



SOUTHEAST MICHIGAN COUNCIL OF GOVERNMENTS



STORMWATER MANAGEMENT UTILITY GUIDEBOOK

A Practical Guide to Establishing A Stormwater Management Utility

June 2026



SOUTHEAST MICHIGAN COUNCIL OF GOVERNMENTS

SEMCOG — the Southeast Michigan Council of Governments — is the only organization in Southeast Michigan that brings together all governments to develop regional solutions for both now and in the future. SEMCOG:

- ◆ Promotes informed decision-making by improving Southeast Michigan and its local governments through insightful data analysis and direct assistance to members.
- ◆ Promotes the efficient use of tax dollars for infrastructure investment and governmental effectiveness.
- ◆ Develops regional solutions that go beyond the boundaries of individual local governments.
- ◆ Advocates on behalf of Southeast Michigan in Lansing and Washington.

Since its inception in 1968, SEMCOG has acted as a regional planning partner with local member governments. SEMCOG serves the Southeast Michigan region, made up of Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw, and Wayne Counties. Membership is open to all counties, cities, villages, townships, intermediate school districts, and community colleges.

Foreword

This guide provides a practical, process-oriented framework for municipalities considering a **stormwater management utility**. It summarizes the major steps involved in evaluating feasibility, determining whether to proceed, developing the utility program, adopting necessary documentation, and preparing for implementation.

The guide emphasizes key considerations, including funding needs, rate structures, billing administration, public outreach, legal and financial defensibility, and implementation planning. It directs readers to appendices and supplemental materials for more detailed information. It is intended to support informed decision-making and coordinated program development. It does not prescribe a single approach or serve as an engineering design manual.

Legal Disclaimer

This guide is intended solely as a practical informational resource to assist communities in understanding and evaluating the process of establishing a **stormwater management utility**. It does not constitute legal advice and should not be relied upon as a substitute for consultation with qualified legal counsel.

Communities considering creating a **stormwater management utility** are strongly encouraged to consult with a municipal attorney early in the planning process and throughout implementation. The legal authority to establish and operate a **stormwater management utility**, including the structure of fees, billing practices, governance, exemptions, credits, enforcement mechanisms, and use of revenues, is governed by state statutes, local ordinances, constitutional requirements, and applicable case law, which may vary by jurisdiction and may change over time.

Legal counsel can help ensure that the **stormwater management utility** is established in compliance with applicable laws; that rates, fees, and procedures are legally defensible; and that the community appropriately addresses public process requirements, intergovernmental considerations, financing issues, and potential legal challenges. Ongoing legal review during development and implementation can also help reduce risk, improve administrative consistency, and support the long-term sustainability of the utility program.

Users of this guide should independently verify all legal, regulatory, financial, and technical information before taking action.



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Introduction and Context

1.1 Purpose of This Guide

This guide is intended for municipalities considering or planning a **stormwater management utility**. It is written for elected officials, municipal administrators, public works and engineering staff, finance professionals, consulting engineers, and others involved in infrastructure planning, funding and policy decisions.

It presents a practical, process-oriented framework for establishing a stormwater management utility based on real-world municipal experience. While this guide does not provide legal advice or prescribe a single approach, it highlights existing enabling statutes and provides references to key legal decisions. These are offered as a guide to flag common implementation challenges and pitfalls that can affect long-term success.

1.2 What a Stormwater Management Utility Is and Why It Matters

A stormwater management utility is a fee-based funding mechanism municipalities use to plan, operate, maintain, and improve stormwater systems, infrastructure, and related **stormwater management services**. Throughout this guide, the term Stormwater Utility (or simply Utility) may be used as shorthand for Stormwater Management Utility. Definitions of key terms used throughout this Guidebook are provided in Appendix A.

Like water or wastewater utilities, it is intended to recover the costs of providing a defined public service through a fee that is proportional to the demand placed by an individual property on that service. Stormwater utility charges are commonly used to fund operation and maintenance activities, capital improvements, regulatory compliance activities, stormwater planning, public education, and program administration.



Figure 1. Routine stormwater infrastructure maintenance. Stormwater utilities commonly fund activities such as catch basin cleaning, storm sewer inspection, debris removal, and other operation and maintenance services needed to maintain drainage system performance and reduce flooding and pollution risks.

Regulatory compliance in the stormwater context extends beyond MS4 permit requirements. While many communities use stormwater utilities to support compliance with federal and state stormwater regulations, stormwater management also serves important public health, safety, and welfare functions. These include reducing flooding, maintaining drainage infrastructure, protecting property, preserving transportation networks, improving water quality, and supporting community resilience. Stormwater utilities are appropriate for both MS4 and non-MS4 communities seeking a dedicated funding source for **stormwater management services**.

Stormwater utility fees are typically based on property characteristics, most commonly **impervious areas**, because those characteristics influence the quantity of stormwater runoff generation and proportional demand on the stormwater system. When properly structured, a stormwater utility provides a dedicated, transparent, equitable, and sustainable funding source for stormwater management.

1.3 What a Stormwater Utility Is Not

Equally important is what a stormwater utility is not. **It is not a tax, a rainfall-based charge, or a general revenue source.** Utility charges must be related to stormwater management services and used only for those purposes.

Courts and oversight bodies have consistently focused on this distinction, examining whether fees are proportional to the service provided, whether there is a clear nexus between the fee and stormwater impacts, and whether revenues are restricted to stormwater uses. These considerations shape nearly every aspect of utility design, from how rates are calculated

to how funds are accounted for and reported. Additional discussion of Michigan legal considerations, including the distinction between a valid user fee and a tax, is provided in Appendix B.

Comparing Water, Wastewater, and Stormwater Utility Fees

Water, wastewater, and stormwater utilities all rely on the same fundamental concept: recovering the cost of providing a public service through user charges that are reasonably related to the service provided. The primary difference is how demand for the service is measured. Water use is measured directly through a meter. Wastewater charges are often based on water consumption as a proxy for wastewater discharge. Stormwater utilities typically use **impervious area** as a proxy for runoff generation and demand on the stormwater system.

Table 1. Comparison of Water, Wastewater, and Stormwater Utility Fees

Consideration	Water Utility	Wastewater Utility	Stormwater Utility
Regulatory / Service Purpose	Provides drinking water service and supports compliance with drinking water regulations	Provides wastewater collection and treatment services and supports compliance with clean water regulations	Provides stormwater management services, supports regulatory compliance, and addresses flooding, drainage, water quality, and other public health, safety, and welfare objectives
Proportionality to the necessary cost of service	Charges are commonly based on metered water consumption	Charges are commonly based on water consumption as a proxy for wastewater discharge	Charges are commonly based on impervious area as a proxy for runoff generation and demand on the stormwater system
Voluntariness	Use less water	Use less water or wastewater-generating activities	Reduce impervious area and/or implement approved credits

Key Takeaway: Water, wastewater, and stormwater utilities are all intended to function as user-fee systems. While the billing basis differs, each utility is structured around defined services, a relationship between charges and the cost of providing those services, and mechanisms that allow customers to influence their charges.

1.4 Why Communities Establish Stormwater Utilities

Stormwater utilities provide a stable, dedicated funding source for stormwater management services. In many communities, stormwater activities have historically been funded through general funds, road budgets, or other sources that are not directly tied to stormwater services and are therefore unreliable and intermittent in nature.

A stormwater utility allows municipalities to:

- ◆ Recover the cost of providing stormwater services in a more equitable and transparent manner
- ◆ Support the operation and maintenance of existing infrastructure
- ◆ Fund capital improvements to address flooding, collection system capacity, and water quality concerns
- ◆ Meet regulatory requirements and permit obligations
- ◆ Plan for long-term system needs and resilience
- ◆ When properly structured, a stormwater utility aligns funding with service demand and provides a framework for sustained investment in stormwater infrastructure

Additional Community Benefits

- ◆ Reduced flooding and property damage
- ◆ Reduced inflow and infiltration (I&I) to sanitary sewer systems
- ◆ Reduced risk of sanitary sewer overflows (SSOs) and combined sewer overflows (CSOs)
- ◆ Improved water quality
- ◆ Reduced regulatory and permit compliance risks
- ◆ Improved infrastructure resilience

Examples of Stormwater-Related Functions and Services

Stormwater utility charges are typically managed through an enterprise fund, a separate accounting fund used to track revenues and expenditures associated with a specific utility or service, to ensure funds are exclusively reinvested in the stormwater system, directly managing stormwater runoff; maintaining stormwater infrastructure; meeting regulatory requirements; improving water quality; reducing flooding; and administering the stormwater program. The specific activities funded by a utility must be clearly defined, documented, and tied to the services provided.

The following examples illustrate the types of services, activities, infrastructure, and program costs that may be funded through a **stormwater management utility**. Not all activities will apply to every community, and municipalities may choose to fund only a subset of these activities based on local priorities, infrastructure responsibilities, regulatory requirements, and legal considerations.

System Operations and Maintenance

- ◆ Inspecting, cleaning, repairing, and replacing storm sewers, drains, culverts, bridges, manholes, catch basins, inlets, outfalls, headwalls, weirs, and related appurtenances
- ◆ Catch basin cleaning, pipe cleaning, CCTV inspection, debris removal, and emergency response
- ◆ Resetting or adjusting storm manholes and inlets when performed as part of drainage-related work or a street improvement project
- ◆ Maintaining pump stations, detention basins, retention basins, forebays, outlet structures, and other stormwater controls
- ◆ Maintaining roadside ditches, swales, underdrains, curb-and-gutter drainage systems, and stormwater conveyance facilities

Green Infrastructure and Nature-Based Systems

- ◆ Maintaining publicly owned rain gardens, bioswales, infiltration practices, permeable pavement, tree trenches, green roofs, constructed wetlands, and similar stormwater practices
- ◆ Planning, designing, constructing, and maintaining green infrastructure that runoff or improves water quality
- ◆ Vegetation management associated with stormwater facilities, including mowing, invasive species control, sediment removal, and restoration planting



Figure 2. Rain gardens are one example of the green infrastructure and nature-based stormwater management practices that may be planned, constructed, operated, and maintained as part of a stormwater management utility program.



Figure 3. Asset management programs help communities inventory, assess, maintain, and plan for long-term replacement of stormwater infrastructure.

Natural Waterways, Floodplains, and Drainage Corridors

- ◆ Maintaining or restoring rivers, creeks, open channels, wetlands, floodplains, riparian buffers, and drainage corridors where they function as part of the stormwater system
- ◆ Streambank stabilization, erosion control, channel restoration, sediment removal, debris clearance, and floodplain reconnection
- ◆ Easement acquisition, access improvements, or property acquisition where needed for stormwater management, flood mitigation, drainage access, or system maintenance
- ◆ Floodplain property acquisition or buyouts where the purpose is to reduce flood risk, restore flood storage, or improve watershed function

Capital Improvements

- ◆ Planning, designing, and constructing new stormwater infrastructure and facilities to support stormwater management, flood mitigation, drainage improvements, water quality objectives, and community growth
- ◆ Replacing aging stormwater infrastructure
- ◆ Constructing new or expanded drainage facilities to address flooding, capacity limitations, or water quality needs
- ◆ Retrofitting existing infrastructure to improve conveyance, storage, treatment, resilience, or regulatory compliance
- ◆ Debt service or financing costs for eligible stormwater capital improvements

Regulatory Compliance and Water Quality

- ◆ MS4 permit compliance activities, including public education, public involvement, illicit discharge detection and elimination, pollution prevention, good housekeeping, construction site runoff control, and post-construction stormwater management
- ◆ Protection of public health, safety, and welfare through effective stormwater management, flood risk reduction, and drainage system maintenance
- ◆ TMDL planning, monitoring, reporting, source identification, pollutant load reduction, and implementation activities required under the MS4 permit or related water quality obligations
- ◆ Water quality monitoring, outfall screening, dry-weather flow investigations, pollutant source tracking, and enforcement support
- ◆ Staff training, documentation, permit renewals, annual reporting, and other administrative work necessary to demonstrate MS4 and TMDL compliance
- ◆ Street sweeping, leaf pickup, catch basin cleaning, or similar activities when performed for stormwater pollution prevention, sediment reduction, or water quality purposes

Planning, Studies, and Asset Management

- ◆ Comprehensive master plan development and updates, including integration of land use planning and stormwater management to evaluate how future growth and redevelopment may affect stormwater needs, and how stormwater infrastructure, flooding risks, water quality goals, and resilience objectives may influence future land use and development patterns.
- ◆ Stormwater master plans, level-of-service analyses, flood studies, drainage studies, watershed studies, rate studies, and utility program planning
- ◆ Hydrologic and hydraulic modeling, climate resilience planning, and capital improvement planning
- ◆ Stormwater asset inventories, condition assessments, risk evaluations, GIS mapping, database development, and data management
- ◆ Updating land cover, **impervious area**, **parcel**, and **billing dataset**

Program Administration and Customer Service

- ◆ Staff time directly associated with stormwater utility administration, program management, engineering review, finance, legal coordination, billing, customer service, public communication, and interdepartmental coordination
- ◆ Utility billing, account management, customer service, call response, recordkeeping, financial reporting, auditing, and enterprise fund administration
- ◆ **Credit program** administration, application review, inspections, recertification, appeals, adjustments, and dispute resolution



Figure 4. Public education and outreach help communities build understanding of stormwater management services, funding needs, and the role of a stormwater management utility.

Public Education and Outreach

- ◆ Public education and outreach required by MS4 permits
- ◆ Utility communication materials, public meetings, stakeholder engagement, website content, FAQs, mailers, and customer education
- ◆ Outreach to large property owners, tax-exempt entities, HOAs, schools, churches, businesses, and other affected stakeholders

Intergovernmental Coordination and Regional Drainage

- ◆ Costs associated with county drains, regional drainage facilities, intergovernmental agreements, or shared stormwater infrastructure where the cost is tied to stormwater services
- ◆ Coordination with county drain commissioners, road agencies, neighboring communities, watershed organizations, or regional partners

Examples from Practice

- ◆ The City of Ann Arbor funds its routine street tree pruning program through the stormwater utility, recognizing the stormwater function of the urban forest. Ann Arbor also describes trees as reducing the quantity of stormwater runoff and improving runoff quality.

- ◆ The City of Alexandria, Virginia, identifies stormwater utility fee uses that include street sweeping, leaf pickup, MS4 permit compliance, public stormwater infrastructure operation and maintenance, stormwater quality initiatives, plan review, and flood management.
- ◆ Floodplain buyouts may also be supported by stormwater utility fee revenues where the purpose is flood risk reduction or stormwater management. Charlotte-Mecklenburg County is an example of a jurisdiction where stormwater utility fee revenue has served as a major local funding source for buyouts.

1.5 Legal and Financial Considerations (High-Level)

Stormwater utilities are common across the United States, but they can survive legal scrutiny only when carefully structured and supported by appropriate legal authority. In Michigan, the distinction between a fee and a tax is particularly important and guided by the framework established in *Bolt v. City of Lansing*. The Bolt decision remains the primary legal framework used by Michigan courts when evaluating stormwater utility fees and should be considered throughout the development and implementation of a stormwater utility.

Key Legal Framework: The Bolt Criteria

In distinguishing a user fee from a tax, the Court identified three primary criteria that are considered under the totality of the circumstances:



Regulatory Purpose. A user fee must serve a regulatory purpose rather than a revenue-raising purpose.



Proportionality. A user fee must be proportionate to the necessary costs of the service.



Voluntariness. A user fee must be voluntary.

These three principles are referenced throughout this guidebook because they influence stormwater utility planning, rate development, credits, administration, and legal defensibility.

These principles influence nearly every aspect of stormwater utility development. The utility should be established to support clearly defined **stormwater management services** and responsibilities rather than simply generating revenue. The fee structure should be supported by a documented cost-of-service analysis that reasonably relates charges to stormwater impacts and program costs. In the stormwater context, the voluntariness factor is often addressed through credits, adjustments, or other mechanisms that allow property owners to reduce charges by implementing practices that lessen demands on the stormwater system.

To support these objectives, establishing a stormwater utility should be approached as a coordinated effort that aligns legal, planning, technical, financial, administrative, and public communication considerations from the outset. It is critical to ensure that all major aspects of the stormwater utility are fully developed before implementation. Unclear purpose, insufficient program structure, weak cost justification, inconsistent administration, unclear billing procedures, or poor public communication can lead to legal challenges, implementation issues, or loss of public support.

Proposed Legislation and Stormwater Utilities in Michigan

Stormwater utilities are legally viable in Michigan and do not require new enabling State legislation. Michigan communities may evaluate and implement stormwater utilities under existing legal authority, provided the utility is carefully structured so that fees serve a regulatory purpose, are proportional to use of the system, and are voluntary.

Michigan Senate Bill 441 of 2025 (SB 441), the proposed **Stormwater Management Utility Act**, is intended to codify existing case law and provide a clear and consistent statutory framework for stormwater utilities in Michigan. The bill has not been enacted, meaning communities should not assume it will be passed in its current form. As such, communities must decide whether to proceed based on existing case law or wait for legislative action before evaluating whether a stormwater utility is appropriate.

As drafted, SB 441 generally addresses several core program elements, including supporting program documentation, proportional fee methodology, dedicated use of revenues, fee reductions or credits, appeals procedures, public hearing requirements, and periodic program review. These concepts are not unique to SB 441; they are also common best practices that support transparency, defensibility, and effective utility administration.

*For that reason, this guide incorporates **several concepts that are consistent with the proposed legislation** while avoiding reliance on SB 441 as a prerequisite. Communities should work with legal counsel to evaluate current legal requirements, monitor legislative developments, and determine how best to structure a stormwater utility under local conditions.*

1.6 How to Use This Guide

This guide is intended to support planning and coordination for municipalities considering a stormwater utility. It outlines the key components of utility development and helps communities understand the decisions, level of effort, and coordination required across departments.

The sections that follow provide context for each topic, while the accompanying tables outline typical activities to support planning and coordination. This guide is not intended to prescribe a single approach.

It is important that a community adapts the process based on its own priorities, available data, staffing, and policy direction.

2

Stormwater Utility Development Process

The development of a **stormwater management utility** involves a series of interrelated steps to define the program, establish funding, and prepare for implementation.

