



- CITY OF LIVINGSTON -

STORMWATER UTILITY FEASIBILITY STUDY



in partnership with:



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Stormwater Utility Feasibility Study

For



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Report Prepared By:

Kayla Mehrens and Jacob Strombeck

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Advanced Engineering and Environmental Services, LLC

1288 North 14th Avenue, Suite 103, Bozeman, MT 59715

Contributing Partners

This Stormwater Utility Feasibility Study was completed as a collaboration between Headwaters Economics and the City of Livingston. Headwaters Economics is a nonprofit organization based in Bozeman, Montana. Through their FloodWise Community Assistance program, they work with communities to help them be more resilient to floods. Individual Study contributors include:

- Bridget Mitchell P.E., FloodWise Community Assistance Lead, Headwaters Economics
- Kirstin Smith Ph.D., FloodWise Lead Research and Policy Analyst, Headwaters Economics
- Grant Gager, City Manager, City of Livingston
- Shannon Holmes P.E., Public Works Director, City of Livingston
- Matt McGee P.E., Principal and Civil Engineer, TD&H Engineering

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Table of Contents

1.	Introduction.....	1
1.1.	Study Purpose	1
1.2.	Stormwater Utility Goals.....	2
2.	Basis of Planning	4
2.1.	Population Projections.....	4
2.2.	Demographics	4
2.3.	Utility Accounts.....	5
2.4.	Stormwater Assets	5
3.	Revenue Requirements.....	6
3.1.	Operating Costs.....	7
3.2.	Capital Costs	9
3.3.	General Fund Services	10
3.4.	Reserves.....	11
3.5.	Revenue Requirement.....	11
3.6.	Enterprise Fund Comparison	12
4.	Revenue Generation.....	12
4.1.	Rate Structures.....	12
4.2.	Data Limitations.....	14
4.3.	Approach #1 - Flat Rate.....	17
4.4.	Approach #2 - Impervious Area	18
4.5.	Approach #3 - Impervious Area plus Parcel Area.....	19
4.6.	Alternative Funding Sources.....	21
4.7.	Update Process	22
5.	Recommendations.....	23

List of Figures

Figure 1: Varying Elements Comprising a Typical Utility Revenue Requirement.....	6
Figure 2: First Year Stormwater Utility Revenue Requirement.....	11
Figure 3: Utility Revenue Requirement Comparison.....	12
Figure 4: Example Best-Practice Stormwater Rate Structures	13

Figure 5: Example Data Limitation Using Building Footprints	15
Figure 6: Customer Class Coding Process.....	16
Figure 7: Estimated Monthly Rates Using a Flat Rate Approach.....	18
Figure 8: Estimated Monthly Rates Using an Impervious Area Approach.....	19
Figure 9: Estimated Monthly Rates Using an Impervious Area Plus Parcel Area Approach	21

List of Tables

Table 1: Population Projections from the Montana Department of Commerce.....	4
Table 2: Customer Utility Accounts	5
Table 3: Stormwater Infrastructure Assets.....	5
Table 4: Estimated Operating Revenue Requirements	7
Table 5: Stormwater Utility Equipment Inventory.....	8
Table 6: Estimated Annual Equipment Costs.....	8
Table 7: Stormwater Utility Capital Improvement Plan (CIP)	9
Table 8: Five-Year Proposed Stormwater Utility CIP.....	10
Table 9: Median Parcel Size Ratios	17

1. Introduction

The City of Livingston (City) owns and operates a stormwater system that collects rain runoff and snowmelt from urban surfaces and conveys it to a variety of local waterways, such as Fleshman Creek and the Yellowstone River. Its primary purpose is to mitigate roadway and property flooding during rain and snowmelt events.

Stormwater systems play a vital role in protecting community safety and environmental health. As these systems age, there is often an increased need to maintain, repair, and replace key infrastructure components, such as pipes, inlets, and manholes, as they start to deteriorate. Unfortunately, a historical lack of attention to stormwater systems is a systemic issue across the country and is not unique to the City or in Montana at large.

Locally, most of the City's stormwater infrastructure was installed several decades ago and is undersized. There is also minimal stormwater infrastructure installed on the north side of the railroad tracks and only one connection (underpass) from the north to the south side of the City, causing substantial flooding challenges.

For many, stormwater issues are often managed on a reactive basis, and funding for work typically comes from non-dedicated municipal revenue sources, such as wastewater funds or street budgets. Further, stormwater programs typically lack staff and equipment resources, and this results in a large accrual of deferred infrastructure maintenance and repair needs over time.

A common solution to these challenges is for cities to work with their residents and policymakers to develop a Stormwater Utility. Stormwater Utilities create a consolidated programmatic structure and dedicated revenue source to fund critical services and infrastructure maintenance and repair.

Recently, the 'Big Seven' cities in Montana (i.e., Billings, Missoula, Helena, Great Falls, Bozeman, Butte, and Kalispell) have developed standalone Stormwater Utilities to provide increased services. Within the last few years, other agencies in Montana have started following their lead since they also have issues and limited funding capacity to complete needed improvements. Local examples include the City of Belgrade and Gallatin County, who are both exploring ways to add enhanced stormwater services.

1.1. Study Purpose

Over the last six years, the City has taken several proactive steps to better understand the condition and overall needs of its stormwater system, including commissioning several engineering studies and reports. Given the scale of identified challenges through these efforts, City leaders opted to commission this Stormwater Utility Feasibility Study (Feasibility Study), in partnership with Headwaters Economics, to develop key information that can be used to assess whether developing a Stormwater Utility is the right choice for their community.

This Feasibility Study builds off the prior technical work and aims to answer the following questions:

- ✓ What stormwater services would the City like to complete, and how much will this work cost annually?
- ✓ What are common stormwater utility rate structures and how may they be used to pay for the City's sought-after services?
- ✓ What scale of monthly fees would result from these varying utility rate structures for differing customer classes (i.e., commercial, multi-family, and single-family properties)?

This Feasibility Study's intent is not to provide formal directions to the City. Instead, its purpose is to inform staff, policymakers, and the public of the opportunities, challenges, and options that exist related to implementing a Stormwater Utility based on best practices tailored to City needs.

1.2. Stormwater Utility Goals

Stormwater Utilities are an equitable solution to funding drainage and water quality needs; however, they can vary widely in scope and scale when compared across communities in Montana and across the region. Nuances exist regarding the amount and type of stormwater infrastructure that requires management, and what the local communities' goals are related to environmental impacts. Through the course of the Feasibility Study, three primary goals became apparent for the City, which are discussed in the following section.

Goal #1 - Mitigating Urban Flooding

Poorly maintained, undersized and broken stormwater infrastructure poses a risk to the wellbeing of residents and property. When stormwater systems do not drain or function properly, urban runoff can flood roads, sidewalks, parking areas, and, in worst-case scenarios, private properties. It is important that cities ensure their stormwater systems are in working order and effectively drain during rainfall and snowmelt events.

There are several areas of the City where urban flooding is a substantial concern at present with notable impacts occurring to resident daily life, including roadway mobility and public safety. Regular stormwater system inspection, maintenance, and repair are a few common activities that can mitigate the risk of urban flooding. In some cases, larger capacity expansion and replacement projects are warranted to alleviate flooding issues. These projects can include replacing old and undersized pipes or installing new drainage systems in areas lacking infrastructure.

The City completes urban flood mitigation efforts on an opportunistic and reactive basis currently; however, the City desires to be more proactive in their efforts given the increasing community impacts.

It is important to clarify that urban flooding is different than natural system flooding caused by the swelling of flood-prone waterways, such as the Yellowstone River during spring runoff. Projects addressing this type of natural system flooding are outside the purview of this Feasibility Study.

Goal #2 - Improving Water Quality

Given the direct connection that stormwater systems establish between hardened urban landscapes (i.e., rooftops, roadways, parking areas, etc.) and local waterways, runoff poses a risk

to the health of these natural systems and their aquatic life. Urban areas accumulate a plethora of pollutants, such as nutrients, E. coli, trash, and metals, from resident daily life and they often get flushed through stormwater systems and into local waterways during rain events.

Conducting street sweeping, vacuuming accumulated debris from infrastructure, installing treatment units, and educating residents on best practices are a few common activities that work in tandem to improve water quality.

The City is adjacent to some of the most prized and renowned waterways in Montana. These resources are one of the many reasons residents and tourists live and travel to the area. Given this, the City seeks to increasingly make water quality improvements within its stormwater system to lessen its impact on these critical natural resources, especially as growth occurs.

Several successful water quality-based projects have been completed in the last few years; however, additional improvements are desired but challenges regarding high project costs and a lack of reliable project funding exist.

