City of Laramie

City Council Briefing
Stormwater Program
August 27, 2024

Agenda

Welcome, Introductions and Agenda Review,

Background on Study

Stormwater Focus Group – Feedback Summary

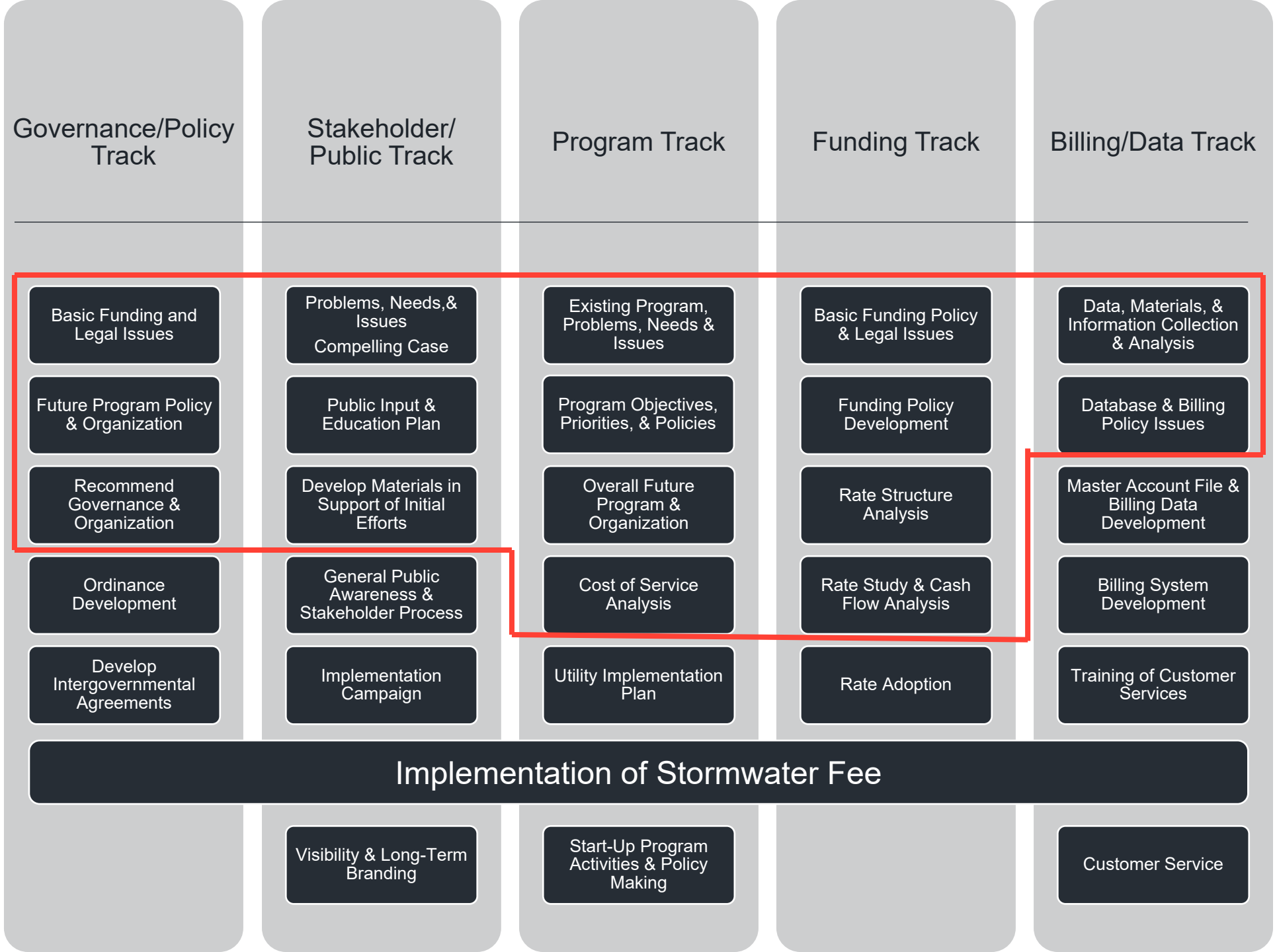
Final Program Recommendations

GIS Data – Impervious Area Data and Analysis

Rate Structures – Analysis of Options

Rate Model - Options Analysis

Stormwater Funding Feasibility Study


Governance/Policy Track
Stakeholder/ Public Track
Program Track
Funding Track
Billing/Data Track
Basic Funding and Legal Issues
Problems, Needs,& Issues
Compelling Case
Existing Program, Problems, Needs & Issues
Basic Funding Policy & Legal Issues
Data, Materials, & Information Collection & Analysis
Future Program Policy & Organization
Public Input & Education Plan
Program Objectives, Priorities, & Policies
Funding Policy Development
Database & Billing Policy Issues
Recommend Governance & Organization
Develop Materials in Support of Initial Efforts
Overall Future Program & Organization
Rate Structure Analysis
Master Account File & Billing Data Development
Ordinance Development
General Public Awareness & Stakeholder Process
Cost of Service Analysis
Rate Study & Cash Flow Analysis
Billing System Development
Develop Intergovernmental Agreements
Implementation Campaign
Utility Implementation Plan
Rate Adoption
Training of Customer Services
Implementation of Stormwater Fee
Visibility & Long-Term Branding
Start-Up Program Activities & Policy Making
Customer Service

Recap – Stormwater Funding Feasibility Study

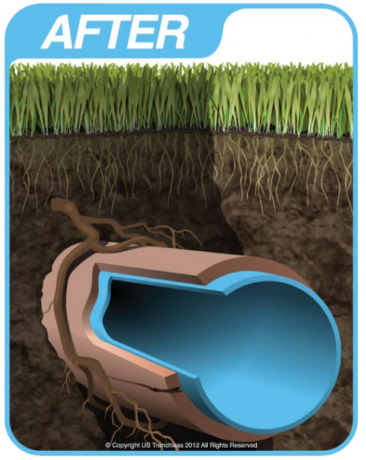
- Goal – ***Sustain investment in existing stormwater infrastructure and services delivery while mitigating flooding and improving water quality.***
- Recognized Need for Improved Level of Service for Stormwater Management
  - Master Plans identified $130M in Capital Improvements (High Priority = $30M)
  - Current staffing levels unable to provide proactive maintenance
  - Stormwater quality management needed to meet current and future regulations
- Quantified current stormwater expenditures (general fund)
- Developed Level of Service "menus" and approximate costs for a future stormwater program
- Discussed Drainage Fees as a method to distribute stormwater management costs among property owners

The basic question is not <u>whether</u> new revenue is needed, but <u>how</u> costs are distributed among property owners in the City.