For clarity, these steps can be grouped into two primary phases:

- ◆ **Phase 1 – Feasibility and Decision Readiness:** Defines goals and services, evaluates legal, financial, and administrative considerations, identifies short- and long-term costs, develops preliminary rate information, and assesses stakeholder impacts to determine whether to proceed.
- ◆ **Phase 2 – Program Development, Adoption, and Implementation:** Includes detailed program design, preparation of the **stormwater utility program plan** and ordinance, and establishment of billing, administrative, and operational procedures.

These phases represent key decision points rather than rigid sequences. Activities are often revisited and refined as additional information becomes available, and the program moves toward implementation.



Figure 5. Overall stormwater utility development process. This guidebook is organized around two primary phases: Phase 1 – Feasibility and Decision Readiness, and Phase 2 – Program Development, Adoption, and Implementation.

Terminology Note

Michigan Senate Bill 441 (2025), the proposed Stormwater Management Utility Act, uses the term Stormwater Management Plan to describe the primary document supporting a stormwater management utility. Throughout this Guidebook, the term Stormwater Utility Program Plan is used instead.

The Guidebook uses this terminology to distinguish the utility program document from other commonly used planning documents, such as stormwater master plans, watershed management plans, drainage studies, and MS4 stormwater management plans. Regardless of terminology, the purpose of the document is the same: to define the services, funding needs, rate methodology, billing procedures, credits, appeals, administrative responsibilities, and implementation framework supporting the stormwater management utility.



3

Phase 1 – Feasibility and Decision Readiness

Phase 1 focuses on determining whether a **stormwater management utility** is appropriate and viable for a community. This phase defines the scope of services, develops planning-level cost and rate information, evaluates administrative feasibility, and identifies key stakeholder considerations. The outcome of Phase 1 is a clear basis for deciding whether to proceed with program development and implementation.

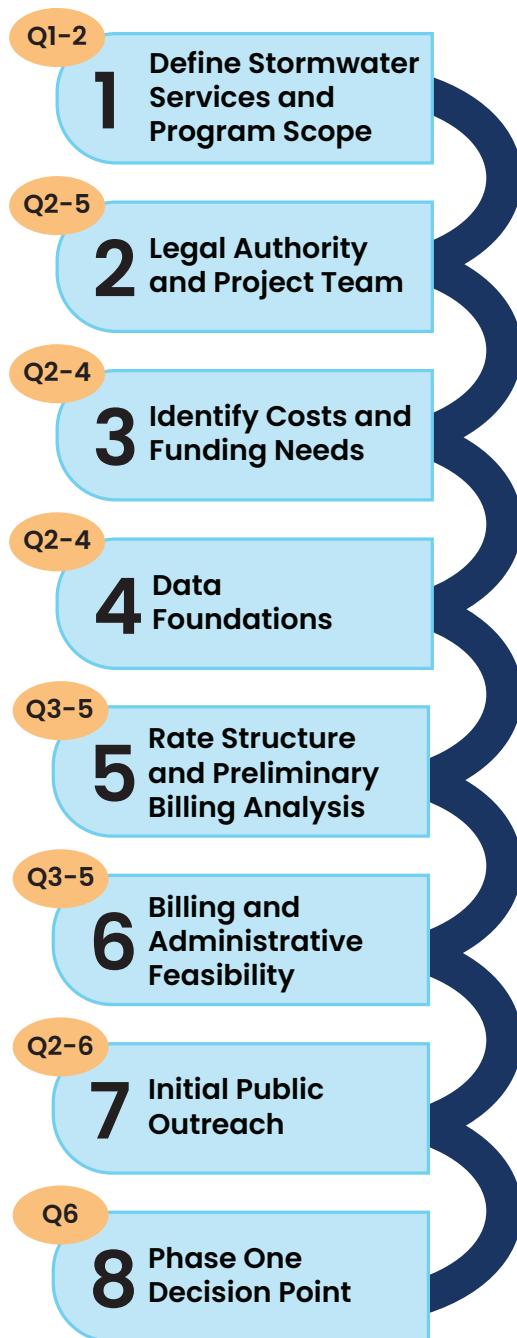
Typical Participants in Phase 1

Stormwater utility feasibility typically requires coordination among multiple municipal functions. The specific departments involved will vary by community, but participants commonly include staff responsible for:

- ◆ Stormwater operations and maintenance
- ◆ Engineering, planning, and asset management
- ◆ Regulatory compliance and environmental programs
- ◆ Finance, budgeting, and accounting
- ◆ Billing and customer service
- ◆ Administration and management
- ◆ Public communication and stakeholder engagement
- ◆ Legal review, as appropriate

The level of involvement may vary throughout the feasibility process. Some participants may provide technical information, while others may support cost development, rate analysis, implementation planning, public outreach, or decision-making.

Phase 1 Process Overview



Phase 1 consists of eight interrelated steps that help a community evaluate whether a **stormwater management utility** is appropriate, feasible, and supportable under local conditions. While the steps are presented in a logical sequence, they do not necessarily occur in a strictly linear order. Information developed during one step may influence decisions made in another, and some activities often occur concurrently.

The process begins by defining the stormwater services to be funded and identifying the legal, organizational, and technical considerations that may affect implementation. The community then develops planning-level information related to costs, funding needs, available data, potential rate structures, billing considerations, and stakeholder impacts.

The quarter references shown in Figure 1 provide a conceptual schedule illustrating when each activity typically occurs during the overall stormwater utility development process. For example, a label of “Q1–2” indicates that the activity would generally occur during the first two project quarters. These timeframes are intended as planning guidance only and should not be interpreted as fixed requirements. Actual schedules will vary based on community size, data availability, staffing, governance processes, public outreach needs, legal review, and overall project complexity. *Phase 1 may be expedited for communities who have already determined needs through analysis and master planning.* The quarter references are consistent with the example implementation schedule presented in Section 5.

The final step in Phase 1 is a decision point. By this stage, the municipality should have sufficient information to determine whether to proceed with detailed program development, refine the analysis, modify the proposed approach, or discontinue the effort. The outcome of Phase 1 is not the establishment of a stormwater utility, but an informed decision regarding whether the community is prepared to move forward with implementation.

The eight steps shown are discussed in greater detail in Sections 3.1 through 3.8.

3.1 Define Stormwater Services and Program Scope

Key Question: *What stormwater services will be funded through the stormwater utility?*

Why This Matters: *The services funded by the utility form the foundation for cost estimation, rate development, legal defensibility, and public communication. Clearly defining stormwater services helps ensure that stormwater utility fees are used for stormwater-related purposes and establishes the basis for determining funding needs. **This step helps establish that stormwater utility fees are tied to specific stormwater services rather than general government activities and establishes the basis for defining the service area and program framework developed during Phase 2.***



The first step in establishing a stormwater utility is to identify the stormwater services to be funded by the utility. These decisions establish the framework for the remainder of the feasibility analysis and provide the basis for developing costs, rates, billing assumptions, and implementation requirements.

Municipalities should define which stormwater activities, facilities, and programs the utility is intended to support. Examples of stormwater-related services, activities, and costs that may be funded through a stormwater utility are provided in Section 1.4. The program scope should clearly define what is included and what is excluded, and these boundaries should be consistently applied to future decisions.

In many communities, the services funded by a stormwater utility are influenced by existing stormwater master plans, watershed plans, capital improvement programs, asset management plans, regulatory requirements, or other planning efforts. These efforts often establish service expectations, identify infrastructure needs, or define regulatory obligations that affect the scope and cost of the stormwater program. These efforts often establish levels of service, identify infrastructure needs, and define regulatory compliance requirements that affect the scope and costs of the stormwater program.

The stormwater services funded through the utility should be clearly connected to stormwater management objectives and documented as part of the feasibility process. Defining these services and the associated levels of service helps establish the basis for identifying infrastructure, operational, regulatory, and administrative needs. Together, these elements form the foundation for estimating program costs, evaluating funding gaps, developing rates, and supporting public communication and legal defensibility.



Figure 6. Defining stormwater services and program scope often requires coordination among engineering, operations, finance, administration, planning, and other stakeholders.

Table 2. Stormwater Services to Be Funded – Typical Activities

No.	Activity	Purpose / Notes / Considerations
1	Identify stormwater services to be funded	Define the stormwater activities, facilities, and programs supported by the utility
2	Review existing plans and requirements	Identify planning, regulatory, and infrastructure needs that influence service scope
3	Define service boundaries	Clarify what is included and excluded from the utility program
4	Identify service providers and responsibilities	Confirm which entities, departments, staff, or contractors are responsible for delivering stormwater services.
5	Document service assumptions	Carry assumptions forward into cost estimating, rate development, and public communication

3.2 Legal Authority and Project Team

Key Question: *Can the **stormwater management utility** be structured and implemented in a legally and administratively defensible manner?*

Why This Matters: *Stormwater utilities require coordination across multiple municipal functions and must be structured so that fees are tied to stormwater services, reasonably related to the cost of those services, and used only for stormwater-related purposes. Early evaluation of legal considerations, organizational responsibilities, and implementation readiness helps identify potential issues before significant effort is invested in program development. **This step helps establish that the stormwater utility is structured as a service-based fee.***



Stormwater utilities in Michigan must be structured so that fees serve a regulatory purpose, are proportional to the necessary costs of service, and include mechanisms such as credits, adjustments, or other provisions that allow property owners to reduce fees by reducing demand on the stormwater system.. These principles influence how costs, rates, and program elements are developed during the feasibility phase.

Legal considerations in this context primarily concern the utility’s structure, rather than its establishment. These considerations influence how stormwater services are defined, how costs are documented, how rates are developed, and how collected fees are managed throughout the feasibility process.

Establishing a stormwater utility also requires coordination across multiple municipal functions, including planning. Early alignment helps ensure that the utility is feasible from both a technical and administrative perspective and that key implementation considerations are understood.

While stormwater utility development requires participation from multiple departments and disciplines, successful efforts often have a single individual who serves as the project champion. The champion helps maintain momentum, coordinates activities across departments, communicates the purpose and benefits of the utility, and serves as the primary advocate for moving the effort forward. Depending on the community, the champion may be a city engineer, public works director, utility manager, finance director, planning director, city manager, or another staff member with a strong interest in stormwater management and organizational support. While the specific role varies, having a clearly identified champion can be an important factor in successfully advancing a stormwater utility from concept to implementation.



Figure 7. Stormwater utility development is often championed by a lead department or individual but requires coordinated support from legal, planning, technical, financial, administrative, and communications functions for success and long-term implementation.

The departments and functions involved in stormwater management utility development will vary by community. Typical roles may include:

- ◆ **Engineering and Public Works** – Defines stormwater services, evaluates system performance, identifies infrastructure needs, and supports capital improvement planning.
- ◆ **Planning and Asset Management** – Supports land use coordination, establishes levels of service, inventories and assesses stormwater assets, and helps identify long-term infrastructure needs.

- ◆ **Administration and Management** – Provides overall project coordination, organizational leadership, and alignment with community priorities.
- ◆ **Environmental Compliance** – Identifies regulatory requirements and compliance obligations, including MS4 permit requirements and other stormwater-related responsibilities.
- ◆ **Finance and Budgeting** – Compiles cost information, develops revenue requirements, evaluates funding needs, and supports rate development and financial planning.
- ◆ **Billing and Customer Service** – Evaluates billing system capabilities, customer service needs, credits, appeals, and ongoing program administration requirements.
- ◆ **GIS and Data Management** – Maintains parcel, land cover, impervious area, and other datasets used to support billing and analysis.
- ◆ **Communications and Public Outreach** – Supports stakeholder engagement, public communication, and customer education efforts.
- ◆ **Legal Counsel** – Reviews legal authority, utility structure, ordinances, and other legal considerations associated with implementation.

Together, these functions help ensure that the stormwater management utility is technically sound, financially sustainable, administratively feasible, and legally defensible.

3.3 Identify Costs and Funding Needs (Preliminary)

Key Question: *What does it cost to provide the stormwater services identified in Section 3.1?*

Why This Matters: *A stormwater management utility should be based on a documented understanding of both current and anticipated stormwater costs. Existing expenditures provide an important baseline, but many communities have unmet needs, deferred maintenance, funding gaps, regulatory requirements, and desired levels of service that are not fully reflected in current spending. Identifying these costs is essential for evaluating feasibility, understanding funding needs, developing rates, and supporting public communication. **This step helps demonstrate that stormwater management utility fees are based on the documented cost of providing stormwater services and achieving the level of service the community intends to provide.***



A **stormwater management utility** should be based on a documented understanding of the costs required to provide stormwater services. This includes both existing expenditures and additional costs associated with achieving desired levels of service, addressing known deficiencies, meeting regulatory obligations, maintaining infrastructure, and implementing planned capital improvements. Identifying these costs at a planning level is essential for understanding funding needs, evaluating feasibility, and informing preliminary rate discussions.

Stormwater utility costs typically include operation and maintenance of stormwater infrastructure, capital improvement projects, regulatory compliance activities, and administrative functions. Administrative costs are often underestimated and may include billing, customer service, credit administration, data management, and legal and financial oversight. Examples of stormwater-related costs and activities to consider during cost identification are provided in Section 1.4.

Ideally, costs are informed by existing planning documents such as a stormwater master plan, capital improvement program, or asset management plan. However, the absence of these documents should not preclude moving forward. Many communities begin with a limited scope and conservative cost assumptions, then refine costs as more information becomes available.

Communities with limited finance staff or experience developing utility rates may benefit from assistance from a utility rate consultant or municipal financial advisor. This support can be especially helpful when forecasting cash flow, evaluating capital financing needs, estimating debt service, and confirming that proposed rates are sufficient to support the stormwater utility program.

Municipalities should also understand how stormwater activities have been historically funded, often through general funds, roadway budgets, utility funds, special assessments, or property tax millages. This context is important for understanding existing funding practices, documenting stormwater-related costs, and communicating how the stormwater utility would support **stormwater management services**.

Table 3. Cost and Funding – Typical Activities

No.	Activity	Purpose / Notes / Considerations
1	Compile existing stormwater-related costs	Establish a baseline of current stormwater expenditures and funding sources and evaluate funding gaps, unmet needs, deferred maintenance, and future program requirements.
2	Identify planned or anticipated capital needs	Document future projects based on available plans or known issues and project these costs out for 5 to 10 years if possible.
3	Estimate administrative costs	Account for billing, customer service, data management, and program management.
4	Identify current funding sources	Understand how stormwater activities are currently funded, such as through the general fund, road budgets, County Drain assessments, or millages.
5	Develop a planning-level cost estimate	Develop a planning-level understanding of future funding needs, cash flow requirements, capital financing considerations, and the basis for preliminary rate discussions.

3.4 Data Foundations

Key Question: Are sufficient **parcel** and **land-cover** data available to support a stormwater utility?

Why This Matters: Stormwater utility feasibility relies on parcel-level data to estimate runoff contribution, evaluate rate structures, and develop planning-level billing information. Early review of available datasets helps identify data gaps, understand data limitations, and confirm that a defensible utility analysis can be performed. **This step helps establish a reasonable relationship between stormwater utility fees and each property's stormwater runoff contribution.**



Stormwater utility feasibility analysis relies on parcel-level data and is typically performed using Geographic Information Systems (GIS). GIS allows municipalities to evaluate land cover, estimate runoff contribution, and support planning-level rate development.

Impervious surfaces such as rooftops, pavement, and compacted areas prevent stormwater from infiltrating into the ground and instead generate runoff. As **impervious area** increases, the volume and rate of runoff also increase, placing greater demand on the stormwater system. For this reason, impervious area is commonly used as a basis for allocating stormwater utility costs.

At a minimum, the following datasets are needed:

- ◆ Parcel boundaries (GIS)
- ◆ Parcel ownership or classification (e.g., residential, commercial, tax-exempt)
- ◆ Land cover data, particularly impervious surface information

SEMCOG maintains regional land cover datasets suitable for feasibility-level analysis and may be used when local data is unavailable or needs to be supplemented.

At this stage, the objective is to confirm that sufficient data exists to support parcel-based analysis and to identify any major gaps.

Typical activities include:

- ◆ Assemble parcel and ownership datasets
- ◆ Obtain or access impervious surface data
- ◆ Perform planning-level GIS analysis to estimate impervious area, evaluate parcel characteristics, summarize billing units, and identify how stormwater utility costs may be distributed across different property types.
- ◆ Identify data gaps or limitations
- ◆ Identify existing multi-jurisdictional stormwater agreements, drainage district obligations, or shared infrastructure responsibilities.

County Drains and Intergovernmental Coordination

Many Michigan communities are served by county drains, drainage districts, regional stormwater infrastructure, or shared drainage systems. These relationships should be identified early because they may affect the utility's **service area**, cost structure, implementation approach, and coordination needs.

A stormwater utility may help fund eligible costs associated with county drains or regional drainage infrastructure, provided those costs are tied to stormwater services and are properly documented. In some Michigan communities, utility revenues are used not only to pay the municipality's share of drain assessments, but also to pay assessments that would otherwise be charged directly to individual property owners. This approach can help avoid situations where property owners are charged both a stormwater utility fee and a separate drain assessment for related stormwater services.

If this approach is used, the costs should be clearly included in the utility's revenue requirement and communicated to property owners. The relationship between the stormwater utility fee, drain assessments, and any existing drainage district obligations should be documented so customers understand what the utility is paying for and why separate charges may be reduced or eliminated.

Drain commissioners, county agencies, road agencies, and neighboring communities may also play important roles in planning, maintenance, administration, or implementation. This coordination can be especially important for smaller communities with limited staff capacity. In some cases, intergovernmental partnerships may help support technical analysis, billing administration, public outreach, or management of shared stormwater facilities. Existing drainage agreements, district assessments, and shared infrastructure responsibilities should be reviewed during the feasibility phase.

Additional discussion of township, county, and multi-jurisdictional stormwater utility considerations is provided in Appendix H.



Figure 8. Understanding how stormwater runoff flows across streets, properties, and drainage systems is an important part of developing the data foundation for a stormwater management utility.

3.5 Rate Structure and Preliminary Billing Analysis

Key Question: *What would property owners likely pay under a stormwater utility, and how would costs be distributed among different property types?*

Why This Matters: *The feasibility phase should provide a planning-level understanding of how stormwater utility costs may be allocated among residential, commercial, industrial, institutional, and tax-exempt properties. Evaluating preliminary rates and example bills helps communities understand affordability, stakeholder impacts, communication needs, and the overall practicality of different rate structure options. **This step helps demonstrate that stormwater utility fees are allocated using a documented methodology that is reasonably related to stormwater service demands.***



Rate structure translates costs into fees. At the feasibility stage, the objective is to evaluate general approaches and understand potential impacts using planning-level analysis.