Goal #3 – Complying with Regulatory Requirements

Larger municipalities (over 10,000 people) are required to comply with state and federal laws regarding stormwater discharges. These requirements are a component of the Montana Pollutant Discharge Elimination System (MPDES) permitting program managed by the Montana Department of Environmental Quality (MDEQ).

One of the specific permits related to stormwater runoff is the Municipal Separate Storm Sewer System (MS4 Permit), which requires cities to implement a variety of programs annually to reduce their impacts on local waterways. Required activities include construction site permitting and inspections, water quality sampling, and community engagement initiatives.

MS4 Permits can be costly to comply with and typically warrant full-time staff to manage on an annual basis. The City is not an MS4 at present; however, it expects to be permitted by MDEQ in the next decade. Section 17.30.1102 of the Administrative Rules of Montana (ARM) defines the trigger point for cities to become an MS4 as the following... "small MS4s serving a population of at least 10,000 as determined by the latest decennial census..."

Given uncertainties regarding population growth and timing, costs arising from MS4 Permit coverage were not factored into the Feasibility Study; however, the City will need to plan for costs associated with new staff resources (0.5-1 Full Time Employees), recurring permit fees (\$4,000-\$8,000/year), and sampling and analysis lab costs (\$10,000 per year) when the City becomes permitted under the program.

Beyond future MS4 Requirements, the City manages an Industrial Stormwater Permit for its Water Reclamation Facility (WRF). This MDEQ-regulated permit requires the City to complete a variety of inspections, sampling activities, and training annually. Costs for these activities are paid for by various non-dedicated revenue sources currently; however, they could be integrated into the Stormwater Utility to alleviate the cost burden on these funding sources.

2. Basis of Planning

Establishing a Basis of Planning is an important Feasibility Study component that documents existing conditions from which assumptions can be made and analysis completed. Section 2.0 details key data points that were collected and used in the following report sections.

2.1. Population Projections

Based on data acquired from the Montana Department of Commerce, the City's 2024 population is 8,908 people. Using a .64% Annual Growth Projection, Commerce estimates that the City will reach a population of approximately 9,315 people by the year 2030 and 9,929 by the year 2040.

This population estimate provides important context related to planning around Goal #3 listed in Section 1.2. Population growth is hard to predict and can be based on several factors in and outside of the City's control. Given this, it is recommended that the City monitor population growth and regularly reassess their plans for compliance with regulatory requirements. Table 1 displays Commerce's population projections as of September 2024 for the City based on actual average annual growth data sourced from the US Census Bureau for the period of 2000 to 2023.

Table 1: Population Projections from the Montana Department of Commerce

Calendar Year	Growth Rate ¹ (%)	Population Projection ²
2025	0.64%	9,022
2030	0.64%	9,315
2035	0.64%	9,617
2040	0.64%	9,929
2045	0.64%	10,251
2050	0.64%	10,583

¹ Data source: <https://commerce.mt.gov/Data-Research/Research/People-Housing/Population>

² Actual average annual growth data from 2000 to 2023 from the US Census Bureau

The City completed a Livingston Growth Policy in 2021. In that report, 1% and 2% growth projections were completed, resulting in 2030 population estimates of 8,703 and 9,699 people, respectively. These estimates align relatively well and add confidence to Commerce's projections.

2.2. Demographics

The Montana Department of Commerce also maintains an inventory of income data for communities in Montana using a 2015-2019 U.S. Census Bureau's American Communities Survey data set. Based on this data, the City's Median Household Income (MHI) is \$46,097, with 14.5% of the City living in poverty. These demographic data points are important when assessing overall rate affordability and can also be useful when seeking external funding, such as state loans and grants.

2.3. Utility Accounts

The City has 4,089 utility accounts at present, with 81% of them being single-family residential customer classes and the remainder being a combination of multi-family, governmental, and commercial properties.

The City's Finance Department has existing workflows to track water usage and bill these utility accounts for water and wastewater services using Caselle, which is a common enterprise billing software. Table 2 provides a listing of accounts detailed by customer class.

Table 2: Customer Utility Accounts

#	Customer Class	Total Accounts ¹ (#)	Percentage of Total Accounts
1	Single-Family Residential	3,309	81%
2	Commercial and Governmental	388	9%
3	Multi-Family Residential	186	5%
4	Vacant Land	206	5%
	Total:	4,089	100%

¹ Account totals acquired from the City's Billing Database in May 2024.

2.4. Stormwater Assets

The City owns and is responsible for the maintenance, repair, and eventual replacement of 421 stormwater infrastructure assets, including inlets, manholes, and outlet pipes. As community growth occurs, the City expects this total to increase, especially as the construction of new roads, subdivisions, Planned Unit Developments (PUD), and improvement of areas currently without infrastructure occurs. Table 3 provides a listing of the City's existing stormwater infrastructure assets detailed by type and count.

Table 3: Stormwater Infrastructure Assets

#	Asset Class (Type)	Total Assets ¹ (#)
1	Manholes	106
2	Outlets	32
3	Inlets	283
4	Water Quality Treatment Units	1
	Total:	422

¹ Asset data acquired from the City's GIS Database in May 2024.

The City also owns and manages approximately eight (8) miles of storm sewer pipe, ranging from 4" to 48" in diameter. The oldest portion of these pipes have been in the ground for over 75 years and are nearing the end of their useful life. Limited information exists regarding the age, material, and condition of the City's storm sewer pipes at present; however, field knowledge provided by the City concluded that most of the stormwater system likely requires some form of maintenance, repair, and replacement, ranging from spot repairs to total replacements.

The City's storm sewer pipe network is smaller than its wastewater collection and water distribution systems; however, similar issues and costly needs exist. For comparison, the City has 50 miles of sanitary sewer pipe and 60 miles of water pipe.

3. Revenue Requirements

Determining an annual revenue requirement is a process that projects the total annual costs necessary for a utility to provide its essential levels of service. This process is longstanding and commonplace for established municipal utilities, such as water and wastewater systems. In most cases, revenue requirements remain relatively stable year-to-year, but may see increases when adding staff, planning for inflation, and implementing changes to provided levels of services.

For new utilities, such as the City's proposed Stormwater Utility, establishing a revenue requirement can be challenging since there are not several years of historical data to compare and base budget estimates. Given this, developing a revenue requirement for a new utility requires a detailed review of several areas to align community goals (i.e., those discussed in Section 1.2) with the costs involved in working towards their achievement over time.

In general, four common types of revenue requirements exist for public utilities, including operating expenses, capital projects, general fund services, and reserves. Figure 1 provides an overview of these components, and the scale of need and associated costs required for the Stormwater Utility are discussed in the following section.

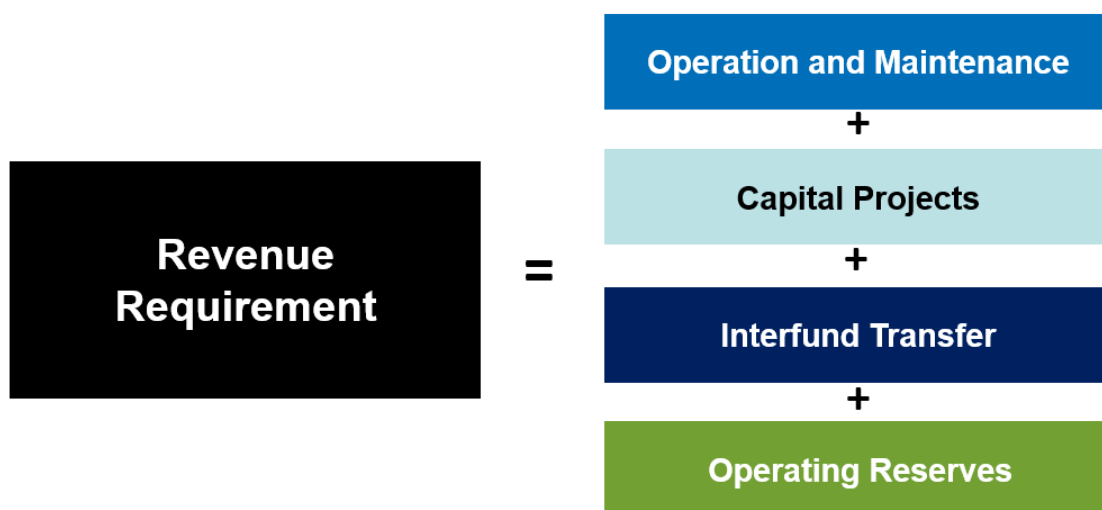


Figure 1: Varying Elements Comprising a Typical Utility Revenue Requirement

3.1. Operating Costs

Operating costs include the costs of a utility that are required to conduct day-to-day business activities, such as funding staff salaries, buying computers and equipment, and furnishing supplies. As noted above, arriving at these costs for a new utility is challenging given the lack of past data.

