Billings PUBLIC WORKS

Stormwater Program Update and Council Direction Needed

To: The Honorable Mayor and Billings City Council

From: Debi Meling, PE; Public Works Director

Date: September 26, 2023

Re: Public Works – Stormwater Program Update and Council Direction Needed

Executive Summary

Historically, the City of Billings has not approached management of our stormwater utility consistent with how we manage the water and sanitary sewer utilities. Over the past decade, additional focus has been on bringing the stormwater program up to a level that is both responsible and sustainable. The goal has been to ensure proper maintenance of existing infrastructure, address problem areas in the City, have the ability to serve new growth, and keep up with regulatory changes. A key factor in being able to improve how we manage our stormwater system is to ensure an appropriate rate system is in place to support this goal. As of now, our rate structure has little nexus between the rate and the impact; has too much burden on the residential property owners; does not capture the cost of new growth in the city; and is not based on an intentional level of service to the community. Currently, the City collects a stormwater fee through property taxes and completes maintenance and capital projects that fall within that budget. In other utilities, the needs of the system are determined and rates are set by those needs. The method that has been used for stormwater in the City of Billings for decades has created a system that is not being managed in a way that ensures it will be operational in the future.

Over the past three years, Public Works has been formalizing the stormwater program by completing and evaluating the following:

- Strengthening rules and regulations
- Conducting a rate structure evaluation that is more equitable
- Managing infrastructure through field maintenance and GIS support
- Focusing city resources to better support this critical infrastructure asset

In 2020, Public Works presented the "development of a dedicated stormwater utility" as one of the three Public Works' Priority Goals. After that initiative, Public Works contracted with a consulting firm to help evaluate the state of the City's stormwater program and infrastructure. In June 2021, Public Works presented the findings of that initial assessment at a Council Work Session. Staff then moved into the next phase of the project during which an Advisory Committee was formed. The purpose of the Advisory Committee was to help identify key programmatic components that need updating within the stormwater program, and then formulate appropriate responses

to the program practices and rates. The Advisory Committee met from August 2022 to March 2023 and identified three independent areas of focus that were then presented to the Council's Budget and Finance Committee in July and August 2023. These three focus areas require City Council action to proceed. The three focus areas presented were:

- Updating the Stormwater Rate Structure
- Implementing a Stormwater System Development Fee
- Selecting an Appropriate Level of Service with Corresponding Rates

After presentations to the Budget and Finance Committee, recommendations for updates to key components of the stormwater program were developed as detailed below. These recommendations will be presented to the full Council on October 2nd.

1) Stormwater Rate Structure

The current rate structure for Billings was created by Council in 1977. This rate structure assesses a fee to each property based upon the parcel's gross lot area and zoning designation. The fee is collected on property tax statements twice per year. The average residential customer is currently assessed $59.56 per year; an equivalent of $4.97 per month. The primary limitations of this rate structure model are:

- Representativeness: zoning may not align with actual land use
- Equitability: there is not a direct correlation between the stormwater contribution from individual properties and zoning

Six alternative rate structures were evaluated. A rate structure based on the impervious surface of individual parcels was selected as most equitable since impervious surfaces are a key driver of stormwater runoff (i.e., stormwater runoff from concrete or asphalt driveways and roofs is considerably greater than that from pervious surfaces such as lawns or undeveloped open space). Under this rate structure, the average single-family home's impervious surface area is calculated and all single-family residential properties, regardless of size, would be assessed the same stormwater rate based on the median representative single-family property. While the actual impervious area of each residential home could be measured and used for assessment, the administrative burden to determine the actual impervious area and to ensure that the area is updated regularly is too high given the small change to the residential rate. **The concept of assessing all residential properties based on a representative property is referred to as an *Equivalent Residential Unit* (ERU).** Based on land cover data for the City of Billings, a representative ERU of 2,600 square feet of impervious surface was measured. Each single-family property would be assessed 1.0 ERU.

The rate assigned to multi-family, commercial, governmental, and industrial properties is based on measured impervious surface area, expressed as a number of ERUs. As an example: if a commercial property has 15,000 square feet of impervious surface area, they would be assessed at the rate of 5.77 ERUs, (15,000 ÷ 2,600).

- **The Advisory Committee and the Council Budget and Finance Committee recommend that Council update the stormwater rate structure and adopt an ERU impervious-based stormwater rate structure model.**

2) Stormwater System Development Fee

The Advisory Committee evaluated the need for Stormwater System Development Fees (SDFs) similar to the City's water and sewer SDFs to help balance the cost of new growth against the stormwater infrastructure needs of this new growth. Currently, the City assesses both water and sewer SDFs for new development per the impact fee statutes outlined in the Montana Code Annotated (MCA). There is no stormwater SDF currently in place for Billings, but the MCA allows for its adoption.

SDFs are a one-time charge to provide revenue for capital improvements as new growth occurs. SDFs recover the proportionate cost share of capacity for future regional stormwater infrastructure; SDFs are not intended to recover the costs for individual subdivision stormwater improvements.

The initial SDF for new property development will be calculated in the next phase of the project if the practice of collecting SDFs is approved. The SDF is estimated to be approximately $1,000 per ERU based on projected capital needs to support new growth. Commercial and non-single-family residential properties would be assessed a proportionate SDF based upon how many square feet of impervious surface their property has relative to the ERU.

- **The Advisory Committee and the Council Budget and Finance Committee recommend that Council approve the development of Stormwater SDFs.**

3) Stormwater Levels of Service and Corresponding Rates

The final area of focus for the Advisory Committee was to evaluate the current physical condition and state of operations for the primary components of the City's stormwater program and calculate the needed rates to support different Levels of Service (LOS). The four primary program components are:

- Deferred Maintenance Backlog
- City-Wide Capital Infrastructure Implementation
- Local Flood Risk Mitigation
- Water Quality Improvements

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Stormwater Program Update and Council Direction Needed

Currently, stormwater services are based upon available funding. By conducting a LOS approach to stormwater, the relationship between rates and services is switched. Under this LOS approach, stormwater funding will be based upon the services provided.

