

# Stormwater/Wastewater Project Advisory Committee (PAC)

December 5, 2023



# Agenda

▶ <b>Introductions</b>	Leland Koester	3:00 PM – 3:10 PM
▶ <b>Overview/Agenda</b>	Chip Ullstad	3:10 PM – 3:15 PM
▶ <b>Policy Question</b> ❖ Rate structure options	Chip Ullstad	3:15PM – 3:20 PM
▶ <b>GIS methodology</b> <i>Discussion/Questions</i>	Christina Conchilla <b>All</b>	3:20 PM – 3:40 PM
▶ <b>Revenue requirements</b> <i>Discussion/Questions</i>	Chip Ullstad <b>All</b>	3:40 PM – 3:50 PM
▶ <b>Rate options, comparison, example rates</b> <i>Discussion/Questions</i>	Deb Galardi <b>All</b>	3:50 PM – 4:15 PM 4:15 PM – 4:55 PM
▶ <b>Next Steps</b>	Chip Ullstad	4:55 PM – 5:00 PM



# City of McMinnville

**Impervious Area Data Development**

**Stormwater/Wastewater Advisory Committee**

December 5, 2023



# GIS Methodology

1. Impervious Area
2. SFR Properties
3. ERU Determination
4. SFA Properties
5. NSFR Properties
6. Units of Service
7. Questions?

# Impervious Area



# Impervious Area (IA)

- Hard surfaces that don't allow infiltration of stormwater into the ground. Examples include:
  - Rooftops
  - Driveways
  - Patios
  - Private Sidewalks
  - Parking Lots
  - Compacted gravel
- Excluded: swimming pool water, railroad ballast, open graded aggregate and landscaping gravel
- Most commonly used metric for stormwater billing



# Equivalent Residential Unit (ERU)



- Billing unit for IA based rate structures
- Community specific
- Median IA on Single-family residential (SFR) properties

# SFR Properties





# Single-Family Residential

- One building on one parcel that contains one or two dwelling units.
- Yamhill County Tax Parcel Data
- 10,136 SFR properties in McMinnville including the following land use codes: 101, 109, 111, 121, 191, 207, 401, 409, 451, 551
- 101 also has some SFA properties that were not included
- 207 also has some mobile home/manufactured home parks that were not included



