and evaluated based on typical performance compared to other municipalities in CT on a four-point scale of Proactive, Average, Below Average, and Poor.

4.1.4 Capital Improvement Projects (CIP)

After reviewing annual budgets, capital improvement documents, and other CIP related information, each municipality was evaluated with respect to how they develop, prioritize, fund and implement their stormwater CIP program. Each municipality was evaluated based on typical performance compared to other municipalities in CT on a four-point scale of Proactive, Average, Below Average, and Poor.

The evaluation of each municipalities' compliance with the four evaluation criteria is presented in more detail in the respective "Existing Conditions Analysis" provided in Appendix A and summarized in Table 3.

4.1.5 Stormwater Program Costs

After reviewing annual budgets, CDM Smith developed existing costs for the various stormwater activities. This draft budget estimate was provided to each participating municipality prior to the in-person interviews with key municipal staff. During the interviews, CDM Smith confirmed costs and gathered additional budget costs and information. As part of this process, CDM Smith was able to identify staff working on stormwater tasks, obtain salary information and percentage of time spent on stormwater activities, and develop a detailed cost for the stormwater activities conducted across several municipal departments. CDM Smith also performed the same type of evaluation with respect to CIP and O&M costs. Attachment 1 to each of the Technical Memorandums provided in Appendix A provides a detailed breakdown of the specific existing costs within each municipality.

All of the municipalities involved in this evaluation, except New Britain, utilize their general fund (taxes) to fund the existing stormwater programs. Since the municipalities have different populations and annual budgets, the existing costs were divided by the population for each community to estimate a per capita cost. Future program costs were identified through interviews and are included as gap costs in the financial analysis. These costs are summarized in Table 3 below.

Table 3. Summary of Existing Conditions and Ratings for Each Municipality - 2025

	Bloomfield	Hartford	New Britain	Rocky Hill	West Hartford	Combined
Town Data						
Population (2020 Census)	21,535	121,057	74,135	20,845	64,083	301,655
Existing Evaluation - Level of Compliance						
Regulatory - MS4	Average	Below	Average	Average	Average	Average
O&M	Average	Below	Average	Average	Proactive	Average
Stormwater CIP	Proactive	Average	Average	Below	Proactive	Average
Program Management	Average	Below	Proactive	Average	Proactive	Average
Overall	**Average**	**Below**	**Average**	**Average**	**Proactive**	**Average**
Stormwater Program Costs						
Existing Costs	$795,659	$2,603,708	$3,287,717	$1,176,538	$10,524,161	$18,387,783
Per Capita Cost	$37	$22	$44	$56	$164	$61
Perceived Gap Costs	$62,500	$0*	$85,290	$291,000	$227,375	$666,165
Future Cost with Perceived Gap	$858,159	$2,603,708	$3,373,007	$1,467,538	$10,751,536	$19,053,948
Future Per Capita with Perceived Gap	$40	$22	$45	$70	$168	$63

* This value represents uncertainty in Hartford's gap costs

The evaluation results for each municipality identify the deficiencies within each municipality for each key category. As shown in the table above, the City of Hartford is "Below Average" in several key areas and Rocky Hill was "Below Average" with respect to their Stormwater CIP program. The table also shows that the Town of West Hartford was "Average" or "Proactive" in all evaluation criteria. Overall, most of the municipalities were rated as Average for the majority of their program elements, but some were identified as below average or proactive. Annual per capita costs for existing programs ranged from $22 in Hartford to $164 in West Hartford.

Based on this evaluation, immediate needs and/or problems areas were not identified by any of the participating municipalities. Most of the results of the evaluation were well received by the municipalities and were what they expected with respect to compliance and costs.

As part of the interview process, CDM Smith identified key departments and personnel responsible for the stormwater programs within each municipality. Table 4 below summarizes the responsibilities within each participating municipality for the various stormwater program activities.

Table 4. Stormwater Program Responsibilities for Each Municipality

	Stormwater Program	Field Inspections	Tracking and Record Keeping	Permit Review and Approval	CIP Program
Bloomfield	Town Engineer	Public Works and Engineering	Engineering	Land Use & Engineering	Engineering and Public Works
Hartford	DPW Director	MDC & Streets Department	Hartford Office of Community Engagement and DPW	Department of Development Services	Hartford Flood Commission
New Britain	Director of Public Works	Building Grounds Maintenance	Engineering	Planning and Development	Department Officers
Rocky Hill	Director of Public Works	Operations Manager	Engineering	Planning and Zoning	Building and Engineering
West Hartford	Director of Community Development	Engineering and Public Works	Engineering and Public Works	Planning and Zoning	Engineering and Public Works

4.1.6 Stormwater Project List

Several of the CRCOG municipalities have developed Hazard Mitigation and Climate Adaptation Plans that include a list of recommended stormwater improvements. With dedicated funding from a stormwater utility, these projects could be evaluated, prioritized, and funded through a more holistic and equitable process to address flooding and infrastructure improvements. The following mitigation strategies and actions were identified in the plans[12] as refined or supplemented through more recent discussion.

[12] Spreadsheet of Active Mitigation Strategies - https://crcog.org/wp-content/uploads/2024/07/Spreadsheet-of-Active-Mitigation-Strategies-and-Actions.xlsx

Hartford

- Conduct a city-wide assessment of stream crossings to identify vulnerabilities and develop a priority list for maintenance and upsizing
- Execute the DEEP Climate Resilience Fund (Kennedy/Kane Brook) project and apply for funds to pursue the recommendations
- Undertake a flood mitigation study for the North Branch Park River that identifies potential acquisitions and green infrastructure projects that will reduce flooding and flood damage and that provide other co-benefits such as habitat enhancement
- Coordinate with CLEAR/NEMO to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.

Bloomfield

- Conduct a town wide assessment of stream crossings to identify vulnerabilities and develop a priority list for maintenance and upsizing
- Perform a town-wide drainage study to identify and prioritize stormwater drainage system improvement and replacement needs
- Coordinate with CLEAR/NEMO to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance

Rocky Hill

- Apply for funding to install a box culvert on Beach Road and to raise the road above the 1% annual chance flood elevation
- Perform a town-wide drainage study to identify and prioritize stormwater drainage system improvement and replacement needs
- Conduct a town wide assessment of stream crossings to identify vulnerabilities and develop a priority list for maintenance and upsizing

West Hartford

- Replacement of undersized and/or degraded culverts on Trout Brook at:
    - Asylum Avenue
    - Trout Brook Drive
    - Former UConn campus
    - Lawler, up to Lindy Lane
- Work with DEEP to stabilize unstable streambanks that are not flood control facilities along Trout Brook

- Execute the DEEP Climate Resilience Fund (Kennedy/Kane Brook) project and apply for funds to pursue the recommendations
- Conduct a town wide assessment of stream crossings to identify vulnerabilities and develop a priority list for maintenance and upsizing

<u>New Britain</u>

- Execute the DEEP Climate Resilience Fund (Willow Brook Watershed) project and apply for funds to pursue the recommendations
- Address damaged retaining walls along the brook at Stanley Quarter Park
- Upsize storm drains in Allen Street to increase capacity (designs are in place, implementation is BRIC grant dependent)
- Implement plan to line west canal with geo-textile fabric to mitigate flooding from that source, monitor the effectiveness of this measure and determine whether additional studies need to be performed to address flooding from groundwater
- Complete the drainage improvement project in the Overlook Avenue area
- Conduct a city-wide assessment of stream crossings to identify vulnerabilities and develop a priority list for maintenance and upsizing

With sufficient revenue, and as programs mature, municipalities can conduct further studies and analyses to identify and prioritize project needs.

5. Financial Analysis

This section provides a financial analysis of stormwater management costs for each studied municipality, including current expenditures, projected gap costs to achieve desired service levels, and estimated regional costs associated with intermunicipal coordination.

5.1. Existing Program Costs

Existing stormwater program costs were derived from a comprehensive review of municipal budgets and interviews, as detailed in Section 4. Costs were categorized into Operations and Maintenance (O&M)—covering personnel, materials, equipment rentals, contracted services, and routine maintenance—and Capital Improvements, which include infrastructure upgrades, flood mitigation projects, trench repairs, and equipment replacement identified through municipal capital improvement plans (CIPs). These cost estimates establish the baseline for stormwater utility rate modeling.

A significant variation in O&M and capital expenditures was observed across the five municipalities. These costs were projected for FY 2027 and beyond to support long-term financial planning (see Table 5).

Table 5. Existing Stormwater Program Costs for Each Town, Projected for FY 2027

	FY 2027 Costs	
	O&M	**Capital**
Bloomfield	$ 690,283	$ 165,375
Hartford	$ 2,093,559	$ 661,500
New Britain	$ 3,436,144	$ 81,861
Rocky Hill	$ 1,101,567	$ 118,125
West Hartford	$ 2,013,928	$ 8,946,788

CDM Smith estimated existing O&M and capital costs through program staff interviews and reviews of FY 2025 or FY 2026 budget data. These costs were projected for future years using escalation factors incorporated into the financial model: 2% annually for inflation, 3.5% for salaries and benefits, and 5% for capital and contracted services (Figure 5 and Figure 6). Notably, West Hartford exhibits substantially higher capital expenditures than other municipalities, driven by a standing commitment for flood mitigation under its Capital Improvement Program (CIP). This aligns with its program being rated “Proactive” in nearly all evaluation categories, whereas other municipalities were rated “Average” or “Below.”

A critical consideration for regional utility implementation is the development of a CIP framework. Most municipalities evaluated lack a prioritized stormwater CIP program; therefore, a regional entity would need to establish either a unified regional CIP or apply proportional rate structures based on each municipality’s CIP commitments. See Table 3 in Section 4 for details.

Figure 5. Five-Year Projected O&M Costs for Each Community

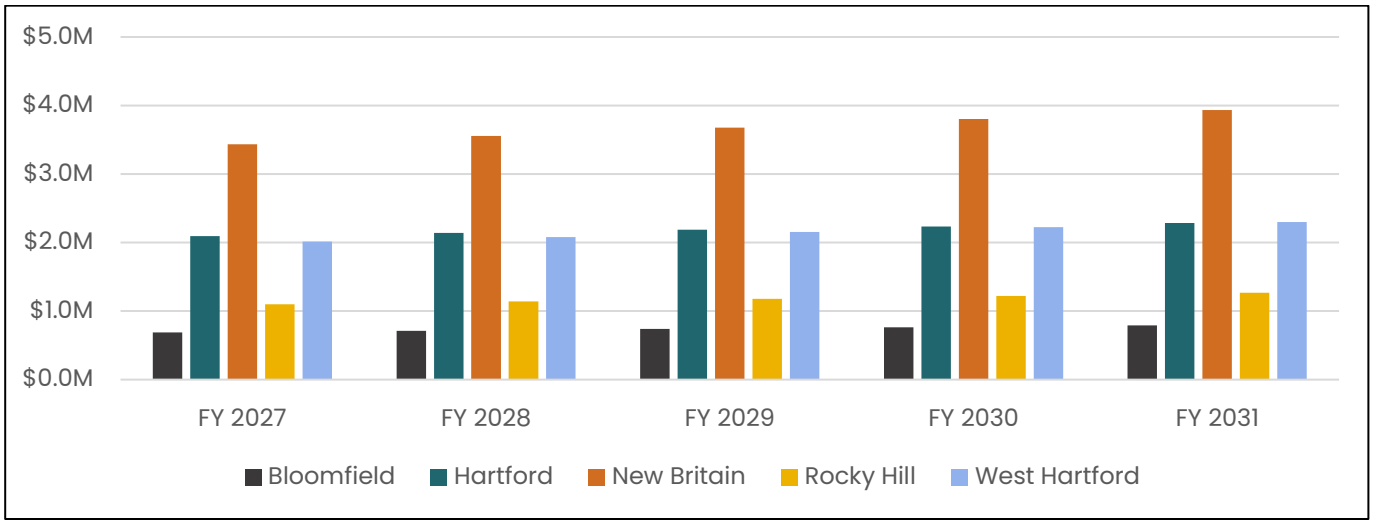
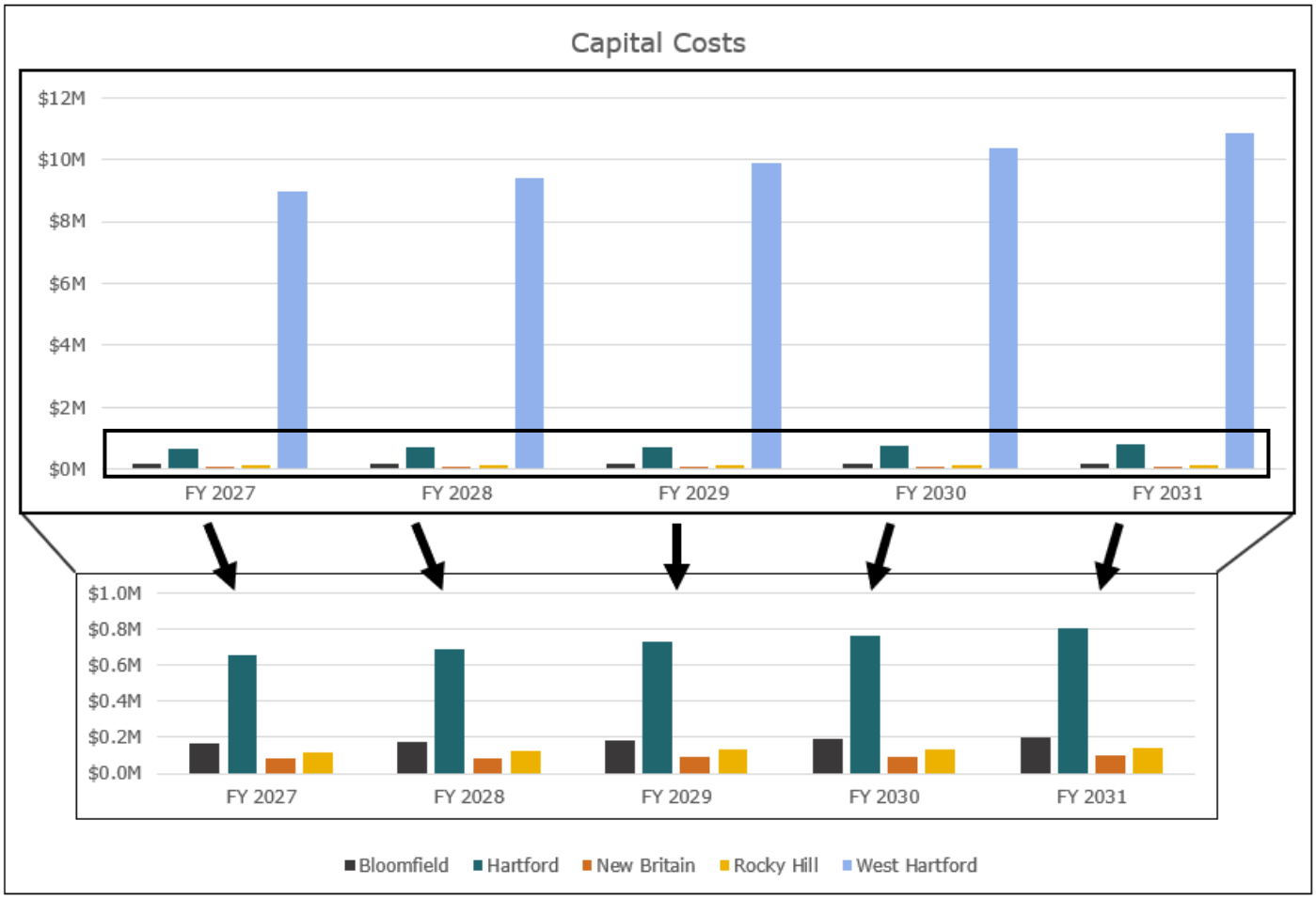


Figure 6. Five-Year Projected Capital Costs for Each Community (inset is zoomed in to show costs for the 4 towns with lower capital budgets)



5.2. Gap Program Costs

Gap costs represent the additional funding desired to address perceived deficiencies identified by each municipality and enhance stormwater programs to a target level of service or compliance.

> **Gap costs were identified through program interviews and include needs such as new equipment, additional personnel, and increased maintenance activities.**

For FY 2027, the projected gap costs are:

- **Bloomfield:** $68,906 (equipment replacement)
- **Hartford:** $0 (no immediate identified gap costs for FY 2027 because the breakdown of responsibility for stormwater management between the City and MDC is uncertain)
- **New Britain:** $91,364 (personnel)
- **Rocky Hill:** $304,560 (personnel and equipment replacement)
- **West Hartford:** $245,876 (stormwater maintenance and equipment replacement)

5.3. Regional Administration Costs

The administration of a regional program would entail some costs for activity coordination, shared services, and stormwater utility support.

> **These costs represent an additional, ongoing investment in collaboration that is expected to reduce expenses for each community over time and promote long-term efficiencies and savings.**

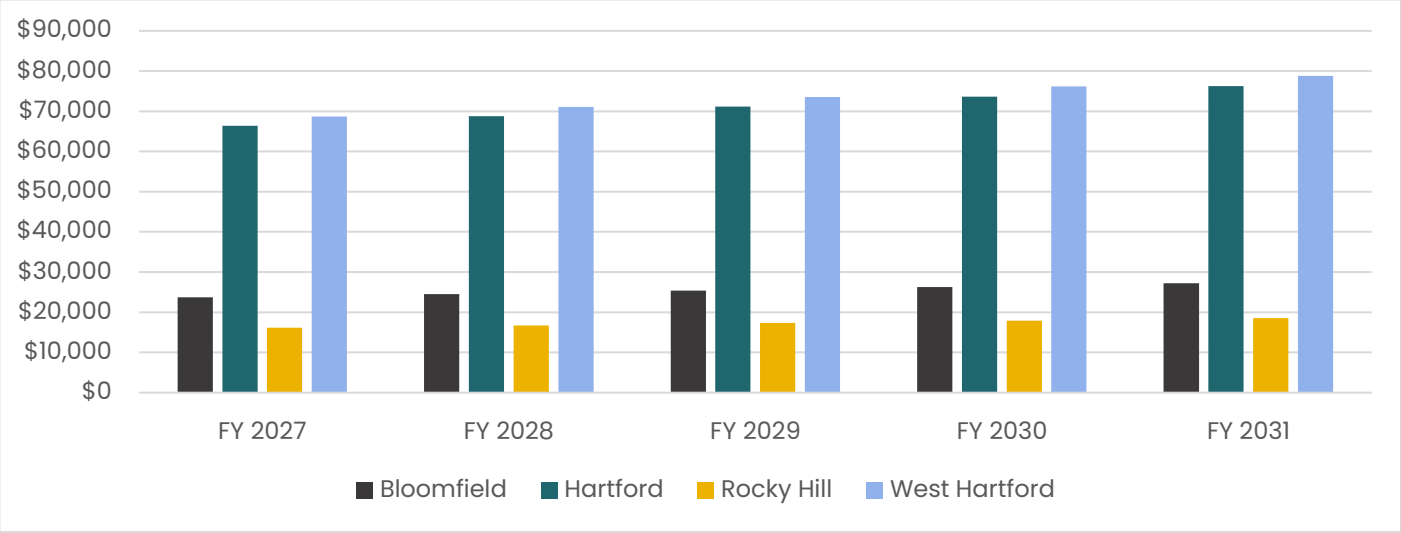
The project team estimated $175,000 for FY 2027 to cover these costs. Regional costs were escalated by 3.5% each year over the 5-year period, equal to the escalation factors used for salary and benefits, because the costs primarily cover personnel. While these are modeled as new costs, they may fill current gaps and are otherwise anticipated to lead to efficiencies in the long run. If additional municipalities joined a regional utility, the administrative cost per municipality could be further reduced.

Allocation of regional costs and all future analysis in this report focuses on the four municipalities without a stormwater utility: Bloomfield, Hartford, Rocky Hill, and West Hartford. New Britain indicated that it is unlikely to move away from its existing independent stormwater utility, so regional costs are modeled as shared between the remaining four municipalities.

Two methods were considered for allocating regional costs among the four communities: based on a percentage of the existing O&M budgets or based on the number of estimated customers/parcels in each municipality, since stormwater billing would be based on the amount of impervious area on each parcel. These methods are proxies for the size of the municipality's stormwater program or the size of the municipality itself, both of which present a reasonable basis for allocating shared costs. The analysis showed that there is a minimal difference between these allocation methods, so this report uses the customer allocation method. Customer counts are estimated based on the count of total SFR parcels and any NSFR parcels that contain impervious area (see Section 6). West Hartford has about 19,700 parcels, Hartford has

around 19,000 parcels, whereas Rocky Hill has closer to 4,600 parcels and Bloomfield has about 6,800 parcels. Because Bloomfield and Rocky Hill have fewer parcels, they are allocated a lower percentage of the regional costs. Figure 7 presents the annual allocation of regional costs to each municipality over the five-year period.

Figure 7. Five-Year Projected Regional Costs Allocated Based on Number of Customers



5.4. Total Revenue Requirements

This section of the report provides a theoretical estimate of the total costs that each community would need to recover through the new stormwater fee(s). The total revenue requirements for each municipality's fee were calculated as the sum of existing costs, gap costs, and allocated regional costs. For the purposes of this analysis, rates were modeled as if each municipality would recover all costs through the stormwater fee. Total Revenue requirements for FY 2027 (projected based on FY 2025 or FY2026) range from $948,000 in Bloomfield to $11.3M in West Hartford (Table 6, Figure 8).

Figure 8. Relative Stormwater Costs and Fee Revenue Requirements for Each Studied Community

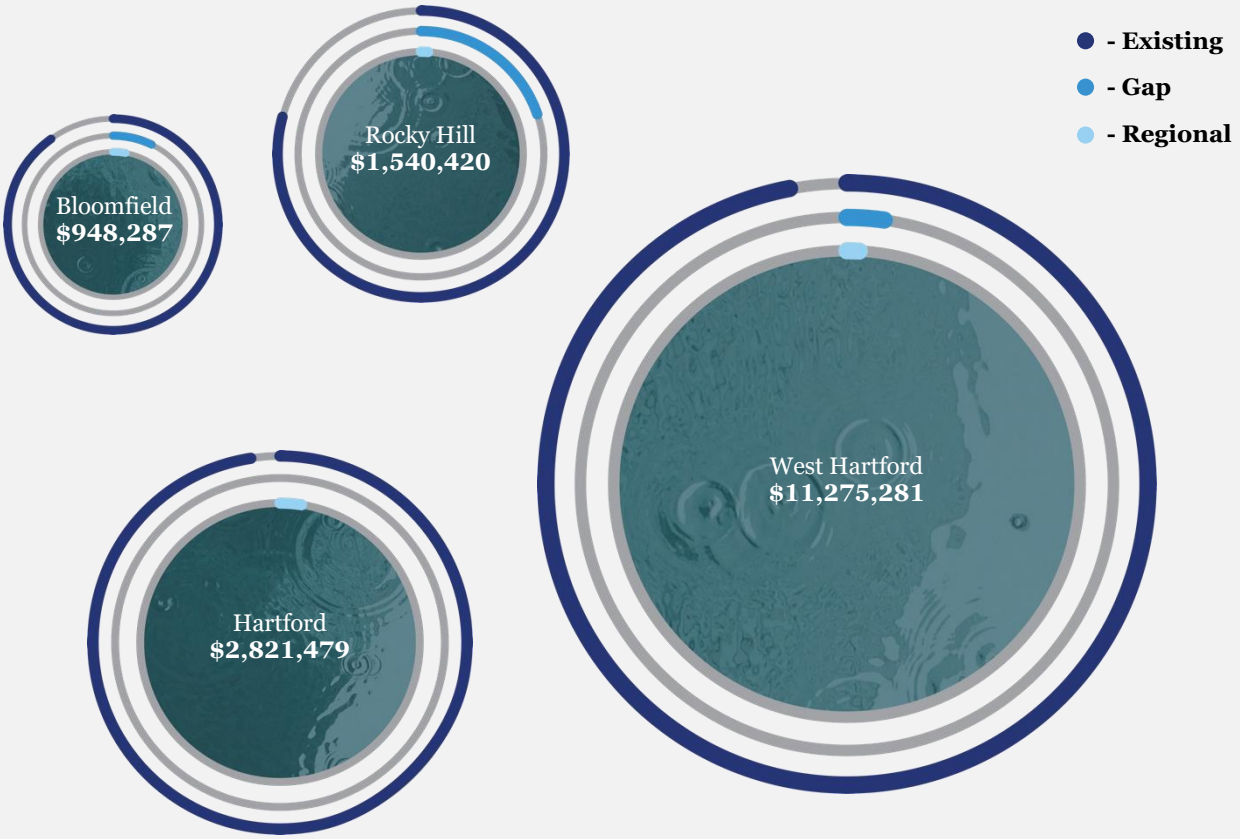


Table 6. Projected FY 2027 Stormwater Program Costs & Fee Revenue Requirements

Expense Type	Bloomfield	Hartford	Rocky Hill	West Hartford
Existing	$855,658	$2,755,059	$1,219,692	$10,960,716
Gap	$68,906	$0	$304,560	$245,876
Regional	$23,723	$66,420	$16,168	$68,690
Total	**$948,287**	**$2,821,479**	**$1,540,420**	**$11,275,281**

6. Data and Units of Service Evaluation

6.1. Stormwater Fee Structures

Best practice throughout the industry demands that stormwater utilities recover costs in a way that maintains a rationale nexus between a customer's demand for, or impact on, the system and the costs recovered from that customer. A stormwater utility rate structure may have several components that could serve as proxy for demand, but by far the most common is the total amount of impervious area (IA) on a property. Under this approach, each property is charged based on its impervious surface area, which does not allow stormwater to infiltrate and therefore generates stormwater runoff.

> **Greater amounts of IA increase demand on the stormwater system by creating more runoff and increased peak rates of runoff, which exacerbates water pollution and flooding.**

The most common impervious area-based rate structure in the U.S. and Canada uses equivalent residential units, or ERUs, as the billing unit.[13] An ERU is a unit of measurement that is developed for each utility and is typically determined as the median amount of impervious area on residential parcels within the utility's service area. While over half of the stormwater utilities across North America use an ERU based rate structure, many communities, especially in New England, use a different standard billing unit (e.g. 1,000 sq. ft. of IA). The ERU is considered the best practice in the industry as it establishes parity between the residential and non-residential customer classes and accurately represents the proportionate burden on the stormwater conveyance system while limiting the need for individual impervious area measurement of single family residential detached properties. Impervious area bears a rational nexus between stormwater fees and the demand on the system.

6.2. Modeled Rate Structure

This study uses the impervious area-based rate structure to equitably distribute stormwater management costs amongst customers based on the demand their properties place on the stormwater system.

Typically, the first step to calculate impervious area-based rates is to estimate the total number of stormwater billing units (units of service). Billing units are calculated based on the total impervious area in the municipality classified into single family residential (SFR) and non-single family residential (NSFR) customers.

- **Single Family Residential (SFR) properties:** For billing purposes, SFR properties include one, two, and three-family residential units in the studied municipalities. In this analysis, SFR parcels are estimated as 1 ERU due to the relative consistency of impervious surface area on one, two, and three-family residential units within each individual town.
- **Non-Single Family Residential (NSFR) properties:** This category includes all other property types (e.g., larger multi-family, commercial, industrial, institutional). Impervious area is measured for each NSFR parcel and then divided by the ERU value to calculate the number of ERUs on an individual NSFR property. NSFR property billing units are estimated based on the number of ERUs

[13] Campbell, Warren, "Western Kentucky University Stormwater Utility Survey 2025" (2025). SEAS Faculty Publications. Paper 22. Accessed on 11/05/2025. https://digitalcommons.wku.edu/seas_faculty_pubs/22

of impervious area, rounded up to the nearest whole number, meaning larger impervious area results in a higher number of ERUs.

To calculate rates, the total revenue requirement is divided by the total units of service (with other slight modifications per best practices in rate setting). This analysis uses each municipality's ERU as the billing unit.

6.3. Data Evaluation

Accurate parcel data and impervious area data are essential for calculating units of service. Parcel data and land use attributes are used to categorize parcels into SFR and NSFR customer classes. A GIS layer outlining measured impervious area based on aerial imagery is used to estimate the amount of IA on each parcel. Recent satellite imagery is also useful to evaluate the accuracy of the measured impervious area layer.

Raftelis' analysis was based on the following data sources:

- **Parcel and Land Use Classification:** A mixture of parcel data and attributes from CRCOG and CT GeoData[14] was used to identify residential and non-residential parcels. Land use descriptions were linked to parcel layers using various identifiers (Parcel ID, Account Number, Map, Object ID). Specific data sources include:
    - **Bloomfield:** CRCOG - Bloomfield_Parcel_OPM_100L_2024.gdb, CRCOG - Bloomfield_Parcel_OPM_100L.csv (using State Use Description for classification).
    - **Hartford:** City of Hartford Parcel Layer - "Parcels with Property Owners" (using LUC Description).
    - **New Britain:** CT GeoData CAMA parcel download (using unit type).
    - **Rocky Hill:** CT GeoData CAMA parcel download, CRCOG - Rocky_Hill_opm (using State Use Code/Style Code).
    - **West Hartford:** CRCOG - WestHartford.gdb, CRCOG - West Hartford OPM_7_100 (using State Use Code/Style Descriptions).
- **Impervious Area (IA) Data:** The primary impervious area layer used was from Connecticut Environmental Connections Online (CT ECO),[15] which was developed based on 2012 aerial imagery. More recent data was not available in time for this analysis.
- **Aerial Imagery:** CT ECO's 2023 aerial imagery[16] was used to evaluate the accuracy of the 2012 IA layer and update the measured IA on select SFR and NSFR parcels.

Parcels were classified into Single Family Residential Parcels (SFR) and Non-Single Family Residential Parcels (NSFR) based on either Unit Type, Land Use Code Description, or State Use Description attributes in the individual municipalities' parcel data. Each municipality has slightly different attributes related to land use codes or unit types for each parcel, so the source with the most complete and accurate set of data was selected for each municipality. When land use or unit type information was missing, these parcels were classified as NSFR for this analysis. Note that further refinement of parcel classification is recommended

[14] https://geodata.ct.gov/pages/parcels
[15] https://maps.cteco.uconn.edu/projects/ms4/impervious2012/
[16] https://maps.cteco.uconn.edu/data/imagery/

prior to utility implementation. If a municipality decides to pursue a stormwater utility, it should identify the relevant parcel attribute to use to classify parcels as SFR or NSFR, check the current classifications, and evaluate the classification of customers without use description or unit type attributes. Other parcel or property information, such as water and sewer billing classifications, could be used to support the determination of the customer class.

Due to the age of the IA data layer, most impervious area from new development and redevelopment since 2012 was not captured or accounted for in this analysis. Additionally, the IA layer was not developed with the level of accuracy required to be used for billing: it misses some IA, for example some sheds and parts of driveways, and over-captures some pervious surfaces, such as grassy patches between walkways, houses, and pools (Figure 9). Our review and updates mitigated some of these deficiencies, as described below, but they are still an important consideration when reviewing estimated rates. If a town decides to pursue a stormwater utility, it should develop a new measured impervious area data layer based on the latest available imagery to support accurate billing.

Figure 9. Examples of Missing IA and Over-Capture of IA

6.4. ERU Determination

6.4.1. Sample Selection and Analysis

A random sample of SFR parcels was selected from each municipality to provide a statistical confidence level of 95% that the true ERU value is within a margin of error of less than 5%. The sample size for each community was 400 parcels. The randomly sampled SFR parcels were visually inspected to determine whether the digitized IA matched the IA visible in the 2023 aerial imagery. IA was updated on a small number of sampled parcels in some of the towns to capture new development. The geographic distribution of each final sample was evaluated to confirm that it represented the geographic distribution of all SFR parcels in the municipality.

The area in square feet (sq. ft.) of each SFR parcel-based IA feature was calculated and became the basis for the statistical analysis. Raftelis recommends using the median measured impervious area from the sample as the ERU. The median is more statistically robust, less sensitive to outliers (the very small or very large impervious surface amounts in the sample), and therefore is a more accurate representation of the “typical” impervious area for residential properties within each municipality.

6.4.2. ERU Results

The calculated median of the SFR sample set for each municipality is shown in Table 7 below. Histograms that show the distribution of IA in the samples for each municipality can be found in Appendix B.

Table 7. Summary Statistics for IA on Sampled Residential Properties (All values sq. ft.)

	Bloomfield	Hartford	Rocky Hill	West Hartford
Min	815	748	894	1,033
Median	3,027	3,067	3,374	2,951
Max	28,181	7,340	25,029	12,398
Mean (Average)	3,415	3,242	3,949	3,402
Sample Size	400	400	400	400

Raftelis recommends that each municipality round the ERU value to ease customer communication and understanding. Below are the recommended ERU values for each municipality. Figure 10 shows example parcels with measured IA that is approximately the same value as the ERU in each specific municipality.

- **Bloomfield –** 3,030 sq. ft.
- **Hartford –** 3,070 sq. ft.
- **Rocky Hill –** 3,370 sq. ft.
- **West Hartford –** 2,950 sq. ft.