This analysis is typically supported by parcel-level GIS data. Impervious surface area is estimated across **parcels**, and a planning-level billing rate is calculated based on total funding needs. This allows municipalities to estimate typical residential charges and evaluate how costs would be distributed among different property types, including larger commercial, industrial, institutional, and tax-exempt properties.



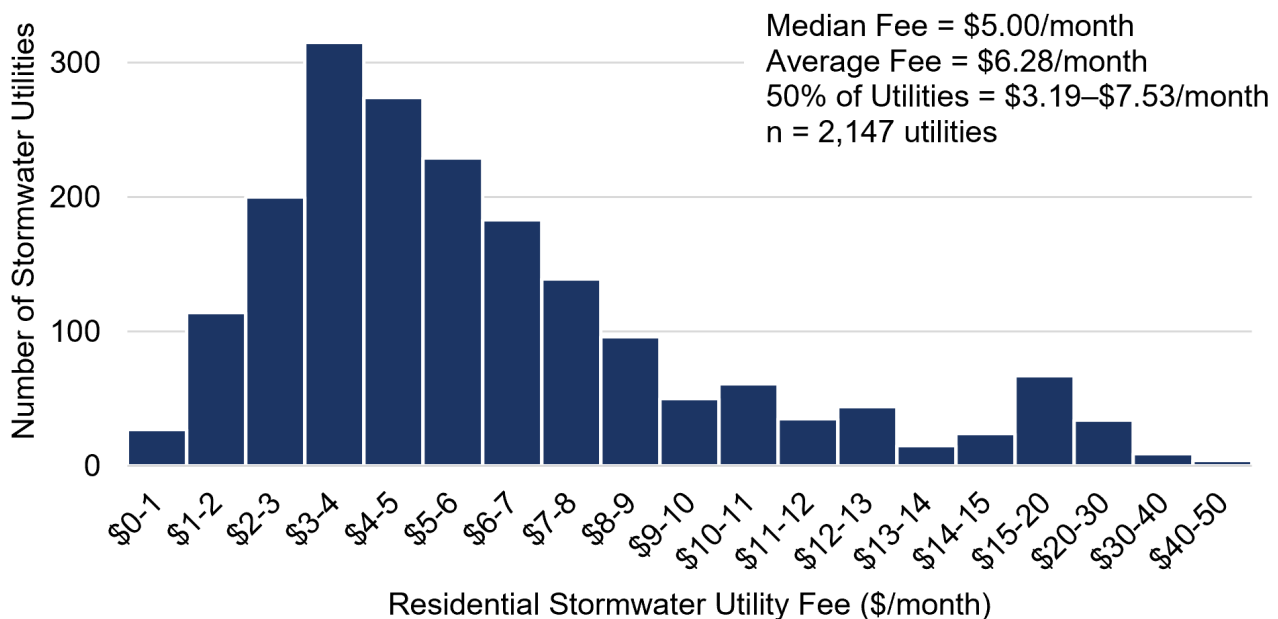
Figure 9. Example GIS-based impervious area analysis. Parcel boundaries and land-cover data are commonly used to estimate impervious area and support stormwater utility rate development and billing analysis.

Stormwater utilities commonly use a limited number of established rate structures. The most widely used approaches include **Equivalent Residential Unit (ERU)**, direct **impervious area**, and hybrid approaches that combine a flat or tiered residential charge with area-based billing for nonresidential properties. Each approach balances equity, simplicity, and administrative effort in different ways. Additional information on rate structures is provided in Appendix C.

Historically, many rate structures were developed using representative or sample data to estimate impervious area across different property types. With current GIS and land-cover technologies, it is now feasible to directly measure impervious surfaces for each **parcel**. This allows for more accurate and defensible fee structures that better reflect each property’s contribution to stormwater runoff. Many communities, including Detroit, use parcel-specific impervious data as the basis for billing.

At the feasibility stage, it is important to understand how these different approaches would perform when applied to local data. In practice, many rate structures produce similar overall revenue levels, but differ in how costs are distributed among property types and how easily the structure can be explained and administered.

To provide context for decision-making, planning-level rates should also be compared to typical stormwater utility fees in other communities. National data indicate that most residential stormwater fees fall within a general range of approximately \$3 to \$15 per month, depending on service levels, capital needs, and regulatory requirements. While these benchmarks are useful for context, they should not be used as a substitute for local analysis.



Source: Western Kentucky University Stormwater Utility Survey 2025. Residential fees represent monthly or monthly-equivalent charges reported by surveyed utilities.

Figure 10. Distribution of residential stormwater utility fees. Benchmarking data can help communities understand how preliminary rates compare to those used elsewhere, but local rates should be developed using local costs and program needs.

Tax-Exempt Properties and Stormwater Utility Fees

Stormwater utility fees are service-based charges, not property taxes. For that reason, a property’s tax-exempt status is generally not the basis for determining whether it is billed. The key question is whether the property contributes runoff to the public stormwater system or receives **stormwater management services**.

This distinction is important because tax-exempt properties—such as schools, churches, hospitals, universities, and government facilities—often have large buildings, parking lots, and other impervious surfaces. These properties often contribute significant runoff to the public stormwater system and receive stormwater management services, making them an important consideration during rate development and stakeholder outreach.

Including example bills for tax-exempt properties during the feasibility phase can help municipalities understand potential impacts, identify concerns early, and communicate clearly with affected stakeholders. Any exclusions, credits, or adjustments should be applied consistently with the adopted rate methodology and documented as part of the program.

Table 4. Rate Structure and Billing Analysis - Typical Activities

No.	Activity	Purpose / Notes / Considerations
1	Identify potential rate structures	ERU, tiered, impervious area
2	Estimate total billable area	Based on GIS analysis
3	Calculate the planning-level unit rate	Based on the total cost and area
4	Develop example residential bills	Typical SFR parcels
5	Develop example nonresidential bills	Large and tax-exempt parcels
6	Evaluate stakeholder impacts	Equity and high-visibility properties
7	Compare alternative approaches	Differences in outcomes and communication

3.6 Billing and Administrative Feasibility

Key Question: *Does the municipality have the organizational structure, technical systems, and operational capacity required to bill, administer, and sustain a stormwater management utility?*

Why This Matters: *A stormwater utility requires more than a rate structure. Municipalities must be able to maintain billing data, calculate and apply fees, administer credits and appeals, respond to customer questions, and maintain records over time. Evaluating administrative feasibility early helps identify system limitations, staffing needs, and implementation challenges before moving into detailed program development.*

This step helps ensure the utility is administered consistently, transparently, and in accordance with the adopted methodology.



Stormwater utilities require billing and administrative systems that can support parcel-based charges and ongoing program management. At the feasibility stage, municipalities should evaluate whether existing systems and staff can support these functions and identify any major constraints that could affect implementation.

Unlike water and sewer utilities, which are typically based on metered usage, stormwater utilities are generally based on **parcel** characteristics such as **impervious area**. This difference can create challenges if existing billing systems are designed primarily for meter-based accounts. As part of feasibility, municipalities should assess whether stormwater fees can be incorporated into an existing billing system, such as a water or sewer bill, or whether a separate billing approach would be required.

Key considerations include how parcel-based charges will be calculated and applied, how multiple parcels under common ownership will be handled, and how updates to parcel data—such as new development, parcel splits, or ownership changes—will be incorporated over time. Municipalities should also consider how credits, adjustments, and appeals would be administered, as these processes require coordination between technical staff and billing or customer service personnel.

Administrative capacity is another important factor. Stormwater utilities often generate a high volume of questions when first introduced, particularly regarding how fees are calculated and why certain properties are billed differently. Municipalities should evaluate whether existing staff can meet these needs or whether additional resources are required.

This evaluation is not intended to finalize billing or administrative procedures, but to confirm that a feasible implementation path exists and to identify any major issues that would need to be addressed in Phase 2.

3.7 Initial Public Outreach

Key Question: *What stakeholder concerns, opportunities, and implementation issues should be understood before deciding whether to proceed?*

Why This Matters: *Stormwater utilities are often highly visible because they create a new fee that is billed directly to property owners. Early outreach helps communities understand stakeholder concerns, identify potential implementation challenges, improve communication strategies, and build awareness before formal program development and adoption begin. **This step helps demonstrate that the utility is being developed through a transparent and informed decision-making process.***



Public outreach is a critical component of stormwater utility feasibility. Early engagement helps communities understand the purpose of a stormwater utility, identify stakeholder concerns, and reduce the risk of opposition during later phases of development. Stormwater utilities often raise questions about fairness, cost, and applicability, particularly for property owners who have not historically paid directly for stormwater services.

At the feasibility stage, outreach is focused on building awareness and gathering input rather than presenting final decisions. Municipalities should identify key stakeholder groups and evaluate how the proposed stormwater utility may affect them. Using the parcel-level GIS analysis and preliminary billing information developed during the feasibility process, municipalities should identify properties expected to have the largest stormwater utility fees. These properties frequently include major commercial, industrial, institutional, and tax-exempt landowners such as hospitals, universities, schools, airports, and large corporate campuses.

Because these stakeholders often experience some of the highest fees and may have significant interest in how the utility is structured, early engagement is strongly recommended. Municipalities should consider developing example bills for major anticipated ratepayers and conducting targeted outreach to explain the purpose of the utility, how fees are calculated, and how revenues will be used. Addressing questions and concerns early in the feasibility process can improve communication, identify potential implementation issues, and support more informed decision-making before formal adoption is considered.

Another important group includes homeowners' associations (HOAs) and residential developments with privately maintained stormwater infrastructure. In many communities, responsibilities for maintaining private detention or retention facilities are not well understood or consistently addressed over time. These groups may have questions about stormwater fees, maintenance obligations, inspections, and potential credit opportunities for privately maintained stormwater systems. Early outreach and education can help clarify expectations, improve understanding of long-term maintenance responsibilities, and reduce confusion or opposition during implementation.

Typical outreach activities include initial meetings or briefings with key stakeholders, presentations to elected officials, and the development of basic communication materials explaining the utility's purpose and how fees would be calculated. Presenting example billing scenarios can be particularly effective, as they help stakeholders understand potential impacts in practical terms.

Stakeholder feedback should be documented and used to inform feasibility analysis, particularly in areas such as rate structure, billing approach, and communication strategy.

Early outreach is often a key factor in determining whether a stormwater utility is successful, as it helps build understanding and trust before formal adoption is considered.

In many communities, a significant portion of public outreach focuses on explaining the stormwater system itself. Property owners may not understand the extent of the infrastructure, services, and activities involved in stormwater management, including storm sewers, culverts, detention facilities, drainage channels, flood mitigation projects, regulatory compliance activities, and ongoing operation and maintenance. Helping stakeholders understand what the stormwater system includes, the services it provides, and the costs associated with those services is often an important first step in building support for a stormwater utility.

Public outreach should also address the differences between tax-based funding and stormwater utility fees. When stormwater services are funded through property taxes or general funds, the costs are typically allocated based on taxable value rather than stormwater impact. As a result, some properties may pay more than their relative contribution to runoff while others may pay less. Stormwater utility fees are often evaluated as a more equitable funding approach because they are generally based on factors related to runoff generation and demand on the stormwater system, such as impervious area, rather than property value.

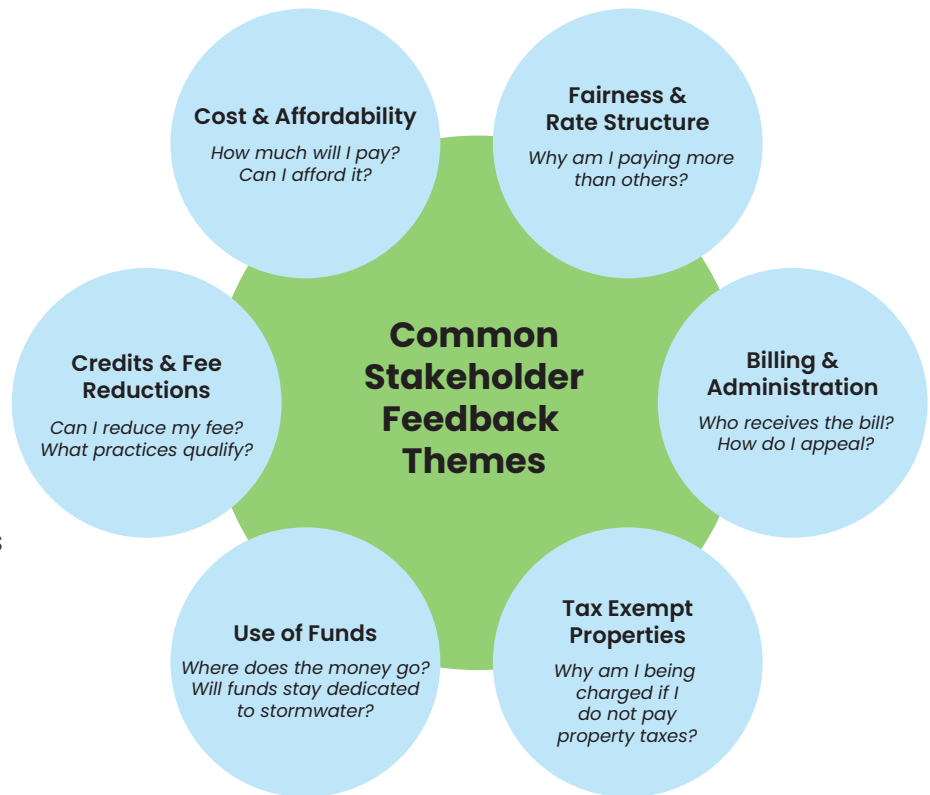


Figure 11. Common Stakeholder Feedback Themes

3.8 Phase 1 Decision Point

Key Question: *Based on the feasibility analysis, should the community proceed with stormwater utility development?*

Why This Matters: *The purpose of Phase 1 is not to establish a stormwater utility. It is to determine whether a stormwater utility is appropriate, feasible, and supportable within the community. By this stage, the municipality should understand the services to be funded, anticipated costs, potential rates, administrative requirements, stakeholder concerns, and implementation challenges. This information provides the basis for an informed decision on whether to proceed to Phase 2. **This step brings together the technical, financial, administrative, and stakeholder considerations needed to support an informed and defensible decision.***



Phase 1 Decision-Readiness Checklist

Is the Municipality Ready to Move Forward with Phase 2 – Program Development, Adoption, and Implementation?

SIX KEY STEPS MUST BE COMPLETED BEFORE PROCEEDING TO PHASE 2

- 1 Prepare feasibility report and presentation
- 2 Identify implementation considerations
- 3 Evaluate overall viability
- 4 Identify key risks and issues
- 5 Outline implementation strategy
- 6 Leadership or governing body approves next steps

Figure 12. Phase 1 Decision Readiness Checklist

By the end of Phase 1, the municipality should have defined stormwater services and levels of service, documented stormwater costs and funding gaps, evaluated data and system readiness, assessed billing and administrative capacity, and developed preliminary rate estimates. Initial public outreach should provide insight into stakeholder perspectives, including potential concerns, particularly from large or high-visibility properties such as schools, hospitals, churches, homeowners’ associations, and major commercial or institutional landowners. Together, these elements provide a comprehensive understanding of program feasibility, anticipated costs, and community impacts.

At this stage, it is critical to identify any barriers to implementation, including data limitations, billing system constraints, staffing capacity, administrative complexity, legal considerations, or stakeholder concerns. These findings should be used to develop strategies to address gaps and mitigate risks, ensuring the community moves forward with a clear and realistic understanding of the effort required and the issues that must be resolved.

Based on this assessment, the municipality should outline a preliminary implementation strategy that identifies key steps, responsible parties, and coordination needs necessary to establish the stormwater management utility. This includes considerations such as ordinance development, system and data enhancements, staffing, public outreach, planning amendments, legal review, and implementation sequencing. The objective is not to finalize implementation details, but to confirm that a feasible and actionable path forward exists.

The results of Phase 1 – Feasibility and Decision Readiness are typically documented in a feasibility report, presentation, or similar summary document provided to municipal leadership and the governing body for discussion and direction. Depending on the size and structure of the community, this process may range from informal work sessions to more formal council presentations and public discussions. Figure 9. Common stakeholder concerns during stormwater utility feasibility. Early outreach helps communities identify questions related to cost, fairness, billing, credits, tax-exempt properties, and the use of funds. Understanding these concerns during feasibility can improve communication strategies and help address potential implementation challenges before formal adoption is considered.

Public outreach conducted during feasibility should provide insight into stakeholder perspectives, including areas of concern or potential opposition. Particular attention should be given to large or high-visibility properties, such as schools, hospitals, churches, HOAs, and major commercial or institutional landowners. Preliminary GIS and billing analyses can help identify properties that are likely to have the highest stormwater utility fees and may benefit from targeted outreach. This feedback helps identify issues that may affect the program’s success and informs whether additional refinement is needed before proceeding.



Figure 13. Municipal leadership and decision-makers review feasibility findings, implementation considerations, and stakeholder input before determining whether to proceed with stormwater management utility development.

The results of the Phase 1 – Feasibility and Decision Readiness phase are typically documented in a feasibility report, presentation, or similar summary document provided to municipal leadership and the governing body for discussion and direction. Depending on the size and structure of the community, this process may range from informal work sessions to more formal council presentations and public discussions.

The outcome of Phase 1 is typically one of several paths:

- ◆ Proceed to Phase 2 – Program Development, Adoption, and Implementation.
- ◆ Refine the Phase 1 – Feasibility and Decision Readiness analysis if key questions remain unresolved or additional information is needed.
- ◆ Address identified implementation barriers, funding gaps, data limitations, or stakeholder concerns before proceeding to Phase 2.
- ◆ Pause or discontinue the effort if the analysis indicates that a stormwater management utility is not appropriate or feasible at that time.

Framing the decision process in this way helps ensure that communities move forward with a clear understanding of both the opportunities and challenges associated with establishing a stormwater utility and the organizational commitment required for successful implementation.