The time frame for addressing these needs and costs is the key variable in defining the LOS. This translates into a variable annual cost and associated fee. The defined levels of service are "Best Practice", "Proactive", or "Minimum". Below is a matrix of LOS options for each individual stormwater program component:

	Total Amount	Best Practice	Proactive	Minimum
Deferred Maintenance	$73.8 million	15-yr. completion ($4.9 million / yr.)	20-yr. completion ($3.7 million / yr.)	25-yr. completion ($3.0 million / yr.)
City-wide Capital	$99.3 million	20-yr. completion ($5.0 million / yr.)	30-yr. completion ($3.3 million / yr.)	40-yr. completion ($2.5 million / yr.)
Flood Protection Capital	$7.3 million (local only)	15-yr. completion ($0.5 million / yr.)	20-yr. completion ($0.4 million / yr.)	25-yr. completion ($0.3 million / yr.)
Water Quality Capital	Varies	$500,000 / yr.	$500,000 / yr.	$250,000 / yr.

The matrix of options allows Council to select any combination of LOS for the individual stormwater program components.

- **The Advisory Committee selected the *Best Practice* LOS for each of the four individual stormwater program components. The Council Budget and Finance Committee recommend that Council select the *Best Practice* LOS for Deferred Maintenance, Flood Protection Capital, and Water Quality Capital and select a LOS mid-way between the *Proactive and Best Practice* LOS for City-wide Capital.**

Each LOS option, for each individual program component, has a corresponding rate impact. The Budget and Finance Committee recommended LOS package has the following rate profile for residential customers over the next 10 years. Please note that this rate profile has a seven-year ramp-up period with inflationary increases thereafter.

Fiscal Year: 7/1 – 6/30 (per month)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
A.C. Recommendation	$4.97	$7.00	$10.00	$11.10	$12.30	$13.60	$14.90	$16.40	$16.90	$17.40

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Stormwater Program Update and Council Direction Needed

As stated previously, Council is being asked to provide direction and act upon on three independent stormwater utility programmatic changes:

- Updating the Stormwater Rate Structure
- Implementing a Stormwater System Development Fee
- Selecting a Stormwater Level of Service with Corresponding Rates

A more detailed presentation of this information is provided in the following sections.

Project Purpose, History And Findings

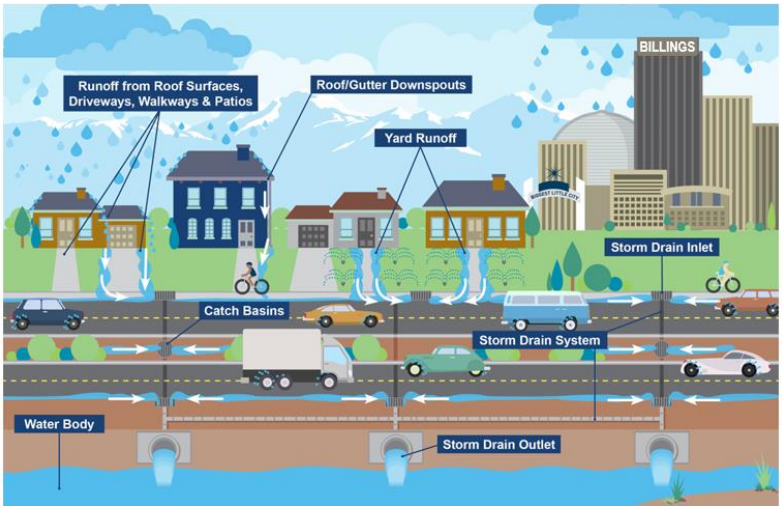
Stormwater Program Update and Council Direction Needed

Project Purpose

The stormwater system in Billings is a critical infrastructure component that serves the public in ways similar to the water and sewer systems. However, the stormwater system has not received the same focus as the other utilities, which results in a storm program that is operational, but largely reactionary and not sustainable in the long term.

Stormwater is being evaluated now because:

- The stormwater system is a critical $1 billion asset
- Much of the existing system has unknown elements (pipe size, material, condition and lifespan)
- Public roads and homes flood in storm events
- Development is outpacing the existing infrastructure network
- Water quality regulations continue to change
- There is a large backlog of deferred maintenance
- The cost of inaction to too great to do nothing



Components of a Municipal Stormwater System

In response, staff has been working to formalize the programmatic aspect of the stormwater utility and strengthening gaps by:

- Providing focused attention on critical infrastructure
- Providing a manageable plan for deferred maintenance
- Providing a reasonable timeframe to construct capital improvements
- Addressing permit requirements and improving local water quality
- Addressing risk management while being good stewards of taxpayer funds

Stormwater Program Update and Council Direction Needed

Evaluations and Findings: Project History (Phase I and Phase II)

In 2020, Public Works started the process of strategically evaluating gaps in the stormwater program. The purpose of the evaluation was to create a baseline index for the state of the City's stormwater network. This work included:

- Interviewing department leads in Engineering, Street/Traffic, Environmental Affairs and Administration
- Determining the needs of people, equipment and budgets
- Assessing the limitation of the GIS data
- Performing limited evaluations of deferred maintenance
- Reviewing previous master plan recommendations
- Identifying data gaps for a Phase II evaluation

Below are findings of how much storm drain infrastructure the City maintains:

300 miles of storm pipe and 5,200 manholes

9,300 inlets

52 miles of open drains

50 acres of ponds

Additionally, the City also maintains and performs services on:

8 miles of culverts

10,800 hours of street sweeping (8 sweepers)

16 key outfalls

9 stormwater pump stations

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The Phase II analysis performed a comprehensive analysis of the four major components of the stormwater network.