The approach used was to conduct a comparative analysis using the City's existing wastewater system and its associated annual operating budget. Individual budget line items were reviewed and assessed for their applicability to the Stormwater Utility. Given that the City's stormwater system is about 1/5th the size of its wastewater system, 20% of the wastewater systems budget line-item costs were used as the standard assumption, with some specific modifications based on consultation with the City. This approach resulted in an operating revenue requirement of \$180,501 per year, which is summarized in Table 4.

Table 4: Estimated Operating Revenue Requirements

#	Budget Detail	Estimated Annual Cost (\$)
1	One full-time operations employee, including insurance and benefits	\$90,137
2	Professional services for project and development external engineering assistance	\$20,000
3	Share of Public Works Director personnel costs (1/6 th)	\$15,947
5	Insurance	\$19,080
6	Fuel, parts, supplies, materials, uniforms, utilities, and small tools	\$35,338
	<i>Total:</i>	<i>\$180,502</i>

Another essential component of operating costs includes the purchase of equipment necessary to complete infrastructure inspection, maintenance, and repair activities. It is common for new utilities to utilize refurbished equipment and share resources with other divisions to save initial startup costs; however, certain equipment is sometimes required, and purchase is necessary.

An equipment inventory was completed with the City that resulted in a decision to dedicate a portion of purchase costs related to a new vacuum truck and street sweeper to the Stormwater Utility. The rest of the equipment reviewed is planned to be acquired through repurposing or sharing with other City Divisions. The results of the equipment inventory are included in Table 5.

Table 5: Stormwater Utility Equipment Inventory

#	Equipment Type	Intended Purpose	Acquisition Strategy
1	Vacuum Truck	Trenchless digs, pipe flushing, and inlet vacuuming.	25% Stormwater Utility Cost share with the Wastewater Division
2	Street Sweeper	Roadway cleaning, dust prevention, and pollutant removal.	50% Stormwater Utility Cost share with the Streets Division
3	Pipe Inspection Camera	Inspection and issue identification for underground pipes.	Repurpose of a Wastewater Division camera; No Initial Stormwater Utility Cost
4	Service Truck	Operator transport to and from job locations.	Repurpose of a Wastewater Division truck; No Initial Stormwater Utility Cost
5	Excavator	Planned and unplanned excavations and repairs.	Share with the Wastewater Division; No Initial Stormwater Utility Cost
6	Dump Truck	Excavated and fill material transport and disposal.	Share with the Wastewater Division; No Initial Stormwater Utility Cost
7	Equipment Storage	Covered storage with areas for equipment repair and maintenance	Share with other Public Works Divisions; No Initial Stormwater Utility Cost

There are several ways to fund equipment purchases, including one-time cash payments, loans paid back from annual operating revenues, or interfund loans between departments. The assumption for the Feasibility Study was that the Stormwater Utility would share the costs of the vacuum truck and street sweeper being funded with a loan. Loans allow for smaller payments spread over time versus a one-time cash payment.

Based on estimated loan terms of a 10-year payback and a 5% interest rate, it is estimated that the Stormwater Utility payments for equipment will be \$40,470 per year, as detailed in Table 6.

Table 6: Estimated Annual Equipment Costs

#	Equipment Type	Estimated Total Cost (\$)	Stormwater Utility Share (%)	SW Utility Share (\$)	Funding Strategy (Type, Interest Rate, Term)	Estimated Annual Payment ¹ (\$)
1	Vacuum Truck	\$750,000 ²	25%	\$187,500	Loan (5%, 10-year)	\$24,282
2	Street Sweeper	\$250,000	50%	\$125,000	Loan (5%, 10-year)	\$16,188
	<i>Total:</i>	<i>\$1,000,000</i>	<i>-</i>	<i>\$312,500</i>	<i>-</i>	<i>\$40,470</i>

¹ Assumes a 10-year loan term with a fixed 5% interest rate

² Equipment costs may range from \$550,000 to \$750,000.

Adding the additional equipment cost of \$40,470 to the estimated operating budget equates to a total of \$220,971 for the first year of Stormwater Utility operation. Attachment A includes a detailed listing of the estimated operating costs factored into this total.

3.2. Capital Costs

Capital costs typically include infrastructure projects, such as pipe replacements, stormwater treatment, and system expansions. Projects can vary in cost depending on their scope and scale and can have a substantial impact on overall utility revenue requirements year to year.

The City completed a Stormwater Drainage System Preliminary Engineering Report in 2023, which noted that many of the City's existing storm sewer pipes are undersized and require an upgrade to handle larger-scale storm events (TD&H, 2023). In total, the Storm PER identified and detailed nine capital projects, totaling approximately \$11 million (2023 \$).

These capital projects were compiled with several others identified by the City through the course of the Feasibility Study. It is important to note that drainage and water quality projects along 2nd Street and Montana Street are progressing through various preliminary project stages. If a Stormwater Utility is not formed, the City may need to utilize funding from other departments to fund the required work, such as the Street and Sewer Departments. Please see Attachment C for a map of the City's proposed stormwater capital projects.

The compilation of the City's planned projects formed the basis for the Stormwater Utility's Capital Improvement Plan (CIP) detailed in Table 7.

Table 7: Stormwater Utility Capital Improvement Plan (CIP)

#	Type	Estimated Cost (2023 \$)	Project Origin
1	Operations Disposal Facility (SW Share)	50,000	Staff Recommendation
2	B Street Water Quality Project	130,000	Staff Recommendation
3	2nd Street Water Quality Project	650,000	Staff Recommendation, Ongoing
4	Montana Street Project	500,000	Staff Recommendation, Ongoing
5	Railroad Crossing	160,000	Storm PER Recommendation
6	W. Geyser Street Outfall	2,505,000	Storm PER Recommendation
7	Eastside Roundabout Improvements	112,000	Storm PER Recommendation
8	Minnesota Addition Infrastructure	1,451,000	Storm PER Recommendation
9	East Residential	509,000	Storm PER Recommendation
10	Little Hill District Infrastructure	3,864,000	Storm PER Recommendation
11	Big Hill District Infrastructure	710,000	Storm PER Recommendation
12	Highground Subdivision Infrastructure	500,000	Storm PER Recommendation
13	Northtown Drainage Basins	637,000	Storm PER Recommendation
<i>Tota Estimated Cost:</i>		<i>11,778,000</i>	

Capital projects are typically a one-time cost to a utility and are paid for using several different approaches, including cash reserves, borrowing/loans, and grants. The benefit of cash funding projects is the ability to avoid interest, thereby keeping overall project costs low. The disadvantage is that project costs are not able to amortize and the City's ability to afford from a cash flow standpoint can be limited. As a result, some expensive projects must be phased out, or several years of revenue must be saved until adequate cash reserves accumulate. The City may decide to diversify their funding strategy over time; however, it was assumed that the City would fund all projects using one-time cash payments for the purposes of this Feasibility Study.

It is not practicable from funding or workload capacity standpoints to complete all the projects listed on the CIP in the first year, or even first decade of the Stormwater Utility's creation. Given this, the City worked to prioritize the projects to develop a plan that allows for iterative progress over time, while still being sensitive to community cost-burden and the highest priority issues.

These prioritization efforts yielded an average capital cost of \$255,126 per year over the next five years, with some variations occurring year-to-year to account for individual project scope and scale nuances. Table 8 provides a listing of the capital projects, and their estimated costs. These costs have been inflated from present to future value using a 3% annual increase.

Table 8: Five-Year Proposed Stormwater Utility CIP

#	Type	Fiscal Year	Estimated Cost (Future \$)
1	Unplanned Drainage Improvements	Annual	\$125,000 (\$25,000/year)
2	B Street Water quality Project	2025	\$142,055
3	Disposal Facility	2025	\$54,636
4	2nd Street Water Quality Project	2026	\$168,826
5	Montana Street Project (Phase 1)	2027	\$289,819
6	Montana Street Project (Phase 2)	2028	\$298,513
7	Railroad Crossing	2029	\$196,780
<i>Five-Year Total (2025 – 2029):</i>			<i>\$1,275,629</i>

Beyond the five-year planning horizon, over \$10.0 million of additional capital projects exist that will require planning and inclusion in future CIPs.

3.3. General Fund Services

Interfund transfers are a common practice for municipalities and typically result in the transfer of funding from a utility enterprise fund to the general fund. General funds pay for a broad range of municipal services that benefit standalone utilities, such as legal support, human resources, finance, and information technology. These general services benefit utility enterprise funds, but

also serve all the other divisions within a municipality. Given that, finding the appropriate transfer ratio can be challenging, and can range based on community policies and state laws.