Table 5. Decision Point – Typical Activities

No.	Activity	Purpose / Notes / Considerations
1	Prepare feasibility report and presentation	Summarize feasibility findings, assumptions, rates, stakeholder impacts, implementation considerations, and recommended next steps
2	Identify implementation considerations	Evaluate billing systems, staffing needs, data requirements, legal review, administrative responsibilities, and coordination needs
3	Evaluate overall viability	Assess technical, financial, administrative, legal, and community considerations
4	Identify key risks and barriers	Identify funding gaps, data limitations, stakeholder concerns, implementation challenges, and other factors that may affect success
5	Outline implementation strategy	Identify key implementation steps, responsible parties, sequencing, and actions needed to proceed to Phase 2
6	Leadership or governing body approves next steps	Determine whether to proceed to Phase 2, refine the analysis, address barriers, or discontinue the effort

4

Phase 2 – Program Development, Adoption, and Implementation

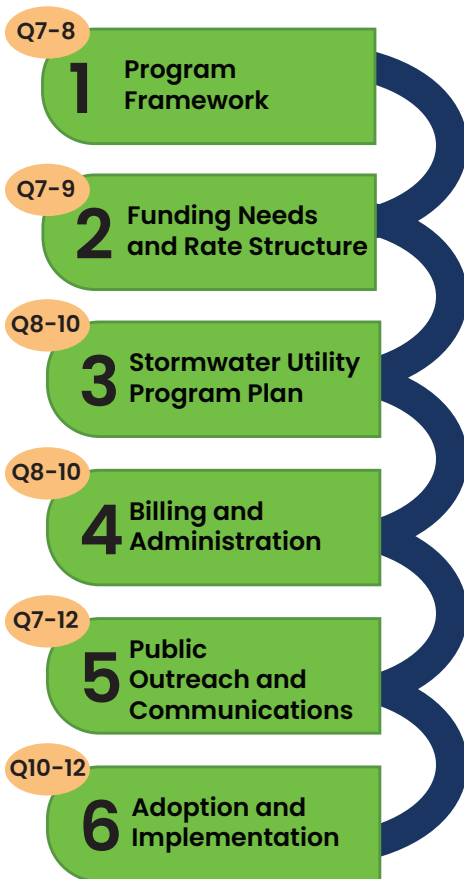


Figure 14. Phase 2 – Program Development, Adoption, and Implementation.

Phase 2 builds on the feasibility analysis and focuses on defining, adopting, and implementing the **stormwater management utility**. During this phase, the municipality establishes the program framework, finalizes funding needs and rate structure, develops the **stormwater utility program plan**, and defines billing and administrative procedures. These elements are formalized through ordinance and supporting documents and implemented through coordinated efforts across departments.

Phase 2 Process Overview

The process is organized around six primary steps, beginning with development of the program framework and concluding with utility adoption and implementation. While the steps are presented in a logical sequence, some activities occur concurrently and information developed during one step may influence decisions made in another.

The quarter references shown in the figure provide a conceptual schedule illustrating when each activity typically occurs during the overall utility development process. These timeframes are intended as planning guidance only and correspond to the example implementation schedule presented in Section 5. Actual schedules will vary considerably based on community

size, data availability, staffing, governance processes, legal review, public outreach needs, and the amount of planning and analysis already completed. Communities with existing stormwater master plans, funding analyses, asset management programs, or other supporting information may be able to complete portions of the process more quickly than shown, while more complex efforts may require additional time. The Phase 2 steps shown in Figure 14 are discussed in greater detail in Sections 4.1 through 4.6.

4.1 Program Framework

Key Question: *What services, activities, and properties will be included in the **stormwater management utility** program?*

Why This Matters: *The program framework establishes the scope of the utility and provides the foundation for rates, billing, administration, and implementation. Clearly defining the services provided, **service area**, and eligible activities helps ensure that the utility is administered consistently and that fees are tied to **stormwater management services**. Building on the feasibility-level framework developed during Phase 1, this step transforms that framework into a defined and implementable stormwater management utility program.*



Building on the stormwater services and program scope defined during Phase 1, the municipality establishes the program framework that will govern implementation of the stormwater management utility. The stormwater utility establishes a defined program for managing stormwater runoff and funding related services. The program framework identifies the services to be provided, the activities and facilities that will be supported, and the **service area** to which the utility applies. These elements build on the work completed during the Phase 1 – Feasibility and Decision Readiness phase and form the foundation for the utility’s rate structure, administrative framework, and supporting implementation documents.

Stormwater management services include the conveyance, storage, treatment, and regulation of stormwater runoff for flood control, public health and safety, and water quality protection. These services should be clearly defined to ensure that all stormwater utility fees are used for stormwater-related purposes and are consistent with applicable legal requirements.

The program typically includes operation and maintenance of stormwater infrastructure, capital improvements to address flooding and system capacity, regulatory compliance activities, stormwater planning and asset management, and program administration. Clearly defining these services establishes the basis for cost recovery and supports proportional and defensible fees.

The stormwater utility service area generally includes all **parcels** within the municipal boundary that contribute runoff to the public stormwater system. Parcels are evaluated based on their connection to or impact on the system, with the intent of applying fees consistently and equitably across property types.

The program framework should also define which activities and costs are eligible for funding through the utility. Stormwater utility fee revenue is limited to stormwater-related purposes and should not be used for unrelated municipal functions. Establishing these boundaries supports transparency and long-term program credibility.

This program framework serves as the basis for developing revenue requirements, rate structures, billing systems, and administrative procedures, and is formalized through the **Stormwater Utility Program Plan** and the ordinance adopted by the municipality.

Table 6. Program Framework – Key Elements

No.	Element	Purpose / Notes / Considerations
1	Confirm stormwater management services and program scope	O&M, capital, compliance, planning, administration
2	Define service area	Typically, all parcels contributing runoff within the municipal boundary
3	Finalize program boundaries and service area	Stormwater-related functions only
4	Establish program boundaries	Clarify what is and is not funded
5	Coordinate across departments	Engineering, finance, billing, and administration

4.2 Funding Needs and Rate Structure

Key Question: *How will stormwater utility costs be allocated among properties?*

Why This Matters: *The rate structure translates stormwater program costs into parcel-level charges. A well-documented methodology helps ensure that fees are applied consistently, communicated clearly, and reasonably related to the services provided. **This step helps demonstrate that stormwater utility fees are proportional to the documented cost of providing stormwater services.***



4.2.1 Funding Needs

Funding needs must be clearly linked to the services defined in the program framework. This connection is essential to demonstrate that fees are proportional to the cost of service and are used exclusively for stormwater-related purposes.



Figure 15. Stormwater utility rates are developed based on the documented costs of providing stormwater management services, maintaining infrastructure, meeting regulatory requirements, and implementing capital improvements.

4.2.2 Rate Structure Approach

The Stormwater Utility Program Feasibility phase evaluated one or more potential rate structures and developed planning-level billing information. During program development, the municipality selects and refines the preferred rate structure, confirms the underlying assumptions and methodology, and establishes the framework that will be used for billing, administration, credits, and appeals. The selected approach should balance equity, simplicity, transparency, and administrative feasibility while remaining understandable to customers.

The rate structure should also incorporate a credit or adjustment framework. Credits allow property owners to reduce fees by implementing approved stormwater management practices that reduce runoff, reduce pollutant loading, or otherwise reduce demand on the municipal stormwater system. Because credits can reduce utility funding, estimated credit participation should be considered during rate development so that the utility is not underfunded.

The credit approach should be clearly defined, limited in scope, and supported by verification and administrative procedures to maintain fairness, revenue stability, and long-term program sustainability.

Additional information on credits is provided in Appendix E.



Basic Rate Calculation Logic

At a basic level, stormwater utility rates are developed by dividing the funding need by the total billable units, such as **ERUs** or measured **impervious area**. The resulting unit rate is then applied to **parcels** according to the selected rate structure, with adjustments as needed for credits, exclusions, or special conditions. Final rates should be supported by documented assumptions, local data, financial review, and governing body action.

4.2.3 Parcel Data and Billing Methodology

Modern rate structures are supported by parcel-level data using GIS. Impervious surface area is quantified across parcels, and a billing rate is calculated based on the total funding need and the total billable area. This approach allows fees to be distributed proportionally based on each property's stormwater runoff contribution.

As part of program development, municipalities should finalize the **billing dataset**, confirm assumptions used in the analysis, and ensure that the methodology is clearly documented. This includes defining how impervious areas are measured, how parcels are classified, and how special cases (Section 4.2.4) are handled.

Billing scenarios developed during feasibility should be refined and confirmed. These examples provide a clear understanding of how fees apply to typical residential properties and to larger or high-visibility properties, such as commercial sites, institutions, and tax-exempt organizations. This information is important for both decision-making and communication.

4.2.4 Special Cases and Proportionality Considerations

Stormwater utility rates are based on the stormwater services provided, which are defined by a property's use of or connection to the municipal stormwater system. Fees are not based on property ownership, tax status, or total **parcel** size, but on the extent to which a property contributes runoff to the public system and receives **stormwater management services**.

In some cases, properties may not discharge stormwater to the municipal system or may manage runoff entirely through privately owned infrastructure. This condition is most common on large campuses, industrial facilities, airports, or institutional properties that discharge directly to a river or stream without using municipal pipes, channels, or other stormwater facilities. In these situations, charging a full stormwater utility fee may not be proportional to the service provided. Utilities should establish clear criteria and documentation requirements—such as drainage maps or outfall information—to verify **hydraulic independence** and support exclusions or partial billing decisions. These determinations should be applied consistently and documented to maintain transparency and defensibility.

Similar principles apply to public roadways, which are typically treated as part of the **major drainage system** rather than as fee-paying **parcels**. The **major drainage system** generally includes streets, open channels, rivers, and other conveyance features that route larger storm events, while the **minor drainage system** consists of storm sewers and related infrastructure serving individual properties. Because roads function as core components of the drainage system, many utilities do not assess stormwater fees on public streets. These distinctions should be clearly defined and documented as part of the overall fee methodology.

Clearly defining how special cases are handled is an important component of rate structure development. Establishing consistent rules for exclusions, partial billing, and unique property conditions helps ensure that the utility is applied equitably and remains aligned with legal and proportionality requirements.

4.2.5 Documentation and Implementation

The final rate structure, assumptions, and supporting data should be documented as part of the **Stormwater Utility Program Plan** and reflected in the ordinance. These elements form the basis for billing, administration, and ongoing program management. Clear documentation of the rate methodology, assumptions, and data sources is essential to demonstrate that fees are proportional to the services provided and to support legal defensibility.

Table 7. Funding and Rate Structure – Key Elements

No.	Element	Purpose / Notes / Considerations
1	Define funding need	O&M, capital, compliance, administration, planning
2	Link costs to services	Maintain proportionality and defensibility
3	Select rate structure	ERU, impervious area, or hybrid approach
4	Finalize billing dataset	Parcel data and impervious area
5	Confirm methodology and assumptions	Document calculations and rules
6	Refine example billing	Residential, commercial, and institutional parcels
7	Establish credit framework	Define eligibility and verification
8	Document program elements	Include in the plan and ordinance

4.3 Stormwater Utility Program Plan

Key Question: *How will the stormwater utility be documented and administered?*

Why This Matters: *The **Stormwater Utility Program Plan** serves as the primary supporting document for the utility and brings together the services, costs, rates, billing methodology, and administrative procedures into a single framework for implementation. **This step helps create the administrative record supporting the utility's development and operation.***



The Stormwater Utility Program Plan builds on the analyses and assumptions developed during the Stormwater Utility Program Feasibility phase and formalizes the utility framework for adoption and implementation. While communities may use different terminology—such as a rate study, utility plan, level of service analysis, or business plan—the purpose of the Plan is to clearly define how the stormwater utility will operate and how stormwater services will be funded and administered.



Figure 16. The stormwater management utility program plan documents the services, funding approach, rates, administrative procedures, and implementation framework that will guide the utility.

The Plan should also define procedures for credits, billing adjustments, and appeals. These procedures help ensure that the utility is implemented fairly and transparently and that property owners have a clear process for resolving questions or disputes. More detailed technical procedures—such as GIS processing methods, credit manuals, or inspection protocols—may be maintained as separate supporting documents.

Although a formal plan is not currently required under Michigan law to establish a stormwater utility, communities should maintain clear documentation supporting the utility's costs, services, fee methodology, and administrative procedures. This documentation is important for transparency, implementation, and legal defensibility.

The Plan should be written at a level that is understandable to both staff and the public. It should provide enough detail to support implementation while remaining flexible enough to accommodate future updates to rates, service levels, regulatory requirements, and program administration.

The Plan is not intended to be a static document. Communities should periodically review and update the Plan to reflect changes in infrastructure needs, operational priorities, development patterns, regulatory requirements, and funding needs. Review intervals of approximately five years are common, although communities may choose more frequent updates based on local needs, regulatory requirements, or program changes. The Plan should identify the expected review schedule and the department or position responsible for coordinating future updates. Regular updates help ensure that the utility remains aligned with community needs and continues to operate in a transparent, equitable, and defensible manner.

Communities should also consider whether stormwater management goals, infrastructure needs, flooding considerations, resilience objectives, and stormwater utility policies are adequately reflected in the comprehensive master plan and other community planning documents. Where appropriate, updates to these documents may help improve coordination between land use planning and long-term stormwater management.

Table 8. Stormwater Utility Program Plan – Key Elements

No.	Element	Purpose / Notes / Considerations
1	Define service area	Identify parcels subject to the utility
2	Define services provided	O&M, capital, compliance, administration
3	Establish fee methodology	Based on parcel data and impervious area
4	Define properties subject to fees	Developed parcels contributing runoff
5	Establish credit procedures	Eligibility, documentation, verification
6	Establish an appeals process	Process for reviewing disputes
7	Document assumptions and methods	Ensure consistency with the ordinance
8	Define update requirements	Periodic review and revision of the plan

4.4 Billing and Administration

Key Question: *How will fees be billed, administered, and maintained over time?*

Why This Matters: *Billing and administration procedures convert the adopted rate structure into an operational utility program. Clear procedures help ensure consistency, transparency, and effective customer service. This step helps ensure that the utility is implemented consistently and in accordance with the adopted methodology.*



The **stormwater** utility must establish a billing and administrative framework that supports accurate fee calculation, consistent application across **parcels**, and effective customer service. These systems translate the rate structure into an operational program and are critical to the utility’s overall success.

Billing is based on parcel characteristics rather than metered usage. Municipalities must implement processes to calculate charges using parcel data, apply those charges consistently, and update billing information as conditions change. The selected billing approach may use an existing utility bill, such as water or sewer, or a separate billing system. The chosen method should be reliable, cost-effective, and compatible with parcel-based data. Customer-facing bills or bill inserts should clearly identify the property, billing basis, fee amount, customer service contact information, and where property owners can obtain more information about credits, adjustments, or appeals.

Table 9. Common Billing Considerations

Topic	Key Decision	Practical Considerations
Billing method	Standalone bill, water/sewer bill, or other system	Parcel-based fees may not align with meter-based billing systems
Billing system	In-house or third-party	Confirm ability to handle parcel data, updates, and credits
Multi-parcel ownership	Whether to allow consolidated billing	Large entities may own many parcels and expect a single bill
Customer service	Who answers questions	Expect high call volume during rollout
Credit administration	How credits are tracked and verified	Requires staff time and periodic review
Data maintenance	Who updates parcel and impervious data	Changes affect billing and must be documented
Dispute resolution	Formal appeal process	Often defined in ordinance; may include review board
Recordkeeping	Documentation and audit trail	Supports transparency and legal defensibility

Administrative procedures must define how billing data is managed and maintained over time. This includes updating **parcel** information to reflect development, redevelopment, ownership changes, and data corrections. The Plan should identify the departments, staff positions, or outside vendors responsible for maintaining billing data, processing credits and adjustments, responding to customer inquiries, managing appeals, and updating records over time. Standardized rules for applying **impervious area** and **parcel** classifications should be established to ensure consistency and reduce disputes.

Customer service is a key component of administration. Property owners will expect clear explanations of how their fees are calculated and how they relate to stormwater services. Municipalities should establish processes for responding to questions, correcting errors, and maintaining accurate records of billing and communications.

The program must also include procedures for managing credits, adjustments, and appeals. Credits should be applied in accordance with defined eligibility criteria and verified practices. Appeals should be limited to issues such as data accuracy, parcel classification, or application of the methodology, rather than broader policy questions. Clear documentation and recordkeeping are essential to support transparency and defensibility.

Billing and administrative responsibilities often span multiple departments, including engineering, finance, and customer service. Clearly defining roles and coordination procedures helps ensure that the utility operates efficiently and that responsibilities are understood across the organization.

These systems should be fully defined prior to implementation and documented in the Plan and ordinance. Clear documentation of billing procedures, administrative responsibilities, and dispute resolution processes is important to support consistent implementation, transparency, and long-term program administration. A well-structured billing and administrative framework helps ensure that the utility is applied consistently, understood by customers, and can be maintained over time.

Table 10. Common Data Issues and Considerations

Issue	Why It Happens	Why It Matters
Parcel boundaries do not align with impervious data	Parcel maps and land cover datasets are created independently	Impervious area may not appear to match what a property owner sees on the ground
Development not reflected in current data	Land cover data are updated periodically	New or redeveloped properties may not be billed accurately until updates occur
Parcel boundaries change over time	Parcels are split, combined, or reconfigured	Fees may temporarily lag ownership or boundary changes
Data appear more precise than they are	High-resolution outputs imply exact accuracy	Can undermine credibility if limitations are not explained clearly

Municipalities should plan early for how stormwater fees will be billed, administered, and disputed. These decisions often require coordination across departments and external vendors, and they can take longer to resolve than anticipated. The clear assignment of responsibilities and documentation of procedures are essential before implementation.

Table 11. Billing and Administration – Key Elements

No.	Element	Purpose / Notes / Considerations
1	Establish billing method	Utility bill, tax bill, or standalone system
2	Apply parcel-based charges	Use impervious area and parcel data
3	Maintain billing dataset	Update for development and ownership changes
4	Define customer service procedures	Respond to inquiries and correct errors
5	Administer credits and adjustments	Based on defined eligibility and verification
6	Establish appeals process	Address data and billing disputes
7	Assign roles and responsibilities	Identify responsible departments, staff, or vendors for billing, data updates, credits, appeals, customer service, and recordkeeping
8	Document procedures	Include in the Plan and ordinance

4.5 Public Outreach and Communication

Key Question: *How will the utility be explained and communicated to stakeholders?*

Why This Matters: *Stormwater utilities are highly visible because they create a direct charge to property owners. Effective communication helps improve understanding, address concerns, and support successful implementation. This step helps support transparency and public understanding of the utility program.*



Public outreach is a critical component of stormwater utility implementation. While feasibility focuses on identifying concerns and gathering input, Phase 2 outreach focuses on clearly explaining the program, building understanding, and supporting adoption.