- Deferred Maintenance Backlog
- City-Wide Capital Infrastructure Implementation
- Local Flood Risk Mitigation
- Water Quality Improvements

Deferred Maintenance Backlog

During the Phase I evaluation, it was determined that the City had little to no information on 65% of the existing storm drain system. Additionally, as CCTV data was gathered on the system it was found that many pipe segments have reached or exceeded their useful lifespan. The pictures to the right are taken from the City's CCTV camera investigation initiative. These pictures show existing pipes that are greatly impacted by sediment, pipe protrusions or are in the early stages of failure. All these pipes need to be cleaned, repaired and in some cases, replaced. It is estimated that the City currently has 29 miles of storm drain pipes and culverts to replace.

Each of the orange and red areas in the exhibit below are existing storm drain mains that need to be replaced. **The overall estimated cost of deferred maintenance for existing stormwater infrastructure is estimated to be $73.8 million.**

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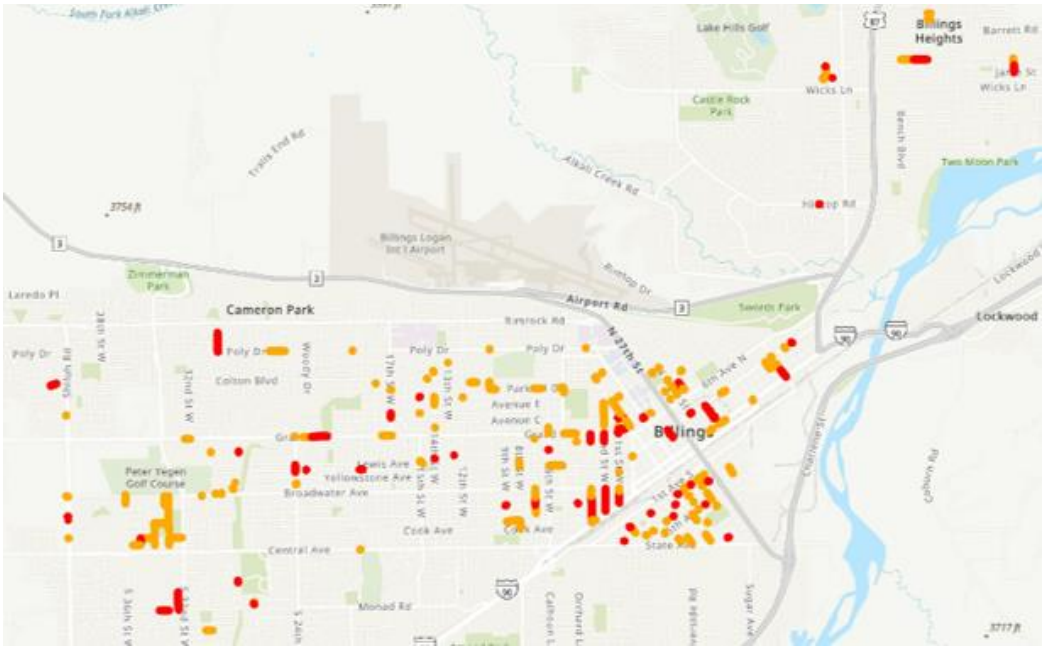

Deferred Maintenance Backlog – Reactionary Maintenance Consequences

Currently, approximately 50% of the City's storm drain system has received CCTV video inspection. In some cases, the City is able to identify pipes and culverts that are impacted before they fail. However, as not all of the system has been routinely inspected, there are still culverts and pipe segments that fail before an evaluation can be completed. Below is an example of a failed culvert that resulted in a reactive capital replacement project. Unfortunately, the cost of a project when it is done after a failure instead of during planned maintenance is oftentimes significantly more expensive.

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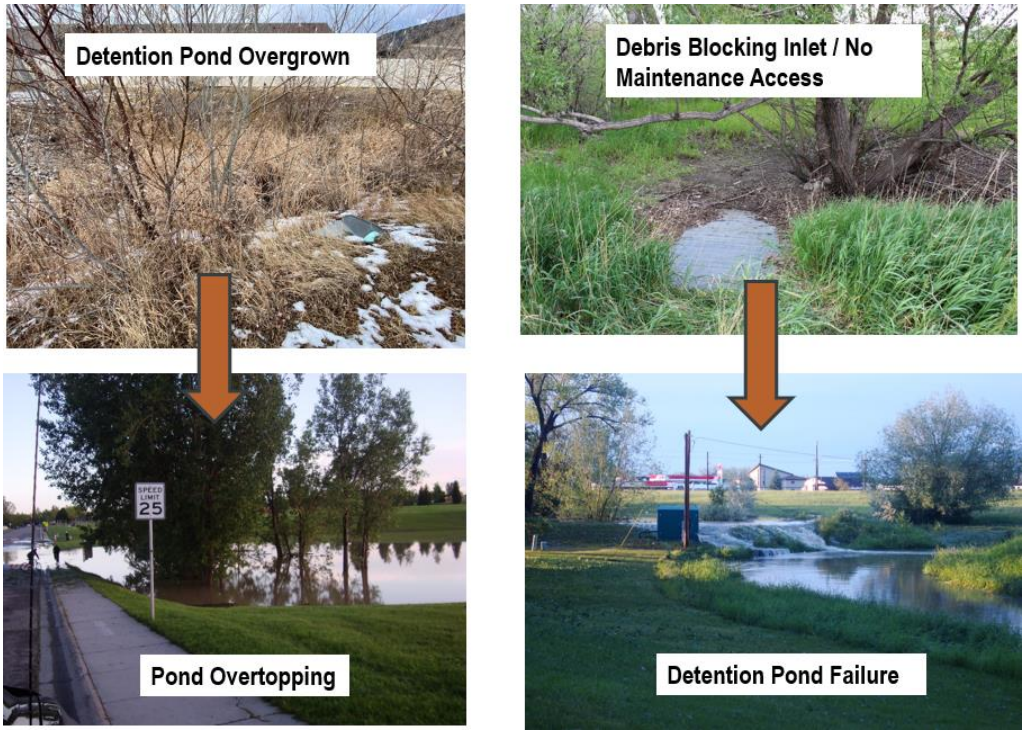
The City maintains 50 acres of detention and retention ponds. When stormwater ponds do not receive adequate maintenance, vegetation clogging occurs. Below is an example of failed ponds that resulted in reactive maintenance, which resulted in flooding to roadways and canals.