Based on directions from the City, 5% of the Stormwater Utility's annual operating budget was used as the General Fund transfer assumption for these internal services. This amount aligns with the existing City policy for its water and wastewater utilities and equates to about \$11,000 per year.

3.4. Reserves

Utilities typically manage dedicated and non-dedicated reserves to ensure the utility can reliably make debt payments and respond to unforeseen emergencies that require quick intervention. Reserves operate like a personal savings account, where money left unspent through a typical budget cycle becomes excess and can be saved for future use.

Industry-best practice is to maintain at least 1/3 (or 33%) of a utility's annual operating expenses in reserves. For new utilities, it is good practice to slightly overbuild initial operating reserves since there will likely be unaccounted for costs that arise over the first several months and years of operation.

The Feasibility Study factored in approximately \$110,000 of reserve generation over the course of the first year of its implementation. This amount equates to 50% of the operating cost detailed in Section 3.1. Moving forward, reserve planning should be completed annually to ensure reserve goals are being established, met, and maintained.

3.5. Revenue Requirement

The proposed Stormwater Utility's total revenue requirement is the sum of the estimated operating expenses, scheduled capital projects, general fund service transfer, and reserve savings discussed in the previous sections. When doing so, an estimate of \$564,000 exists for the first year of the Stormwater Utility. Figure 2 provides detail regarding the itemized costs that resulted in this total.

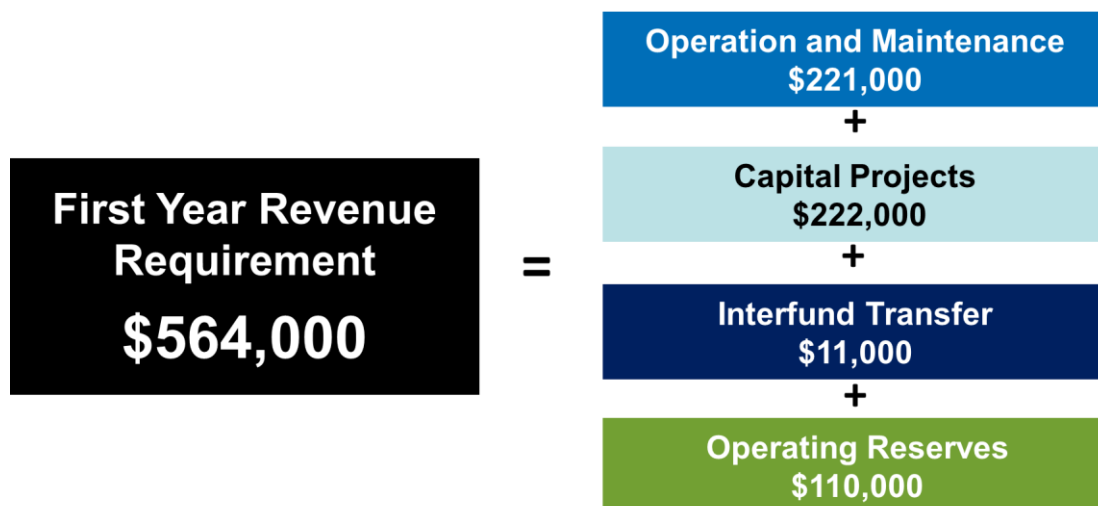


Figure 2: First Year Stormwater Utility Revenue Requirement

3.6. Enterprise Fund Comparison

The City has two existing utility enterprise funds with related revenue requirements. Figure 3 provides a comparison of the proposed Stormwater Utility revenue requirement against the City's water and wastewater utilities.



Figure 3: Utility Revenue Requirement Comparison

4. Revenue Generation

It is increasingly common for cities across the United States to generate revenue to pay for stormwater costs by charging residents and businesses for municipal services. Rate revenue is a reliable and predictable funding source and offers significant benefits over less stable alternatives, such as relying on grants or using funding from other municipal sources. Rate revenue also serves as a foundational revenue source in a diversified and balanced utility funding portfolio, which can then be augmented with other alternatives as opportunities arise.

The City does not have a dedicated revenue source to pay for the stormwater services or projects currently and all existing work is funded from a mix of non-dedicated sources, such as the Sewer and Street Maintenance Funds. Section 4.0 details several best-practice rate structures the City may consider when determining if and how they would like to charge customers to pay for the revenue requirement formulated in Section 3.0.

4.1. Rate Structures

The primary benefit to instituting a utility rate structure and associated fee is to fairly distribute the cost of the City's stormwater services across all eligible properties based on their contributing stormwater runoff.

A range of stormwater rate structures exist, spanning simple to more complex approaches. One of the fundamental differences between them is the mechanism in which charges are calculated per property and the underlying data necessary to make those determinations.

On the more basic end, a flat charge can be used that groups all similar customers into a series of classes and then assigns a fixed charge to each class. This approach requires minimal initial data to develop the rates and is relatively easy to update as new properties are added to the City. This approach has limitations and is less fair and equitable than the more complex approaches.

On the other end of the spectrum, more complex models leverage hydrologic modeling to determine runoff volumes at the individual property-scale. Approaches that are this complex are not found in Montana and are often avoided due to their intricacies and costs necessary to manage long-term, especially for growing communities. The benefit of more complex models is that they are typically more robust, resulting in a fairer and more equitable approach.

Most communities opt for a middle solution that balances the ease and benefits of the simpler approaches with the equitable and fairness benefits of more complex structures. Many of these methodologies rely on impervious areas as the underlying data source, since it provides a direct and defensible connection between runoff originating on a property and public stormwater system impacts, which then allows fees to be determined for each property based on this variable.

Under this approach, those who have a large impervious area footprint and generate more stormwater runoff, such as a large grocery store, are charged more versus those with a smaller footprint, such as a small auto mechanic shop. Figure 4 details several examples of best-practice stormwater rate structures organized by their level of complexity and equitability.



RATE STRUCTURE	PRIMARY ADVANTAGES	PRIMARY DISADVANTAGES
FLAT RATE	• Easy to Administer • All Parcels are Charged	• Highly Inaccurate
GROSS AREA FACTORED BY RUNOFF COEFFICIENT	• Accounts for Parcel Size • Less Data Required • Addresses Intensity of Development • All Parcels are Charged	• Relatively Inaccurate in Terms of Individual Property Impact • Does Not Account for Land Management Practices
IMPERVIOUS SURFACE AREA	• Accurate • Data Requirements can be Simplified for Equivalent Residential Units (ERUs)	• Large Amount of Data Required • Does Not Account for Land Management Practices • Does Not Account for Parcel Size • Not all Parcels are Charged
GROSS AND IMPERVIOUS SURFACE AREA	• Accurate • Accounts for Parcel Size • All Parcels are Charged • Addresses Intensity of Development	• Large Amount of Data Required • Does Not Account for Land Management Practices
CLASS INTENSITY OF DEVELOPMENT	• Accurate • Addresses Intensity of Development	• Large Amount of Data Required • Does Not Account for Land Management Practices • Not all Parcels are Charged
EQUIVALENT HYDRAULIC AREA (PERVIOUS AND IMPERVIOUS)	• Accurate • Accounts Parcel Size • Accounts for Land Management Practices • All Parcels Charged • Addresses Intensity of Development	• Large Amount of Data Required • More Complex than Other Methods

Figure 4: Example Best-Practice Stormwater Rate Structures

It was decided that a range of structures should be reviewed after consultation with the City to determine rate impacts to varying customer classes (i.e., residential, commercial, multi-family, etc.) under each scenario. The structures analyzed included a range of simple to more complex structures, including: (1) Flat Rate, (2) Impervious Area, and (3) Impervious Area plus Parcel Area.

It is important to note that regardless of the underlying rate method, several commonalities exist for all stormwater rate structures that warrant careful consideration, including:

- ✓ Unlike water use that can be metered and quantitatively measured, individual property-scale stormwater runoff impacts can be difficult to track and measure.
- ✓ Stormwater system impacts are most often derived from parcel-scale runoff indicators, such as land use or the amount of impervious area that exists on a respective property.
- ✓ Stormwater rate structures and program drivers vary by community, and it is difficult to acquire true comparisons given the different approaches used and local modifications. This is particularly true when comparing commercial and multi-family properties.
- ✓ A rate structure of any complexity takes time and resources to manage and keep current, especially for growing communities that are expanding their rate bases.
- ✓ An equitable and defensible rate structure is important to ensure the long-term financial success of the Stormwater Utility. Data collection is typically one of the first and most foundational steps.
- ✓ It is important to build a consistent credit and exemption process for any implemented rate structure. To accomplish this, most cities establish policies that allow for the review and adjustment of fees on a case-by-case basis in the event there are situations that arise that are not typical. In most cases, the cities delegate this authority to a Public Works Director or City Engineer level staff member. Although challenges may be somewhat frequent early on, it is common to see them taper as the utility becomes more established.