Stormwater utilities introduce a new, visible fee, and property owners will expect clear explanations of why the utility is needed, how fees are calculated, and how the fees will be used. Communication should be factual, consistent, and focused on the services provided and the benefits to the community.

Outreach efforts should be tailored to different audiences. General public communication may include website content, FAQs, and public meetings, while targeted outreach should

focus on key stakeholder groups such as large property owners, businesses, and tax-exempt organizations. These groups often have higher fees and may require more detailed, property-specific explanations.

Example billing scenarios developed during feasibility should be used to support communication, as they help translate the rate structure into understandable, real-world impacts. Providing clear examples improves transparency and reduces confusion during implementation.

Public communication materials may be organized around common customer questions, such as why the utility is needed, how the fee is calculated, who is billed, how stormwater utility fees are used, and how credits or appeals work.

Public engagement should occur prior to adoption and continue through the initial billing cycles. Early billing periods typically generate a high volume of questions, and municipalities should be prepared to respond with clear, consistent messaging. Ongoing communication helps maintain public trust and supports long-term program success.

Table 12. Example Targeted Outreach Groups

Stakeholder Group	Recommended Outreach Approach	Purpose
General public	Public meetings, website content, FAQs	Establish baseline understanding and transparency
Elected officials	Briefings and working sessions	Build understanding and consistent messaging
Internal staff	Cross-department coordination meetings	Ensure consistent responses to public questions
Business community	Meetings with chambers or business groups	Address economic and competitiveness concerns
Churches and religious institutions	Small-group or focus meetings	Address concerns from tax-exempt property owners
Large property owners (industrial, hospitals, universities)	One-on-one meetings	Explain large bills, credits, and site-specific issues
Colleges and Universities	One-on-one meetings	Explain large bills, credits, and site-specific issues
Public Schools and School Districts	Small-group or focus meetings	Address concerns from tax-exempt property owners
Airports, Rail Yards, and Transportation Facilities	One-on-one meetings	Explain large bills, credits, and site-specific issues
Federal Government Property	One-on-one meetings	Post offices, VA facilities, Federal office buildings, and military installations

Table 13. Public Outreach and Communication – Key Elements

No.	Element	Purpose / Notes / Considerations
1	Develop communication materials	Explain the purpose, rates, and use of funds
2	Conduct general public outreach	Meetings, website, FAQs
3	Engage key stakeholders	Large parcels, businesses, tax-exempt entities
4	Use example billing scenarios	Demonstrate real-world impacts
5	Support initial billing rollout	Respond to questions and concerns
6	Maintain ongoing communication	Reinforce understanding over time

4.6 Adoption and Implementation

Key Question: *What actions are required to formally establish and launch the **stormwater management utility**?*

Why This Matters: *Adoption and implementation transform the utility from a planning effort into an operational program. Clear procedures, defined responsibilities, and coordinated implementation help support a successful rollout. **This step formalizes the utility and establishes the framework for ongoing administration and management.***



Once the program framework, funding needs, rate structure, and administrative procedures have been defined, the municipality can proceed with formal adoption and implementation of the **stormwater management utility**.

Implementation of a stormwater utility typically requires adoption of both a stormwater utility ordinance and the supporting **Stormwater Utility Program Plan**. The ordinance establishes the legal authority to collect stormwater fees, defines eligible uses of revenue, and formalizes key program elements, including billing procedures, credits, and appeals. The Plan serves as the primary supporting document describing how the utility will operate and be administered.

Adoption of the ordinance and related program documents generally requires formal action by the governing body and may include public meetings or public hearings in accordance with local procedures and requirements.

Following adoption, implementation involves establishing the operational systems needed to administer the utility. This includes finalizing the **billing dataset**, integrating fees into the selected billing system, establishing administrative procedures, and coordinating staff across departments. Staff training is important to ensure that responsibilities are clearly understood and that the program is implemented consistently.



Figure 17. Adoption and implementation of a stormwater management utility typically include public engagement, governing body review, and formal approval processes.

The initial rollout of billing requires careful coordination. Municipalities should confirm that billing data is accurate, systems are functioning properly, and customer service processes are in place. Early billing cycles often generate a high volume of inquiries, and timely responses to questions and corrections are important for maintaining confidence in the program.

Some communities choose to issue draft or informational bills prior to implementation to help property owners understand how fees were calculated and identify potential data or billing issues before formal billing begins. This approach can improve transparency, reduce confusion during rollout, and provide time to correct errors before implementation. When feasible, draft or informational bills may be issued several months before formal billing begins to allow time for customer review, data corrections, and public communication.

Stormwater utilities should be managed as ongoing programs rather than one-time initiatives. Program management includes periodic rate reviews, updates to underlying data, maintenance of **credit programs**, and continued coordination across departments. Regular evaluation helps ensure that the utility remains aligned with service needs, regulatory requirements, and community expectations.

Communities should also consider whether one or more visible stormwater capital improvement or maintenance projects can be advanced soon after implementation. Early projects can help demonstrate how stormwater utility revenues are being used to address real drainage, flooding, infrastructure, or water quality needs. When feasible, these projects should be clearly communicated to the public as part of the initial rollout so property owners can see the connection between the new fee and stormwater improvements in the community.

Table 14. Adoption and Implementation

No.	Element	Purpose / Notes / Considerations
1	Adopt stormwater utility ordinance and related program documents	Establish legal authority and program structure through governing body action; a public hearing may be required depending on local procedures.
2	Finalize and adopt the Stormwater Utility Program Plan	Define services, rates, and procedures
3	Conduct pre-implementation billing review	Use draft bills to identify issues prior to launch
4	Prepare the billing system	Integrate fees and finalize the billing dataset
5	Establish administrative procedures	Billing, credits, appeals, recordkeeping
6	Train staff and coordinate departments	Define roles and responsibilities
7	Launch billing	Initiate fee collection
8	Manage initial rollout	Respond to questions and correct issues
9	Maintain an ongoing program	Update rates, data, and program elements

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5


Overall Implementation Schedule

Establishing a stormwater utility typically requires sustained effort over an extended period and coordination across multiple municipal functions. Based on experience from communities across the country, the process from initial planning through adoption and early operation commonly takes two to three years (and in some cases longer, particularly when extensive public outreach, legal review, and/or administrative coordination are required).

The steps described in this guide do not occur in a strict sequence; many activities begin early and continue in parallel as decisions are refined and implementation approaches maturity. The following implementation schedule presents a conceptual timeline illustrating how the major steps and activities commonly overlap from initial planning through adoption and early operation. The schedule is intended as a planning aid rather than a prescriptive timeline and should be adapted to reflect local conditions, governance processes, and resource availability.


Table 15 provides an example implementation schedule organized by generalized project quarters. The schedule is intended to illustrate how major activities may overlap from initial feasibility through adoption, billing, and early operation. The timing shown is conceptual and should not be interpreted as a required sequence or fixed duration. Actual schedules will vary based on community size, governance procedures, staff capacity, data availability, public outreach needs, legal review, billing system requirements, and overall implementation complexity.

Phase 1 Schedule

Step	Activity	Typical Timing	Q1	Q2	Q3	Q4	Q5	Q6
1	Define stormwater services and program scope	Early						
2	Legal authority and project team	Early and ongoing						
3	Identify costs and funding needs	Early						
4	Data foundations	Early						
5	Rate structure and preliminary billing analysis	Mid-process						
6	Billing and administrative feasibility	Mid-process						
7	Initial public outreach	Early and ongoing						
 8	Phase 1 decision point	End of Phase 1						

A vote takes place on Step 8: Phase 1 Decision Point

Phase 2 Schedule

Step	Activity	Typical Timing	Q7	Q8	Q9	Q10	Q11	Q12
1	Program framework	Early	█					
2	Funding needs and rate structure	Early and mid-process	█	█	█	█		
2.1	Funding Needs	Early and mid-process	█	█	█	█		
2.2	Rate structure approach	Early and mid-process	█	█	█	█		
2.3	Parcel data and billing methodology	Early and mid-process	█	█	█	█		
2.4	Special cases and proportionality considerations	Early and mid-process	█	█	█	█		
2.5	Documentation and implementation	Early and mid-process	█	█	█	█		
3	Stormwater utility program plan	Mid-process			█	█	█	
4	Billing and administration	Mid-process			█	█	█	
5	Public outreach and communication	Early and ongoing	█	█	█	█	█	█
 6	Adoption and implementation	Late						█

A vote takes place on Step 6: Adoption and Implementation

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A

APPENDIX: Definition of Key Terms

The following terms are commonly used in the development and administration of stormwater utilities. These definitions are provided for general understanding and may be refined or formally defined within the stormwater utility program plan or ordinance.

Appeals Process. A formal procedure that allows property owners to request review of their stormwater utility fee, typically based on data accuracy, parcel classification, or application of the rate methodology.

Billing Dataset. The compiled set of parcels, impervious area, and related data used to calculate and apply stormwater utility fees.

Credit program. A system that allows property owners to reduce their stormwater utility fees by implementing approved stormwater management practices that reduce runoff or improve water quality.

Equivalent Residential Unit (ERU). A standardized unit used to represent the average impervious area of a typical single-family residential property. ERUs are often used as the basis for calculating stormwater fees, with nonresidential properties assigned fees proportional to their impervious area relative to one ERU.

Hydraulic Independence. A condition in which a property's stormwater runoff does not discharge to the municipal stormwater system, typically due to direct discharge to a natural waterbody or complete on-site management.

Impervious Area. Surfaces that prevent or significantly reduce stormwater infiltration into the ground, thereby increasing runoff. Common examples include rooftops, pavement, sidewalks, and compacted gravel surfaces.

Major Drainage System. Components of the stormwater system designed to convey larger storm events, typically including streets, open channels, rivers, and other large conveyance features.

Minor Drainage System. Components of the stormwater system designed to manage more frequent, smaller storm events, typically including storm sewers, catch basins, and local drainage infrastructure serving individual properties.

Parcel. A unit of land defined for ownership and taxation purposes. Stormwater utility fees are typically assessed at the parcel level based on characteristics such as impervious area.

Service Area. The geographic area within which the stormwater utility applies, typically defined by municipal boundaries or the extent of the public stormwater system.

Stormwater. Stormwater refers to runoff from storms, rainwater, snowmelt runoff, and other surface water runoff or drainage.

Stormwater Management Services. Activities related to the conveyance, storage, treatment, management, and regulation of stormwater runoff for purposes including flood control, protection of public health, safety, and welfare, water quality protection, regulatory compliance, infrastructure operation and maintenance, capital improvements, planning, asset management, and program administration.

Stormwater Management Utility. A funding mechanism used by a municipality to plan, operate, maintain, improve, and administer stormwater infrastructure and provide stormwater management services. Costs are typically recovered through user fees that are reasonably related to the stormwater services provided. The term Stormwater Utility (or simply Utility) may be used as shorthand for Stormwater Management Utility.

Stormwater Utility Program Plan. The primary supporting document describing how a stormwater utility will operate, including the services provided, funding needs, rate methodology, billing procedures, credits, appeals, administrative responsibilities, and implementation framework.

B

APPENDIX: Legal Considerations in Michigan

Michigan has one of the most complex legal environments for stormwater utilities in the United States. However, Michigan law also contains multiple statutory and constitutional provisions that provide local governments with authority to establish, finance, and operate stormwater management programs and utilities. Depending on the type of municipality or public entity involved, this authority may arise from several sources, including the following:

- ◆ The Revenue Bond Act of 1933, 1933 PA 94, MCL 141.101 et seq.;
- ◆ The Home Rule City Act, 1909 PA 279, MCL 117.1 et seq.;
- ◆ The General Law Village Act, 1895 PA 3, MCL 61.1 et seq.;
- ◆ The Charter Township Act, 1947 PA 359, MCL 42.1 et seq.; and
- ◆ The Michigan Drain Code of 1956, 1956 PA 40, MCL 280.1 et seq.

These statutes collectively authorize municipalities and public entities to acquire, construct, maintain, operate, finance, and charge fees for public utility and drainage-related infrastructure, including stormwater systems. The Revenue Bond Act also specifically authorizes municipalities to impose and collect “charges, fees, rentals, or rates” for public improvements and utility systems, including stormwater systems, and further provides that the Act “shall be liberally construed” to effect its public purposes.

In addition, municipalities may rely on statutory lien authority and related collection mechanisms authorized under State law and local ordinance for utility charges, special assessments, and unpaid public utility fees. Depending on the utility’s structure, this authority may arise from provisions of the Revenue Bond Act, municipal charter authority, special assessment statutes, the General Property Tax Act, or locally adopted ordinances authorized under home rule powers. Together, these statutes provide an important legal framework supporting local stormwater management programs and utility financing in Michigan.

Michigan’s legal environment is also shaped by the Headlee Amendment to the Michigan Constitution, adopted by voters in 1978 and codified principally in Const 1963, art 9, §§ 25–34. The Headlee Amendment provides guardrails on local governments’ ability to impose new taxes or increase existing taxes without voter approval. The Headlee Amendment has become central to litigation involving stormwater utilities and other municipal fees because it prohibited local governments from levying “any tax not authorized by law or charter” when

the section was ratified, and prohibits increasing the rate of existing taxes without voter approval. As a result, the legal distinction between a valid user fee and an unconstitutional tax is central to the defensibility of stormwater utilities in Michigan.

The leading Michigan case addressing this issue is *Bolt v. City of Lansing*, 459 Mich. 152, 587 N.W.2d 264 (1998). In *Bolt*, the Michigan Supreme Court invalidated Lansing's stormwater service charge, concluding that the charge functioned as a tax rather than a permissible user fee under the Headlee Amendment. The Court acknowledged that there is "no bright-line test" distinguishing taxes from fees, and established what has become known as the "Bolt factors" or "Bolt test" for evaluating municipal charges.

Under *Bolt*, courts generally examine whether: (1) the charge serves a regulatory or service-related purpose rather than a general revenue-raising purpose; (2) the amount charged is reasonably proportionate to the cost of the service or benefit provided; and (3) the charge is voluntary in nature, meaning property owners have some ability to limit or avoid the charge. Importantly, the Bolt factors are to be evaluated based on the totality of the circumstances, and all three factors do not need to be present for a charge to be considered a user-fee opposed to a tax.

Since *Bolt* was decided, Michigan courts have struggled to apply these factors consistently across a wide variety of municipal charges and utility programs. The result has been a substantial body of case law that many commentators, municipalities, and practitioners view as difficult to reconcile. Courts have applied the Bolt framework not only to stormwater utilities, but also to franchise fees, utility charges, building department fees, public safety fees, and other municipal funding mechanisms. In many cases, the analysis has been highly fact-specific, with different courts emphasizing different Bolt factors depending on the nature of the charge at issue. This has created uncertainty for local governments attempting to structure legally defensible enterprise funds and utility fees. Several communities, including Lansing, Jackson, and Royal Oak, either repealed or modified stormwater utility programs following litigation or concerns regarding compliance with Bolt.

At the same time, subsequent case law has clarified that Bolt does not prohibit stormwater utilities or municipal user fees altogether. Rather, the cases emphasize that fees must be carefully structured, documented, and administered as true service-based charges. A defensible stormwater utility should therefore have a clear stormwater management purpose, a documented engineering and financial basis, a reasonable relationship between the fee and the burdens or benefits associated with runoff, and restrictions ensuring that revenues are used solely for stormwater-related purposes. Courts have also looked favorably on utilities that maintain dedicated enterprise funds, provide credits or offsets where appropriate, conduct periodic rate studies, and support fee methodologies with technical documentation.

Importantly, the Michigan Constitution also contains protections for municipal authority that must be considered alongside the Headlee Amendment. Article VII, Section 34 of the Michigan Constitution provides that "[t]he provisions of this constitution and law concerning counties, townships, cities and villages shall be liberally construed in their favor." Const 1963, art 7, § 34. This provision applies to the Headlee Amendment, and Michigan courts have

repeatedly recognized this constitutional directive when evaluating municipal powers and local utility programs. Existing case law interpreting municipal authority, combined with Article VII, Section 34’s liberal-construction mandate, supports the principle that municipal ordinances, utility systems, and fee structures should generally be presumed valid and reasonable unless clearly shown otherwise.

Proposed legislation, including Michigan Senate Bill 441 of 2025, seeks to provide a clearer, more explicit statutory framework for stormwater utilities. While SB 441 has not been enacted, many of the concepts reflected in the legislation—such as proportional fee structures, dedicated use of revenues, supporting program documentation, fee reductions or credits, appeals procedures, public hearing requirements, and periodic program review—are consistent with best practices already emphasized by Michigan courts and stormwater utility experience nationwide.

The following case summaries provide a plain-language overview of selected Michigan cases and examples most relevant to stormwater utility design. They are provided for general educational purposes, are not intended as legal advice, and should not be treated as an exhaustive legal review. Municipalities should consult legal counsel when evaluating, designing, financing, or adopting a stormwater utility.

Key Michigan Stormwater Utility Cases and Takeaways

The cases below illustrate how Michigan courts and communities have addressed the distinction between stormwater-related user fees and taxes. The practical lessons are especially important for program design, rate methodology, documentation, public communication, and adoption.

***Bolt v. City of Lansing*, 459 Mich. 152; 587 N.W.2d 264 (1998)**

Bolt is the foundational Michigan case for evaluating whether a stormwater charge is a valid user fee or a tax. The Michigan Supreme Court held that Lansing’s stormwater service charge was a tax requiring voter approval under the Headlee Amendment.

The Court identified three primary characteristics used to distinguish a fee from a tax: whether the charge serves a regulatory rather than a revenue-raising purpose; whether the charge is proportionate to the necessary costs of the service; and whether the charge is voluntary. The Court was concerned that Lansing’s charge funded broad public improvements and long-term infrastructure benefits rather than simply defraying the cost of a specific regulatory service.

The practical lesson from *Bolt* is that a stormwater utility fee must do more than generate revenue for stormwater-related projects. It must be structured and documented as a charge for stormwater services provided to or required by the properties being billed.

A later Court of Appeals decision following remand, *Bolt v. City of Lansing*, 238 Mich. App. 37; 604 N.W.2d 745 (1999), addressed remedies and related issues after the Supreme Court decision. It is generally less important for utility design than the Supreme Court's 1998 decision, but it reinforces the consequences of an improperly structured charge.