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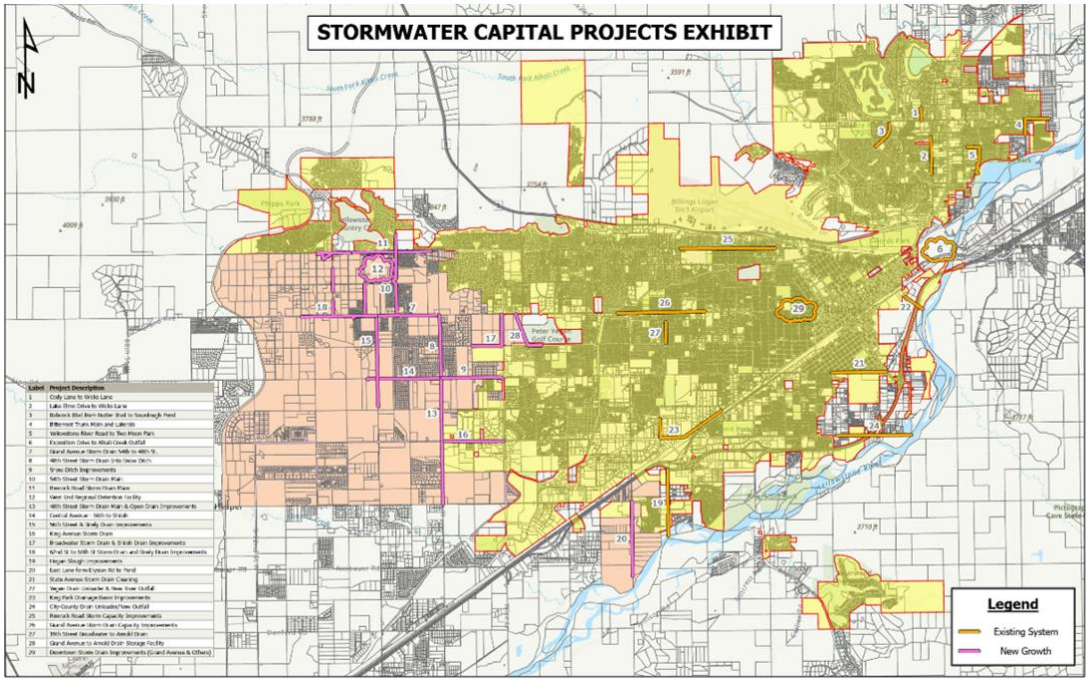
City-Wide Capital Infrastructure Implementation

The City has completed a number of localized stormwater planning studies dating back to the early 1980s. Some of the projects recommended through those planning studies have been completed, but many have not. Public Works and our consultant compiled a list of all previous planning studies and evaluated which projects have been completed and which projects still need to be completed. The estimated project costs identified in each specific local planning study were updated to current costs to arrive at the needed overall city-wide capital improvement costs. **From this evaluation, 29 stormwater projects were identified totaling $99.3 million in city-wide projects.**

Below is a visual representation of each project's location.

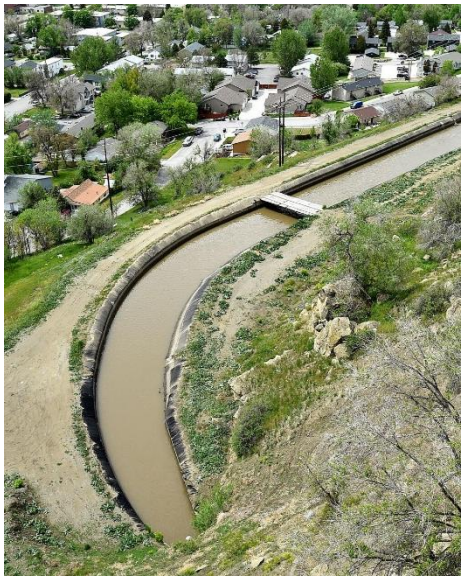


Each of the yellow and pink highlighted segments are proposed city-wide capital trunk main projects. Additionally, the projects were separated by rough geographical location to identify which projects mostly serve existing developed areas and which projects mostly serve new growth areas. This geographic evaluation and project breakdown was utilized in the evaluation of the proposed System Development Fees.

It is important to note that the City's core storm drain infrastructure is designed around the 2-year and 10-year, 24-hour representative storm events. These are standard drainage design parameters common through municipal stormwater design. The City of Billings will continue to experience severe storms, above design

criteria, that will cause localized flooding. The capital program and associated costs that were developed under this project will not alleviate these problems. If the City Council wants staff to reassess the design storm, it can be done, but rates would need to be raised drastically to accommodate larger design storms.

Local Flood Risk Mitigation



Flood protection as discussed in this section has not been included with the stormwater program previously. While there is flooding associated with large rain events, the flooding referred to in this section is due to irrigation facility failure or river level flooding and not due to storm events. To date, the City has not addressed protection from irrigation facility failures and any planning that has been done assumes the cost to address the problem would come from the General Fund. If the City Council wants to include this type of flooding in stormwater rates, it can be done but the rates would need to be reflective of this added scope as it cannot be added without specific funding under the stormwater umbrella without resulting in loss of service to the remaining system.