Figure 10. Example SFR Parcels with IA Similar to the ERU value for Each Municipality [17]

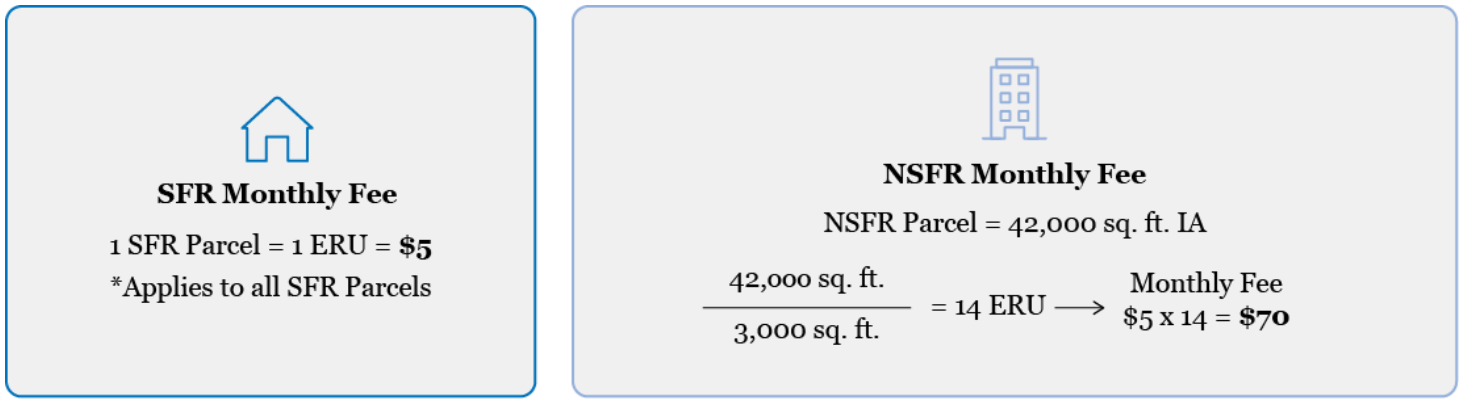
[17] Bloomfield – Parcel_ID – 6606, (3,027 sq. ft.), Hartford - Parcel Number – 121702029, (3,106 sq. ft.), Rocky Hill - Parcel_ID - 04-064, (3,332 sq. ft.), West Hartford - Parcel_ID - 4881 1 43 0001, (2,960 sq. ft.)

Raftelis also calculated a regional ERU based on the sample SFR parcels from Bloomfield, Hartford, Rocky Hill, and West Hartford to evaluate billing on a regional level. The regional ERU was calculated by taking the median IA value of all of the sample SFR properties in the four municipalities included in the ERU analysis. The regional ERU value is 3,110 sq. ft., which falls within the range of the individual municipality ERUs.

6.5. Units of Service Estimation

The total units of service for each municipality consists of the number of SFR parcels, all of which are modeled to be one ERU, and the amount of IA on NSFR divided by the municipality specific ERU value to calculate the total number of NSFR ERUs. Figure 11 shows an example monthly bill calculation for SFR and NSFR properties using a flat rate of one ERU for all SFR parcels and a variable IA based rate for NSFRs. The values presented in Figure 11 are example values to demonstrate the calculation and do not represent the ERU or monthly rate in this study.

Figure 11. Example SFR and NSFR Bill Calculation

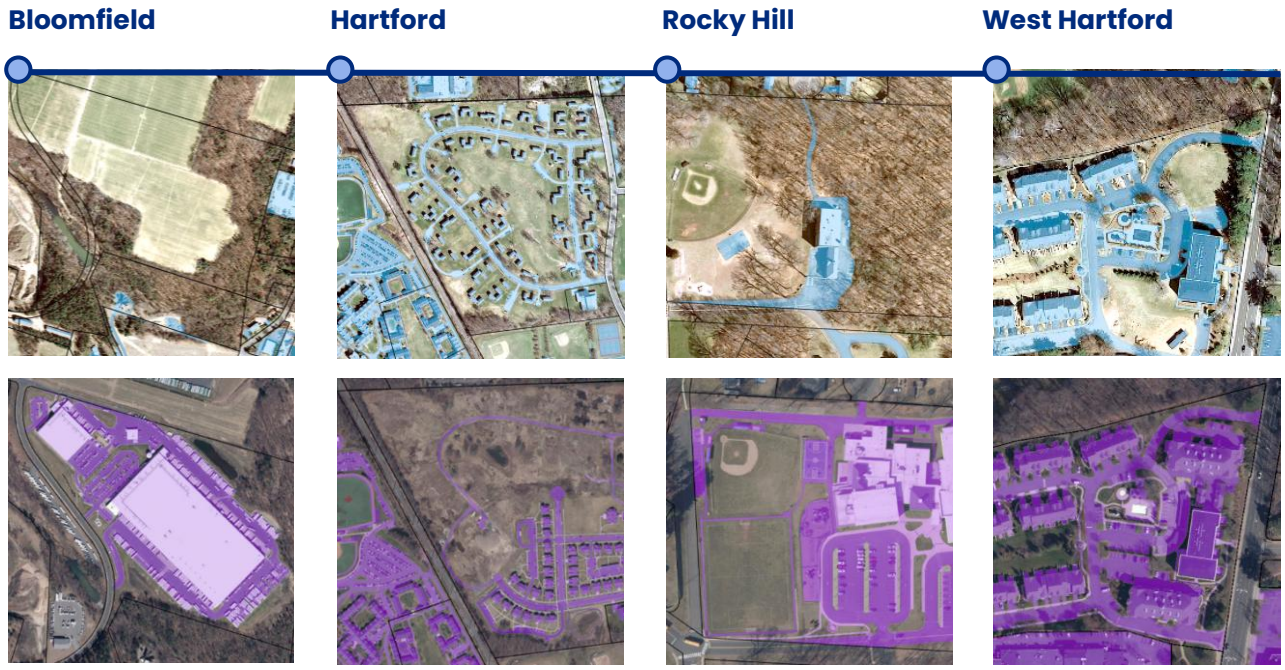


Example Values - ERU = 3,000 sq. ft IA | Monthly Rate per ERU = $5

6.5.1. NSFR Impervious Area Updates

Because billing for NSFR parcels is based on their total impervious area divided by the ERU value, it is important to have accurately measured IA for NSFR parcels. Recognizing the limitations of the 2012 IA layer, Raftelis updated a sample of NSFR parcels with missing or substantially incorrect IA in each municipality. New IA was captured for selected sample NSFR parcels to improve the accuracy of the estimated NSFR units of service. Sample NSFR parcels were selected through visual inspection of the IA layer in comparison to recent aerial imagery, selecting parcels with substantially different measured IA than is shown in the current imagery. The sample was also selected to include a variety of types of NSFR parcels such as schools, shopping centers, small businesses, religious institutions, and industrial parcels. Figure 12 below shows the IA from the original 2012 layer in blue and the updated measured IA layer in purple. The IA updates show new development that has occurred since 2012 (e.g. the Bloomfield parcel, which was developed in 2016), and redevelopment.

Figure 12. Example NSFR Parcel IA updates: Bloomfield[18], Hartford[19], Rocky Hill[20], West Hartford[21]



Within Figure 12, the top row of images displays aerial imagery from 2012[22] and original IA layer in blue. The bottom row of images displays aerial imagery from 2023[23] and updated IA in purple.

6.5.2. Units of Service Estimation Results

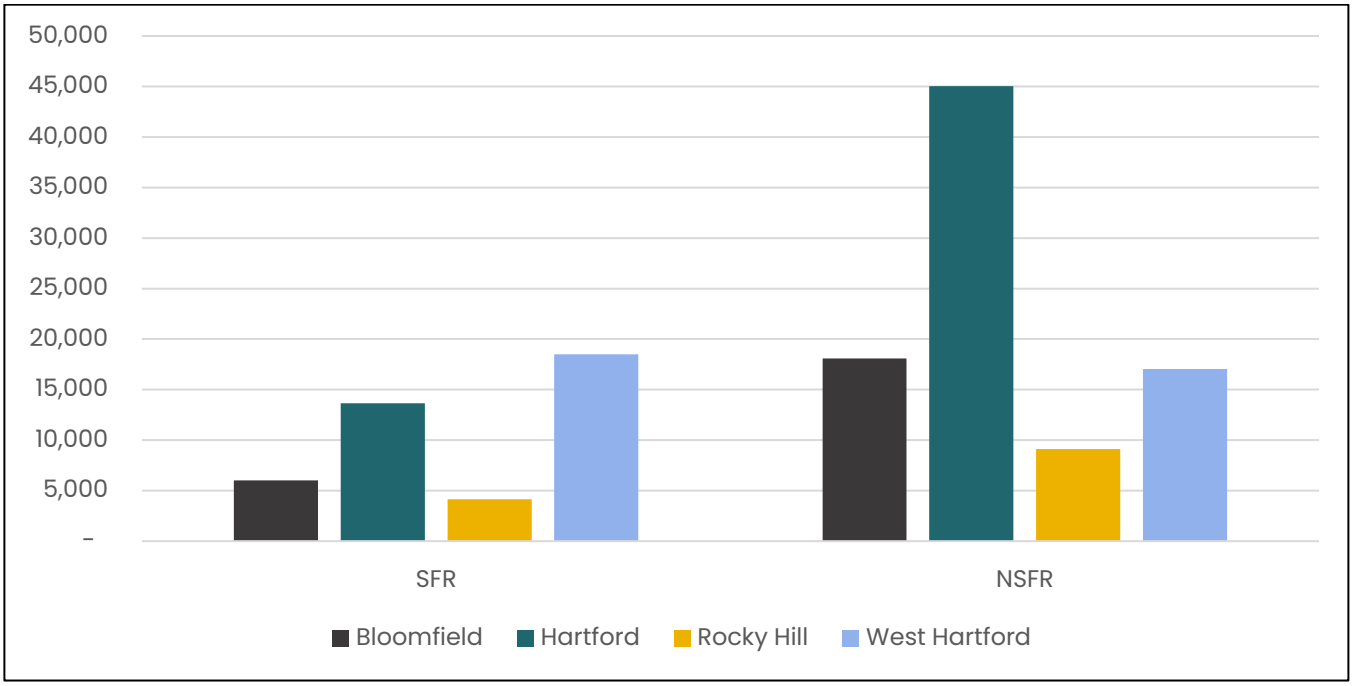
The SFR units of service listed in Table 8 below are calculated as one ERU per SFR parcel. NSFR units of service are the total estimated IA for all NSFR parcels in each community divided by the community-specific ERU. Total ERUs show the sum of SFR and NSFR ERUs. Figure 13 visually compares these units of service by customer class in each of the four municipalities.

Table 8. Estimated Units of Service (ERUs)

	SFR ERUs	NSFR ERUs	Total ERUs
Bloomfield	6,017	18,081	24,098
Hartford	13,633	45,051	58,684
Rocky Hill	4,132	9,133	13,265
West Hartford	18,504	17,039	35,543

[18] Bloomfield – Parcel_ID - 5692
[19] Hartford - Parcel Numb - 124001002
[20] Rocky Hill - Parcel_ID - 14-129
[21] West Hartford - Parcel_ID - 98900
[22] https://cteco.uconn.edu/ctraster/rest/services/images/Ortho_2012/ImageServer
[23] https://cteco.uconn.edu/ctraster/rest/services/images/Ortho_2023/ImageServer

Figure 13. Estimated Units of Service (ERUs) by Customer Class in Each Participating Community



The units of service estimation above can be used to calculate preliminary rates based on the stormwater program revenue requirements and other rate modifiers or policies (e.g., credits) and revenue considerations (e.g., bad debt, growth of units of service, revenue offsets). For this analysis, the revenue requirements were divided by the total estimated units of service to estimate the rate per ERU for each municipality. Raftelis recommends additional IA data development/refinement if a stormwater utility is implemented, so there is more accurate stormwater billing for each parcel, as discussed in Section 6.3 above. Final rates should be based upon measured IA for NSFR properties developed during the implementation phase of each stormwater utility.

7. Modeled Stormwater Rates

7.1. Rate Scenario Variables

Raftelis explored multiple rate scenarios in the financial model to identify the impacts that different variables have on the revenue requirements, units of service, and estimated rates. This report does not present every possible scenario but shows a range of potential rates based on the variables outlined below.

- **Existing Costs:** All scenarios include the current, baseline O&M and capital costs.
- **Gap Costs:** Gap costs can either be included or excluded.
- **Regional Costs:** Regional costs can either be included or excluded.
    - **Regional Cost Allocation Method:** Regional costs can either be allocated by adding a percentage of existing O&M budget to the revenue requirements or based on the number of customers that each utility serves. This report presents the cost allocation based on the number of customers.
- **ERU:** Revenue requirements can either be divided by the community-specific ERU or the regional ERU to calculate a rate for the municipality. The analysis below presents rates based on the municipality specific ERU.
- **Estimation Factor:** A +/- 10% adjustment was applied to the estimated rates to account for uncertainties in IA estimates, units of service, and future costs.

7.2. Estimated Rate Ranges

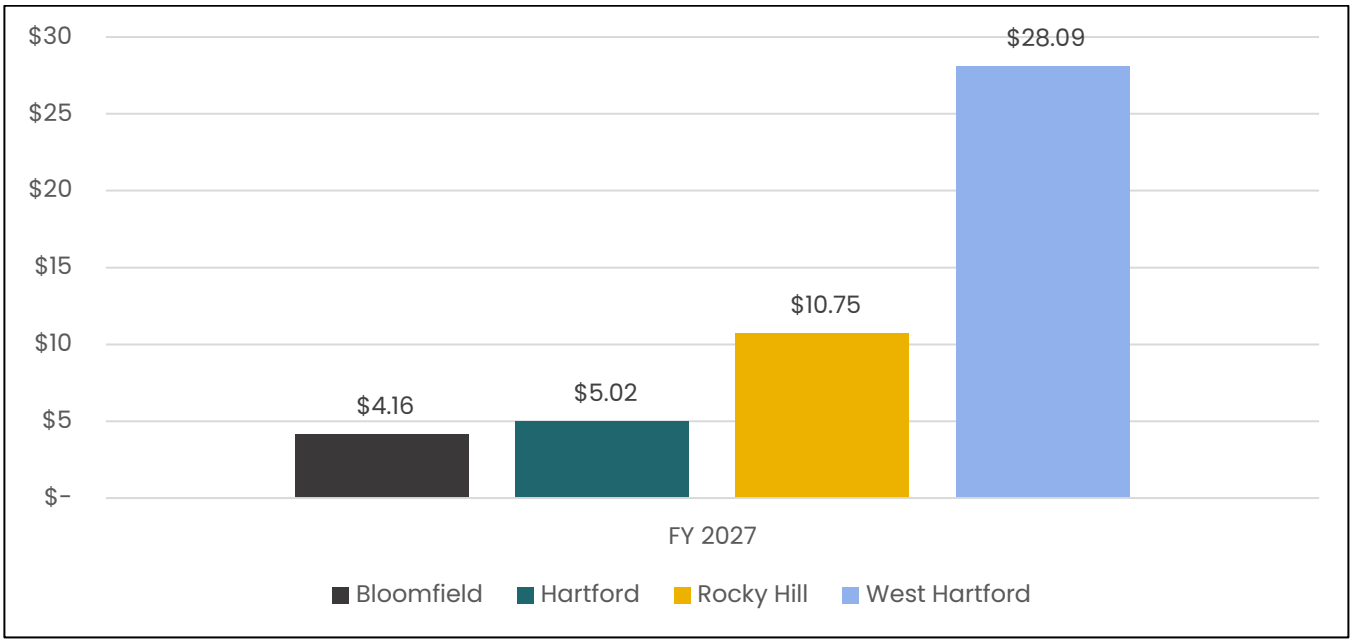
Based on the total projected revenue requirements and the estimated units of service, preliminary monthly rates per ERU were calculated for FY 2027. The rates presented in Table 9 below are based on individual ERUs for each municipality and regional costs allocated based on the number of customers. The “Existing” row shows the portion of the monthly rates that covers existing program costs. The “Gap” row shows the portion of the monthly rates that covers identified gap costs. The “Regional” row shows the portion of the monthly rates that covers the estimated regional costs. The total row shows the total estimated monthly rates to cover all FY 2027 stormwater program costs, assuming that existing, gap, and regional costs would be included in the revenue requirements. Figure 14 compares these rates visually. As expected, West Hartford’s rates are higher than other communities’ rates because it currently operates a proactive stormwater program and is making significant capital investments into flood mitigation efforts.

Table 9. FY 2027 Breakdown of Estimated Monthly Rates per ERU

Expense Type	Bloomfield	Hartford	Rocky Hill	West Hartford
Existing	$2.95	$3.90	$7.63	$25.60
Gap	$0.23	$0.00*	$1.91	$0.57
Regional	$0.98	$1.13	$1.21	$1.92
Total	**$4.16**	**$5.02**	**$10.75**	**$28.09**

* This value represents uncertainty in Hartford's gap costs

Figure 14. Estimated Monthly Rates Based on Existing, Gap, and Regional Stormwater Program Costs



The above values represent all costs included and the units of service estimation results (from Table 8). As discussed above, the analysis included several rate scenario variables (see Section 7.1) which, when applied in different combinations with the estimation factor incorporated, produced a range of potential rates, as shown below. Rates would be on the lower end of the range if some costs were not included, and if IA estimates were low. Rates would be on the higher end of the range if all costs were included, and IA estimates were high.

- **Bloomfield:** $2.70 - $4.60 per ERU
- **Hartford:** $3.50 - $5.50 per ERU
- **Rocky Hill:** $6.90 - $11.80 per ERU
- **West Hartford:** $23.00 - $30.90 per ERU

7.3. Peer Stormwater Utility Rates

Stormwater rates for other New England communities are included in Table 10 to allow for the comparison of estimated rates for study participants with existing stormwater rates in peer communities. Rates were gathered from publicly available information. The estimated rates for all studied municipalities, except for West Hartford, are within the range of monthly rates in peer New England communities.

When comparing rates, it is important to consider that the level of service and conditions of the system vary significantly. Additionally, the billing unit (often an ERU, but sometimes another value) varies from one community to the next. Table 10 below includes the monthly rate per billing unit for each peer community, as well as the monthly rate (prorated where billing occurs on a different frequency) for a residential property comparable to typical properties in the CRCOG study area.

Table 10. Stormwater Rates in Peer New England Communities

City/Town	Population (2020 census)	Monthly Rates (typical SFR)	Monthly Rates (per billing unit)	Billing Unit (sq. ft.)
Boston, MA	675,647	$8.98	$8.98	2,164
Providence, RI^	190,934	$4 - $7	$4 - $7	2,700
Newton, MA	88,923	$11.67	$0.01	1
New Britain, CT	74,135	$6.25	$2.08	1,000
Portland, ME	68,408	$23.25	$7.75	1,200
Chicopee, MA	55,560	$8.33	$0.15	1,000
Lexington, MA^	34,454	$12.92	$12.92	3,290
New London, CT	27,365	$10.47	$3.49	1,000
Reading, MA	25,518	$3.33	$3.33	3,210
Westborough, MA	21,567	$ 9.61	$4.81	2,000
Hudson, MA	20,092	$8.25	$8.25	2,553

^ *proposed utility*, rates uncertain

7.4. Stormwater Credit Program Considerations

As discussed in Section 3.2, Connecticut law requires stormwater utilities to offer credits and partial fee reductions for properties implementing measures that reduce pollutant loads. Credits position the charge as a fee rather than a tax and can be structured simply by aligning with existing municipal development standards, allowing for a simple administrative approach where reviews are integrated with permit and inspection processes, and (for voluntary elements) requiring customers to initiate and provide all necessary documentation for credit applications.

Credit programs are designed to incentivize private stormwater management and reduce demand on municipal systems, thereby lowering overall program costs. Credits should align with local or regional stormwater goals and regulatory requirements. A well-structured program can also serve as a public engagement tool, fostering support for utility implementation.

Key considerations when designing a credit system include credit types, discount levels, eligibility criteria, and application processes, all of which have financial, staffing, and outreach implications for long-term administration. This section summarizes potential credit program elements, their anticipated impacts on rates, and implementation feasibility.

Generally, credits can be grouped into the following four types:

- **Water quantity credits** are credits for stormwater control measures (SCMs) that reduce the amount of runoff from a site (total volume, peak runoff, or both).
- **Water quality credits** are credits for SCMs that improve water quality by mitigating the amount of nutrients and pollutants in the runoff.
- **Permit credits** or exemptions issued to a property or facility that is subject to an individual National Pollutant Discharge Elimination System (NPDES) industrial permit or discharge permit.
- **Community activity credits** are granted for activities that improve stormwater awareness and/or water quality, such as stream cleanups and public education.

Some credits may fall into more than one of these categories. For example, many SCMs address both water quantity and water quality.

Advisory Committee members discussed their individual requirements, tracking, and enforcement of development standards, and evaluated to what extent the current standards address or encourage low-impact development (LID) and nature-based solutions, such as green stormwater infrastructure (GSI) implementation. Some members discussed local regulations referencing the State of Connecticut's "Stormwater Quality Manual" and "Guidelines for Soil Erosion and Sediment Control" and emphasized that their local regulations focus on controlling stormwater at the source, creating opportunities for GSI such as on-site detention. Members had different approaches to LID in their jurisdictions: while some have LID incorporated into their stormwater ordinances, others indicated that, while development permit applications refer to LID, current regulations don't offer enough guidance and so they are looking to improve these regulations. This variability in local regulations may lend itself easier to individual stormwater fee credit programs. However, if a regional credit program was created, it may be an opportunity for participants to align their development standards more closely to steward a more uniform approach to distributed stormwater management in the region and to promote green stormwater infrastructure more widely.

Community activity credit, which can also be referred to as non-structural credits, can provide an opportunity for schools, nonprofits, or community organizations that actively engage in public education efforts around stormwater issues to receive credits for their efforts. It could also encourage other entities that are not currently engaged with such efforts to become engaged and develop educational resources. These credit types help align local stormwater utility programs with the goals of the MS4 permit requirements and encourage broader participation in sustainable stormwater practices. The Advisory Committee members commented that they would be open to community activity, education, and participation credits, even though this is not something that they had considered before.

Other non-structural credits include maintaining open space or preserving natural vegetation, which helps mitigate runoff impacts.

An ideal credit framework balances the goals of recognizing and promoting private stormwater management with administrative simplicity. Consideration should be given to the administrative burden imposed by a credit program, depending on its complexity. Eligibility for credits will need to be determined based upon customer classification and/or land-use classifications of billed parcels. For example, credits could be granted to all customer classes (SFR and NSFR) or just to some of them (e.g., NSFR only). In the latter case, the decision may be based upon the desire to reduce the administrative burden of the credit program. Note,

however, that the makeup of the community may also influence this decision: for municipalities that are largely residential, offering credits to NSFR only customers may not achieve credit program goals. Advisory Committee members had differing opinions about which option might work best for their communities.

If moving forward with municipal credit programs, each municipality would need to develop program eligibility criteria and standard operating procedures for processing applications, calculating credits and adjusting fees in the billing system, administering a credit renewal process, and enforcing compliance. To support these new processes, additional staff may be required to support billing and customer service, data maintenance and account updates, and engineering/plan review and inspection, who may have a more technical role in reviewing information, determining credit eligibility, and performing inspections to track compliance. It is important to consider a credit program that works within the existing staff structure. Some Advisory Committee members commented that their municipalities would not have current staffing capacity to support a local credit program but thought that it could work more efficiently if the program were to be regionally administered.

Each municipality should consider the types of credits and amount of discount it wants to offer as part of the implementation process. Credits' impact on revenues tends to be low to moderate (typically less than 1% and up to 5% of fee revenues). Note that the rate scenarios proposed in this study and discussed above do not yet consider the potential impacts of a fee credit program. Nevertheless, these impacts could easily be added to the financial model.

8. Public Outreach & Engagement

8.1 Communications Plan

At the start of the Study, Raftelis developed a Communications Plan (Plan) to provide guidance to all participating entities about how to communicate about the study, throughout the study. The Study's Advisory Committee provided the foundational guidance for the Plan during the kickoff meeting. Given the pivotal impact communications (or lack of) can have on a concept like regionalization of services, the Plan placed a high priority on internal communications, including elected officials, as well as external stakeholders, such as customers of each participating entity. Each participating entity is encouraged to communicate often with their leaders and their public stakeholders about this project and actively listen to feedback. The Plan offered guidance about how to communicate with stakeholders and what channels to use. A full message platform and talking points were included in the Plan to ensure all participating entities spoke consistently about the project and what was being considered. The full Plan is provided in Appendix C.

8.2. Public Survey

To bolster the participants' knowledge of their residents' awareness and understanding about stormwater services, costs, and funding, as well as their attitudes about regional collaboration, a digital public survey was conducted in July 2025. The survey achieved excellent participation, with over 450 respondents throughout the region, though concentrated from a few municipalities. A $100 gift card raffle likely helped to increase participation.

Full results are provided as Appendix C to this document. Key findings included:

Respondents had broad general knowledge about what stormwater is, how it is managed, and personal actions people can take to protect waterways.

Significant opportunities exist to enhance communications:

- More than 30% think stormwater is treated and nearly 40% are not sure if it is.
- More than 60% haven't seen any educational materials about stormwater from their town.

Respondents did not demonstrate a strong agreement on how to fund stormwater management. Nearly a third selected "State or federal grants," which are unlikely to offset more than occasional (and partial) major project costs. This represents another opportunity for education.

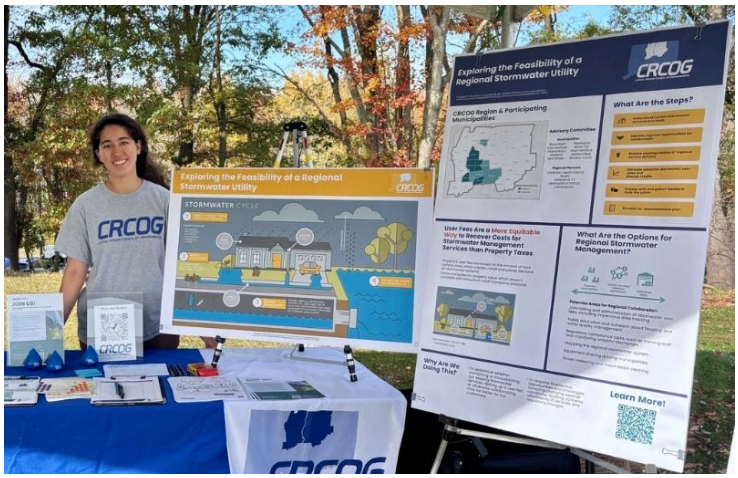
Despite the above, more than half of respondents were willing to pay $5-20 per month (~42%) and over $20 per month (~9%) for stormwater management.

Finally, and importantly, over 64% of respondents supported the idea of their city or town creating a utility with other local municipalities to jointly manage stormwater in the region or share the costs.

While most respondents were supportive of the idea, they expressed concerns related to loss of local control, accountability, subsidizing other communities, and additional bureaucracy, all of which can be addressed through education and outreach about the structure of a regional or collaborative program. Moving forward, surveys remain an excellent tool to gauge the public's perception or understanding of the program, priorities, and outcomes and should be continued annually to gauge how well communications and outreach are impacting public knowledge and sentiment. Most importantly, study participants are encouraged to frequently and transparently communicate with their constituents on the topic of this study, so that if and when a decision is made about shared services, the public is not surprised, and the decision is made with their concerns in mind.

8.3. Public Engagement

Figure 15. CRCOG Staff at Rocky Hill Fall Fest



In mid-October of 2025, the participating entities, with support from CRCOG, engaged with the community about the study in two ways: by tabling at a community event in Rocky Hill and by hosting a virtual public meeting via Zoom. The purpose of these two engagements was to share information about stormwater in general; share the challenges the region faces with stormwater management; and share the potential solutions and recommendations for funding and regional management as outlined in this report.

At the first event, the team hosted a table at the Rocky Hill Fest on October 18. The team engaged with 25 - 30 people, though it was challenging to converse with casual passersby on such a complex topic. No written comments were received. A member of the Rocky Hill Conservation Commission and a state legislator both expressed interest in the project, with the Conservation Commission member attending the virtual meeting after learning about it. Participating entities are encouraged to continue the conversations with them.

On October 22, the team hosted a virtual open house, promoted through CRCOG's network of followers and by the Advisory Committee (Appendix D contains details on targeted outreach). There were 19 participants, seven of which were from CRCOG and the consulting team, and 12 of whom were guests (study participants and members of the public). CRCOG member municipalities and study participants were well represented. Key take-aways from this presentation included:

- Interest from West Hartford and Ellington in regional approach for certain services
- Grant-makers like to see regional collaboration
- There needs to be more effort put toward public outreach and education, as concerns were expressed about customers understanding of the need for regional management since flooding is always local, and concerns about how to explain the need for a stormwater fee if the stormwater program is already well funded using taxes
- The potential impacts on different customer types, such as non-profits and governments, were also discussed.

Input received from the public during these events has been incorporated into this report and considered in the development of the recommendations. A third engagement is planned, as a virtual Zoom meeting, to share the final recommendations laid out in this report. This is likely to be scheduled for mid-February 2026.

9. Feasibility & Implementation

This section of the report summarizes the factors in determining the overall feasibility of a regional stormwater management approach and lays out potential steps that the municipalities and CRCOG could take if they decided to pursue implementation. These variables represent discussions and observations by the project team and Advisory Committee.

9.1. Regional Feasibility Conclusion

Creating a regional stormwater utility is feasible for the Capitol Region municipalities—but success depends on political will and strong local champions. While New Britain already operates a utility and at least one other community has expressed interest in implementing its own, Advisory Committee meetings revealed that more planning and discussion would be needed for all participants to engage in either a fee-funding model or a regional approach. Many members showed curiosity about shared services but were hesitant to commit to full implementation without further study and deliberation. Several indicated they first need to gauge their communities' sentiments and secure guidance from elected officials.

In the near term, the most practical approach is a coordinated effort through interlocal agreements, with CRCOG serving as the central entity to provide key services and facilitate collaboration. This model could deliver immediate economies of scale through shared purchasing and shared staffing resources to assist with MS4 compliance and related tasks, even for municipalities not ready to adopt a fee-based funding model. CRCOG should also establish a permanent stormwater committee to act as an informal venue for collaboration and keep stormwater management a priority in regional planning.

Looking ahead, CRCOG can position itself to expand shared services and, if interest grows, transition toward a more centralized entity. Having a structure for broad participation and a mechanism to scale up collaboration will streamline future efforts. One critical function of any regional approach—whether through a centralized entity or interlocal agreements—is utility administration. As stormwater fees become more common, CRCOG could be well suited to provide administrative support, including billing, data maintenance, and customer service. This would alleviate one of the biggest challenges for municipalities implementing a utility.

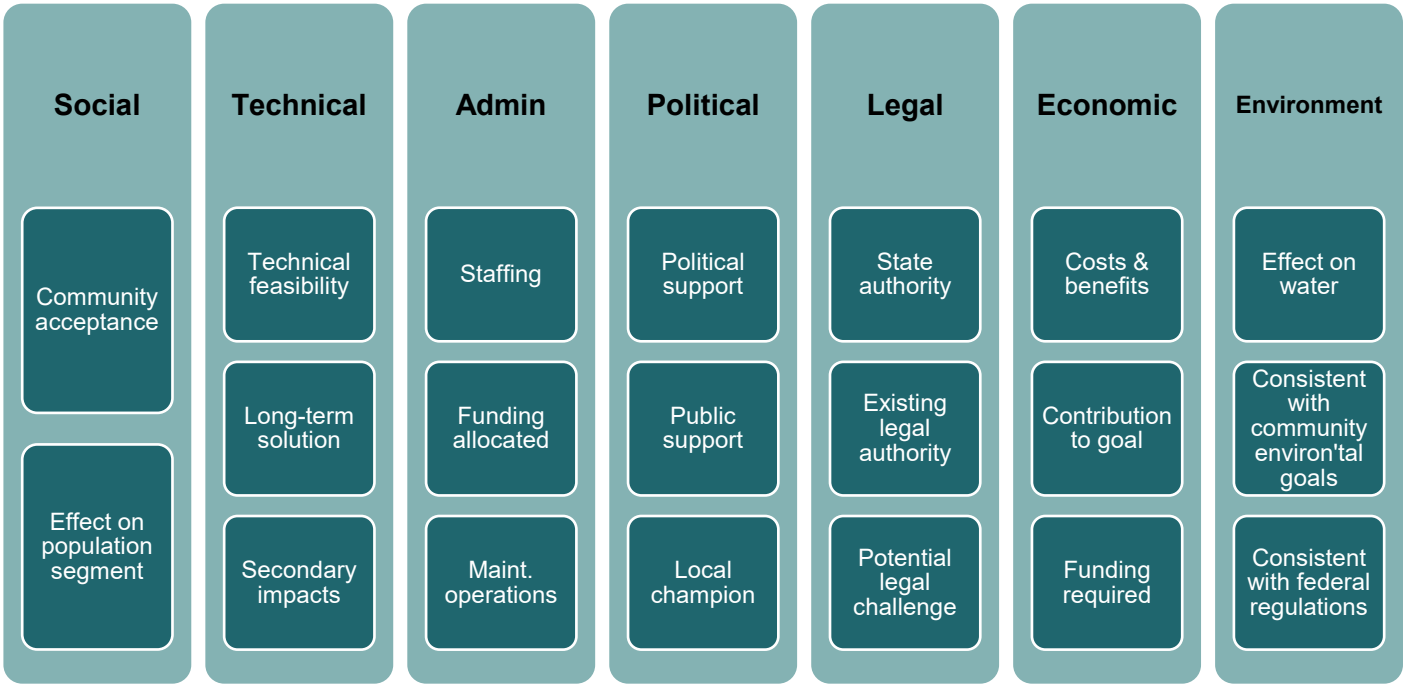
9.2. Feasibility

9.2.1. Framework for Feasibility Evaluation

The STAPLEE framework is used by the Federal Emergency Management Agency (FEMA) for community project evaluation and prioritization.[24] Figure 16 summarizes the intent of the STAPLEE framework. The project team applied this framework to summarize the major take-aways from the study and worked with the Advisory Committee on evaluating the feasibility of a regional stormwater management approach, such as a regional utility or joint management via interlocal agreements. Advisory Committee members were urged to provide a diversity of comments regarding the opportunities and considerations in each category. The goal was not to build consensus but rather to accurately capture the participating communities' perspectives, so they are fully represented in this report. The following sections capture the takeaways from that discussion, divided into opportunities and considerations.

[24] https://toolkit.climate.gov/sites/default/files/PG_Resource_5.3_V2.pdf

Figure 16. STAPLEE Framework Summary



9.2.2. Social

Opportunities

1. Survey responders were generally in favor of regional approach and not opposed to fee funding stormwater.
2. Standardizing public communication regarding stormwater needs may help reach a larger audience and garner more understanding and support.
3. Greater equity is achieved using a fee based on impervious area. One Committee member cited the town has many properties with a lot of impervious area that “don't pay much in taxes.”
4. A fee credit program can help educate customers about stormwater management by offering an incentive to reduce their stormwater fees through reducing their impacts on the municipal stormwater system. This point was important to several Committee members. Since stormwater services are currently being paid for with tax proceeds from the municipalities’ general funds, citizens may think that their property taxes may be lowered if the fee is implemented, which may or may not be the case depending on other needs in each municipality.