County of Jackson v. City of Jackson, 302 Mich. App. 90; 836 N.W.2d 903 (2013)

Jackson is often cited as evidence that stormwater utilities are not viable in Michigan, but that is not the correct takeaway. The Michigan Court of Appeals struck down Jackson's stormwater management charge because the Court viewed the charge as functioning primarily as a tax.

Several factors contributed to that conclusion. The utility appeared to shift costs for pre-existing activities from the general fund and street funds to a new charge. The Court found that the charge had an overriding revenue-generating purpose, lacked a sufficient particularized benefit to the properties being billed, was not adequately proportional to stormwater service use, and was effectively compulsory.

The practical lesson from *Jackson* is that communities should not create a stormwater utility simply to replace general fund revenue without clearly defining stormwater services, documenting their costs, demonstrating proportionality, and explaining how the fee relates to the property's use of or impact on the stormwater system.

Platt Convenience, Inc. v. City of Ann Arbor, Court of Appeals No. 359013, issued October 4, 2024; leave to appeal denied, 25 N.W.3d 320 (Mich. 2025)

Platt is the most important recent Michigan case supporting the viability of stormwater utilities when they are carefully structured. The Michigan Court of Appeals upheld Ann Arbor's stormwater utility fee against a Headlee challenge, and the Michigan Supreme Court later denied leave to appeal.

The Court of Appeals applied the Bolt framework and found that Ann Arbor's stormwater charge was a valid user fee rather than an unconstitutional tax. Important factors included the City's defined stormwater program, regulatory purpose, impervious-area-based methodology, use of a separate stormwater enterprise fund, and documentation connecting charges to stormwater services. The Court found that the charge was effectively compulsory, but that factor did not outweigh the regulatory purpose and proportionality considerations.

The practical lesson from *Platt* is that a Michigan stormwater utility can be legally defensible when the fee is tied to stormwater services, supported by a documented methodology, and administered through clear program and ordinance structures. *Platt* should not be read as a blanket approval of every stormwater utility, but it provides important support for carefully designed programs.

Gottesman v. City of Harper Woods, Court of Appeals No. 344568, unpublished opinion issued December 3, 2019; Michigan Supreme Court order issued September 29, 2021

Gottesman is an unpublished decision and should be treated as a cautionary example rather than a controlling authority. The case involved a challenge to an impermeable-acreage charge imposed by the City of Harper Woods. The Court of Appeals decision raised concerns about the structure and defensibility of the charge, including issues related to proportionality, mandatory application, and collection features. The Michigan Supreme Court later vacated the Court of Appeals judgment and remanded the case for further consideration of specific issues, including whether the charge was authorized before the Headlee Amendment.

The practical lesson from *Gottesman* is not that stormwater fees based on impervious area are invalid. Rather, the case reinforces the importance of documenting the legal authority, cost basis, proportionality, billing methodology, and collection procedures supporting the charge.

Detroit Drainage Fee Litigation, including *Binns v. City of Detroit* and *Detroit Alliance Against the Rain Tax v. City of Detroit*, Court of Appeals Nos. 337609 and 339176

Detroit’s drainage charge litigation provides an important modern example, but it should be described carefully because the procedural history is complex and the Court of Appeals decisions are unpublished. The litigation involved challenges to Detroit’s drainage charge as an unauthorized tax under the Headlee Amendment. After remand and additional proceedings, including a special master process, the Court of Appeals concluded in 2024 that the drainage charge was a valid user fee and denied the plaintiffs’ relief.

Important considerations included Detroit’s combined sewer system, Clean Water Act and NPDES-related obligations, impervious-area-based methodology, direct-discharge adjustments, and green infrastructure credits. The practical lesson from Detroit is that detailed cost allocation, stormwater-specific methodology, credits, adjustments, and technical documentation can support defensibility. Because Detroit’s system and litigation history are unusual, communities should work with legal counsel before relying on this example for local utility design.

Related Michigan Fee-versus-Tax Cases

The following cases are not stormwater utility cases, but they are useful because they apply similar Headlee / Bolt principles in related utility or municipal fee contexts. They should be used as background for understanding fee-versus-tax analysis, not as a direct precedent for a stormwater utility.

Shaw v. City of Dearborn, 329 Mich. App. 640; 944 N.W.2d 153 (2019)

Shaw raised challenges to water and sewer rates, including arguments about combined sewer overflow and stormwater-related costs. The Court of Appeals upheld the charges and emphasized the importance of regulatory obligations, the combined sewer system context, and the plaintiff's burden of proving that the charges functioned as unlawful taxes.

The practical lesson from *Shaw* is that stormwater-related costs embedded in broader utility systems may be defensible when tied to utility service, regulatory obligations, and a reasonable cost structure. The case is most relevant for communities with combined sewer systems or utility rates that include drainage-related costs.

Youmans v. Charter Township of Bloomfield, 336 Mich. App. 161; 969 N.W.2d 570 (2021)

Youmans involved *Headlee* challenges to water and sewer rates, including disputed components related to county drain and stormwater-related costs. The Court rejected the claims, emphasizing that the rates primarily funded utility service and that the plaintiff had not proven disproportionality.

The practical lesson from *Youmans*' case is that Michigan courts may uphold utility charges where the charge is tied to service costs, and the challenger cannot demonstrate that the charge is disproportionate or functions primarily as a tax. It is also relevant to communities evaluating how county drain or drainage-related costs interact with utility rates.

Mackinaw Area Tourist Bureau v. Village of Mackinaw City, Court of Appeals No. 361625, published opinion issued 2024

Mackinaw involved water and sewer rates used in part to support infrastructure improvements. The Court of Appeals upheld the charges as user fees rather than taxes, rejecting the idea that user fees cannot support capital improvements when those improvements are tied to continued utility service and regulatory compliance.

The practical lesson for stormwater utilities is that capital improvements, reserves, and infrastructure investments may be included in a utility cost structure when they are tied to the services provided and are reasonably documented. This supports the concept that stormwater utility fees may fund capital needs, provided the costs are stormwater-related and appropriately justified.

Heos v. City of East Lansing, 513 Mich. ___; 4 N.W.3d 744 (2025)

Heos involved an electric franchise fee collected by a utility and remitted to the City of East Lansing. The Michigan Supreme Court held that the fee functioned as an unlawful tax because it raised general revenue, was not proportionate to the City's costs related to electrical service, and was not voluntary.

Although *Heos* is not a stormwater case, it reinforces an important principle: calling a charge a “fee” is not enough. The charge must be tied to a service or regulatory purpose, proportionate to the cost of that service, and not function as a general revenue mechanism. For stormwater utilities, *Heos* reinforces the importance of avoiding pass-through charges or revenue structures that are not clearly tied to stormwater services.

Settlement and Litigation–Risk Examples

Several Michigan communities have faced Headlee–related challenges involving stormwater, drainage, or utility–style charges that were resolved through settlements, refunds, or changes in billing approach rather than definitive appellate rulings on stormwater utility law. These examples should not be treated as controlling legal precedent, but they are important lessons for implementation.

Examples of communities with available documentation regarding litigation or settlement activity include Royal Oak, Birmingham, Ferndale, Madison Heights, Oak Park, Roseville, St. Clair Shores, and Harper Woods. In some of these cases, challenges involved stormwater or drainage charges billed through water and sewer systems, charges based on water consumption, or charges alleged to function as taxes rather than user fees. Communities may opt to settle a fee challenge regardless of merit to mitigate the uncertainty of court decisions and the costs of expensive and protracted litigation.

The practical lesson from these settlement examples is that legal risk is not limited to published court decisions. Even when a community’s stormwater funding goals are legitimate, the billing basis, ordinance structure, public communication, documentation, and administrative record matter. Charges that appear unrelated to stormwater impact, system use, or services provided are more vulnerable to challenge and public opposition.

Headlee Blue Ribbon Commission Report

The Headlee Blue Ribbon Commission Report (1994) is not a court case, but it has influenced Michigan’s fee–versus–tax analysis and was discussed in *Bolt*. The report helped frame the distinction among taxes, user fees, and special assessments, including concerns that mandatory user fees can function like disguised taxes if they are not tied to a measured service and a reasonable cost basis.

For stormwater utilities, the practical takeaway is that form does not control substance. Calling a charge a “fee” is not enough; the charge must operate like a fee.

Practical Takeaways for Stormwater Utility Design

Taken together, these cases and examples provide a clear message for Michigan communities. Stormwater utilities remain legally viable, but they require careful design and documentation. A defensible utility should clearly define stormwater services, document costs, use a reasonable and proportional rate methodology, connect fees to runoff contribution or services provided, restrict revenues to stormwater-related purposes, provide clear procedures for credits and appeals, and maintain a strong administrative record.

Bolt and *Jackson* show what can go wrong when a charge appears to serve as a general revenue source or fails the proportionality test. *Platt* and the Detroit drainage fee cases show that stormwater and drainage charges can be upheld when they are tied to defined services, supported by documented methodology, and administered consistently. Even where litigation ends in settlement rather than adjudication, fee challenges from other communities still provide important practical lessons by highlighting the types of legal and implementation issues that can trigger disputes and expose municipalities to litigation risk.

C

APPENDIX: Defensibility and Risk- Management Checklist

Stormwater utilities in Michigan should be developed with careful attention to legal defensibility, proportionality, transparency, and administrative consistency. This checklist is intended to help municipalities identify key issues to address during feasibility, program development, adoption, and implementation. It is not a substitute for legal advice, and municipalities should work closely with legal counsel when developing a stormwater utility.

When adopting a stormwater utility, municipalities should ensure that the ordinance, resolution, staff report, or supporting Plan documents the basis for the utility. This may include findings related to the need for stormwater services, documented costs, proportional fee methodology, dedicated use of revenues, credits and appeals, and public process. These findings help establish the administrative record supporting adoption and implementation.

Purpose and Service Nexus

A defensible stormwater utility should clearly define the stormwater services being provided and demonstrate the connection between those services and the fees charged.

Review Item	Key Question
Define stormwater services	Are the services funded by the utility clearly identified?
Establish regulatory or service purpose	Does the utility fund stormwater-related services rather than general municipal activities?
Tie fees to system use or service received	Is there a clear relationship between the fee and the property's contribution to runoff or use of the stormwater system?
Define service area	Are the properties subject to the fee located within the area served by the stormwater program or system?
Identify eligible activities	Are funded activities limited to stormwater-related purposes?
Exclude unrelated costs	Are unrelated municipal expenses excluded from the utility revenue requirement?

Cost Documentation and Revenue Requirement

The utility should be based on documented stormwater costs and should not be structured primarily as a general revenue source.

Review Item	Key Question
Document current costs	Have existing stormwater-related costs been identified across departments?
Document future costs	Have capital, regulatory, planning, and maintenance needs been identified?
Include administrative costs	Are billing, customer service, credit administration, data management, and legal/financial oversight included?
Link costs to services	Can each major cost category be tied to stormwater services provided by the utility?
Avoid over-recovery	Is the revenue requirement limited to the cost of providing stormwater-related services?
Document assumptions	Are assumptions used to estimate costs, staffing, capital needs, and service levels clearly documented?
Address multi-benefit projects	Are stormwater-related shares of road, park, greenway, or other multi-benefit projects documented?

Rate Methodology and Proportionality

The rate structure should allocate costs in a way that is reasonable, consistent, and proportional to **stormwater** service demands.

Review Item	Key Question
Select a defensible billing basis	Is the fee based on a reasonable measure of stormwater impact, such as impervious area, ERUs, or another documented method?
Apply methodology consistently	Are similar properties treated consistently under the adopted methodology?
Document rate calculations	Are calculations, billing units, impervious area assumptions, and rate formulas documented?
Evaluate property class impacts	Have impacts on residential, commercial, institutional, and tax-exempt properties been reviewed?
Address tax-exempt properties	Are tax-exempt properties treated based on service/use rather than tax status?
Address special cases	Are exclusions, partial billing, hydraulic independence, public roadways, and unique parcels handled consistently?
Test example bills	Have representative bills been developed for typical and high-visibility properties?

Credits, Adjustments, and Appeals

Credits, adjustments, and appeals should be clearly defined and administered consistently.

Review Item	Key Question
Define credit eligibility	Are eligible practices and credit criteria clearly defined?
Consider revenue impacts	Has estimated credit participation been considered during rate development?
Require documentation	Are property owners required to document qualifying practices or special conditions?
Verify and renew credits	Are inspection, verification, renewal, and revocation procedures defined?
Distinguish credits from adjustments	Are stormwater management credits distinguished from billing data corrections?
Establish adjustment procedures	Are procedures in place to correct impervious area, parcel, ownership, or classification errors?
Establish appeals process	Is there a clear process for reviewing disputes and documenting decisions?
Define responsible parties	Are staff, departments, or vendors responsible for credits, adjustments, and appeals identified?
Define responsible parties	Are staff, departments, or vendors responsible for credits, adjustments, and appeals identified?

Data, Billing, and Administrative Record

A defensible utility depends on accurate data, consistent billing procedures, and a clear administrative record.

Review Item	Key Question
Maintain parcel data	Are parcel boundaries, ownership, and classifications maintained and updated?
Maintain impervious area data	Are impervious area data sources, methods, and limitations documented?
Establish update procedures	Are procedures defined for redevelopment, parcel splits, consolidations, and data corrections?
Document billing rules	Are rules for billing frequency, responsible party, multi-parcel ownership, and account setup documented?
Prepare for customer service	Are staff prepared to explain bills, calculations, credits, and appeals?
Maintain records	Are rate studies, assumptions, datasets, decisions, appeals, and communications retained?
Assign responsibilities	Are engineering, finance, billing, GIS, legal, and customer service responsibilities clearly assigned?

Adoption, Communication, and Ongoing Review

The utility should be adopted through a transparent process and maintained as an ongoing program.

Review Item	Key Question
Prepare supporting documentation	Has the Stormwater Utility Program Plan or similar documentation been prepared?
Adopt ordinance	Has the municipality adopted an ordinance establishing the stormwater management utility and authorizing fee collection?
Coordinate with legal counsel	Has legal counsel reviewed the ordinance, methodology, and supporting documentation?

Review Item	Key Question
Coordinate with community planning documents	Are stormwater management goals, infrastructure needs, resilience objectives, and stormwater utility policies reflected in the comprehensive master plan and other relevant planning documents, as appropriate?
Conduct public outreach	Has the municipality explained the purpose of the utility, how fees are calculated, and how revenues will be used?
Provide example bills	Have property owners or key stakeholders been shown representative or draft bills before implementation?
Identify public hearing requirements	Have local public meeting or hearing requirements been identified?
Establish dedicated fund	Are revenues restricted to stormwater-related purposes?
Review and update program	Is there a defined process for updating rates, data, credits, procedures, and the Plan over time?

Key Documentation to Retain

Municipalities should maintain a clear administrative record supporting the development and implementation of the utility. Important documentation may include:

- ◆ Stormwater Utility Program Feasibility findings
- ◆ Stormwater Utility Program Plan or equivalent supporting documentation
- ◆ Cost estimates and revenue requirement calculations
- ◆ Rate methodology and billing calculations
- ◆ GIS datasets, impervious area methodology, and data assumptions
- ◆ Example bills and rate impact analyses
- ◆ Credit, adjustment, and appeal procedures
- ◆ Public outreach materials and meeting records
- ◆ Governing body presentations and decisions
- ◆ Ordinance and related resolutions
- ◆ Legal review comments or memoranda, where applicable
- ◆ Records of program updates, rate reviews, and billing data revisions

D

APPENDIX: Overview of Stormwater Utility Rate Structures

Stormwater utilities use a limited number of rate structures to allocate costs among properties. While many variations exist, most utilities rely on approaches that balance equity, simplicity, and administrative feasibility. National surveys (e.g., Western Kentucky University) show that a small number of methods account for most utilities in practice.

Equivalent Residential Unit (ERU). The ERU approach is one of the most used rate structures. It is based on the average impervious area of a typical single-family residential property. Residential properties are assigned a standard fee (one ERU), while nonresidential properties are billed based on their impervious area relative to the ERU.

This approach is widely used because it is relatively simple to understand and administer while maintaining a reasonable connection between impervious area and stormwater impact.

Impervious Area (Equivalent Hydraulic Area). Under this approach, fees are calculated directly based on the measured impervious area of each parcel, typically expressed as a cost per unit area (e.g., per square foot or per 1,000 square feet).

This method provides a high degree of equity because it directly reflects each property's contribution to runoff. Advances in GIS and land cover data have made this approach increasingly feasible, and its use has grown in recent years. Some utilities, including the City of Detroit, use parcel-specific impervious area measurements derived from GIS data for all properties, providing a high level of accuracy and defensibility.

Some utilities use runoff-coefficient or equivalent hydraulic area methods that account for both impervious and pervious surfaces, land cover, or estimated runoff characteristics. These approaches can provide a more detailed relationship between property conditions and runoff contribution, but they require more data, more explanation, and greater administrative effort than simpler ERU or measured impervious area approaches.

Tiered Residential / Area-Based Nonresidential. This hybrid approach is also common. Single-family residential properties are grouped into tiers (or assigned a flat rate), while nonresidential properties are billed based on measured impervious area.

This structure simplifies billing for residential properties while maintaining greater precision for larger or more variable nonresidential parcels.

Flat Fee. Some utilities apply a uniform fee to all properties or broad classes of properties. While simple to administer, this approach is less common and generally considered less equitable because it does not reflect differences in runoff contribution.

Key Considerations

In practice, most stormwater utilities use ERU-based or impervious area-based approaches, or a combination of both. While different structures may produce similar total revenue, they vary in how costs are distributed among property types and how easily they can be explained and administered.

More detailed methods tend to improve equity and defensibility but require higher-quality data and greater administrative effort. Simpler methods are easier to implement and communicate but may be less precise. Communities should select an approach that reflects their data availability, administrative capacity, and policy priorities.

E

APPENDIX: Overview of Stormwater Utility Credit Programs

Stormwater utility credit programs allow property owners to reduce their fees by implementing approved practices or activities that reduce runoff volume, reduce peak flow rates, improve water quality, reduce demand on the municipal stormwater system, or otherwise support the objectives of the stormwater program. Credits help reinforce the connection between the fee charged and the stormwater services provided.

