



City of Monmouth



Stormwater Utility Formation

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Presentation Overview

- ◆ **Background**
 - City Stormwater System
 - Rate-Setting Approach
 - Levels of Service
- ◆ **Stormwater Utility Rate Development**
 - Key Assumptions
 - Customer Types
 - Costs for Each Level of Service
 - Calculated Rates
 - Public Engagement
- ◆ **Questions and Discussion**



City of Monmouth Stormwater System

◆ Goals

- Establish Storm Drain Utility fee to provide secure funding for stormwater collection and treatment
- Allow program to provide basic services that meet existing regulatory requirements

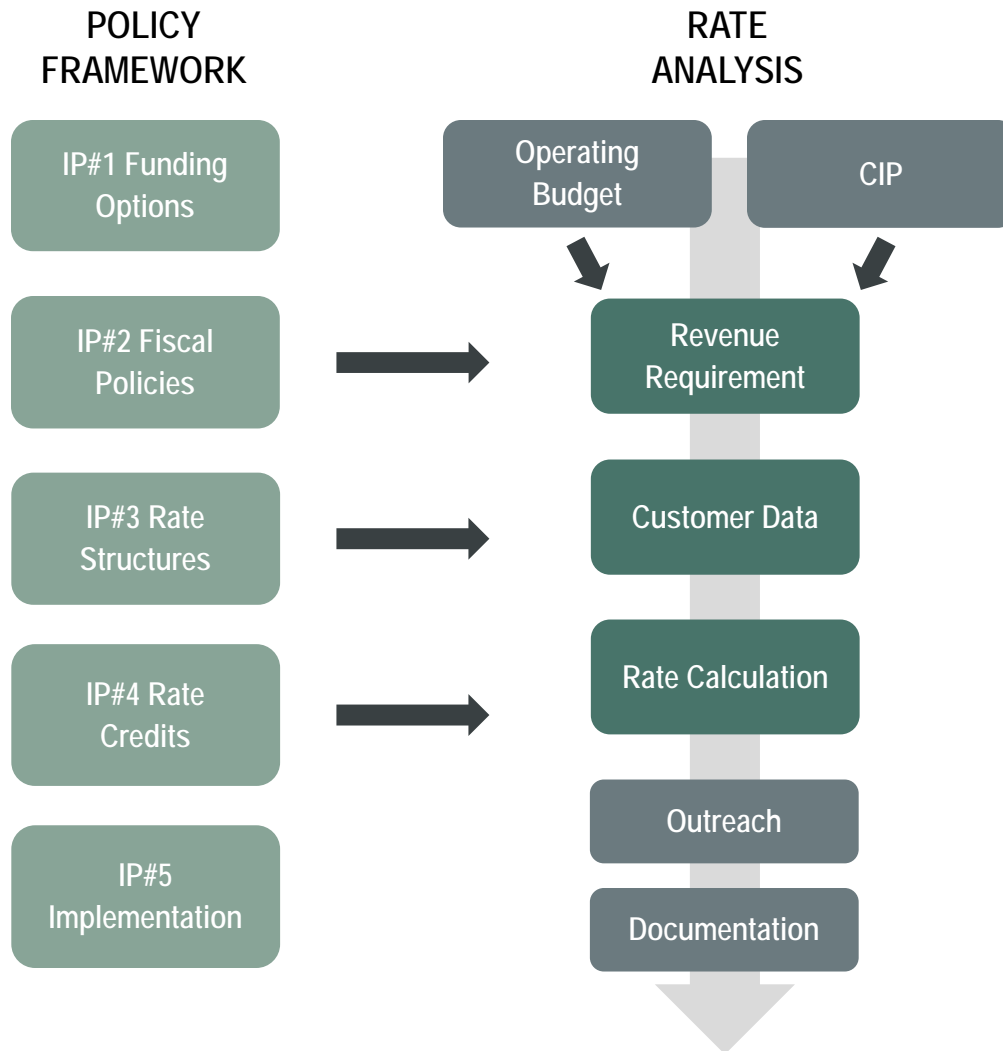
◆ System Characteristics

- Two drainage basins in the City
 - West flowing north and northeast through university to swale emptying into North and Middle Forks of Ash Creek
 - South and southeast flowing east to the City limits and into South Fork of Ash Creek
- Storm drain collection system
 - Small (less than 36-inch diameter) pipes
 - Catch basins
 - Open drainage ditches
- Problems
 - Minor flooding
 - Undersized pipes
 - Lack of storm improvements