Considerations

1. Perception that regionalization is a ‘dirty word.’
2. Programs that are currently well funded would need a comprehensive public engagement campaign to explain the change to a utility fee model.
3. Flooding is felt locally, even if it’s a result of issues upstream in the watershed. Public education would be needed to justify a regional approach. A committee member advised that local clean water

focused non-profit organizations could help to provide educational materials that address the challenge of flooding being felt locally but influenced by the full watershed.

9.2.3. Technical

Opportunities

1. Potential sharing of internal and external expertise between jurisdictions.
2. Standardize technical approach to addressing common issues.

Considerations

1. MS4s service most municipalities except Hartford, which also has a combined system.
2. Current levels of funding and/or expertise impacts compliance with aspects of MS4 permit requirements.
3. Sanitary sewer overflows (SSOs) that are resultant from an existing sanitary sewer system over capacity due to excess clean water (stormwater, groundwater) often are in locations where the existing drainage system is lacking or has insufficient capacity. Addressing and eliminating SSOs needs to be considered as part of both an individual and regional stormwater utility. Also, several of the municipalities within the CRCOG area are MDC Member Towns and will be required to work with MDC to address SSOs.
4. Hartford's combined system, managed by MDC, and complex layers of responsibilities for operation of the overall drainage system present challenges for delineating technical responsibilities between the City and MDC and implementing long-term planning.
5. The Greater Hartford Flood Commission doesn't manage stormwater directly but is an important regional partner in maintaining public safety. It manages the rivers and flood control facilities that are impacted by stormwater runoff. MDC must obtain permits from the Greater Hartford Flood Commission to discharge into the rivers managed by the Flood Commission.

9.2.4. Administrative

Opportunities

1. Councils of Governments (COGs) in Connecticut have just begun working together to determine how to support communities in meeting MS4 requirements.
2. CRCOG is an existing regional entity that may be willing to take on administrative duties for the utility, like coordination of services, IA data maintenance, and bill calculations. A committee member noted that IA maintenance may be challenging for his community and likely other municipalities to do on their own, so regional coordination on this task would be beneficial.
3. Connecticut state legislature is providing additional funding to COGs that may be used for stormwater management activities via Special Session Public Act 25-1.
4. Sharing services would allow towns to centralize procurement for some services and/or equipment, saving staff time and potential costs.
5. Gap costs identified in the study pointed to equipment replacement needs in 3 of 5 studied towns.
6. Having different fee revenue requirements and different rates may not need to impede collaboration if done via interlocal agreements instead of a centralized entity.

7. Fee credit programs could be administered at the local or regional level, depending on the level of cooperation desired.

Considerations

1. Fee billing mechanisms will need to be figured out for municipalities that currently do not bill for utility services. Conveying the fee on the municipal tax bill may be a possibility.
2. Each municipality may have different goals regarding what should be funded by fee revenues – just MS4 compliance, overall stormwater operations, or capital projects as well. At the time of this report, a recently released draft MS4 permit suggests workload to comply would remain substantial.
3. Current local regulations governing stormwater management requirements vary by municipality. However, coordination may help standardize approaches for more consistency throughout the region.
4. Staff are at capacity in most jurisdictions. However, utility fee revenue could help expand staffing.

9.2.5. Political

Opportunities

1. CT DEEP and CT Legislature support for regional solutions.
2. One committee member noted: "Every drop of water infiltrating in West Hartford benefits Hartford and other MDC communities… Investment in infrastructure saves everyone money in the long term."
3. Even smaller, more rural municipalities would benefit from regional collaboration to reduce their impact on the watershed.
4. New Britain is a local example of an existing stormwater utility.

Considerations

1. Out of all the categories considered in the feasibility discussion, this one seems to be the biggest challenge.
2. Concerns about loss of local control, red tape, and transparency. However, any move forward either with a local utility with or without some regional shared services or a move toward a centrally administered entity would require a local vote. If municipalities decide on the model relying on inter-local agreements with some shared services, local policy makers would maintain control over the process while allowing for efficiencies such as shared equipment, resources, and expertise.
3. MDC/Hartford ownership of the City's drainage system and governance of system elements in Hartford add to political complexity.
4. While none of the study municipalities are in a position to commit to joining a regional entity without further assessment and deliberation, several expressed an interest in pursuing ideas for regional collaboration. CRCOG is in a unique position to advance the conversation further and to include a larger group of member towns in the discussion.

9.2.6. Legal

Opportunities

1. Connecticut has enabling legislation to establish stormwater utilities.

2. Member municipalities acting with a central city could vote to establish a regional Metropolitan District to perform these activities (may be duplicative to the existing MDC in Hartford); Alternatively, municipalities could contract with an existing regional authority
3. Legal avenue exists to establish interlocal agreements.
4. Two existing local utilities in Connecticut have not been challenged.

Considerations

1. Resiliency districts – not clear how a regional stormwater utility may interact with this new concept.
2. Under the centralized entity model, the new regional utility could decide to be a co-permittee on the MS4 permits for the municipalities, similarly to the Wyoming Valley Sewer Authority approach. If a project funded by it fails, the liability would be shared between the town(s) and the centralized entity.
3. Under the inter-local agreements model, liability for joint services like equipment sharing will depend on the structure of the inter-local agreements.

9.2.7. Economic

Opportunities

1. Potential cost sharing/cost savings with regional coordination.
2. Opportunity to find economies of scale for managing pollution and flooding on a regional rather than local level.
3. Stormwater fee would be based on IA, which correlates with runoff produced and demand placed on municipal stormwater systems. It would be more equitable and sustainable than funding via the general fund based on property taxes. Under the fee model, tax-exempt properties are billed like they are billed for other utilities.
4. Equivalent Residential Units (ERUs) in the study municipalities are relatively similar, pointing to similar development patterns and supporting the idea of joint billing if desired.

> **A stormwater utility framework would support dedicated, reliable funding for municipal stormwater programs that would not be subject to annual oscillations and competing priorities of the General Fund.**

5. Stormwater fee revenues would alleviate the pressure on each municipality's General Fund while creating funding for necessary but costly capital investments.
6. Grantmakers like to see regional collaboration, which could improve diversity of funding sources.

Considerations

1. Stormwater management in the region is underfunded and is not keeping up with demand and mandates.
2. Current stormwater funding relies on taxes based on property value, which are not tied to how much demand each property places on municipal stormwater systems. Moreover, tax-exempt properties don't contribute.

3. Current funding for stormwater programs among studied CRCOG members is variable, ranging from West Hartford's funding, which is most robust, to Hartford's, which is below average.
4. Technical, political, and administrative complexity of the drainage system in Hartford also has economic implications for the City and region.

9.2.8. Environment

Opportunities

1. Watersheds don't respect political boundaries. A watershed-based or regional approach to stormwater management makes scientific sense.
2. Potential drivers for a regional approach include municipalities contending with flood hazards from upstream runoff volume coming down from other jurisdictions that may not have the means to manage it locally.
3. Additionally, Hartford's partially combined system and the combined sewer overflows (CSOs) it sometimes produces have impacts beyond Hartford and affect neighboring communities.
4. Stormwater fee credit program can help motivate private investment in stormwater control measures, resulting in positive environmental impacts distributed widely throughout the participating municipalities.
5. West Hartford has a renewed focus on tree canopy restoration, which may naturally tie in with stormwater credits for tree plantings.

> **Additional resources for stormwater management could clear the path for investment in green infrastructure and other initiatives that may be challenging to prioritize within existing constraints.**

Considerations

1. Changes in weather patterns are exacerbating flooding issues – additional investment and/or creative approach will be required to promote public safety.
2. MS4 permit requirements focus mainly on addressing water quality concerns and not necessarily flooding.

9.3. Implementation

There are several potential outcomes from this study that could bring about positive changes in stormwater funding and management in the CRCOG region. This document recommends a series of implementation steps that may apply slightly differently depending on each community's path forward, whether individual or collaborative. The steps are summarized as a matrix in Table 11 and discussed further below, with additional details specific to each outcome.

Regardless of the path forward, Advisory Committee members should share the study results with regional colleagues and elected officials to build awareness of the benefits of dedicated stormwater funding and regional collaboration. Although this study focused on a limited number of communities, interest from outside the core group suggests CRCOG should engage its full membership to broaden the feasibility discussion. Establishing a permanent stormwater management committee would provide an ongoing forum for program support, peer exchange, and strategic regional initiatives.

To advance these efforts, CRCOG should assist municipalities in evaluating current program needs and gaps, including MS4 compliance shortfalls and infrastructure rehabilitation requirements. Proactive management and updates to impervious area data will further prepare communities for potential utility implementation and support system planning. Funding for these activities may be available through DEEP or other state grant programs (see Section 9.2.7), as well as through municipal general funds to cover staff time and resources.

The table below summarizes implementation considerations, with detailed explanations following the table.

Table 11. Matrix of Implementation Steps by Outcome

Implementation Step	**Potential Outcomes**			
	Shared (Existing) Services	**Stormwater Utility Fee Implemented by Town**	**Shared Utility Management Services**	**New Regional Utility (See Section 3.2)**
Develop clear view of future program	Not needed if no program changes are envisioned	Necessary to set expectations for use of fee revenue	Necessary to confirm the scope of shared services (existing vs. new) and how they will be paid for	Necessary to define level and extent of service, in collaboration with municipalities
Determine compelling case for fee funding	Not needed – no change to current funding approach	Necessary for successful outreach and adoption	May influence utility administration; recognize potential cost savings here	Influences whether costs are shared/reallocated between municipalities
MOU among interested municipalities	Document plan to share and pay for services	Not needed – effort is focused on individual municipality	Document plan to share and pay for services	Relevant in early stages of new entity creation
Public communication and engagement plan	May be important to communicate changes to service delivery	Important to communicate changes to funding approach	Important to communicate changes to funding approach, service delivery, and roles/contacts	Critical to communicate responsible parties and points of contact
Adopt inter-local agreements	Agreement on services and payments	Not needed – effort is focused on individual municipality	Agreement on services and payments	Required to organize
Determine revenue requirements, fee structure and billing approach	Not needed – no change to current funding approach	Details of the fee must be known before implementation	Details of the fee must be known by all parties before implementation	Details of the fee must be known before implementation

Implementation Step	**Potential Outcomes**			
	Shared (Existing) Services	**Stormwater Utility Fee Implemented by Town**	**Shared Utility Management Services**	**New Regional Utility (See Section 3.2)**
Billing data maintenance & policies approach	Not needed – no change to current funding approach	Details must be known before implementation	Details should be agreed upon by all parties before implementation	Details should be known before implementation
Credit policy	Not needed – no change to current funding approach	Initial framework should be known before implementation	Determine whether administration of the credit program falls under shared services or will be delivered by each town; agree to process and policy specifics	Develop a program that appropriately aligns with participating entities and their MS4 obligations; initial framework should be known before implementation
Ordinances	Not needed	Needed to set up fee and potential enterprise fund	Needed to set up fee at each town and potential enterprise funds	Needed to participate in regional entity

Recommended implementation steps:

1. Establish a **clear view of a future program** – including level of service and future needs, and a **compelling case for a utility** (sufficient or sustainable funding, improved equity in cost recovery, etc.). Section 3 of this report identifies general benefits that can serve as a starting point.
2. Create a **Memorandum of Understanding (MOU)** among interested municipalities to set up a framework for regional collaboration on stormwater management – this would describe what each party wishes to get out of a regional approach.
3. If one or more municipalities decide to move forward with the fee funding model or a change to service delivery, they will need to develop a **public communication and engagement plan** that will allow them to both receive input on fee design and to build community support and understanding throughout this process. The plan should address elements like stakeholder identification and engagement, engagement goals (inform only or seek feedback), engagement methods and formats (in person or virtual), and traditional and social media strategy. The plan should cover the period in the lead up to and following utility implementation to maximize customer understanding. The Communications Plan developed for this Feasibility Study can serve as a starting point (Appendix C).
4. Create **inter-local agreements** among participating municipalities that describe services and costs, if transactional, or for a more comprehensive regional approach, including its governance, coordination, and process for expanding participation. One of the most important questions to address in these agreements is the funding source, which is most likely to be an allocation from each municipality's General Fund or a commitment from its stormwater utility supported by a new fee.
5. Determine particulars about **revenue requirements, fee structure and billing approach**:
    a. Which costs will drive their fee revenue requirements: existing costs only, new (gap) costs, shared costs, or some combination?
    b. What rate structure will be used. If billing/administration is a shared service, the rate structure can be the same for all municipalities or individualized like the ERU. It could follow the model discussed in this study (flat fee for SFR parcels, based on measured IA and billed in ERUs for NSFR parcels) or be adjusted to include residential tiers.
    c. How the new fees will be billed to their customers (e.g., on the tax bill), how often bills will be issued, and who will be responsible for calculating bills on a regular basis (e.g., each town or a contracted entity, such as CRCOG).
6. Once the bill creation responsibility has been assigned, the participants can take the next step in preparing for accurate customer billing by working on IA **billing data maintenance** and confirming the individual or joint ERU, as decided above. IA updates can be made by a contracted entity with GIS capabilities, such as CRCOG or a consultant.
7. The participants will also need to agree on other billing **administration policies** such as billing appeals and customer service processes.
8. Additional consideration should be given to the stormwater fee **credit policy**, including whether it should be designed and administered at the regional level or tailored to individual communities. If tailored to individual communities, the municipalities will need to consider staffing needs to support

the administration of the credit program. The public engagement process may inform some of the credit policy design.

9. Participating municipalities will need to create **ordinances** and approve utility at each town via an ordinance. Ordinances may address topics like the creation of a new enterprise fund for stormwater, which revenues will serve as its proceeds (i.e., new utility fee), the fee rate structure, the existence of a fee credit program, and how the customers should expect to be billed.

This study concludes that both individual stormwater utilities and regional collaboration are viable strategies for improving stormwater management in the Capitol Region. While technical and legal feasibility is clear, implementation will require strong political support and local champions. In the near term, shared services through interlocal agreements represent the most practical approach, with CRCOG positioned to provide administrative coordination and facilitate economies of scale. Establishing a permanent stormwater committee and engaging elected officials will be critical to sustaining momentum and preparing communities for future utility implementation. These steps will lay the groundwork for a scalable regional framework that can evolve as interest and necessity grow.

APPENDIX A:

Existing Conditions Technical Memos

Memorandum

To: *Bloomfield CT*

From: *CDM Smith*

Date: *May 20, 2025*

Subject: *Municipal Stormwater Authority Feasibility Study*
Existing Conditions Analysis

In conjunction with the Capitol Region Council of Governments (CRCOG), CDM Smith has been contracted to study the feasibility of establishing a municipal stormwater authority for five member municipalities: the municipalities of Bloomfield, Hartford, New Britain, Rocky Hill, and West Hartford. The first task in this study is the evaluation of the existing stormwater management programs with respect to: regulatory compliance, operations and maintenance (O&M), stormwater capital improvements projects (CIP) program and program management.

PROGRAM MANAGEMENT	REGULATORY COMPLIANCE
• Master planning • Complaint response • Development review	• MS4 Permit requirements (6 minimum control measures) • TMDL compliance
OPERATIONS AND MAINTENANCE	**CAPITAL IMPROVEMENT PROJECTS**
• Street sweeping • Catchbasin and pipe cleaning	• System upgrades & replacement • Stormwater Flooding Studies

Upon completion of the existing conditions analysis, the CDM Smith and Raftelis team will perform a feasibility assessment that includes: an assessment of stormwater rate structures, billing system requirements, regional utility implementation requirements and stormwater ordinances. Once all three activities are completed, the team will prepare a Feasibility Study Report that summarizes the results of the evaluations.

For the Town of Bloomfield, CDM Smith reviewed the following documents in performing the existing conditions evaluation:

- 2024 Draft MS4 Annual Report
- FY 2024-2025 Adopted Budget
- GIS mapping: https://bloomfield.mapxpress.net/ags_map/
- 2019 Illicit Discharge and Detection Program Manual

- Stormwater Management Regulations
- 2017 Stormwater Management Plan
- 2012 Plan of Conservation and Development
- 2023 Inland Wetlands and Watercourses Commission Regulations
- Storm Drainage Ordinance
- Proposed 2023-2027 Community Investment Plan
- FY2023 Community Investment Plan Worksheet

Using these documents, CDM Smith evaluated the municipality's regulatory compliance, completed a stormwater checklist, and conducted an interview with key staff in order to gain a comprehensive understanding of Bloomfield's stormwater management program. The following summarizes the results of these activities with respect to regulatory compliance, operations and maintenance (O&M), stormwater capital improvements projects (CIP) program and program management.

Regulatory Compliance

The Connecticut Department of Energy and Environmental Protection (CT DEEP) issued the Small Municipal Separate Storm Sewer Systems (MS4) General Permit effective January 11, 2017. The permit authorizes the discharge of stormwater and select non-stormwater discharges associated with a the small MS4, in accordance with the six minimum control measures (MCM's).

This memorandum includes an evaluation of the Town of Bloomfield's existing permit requirements, their level of compliance with the MS4 permit, and an estimation of program costs. It also includes an estimate of the municipality's gap in meeting stormwater compliance and an estimate of additional costs associated with bridging the gap.

Existing MS4 Permit Requirements

The Town of Bloomfield implements the current MS4 general permit through the six MCM's, each containing multiple best management practices (BMP's). Each BMP is defined in the Stormwater Management Plan (SMP) and includes measurable goals designed to provide milestones for each BMP. Below is a summary of the Town of Bloomfield's MCM's and their compliance with each of the BMPs. The compliance evaluation uses the following rating with respect to compliance with each requirement:

"Proactive"	performing all MCM requirements and within the schedule identified in the SMP
"Average"	performing the majority of the MCM requirements (typically miss 1-2 requirements) close to the schedule identified in the SMP
"Below Average"	performing some of the MCM requirements (typically miss 3-4 requirements) and missing the SMP schedule
"Poor"	minimal effort or not performing any BMPs in the respective MCM

MCM 1 – Public Education and Outreach

To satisfy the Public Education and Outreach requirements in MCM 1, the Town of Bloomfield agreed to perform the following BMPs

- Implement a public education and outreach program
- Address education/outreach for pollutants of concern

The Town of Bloomfield maintains a website, has stormwater flyers and brochures available at the Town Hall and hosts public meetings to educate the public on stormwater. Based on the Annual Report, it appears that Bloomfield is in compliance with the BMP's listed in the SMP for this MCM.

Rating: Proactive

MCM 2 – Public Participation and Involvement

To satisfy the Public Participation and Involvement requirements in MCM 2, the Town of Bloomfield agreed to perform the following BMPs

- Comply with public notice requirements for the SMP and Annual Reports

Based on the Annual Report, the Town of Bloomfield implements measures in accordance with the requirements for this MCM.

Rating: Proactive

MCM 3 – Illicit Discharge Detection and Elimination

To satisfy the Illicit Discharge Detection and Elimination (IDDE) requirements in MCM 3, the Town of Bloomfield agreed to perform the following BMPs

- Develop a written IDDE program
- Develop a list and maps of all MS4 stormwater outfalls in priority areas
- Develop a citizen reporting program
- Establish legal authority to prohibit illicit discharges
- Develop a record keeping system for IDDE tracking
- Address IDDE in areas with pollutants of concern
- Detailed MS4 infrastructure mapping

The Town of Bloomfield's IDDE Plan was completed in 2019 and is being implemented. The IDDE Ordinance was adopted in 2018. Based on the Annual Report, the Town of Bloomfield appears to be in compliance with this MCM.

Rating: Average

MCM 4 – Construction Site Stormwater Runoff Control

To satisfy the Construction Site Stormwater Runoff Control requirements in MCM 4, the Town of Bloomfield agreed to perform the following BMPs

- Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit
- Develop/implement plan for interdepartmental coordination in site plan review/approval
- Review site plans for stormwater quality concerns
- Conduct site inspections
- Implement procedure to allow public comment on site development
- Implement procedure to notify developers about DEEP construction stormwater permit

The municipality implements this MCM and performed most BMPs, however, a procedure to allow public comment on site development is still being refined.

Rating: Average

MCM 5 – Post Construction Stormwater Management

To satisfy the Post Construction Stormwater Management requirements in MCM 5, the Town of Bloomfield agreed to perform the following BMPs

- Establish or update legal authority and guidelines regarding LID and runoff reduction in site development planning
- Implement long-term maintenance plan for stormwater basins and treatment structures
- Directly Connected Impervious Area (DCIA) mapping
- Address post-construction issues in areas with pollutants of concern

The municipality implements the LID components of this MCM, however, the DCIA mapping components are in progress and behind schedule.

Rating: Average

MCM 6 – Pollution Prevention/Good Housekeeping

To satisfy the Pollution Prevention and Good Housekeeping requirements in MCM 6, the Town of Bloomfield agreed to perform the following BMPs.

- Develop/implement formal employee training program
- Implement MS4 property and operations maintenance
- Implement coordination with interconnected MS4s
- Develop and implement a program to control other sources of pollutants to the MS4
- Evaluate additional measures for discharges to impaired waters
- Track projects that disconnect DICA
- Develop and implement infrastructure repair, rehabilitation and retrofit program
- Develop and implement plan to identify and prioritize retrofit projects
- Develop/Implement street sweeping program
- Develop/Implement catch basin cleaning program
- Develop/Implement snow management practices

The municipality implements this MCM and performs some BMPs. A formal employee training program is planned to be implemented in 2025. Coordination between connected MS4s is in progress. The Town has contracted with a consultant to support its MS4 compliance, including developing a Retrofit Plan to help meet the DCIA reduction target.

Rating: Below Average

Outfall Monitoring

To satisfy the Outfall Monitoring requirements, the Town of Bloomfield agreed to perform the following BMPs.

- Outfall screening
- Inventory and mapping of discharges to impaired waters
- Follow-up investigations of drainage areas
- Annual monitoring of priority outfalls

Based on the Annual Report, the Town of Bloomfield has performed outfall assessment and priority ranking at 10% of the priority area and dry weather sampling at 5 outfalls. The Town has contracted with a consultant to assist with outfall monitoring work in the future.

Rating: Below Average

Stormwater MS4 Permit Compliance Summary

In general, Town of Bloomfield follows most of the requirements in their MS4 permit and is considered to have an "Average" level of compliance. Table 1 below provides an overall summary of their compliance based on the evaluation of their SMP and 2024 Annual Report.

Table 1: Existing MS4 Permit Compliance - Bloomfield

Control Measure	Compliance
1 - Public Education and Outreach	Proactive
2 - Public Participation and Involvement	Proactive
3 - Illicit Discharge Detection and Elimination	Average
4 - Construction Site Stormwater Runoff Control	Average
5 - Post Construction Stormwater Management	Average
6 - Pollution Prevention/Good Housekeeping	Below Average
Outfall Monitoring	Below Average
Summary/Total	**Average**

Stormwater O&M Summary

During the interview, the municipality discussed their stormwater infrastructure repair program and cleaning operations. It appears that they are reactive with respect to stormwater system repairs and good with stormwater system cleaning.

Rating: Average

Stormwater CIP Summary

During our interview with Bloomfield, town representatives explained their stormwater CIP program, confirmed funding budgeted for an updated flood study for Fiscal Year 2026, stated that they have 17 drainage improvement projects budgeted for completion, have a list of additional improvements to the municipality's stormwater infrastructure, and stated that they have funding for its stormwater CIP program mainly through grants.

Rating: Proactive

Program Management

During the interview and as presented on the Stormwater Checklist, the municipality does well with development review activities, does not have a separate funding for stormwater program management, and is reactive with respect to complaints related to stormwater infrastructure.

Rating: Average

Compliance Summary

Based on the evaluation of the stormwater program, the Town of Bloomfield is considered to have the following ratings for the four components of the stormwater program:

Regulatory Compliance	Average
O&M	Average
CIP Program	Proactive
Program Management	Average

Existing Cost Summary

CDM Smith evaluated the costs associated with the Town of Bloomfield's stormwater activities including MS4 requirements, stormwater operations and maintenance, CIP program and management activities. Attachment 1 contains cost calculations based on the Fiscal Year 2024-2025 Adopted Budget and input from the municipality. These costs are presented as annual current costs and do not account for BMPs which were completed or discontinued in earlier years to allow for easy comparison between current and estimated future costs.

At a current estimated cost of $795,659 and a census population of 21,535 (2020 census), Bloomfield's estimated cost per capita is approximately $37. Based on the interview with representatives from Bloomfield, the Town identified a perceived gap of $62,500 for equipment replacement. This increases the total costs to $858,159 and increases the spending from $37 per capita to $40 per capita.

Table 2 below presents the total costs for stormwater activities as well as the additional costs identified by the municipality to address their perceived gap.

Table 2: Stormwater Costs and Cost per Capita

	Total Stormwater Costs	Per Capita Cost
Existing	$795,659	$37
Perceived Gap	$858,159	$40

Attachments:
Attachment 1: Town of Bloomfield Cost Summary

Attachment 1

CRCOG Municipal Stomwater Authority Feasiblity Study

Town of Bloomfield - Existing Conditions Cost Summary

Salaries	Budgeted Value (FY2024-2025 Adopted Budget)	Percent Stormwater	Stormwater Budget Value
Engineering Staff	$385,233	15%	$57,785
PW Employees	$1,960,409	25%	$490,102
Clerical Salaries	$431,552	2%	$8,631
Engineering Services	$22,300	100%	$22,300
		Total	**$578,818**

Materials/O&M	Budgeted Value (FY2024-2025 Adopted Budget)	Percent Stormwater	Stormwater Budget Value
Equipment Rental	$11,375	25%	$2,844
Construction Materials	$41,150	25%	$10,287
Road Aid Materials	$197,551	25%	$49,388
Material Disposal	$17,287	25%	$4,322
Stormwater CIP	$150,000	100%	$150,000
		Total	**$216,841**

Gap	Value	Percent Stormwater	Stormwater Value
Equipment Replacement	$250,000	25%	$62,500
		Total	**$62,500**

Purpose	Current Stormwater Budget Value	Future Stormwater Budget Value
Salaries	$578,818	$578,818
Materials/O&M	$216,841	$216,841
Gap	$0	$62,500
Total	**$795,659**	**$858,159**

Memorandum

To: *Hartford CT*

From: *CDM Smith*

Date: *June 2, 2025*

Subject: *Municipal Stormwater Authority Feasibility Study*
Existing Conditions Analysis

In conjunction with the Capitol Region Council of Governments (CRCOG), CDM Smith has been contracted to study the feasibility of establishing a municipal stormwater authority for five member municipalities: the municipalities of Bloomfield, Hartford, New Britain, Rocky Hill, and West Hartford. The first task in this study is the evaluation of the existing stormwater management programs with respect to: regulatory compliance, operations and maintenance (O&M), stormwater capital improvements projects (CIP) program and program management.

PROGRAM MANAGEMENT	REGULATORY COMPLIANCE
• Master planning • Complaint response • Development review	• MS4 Permit requirements (6 minimum control measures) • TMDL compliance
OPERATIONS AND MAINTENANCE	**CAPITAL IMPROVEMENT PROJECTS**
• Street sweeping • Catchbasin and pipe cleaning	• System upgrades & replacement • Stormwater Flooding Studies

Upon completion of the existing conditions analysis, the CDM Smith and Raftelis team will perform a feasibility assessment that includes: an assessment of stormwater rate structures, billing system requirements, regional utility implementation requirements and stormwater ordinances. Once all three activities are completed, the team will prepare a Feasibility Study Report that summarizes the results of the evaluations.

For the City of Hartford, CDM Smith reviewed the following documents in performing the existing conditions evaluation:

- Hartford Stormwater Management Plan
- Hartford 2024 Annual Report
- Hartford FY2025 Adopted Budget
- Hartford 2024 Draft MS4 Annual Report

- City Website (DPW)
- 2010 North Branch Park River Watershed Management Plan
- Hartford 2023 IDDE Plan
- Hartford Illicit Discharge Fact Sheet
- Hartford Zoning mapping
- City of Hartford Zoning Regulations
- 2020 Plan of Conservation and Development

For the City of Hartford, CDM Smith evaluated the City's regulatory compliance, completed a stormwater checklist, and conducted an interview with key staff in order to gain a comprehensive understanding of City's stormwater management program. The following summarizes the results of these activities with respect to regulatory compliance, operations and maintenance (O&M), stormwater capital improvements projects (CIP) program and program management.

Regulatory Compliance

The Connecticut Department of Energy and Environmental Protection (CT DEEP) issued the Small Municipal Separate Storm Sewer Systems (MS4) General Permit effective January 11, 2017. The permit authorizes the discharge of stormwater and select non-stormwater discharges associated with the small MS4, in accordance with the six minimum control measures (MCM's).

This memorandum includes an evaluation of the City of Hartford's existing permit requirements, their level of compliance with the MS4 permit, and an estimation of program costs. Due to the limited regulatory and stormwater responsibilities, this document also includes a summary of the costs associated with the City of Providence's stormwater program based on a recent study by Raftelis and scaled proportionately based on population. Using the City of Providence as an example, the City of Hartford may be able to estimate future stormwater costs and budgets.

Existing MS4 Permit Requirements

The City of Hartford's Stormwater Management Plan (SMP) includes best management practices (BMPs) for each of the six minimum control measures (MCM's), based on the MS4 Permit requirements. Each BMP defined in the SMP includes measurable goals designed to meet milestones for each BMP. Below is a summary of each of the City of Hartford's MCM's and their compliance with each of the BMPs.

The compliance evaluation for each MCM includes a rating based on the following criteria:

"Proactive"	performing all MCM requirements and within the schedule identified in the SMP
"Average"	performing the majority of the MCM requirements (typically miss 1-2 requirements) close to the schedule identified in the SMP
"Below Average"	performing some of the MCM requirements (typically miss 3-4 requirements) and missing the SMP schedule
"Poor"	minimal effort or not performing any BMPs in the respective MCM

MCM 1 – Public Education and Outreach

To satisfy the Public Education and Outreach requirements in MCM 1, the City of Hartford agreed to perform the following BMPs

- Implement a public education and outreach program
- Address education/outreach for pollutants of concern
- Provide stormwater information on the City's website
- Periodically post stormwater management issues on social media
- Educate dog owners about picking up dog waste

The City of Hartford implements the BMPs listed above, meeting the requirements of this MCM.

Rating: Average

MCM 2 – Public Participation and Involvement

To satisfy the Public Participation and Involvement requirements in MCM 2, the City of Hartford agreed to perform the following BMPs

- Comply with public notice requirements for the SMP and Annual Reports
- Sponsor community participation event
- Hold Stormwater Committee meetings

The City of Hartford implements the BMPs listed above, meeting the requirements of this MCM.

Rating: Average

MCM 3 – Illicit Discharge Detection and Elimination

To satisfy the Illicit Discharge Detection and Elimination (IDDE) requirements in MCM 3, the City of Hartford agreed to perform the following BMPs

- Develop a written IDDE program
- Develop a list and maps of all MS4 stormwater outfalls in urbanized and priority areas
- Develop a program for citizen reporting of illicit discharges
- Establish legal authority to prohibit illicit discharges
- Develop a record keeping system for IDDE tracking
- Address IDDE in areas with pollutants of concern
- Develop and maintain an inventory identifying all known locations where Sanitary Sewer Overflows have discharged to the MS4 within the previous 5 years

The City of Hartford performed the majority of the BMPs listed above, however, the legal authority is still in the process of being updated and a system for tracking IDDE activities is still being developed. The City is behind on implementation of their IDDE program.

Rating: Below Average

MCM 4 – Construction Site Stormwater Runoff Control

To satisfy the Construction Site Stormwater Runoff Control requirements in MCM 4, the City of Hartford agreed to perform the following BMPs

- Implement, upgrade (as necessary), and enforce City land use regulations or other legal authority to meet requirements of MS4 general permit
- Establish interagency or inter-jurisdictional agreements
- Develop and implement a plan outlining interdepartmental coordination of site plan review and approval
- Review site plans for stormwater quality concerns
- Conduct site inspections
- Implement procedure to allow and consider public comment on site development
- Notify construction site operators of the requirements for registration under "General Permit for the Discharge of Stormwater Dewatering Wastewaters Associated with construction Activities"
- Document compliance with the Connecticut Anti-Degradation Implementation Policy in the Water Quality Standards for all new or increased discharges to High Quality Waters from the MS4

The City implements the majority of the BMPs above, however, the City could strengthen the City's regulations and ordinances relative to erosion and sedimentation control to be better in line with the MS4 permit requirements.

Rating: Average

MCM 5 – Post Construction Stormwater Management

To satisfy the Post Construction Stormwater Management requirements in MCM 5, the City of Hartford agreed to perform the following BMPs

- Establish legal authority and guidelines regarding LID and runoff reduction in site development planning
- Enforce LID/runoff reduction requirements for development and redevelopment projects
- Identify retention and detention ponds in priority areas
- Implement long-term maintenance plan for stormwater basins and treatment structures
- Directly Connected Impervious Area (DCIA) mapping
- Address post-construction issues in areas with pollutants of concern
- Implement and maintain any control measures or conditions for New Discharge to an Impaired Water without an Established TMDL
- Additional requirements for all new and existing discharges to a water with an Established TMDL or with a Pollutant Load Reduction specified within the TMDL

The City implements most of the BMPs listed above, however, the City plans to conduct a final review of the LID regulations located in several sections of the Zoning Regulations to determine if any adjustments are necessary. The City has not begun the work to identify retention and detention ponds, or to develop a long-term maintenance plan. The City also has not begun the work to address any new discharges to impaired waters or establish additional requirements for discharges to waters with an established TMDL or with a Pollutant Load Reduction.

Rating: Below Average

MCM 6 – Pollution Prevention/Good Housekeeping

To satisfy the Pollution Prevention and Good Housekeeping requirements in MCM 6, the City of Hartford agreed to perform the following BMPs.