Recommended Program Investments

- Implementation of Master Plan capital projects
- Pipe rehabilitation – continued effort to sustain infrastructure performance through lining pipes
- Continued new system installation for underserved areas of the City
- Improve water quality of runoff – reduce sediment loading into the system
- Expand use of Gutter Bins
- Implement an asset management program through inspections and expanded maintenance capabilities
- Ensure ongoing service delivery through addition of staff resources in engineering and maintenance

Gutter Bin Installation in Casper WY



Stormwater Focus Group Feedback

- Community Expectations
  - Effectively maintained system
  - Safe travel
  - Flooding problem areas resolved (4th Street, 22nd Street Ponds)
  - Health & Safety key mission
  - Property damage prevention
  - New development impacts – City doing well on requiring stormwater management
  - Focus on under-served areas
  - Incentivize green infrastructure
  - Need Drainage Criteria Manual – developers not scared by requirements, but don't like the uncertainty of lack of defined requirements (*note: Drainage Criteria Manual currently under development*)
- Other Input
  - Monitoring the water quality of discharges from the storm sewer system may be important to understand problems and focus solutions
  - Public education will be important through this process to help community understand what fees are for and how things will change

Stormwater Focus Group Feedback

- Level of Service
  - Residents will need to see that the funds generated are improving the performance of the stormwater system (less flooding).
  - Outcomes should be measurable, specific, and reported to the public.
  - Investment in keeping system functioning will provide immediate benefits from the charges.
- Financial Model
  - How the impervious area is determined is an important process to ensure confidence in the process.
  - Under-served areas of the City may not recognize the value unless it is clear they are receiving benefits.
  - It will be important to explain what will be done with the general fund dollars that are currently spent on stormwater.
- Preliminary Rate
  - All members felt that the range of rates was reasonable.
  - Some members stated that they would be happy to pay the fee since the service provided are needed.
  - The range of rates is in line with other rates in Wyoming, and much lower than rates across the country.

Program Recommendations

Long Term Financial Plan to Address:

1. Cost of Current Services
    a) Operational expenses – engineering, maintenance and operations, DPW administration
    b) Capital expenses – design, construction, project oversight, equipment
2. New Service needs
    a) Enhance street sweeping, inspections, system capacity improvements
    b) Project implementation for those identified in the master plan (design, permitting, construction), along with continued pipe lining, and equipment replacements
    c) Administration – financial accounting and customer support, including cost share for billing and collections

Level of Service Recommendation

ACTIVITY/CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5		YEAR 10
Asset Management / System Inspection	Medium	Medium	Medium	Medium	Medium		High
Engineering / Planning	Basic	Basic	Medium	Medium	Medium		Medium
Operation & Maintenance	Medium	Medium	Medium	Medium	Medium		High
Capital Improvements	Basic	Basic	Medium	Medium	Medium		Medium
Administration / Customer Service	Basic	Medium	Medium	Medium	Medium		High

Asset Management

ACTIVITY/CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 10
Asset Management / System Inspection	Medium	Medium	Medium	Medium	Medium	High

Primary Goals	Resources	Outcomes
1. Maintain inventory of system in GIS with conditions assessment	1. Four Public Works Street Operators – Year 1	1. New winter season inspection program; Entire system inspected on 5-year rotating cycle
2. Address all minor repairs annually	2. CCTV equipment – Year 2	2. Dedicated street sweeping program - Spring to Fall
3. Maintain annual inspection program for condition/failure assessment	3. GIS support for Inventory - PW Engineering	3. Maintained GIS inventory of the system on condition, material, age
4. Shift to proactive program for ongoing maintenance	4. Increase in tools, supplies, fuel, equipment maintenance	4. Completion of minor repairs on drainage system annually
5. Maintain ongoing sweeping program (spring through fall)		5. Sustained capacity of pipe network through routine cleaning and inspections

Operations and Maintenance

ACTIVITY/CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5		YEAR 10
Operation & Maintenance	Medium	Medium	Medium	Medium	Medium		High

Primary Goals	Resources	Outcomes
1. Shift to proactive maintenance program over time 2. Maintain capacity for dedicated stormwater maintenance program (hires or contracted services) 3. Establish capacity for an effective street sweeping program 4. Have materials/equipment in place to support ongoing operations in maintenance of the storm system	See Asset Management Section for staff 1. Increased materials and supplies for minor repairs 2. Repair and replacement of equipment on routine schedule to maintain performance goal 3. Initiate water quality monitoring program at public system outfalls	1. Improved capacity of system due to sweeping and system cleaning programs 2. Longevity and productivity of equipment - limited downtime 3. Increased capacity to complete minor repairs of drainage system (repair cost under $1M) 4. Performance goals are met (e.g., lane miles swept, tons removed from system). 5. Water quality improvements are targeted based on field test results

Engineering and Planning

ACTIVITY/CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 10
Engineering / Planning	Basic	Basic	Medium	Medium	Medium	Medium

Primary Goals

1. Maintain staff capacity to oversee Master Plan implementation and long-term capital program; maintain all Engineering Services while addressing Master Plan
2. Initiate and maintain major capital project design support to implement system rehab and new system extensions
3. Develop policy/design standards for storm sewer systems
4. Develop policy /design standards for use of Green Infrastructure; maintain design proficiency
5. Maintain support services to development community

Resources

1. Year 1 - add engineering technician
2. Year 2 - add engineer
3. Contract for inspection services
4. Provide vehicles and supplies, computers, communication equipment, office setup