Credit programs vary by community. Some focus primarily on structural stormwater practices while others also recognize education, stewardship, regulatory compliance, private system maintenance, or direct discharge to surface waters. The most effective credit programs are clear, limited in scope, verifiable, and administratively manageable.

Credit programs should also recognize that different practices provide different types of stormwater benefits. Some practices reduce runoff volume by retaining, infiltrating, reusing, or disconnecting stormwater from the public system. Others primarily detain runoff and reduce peak discharge rates. Water quality practices may reduce sediment, nutrients, bacteria, or other pollutants without substantially reducing runoff volume. Some utilities also provide limited credits for nonstructural activities, such as stormwater education, pollution prevention, watershed stewardship, or participation in approved municipal programs. Because these practices do not all reduce the same service demands, the credit methodology should clearly define what benefit is being credited, how the benefit is measured or verified, and whether the credit applies to all or only part of the stormwater utility fee.

Common Credit Types

Runoff Volume Reduction Credits. These credits recognize practices that reduce the total amount of stormwater leaving a site. Examples include infiltration practices, bioretention, rain gardens, permeable pavement, green roofs, cisterns, dry wells, and disconnection of impervious areas.

Peak Flow Reduction Credits. These credits recognize practices that temporarily store stormwater and release it slowly to reduce peak discharge rates. Examples include detention basins, underground storage systems, controlled outlet structures, and other practices designed to reduce peak runoff rates.

Water Quality Credits. Some utilities provide credits for practices that reduce pollutants in stormwater runoff. These may include filtration practices, vegetated swales, constructed wetlands, bioretention, proprietary treatment systems, or other approved practices that reduce sediment, nutrients, bacteria, metals, or other pollutants.

Direct Discharge or Reduced Municipal Service Demand Credits. Some utilities provide full or partial credits for properties that discharge stormwater directly to a receiving water through private infrastructure, rather than to the municipal stormwater system. These credits typically require documentation showing how runoff is conveyed and confirming that the municipal system is not used. Depending on the local methodology, direct discharge or hydraulic independence may be handled as a credit, partial billing adjustment, exclusion, or special-case determination.

Private Stormwater System or Maintenance Credits. Some utilities recognize privately owned and maintained stormwater infrastructure that reduces demand on the municipal system. Examples may include privately maintained detention or retention basins, private storm sewers, outlet structures, treatment facilities, or common stormwater facilities maintained by homeowners' associations, commercial developments, campuses, or institutional properties. These credits should require clear documentation of ownership, maintenance responsibility, contributing drainage area, and ongoing maintenance practices.

Residential and Stewardship Credits. Residential credits are often simpler and may recognize rain gardens, rain barrels, cisterns, dry wells, disconnected downspouts, or other small-scale practices. Some utilities also provide limited stewardship or education-based credits for actions such as pollution prevention pledges, participation in approved watershed stewardship programs, public education activities, or other practices that support stormwater program goals. These credits can be useful for public engagement but should be modest, clearly defined, and easy to administer.

Nonresidential Credits. Nonresidential credits are typically more detailed and may require engineering documentation, drainage area mapping, design plans, maintenance plans, inspection records, and periodic certification. Nonresidential credits often apply to commercial, industrial, institutional, municipal, campus, or large multifamily properties where stormwater practices manage runoff from defined portions of a site.

Key Design Considerations

Credit programs should clearly define:

- ◆ Eligible practices or activities
- ◆ The stormwater benefit being recognized
- ◆ Maximum credit limits
- ◆ Whether credits apply to all or only part of the fee
- ◆ Whether credits are stackable or mutually exclusive
- ◆ How credits are calculated
- ◆ Documentation requirements
- ◆ Inspection or verification procedures
- ◆ Renewal or recertification requirements
- ◆ How credits are tracked in the billing system
- ◆ Procedures for modifying, suspending, or revoking credits if practices are not maintained

Credits should generally apply only to the portion of the property or fee associated with the stormwater service being reduced. For example, if a practice manages runoff from only part of a site, the credit should typically be applied only to the managed portion. Similarly, a water quality practice may justify a credit related to pollutant reduction, but not necessarily a credit for conveyance, flood control, or peak flow reduction unless those benefits are also provided.

Many communities establish maximum credit limits so that all properties continue to contribute to shared stormwater program costs, such as administration, public education, regulatory compliance, planning, and system-wide infrastructure. Full exemptions or very large fee reductions should be supported by strong documentation and should be applied consistently with the adopted rate methodology.

Credit programs should also consider revenue stability. Because credits reduce utility revenue, estimated credit participation should be considered during rate development so that the utility remains adequately funded. Poorly defined or overly generous credit programs can reduce revenue stability, create inequities among customers, and increase administrative burden.

Credit programs should distinguish between credits and billing adjustments. A credit recognizes an approved stormwater management practice, activity, or reduced service demand. A billing adjustment corrects the underlying billing data, such as impervious area, ownership, parcel configuration, rate class, or classification.

Credits, Adjustments, and Appeals: How They Differ			
Process	Purpose	Common Examples	Typical Outcome
Credit	Recognizes an approved stormwater management practice or reduced demand on the municipal stormwater system.	Detention, infiltration, green infrastructure, direct discharge, private stormwater controls, stewardship activities, approved pollution prevention practices.	Partial reduction in the stormwater utility fee, subject to eligibility, verification, and renewal requirements.
Billing Adjustment	Corrects the data or assumptions used to calculate a fee.	Incorrect impervious area, parcel classification error, ownership/account issue, parcel split or combination, duplicate billing.	Corrected billing record and revised fee if warranted.
Appeal	Provides a formal review process when a property owner disputes a determination.	Dispute over credit denial, adjustment decision, parcel classification, application of methodology, or special-case determination.	Written decision confirming, modifying, or reversing the determination based on adopted procedures.

Communities should define clear procedures, documentation requirements, review responsibilities, and timelines for each process so that requests are handled consistently and decisions are supported by the administrative record.

Administration and Maintenance

Credit programs require ongoing administration. Municipalities should define how applications are submitted, how applications are reviewed, who approves credits, how practices are inspected or verified, how credits are renewed, and how credits may be modified or revoked. Practices must be maintained over time to continue receiving credit.

Credits should not be treated as one-time approvals without follow-up. Depending on the type of credit, communities may require periodic inspections, owner certifications, maintenance records, photographs, drainage area documentation, or professional certifications. The level of verification should be scaled to the type and value of the credit.

Many communities begin with a limited credit program and refine it over time as staff capacity, customer understanding, and program experience increase. This approach can help maintain administrative feasibility while allowing the credit program to evolve.

Detailed procedures, technical criteria, application forms, inspection requirements, and calculation methods are often best maintained in a separate credit manual rather than in the main guidebook or ordinance. Although detailed credit procedures may be maintained in a separate credit manual, the ordinance should authorize the credit program and identify how the manual or related procedures are adopted, amended, and administered.

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APPENDIX: GIS and Billing Dataset Reference

Stormwater utility billing depends on accurate parcel, impervious area, ownership, and billing data. This appendix summarizes common datasets, fields, quality control considerations, and update procedures that municipalities may use when developing or maintaining a stormwater utility billing dataset. The level of detail should be scaled to the community's rate structure, billing approach, staff capacity, and available GIS data.

Category	Items to Include or Consider
Core Datasets	Parcel boundaries; parcel ownership or assessing data; property classification or land use; impervious area or land cover data; billing account data; public parcels and rights-of-way; service area boundaries; drainage district, county drain, or special assessment data where applicable.
Recommended Billing Dataset Fields	Parcel ID; owner or account name; service address; mailing address; property class; land use; impervious area; pervious area if used; ERU or billing unit; rate class; credit status; adjustment or exemption status; billing account number; appeal status; data source; last updated date.
Quality Control Considerations	Missing or duplicate parcel IDs; parcels without billing accounts; billing accounts without matching parcels; parcels with zero impervious area; unusually high impervious area; public, tax-exempt, institutional, or large commercial parcels; parcel splits, combinations, or boundary changes; recent development or redevelopment; obvious land cover classification errors.
Special-Case Flags	Gravel or compacted surfaces; private roads; HOA or common-area parcels; large campuses; airports or industrial sites; properties with direct discharge or hydraulic independence; public streets and rights-of-way; parcels served by private stormwater systems; county drain or drainage district obligations.
Update Procedures	Parcel and billing account data should be refreshed on a regular schedule. Impervious area data should be updated periodically or when new land cover data are available. Updates may also be triggered by building permits, site plan approvals, redevelopment, parcel splits, customer corrections, credits, adjustments, and appeals.
Responsibility and Recordkeeping	The municipality should identify the department, staff position, or vendor responsible for GIS updates, billing data maintenance, customer corrections, credit tracking, and appeal records. Documentation should be maintained for data sources, update dates, assumptions, corrections, and decisions affecting billing.

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G

APPENDIX: Stormwater Management Utility Ordinance

A stormwater management utility ordinance establishes the legal authority for a municipality to implement and operate a stormwater utility. It defines how stormwater services are funded, how fees are assessed, and how the utility is administered in coordination with the supporting Stormwater Utility Program Plan. The ordinance serves as the formal mechanism for adopting the utility and ensuring that it is implemented in a consistent, transparent, and legally defensible manner.

The ordinance works in conjunction with the Stormwater Utility Program Plan. While the Plan provides the technical and administrative details, such as service levels, rate methodology, and program structure, the ordinance establishes the authority to apply those elements and collect fees. Together, these documents form the foundation of the stormwater utility.

Stormwater utility ordinances are typically concise and focused. Most do not include detailed technical information; instead, they refer to the Plan and supporting documents for methodology and procedures. This approach allows municipalities to update program details over time without requiring frequent amendments to the ordinance.

Because stormwater utilities are subject to legal and public scrutiny, the ordinance should clearly demonstrate that fees are proportional to the services provided and that revenues are used only for stormwater-related purposes. Municipalities should work closely with legal counsel to ensure that the ordinance is consistent with applicable laws and reflects local policies and priorities.

Typical Ordinance Components

A stormwater utility ordinance should generally include the following elements:

- Purpose and Intent – Establishes the reason for the utility and the services it will fund.
- Definitions – Defines key terms used in the ordinance.
- Authority and Establishment – Formally creates the stormwater utility and authorizes fee collection.
- Service Area – Identifies the geographic area subject to the utility.
- Basis of Fees – Describes how fees are determined (e.g., **impervious area**, **ERU**, or other method).
- Rate Adoption and Updates – Provides a mechanism for establishing and adjusting rates.
- Properties Subject to Fees – Identifies which properties are billed.
- Exemptions and Special Cases – Defines any exclusions or adjustments.
- Credit program Authorization – Allows for fee reductions based on approved stormwater practices.
- Billing Adjustments – Establishes procedures for correcting billing data.
- Appeals Process – Provides a process for reviewing disputes.
- Billing and Collection Procedures – Defines how fees are billed and collected.
- Responsibility for Payment – Identifies the responsible party.
- Enforcement Provisions – Defines consequences for non-payment.
- Use of Revenue – Restricts funds to stormwater-related purposes.
- Program Administration – Assigns responsibility for managing the utility.
- Stormwater Utility Program Plan Reference – Links the ordinance to the supporting plan.
- Updates and Revisions – Provides a mechanism for modifying the program over time.

Implementation Considerations

The ordinance should be developed in coordination with the Stormwater Utility Program Plan and supporting technical documentation. Clear alignment between these documents is essential to ensure consistency, transparency, and legal defensibility. Municipalities should also consider how the ordinance will be communicated to the public, as it represents the formal adoption of a new fee-based program.

Ordinance Examples

Michigan communities have established stormwater utilities using a variety of ordinance structures and billing methodologies. Table 16 illustrate several approaches currently used in Michigan and may be helpful references when developing local ordinance provisions. Communities should work closely with legal counsel when developing ordinance language appropriate for local conditions.

Community	Ordinance Location	Why Review This Example?
Ann Arbor	Chapter 33 Stormwater System; Chapter 29 Water, Sewer, and Stormwater Rates	Mature Michigan utility with separate utility and rate ordinances. Useful for reviewing utility establishment, rate administration, credits, appeals, and enterprise fund structure.
Berkley	Chapter 126 Utilities, Article IV Rates, Division 2 Stormwater User Charge	Useful example of a stormwater utility integrated into a broader utility code and based on a traditional ERU methodology.
Chelsea	Chapter 32 Utilities, Article V Stormwater Utility	Useful for reviewing how a smaller community structured utility participation, administration, and stormwater service responsibilities.
Marquette	Chapter 48 Utilities, Article VI Stormwater Utility	Useful example of an alternative runoff-based methodology and a comprehensive credit structure tied to stormwater management practices.
New Baltimore	Chapter 54 Utilities, Article V Stormwater Utility	Straightforward ordinance that clearly illustrates utility establishment, billing, connection fees, and administration.
Oak Park	Chapter 82 Utilities	Useful example of stormwater utility charges incorporated into a broader municipal utility ordinance rather than a standalone chapter.
Roseville	Chapter 256 Sewers, Article V Stormwater System Utility Fees	Useful for reviewing fee calculation methods, credits, appeals, and billing procedures in a concise ordinance format.
St. Clair Shores	Chapter 34 Stormwater Utilities	One of the most comprehensive Michigan examples. Useful for reviewing utility establishment, rate methodology, credits, appeals, enterprise fund provisions, and overall ordinance organization.

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H

APPENDIX: Local and Multi-Jurisdictional Stormwater Utility Considerations

This appendix discusses how stormwater utility concepts may apply in local and multi-jurisdictional settings in Michigan. It focuses on two related questions: how stormwater utility authorities may differ among cities, villages, townships, counties, road agencies, drain commissioners, and other public entities; and how communities might coordinate stormwater utility functions across jurisdictional boundaries. The appendix is intended to help communities understand the range of possible approaches, from coordinated local utilities and shared administration to more centralized regional models, while recognizing that authority, governance, revenue collection, and accountability must be evaluated based on the specific structure being considered.

Why Stormwater Utility Authority Can Be Complicated in Michigan

Stormwater utilities are typically developed for a single local unit of government. In Michigan, that approach may be straightforward in some communities and more complicated in others because stormwater responsibilities do not always align within one public entity. The entity with MS4 permit obligations may not be the owner of the drainage infrastructure. The entity that owns road drainage infrastructure may not be the entity with general municipal utility powers. The entity responsible for county drains may operate under a separate statutory framework. As a result, stormwater utility authorities in Michigan should be evaluated in relation to the specific services being funded, the infrastructure involved, the entity collecting revenue, and the legal authority being used.

Cities and villages often have the clearest path to a conventional stormwater utility because they commonly own, operate, maintain, and improve municipal stormwater infrastructure. This may include storm sewers, catch basins, culverts, ditches, detention facilities, outfalls, and related drainage infrastructure. Where a city or village can show that it provides stormwater service, incurs stormwater costs, and allocates charges in reasonable proportion to runoff contribution or system demand, it is generally in a stronger position to establish and operate a local stormwater utility.

Townships and charter townships can present a more complicated case. Many Michigan townships do not own or operate public roads, and the drainage associated with those roads may be owned or maintained by a county or state road agency, a private entity, or other parties. County drains located within a township are under the jurisdiction of the

county drain commissioner or water resources commissioner, not the township. A township may own stormwater facilities on township-owned properties and may have MS4 permit responsibilities, but those facts do not necessarily mean the township owns or controls the broader drainage system within its boundaries. For that reason, a township stormwater utility would need to be framed carefully around the services the township provides, the costs it incurs, and the infrastructure or regulatory program it owns, operates, administers, or funds.

Counties are also complex because county stormwater functions may be divided among multiple entities. A county board of commissioners, a county road agency, and a drain commissioner or a water resources commissioner have different stormwater-related roles. County road agencies often own and maintain drainage infrastructure along county roads, including roadside ditches, culverts, catch basins, storm sewers, and outlet structures. Drain commissioners and water resources commissioners administer county drains and drainage districts under the Drain Code. These are important stormwater responsibilities, but they are not the same as a broad, general-purpose stormwater utility billing authority.

MS4 permit coverage is also important but should be treated as a separate issue from utility fee authority. MS4 permits create stormwater management obligations related to public education, illicit discharge elimination, construction and post-construction controls, pollution prevention, and other program elements. Those obligations may help establish a need for stormwater funding, but MS4 permit status alone does not necessarily resolve who owns the infrastructure, who provides the service, or who may impose and collect a stormwater utility charge.

This fragmented structure creates both a challenge and an opportunity. In some communities, a single local stormwater utility may align well with local infrastructure ownership, service delivery, and regulatory responsibility. In other areas, the practical stormwater system may involve multiple local units, county agencies, road agencies, drain commissioners, drainage districts, and regional partners.

Why Multi-Jurisdictional Utility Models May Be Appealing

A multi-jurisdictional stormwater utility model may be appealing where several communities face similar stormwater funding needs, share connected drainage systems, or would benefit from common utility administration. Communities already coordinate on stormwater planning, MS4 compliance, watershed management, and public education in many ways. The more specific question is whether the utility function itself can be structured across multiple jurisdictions.

That utility function may include rate development, impervious area mapping, billing data, customer service, credit policies, appeal procedures, revenue collection, revenue accounting, revenue distribution, and eligible use of funds. A multi-jurisdictional utility could support regional improvements, provide administrative services, or distribute revenue back to participating local units for eligible stormwater purposes. In other words, a regional utility entity would not necessarily need to perform all stormwater work directly. Depending on

the structure, it could function as a utility administrator, a revenue collection mechanism, a funding distributor, a regional project sponsor, or a combination of these roles.

This distinction is important in Michigan. A multi-jurisdictional model could potentially help align stormwater funding with how stormwater responsibilities are actually distributed. For example, one entity may provide utility administration while participating communities remain responsible for local stormwater projects. Alternatively, a portion of revenue could be retained for regional improvements while another portion is returned to participating communities. These concepts would require careful legal, financial, and governance review, but they may be useful for communities that do not fit neatly into a single-community utility model.

Potential Multi-Jurisdictional Utility Models

Several models could be explored. They are not mutually exclusive, and a group of communities could begin with a less centralized model before considering more formal structures.

Coordinated local utility model. Each participating community establishes and remains responsible for its own stormwater utility, but the communities coordinate on rate methodology, impervious area data, billing categories, public communication, credit policies, and/or administrative support. This model may help reduce startup costs and improve consistency while preserving local adoption and local control of revenue.