- Continue the formal employee training program developed under the 2004 MS4 General Permit
- Implement MS4 property and operations maintenance
- Minimize the discharge of pollutants to MS4 from parks and open space, pet waste, waterfowl, and leaf management
- Minimize the discharge of pollutants to MS4 from municipal buildings and facilities
- Minimize the discharge of pollutants to MS4 from municipal vehicle and equipment maintenance
- Implement coordination with interconnected MS4s
- Develop/implement program to control other sources of pollutants to the MS4
- Evaluate additional measures for discharges to impaired waters
- Track projects that disconnect DCIA
- Develop/implement infrastructure repair/rehabilitation program
- Develop plan to identify/prioritize retrofit projects
- Develop/implement street sweeping program
- Develop/implement catch basin cleaning program
- Develop/implement snow management practices

The City implements most of the BMPs, however, the City anticipates developing a program to track DCIA in 2025. The City has begun communications with West Hartford and Wethersfield with regards to interconnected MS4 infrastructure, and is in communication with the MDC regularly regarding the complex interconnected MS4 operation and maintenance. As a result of the complex nature of the ownership and responsibility of the MS4 infrastructure between the City and MDC, the City has been working to clarify and establish ownership and responsibility for operation and maintenance of the MS4 before it can begin the work to develop and implement the infrastructure repair/rehab program and the retrofit plan to disconnect 2% DCIA.

Rating: Below Average

Outfall Monitoring

To satisfy the Outfall Monitoring requirements, the City of Hartford has contracted with a consultant to begin outfall monitoring for City-owned outfalls in priority areas in 2025.

Rating: Below Average

Compliance Summary

In general, City of Hartford is behind in implementing the MS4 requirements and is considered to have an "Below Average" level of compliance. The City is in the process of contracting a consultant to assist with the MS4 permit requirements and has budgeted future funds for the MS4 program. Table 1 below provides an overall summary of their compliance based on their 2024 Annual Report.

Table 1: Existing MS4 Permit Compliance - Hartford

Control Measure	Compliance
1 - Public Education and Outreach	Average
2 - Public Participation and Involvement	Average
3 - Illicit Discharge Detection and Elimination	Below Average
4 - Construction Site Stormwater Runoff Control	Average
5 - Post Construction Stormwater Management	Below Average
6 - Pollution Prevention/Good Housekeeping	Below Average
Outfall Monitoring	Below Average
Summary/Total	**Below Average**

Stormwater O&M Summary

During the interview, the City described their stormwater infrastructure repair program and cleaning operations. It appears that they are reactive with respect to both stormwater system repairs and stormwater system cleaning.

Rating: Below Average

Stormwater CIP Summary

During our interview with Hartford, it was stated that the City has a CIP program, of which two stormwater improvement projects are currently budgeted for completion. Stormwater CIP projects are mainly through the general fund.

One unique aspect that was discussed during the meeting was the Hartford Flood Commission and their roll in stormwater management. The City has a significant budget to operate and manage the levees and nine stormwater pump stations that protect the City of Hartford during flooding of the Connecticut River. The costs and evaluation of this program has been included in this section of the Technical Memorandum.

Rating: Average

Program Management

During the interview and as presented on the Stormwater Checklist, the City does well with development review activities, does not have a separate funding for stormwater program management, and is reactive with respect to complaints related to stormwater infrastructure.

Rating: Below Average

Compliance Summary

Based on the evaluation of the stormwater program, the City of Hartford is considered to have the following ratings for the four components of the stormwater program:

Regulatory Compliance	Below Average
O&M	Below Average
CIP Program	Average
Program Management	Below Average

Existing Cost Summary

CDM Smith evaluated the costs associated with the City's stormwater activities including MS4 requirements, stormwater operations and maintenance and administrative activities. Attachment 1 contains cost calculations based on the Fiscal Year 2025 Adopted Budget and input from the City. These costs are presented as annual current costs and do not account for BMPs which were completed or discontinued in earlier years to allow for easy comparison between current and estimated future costs. Table 2 below presents the total costs for stormwater activities.

Table 2: Stormwater Costs and Cost per Capita

	Total Stormwater Costs	Per Capita Cost
Existing	$2,603,708	$22

At a current estimated cost and a census population of 121,057 (2020 census), Hartford's estimated cost per capita is approximately $22.

Future Stormwater Program Costs

It is not currently feasible to predict future stormwater program costs and projected per capita cost for the City of Hartford due to the uncertainties pertaining to the City's future role and responsibilities for stormwater management. Below, a comparison is provided with a similar mid-sized northeastern City with recent developments and cost information related to stormwater management.

Comparison with City of Providence

The City of Providence is located in the north-central portion of Rhode Island. To the east, the City is bounded by the Seekonk River and the Providence River, to the north by Pawtucket and to the west and south by North Providence, Johnson and Cranston. Major water features include the Woonasquatucket River, West River, Mashapaug Pond and Roger Williams Park Ponds. All of these

water bodies have Total Maximum Daily Load (TMDL) regulatory requirements. Additionally, the City has been under a consent decree to improve the stormwater sewer system since 2017 and a U.S. EPA administrative order for the sanitary system since 2007.

Providence has a population of 194,706 (US Census Bureau, 2024) and comprises about 18.4 square miles in area. The City has areas with combined sewers (68.3 percent) and separated sewers (31.7 percent) and stormwater infrastructure comprised of nearly 14,000 catch basins (approximately 5,000 in MS4 areas), 4,000 gutter inlets, and 176 MS4 outfalls. The City's Department of Public Works (DPW) finalized the sewer system mapping using GIS in 2020 and stormwater system mapping in 2023. DPW estimated that at least 60% of the sewer collection pipes are at least 100 years old and a significant portion of the MS4 system is 75 years old or greater, with both systems impacted by deferred maintenance and long-overdue capital improvements.

City of Providence Stormwater Program Costs

Raftelis worked with the City to understand costs allocable to the stormwater program, including regulatory compliance, operations and maintenance of the MS4 system and parts of the combined system attributable to stormwater management, and program administration and excluding any capital costs. These costs were estimated at $1,437,089 in FY2025 and represent the current level of service. With the estimated population of 194,706 in 2024, this results in $7.38 per capita cost. Raftelis' projected stormwater program non-capital costs, including recommended improvements, will increase to $4,180,396 by FY2035. This increase balances the City's desire to increase the level of service with affordability considerations and would result in $21.47 per capita cost based on the 2024 population.

City of Hartford Stormwater Program Costs Comparison

The City of Hartford Stormwater Program has a cost per capita of $22, which is similar to the FY 2035 projected cost per capita for the City of Providence ($21.47). The majority (66%) of the current stormwater program costs for the City of Hartford are from the Hartford Flood Commission, which Providence does not currently have a comparable flood protection program or organization. With the numerous differences between the City of Hartford and the City of Providence, it is difficult to project a realistic goal for a stormwater program cost, using the Providence study. Until the City of Hartford better defines the City's responsibilities, associated costs, and stormwater program requirements, a more definitive projected per capita cost cannot be determined.

Attachments:
Attachment 1: Estimated Costs Summary Spreadsheet

Attachment 1
CRCOG Stormwater Authority Study
City of Hartford Cost Summary

Department Budgets	Budgeted Value (FY25 Budget)	Percent Stormwater	Stormwater Budget Value
Engineering	$1,289,521	5%	$64,476
Street Services	$2,485,587	5%	$124,279
Stormwater MS4	$100,000	100%	$100,000
		Total	$288,755

Materials/O&M and CIP	Budgeted Value (FY25 Budget)	Percent Stormwater	Stormwater Budget Value
Consultant - Atlas	$0	100%	$0
Infrastructure Maintenance	$0	25%	$0
Maintenance	$0	25%	$0
CIP Projects (All City projects)	$12,000,000	5%	$600,000
		Total	$600,000

Hartford Flood Commission	Value	Percent Stormwater	Stormwater Value
HFC O&M	$1,714,953	100%	$1,714,953
		Total	$1,714,953

Purpose	Current Stormwater Budget Value
Department Budgets	$288,755
Materials/O&M and CIP	$600,000
Hartford Flood Commission	$1,714,953
Total	$2,603,708

Memorandum

To: *New Britain CT*

From: *CDM Smith*

Date: *May 20, 2025*

Subject: *Municipal Stormwater Authority Feasibility Study*
Existing Conditions Analysis

In conjunction with the Capitol Region Council of Governments (CRCOG), CDM Smith has been contracted to study the feasibility of establishing a municipal stormwater authority for five member municipalities: the Municipalities of New Britain, Hartford, New Britain, Rocky Hill, and West Hartford. The first task in this study is the evaluation of the existing stormwater management programs with respect to: regulatory compliance, operations and maintenance (O&M), stormwater capital improvements projects (CIP) program and program management.

PROGRAM MANAGEMENT	REGULATORY COMPLIANCE
• Master planning • Complaint response • Development review	• MS4 Permit requirements (6 minimum control measures) • TMDL compliance
OPERATIONS AND MAINTENANCE	**CAPITAL IMPROVEMENT PROJECTS**
• Street sweeping • Catchbasin and pipe cleaning	• System upgrades & replacement • Stormwater Flooding Studies

Upon completion of the existing conditions analysis, CDM Smith will evaluate two scenarios: one that focuses on meeting the regulatory compliance requirements, second to have a proactive stormwater program. Using these two scenarios, CDM Smith will then perform a feasibility assessment that includes: an assessment of fee structures, billing system requirements, implementation requirements and stormwater ordinances. Once all three activities are completed, CDM Smith will prepare a Feasibility Study Report that summarizes the results of the evaluations.

For the City of New Britain, CDM Smith evaluated the Municipality's regulatory compliance, completed a stormwater checklist, and conducted an interview with key staff to gain a comprehensive understanding of Municipality's stormwater management program. Even though the City of New Britain has a stormwater utility, CDM Smith evaluated the City as if this was not the case.. The following summarizes the results of this evaluation with respect to the four general stormwater activities: regulatory compliance, operations and maintenance (O&M), stormwater capital improvements projects (CIP) program and program management.

Regulatory Compliance

The Connecticut Department of Energy and Environmental Protection (CT DEEP) released the Small Municipal Separate Storm Sewer Systems (MS4) General Permit effective October 1, 2023. The permit authorizes the discharge of stormwater and select non-stormwater discharges associated with a the small MS4. Small MS4's are required to submit a Stormwater Management Plan (SMP) on October 1, 2023 and implement the SMP over the five-year permit term.

This memorandum includes an evaluation of the City of New Britain's existing permit requirements, their level of compliance with the MS4 permit, and an estimation of program costs. It also includes an estimate of the Municipality's gap in meeting stormwater compliance and an estimate of additional costs associated with bridging the gap.

CDM Smith reviewed the following documents in performing this evaluation:

- 2021 Plan of Conservation and Development
- 2024 Draft MS4 Annual Report
- GIS Mapping https://newbritain.mapxpress.net/ags_map/
- City Website (Water Department)
- New Britain Code of Ordinances
- Zone Map

Existing MS4 Permit Requirements

The City of New Britain implements the current MS4 general permit through the six minimum control measures (MCM's), each containing multiple best management practices (BMP's). Each BMP is defined in the SMP and includes measurable goals designed to provide milestones for each BMP. Below is a summary of each of the City of New Britain's MCM's and their compliance with each of the BMPs. The compliance evaluation uses

"Proactive"	performing all MCM requirements
"Average"	performing the majority of the MCM requirements (typically miss 1-2 requirements)
"Below Average"	performing some of the MCM requirements (typically miss 3-4 requirements)
"Poor"	minimal effort or not performing any BMPs in the respective MCM

MCM 1 – Public Education and Outreach

To satisfy the Public Education and Outreach requirements in MCM 1, the City of New Britain agreed to perform the following BMPs

- Implement a public education and outreach program
- Address education/outreach for pollutants of concern

The City of New Britain implements this MCM, all BMPs have been maintained by the Municipality.

Rating: Average

MCM 2 – Public Participation and Involvement

To satisfy the Public Participation and Involvement requirements in MCM 2, the City of New Britain agreed to perform the following BMPs

- Comply with public notice requirements for the SMP and Annual Reports

The City of New Britain implements this MCM, all BMPs have been maintained by the Municipality.

Rating: Average

MCM 3 – Illicit Discharge Detection and Elimination

To satisfy the Illicit Discharge Detection and Elimination (IDDE) requirements in MCM 3, the City of New Britain agreed to perform the following BMPs

- Develop a written IDDE program
- Develop a list and maps of all MS4 stormwater outfalls in urbanized and priority areas
- Develop a citizen reporting program
- Confirm legal authority to eliminate illicit discharges
- Develop a record keeping system for IDDE tracking
- Address IDDE in areas with pollutants of concern
- Outfall and interconnection dry weather screening and sampling
- Sanitary Sewer Overflows (SSOs) inventory

The City of New Britain implements this MCM, all BMPs have been maintained by the Municipality.

Rating: Average

MCM 4 – Construction Site Stormwater Runoff Control

To satisfy the Construction Site Stormwater Runoff Control requirements in MCM 4, the City of New Britain agreed to perform the following BMPs

- Implement, upgrade (as necessary) and enforce land use regulations or other legal authority to meet requirements of MS4 general permit
- Develop/implement plan for interdepartmental coordination in site plan review and approval
- Review site plans for stormwater quality concerns
- Conduct site inspections
- Implement procedure to allow public comment on site development
- Implement procedure to notify developers about DEEP construction stormwater permit

The Municipality implements this MCM and performed most BMPs, however, a procedure to allow public comment on site development is still being refined.

Rating: Average

MCM 5 – Post Construction Stormwater Management

To satisfy the Post Construction Stormwater Management requirements in MCM 5, the City of New Britain agreed to perform the following BMPs

- Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning
- Enforce LID/runoff reduction requirements for development and redevelopment projects
- Implement long-term maintenance plan for stormwater basins and treatment structures
- Directly Connected Impervious Area (DCIA) mapping
- Address post-construction issues in areas with pollutants of concern

The Municipality implements this MCM and performed most BMPs, however, the City is still in progress establishing the legal authority regarding LID in site development planning and implementing a long-term maintenance plan for its stormwater treatment BMPs.

Rating: Average

MCM 6 – Pollution Prevention/Good Housekeeping

To satisfy the Pollution Prevention and Good Housekeeping requirements in MCM 6, the City of New Britain agreed to perform the following BMPs.

- Develop/implement formal employee training program
- Implement MS4 property and operations maintenance
- Implement coordination with interconnected MS4s
- Develop and implement program to control other sources of pollutants to the MS4
- Evaluate additional measures for discharges to impaired waters
- Track projects that disconnect DCIA
- Develop/implement infrastructure repair/rehab program
- Develop/implement plan to identify/prioritize retrofit projects
- Develop/implement street sweeping program
- Develop/implement catch basin cleaning program
- Develop/implement snow management practices

The Municipality fully implements this MCM and performs all BMPs.

Rating: Proactive

Outfall Monitoring

The City's SMP included the following BMPs to address the Outfall Monitoring requirements in the MS4 Permit:

- Develop/implement formal employee training program

- Outfall screening
- Inventory and mapping of discharges to impaired waters
- Follow-up investigations of drainage areas
- Annual monitoring of priority outfalls

The City of New Britain completed dry weather screening and sampling in priority areas. The City is in progress completing wet weather sampling of outfalls that discharge to impaired waters.

Rating: Average

Compliance Summary

In general, City of New Britain follows most of the requirements in their MS4 permit and is considered to have an "Average" level of compliance. Table 1 below provides an overall summary of their compliance based on their 2024 Annual Report.

Table 1: Existing MS4 Permit Compliance - New Britain

Control Measure	Compliance
1 - Public Education and Outreach	Average
2 - Public Participation and Involvement	Average
3 - Illicit Discharge Detection and Elimination	Average
4 - Construction Site Stormwater Runoff Control	Average
5 - Post Construction Stormwater Management	Average
6 - Pollution Prevention/Good Housekeeping	Proactive
Outfall Monitoring	Average
Summary/Total	**Average**

Stormwater O&M Summary

During the interview, New Britain described their stormwater infrastructure repair program and cleaning operations. It appears that they are reactive with respect to stormwater system repairs and good with stormwater system cleaning.

Rating: Average

Stormwater CIP Summary

During our interview with the City, New Britain representatives stated that the City has a stormwater CIP program, which has 9 drainage improvement projects budgeted for completion, and funds its stormwater CIP program mainly through grants.

Rating: Average

Program Management

During the interview and as presented on the Stormwater Checklist, the Municipality does well with development review activities, tracking DCIA and IDDE abatement activities, and is reactive with respect to complaints related to stormwater infrastructure.

Rating: Proactive

Compliance Summary

Based on the evaluation of the stormwater program, the City of New Britain is considered to have the following ratings for the four components of the stormwater program:

Regulatory Compliance	Average
O&M	Average
CIP Program	Average
Program Management	Proactive

Existing Cost Summary

CDM Smith evaluated the costs associated with the City's stormwater activities including MS4 requirements, stormwater operations and maintenance, CIP program and management activities. Attachment 1 contains cost calculations based on the Fiscal Year 2026 Proposed Budget and input from the City. These costs are presented as annual current costs and do not account for BMPs which were completed or discontinued in earlier years to allow for easy comparison between current and estimated future costs.

At a current estimated cost of $3,287,717 and a census population of 74,135 (2020 census), New Britain's estimated cost per capita is approximately $44. Based on the interview with representatives from New Britain, they identified a perceived gap of $85,290 for additional staff, increasing the total costs to $3,373,007. This would increase the per capita spending from $44 per capita to $45 per capita.

Table 2 below presents the total costs for stormwater activities as well as the additional costs identified by the City to address their perceived gap.

Table 2: Stormwater Costs and Cost per Capita

	Total Stormwater Costs	Per Capita Cost
Existing	$3,287,717	$44
Future Gap	$3,373,007	$45

Attachments:
Attachment 1: City of New Britain Cost Summary

Municipal Stormwater Authority Feasiblity Study
City of New Britain - Existing Conditions Cost Summary

Salaries	Budgeted Value (FY26 Budget)	Percent Stormwater	Stormwater Budget Value
Streets and Highway	$1,222,667	33%	$403,480
Engineering	$895,874	33%	$295,638
Fleet	$2,252,703	33%	$743,392
Public Works Admin	$178,124	33%	$58,781
		Total	**$1,501,291**

Materials/O&M	Budgeted Value (FY26 Budget)	Percent Stormwater	Stormwater Budget Value
Equipment and Vehicle Maintenance	$88,200	33%	$29,106
Materials	$200,000	33%	$66,000
Stormwater Infrastructure Maintenance	$67,535	100%	$67,535
Clean Water Fund Projects Management	$799,535	100%	$799,535
CB Cleaning Contractor	$750,000	100%	$750,000
Trench Repairs	$225,000	33%	$74,250
		Total	**$1,786,426**

Gap	Value	Percent Stormwater	Stormwater Value
2 Public Works Employees	$26,262	33%	$8,666
City Engineer	$109,227	33%	$36,045
1 Clerical Employee	$122,965	33%	$40,578
		Total	**$85,290**

Purpose	Current Stormwater Budget Value	Future Stormwater Budget Value
Salaries	$1,501,291	$1,501,291
Materials/O&M	$1,786,426	$1,786,426
Gap	$0	$85,290
Total	**$3,287,717**	**$3,373,007**

Memorandum

To: *Rocky Hill CT*

From: *CDM Smith*

Date: *May 20, 2025*

Subject: *Municipal Stormwater Authority Feasibility Study*
Existing Conditions Analysis

In conjunction with the Capitol Region Council of Governments (CRCOG), CDM Smith has been contracted to study the feasibility of establishing a municipal stormwater authority for five member municipalities: the municipalities of Bloomfield, Hartford, New Britain, Rocky Hill, and West Hartford. The first task in this study is the evaluation of the existing stormwater management programs with respect to: regulatory compliance, operations and maintenance (O&M), stormwater capital improvements projects (CIP) program and program management.

PROGRAM MANAGEMENT	REGULATORY COMPLIANCE
• Master planning • Complaint response • Development review	• MS4 Permit requirements (6 minimum control measures) • TMDL compliance
OPERATIONS AND MAINTENANCE	**CAPITAL IMPROVEMENT PROJECTS**
• Street sweeping • Catchbasin and pipe cleaning	• System upgrades & replacement • Stormwater Flooding Studies

Upon completion of the existing conditions analysis, CDM Smith and the Raftelis team will perform a feasibility assessment that includes: an assessment of stormwater rate structures, billing system requirements, regional utility implementation requirements and stormwater ordinances. Once all three activities are completed, the team will prepare a Feasibility Study Report that summarizes the results of the evaluations.

For the Town of Rocky Hill, CDM Smith reviewed the following documents to assess their existing conditions:

- 2024 Draft MS4 Annual Report
- 2017 Rocky Hill Stormwater Management Plan
- Town Website (Stormwater Management)
- 2024-2025 Adopted Fiscal Year Budget

Using these documents, CDM Smith evaluated the municipality's regulatory compliance, completed a stormwater checklist, and conducted an interview with key staff in order to gain a comprehensive understanding of Rocky Hill's stormwater management program. The following summarizes the results of these activities with respect to regulatory compliance, operations and maintenance (O&M), stormwater capital improvements projects (CIP) program and program management.

Regulatory Compliance

The Connecticut Department of Energy and Environmental Protection (CT DEEP) released the Small Municipal Separate Storm Sewer Systems (MS4) General Permit effective January 11, 2017. The permit authorizes the discharge of stormwater and select non-stormwater discharges associated with a the small MS4, in accordance with the six minimum control measures (MCM's).

This memorandum includes an evaluation of Rocky Hill's existing permit requirements, their level of compliance with the MS4 permit, and an estimation of program costs. It also includes an estimate of the municipality's gap in meeting stormwater compliance and an estimate of additional costs associated with bridging the gap.

Existing MS4 Permit Requirements

The Town of Rocky Hill implements the current MS4 general permit through the six MCM's, each containing multiple best management practices (BMP's). Each BMP is defined in the Stormwater Management Plan (SMP) and includes measurable goals designed to provide milestones for each BMP. Below is a summary of the Town of Rocky Hill's MCM's and their compliance with each of the BMPs. The compliance evaluation uses the following rating with respect to compliance with each requirement:

"Proactive"	performing all MCM requirements and within the schedule identified in the SMP
"Average"	performing the majority of the MCM requirements (typically miss 1-2 requirements) close to the schedule identified in the SMP
"Below Average"	performing some of the MCM requirements (typically miss 3-4 requirements) and missing the SMP schedule dates
"Poor"	minimal effort or not performing any BMPs in the respective MCM

MCM 1 – Public Education and Outreach

To satisfy the Public Education and Outreach requirements in MCM 1, the Town of Rocky Hill agreed to perform the following BMPs

- Implement a public education and outreach program
- Address education and outreach for pollutants of concern

The Town of Rocky Hill implements this MCM in accordance with their SMP.

Rating: Average

MCM 2 – Public Participation and Involvement

To satisfy the Public Participation and Involvement requirements in MCM 2, the Town of Rocky Hill agreed to comply with public notice requirements for the SMP.

The Municipality fully implements this MCM and performs all BMPs.

Rating: Proactive

MCM 3 – Illicit Discharge Detection and Elimination

To satisfy the Illicit Discharge Detection and Elimination (IDDE) requirements in MCM 3, the Town of Rocky Hill agreed to perform the following BMPs

- Develop written IDDE plan
- Develop, list and map of all MS4 stormwater outfalls and interconnections in priority areas
- Develop citizen reporting program
- Establish legal authority to prohibit illicit discharges
- Develop record keeping system for IDDE tracking
- Address IDDE in areas with pollutants of concern
- Detailed MS4 infrastructure mapping

Rocky Hill has implemented most of the BMPs under this MCM. They have developed an IDDE Plan; have not started the IDDE investigations; completed the majority of the GIS mapping; need to confirm their interconnections; and need to develop a method for tracking the status of IDDE at each outfall.

Rating: Below Average

MCM 4 – Construction Site Stormwater Runoff Control

To satisfy the Construction Site Stormwater Runoff Control requirements in MCM 4, the Town of Rocky Hill agreed to perform the following BMPs

- Implement, upgrade, and enforce land use regulations to meet requirements of MS4 general permit
- Develop and implement plan for interdepartmental coordination in site plan review and approval
- Review site plans for stormwater quality concerns
- Conduct site inspections
- Implement procedure to allow public comment on site development
- Implement procedure to notify developers about DEEP construction stormwater general permit

The municipality implements the majority of the BMP's associated with this MCM.

Rating: Average

MCM 5 – Post Construction Stormwater Management

To satisfy the Post Construction Stormwater Management requirements in MCM 5, the Town of Rocky Hill agreed to perform the following BMPs

- Establish legal authority and guidelines regarding LID and runoff reduction in site development planning
- Implement long-term maintenance plan for stormwater basins and treatment structures
- Directly Connected Impervious Area (DCIA) mapping
- Address post-construction issues in areas with pollutants of concern

The municipality partially implements this MCM. Most BMPs have been completed or are ongoing, however, nothing has been done to address the DCIA requirements.

Rating: Average

MCM 6 – Pollution Prevention/Good Housekeeping

To satisfy the Pollution Prevention and Good Housekeeping requirements in MCM 6, the Town of Rocky Hill included the following BMPs in their SMP.

- Develop and implement formal employee training program
- Implement MS4 property and operations maintenance
- Implement coordination with interconnected MS4s
- Develop and implement a program to control other sources of pollutants to the MS4
- Evaluate additional measures for discharges to impaired waters
- Track projects that disconnect DCIA
- Develop and implement an infrastructure repair, rehabilitation and retrofit program
- Develop and implement a plan to identify and prioritize retrofit projects
- Develop and implement street sweeping program
- Develop and implement catch basin cleaning program
- Develop and implement snow management practices

The municipality implements the BMP's associated with this MCM. Some coordination has been implemented between interconnected MS4s, evaluation of discharges to impaired waters has not begun, development/implementation of an infrastructure repair/rehab program is ongoing and the Town continually repairs and rehabs the drainage system, and retrofit projects are in progress but are not on track to meet due dates.

Rating: Average

Outfall Monitoring

To satisfy the Outfall Monitoring requirements, the SMP included the following BMPs.

- Monitor and investigate outfalls that discharge to impaired waters
- Inventory and mapping of discharges to impaired waters
- Follow up investigations of drainage areas
- Annual monitoring of priority outfalls

The Town of Rocky Hill has conducted dry weather screening of 50% of the MS4 outfalls and completed wet weather outfall screening within the priority areas. They were not able to complete the annual wet weather sampling of the six highest contributors last year due to dry conditions, and they have not completed the drainage area investigations.

Rating: Below Average

Compliance Summary

In general, Rocky Hill implements most of the requirements in their SMP and is considered to have an "Average" level of compliance. Table 1 below provides a summary of their compliance based on their 2024 Annual Report.

Table 1: Existing MS4 Permit Compliance – Rocky Hill

Control Measure	Compliance
1 - Public Education and Outreach	Average
2 - Public Participation and Involvement	Proactive
3 - Illicit Discharge Detection and Elimination	Below Average
4 - Construction Site Stormwater Runoff Control	Average
5 - Post Construction Stormwater Management	Average
6 - Pollution Prevention/Good Housekeeping	Average
Outfall Monitoring	Below Average
Summary/Total	**Average**

Stormwater O&M Summary

During the interview, the municipality discussed their stormwater infrastructure repair program and cleaning operations. It appears that they are reactive with respect to stormwater system repairs and good with stormwater system cleaning.

Rating: Average

Stormwater CIP Summary

During our interview with Rocky Hill, the municipality does have a stormwater CIP program, but it is not fully fleshed out yet. One flood study was conducted in 1973. A section of the CIP budget is dedicated to stormwater CIP projects, but funding is difficult to get. Projects are recommended based on identified health and safety concerns.

Rating: Below Average

Program Management

During the interview and as presented on the Stormwater Checklist, the municipality does well with development review activities, does not have a separate funding for stormwater program management, and is reactive with respect to complaints related to stormwater infrastructure.

Rating: Average

Compliance Summary

Based on the existing conditions evaluation of the Town's stormwater program, the Town of Rocky Hill has the following compliance rating for the four stormwater program components:

Regulatory Compliance	Average
O&M	Average
CIP Program	Below Average
Program Management	Average

Existing Cost Summary

CDM Smith evaluated the costs associated with the Town of Rocky Hill's stormwater activities including MS4 requirements, stormwater operations and maintenance, CIP program and management activities. Attachment 1 contains cost calculations based on the 2024-2025 Adopted Fiscal Year Budget and input from the municipality. These costs are presented as annual current costs and do not account for BMPs which were completed or discontinued in earlier years to allow for easy comparison between current and estimated future costs.

Table 2 below presents the total costs for stormwater activities as well as the additional costs identified by the municipality to address the perceived gap.

Table 2: Stormwater Costs and Cost per Capita

	Total Stormwater Costs	Per Capita Cost
Existing	$1,176,538	$56
Perceived Gap	$1,467,538	$70

At a current estimated cost of $1,176,538 and a census population of 20,845 (2020 Census), Rocky Hill's estimated cost per capita is approximately $56. Based on the interview with representatives from Rocky Hill, the Town identified a perceived gap of $291,000 for gaps in maintenance and equipment. This increases their annual spending on stormwater activities to $1,467,538. This would increase the per capita spending from $56 per capita to $70 per capita.

Attachments:
Attachment 1: Rocky Hill Existing Conditions Program Costs

Attachment 1

CRCOG Municipal Stormwater Authority Feasibility Study

Rocky Hill Exisiting Conditions Program Costs

Salaries	Budgeted Value (FY26 Annual Budget)	Percent Stormwater	Stormwater Budget Value
DPW Director	$155,723	25%	$38,931
Highway Supervisor	$147,699	6%	$8,862
Highway Employees	$1,064,981	66%	$702,887
Engineering Staff	$306,676	75%	$230,007
Stormwater Management	$50,000	100%	$50,000
		Total	$1,030,687

Materials/O&M	Budgeted Value (FY26 Annual Budget)	Percent Stormwater	Stormwater Budget Value
Equipment Rental	$10,000	50%	$5,000
Materials	$10,505	20%	$2,101
CIP - Infrastructure Reserv	$450,000	25%	$112,500
CB Cleaning Contractor	$26,250	100%	$26,250
		Total	$145,851

Gap	Value	Percent Stormwater	Stormwater Value
Maintenance Staff	$100,000	66%	$66,000
Equipment Replacement	$450,000	50%	$225,000
		Total	$291,000

Purpose	Current Stormwater Budget Value	Future Stormwater Budget Value
Salaries	$1,030,687	$1,030,687
Materials/O&M	$145,851	$145,851
Gap	$0	$291,000
Total	$1,176,538	$1,467,538

Memorandum

To: *West Hartford, CT*

From: *CDM Smith*

Date: *May 20, 2025*

Subject: *Municipal Stormwater Authority Feasibility Study*
Existing Conditions Analysis

In conjunction with the Capitol Region Council of Governments (CRCOG), CDM Smith has been contracted to study the feasibility of establishing a municipal stormwater authority for four member municipalities: the Municipalities of Bloomfield, Hartford, New Britain, Rocky Hill, and West Hartford. The first task in this study is the evaluation of the existing stormwater management programs with respect to: regulatory compliance, operations and maintenance (O&M), stormwater capital improvements projects (CIP) program and program management.

PROGRAM MANAGEMENT	REGULATORY COMPLIANCE
• Master planning • Complaint response • Development review	• MS4 Permit requirements (6 minimum control measures) • TMDL compliance
OPERATIONS AND MAINTENANCE	**CAPITAL IMPROVEMENT PROJECTS**
• Street sweeping • Catchbasin and pipe cleaning	• System upgrades & replacement • Stormwater Flooding Studies

Upon completion of the existing conditions analysis, CDM Smith and the Raftelis team will perform a feasibility assessment that includes: an assessment of stormwater rate structures, billing system requirements, regional utility implementation requirements and stormwater ordinances. Once all three activities are completed, the team will prepare a Feasibility Study Report that summarizes the results of the evaluations.

For the Town of West Hartford, CDM Smith reviewed the following documents to assess their existing conditions:

- 2024 Draft MS4 Annual Report
- 2017 Stormwater Management Plan
- 2018 IDDE Plan
- Town Website (Engineering)
- West Hartford Capital Improvements Program

Using these documents, CDM Smith evaluated West Hartford's regulatory compliance, completed a stormwater checklist, and conducted an interview with key staff in order to gain a comprehensive understanding of West Hartford's stormwater management program. The following summarizes the results of these activities with respect to regulatory compliance, operations and maintenance (O&M), stormwater capital improvements projects (CIP) program and program management.

Regulatory Compliance

The Connecticut Department of Energy and Environmental Protection (CT DEEP) released the Small Municipal Separate Storm Sewer Systems (MS4) General Permit effective January 11, 2017. The permit authorizes the discharge of stormwater and select non-stormwater discharges associated with a the small MS4 in accordance with the six minimum control measures (MCM's).

This memorandum includes an evaluation of West Hartford's existing permit requirements, their level of compliance with the MS4 permit, and an estimation of program costs. It also includes an estimate of the municipality's gap in meeting stormwater compliance and an estimate of additional costs associated with bridging the gap.

Existing MS4 Permit Requirements

The Town of West Hartford implements the current MS4 general permit through the six MCM's, each containing multiple best management practices (BMP's). Each BMP is defined in the Stormwater Management Plan (SMP) and includes measurable goals designed to provide milestones for each BMP. Below is a summary of each of the Town of West Hartford's MCM's and their compliance with each of the BMPs. The compliance evaluation uses the following rating with respect to compliance with each requirement:

"Proactive"	performing all MCM requirements and within the schedule identified in the SMP
"Average"	performing the majority of the MCM requirements (typically miss 1-2 requirements) close to the schedule identified in the SMP
"Below Average"	performing some of the MCM requirements (typically miss 3-4 requirements) and missing the SMP schedule dates
"Poor"	minimal effort or not performing any BMPs in the respective MCM

MCM 1 – Public Education and Outreach

To satisfy the Public Education and Outreach requirements in MCM 1, the Town of West Hartford agreed to perform the following BMPs

- Implement a public education and outreach program
- Address education/outreach for pollutants of concern

The Town of West Hartford implements these BMP's, includes additional outreach activities, and exceeds the requirements of their SMP.