A number of large irrigation supply canals flow through Billings. A breach of the largest of these canals, the BBWA canal, was the major contributor to the historic flood of 1937. This canal breached again in 2016, but due to the breach location, there was no impact to the public. Additionally, in June 2023, the Birely Drain breached at the Big Ditch crossing. After discussions with the Advisory Committee, it is recommended that ditch unloaders be added to the storm drain system at key locations throughout the City be installed to unload significant portions of irrigation flows such that impacts to public infrastructure and property is reduced from flooding and canal breach events. **The cost of these flood-risk mitigation canal unloading structures is estimated at $2.85 million.**

Recent flooding of the Yellowstone River showed that the City does not have significant vulnerabilities related to the level of the river. However, Yellowstone River flood events can compromise the City's primary stormwater outfalls. Projects at the river outfalls are needed to prevent failures and secure the City's outfalls. **The cost of outfall protection at the Yellowstone River is estimated at $4.4 million.**

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Water Quality Improvements

The City operates under a Municipal Separate Storm Sewer (MS4) permit regulated by the Montana DEQ to satisfy EPA regulations associated with the Clean Water Act. The City's current MS4 permit with DEQ has six minimum control measures that the City must maintain to remain in good standing with the permit. As part of the permit requirements, Billings must demonstrate that incremental water quality improvements, in terms of policy, enforcement and infrastructure, with the system are occurring each year. Public Works already conducts policy and enforcement work; however, incremental water quality infrastructure is needed to remain in good standing with the permit. After discussion, **the Advisory Committee decided to add an annual water quality infrastructure improvement project to the Level of Service matrix.**

Stormwater Program Update and Council Direction Needed

Advisory Committee

The Advisory Committee was formed to provide awareness and transparency to the stormwater program development and to help staff clarify the City's stormwater objectives and determine appropriate levels of service and rate structures to match those objectives.

The Advisory Committee was made of up members with varying community perspectives representing City Council, Public Works Board, citizens, developers, real estate, land development, the agricultural community, consulting staff and City staff from Public Works and Parks and Recreation. The Advisory Committee members are listed in the table to the right.

Committee Member	Title	Organization
Debi Meling	Director of Public Works	City of Billings Public Works
Jennifer Duray	Deputy Director of Public Works	City of Billings Public Works
John Ghilarducci	Utility Rate and Fee Consultant	FCS Group
Wade Irion	Engineering Consultant	DOWL
Aaron Redland	Board Member	Public Works Board
Derick Miller	Street/Traffic Superintendent	City of Billings Public Works
Mike Whitaker	Director	City of Billings Parks and Recreation
Mike Pigg	Director	City of Billings Parks and Recreation
Ed Gulick	City Council Member, Ward 1	Billings City Council
Rick Leuthold	Engineering Development Consultant	Sanderson Stewart
Dan Wells	Owner/Developer	Wells Built Homes
Charlie Yegen	Real Estate Broker/ Developer	Peter Yegen Jr., Inc.
Todd Brown	Owner/Developer	Brown Builders

The Advisory Committee met seven times throughout 2022 and 2023 and provided the following recommendations:

- Move to an impervious area rate structure, equivalent residential unit (ERU)
- Adopt a Stormwater System Development Fee
- Adopt *Best Practice* Level of Service for deferred maintenance, city-wide capital, flood protection and water quality capital
    - As noted previously, the **Budget and Finance Committee recommended *Best Practice* LOS for deferred maintenance, flood protection and water quality capital, and a LOS mid-way between *Best Practice* and *Proactive* for city-wide capital.**

The Advisory Committee made the recommendations because doing so brought:

- Focused attention to this critical infrastructure
- Manageable plan to address deferred maintenance
- Reasonable timeframe to complete capital improvements
- Addresses permit requirements and improving local water quality
- Significant increase in service for relatively small increase in rate
- Balance between citizen services and rates
- Satisfies risk management objectives and targeted goals
- Brings a rate-based approach to managing a billion-dollar asset

Rate Structure Analysis and Proposed Changes

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Rate Structure Analysis and Proposed Changes

The current rate structure utilized by Billings was created by Council in 1986. This rate structure assesses a fee to each property based upon the parcel's gross lot area and zoning designation. The fee is collected on property tax statements twice per year. The current rate structure is shown in the table on the right. For reference, the single-family zoning classifications are:

- N1 – "First Neighborhood
- N2 – "Mid-Century Neighborhood"
- N3 – "Suburban Neighborhood"

For single-family residential lots under the current model, each parcel is assigned the same rate when calculating the stormwater fee. The rate is then multiplied against the lot's gross square footage to calculate the parcels annual stormwater charge. **The annual FY 2024 stormwater assessment for an average residential customer is currently $59.56 per year.** Further details of the standard single-family residential lot are listed below.

- Monthly equivalent: $4.97
- 9,691 square foot lot
- $0.006146 per square foot per year

STORM SEWER FEE

ZONE	RATE	
VACANT	1,110.00	Cap
AT RATE	0.001901	per sq. ft.
CBD	0.019462	per sq. ft.
CMU1	0.013401	per sq. ft.
CMU2	0.013749	per sq. ft.
CX	0.014615	per sq. ft.
DX	0.013401	per sq. ft.
EBCW	0.013401	per sq. ft.
EBIS	0.014615	per sq. ft.
EBMS	0.019462	per sq. ft.
EBRMS	0.019462	per sq. ft.
EBRSV	0.012524	per sq. ft.
I1	0.014615	per sq. ft.
I2	0.016252	per sq. ft.
N1	0.006146	per sq. ft.
N2	0.006146	per sq. ft.
N3	0.006146	per sq. ft.
NMU	0.012524	per sq. ft.
NO	0.010549	per sq. ft.
NX1	0.011004	per sq. ft.
NX2	0.011183	per sq. ft.
NX3	0.011352	per sq. ft.
P1	0.003231	per sq. ft.
P2	0.003231	per sq. ft.
P3	0.012925	per sq. ft.
PD	0.008902	per sq. ft.
RMH	0.007255	per sq. ft.