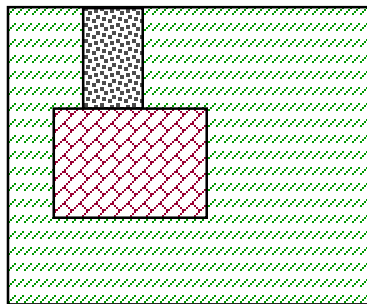
Overview of Rate Setting Process





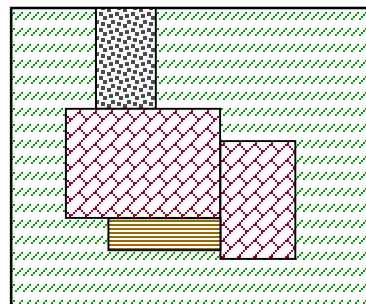
Typical Rate Approach

- ◆ Rate Structure: \$X.XX per ESU
- ◆ One ESU = X,XXX square feet of impervious area
 - SFRs: One ESU each
 - Non-SFRs: $\frac{\text{Impervious Area}}{\text{ESU ISA}} = \# \text{ of ESUs}$

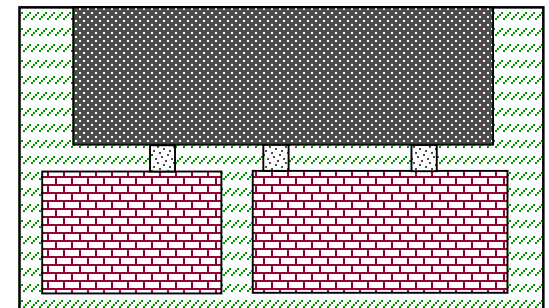


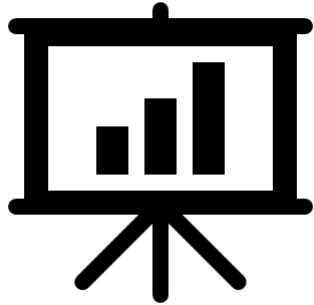
SFR #1
2,500 sq ft of
impervious =
1 ESU

SFR #2
3,700 sq ft of
impervious =
1 ESU



Non-SFR (other)
60,000 sq ft
impervious /
3,000 sq ft =
20 ESUs





Financial Analysis Results



Key Assumptions

Annual Cost Inflation

- Salaries: 2.0%
- Benefits: 3.0%
- Other Operating Costs: 2.2%
- Construction Costs: 3.0%

Annual Growth Rates

- Customer Account Growth: 1.0%
- Investment Interest: 2.75%

Operating Forecast

- Operating costs estimated for each of three “levels of service”
 - Basic, Medium and Optimal
- Rate revenue requirement determined based on operating and capital needs for each level of service

Capital Funding

- \$1.9 million CIP
- Internal financing
- 2.75% interest rate for 10 years
- No issuance costs



Revenue Requirement Overview

- ◆ Determine the amount of annual revenue necessary to meet all financial obligations
 - Operating and maintenance expenses
 - Debt service (principal & interest)
 - Capital costs and funding approach
 - Annual target reserve balances
- ◆ Evaluate revenue sufficiency over multi-year period
- ◆ Develop rate plan to balance financial needs and minimize customer impacts



Capital Improvement Plan Summary

Project Title	Cost (\$ 2019)	Year	Description
Stormwater Master Plan	\$ 218,000	2021	<ul style="list-style-type: none">• Evaluate Facilities• Model Hydraulic Development• Financial Plan• Analyze Future Conditions
Stadium/Church Street Improvements	\$ 1,001,730	2021	Alleviate flooding at WOU by upsizing pipes on Stadium & Church Streets
Coopers View Overflow	\$ 39,960	2023	Provide emergency overflow for residential area near Maxwell Avenue
Madrona Open Ditch	\$ 633,500	2023	Replace storm ditch with storm pipe near Madrona Park to address frequent maintenance issues