Rating: Proactive

MCM 2 – Public Participation and Involvement

To satisfy the Public Participation and Involvement requirements in MCM 2, the Town of West Hartford agreed to comply with public notice requirements for the SMP and Annual Reports.

The Municipality fully implements this BMP in accordance with the SMP.

Rating: Average

MCM 3 – Illicit Discharge Detection and Elimination

To satisfy the Illicit Discharge Detection and Elimination (IDDE) requirements in MCM 3, Town of West Hartford agreed to perform the following BMPs

- Develop a written IDDE program
- Develop a list and maps of all MS4 stormwater outfalls in priority areas
- Develop a citizen reporting program
- Establish legal authority to prohibit illicit discharges
- Develop a record keeping system for IDDE tracking
- Address IDDE in areas with pollutants of concern
- Outfall and interconnection dry weather screening and sampling
- Sanitary sewer overflows(SSOs) inventory

West Hartford implements all of these BMP's, meeting the SMP schedule and exceeding the requirements in the SMP for some of the BMP's listed above.

Rating: Proactive

MCM 4 – Construction Site Stormwater Runoff Control

To satisfy the Construction Site Stormwater Runoff Control requirements in MCM 4, the Town of West Hartford agreed to perform the following BMPs

- Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit
- Develop/Implement plan for interdepartmental coordination in site plan review and approval
- Review site plans for stormwater quality concerns
- Conduct site inspections
- Implement procedure to allow public comment on site development
- Implement procedure to notify developers about DEEP construction stormwater general permit

The Municipality implements this MCM and performed all BMPs, some of which are ongoing as needed.

Rating: Average

MCM 5 – Post Construction Stormwater Management

To satisfy the Post Construction Stormwater Management requirements in MCM 5, the Town of West Hartford agreed to perform the following BMPs

- Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning
- Enforce LID/runoff reduction requirements for development and redevelopment projects
- Implement long term maintenance program for stormwater basins and treatment structures
- DCIA mapping
- Address post-construction issues in areas with pollutants of concern

West Hartford partially implements this MCM. Most BMPs have been completed or are ongoing, however, nothing has been done to address post construction issues in areas of concern.

Rating: Average

MCM 6 – Pollution Prevention/Good Housekeeping

To satisfy the Pollution Prevention and Good Housekeeping requirements in MCM 6, the Town of West Hartford performs the following BMPs.

- Develop/implement formal employee training program
- Implement MS4 property and operations maintenance
- Implement coordination with interconnected MS4s
- Develop/implement program to control other sources of pollutants to the MS4
- Evaluate additional measures for discharges to impaired waters
- Track projects that disconnect DCIA
- Develop/implement infrastructure repair/rehabilitation/retrofit program
- Develop/implement plan to identify/prioritize retrofit projects
- Implement retrofit projects to disconnect 2% of DCIA
- Develop/implement street sweeping program
- Develop/implement catch basin cleaning program
- Develop/implement snow management practices

The municipality implements this MCM and performs the majority of the BMPs. Some coordination has been implemented between interconnected MS4s and they have evaluated discharges to impaired waters. They appear to be lacking in the development and implementation of an infrastructure repair and rehab program. Retrofit projects are in progress but are not on track to meet due dates.

Rating: Average

Outfall Monitoring

To satisfy the Outfall Monitoring requirements, the SMP included the following BMPs:

- Outfall screening
- Inventory and mappings of discharges to impaired waters
- Follow-up investigations of drainage areas
- Annual monitoring of priority outfalls

The Town of West Hartford is currently focused on conducting wet weather sampling at the outfalls that discharge to impaired waters. Dry weather sampling of outfalls was completed according to permit requirements. Annual wet weather sampling of the six highest contributors is not currently being worked on but will be completed in the future.

Rating: Average

Compliance Summary

In general, the Municipality follows most of the requirements in their MS4 permit and is considered to have an "Average" level of compliance. Table 1 on the following page is an overall summary of their compliance based on their 2024 Annual Report. Attachment 1 contains a more detailed compliance table and Attachment 1 contains cost calculations based on the 2024-2025 Adopted Budget. These costs are presented as annual current costs and do not account for BMPs which were completed or discontinued in earlier years to allow for easy comparison between current and estimated future costs.

Table 1: Existing MS4 Permit Compliance – West Hartford

Control Measure	Compliance
1 - Public Education and Outreach	Proactive
2 - Public Participation and Involvement	Average
3 - Illicit Discharge Detection and Elimination	Proactive
4 - Construction Site Stormwater Runoff Control	Average
5 - Post Construction Stormwater Management	Average
6 - Pollution Prevention/Good Housekeeping	Average
Outfall Monitoring	Average
Summary/Total	**Average**

Stormwater O&M Summary

During the interview, the municipality discussed their stormwater infrastructure repair program and cleaning operations. It appears that they are proactive with infrastructure inspections, reactive with respect to stormwater system repairs and proactive with stormwater system cleaning.

Rating: Proactive

Stormwater CIP Summary

During our interview with West Hartford, the Municipality does have a stormwater CIP program, multiple flood studies have been conducted in different areas and West Hartford has dedicated funding for flood mitigation and improvements.

Rating: Proactive

Program Management

During the interview and as presented on the Stormwater Checklist, West Hartford does well with development review activities, conducts appropriate meetings with department heads to discuss stormwater programs, and has separate funding for stormwater projects.

Rating: Proactive

Compliance Summary

Based on the existing conditions evaluation of the Town's stormwater program, the Town of West Hartford has the following compliance rating for the four stormwater program components:

Regulatory Compliance	Average
O&M	Proactive
CIP Program	Proactive
Program Management	Proactive

Existing Cost Comparison

CDM Smith evaluated the costs associated with the municipality's stormwater activities including MS4 requirements, stormwater operations and maintenance, stormwater CIP program and management activities. Attachment 1 contains cost calculations based on the 2024-2025 Adopted Budget and input from the municipality. These costs are presented as annual current costs and do not account for BMPs which were completed or discontinued in earlier years to allow for easy comparison between current and estimated future costs.

Table 2 below presents the total costs for stormwater activities as well as the additional costs identified by the Municipality to be able to fully address stormwater needs.

Table 2: Stormwater Costs and Cost per Capita

	Total Stormwater Costs	Per Capita Cost
Existing	$10,524,161	$164
Perceived Gap	$10,751,536	$168

At a current estimated cost of $10,524,161 and a census population of 64,083 (2020 census), West Hartford estimated cost per capita is approximately $164. Based on the interview with representatives from West Hartford, the Town identified a perceived gap of $227,375, increasing the total costs to $10,751,536. This would increase the per capita spending from $164 per capita to $168 per capita.

Attachments:
Attachment 1: Existing Stormwater Program Costs – West Hartford

Attachment 1
CRCOG Municipal Stormwater Authority Feasibility Study
West Hartford - Existing Stormwater Program Costs

Salaries	Budgeted Value (Budget 24-25)	Percent Stormwater	Stormwater Budget Value
PW Employees	$5,192,937	25%	$1,298,234
Clerical Salaries	$291,237	10%	$29,124
Engineering Staff (stormwater only)	$299,341	100%	$299,341
Planning Staff (stormwater only)	$113,687	100%	$113,687
		Total	$1,740,386

Materials/O&M	Budgeted Value (Budget 24-25)	Percent Stormwater	Stormwater Budget Value
Snow Removal Supplies	$307,100	25%	$76,775
Material Disposal	$67,000	100%	$67,000
CIP Stormwater	$733,000	100%	$733,000
Vacuum Truck Replacement	$700,000	75%	$525,000
CCTV	$150,000	50%	$75,000
Contractual Services(CDM Smith)	$175,000	100%	$175,000
CIP Flood Mitigation	$7,000,000	100%	$7,000,000
CIP DPW Equipment	$264,000	50%	$132,000
		Total	$8,783,775

Percieved Gap	Value	Percent Stormwater	Stormwater Value
Stormwater Maintenance	$154,750	50%	$77,375
Equipment Replacement	$300,000	50%	$150,000
		Total	$227,375

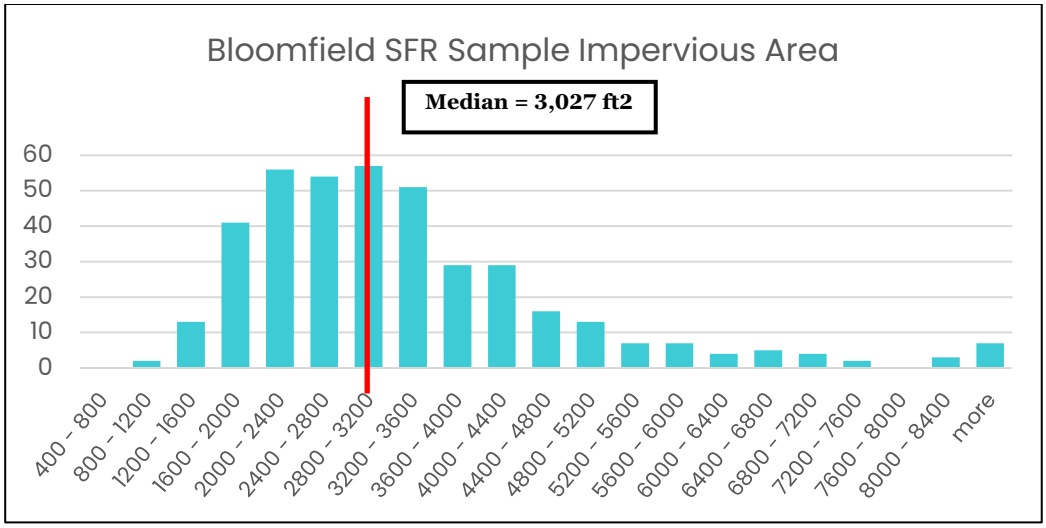
Purpose	Current Stormwater Budget Value	Future Stormwater Budget Value
Salaries	$1,740,386	$1,740,386
Materials/O&M	$8,783,775	$8,783,775
Percieved Gap	$0	$227,375
Total	$10,524,161	$10,751,536

APPENDIX B:

ERU, Units of Service, and Financial Analysis

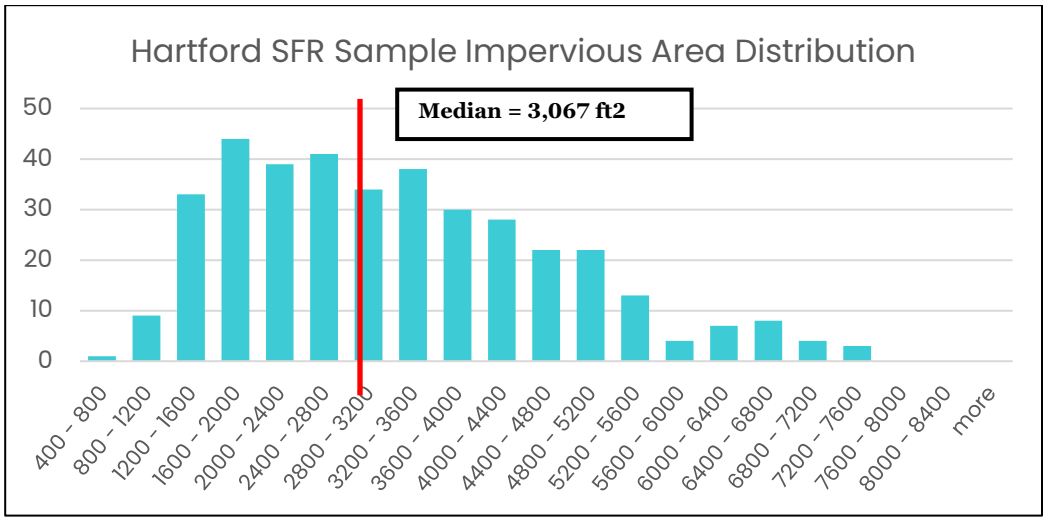
ERU AND UNITS OF SERVICE ANALYSIS

Bloomfield



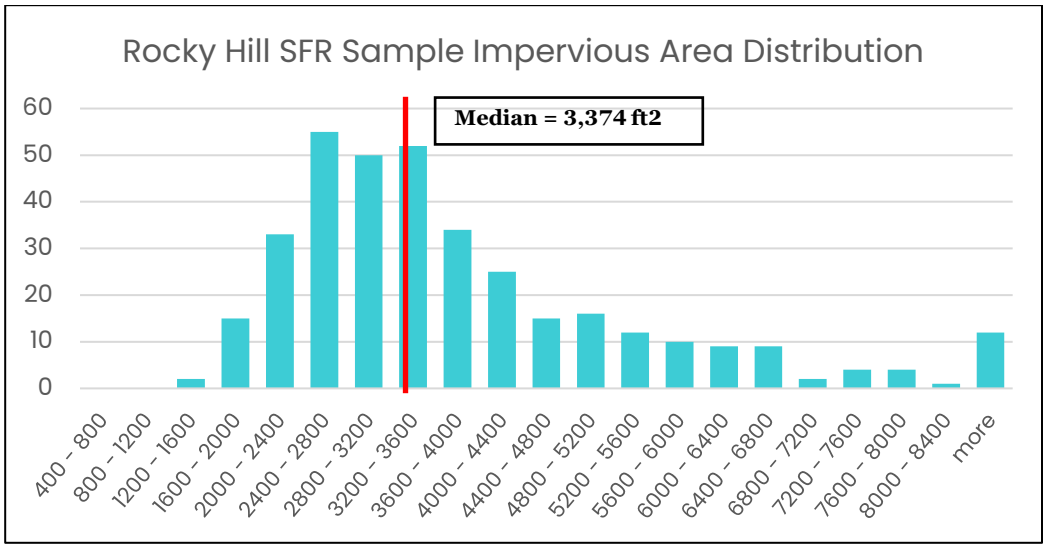
Minimum IA	Maximum IA	Median IA	Average IA	Sample Count
815	28,181	3,027	3,415	400

Hartford



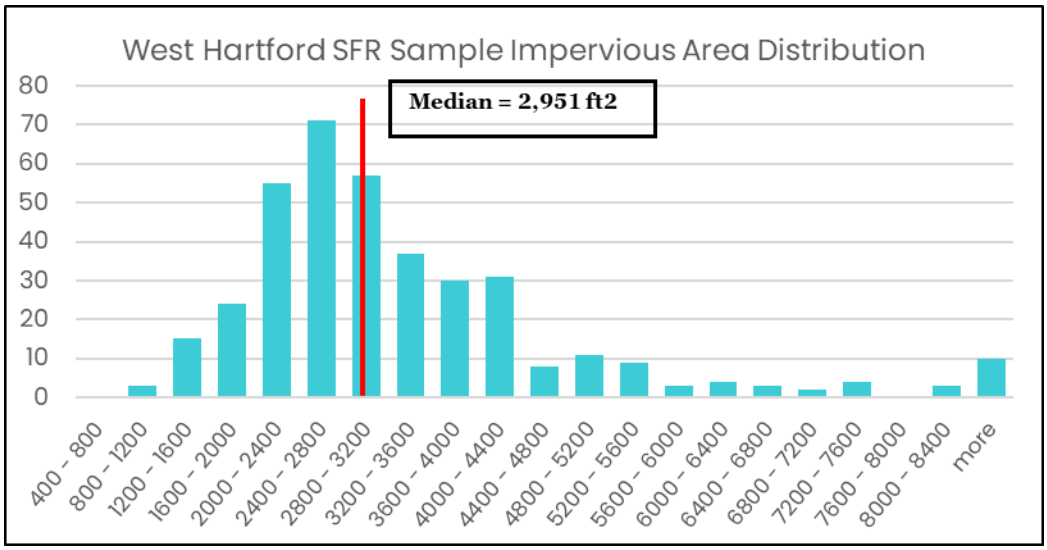
Minimum IA	Maximum IA	Median IA	Average IA	Sample Count
748	7,340	3,067	3,242	400

Rocky Hill



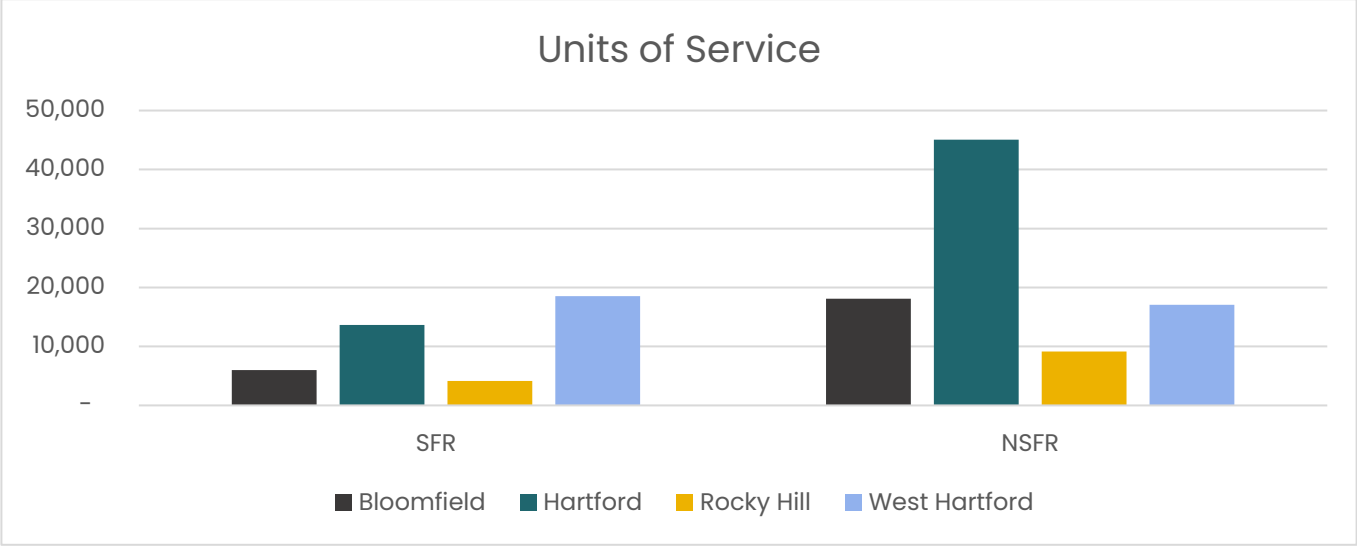
Minimum IA	Maximum IA	Median IA	Average IA	Sample Count
894	25,029	3,374	3,949	400

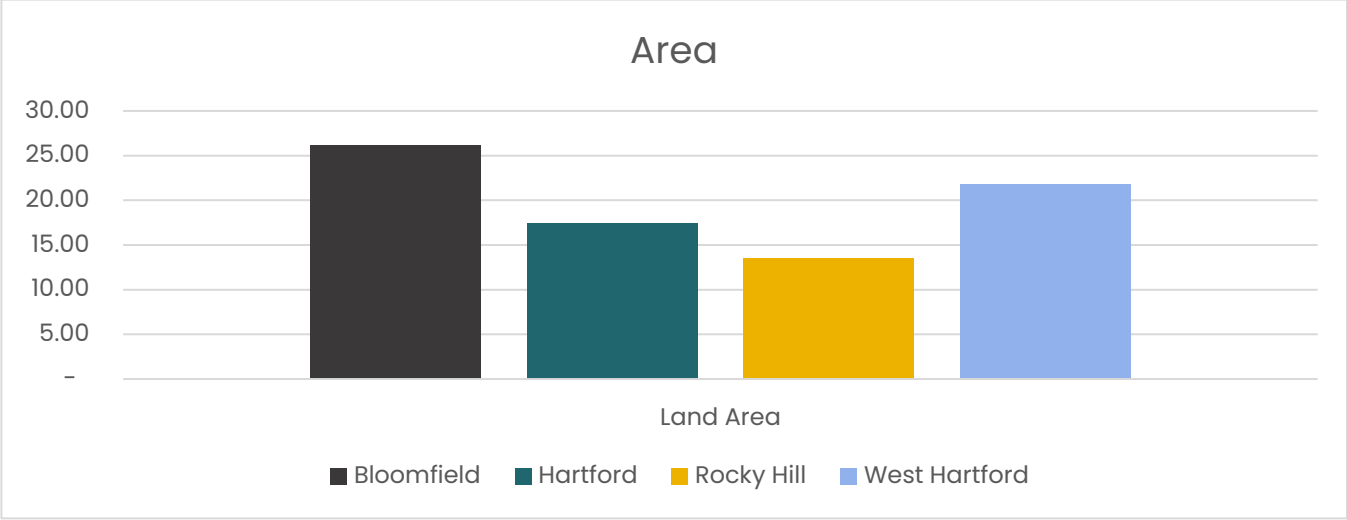
West Hartford

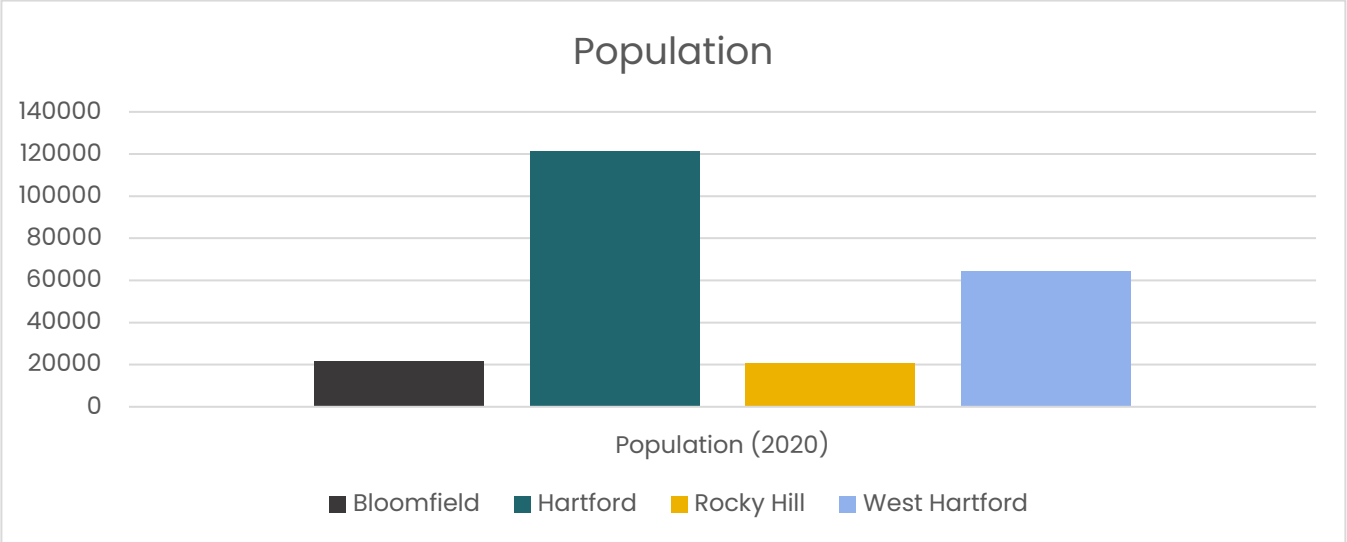


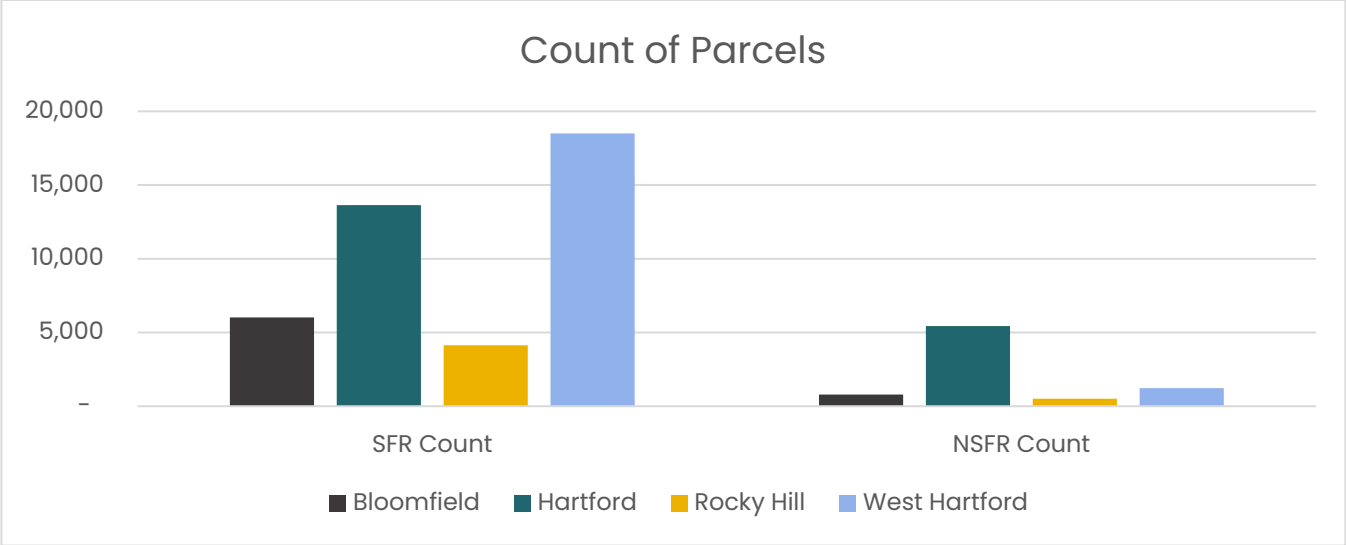
Minimum IA	Maximum IA	Median IA	Average IA	Sample Count
1,033	12,398	2,951	3,402	400

Comparison Between Municipalities





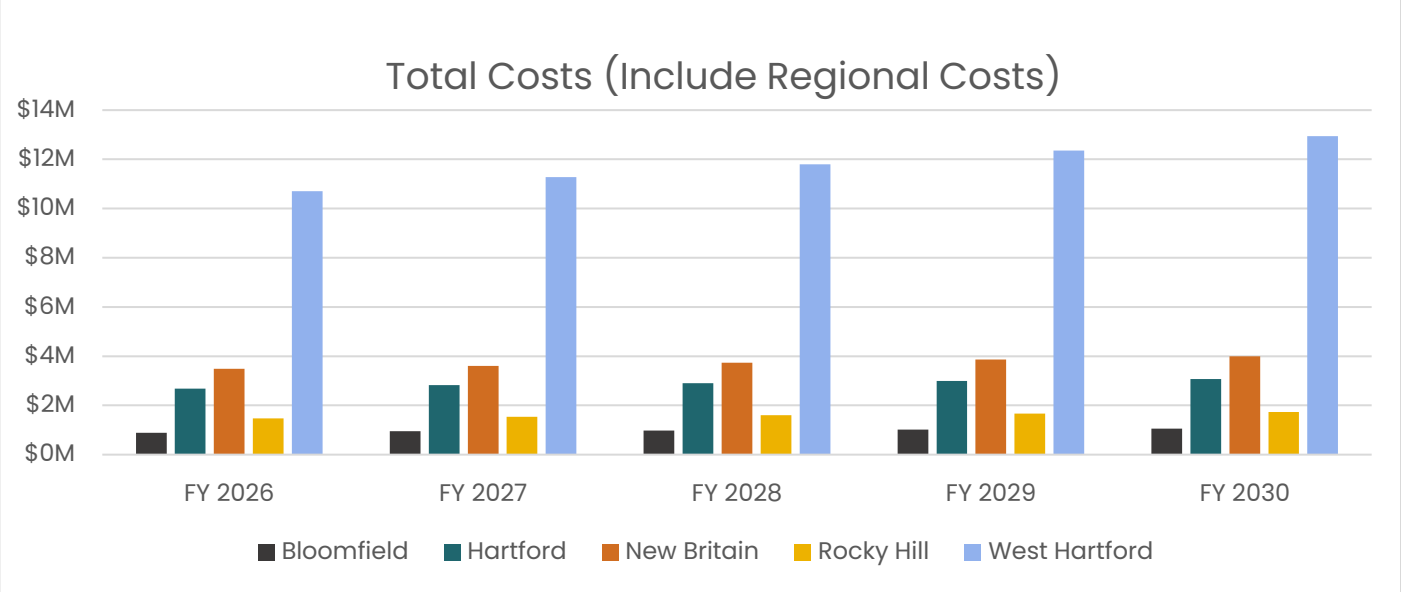




Impervious Area as a Percentage of Total Land Area

	ERU Value (sq. ft.)	Total Number of ERUs	Estimated IA (sq. ft.)	Land Area (sq. ft.)	Percent Impervious
Bloomfield	3,030	24,098	73,016,940	727,626,240	10%
Hartford	3,070	58,684	180,159,880	485,084,160	37%
Rocky Hill	3,370	13,265	44,703,050	376,358,400	24%
West Hartford	2,950	35,543	104,851,850	607,749,120	12%

FINANCIAL ANALYSIS



Bloomfield

Capitol Region Council of Governments

Bloomfield Inputs

	Category	Allocation	FY24 - 25 Budge	% Stormwate	Inflation	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
O&M Costs											
Engineering Staff	Personnel	Bloomfield	$ 385,233	15%	Salaries	$ 57,785	$ 59,807	$ 61,901	$ 64,067	$ 66,310	$ 68,630
PW Employees	Personnel	Bloomfield	$ 1,960,409	25%	Salaries	$ 490,102	$ 507,256	$ 525,010	$ 543,385	$ 562,404	$ 582,088
Clerical Salaries	Personnel	Bloomfield	$ 431,552	2%	Salaries	$ 8,631	$ 8,933	$ 9,246	$ 9,569	$ 9,904	$ 10,251
Engineering Services	Materials/O&M	Bloomfield	$ 22,300	100%	Contracted Services	$ 22,300	$ 23,415	$ 24,586	$ 25,815	$ 27,106	$ 28,461
Equipment Rental	Materials/O&M	Bloomfield	$ 11,375	25%	General (CPI)	$ 2,844	$ 2,901	$ 2,959	$ 3,018	$ 3,078	$ 3,140
Construction Materials	Materials/O&M	Bloomfield	$ 41,150	25%	General (CPI)	$ 10,287	$ 10,493	$ 10,703	$ 10,917	$ 11,135	$ 11,358
Road Aid Materials	Materials/O&M	Bloomfield	$ 197,551	25%	General (CPI)	$ 49,388	$ 50,376	$ 51,383	$ 52,411	$ 53,459	$ 54,528
Material Disposal	Materials/O&M	Bloomfield	$ 17,287	25%	General (CPI)	$ 4,322	$ 4,408	$ 4,496	$ 4,586	$ 4,678	$ 4,771
Total O&M						**$ 645,659**	**$ 667,589**	**$ 690,283**	**$ 713,769**	**$ 738,074**	**$ 763,228**
Total O&M		Regional				$ -	$ -	$ -	$ -	$ -	$ -
Total O&M		Bloomfield				$ 645,659	$ 667,589	$ 690,283	$ 713,769	$ 738,074	$ 763,228
CHECK						TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
Capital Costs											
Stormwater CIP	CIP	Bloomfield	$ 150,000	100%	Capital	$ 150,000	$ 157,500	$ 165,375	$ 173,644	$ 182,326	$ 191,442
Total Capital						**$ 150,000**	**$ 157,500**	**$ 165,375**	**$ 173,644**	**$ 182,326**	**$ 191,442**
Total Capital		Regional				$ -	$ -	$ -	$ -	$ -	$ -
Total Capital		Bloomfield				$ 150,000	$ 157,500	$ 165,375	$ 173,644	$ 182,326	$ 191,442
CHECK						TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
Additional Expenses											
Equipment Replacement	Equipment	Bloomfield	$ 250,000	25%	Capital	$ 62,500	$ 65,625	$ 68,906	$ 72,352	$ 75,969	$ 79,768
Placeholder 2		Bloomfield			General (CPI)						
Total Additional						**$ 62,500**	**$ 65,625**	**$ 68,906**	**$ 72,352**	**$ 75,969**	**$ 79,768**
Total Additional		Regional				$ -	$ -	$ -	$ -	$ -	$ -
Total Additional		Bloomfield				$ 62,500	$ 65,625	$ 68,906	$ 72,352	$ 75,969	$ 79,768

Hartford

Capitol Region Council of Governments

Hartford Inputs

	Category	Allocation	FY25 Budget	Stormwat	Inflation	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
O&M Costs											
Engineering	Personnel	Hartford	$ 1,289,521	5%	Salaries	$ 64,476	$ 66,733	$ 69,068	$ 71,486	$ 73,988	$ 76,577
Street Services	Personnel	Hartford	$ 2,485,587	5%	Salaries	$ 124,279	$ 128,629	$ 133,131	$ 137,791	$ 142,613	$ 147,605
Stormwater MS4	Personnel	Hartford	$ 100,000	100%	Salaries	$ 100,000	$ 103,500	$ 107,123	$ 110,872	$ 114,752	$ 118,769
Consultant - Atlas	Materials/O&	Hartford	$ -	100%	Contracted Services	$ -	$ -	$ -	$ -	$ -	$ -
Infrastructure Maintenanc	Materials/O&	Hartford	$ -	25%	General (CPI)	$ -	$ -	$ -	$ -	$ -	$ -
Maintenance	Materials/O&	Hartford	$ -	25%	General (CPI)	$ -	$ -	$ -	$ -	$ -	$ -
HFC O&M	Materials/O&	Hartford	$ 1,714,953	100%	General (CPI)	$ 1,714,953	$ 1,749,252	$ 1,784,237	$ 1,819,922	$ 1,856,320	$ 1,893,447
Total O&M						**$ 2,003,708**	**$ 2,048,114**	**$ 2,093,559**	**$ 2,140,070**	**$ 2,187,674**	**$ 2,236,398**
Total O&M		Regional				$ -	$ -	$ -	$ -	$ -	$ -
Total O&M		Hartford				$ 2,003,708	$ 2,048,114	$ 2,093,559	$ 2,140,070	$ 2,187,674	$ 2,236,398
CHECK						TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
Capital Costs											
CIP Projects (All City proj	CIP	Hartford	$ 12,000,000	5%	Capital	$ 600,000	$ 630,000	$ 661,500	$ 694,575	$ 729,304	$ 765,769
Placeholder - Project 2	Equipment	Hartford			Capital						
Total Capital						**$ 600,000**	**$ 630,000**	**$ 661,500**	**$ 694,575**	**$ 729,304**	**$ 765,769**
Total Capital		Regional				$ -	$ -	$ -	$ -	$ -	$ -
Total Capital		Hartford				$ 600,000	$ 630,000	$ 661,500	$ 694,575	$ 729,304	$ 765,769
CHECK						TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
Additional Expenses											
Placeholder 1		Hartford			General (CPI)	$ -	$ -	$ -	$ -	$ -	$ -
Placeholder 2		Hartford			General (CPI)	$ -	$ -	$ -	$ -	$ -	$ -
Total Additional						**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Total Additional		Regional				$ -	$ -	$ -	$ -	$ -	$ -
Total Additional		Hartford				$ -	$ -	$ -	$ -	$ -	$ -