Outcomes

1. Maintain ongoing services for development activities
2. Increased number of capital projects in process of implementation
3. Support expansion of Green Infrastructure with goal of reduced impacts to water quality and quantity
4. Increased capital investment in drainage system capacity, targeting reduced flooding and improved water quality discharge

Capital Projects

ACTIVITY/CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 10
Capital Improvements	Basic	Basic	Medium	Medium	Medium	Medium

Primary Goals	Resources	Outcomes
1. Annual investment goal of $4M to capitalize the Master Plan to effectively manage runoff 2. Maximize currently available capital funding 3. Issue Bonds or obtain grants for projects greater than $2M with specific targets and timelines 4. Design/construct high priority capital projects (known and identified by inspections) 5. Rehabilitate and extend life of existing system through pipe-lining	See Engineering and Planning for staff resources, equipment, supplies 1. Maintain capacity for design, permitting, and construction oversight with outsourced partners 2. Provide training of staff and education of engineering community on Green Infrastructure practices 3. Periodically recalibrate/ update system model by contracted services	1. Existing underground system productive life is optimized 2. Currently underserved areas of City have improved drainage service 3. Reduced neighborhood flooding 4. Repair/rehab projects well planned and targeted based on systemwide data

Administration and Customer Service

ACTIVITY/CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5		YEAR 10
Administration / Customer Service	Basic	Medium	Medium	Medium	Medium		High

Primary Goals	Resources	Outcomes
1. Maintain appropriate financial accounting for stormwater fees 2. Report to the community on overall program goals and accomplishments 3. Provide customer service for billing and administration 4. Update user fee rates to maintain sufficient cash flow, meeting program needs	1. Contract for necessary assistance in drainage fee integration and ongoing administration 2. Master account file data maintained by Public Works Engineering (with additional Technician added under Engineering)	1. Support measurable outcomes in financial management and budget oversight. 2. Provide high level of customer service and inform community leaders and Public Works on performance.

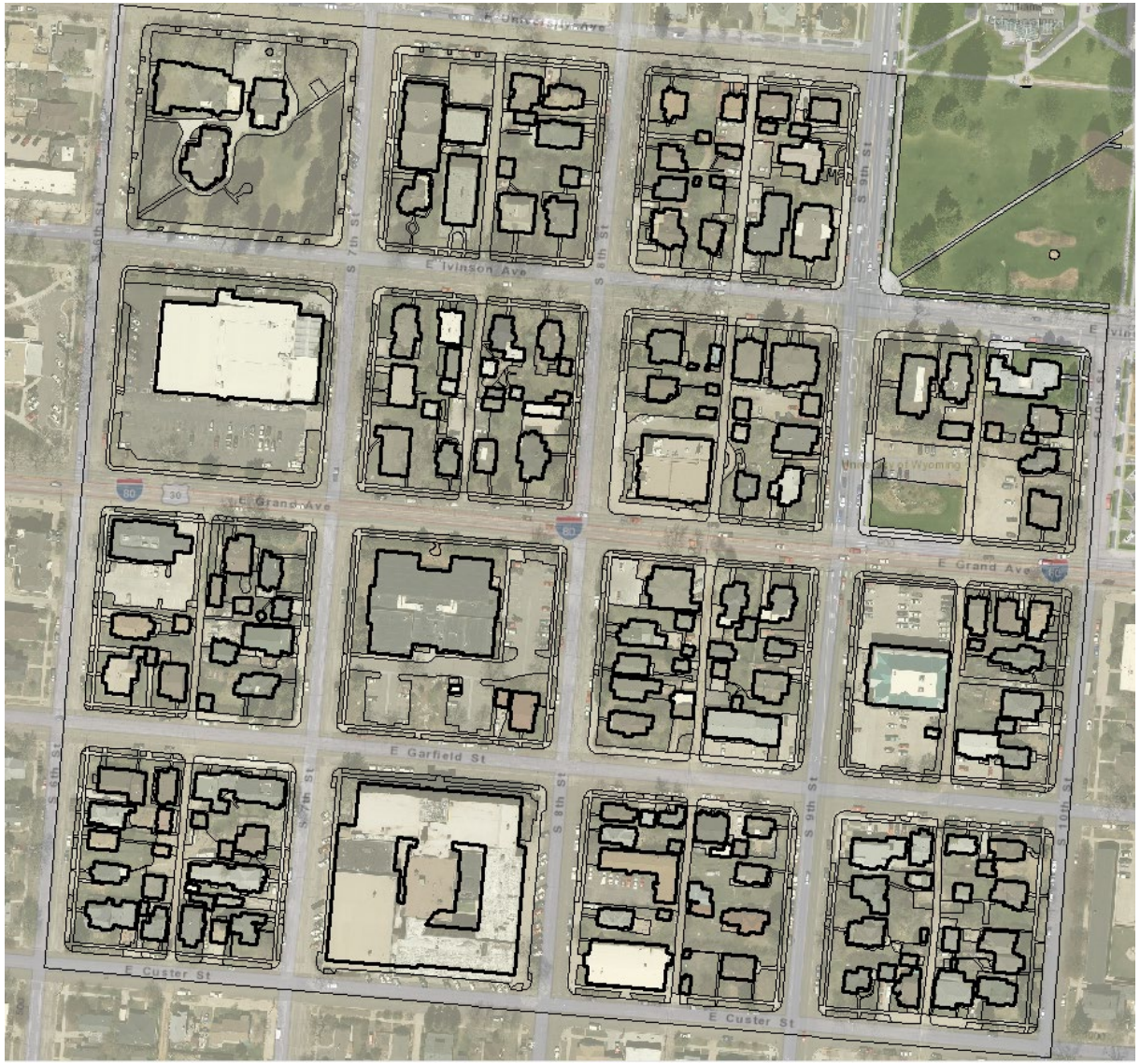
Forecast – Stormwater Management Services

Cost Center	FY25	FY26	FY27	FY28	FY29
Personnel Effort	$ 765,548	$ 931,886	$ 959,843	$ 988,638	$ 1,018,297
Direct Operating	$ 267,403	$ 279,465	$ 289,709	$ 293,510	$ 301,651
Capital Projection	$ 655,233	$ 3,305,024	$ 1,440,484	$ 9,653,886	$ 2,803,166
Total Forecast	**$ 1,688,184**	**$ 4,516,376**	**$ 2,690,036**	**$ 10,936,034**	**$ 4,123,115**