Total \$ 1,893,190

- ◆ Initial project list
- ◆ \$1.9 million capital requirement
- ◆ Two projects begin in 2021, two more in 2023
- ◆ Addresses gaps in stormwater system

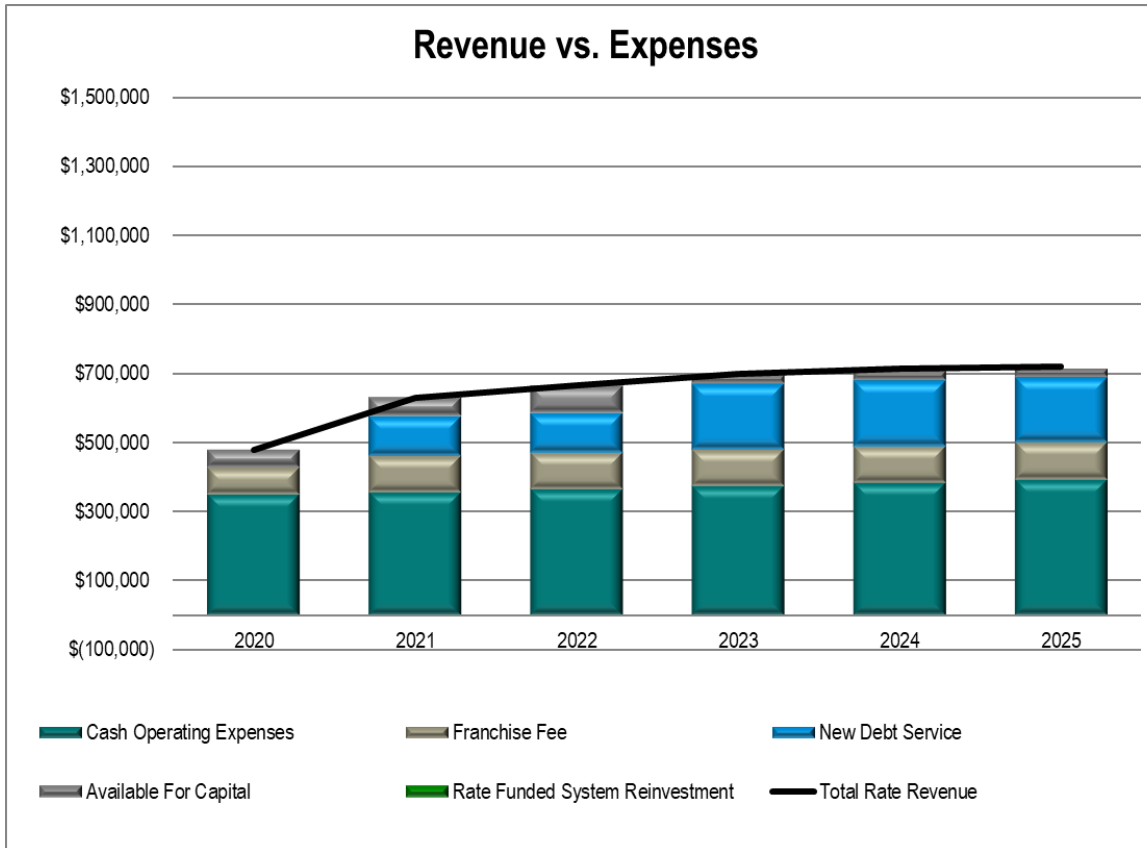


Service Level Matrix

LOS	Infrastructure Replacement	Capital Projects	Maintenance	Riparian Health / Quality / Monitoring	Public Education	Pollution Prevention / Best Practices	Construction Permitting / Inspection	Staff Training
Basic \$277,900 / 1.6 FTEs	Reactive replacement for severe problems	Master plan and three drainage projects funded	Cleaning of outfalls, portions of the rest of the system	Support of Ash Creek WD restoration efforts	Public Works Day, local schools outreach, leaf pickup brochure	Street sweeping, leaf hauling	DEQ 1200-C requirement & require as-built submission for new construction	Train staff on maintenance of infrastructure
Medium \$420,765 / 2.1 FTEs	Reactive replacement for moderate problems		Proactive with higher budget	Increase in community partner funds & monitoring at select outfalls	Annual brochure on stormwater utility	Staff training on best practices	City staff training in ESC inspection & Review as-builts to ensure compliance	Train staff commensurate with stormwater program needs
Optimal \$691,908 / 2.9 FTEs	Replacement at prescribed frequencies		Maintenance at recommended frequencies; new equipment	Increased stewardship projects, publicity & monitoring all outfalls	Website and expanded program for outreach / education	Formal O&M practices related to pollution prevention	Construction site runoff program & adopt stormwater management manual	