New Britain

Capitol Region Council of Governments

New Britain Inputs

	Category	Allocation	FY25 Budget	Stormwat	Inflation	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
O&M Costs											
Streets and Highway	Personnel	New Britain	$ 1,222,667	33%	Salaries	$ 403,480	$ 417,602	$ 432,218	$ 447,346	$ 463,003	$ 479,208
Engineering	Personnel	New Britain	$ 895,874	33%	Salaries	$ 295,638	$ 305,986	$ 316,695	$ 327,780	$ 339,252	$ 351,126
Fleet	Personnel	New Britain	$ 2,252,703	33%	Salaries	$ 743,392	$ 769,411	$ 796,340	$ 824,212	$ 853,059	$ 882,916
Public Works Admin	Personnel	New Britain	$ 178,124	33%	Salaries	$ 58,781	$ 60,838	$ 62,968	$ 65,171	$ 67,452	$ 69,813
Equipment and Vehicle Maintenance	Materials/O&	New Britain	$ 88,200	33%	General (CPI)	$ 29,106	$ 29,688	$ 30,282	$ 30,888	$ 31,505	$ 32,135
Materials	Materials/O&	New Britain	$ 200,000	33%	General (CPI)	$ 66,000	$ 67,320	$ 68,666	$ 70,040	$ 71,441	$ 72,869
Stormwater Infrastructure Maintenance	Materials/O&	New Britain	$ 67,535	100%	General (CPI)	$ 67,535	$ 68,886	$ 70,263	$ 71,669	$ 73,102	$ 74,564
Clean Water Fund Projects Management	Materials/O&	New Britain	$ 799,535	100%	General (CPI)	$ 799,535	$ 815,526	$ 831,836	$ 848,473	$ 865,442	$ 882,751
CB Cleaning Contractor	Materials/O&	New Britain	$ 750,000	100%	Contracted Services	$ 750,000	$ 787,500	$ 826,875	$ 868,219	$ 911,630	$ 957,211
Total O&M						**$ 3,213,467**	**$ 3,322,756**	**$ 3,436,144**	**$ 3,553,796**	**$ 3,675,886**	**$ 3,802,595**
Total O&M		Regional				$ -	$ -	$ -	$ -	$ -	$ -
Total O&M		New Britain				$ 3,213,467	$ 3,322,756	$ 3,436,144	$ 3,553,796	$ 3,675,886	$ 3,802,595
CHECK						TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
Capital Costs											
Trench Repairs	CIP	New Britain	$ 225,000	33%	Capital	$ 74,250	$ 77,963	$ 81,861	$ 85,954	$ 90,251	$ 94,764
Placeholder - Project 2		New Britain			Capital						
Total Capital						**$ 74,250**	**$ 77,963**	**$ 81,861**	**$ 85,954**	**$ 90,251**	**$ 94,764**
Total Capital		Regional				$ -	$ -	$ -	$ -	$ -	$ -
Total Capital		New Britain				$ 74,250	$ 77,963	$ 81,861	$ 85,954	$ 90,251	$ 94,764
CHECK						TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
Additional Expenses											
2 Public Works Employees	Personnel	New Britain	$ 26,262	33%	Salaries	$ 8,666	$ 8,970	$ 9,284	$ 9,609	$ 9,945	$ 10,293
City Engineer	Personnel	New Britain	$ 109,227	33%	Salaries	$ 36,045	$ 37,306	$ 38,612	$ 39,964	$ 41,362	$ 42,810
1 Clerical Employee	Personnel	New Britain	$ 122,965	33%	Salaries	$ 40,578	$ 41,999	$ 43,468	$ 44,990	$ 46,565	$ 48,194
Total Additional						**$ 85,290**	**$ 88,275**	**$ 91,364**	**$ 94,562**	**$ 97,872**	**$ 101,297**
Total Additional		Regional				$ -	$ -	$ -	$ -	$ -	$ -
Total Additional		New Britain				$ 85,290	$ 88,275	$ 91,364	$ 94,562	$ 97,872	$ 101,297

Rocky Hill

Capitol Region Council of Governments

Rocky Hill Inputs

	Category	Allocation	FY26 Budget	Stormwat	Inflation	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
O&M Costs											
DPW Director	Personnel	Rocky Hill	$ 155,723	25%	Salaries		$ 38,931	$ 40,293	$ 41,704	$ 43,163	$ 44,674
Highway Supervisor	Personnel	Rocky Hill	$ 147,699	6%	Salaries		$ 8,862	$ 9,172	$ 9,493	$ 9,825	$ 10,169
Highway Employees	Personnel	Rocky Hill	$ 1,064,981	66%	Salaries		$ 702,887	$ 727,489	$ 752,951	$ 779,304	$ 806,580
Engineering Staff	Personnel	Rocky Hill	$ 306,676	75%	Salaries		$ 230,007	$ 238,057	$ 246,389	$ 255,013	$ 263,938
Stormwater Management	Materials/C	Rocky Hill	$ 50,000	100%	Salaries		$ 50,000	$ 51,750	$ 53,561	$ 55,436	$ 57,376
Equipment Rental	Materials/C	Rocky Hill	$ 10,000	50%	General (CPI)		$ 5,000	$ 5,100	$ 5,202	$ 5,306	$ 5,412
Materials	Materials/C	Rocky Hill	$ 10,505	20%	General (CPI)		$ 2,101	$ 2,143	$ 2,186	$ 2,230	$ 2,274
CB Cleaning Contractor	Materials/C	Rocky Hill	$ 26,250	100%	Contracted Services		$ 26,250	$ 27,563	$ 28,941	$ 30,388	$ 31,907
Total O&M						**$ -**	**$ 1,064,038**	**$ 1,101,567**	**$ 1,140,426**	**$ 1,180,665**	**$ 1,222,331**
Total O&M		Regional				$ -	$ -	$ -	$ -	$ -	$ -
Total O&M		Rocky Hill				$ -	$ 1,064,038	$ 1,101,567	$ 1,140,426	$ 1,180,665	$ 1,222,331
CHECK						TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
Capital Costs											
CIP - Infrastructure Reserve	CIP	Rocky Hill	$ 450,000	25%	Capital		$ 112,500	$ 118,125	$ 124,031	$ 130,233	$ 136,744
Placeholder - Project 2		Rocky Hill			Capital						
Total Capital						**$ -**	**$ 112,500**	**$ 118,125**	**$ 124,031**	**$ 130,233**	**$ 136,744**
Total Capital		Regional				$ -	$ -	$ -	$ -	$ -	$ -
Total Capital		Rocky Hill				$ -	$ 112,500	$ 118,125	$ 124,031	$ 130,233	$ 136,744
CHECK						TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
Additional Expenses											
Maintenance Staff	Personne	Rocky Hill	$ 100,000	66%	Salaries		$ 66,000	$ 68,310	$ 70,701	$ 73,175	$ 75,737
Equipment Replacement	Equipme	Rocky Hill	$ 450,000	50%	Capital		$ 225,000	$ 236,250	$ 248,063	$ 260,466	$ 273,489
Total Additional						**$ -**	**$ 291,000**	**$ 304,560**	**$ 318,763**	**$ 333,641**	**$ 349,225**
Total Additional		Regional				$ -	$ -	$ -	$ -	$ -	$ -
Total Additional		Rocky Hill				$ -	$ 291,000	$ 304,560	$ 318,763	$ 333,641	$ 349,225

West Hartford

Capitol Region Council of Governments

West Hartford Inputs

	Category	Allocation	FY25 Budget	Stormwat	Inflation	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
O&M Costs											
PW Employees	Personn	West Hartfc	$ 5,192,937	25%	Salaries	$ 1,298,234	$ 1,343,672	$ 1,390,701	$ 1,439,376	$ 1,489,754	$ 1,541,895
Clerical Salaries	Personn	West Hartfc	$ 291,237	10%	Salaries	$ 29,124	$ 30,143	$ 31,198	$ 32,290	$ 33,420	$ 34,590
Engineering Staff (stormwater only)	Personn	West Hartfc	$ 299,341	100%	Salaries	$ 299,341	$ 309,818	$ 320,662	$ 331,885	$ 343,501	$ 355,523
Planning Staff (stormwater only)	Personn	West Hartfc	$ 113,687	100%	Salaries	$ 113,687	$ 117,666	$ 121,784	$ 126,047	$ 130,458	$ 135,024
Snow Removal Supplies	Materials	West Hartfc	$ 307,100	25%	General (CPI)	$ 76,775	$ 78,311	$ 79,877	$ 81,474	$ 83,104	$ 84,766
Material Disposal	Materials	West Hartfc	$ 67,000	100%	General (CPI)	$ 67,000	$ 68,340	$ 69,707	$ 71,101	$ 72,523	$ 73,973
Total O&M						**$ 1,884,161**	**$ 1,947,950**	**$ 2,013,928**	**$ 2,082,172**	**$ 2,152,760**	**$ 2,225,772**
Total O&M		Regional				$ -	$ -	$ -	$ -	$ -	$ -
Total O&M		West Hartford				$ 1,884,161	$ 1,947,950	$ 2,013,928	$ 2,082,172	$ 2,152,760	$ 2,225,772
CHECK						TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
Capital Costs											
CIP Stormwater	CIP	West Hartfc	$ 733,000	100%	Capital	$ 733,000	$ 769,650	$ 808,133	$ 848,539	$ 890,966	$ 935,514
Vacuum Truck Replacement	Equipme	West Hartfc	$ 700,000	75%	Onetime	$ 525,000	$ -	$ -	$ -	$ -	$ -
CCTV	CIP	West Hartfc	$ 150,000	50%	Capital	$ 75,000	$ 78,750	$ 82,688	$ 86,822	$ 91,163	$ 95,721
Contractual Services(CDM Smith)	CIP	West Hartfc	$ 175,000	100%	Capital	$ 175,000	$ 183,750	$ 192,938	$ 202,584	$ 212,714	$ 223,349
CIP Flood Mitigation	CIP	West Hartfc	$ 7,000,000	100%	Capital	$ 7,000,000	$ 7,350,000	$ 7,717,500	$ 8,103,375	$ 8,508,544	$ 8,933,971
CIP DPW Equipment	CIP	West Hartfc	$ 264,000	50%	Capital	$ 132,000	$ 138,600	$ 145,530	$ 152,807	$ 160,447	$ 168,469
Total Capital						**$ 8,640,000**	**$ 8,520,750**	**$ 8,946,788**	**$ 9,394,127**	**$ 9,863,833**	**$ 10,357,025**
Total Capital		Regional				$ -	$ -	$ -	$ -	$ -	$ -
Total Capital		West Hartford				$ 8,640,000	$ 8,520,750	$ 8,946,788	$ 9,394,127	$ 9,863,833	$ 10,357,025
CHECK						TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
Additional Expenses											
Stormwater Maintenance	Materi	West Hartfc	$ 154,750	50%	General (CPI)	$ 77,375	$ 78,923	$ 80,501	$ 82,111	$ 83,753	$ 85,428
Equipment Replacement	Equipr	West Hartfc	$ 300,000	50%	Capital	$ 150,000	$ 157,500	$ 165,375	$ 173,644	$ 182,326	$ 191,442
Total Additional						**$ 227,375**	**$ 236,423**	**$ 245,876**	**$ 255,755**	**$ 266,079**	**$ 276,870**
Total Additional		Regional				$ -	$ -	$ -	$ -	$ -	$ -
Total Additional		West Hartford				$ 227,375	$ 236,423	$ 245,876	$ 255,755	$ 266,079	$ 276,870

Regional Cost Allocation

Capitol Region Council of Governments

Regional Cost Allocation

	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Regional Costs						
Total Regional Costs		**$ 175,000**	**$ 181,125**	**$ 187,464**	**$ 194,026**	**$ 200,817**
Regional Cost Allocation - per Customer						
Bloomfield		$ 23,723	$ 24,553	$ 25,412	$ 26,302	$ 27,222
Hartford		$ 66,420	$ 68,744	$ 71,150	$ 73,641	$ 76,218
New Britain		$ -	$ -	$ -	$ -	$ -
Rocky Hill		$ 16,168	$ 16,734	$ 17,320	$ 17,926	$ 18,553
West Hartford		$ 68,690	$ 71,094	$ 73,582	$ 76,157	$ 78,823
Total Regional Costs		$ 175,000	$ 181,125	$ 187,464	$ 194,026	$ 200,817
Regional Costs Included in Model						
Bloomfield		$ 23,723	$ 24,553	$ 25,412	$ 26,302	$ 27,222
Hartford		$ 66,420	$ 68,744	$ 71,150	$ 73,641	$ 76,218
New Britain		$ -	$ -	$ -	$ -	$ -
Rocky Hill		$ 16,168	$ 16,734	$ 17,320	$ 17,926	$ 18,553
West Hartford		$ 68,690	$ 71,094	$ 73,582	$ 76,157	$ 78,823
Regional Costs Included		$ 175,000	$ 181,125	$ 187,464	$ 194,026	$ 200,817

Additional Revenue Generated for Every $1 added to the monthly rate

Capitol Region Council of Governments

Rate Calculator

	SFR ERU	NSFR ERUs	Total ERUs	Monthly Rate	Annual Revenue
Bloomfield	6017	18081	24,098	$ 1.00	$ 289,176
Hartford	13633	45051	58,684	$ 1.00	$ 704,208
Rocky Hill	4132	9133	13,265	$ 1.00	$ 159,180
West Hartford	18504	17039	35,543	$ 1.00	$ 426,516

APPENDIX C:

Communication Plan & Public Survey Results

CRCOG CAPITOL REGION COUNCIL OF GOVERNMENTS
Working together for a better region.

Capitol Region Council of Governments

Stormwater Regionalization Feasibility Study
Communications Plan

Updated: August 11, 2025

Image Credit: www.worldatlas.com

Table of Contents

Setting the Stage

Project Overview

Raftelis, with assistance from CDM Smith and Rath, Young and Pignatelli, PC (RYP), (the Project Team), is conducting a study to determine whether creating regional stormwater authority is feasible and desirable. Five representative CRCOG communities (West Hartford, New Britain, Rocky Hill, Bloomfield, and Hartford) are being examined as part of this effort. For the study, the Project Team will investigate all benefits, costs, issues, challenges, and barriers related to a potential regional stormwater utility for each agency's interests and their respective ratepayers.

About This Communications Plan

The purpose of this Communications Plan (Plan) is to provide guidance to all entities about how to communicate about the study, throughout the study. While it places a high priority on internal communications, including with elected officials, it acknowledges that external stakeholders, such as customers of each entity, may be interested in the study, so it's important that representatives at each agency speak about it consistently and clearly. The Study's Advisory Group (Group) provided the foundational guidance for this Plan during the kickoff meeting. Raftelis' communications consultant will assist the Group as needed with communications efforts for the study as described in this document.

Advisory Group Members

- Capitol Region Council of Governments
- Study Participants (West Hartford, New Britain, Rocky Hill, Bloomfield, and Hartford)
- Observing Towns (Glastonbury, Newington, and East Hartford, Windsor Locks and Wethersfield)
- Rivers Alliance of Connecticut
- Chatham Health District
- Metropolitan District Commission
- Department of Energy & Environmental Protection (DEEP)

The Group members acknowledge that their agencies each have their own communications programs designed to meet the needs of their various stakeholders. This Plan capitalizes on those programs while also creating new opportunities for joint communication on this effort. It is crucial that the Group members have clear communications roles that are executable and support the goals of this Plan.

Plan Goals

- Build awareness of the study's purpose and that there are no foregone conclusions
- Demonstrate transparency
- Avoid miscommunication and minimize spread of misinformation
- Ensure consistent messages are communicated to all stakeholders identified for this phase of the project

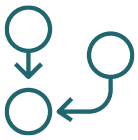
Critical Success Factors for Communications

- Finished report that indicates:
  - What models are in place elsewhere in the country
  - Whether a regional stormwater utility is or is not clearly and definitively feasible
  - What is the best path forward for study participants and CRCOG
  - Recommendation on utility implementation, structure and fees that could take effect almost immediately
  - A simple process and system for utility implementation
  - Helps each entity meet MS4 permit responsibilities
- Each city/town has enough information for decision making
- All members of the advisory group are actively engaged in the process

Communicating in Context

A successful study requires an inclusive, highly transparent foundation that involves stakeholders and employees at appropriate levels. Because that transparent foundation is so critical to communicating effectively, the following observations are important to keep as a frame of reference for this Plan.

- Each agency is highly unique in their management approach, culture, size of population served, and stormwater infrastructure.
- There is a legacy of (or culture of) community independence, and each agency has a complex history with established norms and expectations among employees, governing bodies and customers. Communication strategies must consider the long operating histories and well-established norms and expectations of each entity.
- Each participating entity understands the importance of and is committed to keeping their own internal staff aware of the study and its findings.
- The communication programs and channels for each entity varies greatly as does the staff resources available to implement communications strategies and tactics.
- Differences between customer demographics and customer expectations, including rates, affordability, and desired service levels, must be carefully considered.



Roles of Participating Agencies

Advisory group members

- Prepare for meetings by reviewing materials
- Attend meetings; engage in good faith
- Communicate to and from your jurisdiction

Consultant team

- Plan and facilitate meetings
- Create a welcome and congenial environment for information sharing
- Equip and empower participants
- Provide a framework for decision-making

Key Stakeholders/Audiences

The Advisory Group members have identified stakeholders for the purposes of this Plan as individuals, groups, organizations or entities that have an interest in the study and are assumed to be directly or indirectly affected by the outcome of decisions related to it. The following general stakeholder audiences have been identified:

- Governing bodies for each entity
- Each municipality's leader and lead staff
- Employees of each entity (especially public works/engineering/planning)
- Sustainability Committee, Open Space Conservation Committee, Land Use Commissions
- Concerned residents (seniors, businesses, non-profits)
- Tax-exempt (faith-based orgs, hospitals, city-owned properties)
- Residents and politicians who have been impacted by the stormwater issues in the city
- Environmental groups
- CT Department of Transportation
- CT Department of Energy and Environmental Protection
- CT Division of Emergency Management and Homeland Security

Communication Strategies

Internal Communication for Staff and Leadership

Communication from the top down

Most employees prefer to hear organizational level news from leadership, so leadership should be the first to know about the study and the impetus and purpose of the study should therefore come from the senior levels of each organization. This means workgroup members will need to keep their leadership informed throughout the study period. Municipal leadership is responsible for communicating about the study to their staff, listening and responding to feedback, and setting the tone.

Connect to employees directly about the study's meaning

Employees within key departments are likely to be most interested in how results of the study may impact them personally—their jobs. It's important all parties are sensitive to this spectrum as they talk about study outcomes in the coming months. For that reason, it will be important not to speculate on outcomes and share only what's known to date.

Set expectations for timing of information

It's important to share the study schedule with internal stakeholders so they know what's happening and when it's happening.

External Communication Strategies for Customers

Be proactive

In the same way each entity will proactively communicate with employees, they should also talk about the study to external stakeholders. Messaging about the study proactively will ensure stakeholders and customers are well-enough informed so that when the study concludes and a recommendation is put forth, they will not be surprised.

Speak consistently about the study

To maintain trust in each entity involved and eliminate speculation or rumors, it's important for all entities to communicate consistently. The key message platform in this document is the tool all entities should refer to when developing any materials that talk about the study.

Meet stakeholders where they are

As planned with employee communications, it's important for each municipality to consider where their external stakeholders (customers, environmental groups, business leaders, others) typically seek out local news, and specifically, information about stormwater services, to ensure study messages are using those outlets and channels to communicate.

Key Message Platform

A message platform provides consistency to study communications. Simple, informative and clear Key Messages have been developed and tailored to internal and external stakeholder audiences based on relevancy.

Media Spokespersons

Though each entity will have a spokesperson to ensure a united, consistent message to their larger community, it is recommended that when speaking to the media specifically, the Advisory Group defer to CRCOG staff to speak for the study because they are the contract administrator for the study. CRCOG staff will use the message platform in this Plan and keep the Group abreast of any interactions they have with the media.

Guidelines for Message Development

Messages about the study should be consistent across every communication channel (website, newsletters, presentations, meetings, etc.) When communicating changes or decisions, clearly explain the "why."

Messages will follow the seven Cs of communication:

- **Clarity**—Be clear with the message, keep it simple, remove industry jargon and acronyms
- **Concise**—Least possible words
- **Correct**—Accurate facts and figures, spelling, grammar and language
- **Complete**—Convey all the facts required by the recipient
- **Consideration**—Consider the different audiences and tailor messages to their requirements
- **Concrete**—Use specific language, do not be vague
- **Courtesy**—Think about the recipient and their viewpoint and be respectful

The study goals should be the leading focus of every advisory group member when communicating about the study. Since the employees and customers of each agency are top priorities, the connection to customer service should be top of mind in message development.

Key Messages

More than 40 inches of rain falls on the Capitol Region each year, and this water, when it hits the ground, must be managed to ensure it doesn't flood roads and properties, and doesn't carry pollutants to waterways.

A. Every municipality in Connecticut must manage the flow of stormwater and ensure waterways are not impacted by polluted stormwater.
B. This challenge is growing increasingly more difficult due to the increase in more severe weather events and an increase in regulations to manage the impacts of stormwater.
C. The State of Connecticut allows Connecticut municipalities to implement stormwater utilities to fund needed stormwater infrastructure upgrades, operation of maintenance of stormwater control systems, and public education on stormwater services.
D. The State also enables municipalities to implement regional stormwater utilities, combining their services as needed to provide cost-effective regional management of stormwater.
E. The Capitol Region Council of Governments (CRCOG) applied for and received a Climate Resilience Fund grant from the Connecticut DEEP to determine if a regional stormwater utility could be a viable solution for eight of its member municipalities.

The municipalities of West Hartford, New Britain, Rocky Hill, Bloomfield, and Hartford are voluntarily and jointly participating in a study to determine whether a regional stormwater utility or combining or consolidating their stormwater services may be advantageous for them.

A. The study builds on each municipality's history and excellent track record of providing high-quality, reliable services.
B. As the entities involved face increasing demand for services, rising costs, and aging infrastructure, they are interested in exploring all potential options for continuing to serve the region efficiently by examining what solutions exist to improve services and keep costs down for everyone.
C. This study will consider trends that affect all entities and will include analysis to help address all potential opportunities and challenges, including changing conditions, affordability of services, and regulatory changes.

This study is being developed with data and input from leadership and governing boards of each entity involved.

A. The study advisory group comprises a mix of leadership and management from all five municipalities, as well as from the Chatham Health Department, Rivers Alliance of Connecticut, Metropolitan District Commission, the Department of Energy & Environmental Protection (DEEP), and from three towns that are observing the process and participating in discussions (Glastonbury, Newington, and East Hartford, and Wethersfield).
B. The governing boards of each agency have been briefed and are supportive of the efforts to study solutions and make a recommendation for their consideration.

C. All entities have provided the key data needed by the CRCOG consultants to complete a comprehensive study.

This study is being conducted impartially and without bias toward any particular outcome; all entities involved have agreed to a set of critical success factors, regardless of study recommendations.

A. High quality customer service, keeping rates affordable, meeting the needs of customers, and protecting the environment are at the heart of each city's work. Any solution must benefit all municipalities' customers in terms of service levels and affordability.
B. Employees' jobs, their compensation, and their benefits should not be impacted negatively.

The study is anticipated to take approximately six months, with a final report on its findings available in January of 2026.

A. A three-consultant agency team is conducting the study, which includes Raftelis, CDM Smith and RYP.
B. Though CRCOG is coordinating the study with CT DEEP funding, leadership from all entities are part of an advisory group that is overseeing the study and will jointly advise on whether and which solutions, if any, may be appropriate for implementation.
C. All entities involved are committed to ongoing, transparent communications about the study; as such, all stakeholders can stay informed of the study progress at the CRCOG website (https://crcog.org/regional-planning-and-development/environment-energy/regional-stormwater-authority-study/), and a CRCOG will make the final recommendation public when available.

Talking Points

The Capitol Region Council of Governments (CRCOG) applied for and received a Climate Resilience Fund grant from the Connecticut DEEP to determine if a regional stormwater utility could be a viable solution for a group of its member municipalities.

The municipalities of West Hartford, New Britain, Rocky Hill, Bloomfield, Hartford, Glastonbury, Newington, and East Hartford are voluntarily and jointly participating in the study to determine the best path for managing stormwater in the region, and specifically, to determine whether combining or consolidating our services, setting up a utility funding approach, or otherwise collaborating, may be advantageous.

Though CRCOG is coordinating the study, leadership from several entities are part of an advisory group that is overseeing the study, and will jointly decide whether and which solutions, if any, may be feasible for implementation.

In addition to representatives from all five municipalities, the Chatham Health Department, Rivers Alliance of Connecticut, Metropolitan District Commission, the Connecticut Department of Energy & Environmental Protection (DEEP) are participating in the study.

The study builds on each municipality's history and excellent track record of providing high-quality, reliable services and considers trends that affect all entities. It will include analysis to help address all potential opportunities and challenges, including changing conditions, affordability of services, and regulatory changes.

This study to determine a feasible solution is being conducted impartially and without bias toward any particular outcome; all entities involved have agreed to a set of critical success factors, regardless of study recommendations.

As part of the study, a survey was distributed by individual municipalities. Survey results show that respondents are broadly interested in water quality and in regional collaboration.

Participating entities agreed that any solution must benefit all municipalities' customers in terms of service levels and affordability, and employees' jobs, their compensation, and their benefits should not be impacted negatively.

The study began in March of 2025 and is anticipated to take approximately ten months, with a final report on its findings available in January of 2026. A multidisciplinary consultant team is conducting the study, which includes Raftelis, CDM Smith, and RYP.

All entities involved are committed to ongoing, transparent communications about the study; as such, all regional stakeholders can stay informed of the study progress at the CRCOG website and CRCOG will make the final study recommendation public when available.

Communications & Engagement Strategies

Communicating About the Study

The following table lists opportunities for each Advisory Group member to share information about the Study with their stakeholders. Any materials created should use the messages from this Plan. Raftelis will assist CRCOG and participating cities/towns with coordination and creation of outreach materials in a limited capacity within allotted hours.

Material	Description	Channels	Audience Intended	By Whom	Timing
Study Summary	Brief description of study	1:1 Conversations with leadership Websites Newsletters	Leadership, Employees, Customers	Raftelis	July
FAQs	Answers common questions about the Study	Websites Employee and community meetings	Employees and Customers (Separate versions)	Raftelis	July
Study Handout	Describes what the study is, why it was initiated, and recommendations	Websites Presentations	All audiences	CRCOG (using message platform)	November
Presentation	10-15-minute PowerPoint presentation	Existing meetings – add to agenda	City Leadership Key Community Groups Key Committees	CRCOG	July and November
Press releases	To inform the media of (1) the study taking place and (2) study results	Local media	All audiences	Raftelis	July and November
Open Houses	To provide the public a chance to learn about the study and express concerns prior to final decision	1 in each community – plus one virtual via Zoom	The public	AC members with assistance from Raftelis	October/ November

Stakeholder Engagement

We recommend the Advisory Group conduct two types of engagement as follows.

Public survey

A public survey was conducted in July, giving each participating entity insights into the level of awareness their community members have about stormwater services, costs, and funding, as well attitudes about regional collaboration. The survey achieved excellent participation, with over 450 respondents throughout the region, though concentrated from a few municipalities.

Full results are provided as an appendix to this document. Key findings included:

- Public had broad general knowledge about what stormwater is, how it is managed, and personal actions people can take to protect waterways.
- Significant opportunities exist to enhance communications:
  - 30% think stormwater is treated and nearly 40% are not sure if it is.
  - 60% haven't seen any educational materials about stormwater from their town
  - 98% say effectively managing stormwater is very or somewhat important.
- Respondents did not demonstrate a strong agreement on *how* to fund stormwater management. Nearly a third selected "State or federal grants," which are unlikely to offset more than occasional (and partial) major project costs. This represents another opportunity for education.
- Despite the above, more than half of respondents were willing to pay $5-20 per month (~42%) and over $20 per month (~9%) for stormwater management.
- Finally, and importantly, over 64% of respondents supported the idea of their city or town creating a utility with other local municipalities to jointly manage stormwater in the region or share the costs.

While most respondents were supportive of the idea, they expressed concerns related to loss of local control, subsidizing other communities, and additional bureaucracy, all of which can be addressed through educating the public about the scope and structure of a regional or collaborative program.

Moving forward, surveys remain an excellent tool to gauge the public's perception or understanding of the program, priorities, and outcomes. Study participants are encouraged to communicate to and engage with their constituents on the topic of this study, so that if and when a decision is made about shared services, the public is not surprised and the decision is made with their concerns in mind.

Open houses

In late October/early November, it is recommended that each entity host at least one open house (and there is one virtual option) to share the draft recommendation of the study, so a total of five open houses would be conducted over the course of 4-5 weeks. At each open house, guests should be able to visit stations to learn about their municipality's current stormwater program (their challenges, their needs); current stormwater costs and their billing structure; planned projects and their costs; and preliminary recommendations for consolidation or shared services. At these open houses, guests will have an opportunity to ask questions and provide feedback about key issues, such as willingness to pay, etc., orally and in written format using comment cards. The feedback will be tallied and fed into the final report, sharing how or whether it influenced the final recommendation.

Promotion of Surveys and Open Houses

The following existing communications channels were identified in each community to provide opportunities for promoting the survey and the open houses. Future outreach and communication activities can leverage these channels as well.

	Hartford	West Hartford	Rocky Hill	Bloomfield	New Britain
Alerts	X		X	X	
Notify Me				X	
E-newsletter	X	X		X	
Senior Newsletter			X	X	
Facebook	X	X	X	X	X
Instagram		X		X	X
Website	X	X	X	X	X

APPENDIX 1

July 2025 Survey Results

CRCOG Regional Stormwater Study

Response Statistics

1229 Survey Visits	464 Total Responses
464 Completed Responses	0 Partial Responses
0 Disqualified Responses	0 Over Quota Responses

Capitol Region Council of Governments is collaborating with several of its member cities and towns to explore the feasibility of creating a regional stormwater utility. With increasing frequency, cities and towns across the country are funding stormwater management with a dedicated fee that’s based on the amount of hard surface of a property, since hard surfaces, like roofs, sidewalks, and driveways, are what causes stormwater to travel rapidly into streets, causing potential flooding and pollution. Part of this project includes engaging the public to measure the level of understanding of and concerns about stormwater-related issues in the region, and how communities should go about managing these challenges. This survey is part of this engagement and outreach effort. We appreciate your feedback!

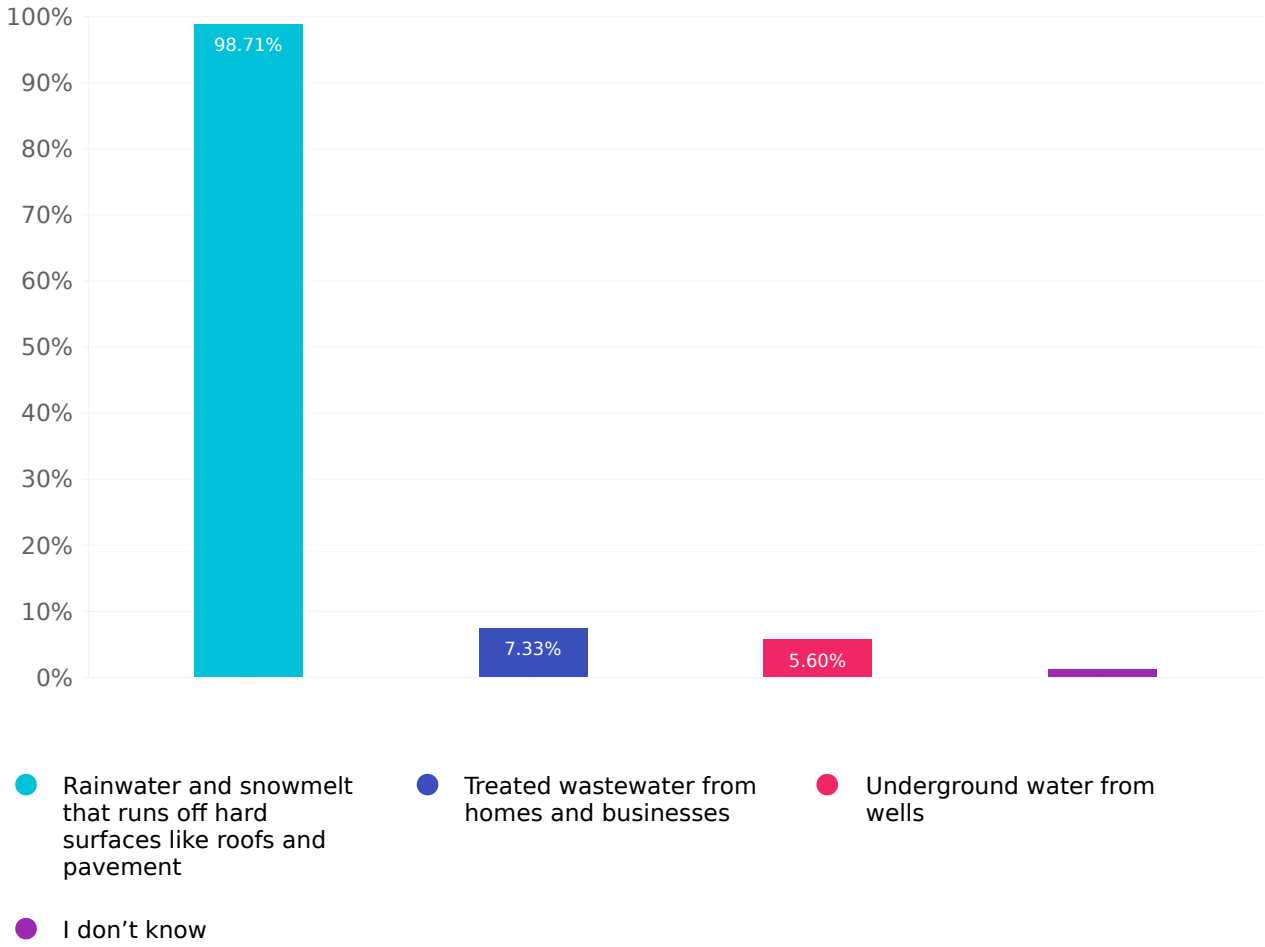
Funding provided by the Climate Resilience Fund, administered by the Connecticut Department of Energy and Environmental Protection (DEEP).