The advantages of the current rate structure are that delinquencies and non-payments are typically lower as fees are collected on the property tax statements and the current rate structure and billings method have been challenged legally and upheld as a valid method to assess for stormwater. Another advantage is that the current billing and collection process is in place and requires no staff time to perpetuate the assessments in this manner. However, this rate structure does have numerous limitations that impact both the City and lot owners. The primary limitation of this rate structure model is fairness, because gross lot area does not provide a good functional nexus between property-specific conditions and stormwater program activities nor does zoning necessarily equate to land use and stormwater runoff. Additionally, charging stormwater as an assessment on the property tax statements means that revenues are only received twice a year and results in increased reserve requirements.

Stormwater Program Update and Council Direction Needed

Considering these limitations, an alternative rate structure is being considered that better aligns rates and impacts to the system. Six rate structures were evaluated:

Rate Structure Basis / Feature	Fair	Legal	Admin	Feasible
Impervious Surface Area	✓	✓	✓	✓
Density of Development	✓	✓	✓	✓
Runoff Coefficients		✓	✓	
Land Use		✓	✓	✓
Trip Generation		✓		✓
Geographic Location	✓	✓		✓

As shown in the graph, the only structures that meet all of the criteria are impervious area and density. There are many ways to implement either of those structures so the committee evaluated each one. Through this evaluation, an impervious-based rate structure model was selected by the Advisory Committee as the most appropriate rate model that equitably matches impacts to the overall stormwater system with rates. Impervious surface area is a generally accepted measure of runoff contribution, providing the basis for rates in most stormwater utilities. Additionally, there is a strong and supportable functional nexus among impervious surface area, runoff contribution, increased flooding and water quality degradation, and damage to habitat.

Under this rate structure model, the statistical median residential home impervious surface area was calculated. Each residential home, regardless of size, will be assessed the same stormwater rate. **The concept of assessing all residential homes equally is referred to as an *Equivalent Residential Unit* (ERU).** Each residential home will be assessed 1.0 ERUs. The rate assigned to commercial properties is based upon how many ERU's of impervious surface that commercial property has developed. While the actual area can be used for each residential property, the administrative burden would be extremely high and the committee determined any benefits of that method did not warrant the increased cost of administration.

During a statistical evaluation, one ERU was calculated at 2,600 square feet of impervious surface. An example of the ERU model is shown below:

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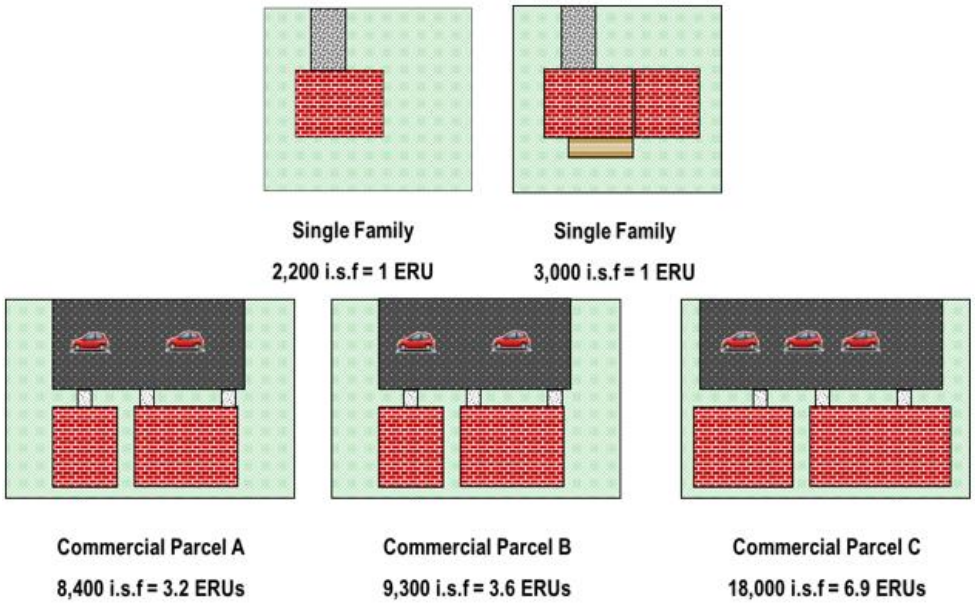
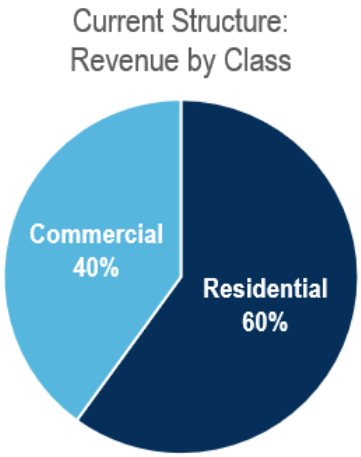
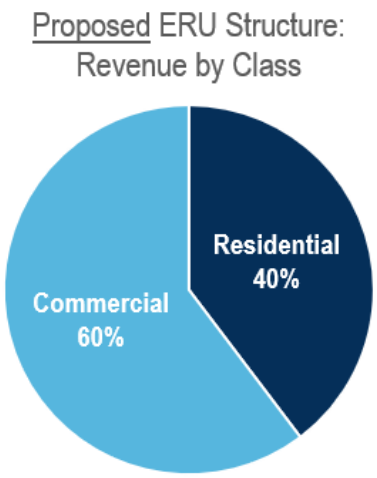


Please note the calculated median impervious surface of 2,600 square feet needs refinement before formal implementation based upon additional data processing.