# Mobile Home/Manufactured Home Properties

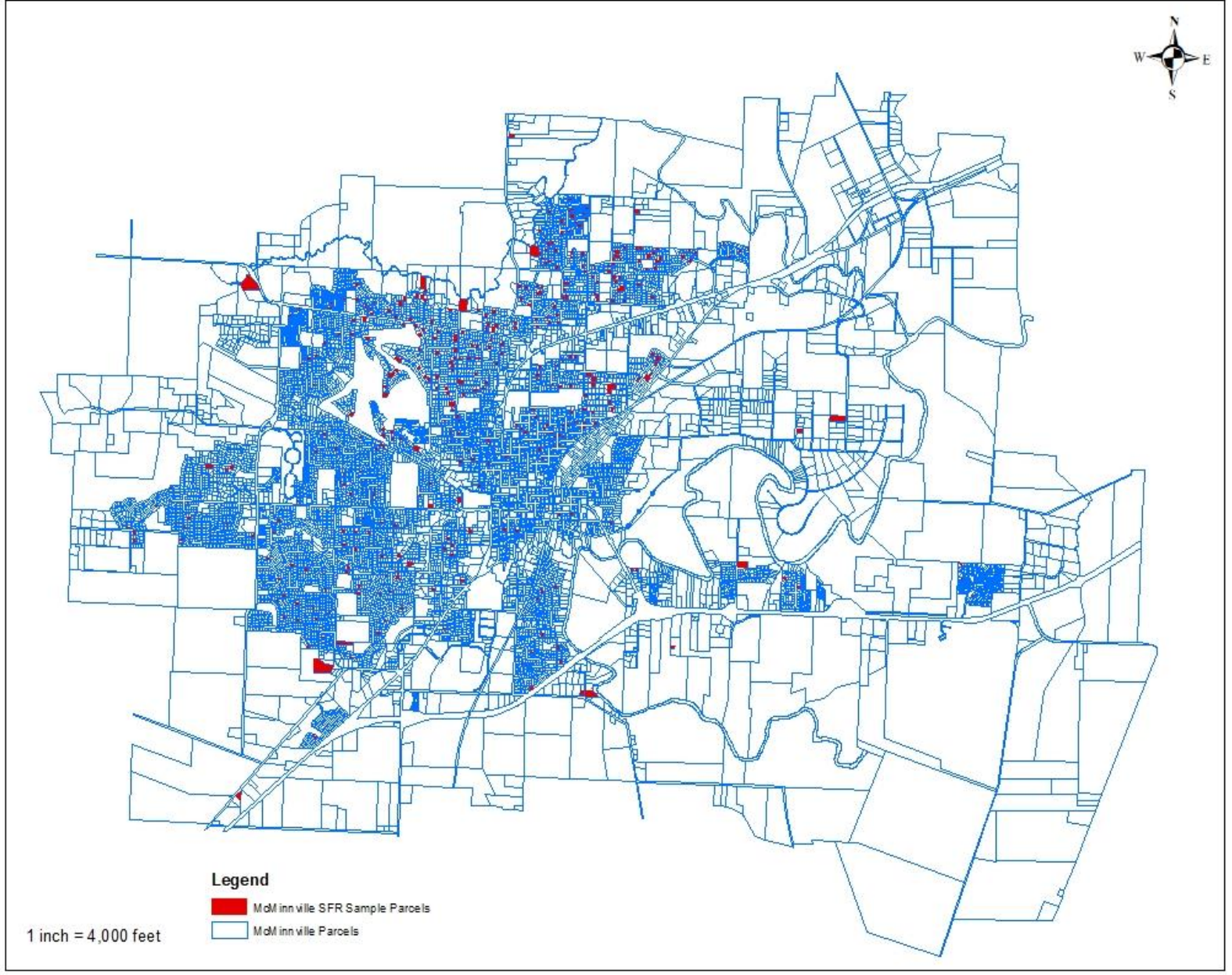


- One home per parcel – SFR
- More than one home per parcel – Non-single-family residential (NSFR)



# ERU Determination





# Impervious Area Digitization

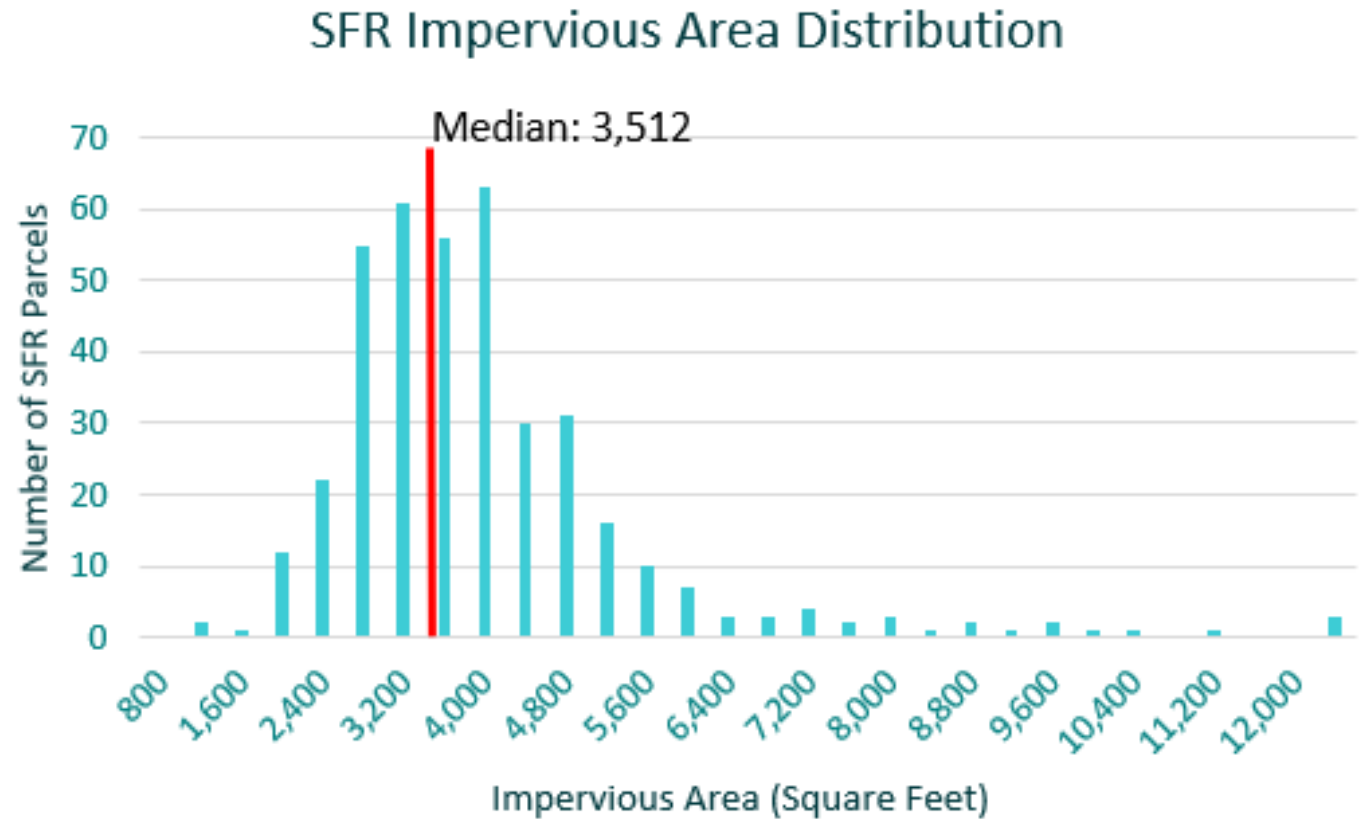
- Using ArcGIS, measured IA on a random sample 400 properties
- Representative range of geographies, structure ages, and housing types within the City