No Responses

Q1

What is stormwater? (Select all that apply)

Answered: 464 Skipped: 0



Choices	Response percent	Response count
Rainwater and snowmelt that runs off hard surfaces like roofs and pavement	98.71%	458
Treated wastewater from homes and businesses	7.33%	34
Underground water from wells	5.60%	26
I don’t know	1.08%	5

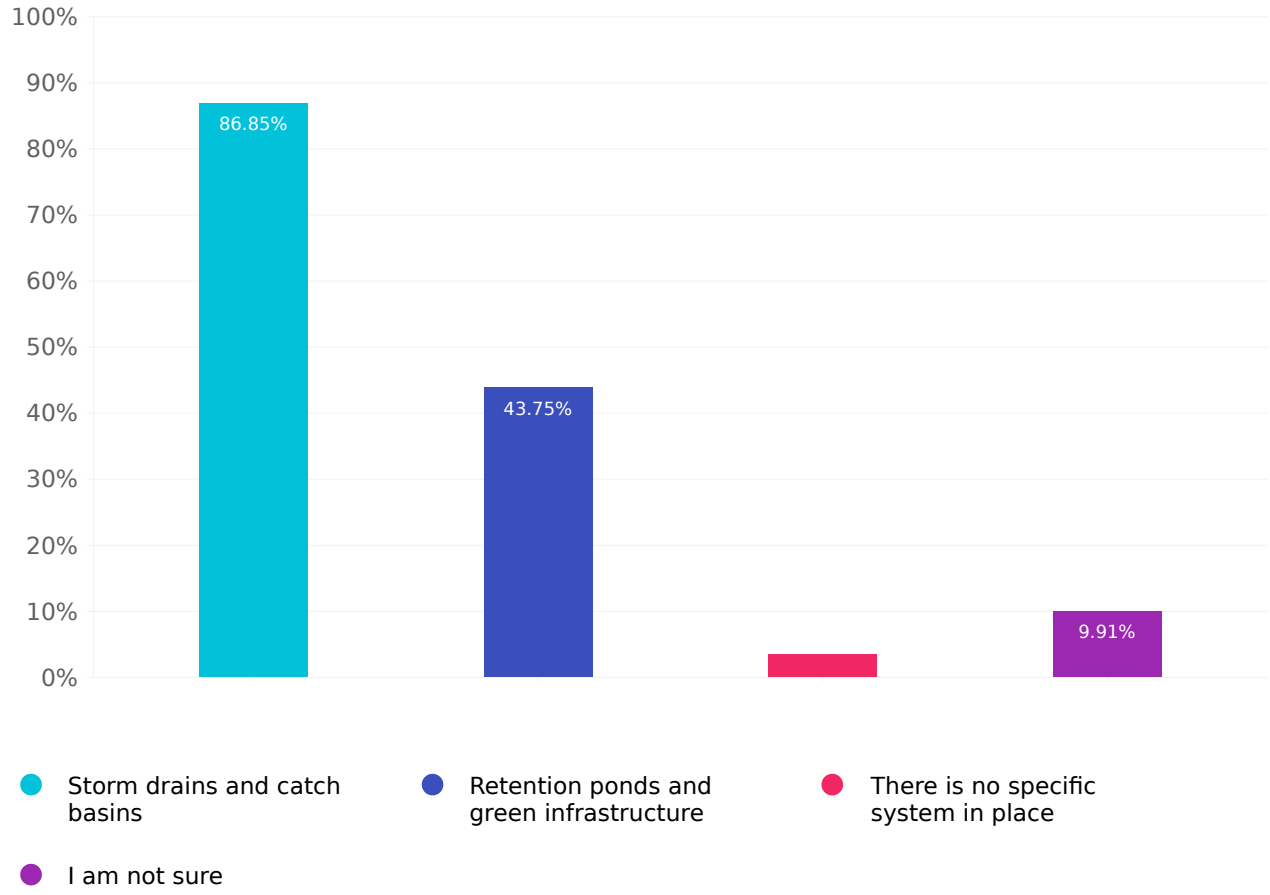
Stormwater is rainwater and snowmelt that runs off hard surfaces like roofs and pavement.

No Responses

Q2

How does your city or town manage water from rain and storms? (Select all that apply)

Answered: 464 Skipped: 0

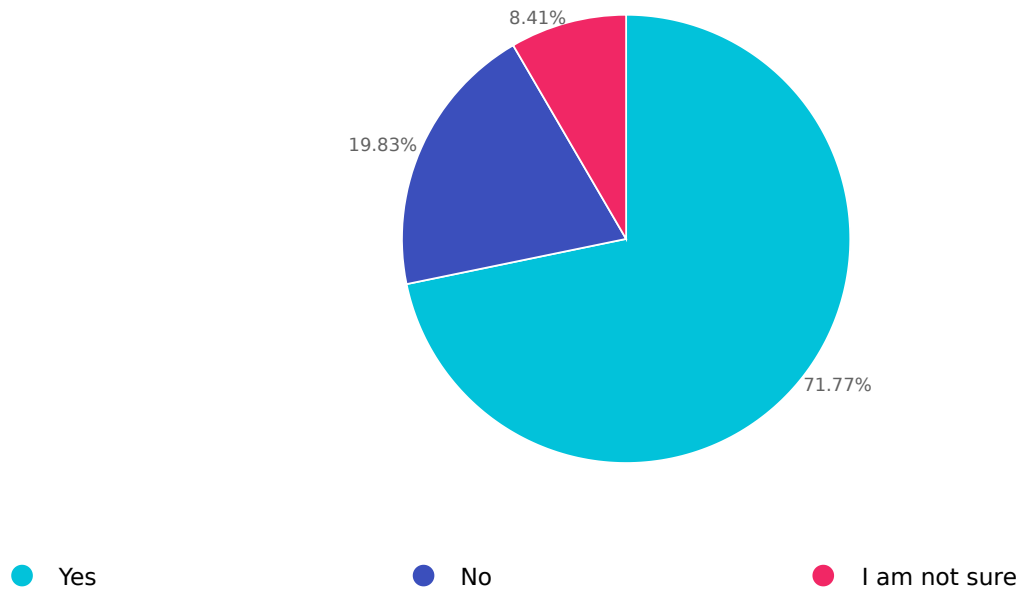


Choices	Response percent	Response count
Storm drains and catch basins	86.85%	403
Retention ponds and green infrastructure	43.75%	203
There is no specific system in place	3.45%	16
I am not sure	9.91%	46

Q3

Have you noticed stormwater management features in your area?

Answered: 464 Skipped: 0

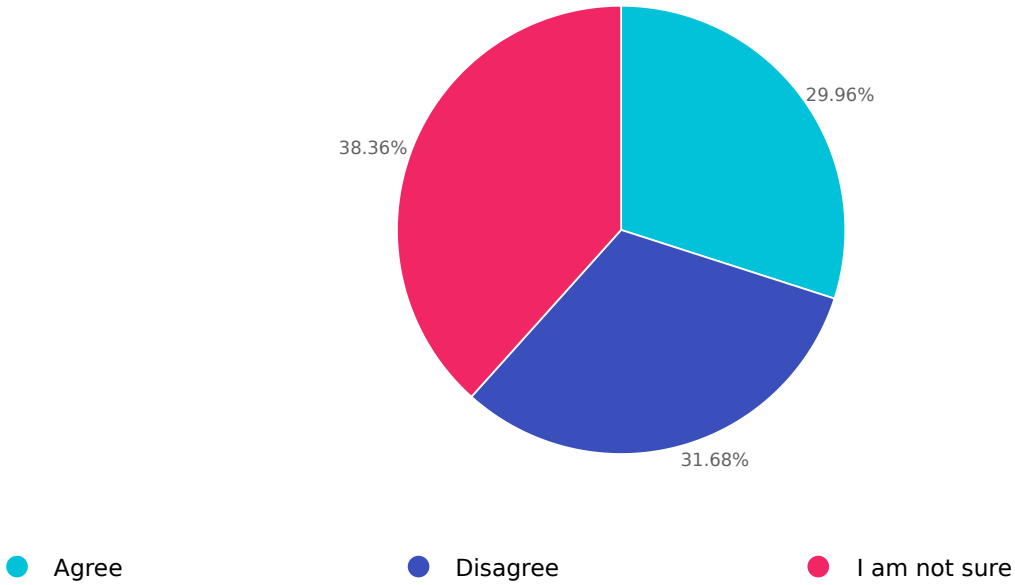


Choices	Response percent	Response count
Yes	71.77%	333
No	19.83%	92
I am not sure	8.41%	39

Q4

In my community, stormwater is treated before it reaches a waterway.

Answered: 464 Skipped: 0

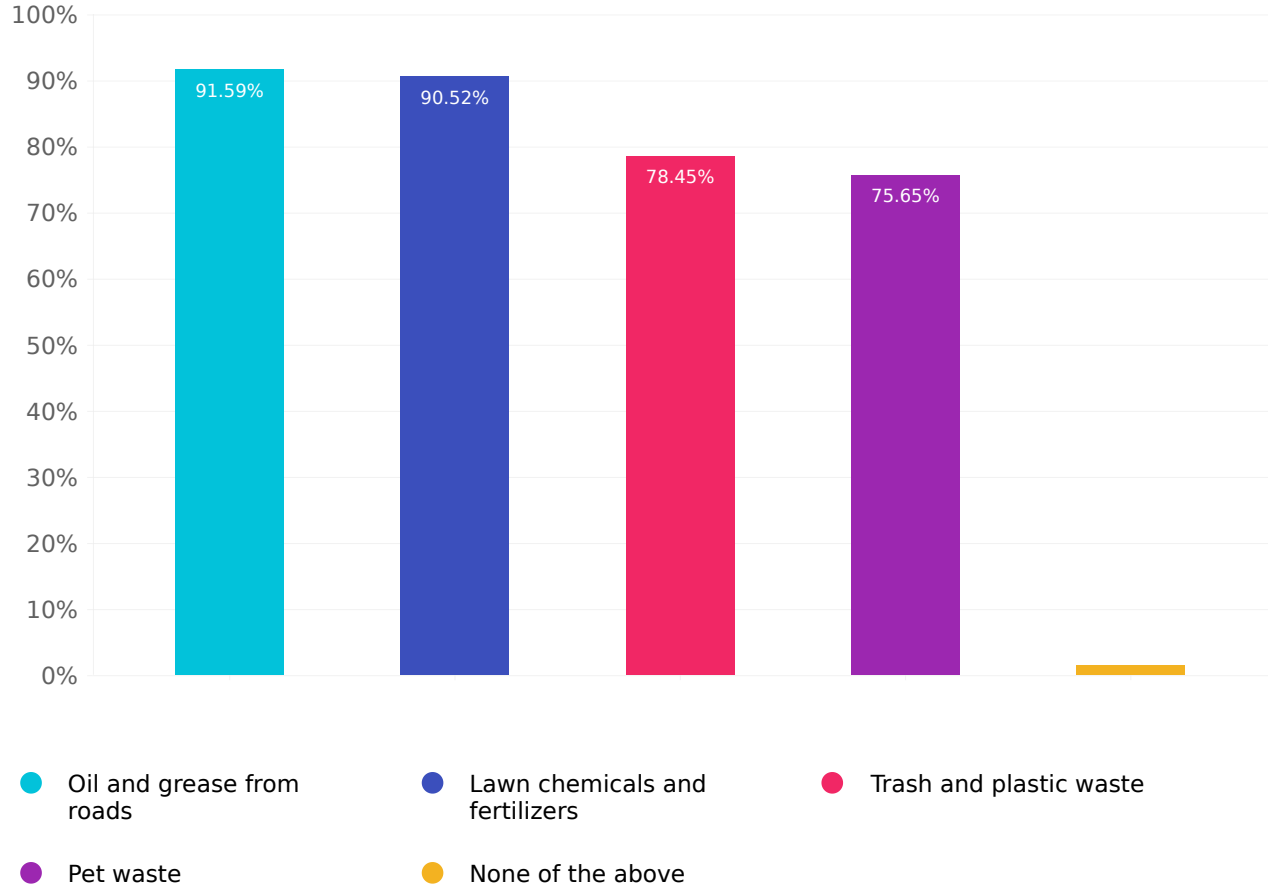


Choices	Response percent	Response count
Agree	29.96%	139
Disagree	31.68%	147
I am not sure	38.36%	178

Q5

Stormwater can affect local water quality by carrying which of the following to waterways? (Select all that apply)

Answered: 464 Skipped: 0

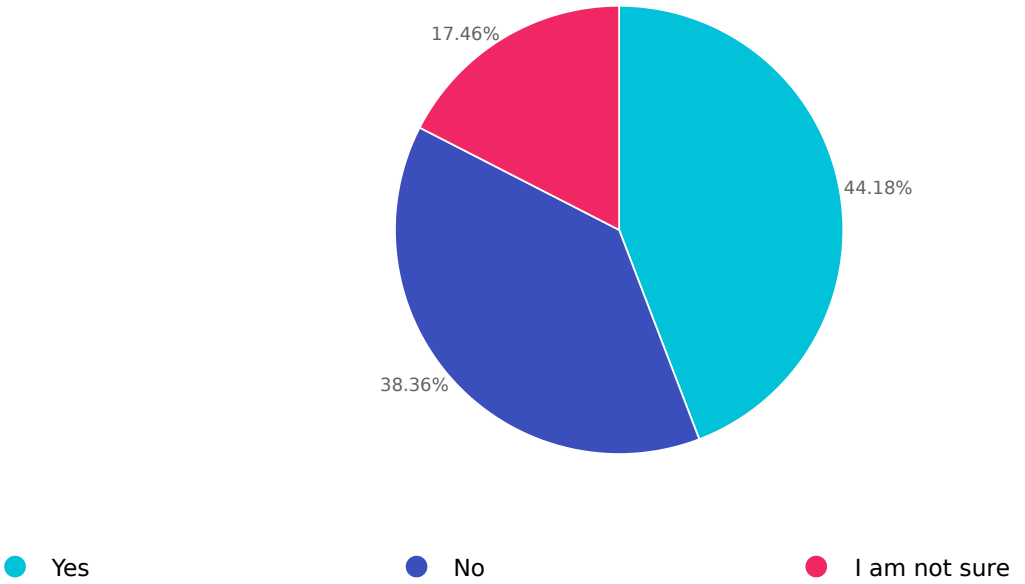


Choices	Response percent	Response count
Oil and grease from roads	91.59%	425
Lawn chemicals and fertilizers	90.52%	420
Trash and plastic waste	78.45%	364
Pet waste	75.65%	351
None of the above	1.51%	7

Q6

Are you aware of any local or state regulations for stormwater management?

Answered: 464 Skipped: 0

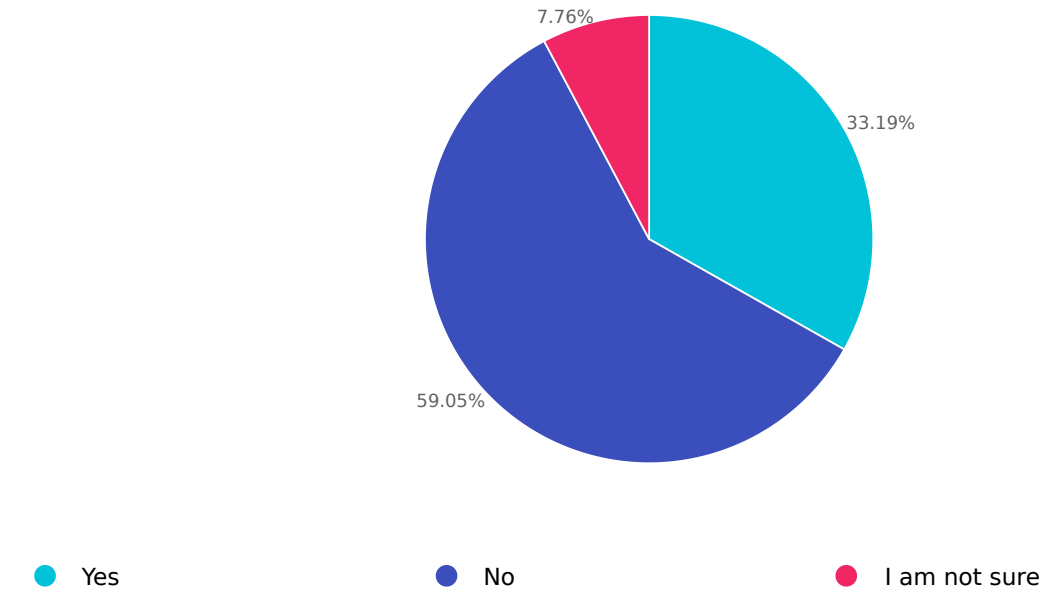


Choices	Response percent	Response count
Yes	44.18%	205
No	38.36%	178
I am not sure	17.46%	81

Q7

Have you seen any educational materials about stormwater management from your city or town?

Answered: 464 Skipped: 0

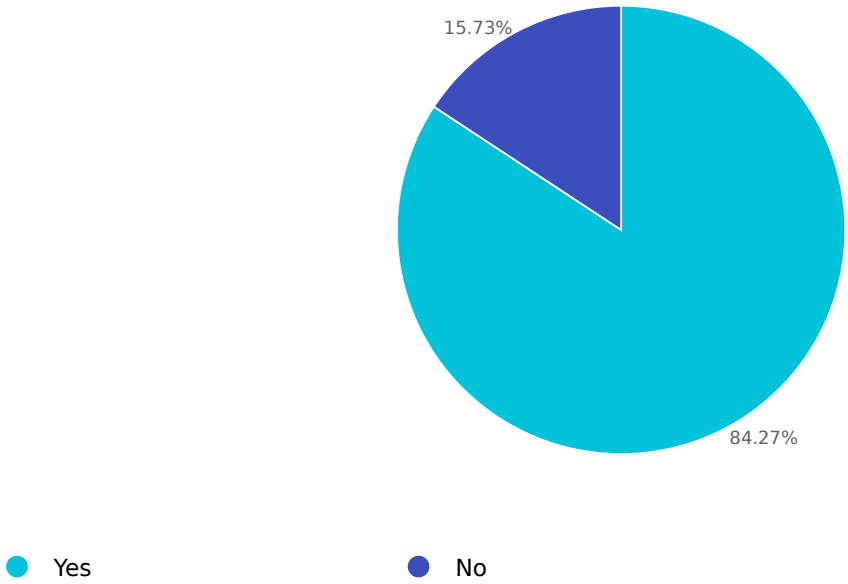


Choices	Response percent	Response count
Yes	33.19%	154
No	59.05%	274
I am not sure	7.76%	36

Q8

Do you take any steps to reduce stormwater pollution?

Answered: 464 Skipped: 0

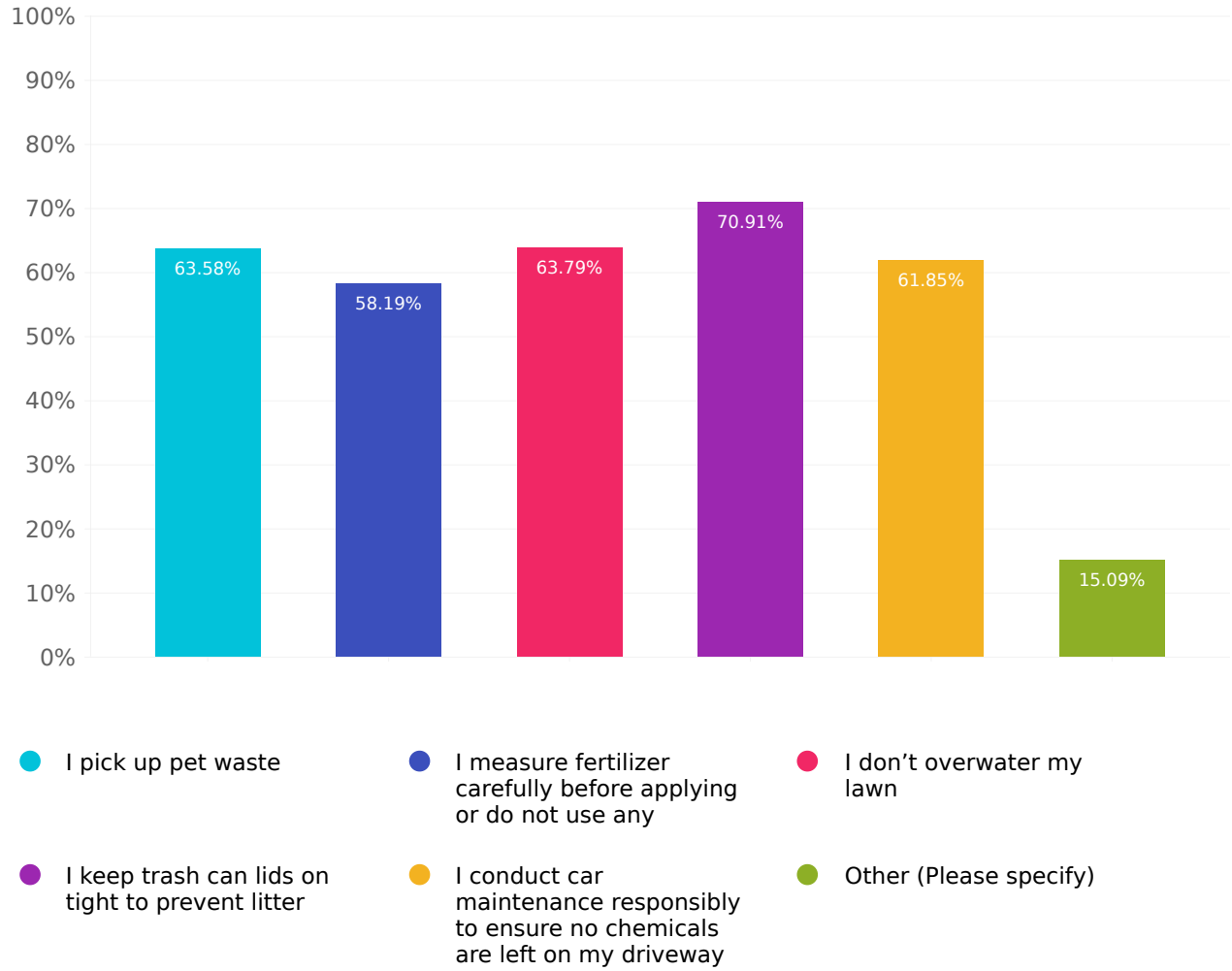


Choices	Response percent	Response count
Yes	84.27%	391
No	15.73%	73

Q9

If you try to reduce stormwater pollution, what steps do you take? (Select all that apply)

Answered: 464 Skipped: 0

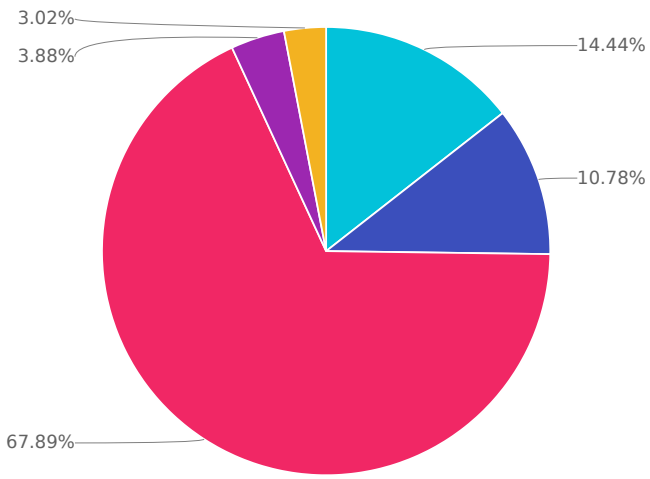


Choices	Response percent	Response count
I pick up pet waste	63.58%	295
I measure fertilizer carefully before applying or do not use any	58.19%	270
I don’t overwater my lawn	63.79%	296
I keep trash can lids on tight to prevent litter	70.91%	329
I conduct car maintenance responsibly to ensure no chemicals are left on my driveway	61.85%	287
Other (Please specify)	15.09%	70

Q10

When you consider the ways stormwater may affect you or your community, what concerns you?

Answered: 464 Skipped: 0

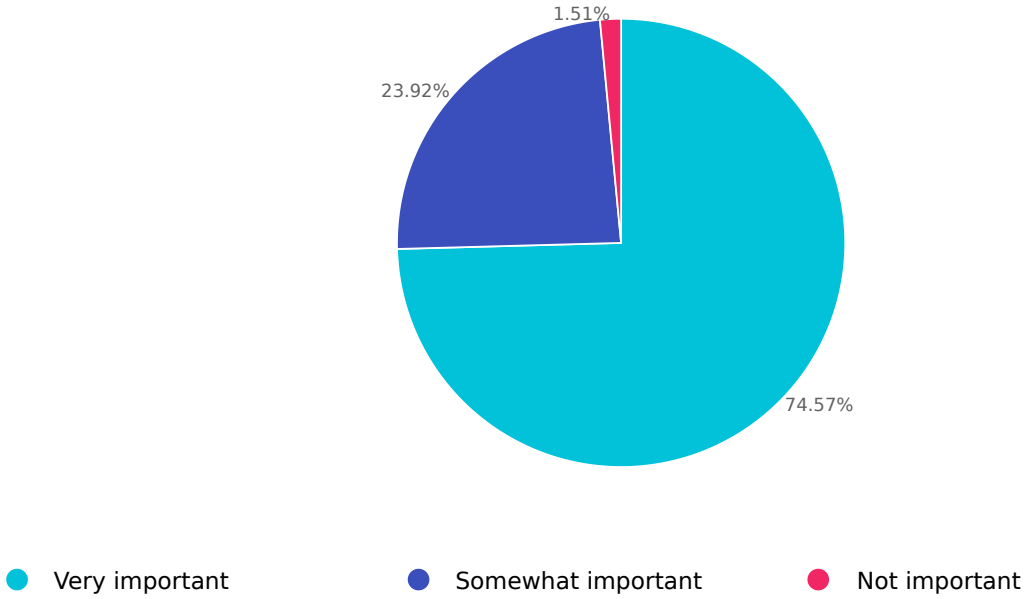


Choices	Response percent	Response count
Polluted waterways	14.44%	67
Flooding	10.78%	50
Both polluted waterways and flooding	67.89%	315
I am not concerned about either	3.88%	18
Other (Please specify)	3.02%	14

Q11

How important to you is it that your city/town effectively manages stormwater?

Answered: 464 Skipped: 0

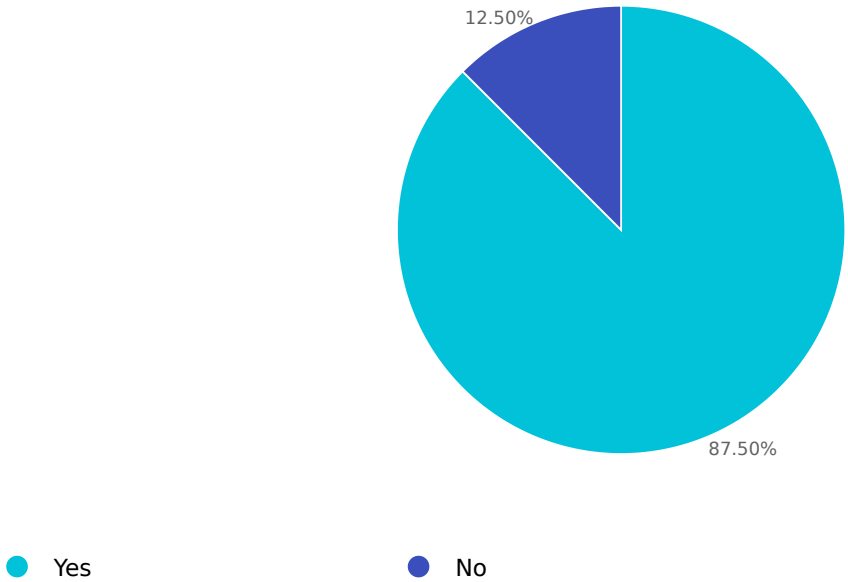


Choices	Response percent	Response count
Very important	74.57%	346
Somewhat important	23.92%	111
Not important	1.51%	7

Q12

Are you aware that cities and towns incur costs to manage stormwater systems?

Answered: 464 Skipped: 0

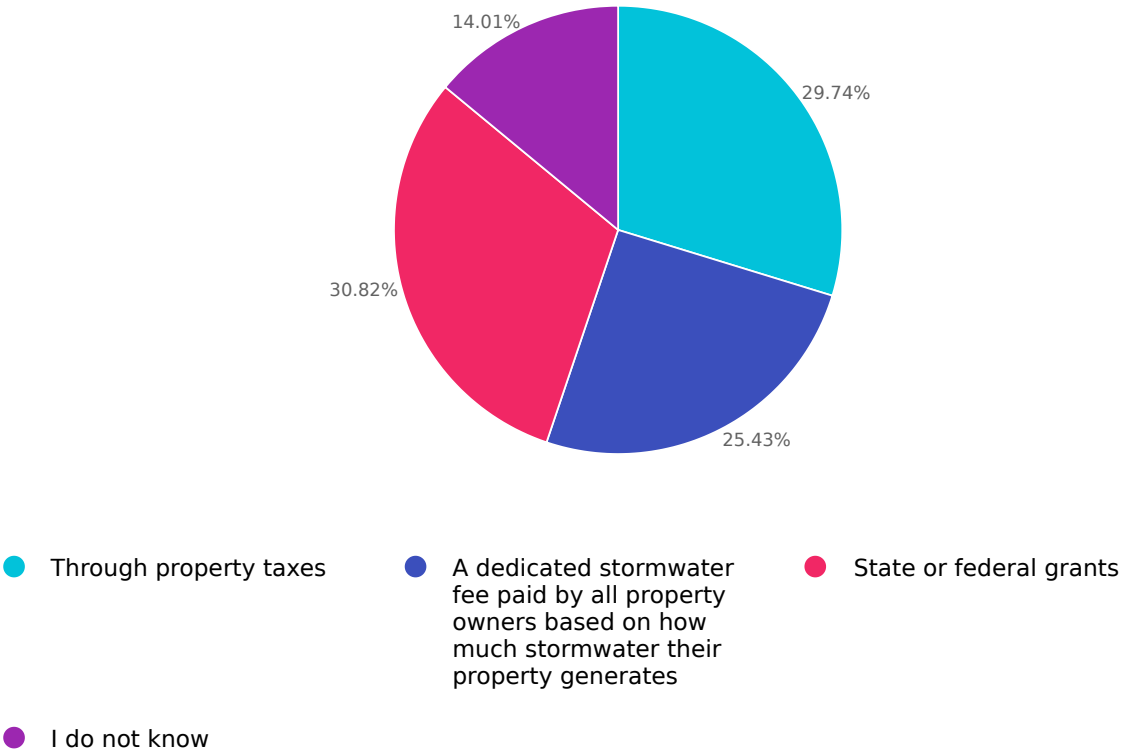


Choices	Response percent	Response count
Yes	87.50%	406
No	12.50%	58

Q13

How do you think stormwater services should be funded in your city/town?

Answered: 464 Skipped: 0

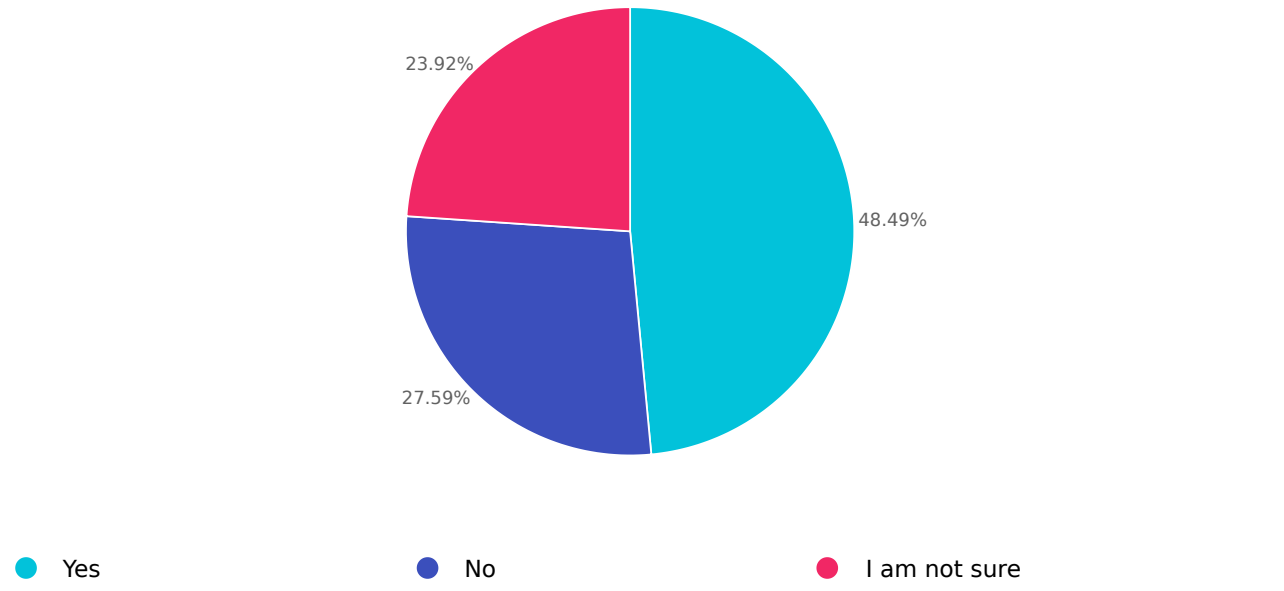


Choices	Response percent	Response count
Through property taxes	29.74%	138
A dedicated stormwater fee paid by all property owners based on how much stormwater their property generates	25.43%	118
State or federal grants	30.82%	143
I do not know	14.01%	65

Q14

Would you be willing to pay a fee for stormwater services, similar to how you pay for water services, to help your municipality reduce flooding and improve the quality of local waters?