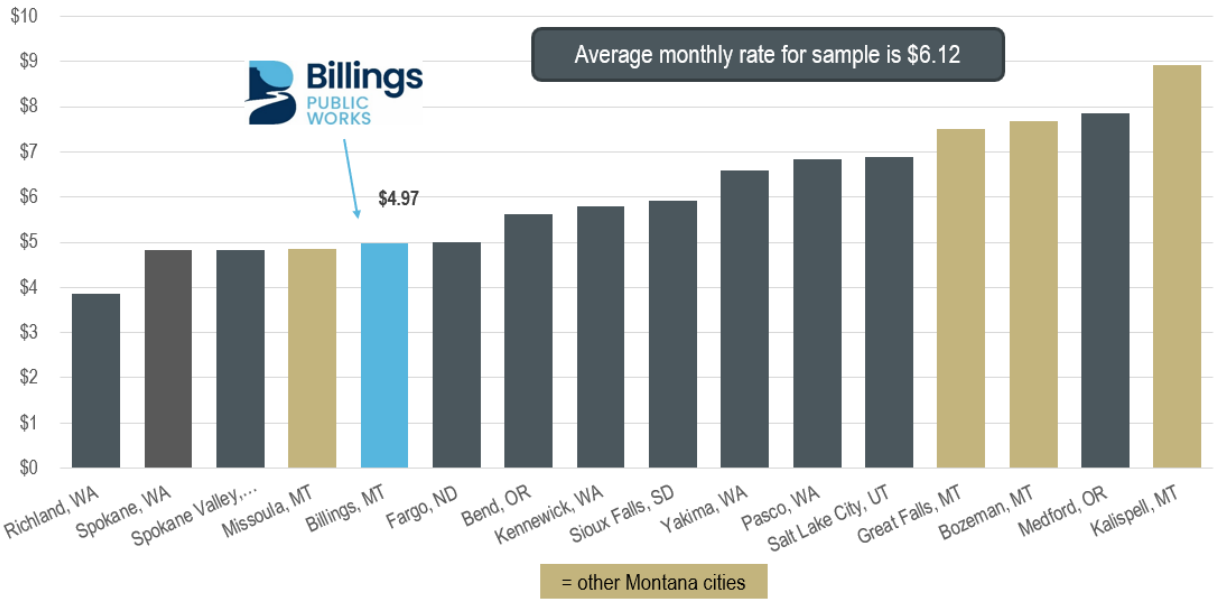
The current stormwater fee that is based upon zoning and square footage generates a revenue profile where roughly 60% of funds are collected from residential properties and 40% of funds are collected from commercial properties. Moving to an impervious area-based rate structure shifts cost recovery to commercial property.





Stormwater Program Update and Council Direction Needed

The average stormwater fee collected for the typical single-family residential property in FY 2024 is $59.60 per year, which equates to $4.97 per month. The stormwater team researched rates collected by other regional communities of similar size, climate, and/or stormwater development process to see how Billings compares. Below is a graph showing that comparison.



System Development Fees

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System Development Fees

The City currently assesses System Development Fees (SDF) to new residential and commercial properties that connect to the water and sewer system. The SDF is intended to balance new growth against infrastructure needs of the system. There is no stormwater SDF currently in place.

Below are additional details of an SDF:

- One-time charges, not ongoing rates
- Provide revenue for capital as growth occurs
- Include future & existing infrastructure costs

- For general facilities, not "local" facilities
- Recover proportionate share of cost of capacity
- For capital only, in both calculation and in use

Under the proposed model each residential home is treated equally and assigned an Equivalent Residential Unit (ERU), similar to the lot impervious method. **The initial SDF for new property development will be calculated in the next phase of the project if the practice of collecting SDFs is approved but is estimated to be approximately $1,000 per ERU**. Commercial properties will be assessed a proportionate SDF based upon how many square feet of impervious surface their property has relative to the ERU.

The SDF is for new development only; existing residential and commercial properties will not have to pay for an SDF unless redevelopment occurs for a commercial property and a new connection is made to the system.

The chart to the right shows how the proposed stormwater SDF compares to the existing water and sewer SDF. This is a preliminary evaluation of the SDF; additional calculations will be made after a decision is made regarding implementation of SDFs.

Utility	SDFs
Water (3/4" meter with indoor and outdoor component)	$3,255
Wastewater (3/4" meter)	$2,800
Stormwater	Approx. $1,000
Total	$7,055

A Stormwater SDF is permissible per the MCA, Title 7, Chapter 6, Part 16.

Program Levels of Service and Associated Rates

Stormwater Program Update and Council Direction Needed

Program Levels of Service and Associated Rates

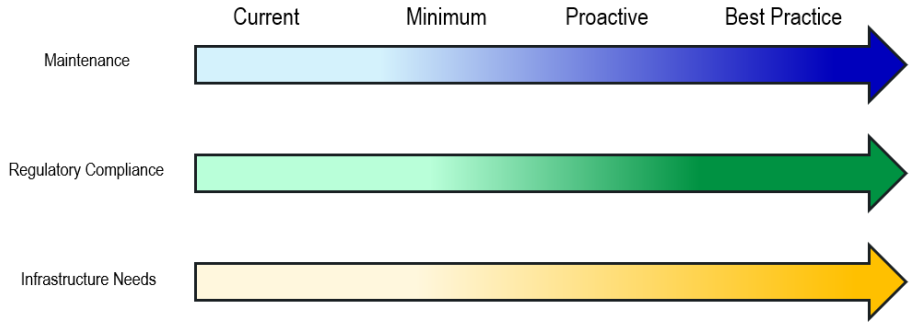
The Phase II analysis previously described performed a comprehensive analysis of the four major components of the stormwater network.