Cost Center	FY30	FY31	FY32	FY33	FY34
Personnel Effort	$ 1,048,846	$ 1,080,312	$ 1,112,721	$ 1,146,103	$ 1,180,486
Direct Operating	$ 310,037	$ 322,674	$ 327,456	$ 336,618	$ 346,055
Capital Projection	$ 2,364,622	$ 10,199,629	$ 644,060	$ 8,083,110	$ 5,370,247
Total Forecast	**$ 3,723,505**	**$ 11,602,615**	**$ 2,084,237**	**$ 9,565,831**	**$ 6,896,788**

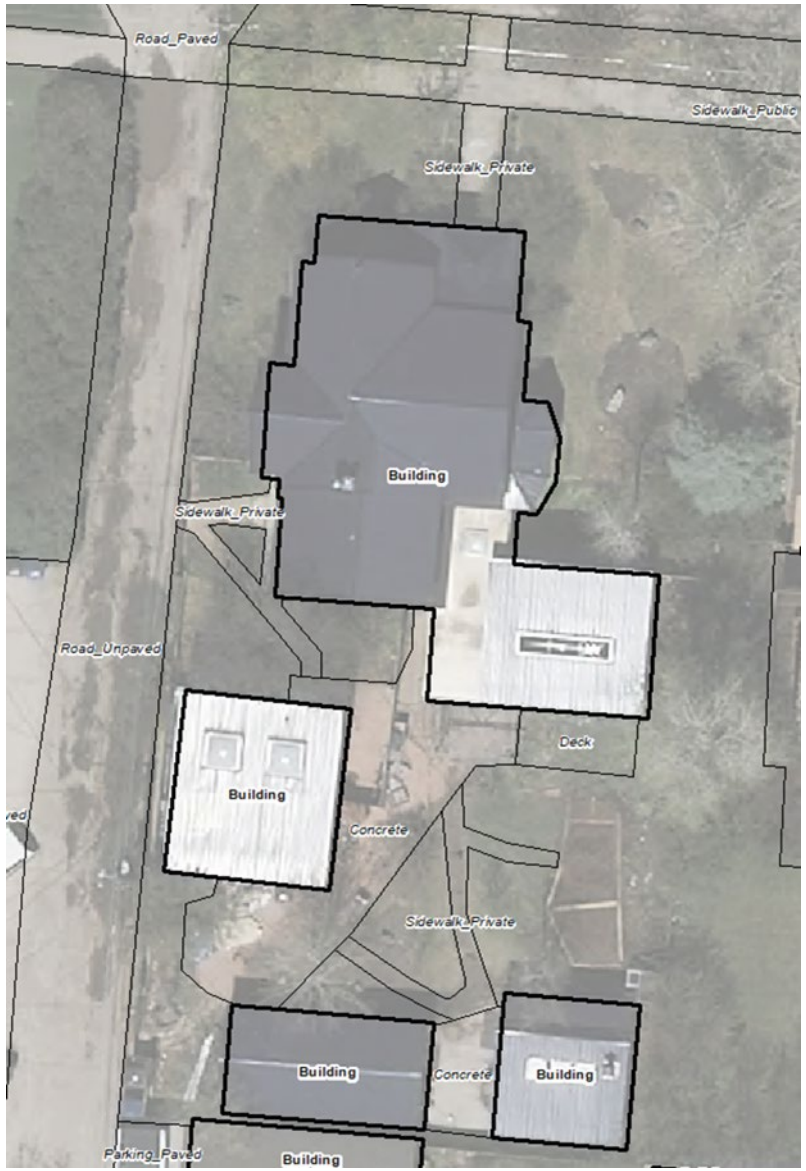
Impervious Area – GIS Data

Impervious Area Data Examples



- High degree of resolution
- Accurately identifies and separates impervious data by type:
  - buildings,
  - sidewalks (private vs. public),
  - roads (paved vs. unpaved, private vs. public),
  - decks, patios