Answered: 464 Skipped: 0

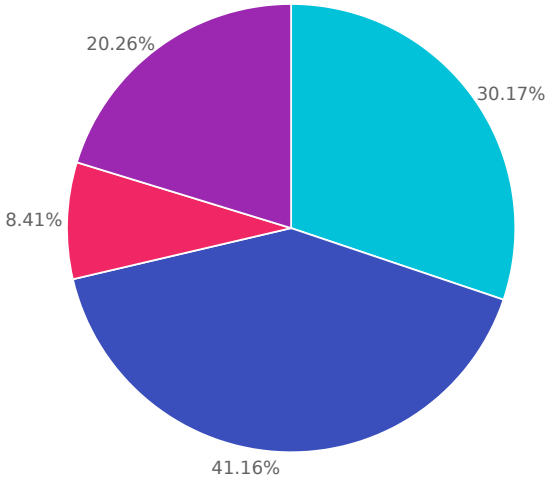


Choices	Response percent	Response count
Yes	48.49%	225
No	27.59%	128
I am not sure	23.92%	111

Q15

What is the highest amount you would be comfortable paying per month for stormwater management?

Answered: 464 Skipped: 0

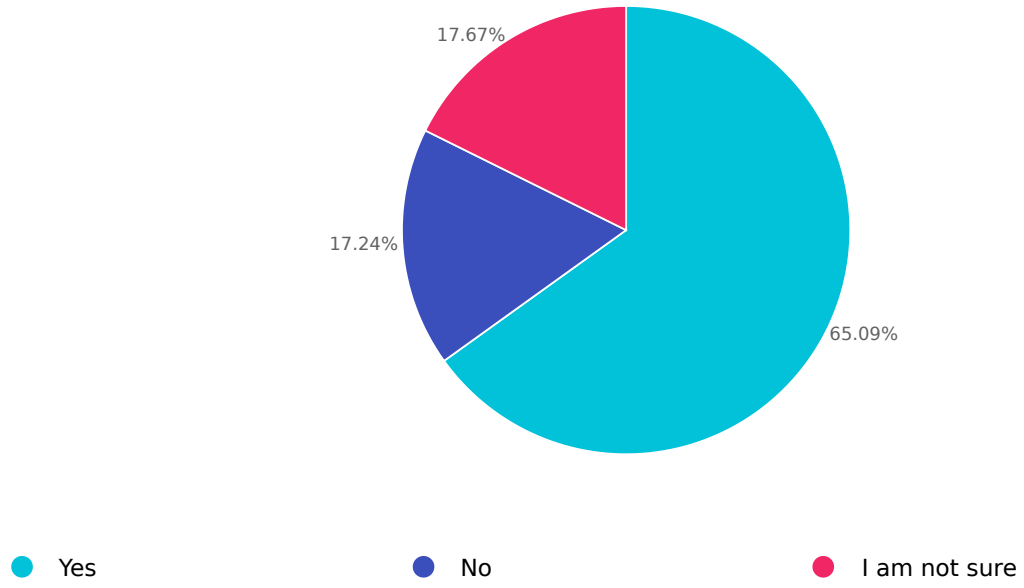


Choices	Response percent	Response count
Less than $5	30.17%	140
$5–$20	41.16%	191
More than $20	8.41%	39
I would not be willing to pay for this	20.26%	94

Q16

Would you support your city or town creating a utility with other local municipalities to jointly manage stormwater in the region and share the costs?

Answered: 464 Skipped: 0

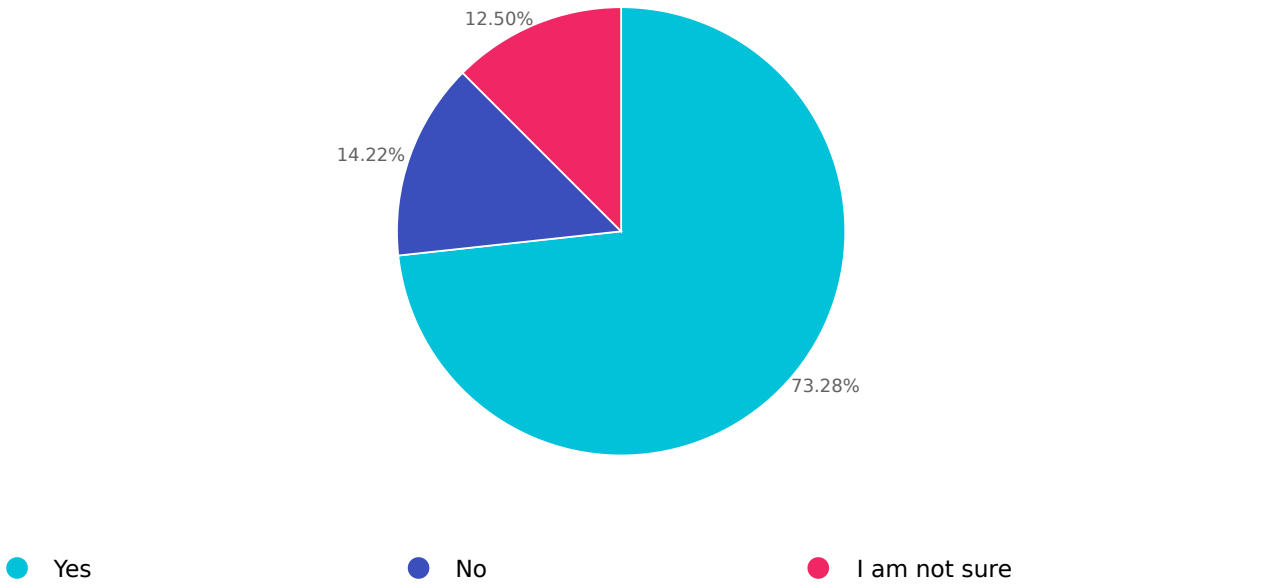


Choices	Response percent	Response count
Yes	65.09%	302
No	17.24%	80
I am not sure	17.67%	82

Q17

Would you support your city or town creating a utility with other local municipalities to jointly manage stormwater in the region and share costs, if it lowered monthly costs for you?

Answered: 464 Skipped: 0



Choices	Response percent	Response count
Yes	73.28%	340
No	14.22%	66
I am not sure	12.50%	58

Q18

What concerns do you have about your city or town joining with other municipalities to manage stormwater in the region together and share costs?

Answered: 464 Skipped: 0

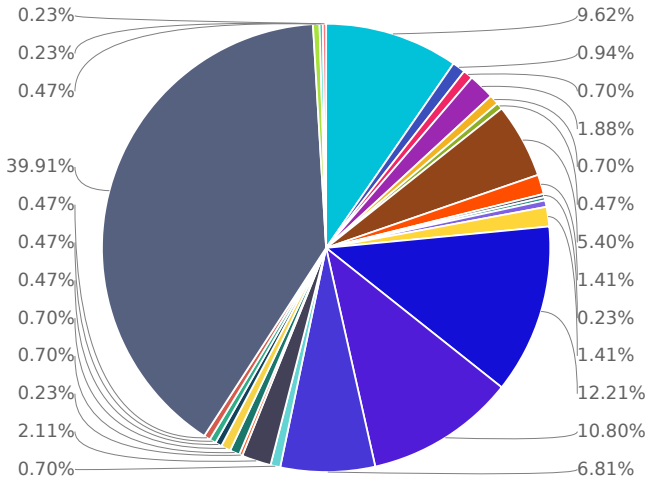
To help us better understand our customers and their needs, here are a few optional questions about your household.

No Responses

Q19

In what city or town do you live?

Answered: 426 Skipped: 38



- Andover
- Avon
- Berlin
- Bloomfield
- Bolton
- Canton
- Columbia
- Coventry
- East Granby
- East Hartford
- East Windsor
- Ellington
- Enfield
- Farmington
- Glastonbury
- Granby
- Hartford
- Hebron
- Manchester
- Mansfield
- Marlborough
- New Britain
- Newington
- Plainville
- Rocky Hill
- Simsbury
- Somers
- South Windsor
- Southington
- Stafford
- Suffield
- Tolland
- Vernon
- West Hartford
- Wethersfield
- Willington
- Windsor
- Windsor Locks

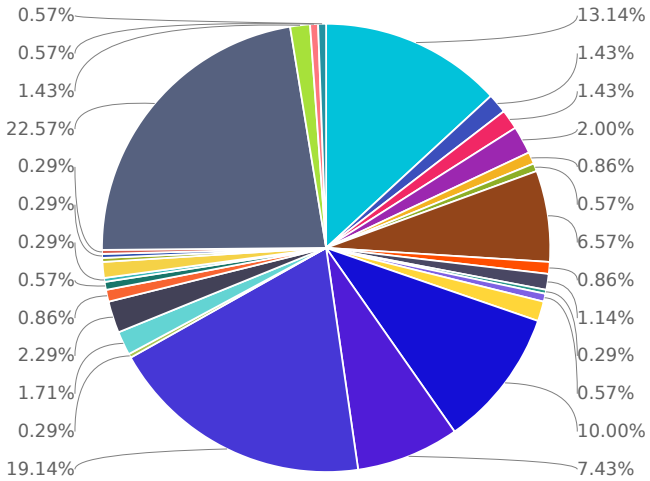
Choices	Response percent	Response count
Andover	9.62%	41
Avon	0.94%	4
Berlin	0.70%	3
Bloomfield	1.88%	8
Bolton	0.70%	3
Canton	0.47%	2
Columbia	5.40%	23
Coventry	1.41%	6
East Granby	0.00%	0
East Hartford	0.23%	1
East Windsor	0.23%	1
Ellington	0.47%	2
Enfield	1.41%	6
Farmington	12.21%	52
Glastonbury	10.80%	46
Granby	0.00%	0
Hartford	6.81%	29
Hebron	0.00%	0
Manchester	0.70%	3
Mansfield	2.11%	9
Marlborough	0.00%	0
New Britain	0.23%	1

Newington	0.70%	3
Plainville	0.00%	0
Rocky Hill	0.70%	3
Simsbury	0.00%	0
Somers	0.00%	0
South Windsor	0.47%	2
Southington	0.00%	0
Stafford	0.00%	0
Suffield	0.00%	0
Tolland	0.47%	2
Vernon	0.47%	2
West Hartford	39.91%	170
Wethersfield	0.47%	2
Willington	0.23%	1
Windsor	0.23%	1
Windsor Locks	0.00%	0

Q20

In what city or town do you work?

Answered: 350 Skipped: 114



- Andover
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- New Britain
- Newington
- Plainville
- Rocky Hill
- Simsbury
- Somers
- South Windsor
- Southington
- Stafford
- Suffield
- Tolland
- Vernon
- West Hartford
- Wethersfield
- Willington
- Windsor
- Windsor Locks

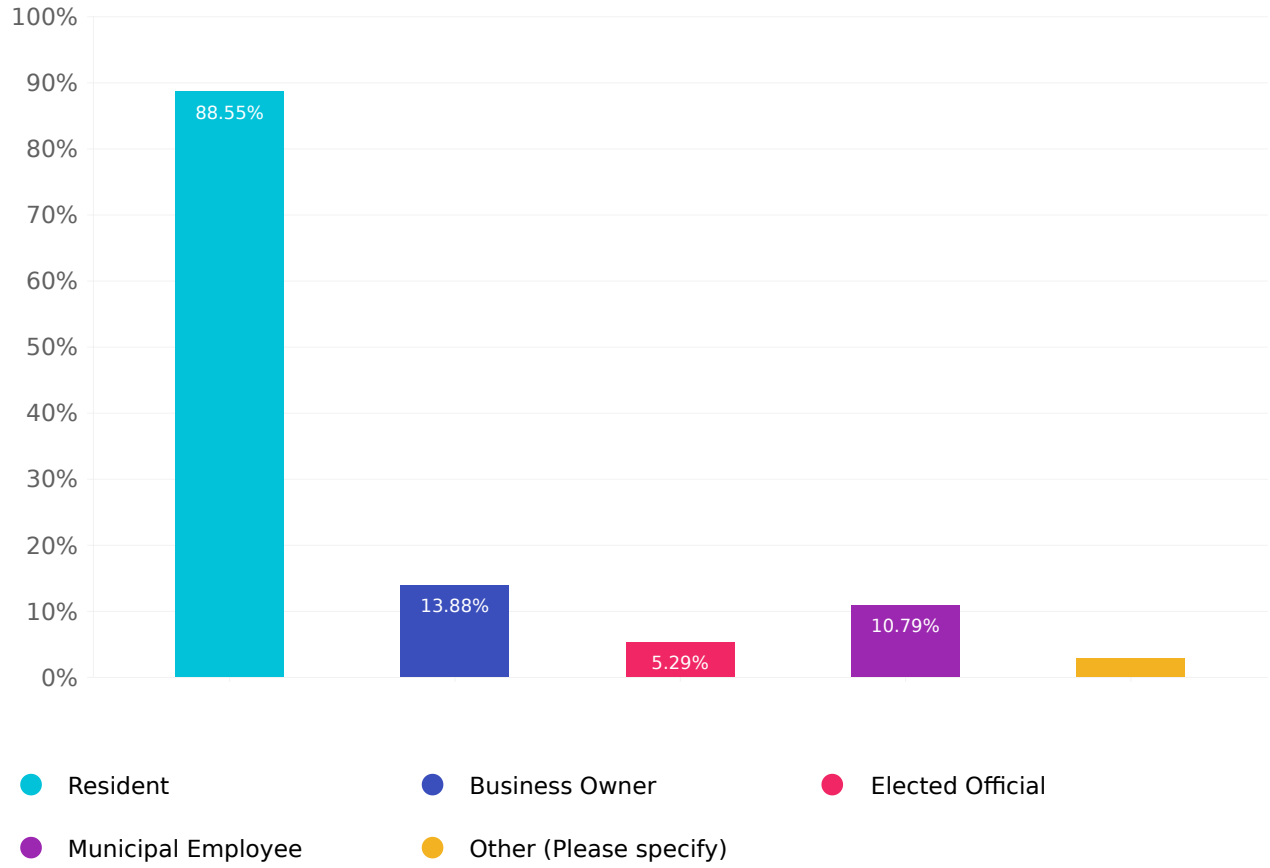
Choices	Response percent	Response count
Andover	13.14%	46
Avon	1.43%	5
Berlin	1.43%	5
Bloomfield	2.00%	7
Bolton	0.86%	3
Canton	0.57%	2
Columbia	6.57%	23
Coventry	0.86%	3
East Granby	0.00%	0
East Hartford	1.14%	4
East Windsor	0.29%	1
Ellington	0.57%	2
Enfield	1.43%	5
Farmington	10.00%	35
Glastonbury	7.43%	26
Granby	0.00%	0
Hartford	19.14%	67
Hebron	0.29%	1
Manchester	1.71%	6
Mansfield	2.29%	8
Marlborough	0.00%	0
New Britain	0.86%	3

Newington	0.57%	2
Plainville	0.29%	1
Rocky Hill	1.14%	4
Simsbury	0.29%	1
Somers	0.29%	1
South Windsor	0.00%	0
Southington	0.00%	0
Stafford	0.00%	0
Suffield	0.00%	0
Tolland	0.00%	0
Vernon	0.29%	1
West Hartford	22.57%	79
Wethersfield	1.43%	5
Willington	0.00%	0
Windsor	0.57%	2
Windsor Locks	0.57%	2

Q21

Which option(s) best describes you? Select all that apply.

Answered: 454 Skipped: 10

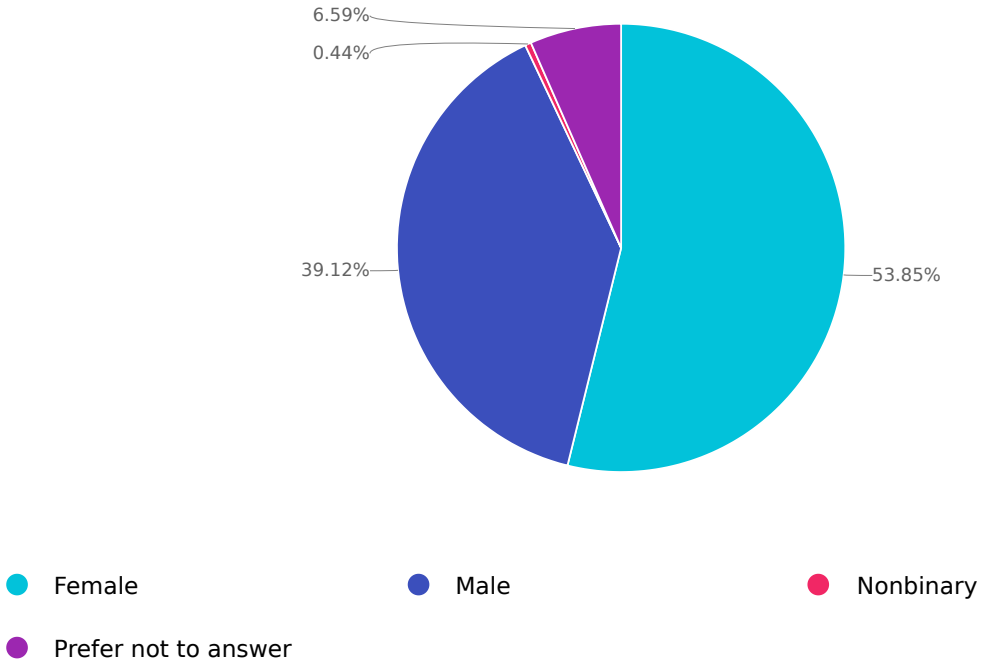


Choices	Response percent	Response count
Resident	88.55%	402
Business Owner	13.88%	63
Elected Official	5.29%	24
Municipal Employee	10.79%	49
Other (Please specify)	2.86%	13

Q22

What gender do you identify with?

Answered: 455 Skipped: 9

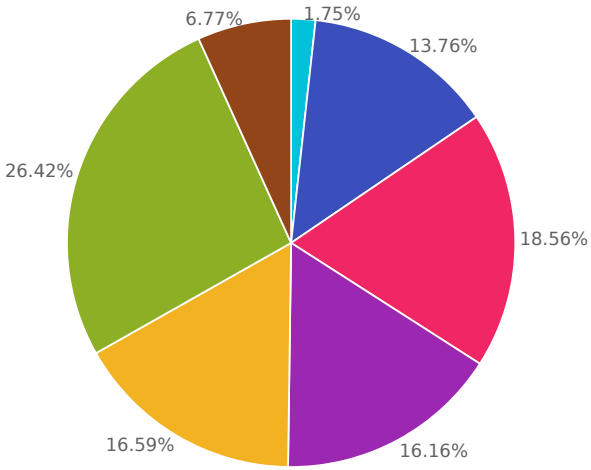


Choices	Response percent	Response count
Female	53.85%	245
Male	39.12%	178
Nonbinary	0.44%	2
Prefer not to answer	6.59%	30

Q23

What is your age?

Answered: 458 Skipped: 6

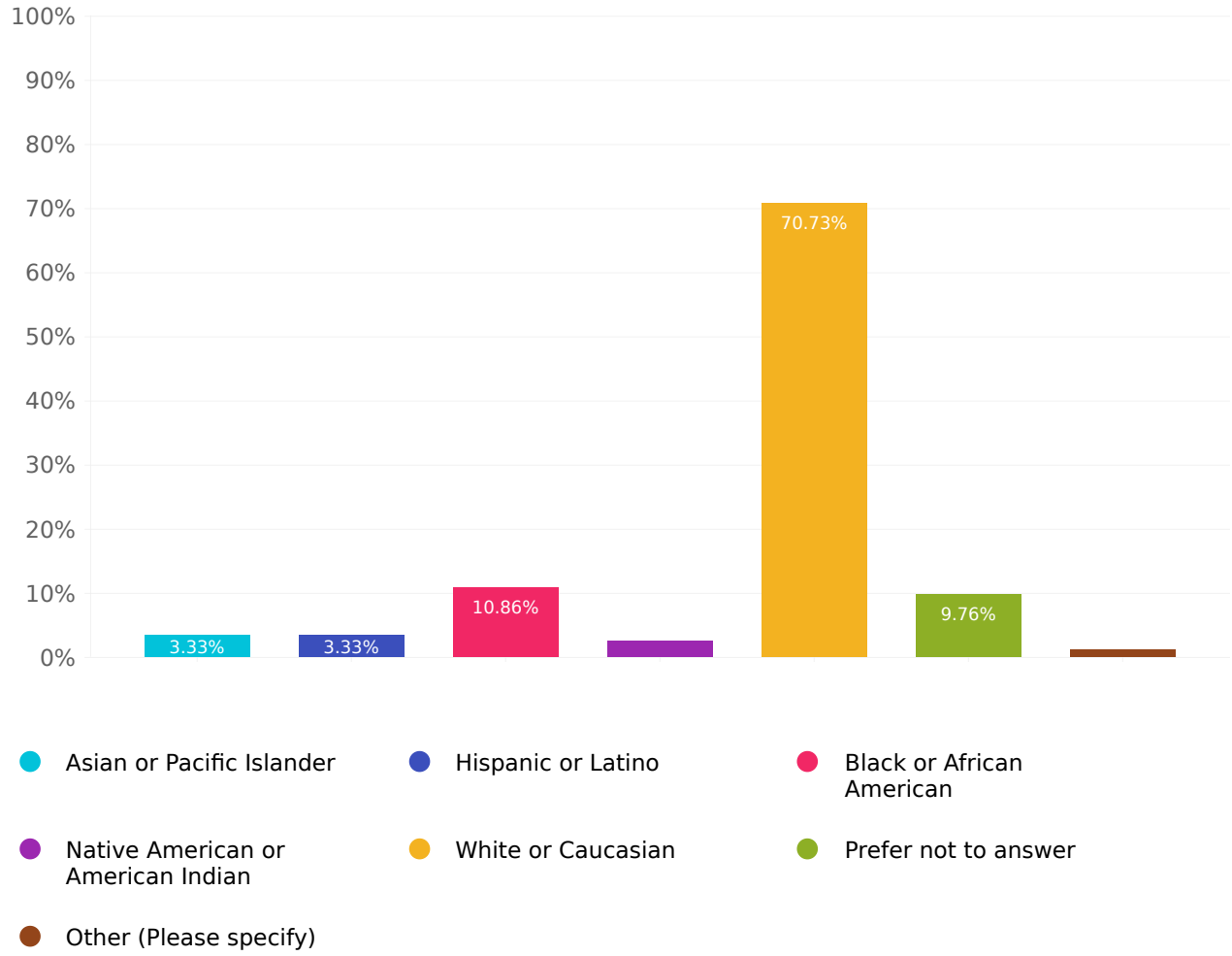


Choices	Response percent	Response count
18 to 24	1.75%	8
25 to 34	13.76%	63
35 to 44	18.56%	85
45 to 54	16.16%	74
55 to 64	16.59%	76
Over 65	26.42%	121
Prefer not to answer	6.77%	31

Q24

Which of the following best describes your ethnicity? (check all that apply)

Answered: 451 Skipped: 13

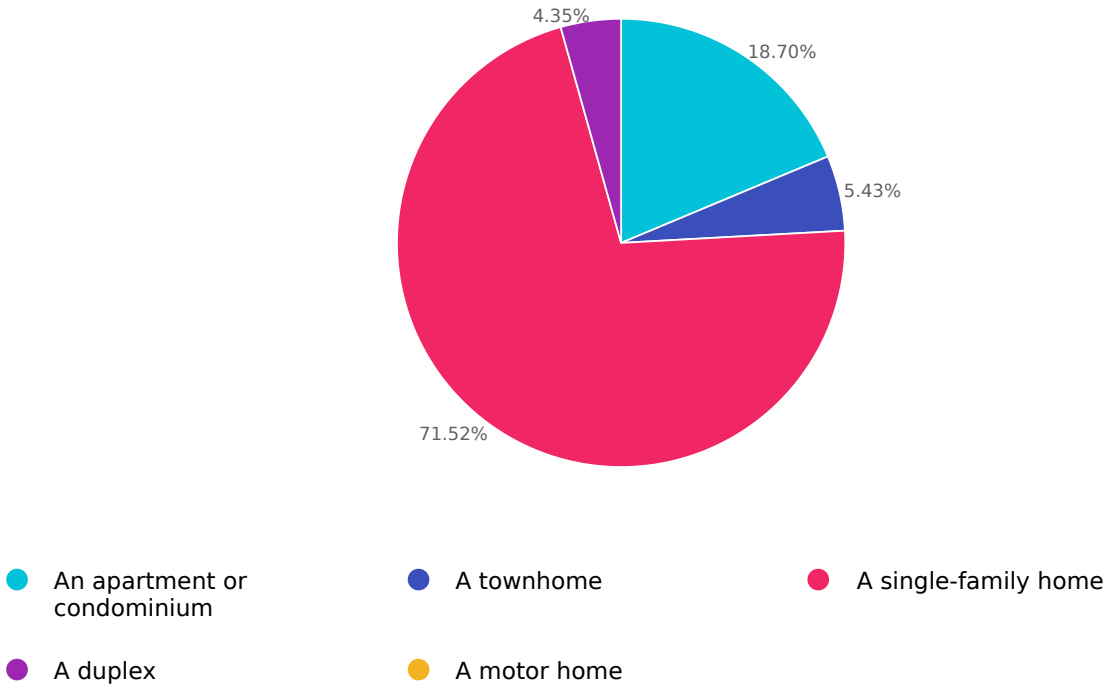


Choices	Response percent	Response count
Asian or Pacific Islander	3.33%	15
Hispanic or Latino	3.33%	15
Black or African American	10.86%	49
Native American or American Indian	2.44%	11
White or Caucasian	70.73%	319
Prefer not to answer	9.76%	44
Other (Please specify)	1.11%	5

Q25

What type of home do you live in?

Answered: 460 Skipped: 4

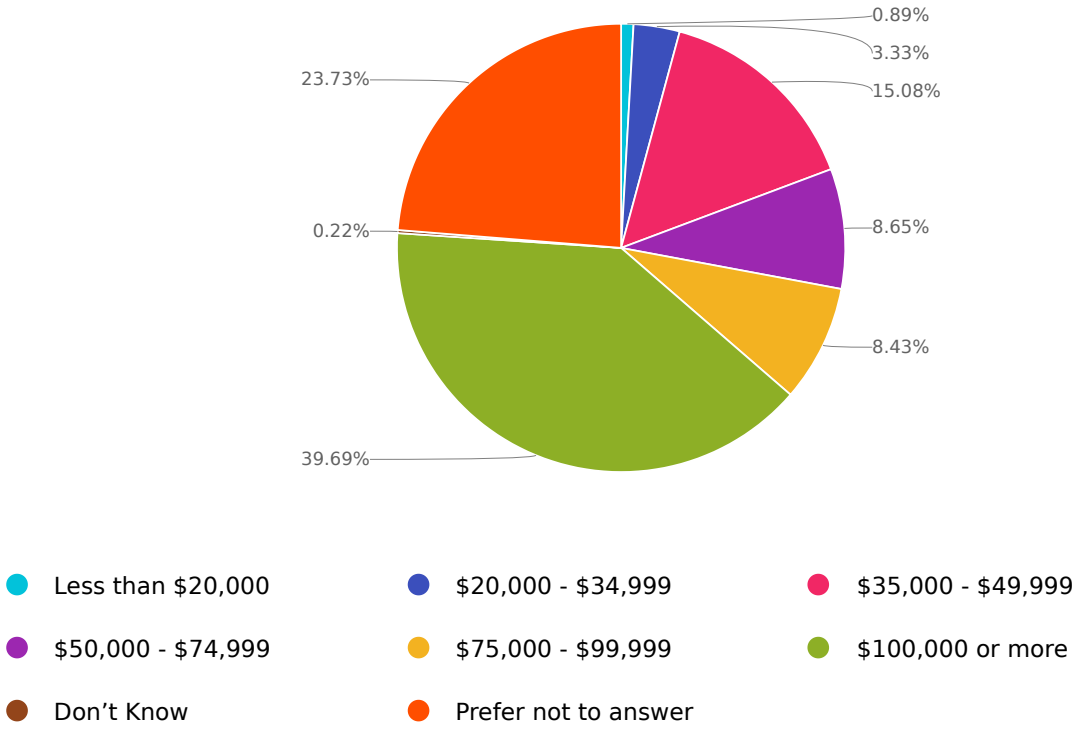


Choices	Response percent	Response count
An apartment or condominium	18.70%	86
A townhome	5.43%	25
A single-family home	71.52%	329
A duplex	4.35%	20
A motor home	0.00%	0

Q26

What is your household’s total income before taxes?

Answered: 451 Skipped: 13

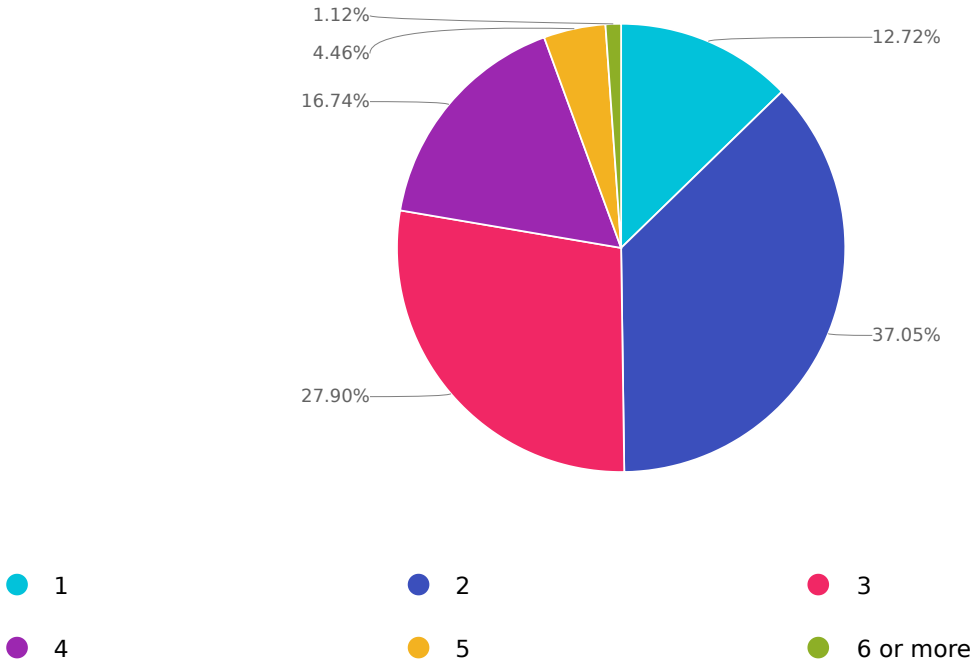


Choices	Response percent	Response count
Less than $20,000	0.89%	4
$20,000 - $34,999	3.33%	15
$35,000 - $49,999	15.08%	68
$50,000 - $74,999	8.65%	39
$75,000 - $99,999	8.43%	38
$100,000 or more	39.69%	179
Don’t Know	0.22%	1
Prefer not to answer	23.73%	107

Q27

Including you, how many people are currently living in your household?

Answered: 448 Skipped: 16

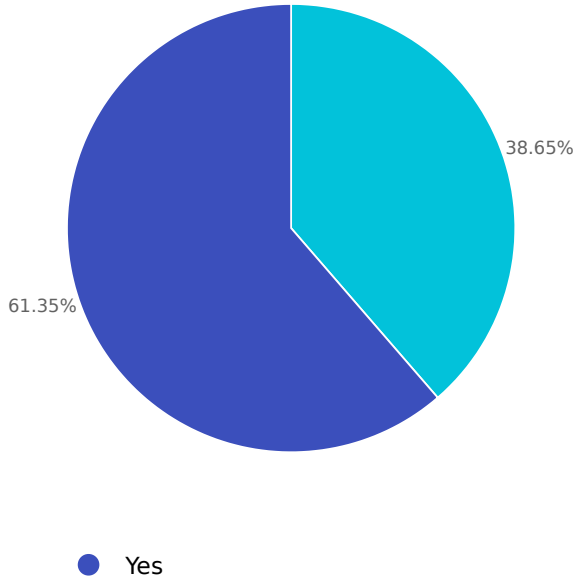


Choices	Response percent	Response count
1	12.72%	57
2	37.05%	166
3	27.90%	125
4	16.74%	75
5	4.46%	20
6 or more	1.12%	5

Q28

Would you like to enter your email address to be placed in a random drawing to win a $100 gift card as our thanks for completing the survey?

Answered: 445 Skipped: 19



Choices	Response percent	Response count
No	38.65%	172
Yes	61.35%	273

APPENDIX D:

CRCOG Public Outreach

Publicity for the October 2025 Public Events

- CRCOG Social Media Postings on Facebook and LinkedIn
- Provided Flyer to Advisory Committee for them to publicize as appropriate
- Emailed Hartford Neighborhood Revitalization Zones. Hartford Planning Department also included flyer in upcoming NRZ meeting packets.
- Emailed CT Department of Transportation and CT Department of Emergency Management and Homeland Security.
- Emailed other potentially interested watershed and environmental organizations, including Park Watershed, North Central Conservation District, Connecticut River Conservancy, and others.
- Emailed municipal MS4 contacts for CRCOG member municipalities.
- Emailed CRCOG Policy Board.
- Emailed usable email addresses from the survey respondents who provided an email address.
- Posted on CRCOG's webpage and emailed project mailing list.