Key Components – Basic Level of Service

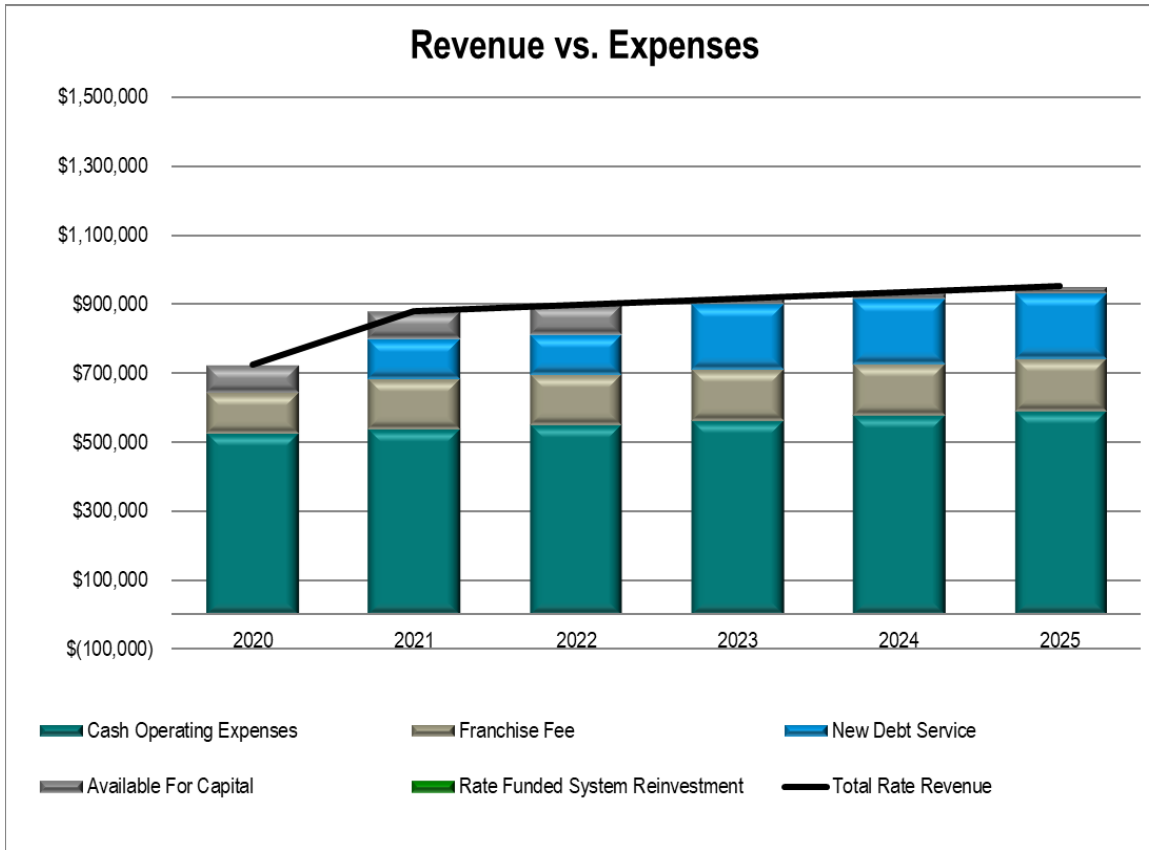


- ◆ Total expenses at \$628,743 in 2021 (includes \$53,382 in operating reserves)
- ◆ Continuation of existing level of operations and maintenance
- ◆ Funds capital expenses of \$2 million

Monthly Bill	2020	2021	2022	2023	2024	2025
Proposed Increases	0.0%	30.0%	5.0%	4.0%	1.0%	0.0%
Sample Residential Mo. Bill	\$9.14	\$11.88	\$12.47	\$12.97	\$13.10	\$13.10
<i>\$ Mo. Difference</i>	<i>\$0.00</i>	<i>\$2.74</i>	<i>\$0.59</i>	<i>\$0.50</i>	<i>\$0.13</i>	<i>\$0.00</i>