The remaining portions of this section offer a planning-level review of the selected rate structures to help the City make an informed decision of which option is best suited for their community. The intent is to offer a scale for how these different structures would impact the varying customer classes but stops short of making any formal recommendations given the scope of the Feasibility Study and the limited data that exists at present.

4.2. Data Limitations

Data collection is an important step when developing a stormwater rate structure, especially for those leveraging more complex inputs and calculations. For new utilities, acquiring adequate existing data is a common challenge since data sets, like impervious areas, are rare and not commonly managed by smaller communities in Montana. The following section details several data challenges identified throughout the course of the Feasibility Study and describes several workaround solutions deployed to maintain the intent of the work.

Impervious Area

Aerial imagery is essential in deriving impervious area footprints for buildings, parking lots, and driveways. Although aerial imagery is relatively commonplace, often the imagery that is available does not have the quality or conditions necessary to derive a defensible data set. A few examples of this include the inclusion of infrared imagery, leaf off conditions, and imagery captured within a reasonable timespan from which new growth is represented.

Unfortunately, research into the City's available aerial imagery resulted in a few different data sets; however, none of them possessed the quality and conditions to derive a quality impervious area data set. Given this, an alternative building footprint data set was used to mimic the use of impervious area data; however, it should be recognized this approach is limited given that it omits parking lots and driveways. The data was also several years old and omitted several new properties, which were manually included in the analysis.

It is not recommended that the City use a building footprint approach if they were to move forward with an impervious area-based method; however, this approach served as a suitable alternative for the Feasibility Study's intent given the lack of suitable aerial imaging. Figure 5 provides an example of the limitation of the building footprint data. The dark purple polygon is the building's footprint captured in the utilized data, and the lighter areas are the portions of impervious manually drawn.



Figure 5: Example Data Limitation Using Building Footprints

Acquiring suitable impervious area data is becoming easier and more cost effective as technology improves. Consultation with a third party occurred to determine options and costs for the City if they decided to move forward with an impervious area-based approach. An estimated cost range for imagery and analysis to derive a defensible impervious area dataset was provided at \$15,000 - \$30,000.

Financial System Linkage to Spatial Data Sets

Another common challenge that stormwater rate structures present is the need for a clear linkage from the City's financial billing system to its spatial data sets, such as parcels. This is typically not an issue for water utility charges since the data comes from deployed meters that directly tie to the financial billing system.

For stormwater charges, this connection is not possible since there is no meter tracking and transmitting usage data. Instead, the spatial information being used, such as impervious area, must be assigned to an individual property manually or by using a data model, and then linked to the financial billing system. Once in the financial billing system, a charge can be included on utility bills along with water and wastewater charges and sent to customers on a recurring basis.

Upon review of the City's billing database, it was found that there is not a link that ties billing records to spatial data sets; however, this could be rectified at the time of establishing the aerial imagery and associated impervious area layer.

Parcel Accuracy and Class Determinations

The accuracy of parcels is an essential data element in ensuring the accurate calculation of impervious areas assigned to each property, and their corresponding charges. The State of Montana manages a statewide parcel dataset, with Park County making local modifications as changes occur. Although the existing parcel data set is relatively accurate, some additional adjustments would need to be completed to ensure overall accuracy, especially as it relates to overlaps, connectivity issues, and spatial shifts.

Another challenge identified is that the currently available parcel data lacks "customer class" information, so there was no clear way to determine what parcels possessed single-family, commercial, or multi-family dwellings. This is also a common issue that can be resolved using County Tax Records or a manual property coding process.

Given the limited scope of the Feasibility Study, an exercise was undertaken to take a high-level attempt at bulk coding properties; however, it should be noted that a much more detailed analysis and QA/QC process would be required to ensure a defensible and accurate data set during the implementation stage of a rate structure reliant on this information.

Figure 6 displays an example area of the City where the coding process occurred. The green polygons are the properties assumed to be single-family residential, commercial properties are displayed as tan, and multi-family are displayed as orange.



Figure 6: Customer Class Coding Process

4.3. Approach #1 - Flat Rate

Overview

Approach #1 – Flat Rate is a relatively straightforward rate approach and applies a flat fee across the differing customer types (i.e., single-family, commercial, and multi-family), with no variability for each class. The main benefits of this approach are that it is low in complexity, does not require extensive data collection to implement, and can be easily maintained using existing financial billing software as new properties are added to the City. Drawbacks of this approach are that it lacks variation within individual customer classes and has a minimal relationship to actual runoff patterns.

Approach

There are several ways to determine the level of charge per customer class. For the Feasibility Study, the ratio was determined by comparing median lot sizes as a surrogate to establish flat rates for each customer class. For instance, it was determined that the median single-family lot size in Livingston is 7,033 square feet, while the median lot size for a commercial parcel is 10,596 square feet based on the available data. This difference results in a 1.5 ratio. In other words, the monthly fee for a commercial parcel was determined to be 1.5 times that of a single-family residential fee. Table 9 shows the median parcel sizes and their corresponding ratios.

Table 9: Median Parcel Size Ratios

Class	Median Parcel Size (Square Feet)	Size Ratio Compared to Single Family
Single Family	7,033	1.00
Commercial	10,596	1.51
Multi-Family	4,302	0.61
Vacant	10,756	1.53

The revenue requirement established in Section 3.0 was used to calculate each customer class charge by using the ratios along with the total number of accounts in each user class to arrive at a monthly fee capable of meeting the budget goal.

Results

The Flat Rate Approach results in an estimated single-family residential rate of \$10-11 per month (\$120-132 per year) and \$16-17 per month for commercial properties. In this scenario, it was assumed that non-utility billed parcels (i.e., parking lots, vacant land, etc.) would receive a monthly charge. Since the ratios were based on total land area, this resulted in a flat charge of \$16-17 for these properties. Figure 7 provides an overview of estimated monthly charges per customer class under this approach.

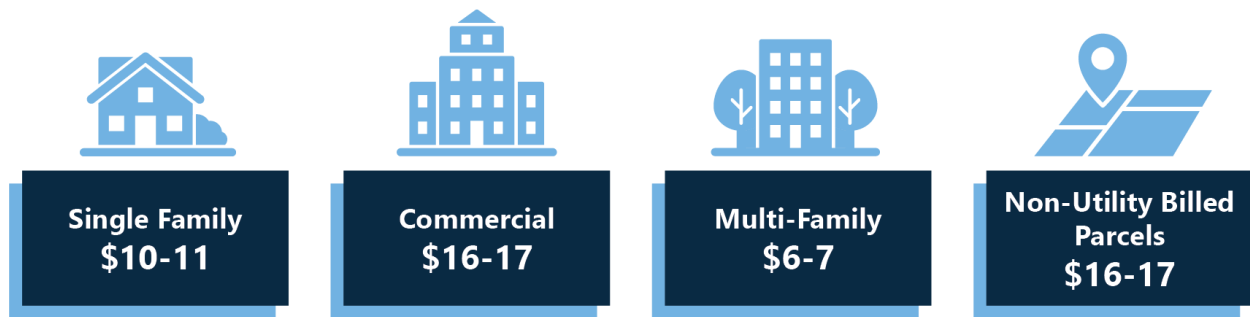


Figure 7: Estimated Monthly Rates Using a Flat Rate Approach

4.4. Approach #2 - Impervious Area

Overview

Approach #2 – Impervious Area is a common rate approach that applies a variable rate to individual properties based on the amount of impervious area present, such as rooftops, driveways, and sidewalks. A direct relationship exists between the amount of impervious area on a select property and the amount of runoff that occurs, which is why it is widely used to generate stormwater fees.

Typically, a uniform rate is assessed for single-family residential properties to ease the burden of having to manage impervious area totals for thousands of individual single-family properties. This is commonly referred to as an Equivalent Residential Unit (ERU).

For multi-family and commercial properties, charges are based on their total impervious area and related impact. For example, properties with larger building footprints and parking areas are charged more than those with smaller areas.

This approach requires time and investment for implementation; however, the primary benefit is that it is highly defensible once set up, widely recognized as the industry standard, and is commonly used across Montana, including the adjacent cities of Bozeman and Billings. Notable drawbacks include the need for acquiring quality data upfront and the higher workload associated with ongoing maintenance and updates.

Approach

Given the lack of quality aerial imagery, and the corresponding inability to generate an accurate impervious area dataset, building footprint data was used to mimic and model this approach. Building footprints provided a reasonable comparative data set since large building footprints coincided with properties with large parking lots and the ratios were found to be comparable. Although building footprints were used, it is important to note that the City would need to use a fully developed impervious area data set that includes parking areas and driveways.