- Deferred Maintenance Backlog
- City-Wide Capital Infrastructure Implementation
- Local Flood Risk Mitigation
- Water Quality Improvements

The evaluation included gathering information on the existing system, evaluating and prioritizing previous capital planning projects, and providing a stormwater risk assessment analysis.

From the analysis, it was determined that the City has $73.8 million in deferred maintenance, $99.3 million in City-wide capital projects and $7.3 million of local flood protection projects. The amount of funding needed for water quality improvements varies based upon the City's permit with Montana DEQ.

During the stormwater team and Advisory Committee meetings, it was determined that Level of Service options were needed to balance rates with the time needed to complete the improvements. The higher the level of service, the faster improvements to the system would be made.



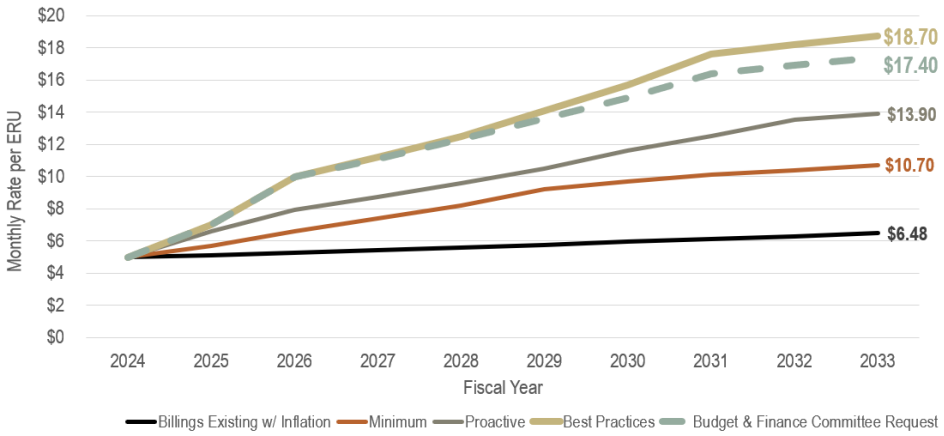
Currently, stormwater rates are set, and services are provided to match the available funding. This current process has resulted in the stormwater program being underfunded. This Level of Service (LOS) evaluation built a "dial" to flip the process. **Under this proposed model, stormwater funding is based on services provided as detailed by the level of service matrix.**

Stormwater Program Update and Council Direction Needed

The matrix below is developed such that Council can select any LOS "box" within each row and column; Council does not need to select one *Best Practice, Proactive or Minimum* column that covers all four program areas. **Each LOS box has a corresponding rate impact.** The Stormwater Advisory committee recommended a *Best Practice* LOS for each of the four stormwater program components primarily based on liability of not addressing issues quickly and the customer service aspect of allowing projects to take more than 15 or 20 years to complete when we know they are a problem now. After a presentation to the Budget and Finance Committee, the Committee chose the *Best Practice* LOS for Deferred Maintenance, Flood Protection Capital and Water Quality Capital and adopt a mid-way LOS (25-year) between the *Proactive* and *Best Practice* LOS for City-wide Capital. Please see the matrix below for the Committee Recommendation. While the Budget committee agreed with many of the reasons that the Advisory committee selected Best Practice levels for all categories, they were very sensitive to the rate impacts and wanted to try to balance the needs and the rates to where they determined was an appropriate level.

	Total Amount	Best Practice	Proactive	Minimum
Deferred Maintenance	$73.8 million	15-yr. completion ($4.9 million / yr.)	20-yr. completion ($3.7 million / yr.)	25-yr. completion ($3.0 million / yr.)
City-wide Capital	$99.3 million	20-yr. completion ($5.0 million / yr.)	30-yr. completion ($3.3 million / yr.)	40-yr. completion ($2.5 million / yr.)
Flood Protection Capital	$7.3 million (local only)	15-yr. completion ($0.5 million / yr.)	20-yr. completion ($0.4 million / yr.)	25-yr. completion ($0.3 million / yr.)
Water Quality Capital	Varies	$500,000 / yr.	$500,000 / yr.	$250,000 / yr.

Currently, the average residential customer pays $59.60 per year (an equivalent of $4.97 per month) in stormwater fees. The recommended LOS packages generate the following rate profile over the next 10-years:



Billings PUBLIC WORKS

Stormwater Program Update and Council Direction Needed

This rate profile includes a seven-year ramp-up where rates are incrementally increased over the first seven years before leveling off to meet standard inflationary increases.

Stormwater Program Update and Council Direction Needed

City Council Discussion and Direction

Billings PUBLIC WORKS

Stormwater Program Update and Council Direction Needed

City staff will present this information at the October 2, 2023, City Council work session. The presentation will generally follow the information provided in this report. This documentation is being provided to the City Council upon request of the Budget and Finance Committee. After two meetings discussing these issues, it was the opinion of the committee that it would be difficult for the City Council members to fully digest all of this information in one session. In the interest of having a more productive conversation at the work session, staff is providing this information in advance of the meeting so the Councilmembers have an opportunity to become familiar with it before staff presents.

The questions that the City Council will need to provide direction are:

- Is Equivalent Rate Units (ERU) the appropriate rate structure?
- Should the city be charging system development fees (SDFs) on construction for stormwater similar to water and wastewater?
- What is the appropriate level of service for the four categories of stormwater service?
    - Deferred Maintenance
    - Citywide Capital
    - Flooding
    - Water Quality

After the City Council work session discussion, if the City Council is able to provide direction on those three questions, staff will proceed to Phase III of the stormwater program development. In this next phase, a master plan to determine a roadmap for getting the projects completed will be started, a rate study will be completed to determine final rates and SDFs, and the billing system will be updated to accommodate the new rate structure. The City Council will be presented with the new rates and SDFs for approval before implementation.