Key Components – Medium Level of Service

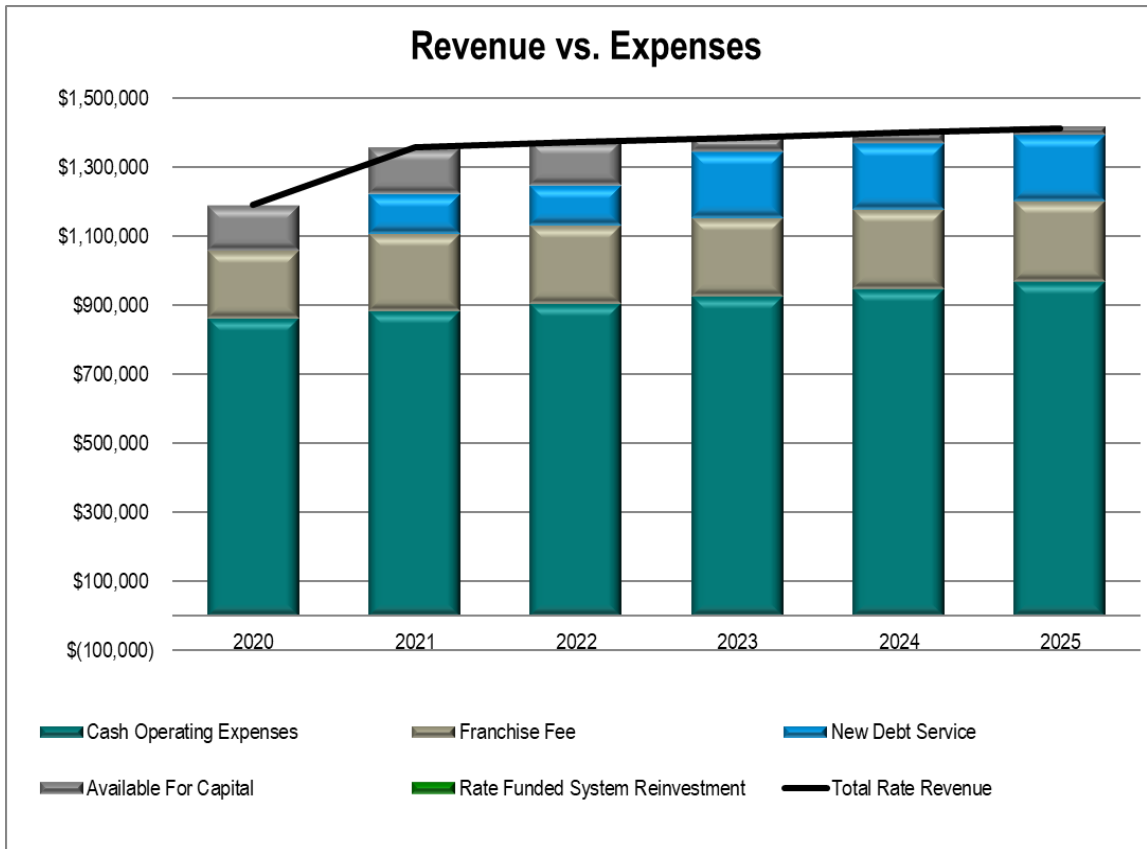


- ◆ Total expenses at \$880,612 in 2021 (includes \$80,814 in operating reserves)
- ◆ Increased operations and maintenance
- ◆ Funds capital expenses of \$2 million

Monthly Bill	2020	2021	2022	2023	2024	2025
Proposed Increases	0.0%	20.3%	1.0%	1.0%	1.0%	1.0%
Sample Residential Mo. Bill	\$13.83	\$16.64	\$16.80	\$16.97	\$17.14	\$17.31
<i>\$ Mo. Difference</i>	<i>\$0.00</i>	<i>\$2.81</i>	<i>\$0.17</i>	<i>\$0.17</i>	<i>\$0.17</i>	<i>\$0.17</i>