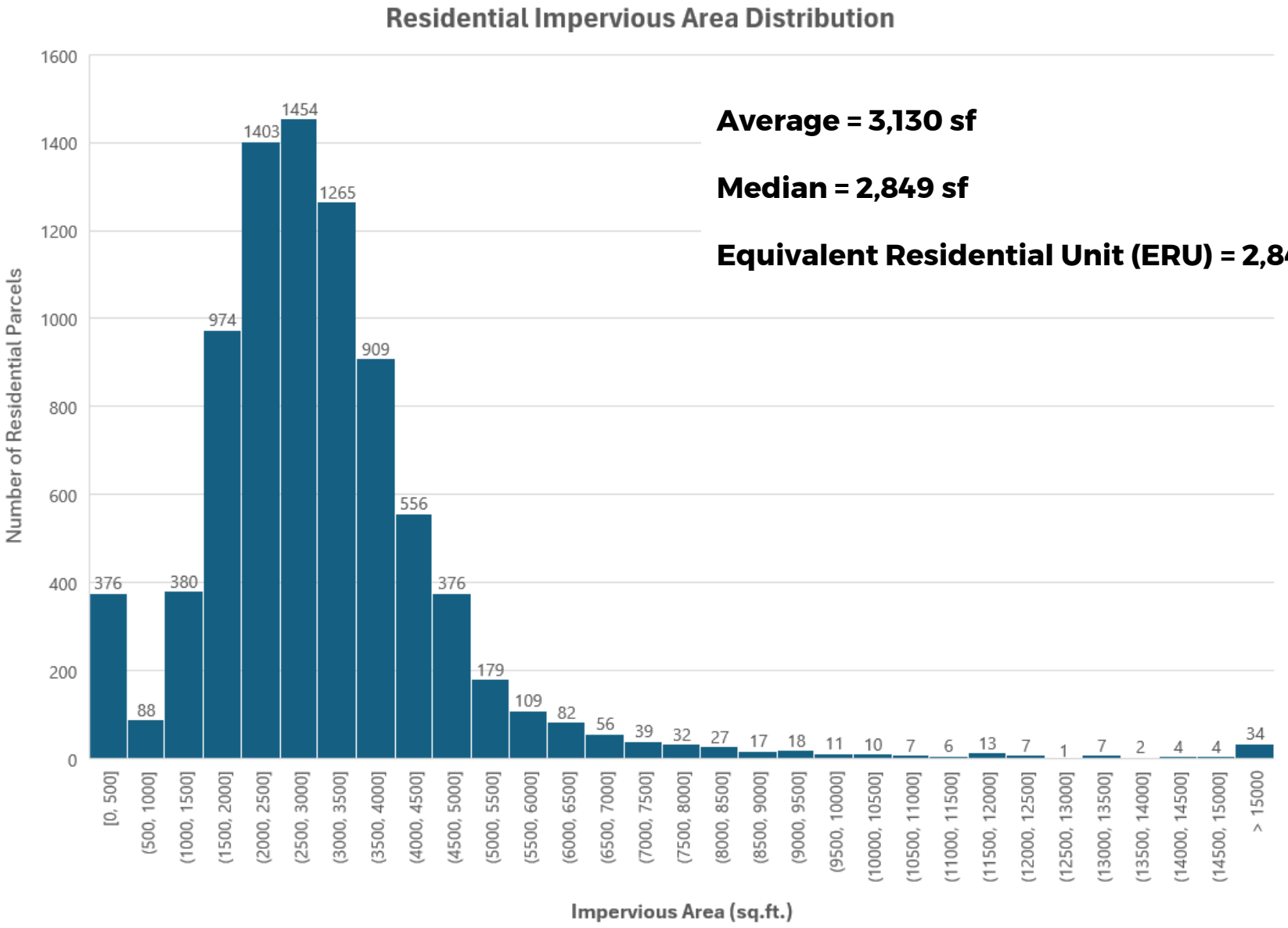
Impervious Area Data Examples



Impervious Area Data Examples

Calculated Impervious Area by Parcel

Rate Basis – Single Family Residential Parcels - Histogram

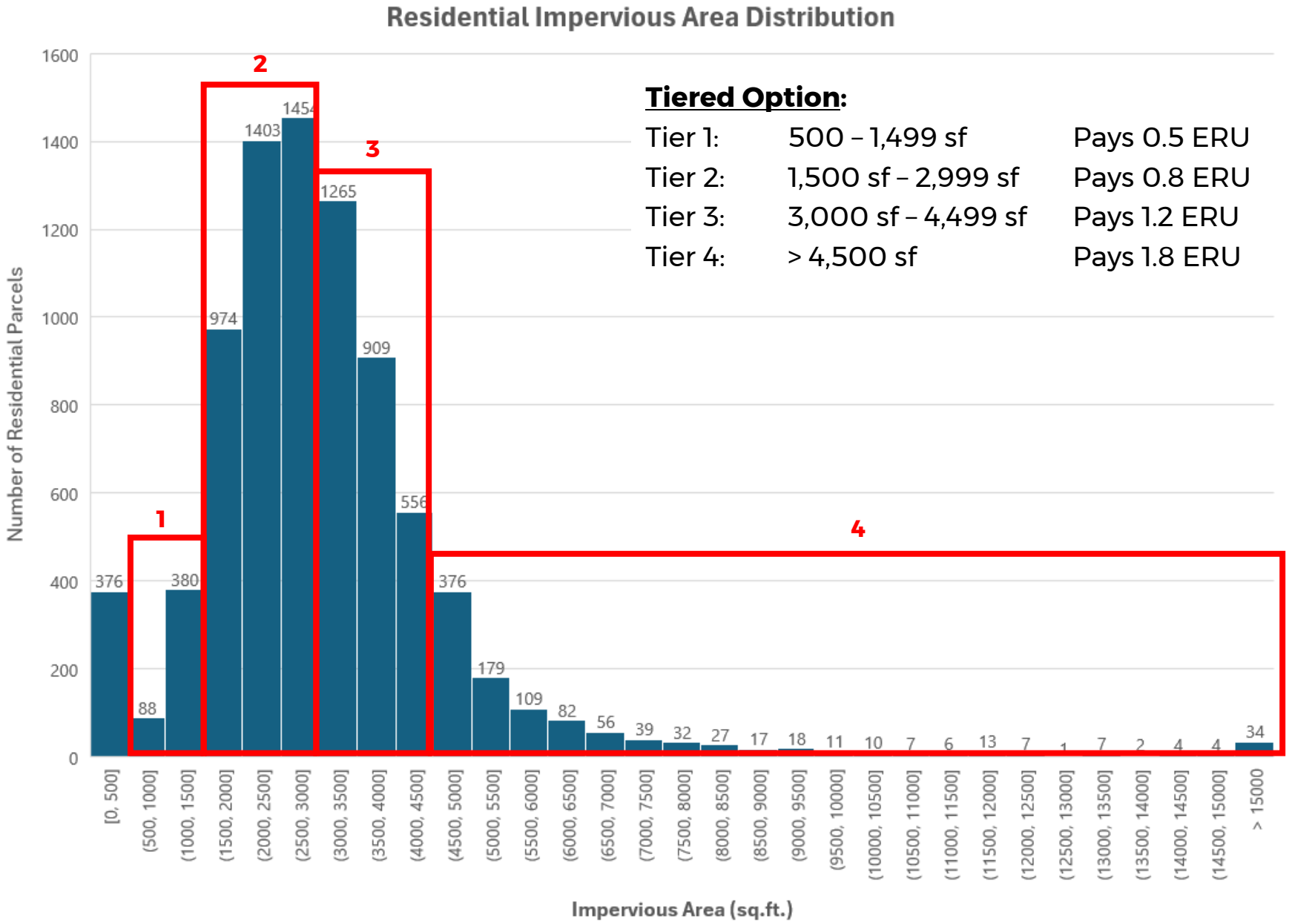


Average = 3,130 sf

Median = 2,849 sf

Equivalent Residential Unit (ERU) = 2,849 sf

Rate Basis – Single Family Residential – Tier Analysis



Tiered Option:

Tier 1:	500 – 1,499 sf	Pays 0.5 ERU	468 parcels
Tier 2:	1,500 sf – 2,999 sf	Pays 0.8 ERU	3,831 parcels
Tier 3:	3,000 sf – 4,499 sf	Pays 1.2 ERU	2,730 parcels
Tier 4:	> 4,500 sf	Pays 1.8 ERU	1,041 parcels

Rate Basis – Fixed Value Per Square Foot

All parcels, regardless of land use, pay a fixed rate per square foot.