Based on the acquired data building footprint data, it was found that the City has approximately 10 million square feet of total building footprint area applicable to the analysis. Given that the

building footprint data was a few years old, several new properties were manually assessed and included to ensure a more accurate citywide total.

A spatial process was then used to determine the amount of building footprint that existed on each individual property using the acquired parcel data set along with the coded property types (i.e., commercial, multi-family and single-family). To complete, the building footprint areas were then clipped to their respective parcels and associated property classes to determine how much exists on each parcel.

For commercial and multi-family properties, these corresponding areas were left in a varied state for each property depending on their size. For single-family properties, using the equivalent residential approach, the average building footprint of all single-family parcels was found to be approximately 1,800 square feet. This established a common residential rate (i.e., Equivalent Residential Unit or ERU) based on average parcel characteristics and rates per square foot, which were then applied uniformly across the City's 3,309 single-family properties.

The final step was to determine the cost per square foot of building footprint so that it could be applied to all properties based on their total respective sizes. To do this, the total revenue requirement from Section 3.0 was divided by the total building footprint square footage to arrive at a \$.059 per square foot total. This rate was then multiplied by the building footprint areas for individual properties to determine a monthly rate.

Results

Approach #2 resulted in an estimated single-family residential rate of \$8-9 per month (\$96-108 per year) and a \$18-19 per month median for commercial properties. In this scenario, it was assumed that non-utility billed parcels (i.e., parking lots, vacant land, etc.) would not receive a charge. Figure 8 provides an overview of estimated monthly charges per customer class under this method.

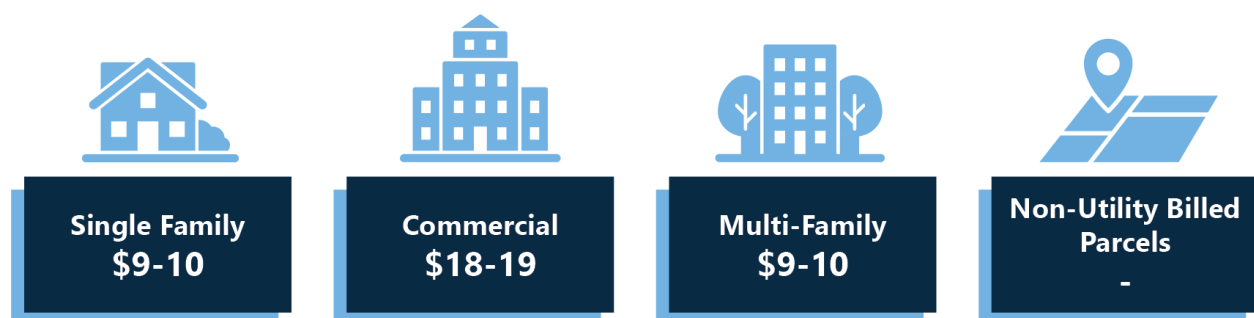


Figure 8: Estimated Monthly Rates Using an Impervious Area Approach

4.5. Approach #3 - Impervious Area plus Parcel Area

Overview

Like Approach #2, Impervious Area plus Parcel Area is a common rate approach that applies a variable rate to individual properties based on the amount of impervious area present, such as

rooftops, driveways, and sidewalks. The primary difference between Approach #2 and Approach #3 is the inclusion of a fee for parcels that lack impervious area however still have an impact on the City's stormwater system but to a much lesser degree.

Like in Approach #2, an ERU approach was used for single-family residential properties to ease the burden of having to manage impervious area totals and parcel areas for thousands of individual single-family properties.

For multi-family and commercial properties, charges are based on their total impervious area and their parcel areas. For example, properties with larger swaths of impervious area, and larger parcel areas are charged more than those with smaller overall footprints.

The approach is also a medium-complexity approach that requires time and investment for implementation. It offers the same benefits as Approach #2, such as fairness and alignment with industry standards, while also generating revenue from vacant parcels and maintaining flat fees for single-family residential properties.

This method also has its challenges: it requires detailed impervious areas and parcel data sets, making it the most complex approach. Additionally, it necessitates ongoing efforts to maintain and update data, with significant initial data collection and coordination required.

Approach

Approach #3 extended the process used in Approach #2 by incorporating a mechanism to charge for vacant land areas in addition to building footprint areas. A two-step spatial analysis was used: first, determining the amount of building footprint on each parcel, and second, calculating the total parcel area by subtracting the total building footprint from the total parcel area. A building footprint rate and a parcel area rate were then established and applied based on the unique characteristics of each property.

For this analysis, 70% of the revenue requirements were allocated to the building footprint charge, while the remaining 30% was allocated to the parcel area portion of the fee. This ratio was used as a starting point; however, may be adjusted to emphasize or deemphasize the fee generation amount derived from vacant land. Typically, the ratio of the revenue requirement is lower for vacant land since less runoff originates from undeveloped lots and portions of properties that do not have impervious area.

The total building footprint area in Livingston is roughly 10 million square feet and the total parcel area is roughly 174 million square feet based on available data. Using both of those figure's results in a cost per square foot of \$0.040 for building footprint and \$0.001 for total parcel area. Those figures were then multiplied by the building footprint and parcel area of individual parcels to arrive at a monthly fee.

Results

The Impervious Area Approach results in an estimated single-family residential rate, or ERU, of \$6-7 per month (\$72-84 per year) and a \$12-13 per month median for commercial properties. In this scenario, non-utility billed parcels (i.e., parking lots, vacant land, etc.) would

receive a charge, with a median monthly fee of \$4-5. Figure 9 provides an overview of estimated monthly charges per customer class under this method.

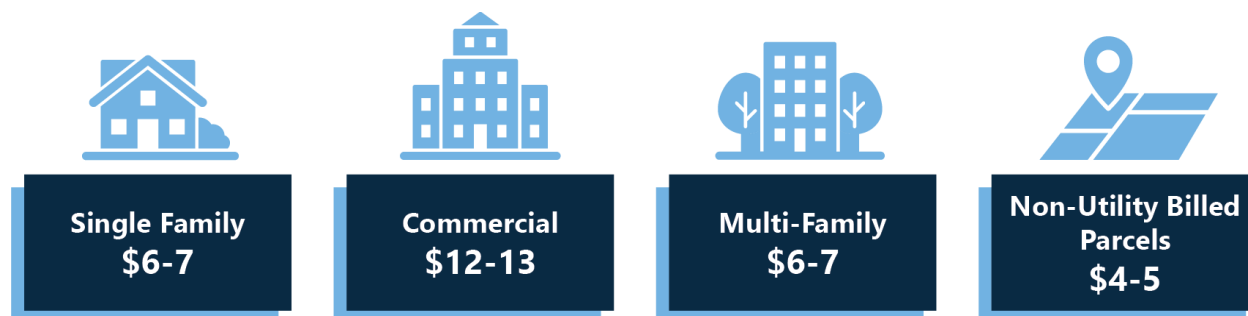


Figure 9: Estimated Monthly Rates Using an Impervious Area Plus Parcel Area Approach

4.6. Alternative Funding Sources

Several alternative funding approaches beyond generating rate revenue exist that may offer the City an alternate pathway to funding some of their stormwater-related costs. These sources are typically used to augment rate revenues and do not typically stand-alone since they are less reliable than rate revenue.

Impact Fees

Impact fees are one-time payments by property owners that help fund growth-related infrastructure projects and improvements. They are often pooled and used to complete larger projects over time, such as installing a water pipe that will eventually supply an expanding area of the City.

Rules govern how impact fees can be spent, and they are prohibited from funding typical system operation or projects that address deferred maintenance. As such, they are limited in scope and the amount raised every year is dependent on the level of local community growth, making them challenging to predict. The benefit of impact fees is that the City can use them to upsize or extend their existing system, and offset costs associated with growth-driven projects.

Impact fees are very common in water and wastewater utilities; however, they are not as commonly used to fund new stormwater infrastructure in Montana. They are relatively commonplace in other areas of the Country who have more mature stormwater utilities. If the City is interested in establishing a stormwater impact fee, a dedicated study would be required to establish an underlying policy and to set a defensible fee structure based on applicable growth-related projects.