Key Components – Optimal Level of Service



- ◆ Total expenses at \$1,358,459 in 2021 (includes \$132,857 in operating reserves)
- ◆ Adequate operations and maintenance for municipal separate storm sewer systems (MS4s)
- ◆ Funds capital expenses of \$2 million

Monthly Bill	2020	2021	2022	2023	2024	2025
Proposed Increases	0.0%	12.8%	0.0%	0.0%	0.0%	0.0%
Sample Residential Mo. Bill	\$22.75	\$25.67	\$25.67	\$25.67	\$25.67	\$25.67
<i>\$ Mo. Difference</i>	<i>\$0.00</i>	<i>\$2.92</i>	<i>\$0.00</i>	<i>\$0.00</i>	<i>\$0.00</i>	<i>\$0.00</i>



Level of Service Rate Options

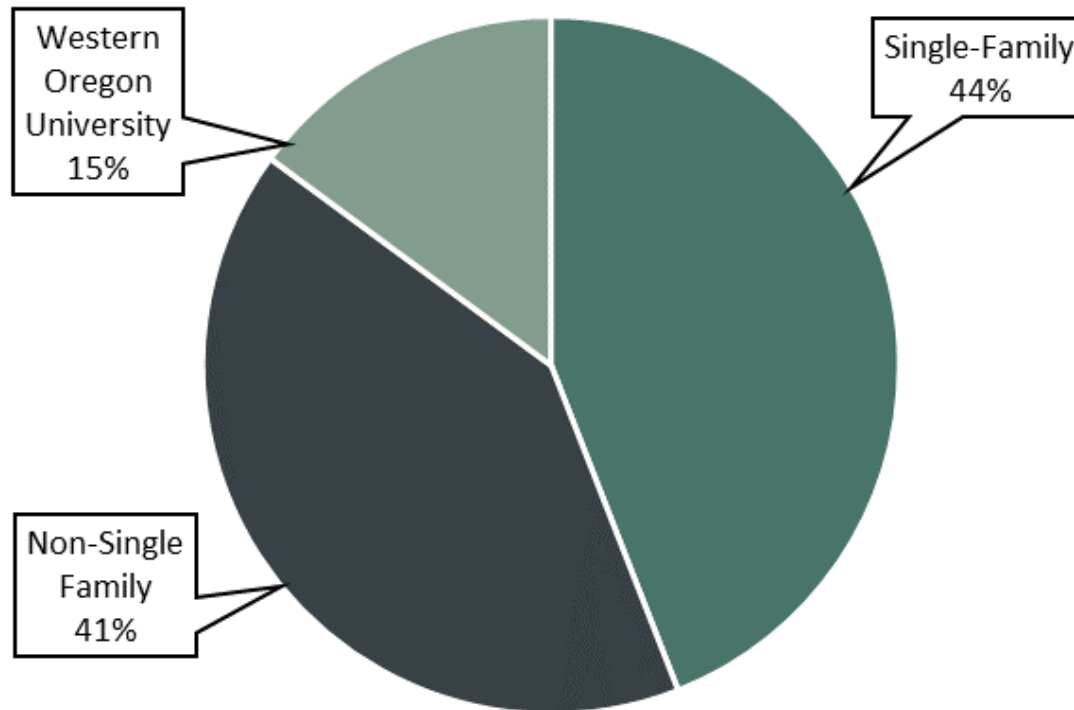
LOS Description	2020	2021	2022	2023	2024	2025	2026	2027
Basic (Existing)	\$9.14	\$11.88	\$12.47	\$12.97	\$13.10	\$13.10	\$13.10	\$13.10
Medium (Proactive)	\$13.83	\$16.64	\$16.80	\$16.97	\$17.14	\$17.31	\$17.49	\$17.66
Optimal (MS4 or Better)	\$22.75	\$25.67	\$25.67	\$25.67	\$25.67	\$25.67	\$25.67	\$25.92

- ◆ Each Level of Service incurs different costs which require different rates to fund associated programs.