Billing Unit (BU) = 500 sf

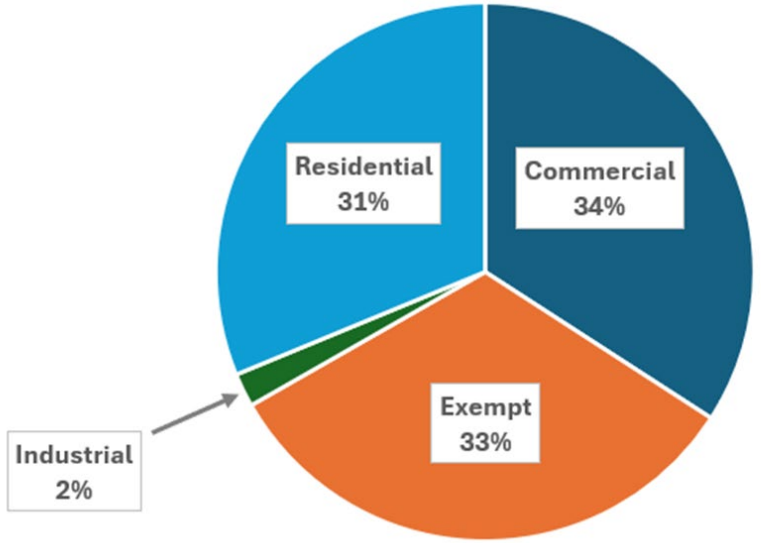
<u>Example</u>:

Measured Impervious Area = 3,700 sf

3,700 sf / 500 sf = 7.4 BU

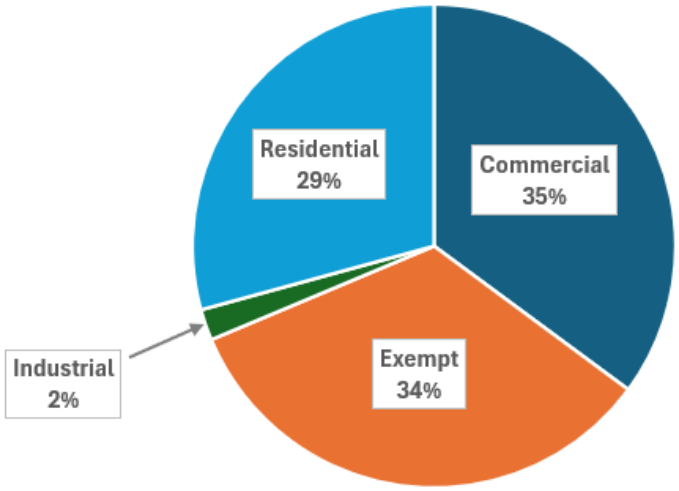
Parcel would be billed 7 BU (rounded to nearest whole billing unit)

Percent of Total Impervious Area by Land Use

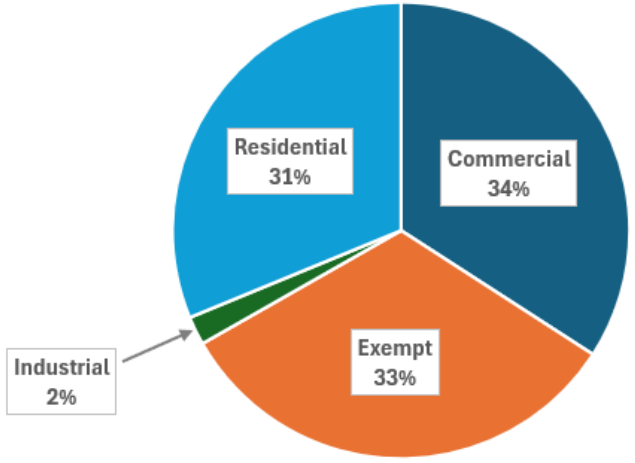


	Number of Billing Units	
Land Use	**Tiered Residential Rate Option**	**Fixed Value per SF Option**
Residential	8,449	52,881
Commercial	10,145	57,808
Exempt	9,693	55,231
Industrial	601	3,422
TOTAL	**28,887**	**169,342**

Percent of Billing Units by Land Use (Tier Option)



Percent of Billing Units (Fixed Value per SF Option)



Financial Policy

Policy for Financial Model

Established as an Enterprise Fund as required by state statute, support as described below:

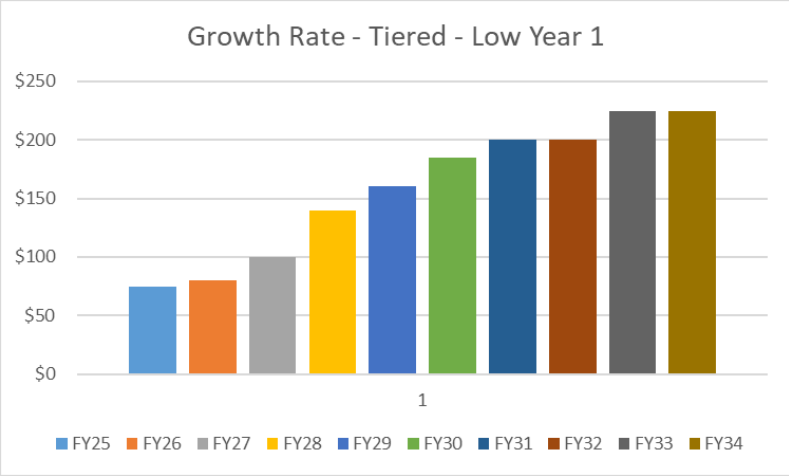
- $5M contribution from the General Fund to seed the fund. No contribution thereafter.
- $2M in bonding in FY 28 and $4M in bonding in FY 29 with Specific Purpose Tax as the repayment source to offset impact on fund (based on future Council policy decision)
- $1.5 M in grant funds in FY 31 and FY 34
- Grant funds to offset the Jacoby project, wherever that lands in the plan – this is a large award of approximately $12M.
- Establish credit policies for recognition of private investments in stormwater management