State and Federal Loans and Grants

The City was proactive in commissioning a Preliminary Engineering Report (PER) in 2023 that meets most state and federal program requirements, which is an essential first step in pursuing agency loans and grants. Given that, various state and federal funding options now exist that may benefit the City on an opportunistic basis. Typically, these programs offer grants or loans for

individual capital projects, not recurring operational costs, such as equipment and staffing. These funding sources can help offset the local-cost burden of projects; however, their acquisition can be costly, competitive, and take time. The following list includes several examples of sources that could help fund City stormwater capital projects; however, state and federal funding availability is subject to change and applicable agencies should be contacted to understand current terms once a suitable project is identified. Examples include:

- ✓ Montana Department of Natural Resources and Conservation (MTDNRC) Renewable Resource Planning and Project Grants (RRG): MTDNRC will fund up to \$40,000 to aid in Preliminary Engineering Report (PER) creation and up to \$125,000 for construction projects.
- ✓ MTDNRC and Montana Department of Environmental Quality (MDEQ) State Revolving Fund (SRF): MTDNRC and MDEQ co-administer Montana's SRF Program, which provides loans for qualified public agencies and projects. SRF loans typically offer better terms than traditional market bonding, including interest rates as low as 2.5% and up to 30-year pay back periods.
- ✓ Montana Department of Commerce Coal Endowment Program (MCEP): Commerce will fund up to \$40,000 to aid in Preliminary Engineering Report (PER) creation and up to \$750,000 for infrastructure-related construction projects.
- ✓ United States Department of Agriculture (USDA) Rural Development Grants and Loans: The USDA offers loans and grants to qualified municipalities and projects that have a population of 10,000 people or less. Like SRF, they offer low-interest rate loan packages that can include up to a 40-year payback period. USDA also attempts to keep user rates reasonable, so they have the discretion to provide grants along with loans based on community variables, such as median household income (MHI).

4.7.Update Process

Regardless of the rate approach ultimately selected by the City, it is important to consider how updates will occur as the community changes and grows. The Flat Rate Approach would warrant a fairly simple process of assigning the fixed charge each time a new customer is added to the financial system.

For the more complex structures, such as those utilizing impervious area, a process is necessary that combines the City's Planning, Geographic Information Systems (GIS), Public Works, and Financial Divisions, so that growth can be accurately captured, documented, and integrated and sent monthly stormwater fees. Typically, this process includes the use of site plans submitted at the time of application and an associated digitization and integration process into the applicable GIS layer. From there, the data can be relayed to the billing database and included in the typical billing cycle.

Another element to consider is that most communities elect to update their underlying imagery every few years to capture community growth and changes. These costs are typically shared across several departments and divisions, since cities benefit in several ways by having updated imagery.

Given that the City is still relatively small, it is not expected that this update process would be a significant undertaking; however, establishing a clear and repeatable process would be necessary during the development stage of the City's Stormwater Utility.

5. Recommendations

The City is paying for stormwater improvements largely through Sewer and Street Maintenance at present. Forming a Stormwater Utility would allow those funds to be appropriately spent on dedicated sewer and street related projects and services, rather than be diverted. Further, a dedicated Stormwater Utility would increase the City's capacity and expand the level of service provided to residents by its stormwater system.

The Feasibility Study was successful in establishing that (1) there are substantial needs within the City's stormwater system and (2) that implementing a rate structure could generate sufficient revenue to fund associated costs while remaining consistent with other communities in Montana and the region. Attachment B includes a chart that shows how the rates estimated in this Feasibility Study compare to those in Montana and several cities across the region.

The following recommendations are provided in the event the City decides to move forward with the development and implementation of a dedicated Stormwater Utility.

Recommendation #1 – Engage the Community Early and Often and Obtain Input

Implementing a new Stormwater Utility can come as a surprise and elicit negative feedback from businesses and residents if not adequately explained and justified. Little understanding exists around the value of municipal services, and stormwater services are no exception since this work has been avoided, reactive, and deferred historically.

It is important that outreach efforts focus on why the work the City plans to undertake using collected funds is important and how it will impact resident daily life. It is recommended that the City involve the community in its plans early, often, and in clear and diverse ways to mitigate the chance for negative reaction during the adoption period. Examples include public presentations for key audiences, utility bill stuffers, and developing a dedicated web page.

The City has started this process, with several presentations since 2018 to the City Commission and area nonprofits. They plan to continue their proactive efforts over the coming months.

Recommendation #2 – Invest In and Leverage High-Quality Data

Overly simple and excessively complex rate structures both present substantial challenges. Given that, it is recommended that the City pursue a middle ground rate solution that leverages impervious data as its foundational element, balancing simplicity with equitability. Although increased initial investment would be required, the benefit is that the implemented rate approach will be more accurate, defensible, and result in less resident and business challenges over time.

Recommendation #3 – Pursue a Phased Development Plan

Implementing a new utility can be challenging amongst other community priorities and, in some cases, communities may choose to ramp up service offerings and their associated rates slowly and

over time. This approach allows for a phase in of services and costs to residents and can reduce hurdles that may exist with a comprehensive initial implementation.

A recommended next step is to pursue a utility implementation phase that bridges the gap between this Feasibility Study and total utility implementation from which revenue can be generated. Tasks completed during this phase may include the development of a detailed phasing plan in addition to impervious area data collection and analysis, ordinance development, establishment of development requirements, public communications, policy development, public engagement, and a multi-year rate study. It is possible that some or all these costs may be funded by state grants issued from the Department of Commerce or Department of Natural Resources and Conservation through their various funding programs.

A key item to consider during this effort is the possible diversifying of rates for single family customers. It is common to apply a flat charge for this customer class due to the high number of properties and challenges regarding maintaining accurate data; however, there may be an opportunity to review and implement size tiers to improve rate equity.

Another key item that would need to be addressed during the development phase is determining how calculated service fees will be charged to customers. The most common approach is to utilize existing water and wastewater bills that are sent via physical mail or electronically monthly. Some cities elect to use property tax rolls; however, this approach is less common and can present legal, cash flow, and logistical challenges.

For example, the City of Billings has charged customers using a 'Property Tax' approach for many years until recently when they underwent a multi-year development process to switch to a more typical utility rate billing mechanism. The City of Bozeman also avoided using property taxes as a charge mechanism upon their stormwater utility development several years ago and uses a monthly utility bill approach as well.

Recommendation #4 – Track Population Growth and Regulatory Changes

MS4 Permit requirements will eventually impact the City; however, the timing could range from the next few years to over a decade. Even once a permit is acquired, MDEQ typically provides agencies with time to ramp up compliance activities and develop a multi-year plan to achieve compliance with newly enacted regulations.

Given this, it is recommended that the City monitor their population growth annually and iteratively increase planning activities once more clarity is reached on when regulations will apply. It is also recommended to remain in contact with an applicable MDEQ representative to track programmatic changes over time and communicate with other MS4s in the state to remain apprised of changes happening at federal and state regulatory levels.

Recommendation #5 – Pursue State and Federal Grant and Loan Opportunities

As Stated in Section 4.6, there are opportunities to secure grant funding from varying state and federal agencies. Pursuing these alternative funding sources takes time and resources, however, the assistance can go a long way towards augmenting local rate revenues and completing priority projects that otherwise would need to be deferred due to a lack of funding. For example, there

may be a willingness for state agencies to fund a portion of the Stormwater Utility's development stage. SRF loan funding is another area that could benefit the City long-term, especially given favorable terms and the ability to complete larger capital projects when year to year cash flow challenges exist.

Recommendation #6 – Formalize an Agreement with the Livingston Ditch Company

The Livingston Ditch (Ditch) flows south to north generally along Montana Street. The Ditch is utilized as an irrigation canal to supply agricultural fields north of the City. It also serves as a critical stormwater conveyance for a large portion of the City, especially during spring melt events.

The upcoming Montana Street project seeks to utilize the ditch as an outfall location for treated stormwater originating from that corridor. Given the scope and scale of the road project, and limited alternative outfall options, it is recommended that the City engage the Ditch Company and work to formalize an agreement for the long-term use of the Ditch. The City of Billings has completed similar negotiations recently with their agricultural community and has established contracts the City may emulate.