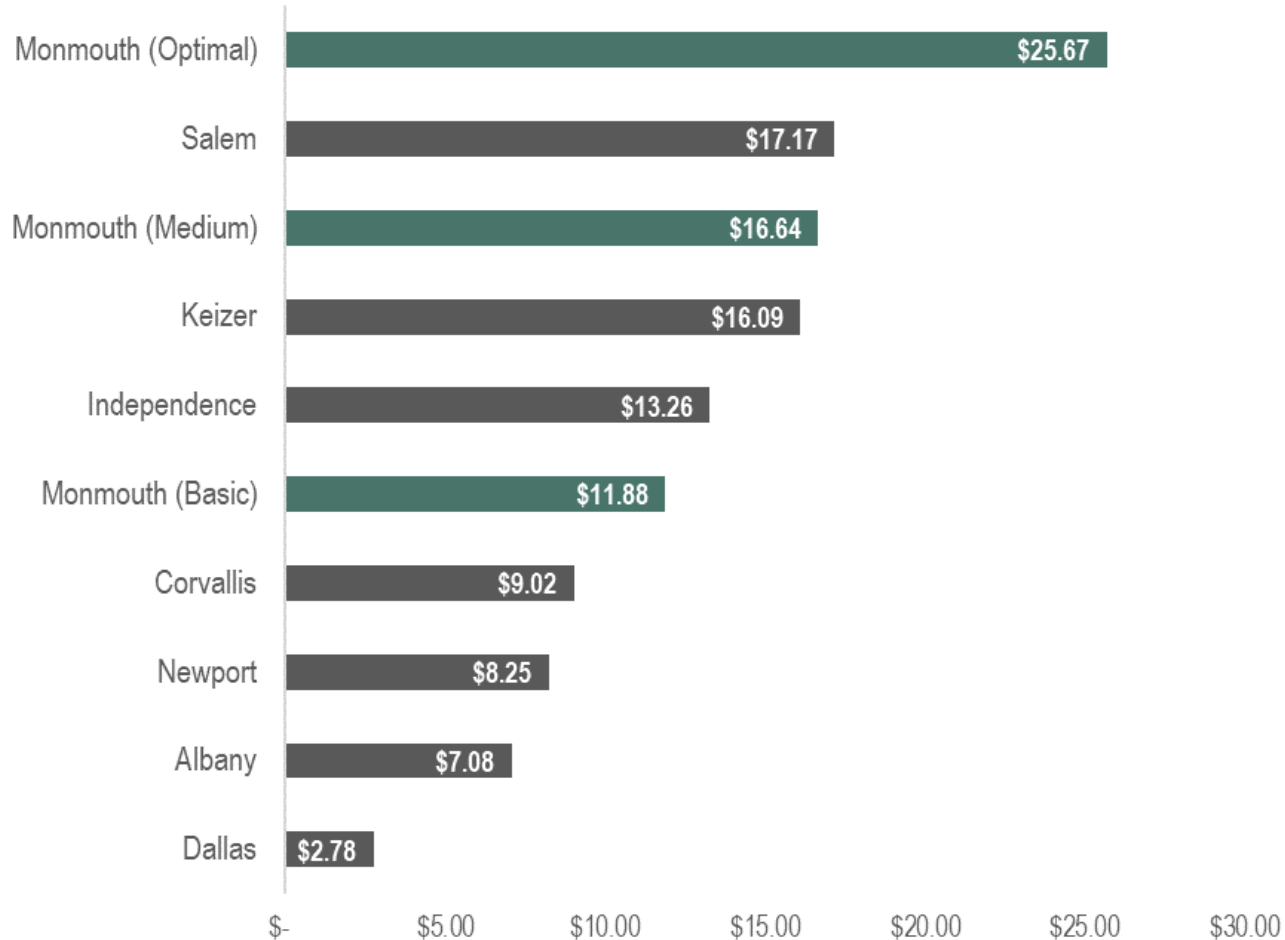
Revenue Profile

Impervious Surface Area Equivalent Service Units





Latest Adopted Rate Comparisons



Note: Rate comparisons represent a single-family residence



Public Engagement

- ◆ **Consultant Resources**
 - FCS GROUP
 - Barney & Worth
- ◆ **Budgeted Meetings and Presentations (Task 5)**
 - City Council workshop (April 16, 2019)
 - Up to four open houses or other meetings
 - One meeting held earlier with WOU (April 16, 2019)



Next Steps

- ◆ Incorporate feedback from Council
- ◆ Public Outreach
- ◆ Draft ordinance / resolution
- ◆ Council consideration
- ◆ Possible implementation



Questions/Discussion



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