Shared utility administration model. A county, authority, regional agency, or contracted administrator provides back-office utility services for participating communities. These services could include data management, billing file preparation, customer service support, credit review, appeal support, reporting, and annual updates. Under this model, local units may still retain legal responsibility for their own utility charges and revenues.

Fee collection and distribution model. A multi-jurisdictional entity, where legally authorized, collects or administers stormwater utility fees and distributes some or all the collected fees back to participating local units. Distribution could be based on fees collected within each community, impervious area, planned project costs, drainage areas, level of service, or another agreed allocation method. This model separates utility fee administration from stormwater project delivery.

Regional project funding model. A utility or authority collects revenue to fund projects that benefit multiple jurisdictions, such as regional detention, trunk drainage improvements, flood mitigation, water-quality retrofits, or shared asset management. Local units may continue to fund local projects separately, or revenue may be divided between local and regional purposes.

Full regional stormwater utility model. A regional entity imposes or administers a stormwater fee, manages revenue, funds improvements, provides services, and potentially owns or operates infrastructure. This is the most centralized model. It exists in other states but would likely require the most careful legal and institutional review in Michigan.

Potential Benefits of a Multi-Jurisdictional Stormwater Utility

Potential benefits should be understood as utility-related, not merely the general benefits of stormwater collaboration. A multi-jurisdictional stormwater utility model may help communities:

- ◆ Reduce the cost of developing rate studies, billing databases, impervious area mapping, credit policies, and utility implementation materials.
- ◆ Create more consistent rate structures, billing categories, credit policies, appeal procedures, and customer-facing materials across neighboring communities.
- ◆ Make stormwater utility implementation more feasible for smaller communities that may not have the staff capacity or financial resources to develop and administer a standalone utility.
- ◆ Share specialized administrative functions such as parcel data management, billing support, customer service, credit review, appeal administration, and annual rate updates.
- ◆ Establish a common revenue framework for stormwater needs that cross jurisdictional boundaries.
- ◆ Allow participating communities to receive stormwater revenue through a defined allocation or distribution method, where legally authorized.
- ◆ Support regional improvements that benefit multiple jurisdictions while also allowing local units to fund local stormwater priorities.
- ◆ Reduce duplication where several communities would otherwise develop separate utility administration systems.
- ◆ Improve public understanding by using consistent messaging to explain why fees are charged, how fees are calculated, and how revenue is used.

These benefits are not automatic. They depend on how the utility is structured, who has authority to impose or collect the charge, how revenues are restricted, how responsibilities are assigned, and whether the program is legally defensible.

National Examples

Examples from other states show that multi-jurisdictional stormwater utility and regional stormwater fee models can be structured in several different ways. These examples are useful for understanding possible governance structures, billing methods, credit systems, and revenue models. However, their legal foundations are specific to their respective states and should not be treated as directly transferable to Michigan.

Southeast Metro Stormwater Authority, Colorado. The Southeast Metro Stormwater Authority (SEMSWA) is a regional stormwater authority serving the southeast Denver metropolitan area. It administers an annual stormwater fee based on impervious area and provides stormwater and floodplain management services across a defined service area. SEMSWA is a useful example of an authority-based stormwater utility model formed through a multi-entity framework.

Boxelder Basin Regional Stormwater Authority, Colorado. The Boxelder Basin Regional Stormwater Authority was formed through an intergovernmental agreement to address stormwater and flood risks in a defined basin. It uses stormwater service fees and system development fees to support regional stormwater responsibilities. This example is useful because it connects stormwater utility fees to basin-scale flood mitigation, infrastructure needs, and a defined governance structure.

Northeast Ohio Regional Sewer District, Ohio. The Northeast Ohio Regional Sewer District operates a regional stormwater management program in addition to its wastewater functions. Its program uses an Equivalent Residential Unit methodology and includes stormwater service areas, credits, and watershed-based stormwater activities. This example demonstrates how a regional sewer district can administer stormwater utility charges and related services across multiple communities.

Clean Water Services, Oregon. Clean Water Services provides sanitary sewer and surface water management services in urban Washington County, Oregon, in coordination with partner cities. Its model distinguishes between regional surface water responsibilities and local partner-city responsibilities. This example is useful for communities considering a hybrid model in which some stormwater utility functions are regional, others remain local.

Sanitation District No. 1, Kentucky. Sanitation District No. 1 provides wastewater and stormwater services in Northern Kentucky. It uses stormwater rates and fees to support stormwater management across multiple jurisdictions. This example demonstrates how a regional sanitation district can incorporate stormwater services, fees, review charges, and capital needs into a broader utility structure.

Louisville and Jefferson County Metropolitan Sewer District, Kentucky. Louisville MSD provides drainage and flood protection services in addition to wastewater services. Its drainage service charges are based on Equivalent Service Units and are accounted for separately from other utility functions. This example illustrates a metropolitan-scale drainage and stormwater funding structure.

South Washington Watershed District, Minnesota. The South Washington Watershed District collects a stormwater utility fee to support regional stormwater and flood-control systems. This example shows how a watershed district model can fund regional stormwater infrastructure and water management functions. As with the other examples, the legal authority is state-specific.

Together, these examples show that regional stormwater utility models may be organized as stormwater authorities, basin-scale authorities, regional sewer or sanitation districts, watershed districts, or hybrid regional-local structures. The important lesson is not that Michigan communities can copy any one model directly, but that stormwater utility functions can be divided, shared, centralized, or allocated in different ways depending on the legal framework.

Michigan Frameworks to Explore

Michigan communities interested in a multi-jurisdictional stormwater utility should begin by identifying what role they want the shared structure to perform. The relevant framework may differ depending on whether the goal is shared utility development, shared administration, county-led service delivery, authority formation, infrastructure financing, revenue collection, or revenue distribution. The following frameworks are not presented as definitive legal authority for a regional stormwater utility fee. They are potential starting points for legal and governance review.

Coordinated local stormwater utilities. One possible approach is for each participating local unit to adopt its own stormwater utility while coordinating with neighboring communities on methodology, data, administration, and communication. This model may be simpler than asking a new regional entity to impose a single fee across multiple jurisdictions. It may also allow communities to share startup costs and administrative systems while preserving local responsibility for the utility.

Urban Cooperation Act, Act 7 of 1967. The Urban Cooperation Act may be relevant where communities want to share utility development, administrative support, billing support, data management, public communication, or related services. An intergovernmental agreement could define how participating communities share costs, assign responsibilities, maintain data, and make decisions. This framework may be most useful for coordinated local utilities or shared utility administration.

County Public Improvement Act, Act 342 of 1939. Act 342 authorizes counties to establish and provide certain public improvements and services, including water supply, sewage disposal, and related systems, and to enter into contracts with local units of government for those services. It also includes provisions related to rates, charges, assessments, financing, and administration of county-led public improvement systems. For stormwater utility discussions, Act 342 may be worth exploring where a county-led structure is being considered for utility administration, service delivery, infrastructure financing, or cost allocation among participating communities. Genesee County Drain Commissioner's Surface Water Management program is a useful Michigan example of Act 342 being used for coordinated MS4 implementation and stormwater management support, but it should not

be characterized as a regional stormwater utility. Macomb County is also relevant because MCL 280.21 allows certain public works, Act 342 public improvement agency, and Drain Code functions to be combined into one county department headed by an elected Public Works Commissioner. This structure may be useful to review when considering county-led utility administration or multi-jurisdictional service delivery concepts, but it should not be treated as an existing regional stormwater utility.

Municipal Sewage and Water Supply Systems Act, Act 233 of 1955. Act 233 may be relevant where communities are considering a formal intermunicipal authority. The act is important because its definition of “sewage disposal system” includes storm sewers. This may make it a potential framework to explore for infrastructure ownership, operation, financing, or administration. Whether it can support a stormwater-only utility model, direct stormwater charges, or revenue distribution to participating local units would require more specific review.

Watershed Alliance Act / Part 312 of NREPA. Watershed alliances may be useful for planning, education, monitoring, grants, and coordination related to surface water quality or water flow issues. For stormwater utility purposes, however, they should not be treated as general stormwater fee authorities. Existing watershed alliances may still be useful partners or planning platforms if communities later explore a utility model through another legal structure.

Drain Code of 1956, Act 40. The Drain Code provides existing mechanisms for funding specific county or intercounty drain projects through drainage districts, benefit determinations, apportionments, and assessments. These tools can be important for stormwater infrastructure implementation and may complement a utility. However, Drain Code assessments are legally distinct from general stormwater utility fees.

Proposed stormwater utility legislation. Legislation has been proposed in Michigan to provide more explicit stormwater utility authority. Proposed legislation may be useful as a policy reference, but unless enacted, it should not be cited as current authority.

Multi-Jurisdictional Issues to Resolve

In Michigan, municipalities may establish and operate stormwater utilities either independently or through cooperative regional arrangements. Two common mechanisms for regional implementation are interlocal agreements and the creation of a public authority. Both approaches allow local governments to share costs, coordinate infrastructure management, and administer stormwater fees across jurisdictional boundaries while relying on existing statutory authority under Michigan law.

A multi-jurisdictional stormwater utility would require consideration of the following factors:

- ◆ The need for stormwater funding
- ◆ The process to establish or create a stormwater
- ◆ Costs allocation, credits and *appeals process*
- ◆ Administrative and customer service responsibility;
- ◆ Collection practices
- ◆ Revenue management
- ◆ Project selection and eligibility
- ◆ Public reporting

In addition to legal, financial, and governance considerations, multi-jurisdictional stormwater utility models require coordination among participating entities. Early discussions among elected officials, municipal staff, drainage agencies, watershed organizations, and other stakeholders may help identify common stormwater challenges, shared objectives, opportunities for collaboration, and potential barriers to implementation. Building consensus among participating entities is often an important first step before evaluating more formal governance or funding structures.

Legal and Policy Caution

As discussed elsewhere in this Guidebook, any stormwater charge in Michigan must be structured carefully to avoid being treated as a tax rather than a valid user fee. Those considerations would also apply to any multi-jurisdictional model. The research conducted for this appendix did not identify an enacted Michigan statute that clearly and specifically authorizes a regional stormwater authority to impose a single parcel-level stormwater utility fee across multiple municipalities. Existing statutes may provide useful tools for shared administration, county-led services, authority formation, infrastructure implementation, or watershed planning, but communities should not assume that those tools automatically authorize a regional stormwater utility fee.

Summary

Stormwater utility authority in Michigan can be complicated because stormwater responsibilities are often divided among multiple public entities. Cities and villages may have a relatively clear path where they own and operate municipal stormwater systems, but townships, counties, road agencies, drain commissioners, and drainage districts may each have more limited or specialized roles. This fragmented structure is one reason communities may wish to explore whether stormwater utility functions can be shared, administered, or funded across multiple jurisdictions.

A multi-jurisdictional stormwater utility model may support common rate methodologies, shared billing data, customer service, credits, appeals, revenue accounting, or distribution of funds back to participating local governments. More centralized models could also fund shared regional stormwater improvements or operate as a full regional stormwater utility.

Examples from other states show that regional stormwater utility models can be structured through authorities, regional sewer or sanitation districts, watershed districts, and hybrid regional-local arrangements. In Michigan, communities have several frameworks to explore, including coordinated local ordinances, intergovernmental agreements, county-led public improvement structures, intermunicipal authorities, watershed alliances, and Drain Code mechanisms. Each framework has different strengths and limitations.

The key question is whether the selected structure clearly supports the proposed utility function. A multi-jurisdictional stormwater utility should clearly define who establishes or administers the charge, who collects and holds the revenue, how funds are used or distributed, what responsibilities remain local, and how the program remains accountable to the communities and properties being charged.

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I APPENDIX: Frequently Asked Questions

This appendix provides plain-language responses to common questions about stormwater management utilities. It is intended to support communication with elected officials, municipal staff, stakeholders, and the public. Communities should adapt these responses to reflect local conditions, adopted policies, legal review, and the specific stormwater utility program being considered.

What is a stormwater utility?

A stormwater management utility is a dedicated funding mechanism for stormwater management services. These services may include operation and maintenance of storm sewers, catch basins, culverts, ditches, detention facilities, flood mitigation projects, water quality improvements, regulatory compliance, planning, public education, billing administration, and customer service.

Stormwater utilities are commonly structured like other municipal utilities. The fee is typically based on a property's contribution to stormwater runoff or demand on the stormwater system.

Why do communities establish stormwater utilities?

Communities establish stormwater utilities because stormwater systems require ongoing investment. Storm sewers, culverts, ditches, detention basins, outfalls, and related infrastructure must be inspected, maintained, repaired, and replaced over time. Communities may also need funding to address flooding, improve water quality, comply with MS4 permit requirements, implement capital improvements, and plan for future

A stormwater utility provides a dedicated, transparent funding source for these activities, rather than relying solely on general funds, road funds, or other sources that may not be directly tied to stormwater services.

Is a stormwater utility fee a tax?

No. A properly structured stormwater utility fee is intended to be a service-based fee, not a tax. The distinction is especially important in Michigan. A stormwater utility fee should be tied to stormwater services, reasonably proportional to the service provided or demand placed on the system, and used only for stormwater-related purposes.

Additional discussion of Michigan legal considerations is provided in Appendix B.

Why is impervious area commonly used to calculate stormwater fees?

Stormwater utility fees should be based on the program's cost drivers. In many communities, the highest costs are associated with stormwater infrastructure, such as storm sewers, culverts, detention facilities, drainage improvements, flood mitigation, and water quality practices.

Impervious surfaces—such as rooftops, pavement, sidewalks, driveways, parking lots, and compacted surfaces—generate more runoff than natural or pervious areas. A more impervious area generally means more runoff, which creates a greater demand for conveyance, storage, treatment, and maintenance. For this reason, impervious area is commonly used as the basis for allocating stormwater utility costs.

In some communities, particularly where the stormwater program focuses more on regulatory compliance or administration than on infrastructure, other or blended billing methods may be considered. The key is that the billing basis should reasonably reflect the services provided and the costs being funded.

Who is billed?

The properties subject to a stormwater utility fee depend on the local ordinance, rate methodology, and service area. In many communities, developed parcels that contribute runoff to the public stormwater system or receive stormwater management services are billed.

Residential, commercial, industrial, institutional, and tax-exempt properties may all be included if they contribute runoff or receive stormwater services. The utility should clearly define which properties are subject to the fee and how special cases, exclusions, credits, or adjustments are handled.

Are tax-exempt properties billed?

Yes. Tax-exempt properties are commonly included in stormwater utility billing when they contribute runoff to the public stormwater system or receive stormwater management services. These may include schools, churches, hospitals, universities, government facilities, and other tax-exempt properties.

The reason is that a stormwater utility fee is based on stormwater service or system demand, not property tax status. Tax-exempt properties may have large buildings, parking lots, and other impervious surfaces that contribute runoff to the system.

How are stormwater utility fees used?

Stormwater utility fee revenues should be used only for stormwater-related purposes. These may include operation and maintenance, capital improvements, regulatory compliance, water quality programs, flood mitigation, planning, asset management, billing administration, credit and appeal administration, customer service, and public education.

The utility should maintain clear accounting procedures so that stormwater revenues are not used for unrelated municipal purposes.

Can stormwater utility fee revenue be used for road projects or county drain costs?

Stormwater utility fee revenue should not be used for general road costs. However, some road projects include stormwater-related components, such as storm sewer replacement, drainage improvements, catch basin work, culvert replacement, green infrastructure, or water quality treatment. For multi-benefit projects, the stormwater-related share of cost should be documented.

In some Michigan communities, stormwater utility fee revenues may also be used to pay eligible costs associated with county drains or regional drainage infrastructure, provided those costs are tied to stormwater services and properly documented. Some communities may use utility revenues to pay drain assessments that would otherwise be charged directly to individual property owners, helping avoid duplicative stormwater-related charges.

Can property owners reduce their stormwater fee?

Yes. A stormwater utility should provide a clear process for property owners to reduce their fee when they reduce their stormwater impact or can demonstrate that the billing data should be corrected.

Because stormwater fees are often based on impervious area, one way to reduce the fee is to reduce the amount of impervious area on a property. For example, removing pavement, replacing impervious surfaces with pervious surfaces, or otherwise reducing measured impervious area may reduce the billing basis and, in turn, the fee.

In addition, stormwater utilities should include a credit program that allows property owners to receive a fee reduction for approved stormwater practices or activities that reduce runoff, peak flow, or demand on the municipal stormwater system, or improve water quality and support stormwater program goals. Examples may include detention or retention systems, infiltration practices, green infrastructure, water quality treatment, direct discharge, privately maintained stormwater systems, or approved stewardship activities.

Credit and fee reduction procedures should be clearly defined and should include eligibility criteria, documentation requirements, verification procedures, renewal requirements, and maximum credit limits. This is especially important in Michigan, where stormwater utility fees should be structured to maintain a reasonable relationship between the charge and the stormwater services provided.

What happens if the billing data are wrong?

The utility should include a process for correcting billing data. Common issues include incorrect impervious area, parcel classification errors, ownership changes, duplicate billing, parcel splits or combinations, or missing account information.

A clear billing adjustment process helps maintain fairness, transparency, and public trust.

How are rates developed?

At a basic level, stormwater utility rates are developed by identifying the funding needed to provide stormwater services and dividing that revenue requirement by the total billable units, such as equivalent residential units or measured impervious area. The resulting unit rate is then applied to properties based on the adopted rate structure.

Final rates should be supported by documented costs, local data, clear assumptions, financial review, and governing body action.

Can multiple communities work together on a stormwater utility?

Communities may coordinate stormwater utility development, data management, billing support, public communication, credit policies, and regional project funding. Coordinated local utilities or shared administrative services may reduce costs and improve consistency.

A more centralized model in which one regional entity directly imposes a parcel-level stormwater utility fee across multiple municipalities is more complex and should be evaluated carefully under Michigan law. Additional discussion is provided in Appendix H.

What should a community do before deciding to move forward?

Before deciding to move forward, a community should understand the stormwater services it wants to fund, what those services cost, what data are available to support billing, what rate structures are feasible, how typical and high-impact properties may be affected, whether billing and administrative systems can support the utility, what stakeholder concerns need to be addressed, and what legal, financial, and governance steps are required.

This feasibility work helps the community decide whether to proceed, refine the approach, modify the scope, or pause the effort. Refer to Section 3 Phase 1 – Feasibility and Decision Readiness.



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