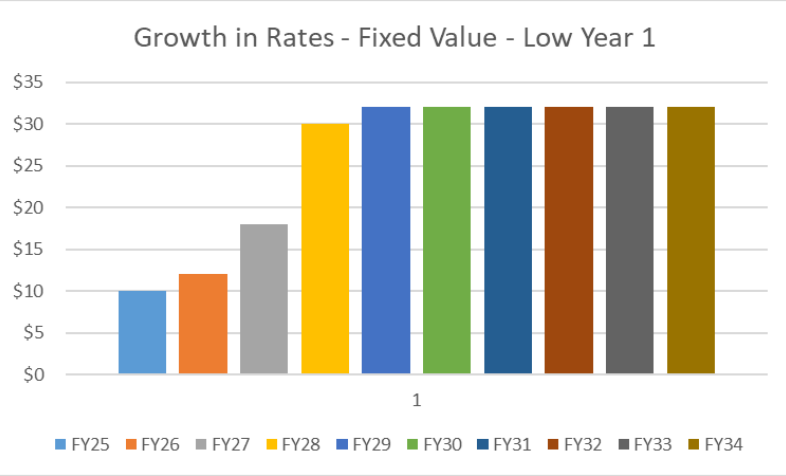
Financial Model – Two Rates Option Analysis

Rate Management Policy – Growth in Rates Over Time

Option 1

- Increase rates as needed to address the capital project priority plan contributing to capital reserves when appropriate
  - Rates are lower in the beginning with double-digit increases beginning in years 4





Preliminary Rate Estimates – Year 1 through Year 5 – Option 1

Tiered residential and non-residential by 2,849 sf of Impervious Area

28,887 Total Billing Units

	Year 1	Year 2	Year 3	Year 4	Year 5
Rate/Month/BU	$6.25	$6.67	$8.33	$11.67	$13.33
Rate/Year/BU	$75	$80	$100	$140	$160

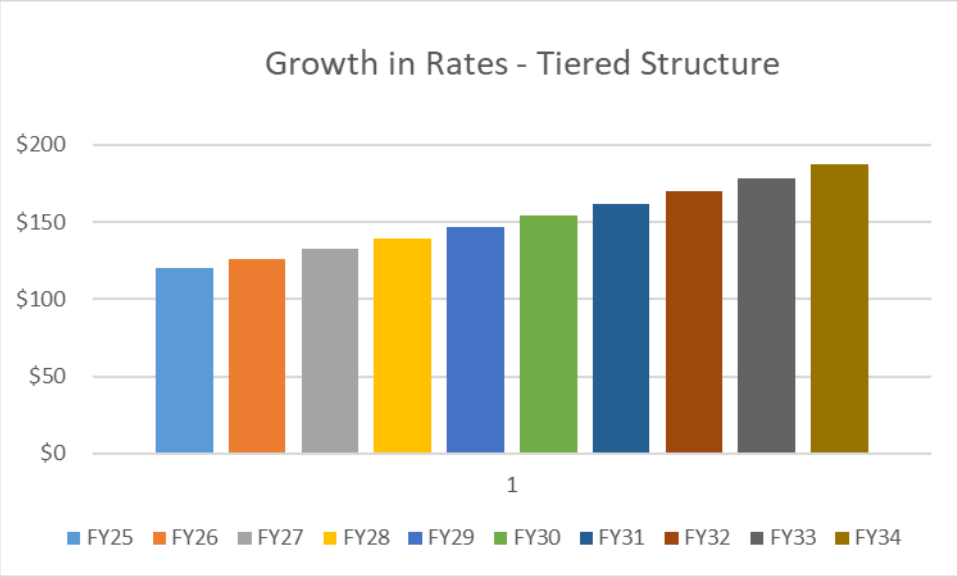
Fixed rate per 500 sf of Impervious Area – 169,342 Total Billing Units

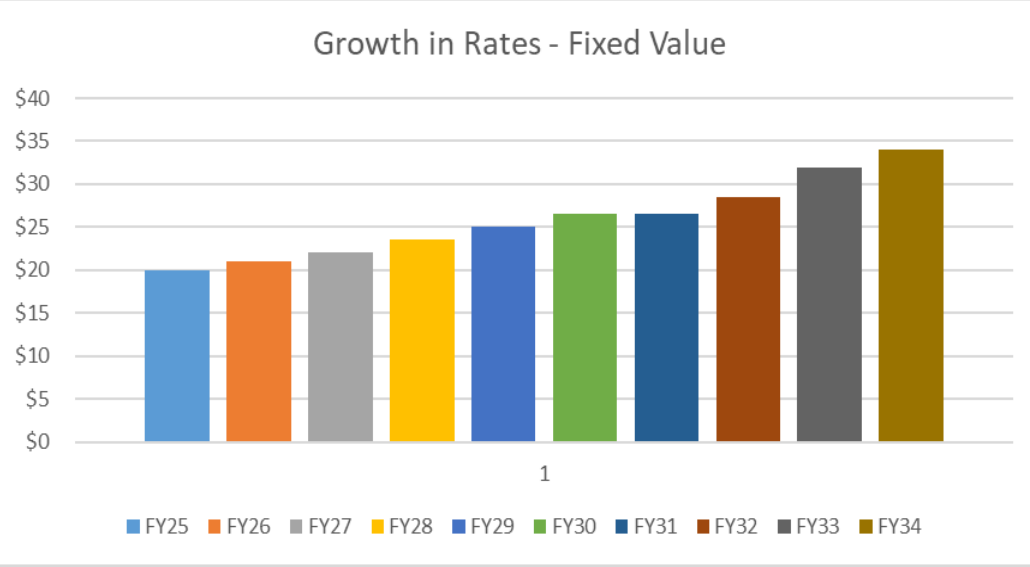
	Year 1	Year 2	Year 3	Year 4	Year 5
Rate/Month/BU	$0.83	$1.00	$1.50	$2.67	$2.67
Rate/Year/BU	$10	$12	$18	$32	$32