Recommendation #7 – Establish and Maintain an Accurate Asset Inventory

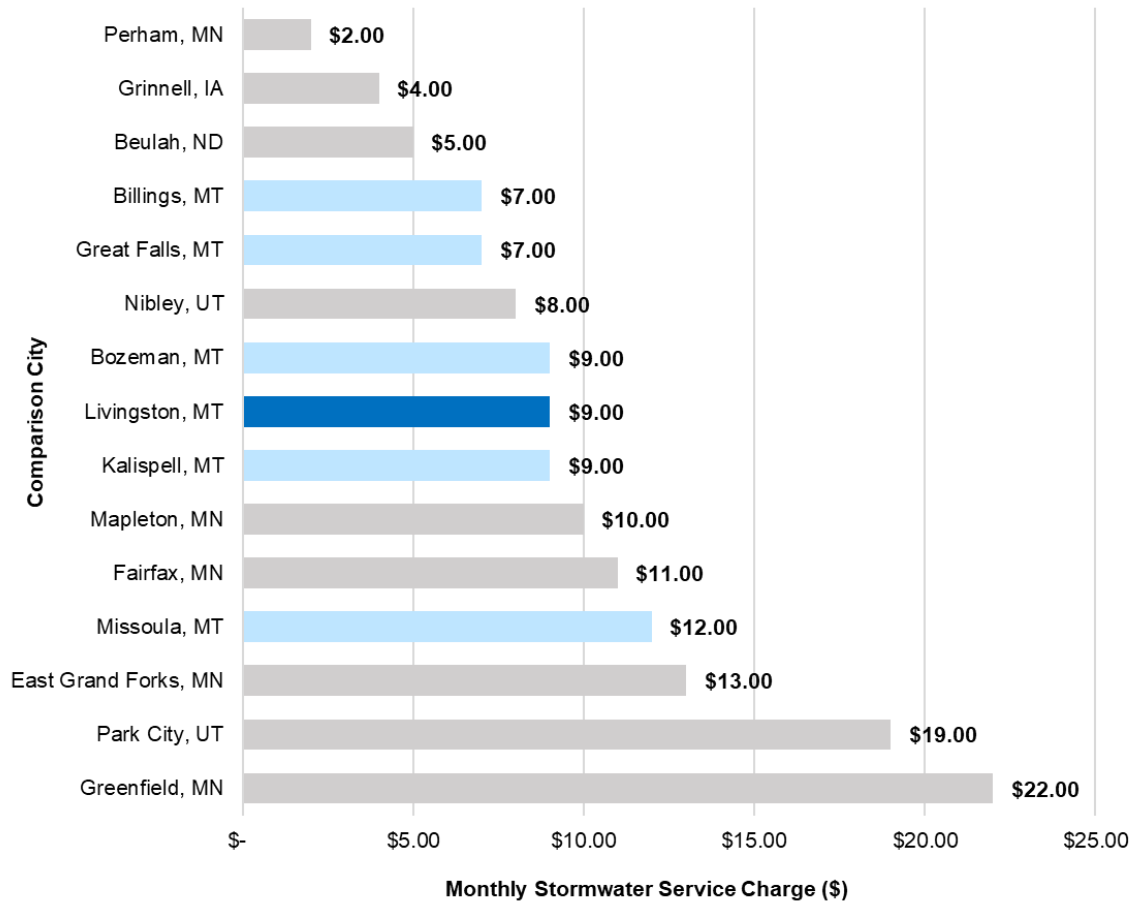
Accurately managing a robust GIS data set is essential to the long-term management of the City's stormwater system. The City has a good starting point; however, adding additional features, such as retention and detention basins, infrastructure related to growth, and improving attribution will benefit future operations/maintenance and system modeling activities.

Attachment A | Estimated Stormwater Utility Operating Expenses

#	Budget Category/Line Item	Notes and Detail	2025 Wastewater Utility Budget (\$)	Ratio of Wastewater Utility Budget (%)	Adjusted First Year Stormwater Utility Budget (\$)
STORMWATER ADMINISTRATION					
110	SALARIES AND WAGES	1/6 PW DIRECTOR SHARE	\$ 67,216	17%	\$ 11,427
120	OVERTIME	1/6 PW DIRECTOR SHARE	\$ 1,200	17%	\$ 204
141	UNEMPLOYMENT INSURANCE	1/6 PW DIRECTOR SHARE	\$ 376	17%	\$ 64
142	WORKERS' COMPENSATION	1/6 PW DIRECTOR SHARE	\$ 345	17%	\$ 59
143	HEALTH INSURANCE	1/6 PW DIRECTOR SHARE	\$ 13,158	17%	\$ 2,237
144	F.I.C.A.	1/6 PW DIRECTOR SHARE	\$ 4,242	17%	\$ 721
145	P.E.R.S.	1/6 PW DIRECTOR SHARE	\$ 6,274	17%	\$ 1,067
151	MEDICARE	1/6 PW DIRECTOR SHARE	\$ 992	17%	\$ 169
210	OFFICE SUPPLIES		\$ 1,200	20%	\$ 240
224	JANITOR CONTRACT/SUPPLIES		\$ 1,800	20%	\$ 360
331	LEGAL NOTICES		\$ 500	20%	\$ 100
346	INTERNET SERVICE		\$ 3,300	20%	\$ 660
352	CONSULTANT SERVICES	ENGINEERING SERVICES	\$ 20,000	100%	\$ 20,000
357	SOFTWARE SERVICES		\$ 2,500	20%	\$ 500
368	R&M-COMPUTER/OFFICE MACH		\$ 1,139	20%	\$ 228
394	INTERFUND GOVERNMENTAL SU		\$ 17,400	0%	\$ -
510	LIABILITY INSURANCE		\$ 30,550	20%	\$ 6,110
512	INSURANCE ON BUILDINGS		\$ 60,800	20%	\$ 12,160
513	INS ON VEHICLES & EQUIP		\$ 4,050	20%	\$ 810
535	LEASE AGREEMENTS		\$ 2,500	20%	\$ 500
FACILITIES					
220	OPERATING SUPPLIES		\$ 1,000	100%	\$ 1,000
341	UTILITIES-GAS/ELECTRIC		\$ 3,500	100%	\$ 3,500
347	CELLULAR PHONE		\$ 3,000	100%	\$ 3,000
361	REP & MAINT-GENERAL		\$ 4,000	100%	\$ 4,000
STORMWATER SERVICES					
110	SALARIES AND WAGES	OPERATIONS FTE	\$ 169,965	33%	\$ 56,088
120	OVERTIME	OPERATIONS FTE	\$ 18,500	33%	\$ 6,105
141	UNEMPLOYMENT INSURANCE	OPERATIONS FTE	\$ 1,053	33%	\$ 347
142	WORKERS' COMPENSATION	OPERATIONS FTE	\$ 9,719	33%	\$ 3,207
143	HEALTH INSURANCE	OPERATIONS FTE	\$ 38,700	33%	\$ 12,771
144	F.I.C.A.	OPERATIONS FTE	\$ 11,871	33%	\$ 3,917
145	P.E.R.S.	OPERATIONS FTE	\$ 17,557	33%	\$ 5,794
148	CLOTHING ALLOWANCE	OPERATIONS FTE	\$ 3,000	33%	\$ 990
151	MEDICARE	OPERATIONS FTE	\$ 2,776	33%	\$ 916
231	REP & MAINT-SUPPLIES		\$ 10,000	20%	\$ 2,000
232	REP & MAINT-VEHICLES		\$ 5,000	20%	\$ 1,000
236	FUEL/OIL/DIESEL		\$ 12,500	20%	\$ 2,500
237	MAIN/HYDRANT/WELL PARTS		\$ 25,000	20%	\$ 5,000
255	SAFETY & RISK MANAGEMENT		\$ 750	20%	\$ 150
317	UTILITY LOCATE SERVICES		\$ 1,200	20%	\$ 240
344	UTILITIES-GAS/ELECTRIC		\$ 10,500	20%	\$ 2,100
361	REP & MAINT-GENERAL		\$ 10,000	20%	\$ 2,000
362	REP & MAINT-VEHICLES	EQUIPMENT SHARES	\$ 13,000	0%	\$ 40,470
368	R&M-COMPUTER/OFFICE MACH		\$ 4,551	20%	\$ 910
370	TRAVEL/LODGING/MEALS		\$ 750	20%	\$ 150
380	TRAINING SERVICES		\$ 1,000	20%	\$ 200
531	EQUIP RENTAL		\$ 5,000	20%	\$ 1,000
983	MAINLINE REPLACEMENT		\$ 20,000	20%	\$ 4,000
COLLECTION AND TRANSMISSION					
225	LABORATORY SUPPLIES		\$ -	0%	\$ -
940	CAPITAL OUTLAY		\$ -	0%	\$ -
960	INFRASTRUCTURE/WATER/SEWER		\$ -	0%	\$ -
			TOTAL:	\$	220,971

Attachment B | Residential Stormwater Rate Comparisons

Typical Single-Family Residential Monthly Stormwater Charge



Attachment C | Stormwater Utility Capital Improvement Plan Map

Please see the following page for a map of the City's proposed stormwater capital projects.

Stormwater Utility Capital Improvement Plan

- 1 - Operations Disposal Facility
- 2 - B Street Water Quality Project
- 3 - 2nd Street Water Quality Project
- 4 - Montana Street Project
- 5 - Railroad Crossing
- 6 - W. Geyser Street Outfall
- 7 - Eastside Roundabout Improvements
- 8 - Minnesota Addition Infrastructure
- 9 - East Residential
- 10 - Little Hill District Infrastructure
- 11 - Big Hill District infrastructure
- 12 - Highground Subdivision infrastructure
- 13 - Northtown Drainage Basin