Rate Management Policy – Growth in Rates Over Time

Option 2

- Increase rates each year building capital reserves with a single digit rate adjustment each year
  - Rates are higher than Option 1, in the beginning, with moderate increases each year to address priority capital





Preliminary Rate Estimates – Year 1 through Year 5 – Option 2

Tiered residential and non-residential by 2,849 sf of Impervious Area

28,887 Total Billing Units

	Year 1	Year 2	Year 3	Year 4	Year 5
Rate/Month/BU	$10	$10.50	$11.08	$11.64	$12.22
Rate/Year/BU	$120	$126	$133	$140	$147

Fixed rate per 500 sf of Impervious Area – 169,342 Total Billing Units

	Year 1	Year 2	Year 3	Year 4	Year 5
Rate/Month/BU	$1.67	$1.75	$1.83	$1.96	$2.08
Rate/Year/BU	$20	$21	$11	$23.50	$25

Impact Comparison – Tiered Residential Rate versus Fixed Value Rate

Residential Comparisons - Year 1 Rate Forecast – Option 1

Fixed Unit Rate – ½ of residential pay less than 6 billing units or $5.00/month (less than $60/year)

Tiered Rates:

468 parcels at 0.5 x $6.25 = $3.12 per month

3,831 parcels at 0.8 x $6.25 = $5.00 per month

2,730 parcels at 1.2 x $6.25 = $7.50 per month

1,041 parcels at 1.8 x $6.25 = $11.25 per month

Non - Residential Rate Comparisons – Year 1 Forecast – Option 1

	Tiered Residential Rate Option	Fixed Value per SF Option
Non-Residential Billing Units	20439	116461
Year 1 Annual Rate per BU	$ 75.00	$ 9.96
Non-Residential Revenue	$ 1,532,925	$ 1,159,952

Impact Comparison – Tiered Residential Rate versus Fixed Value Rate

Residential Comparisons - Year 1 Rate Forecast – Option 2

Fixed Unit Rate – ½ of residential pay less than 6 billing units or $5.00/month (less than $60/year)

Tiered Rates:

468 parcels at 0.5 x $10 = $5.00 per month

3,831 parcels at 0.8 x $10 = $8.00 per month

2,730 parcels at 1.2 x $10 = $12.00 per month

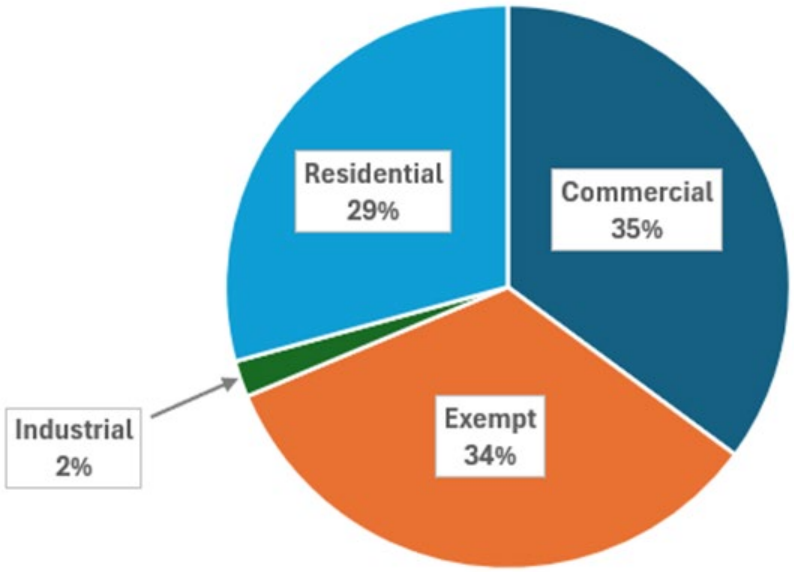
1,041 parcels at 1.8 x $10 = $18.00 per month

Non - Residential Rate Comparisons – Year 1 Forecast – Option 2

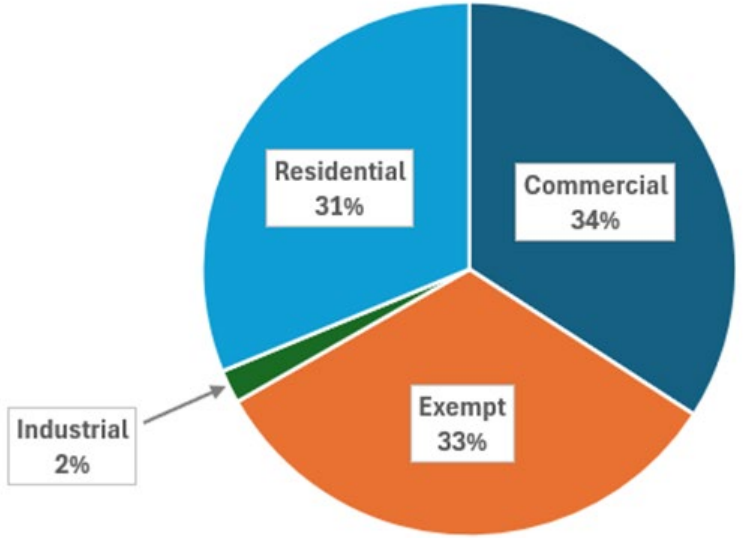
	Tiered Residential Rate Option	Fixed Value per SF Option
Non-Residential Billing Units	20439	116461
Year 1 Annual Rate per BU	$ 120.00	$ 20.00
Non-Residential Revenue	$ 2,452,680	$ 2,329,220

Charts – Shift in Who Pays by Land Use Categories – By Rate Structures

Percent of Billing Units by Land Use (Tier Option)



Percent of Billing Units (Fixed Value per SF Option)



Next Steps for Adoption of Drainage User Fee Rate

- Finalize Policies – Credits, Appeals and Rates
- Preparation of draft and final Ordinance language
- Upon adoption, develop billing system and internal policy, creation of master account files, and integration with existing billing system along with public education.

Thank you for your guidance and feedback. Questions?