# Impervious Area Examples

# Histogram

- For ease of billing administration and customer understanding – will round ERU to 3,500 square feet



# SFA Properties



# SFA Properties

- Yamhill County Tax Parcel Data
- 286 SFA properties in McMinnville including the following land use codes: 101, 102 and 003 (common area)
- 9 different SFA communities
- Each community was assigned a parent parcel ID to count total parcels and common area parcels and to sum the measured IA





# Single-Family Attached (SFA) Properties



- Attached units located on individual parcels – often smaller than SFR parcels
- Share common area IA
- Impervious area for SFA properties and common areas was measured

## 2 Billing Options for SFA Properties

- Bill like NSFR properties: total measured IA/ERU value = total ERUs. Allocate ERUs equally amongst meters.
- Bill by Class per Unit ERU Value: Measured IA is divided by the number of units. Then further divided by ERU value for a per unit ERU value. Average per unit ERU value for all SFA properties (0.7 ERU per Unit)



# SFA - IA Measurement Data

Parent_Par	Total Parcel Count	Common Area Parcel Count	Unit Count	Impervious Area (sq. ft.)	IA per Unit	Unit ERUs
R4416AB90003	31	1	30	58,290.04	1,943.00	0.6
R4417CC90000	24	2	22	71,720.55	3,260.03	0.9
R4417CD90100	25	1	24	90,623.60	3,775.98	1.1
R4418DB12131	29	1	28	44,792.54	1,599.73	0.5
R4419AD00660	20	0	20	29,423.51	1,471.18	0.4
R4419DB03906	23	2	21	42,473.95	2,022.57	0.6
R4420BA00200	62	6	56	179,447.97	3,204.43	0.9
R4421CC90000	38	1	37	45,005.40	1,216.36	0.3
R4423 90000	30	3	27	91,911.06	3,404.11	1.0
					<b>Average</b>	<b>0.7</b>



# NSFR Parcels



# Non-Single Family Residential (NSFR) Properties

- 1,613 NSFR Parcels in McMinnville – 1,469 developed with IA
- Total IA divided by ERU value to calculate billable ERUs



# Units of Service



# Units of Service

- Billing units for the proposed Stormwater Utility:
  - SFR - 1 ERU each
  - SFA - 0.7 ERU each
  - NSFR - IA/divided by 3,500 then rounded up to the nearest whole integer value (*policy question for February 2024 meeting*)
  - No bill for parcels with under 350 sq. ft. of IA value (*policy question for February 2024 meeting*)

	Billable Parcel Count	ERUs
SFR	9,985.0	9,985.0
SFA	269.0	188.3
NSFR	1,469.0	17,886.0
<b>Total</b>	<b>11,723.0</b>	<b>28,059.3</b>

Q&A



# Revenue Requirements

## Estimated Stormwater Utility Revenue Requirements

<b>Operating costs</b>		Current	Fully Funded Cost	FTE
<b>Stormwater collections</b>				
Estimated current stormwater collection system maintenance	\$	62,315	\$ -	
+ 2 new FTEs, including benefits	\$	-	\$ 254,000	2.0
Equipment	\$	-	\$ 68,000	-
+1 new FTE including benefits, Supervisor	\$	-	\$ 173,000	1.0
Allowance for annual equipment maintenance	\$	-	\$ 20,000	-
<b>Sub-total, Stormwater Collections</b>	<b>\$</b>	<b>62,315</b>	<b>\$ 515,000</b>	<b>3.0</b>
<b>PW-Operations</b>				
+ 0.7 new FTE, Leaf program	\$	50,000	\$ 75,000	0.7
Storm/High water/Reactive response	\$	15,000	\$ 70,000	-
+1.6 new FTEs, including benefits, Detention/Swale maintenance	\$	75,000	\$ 150,000	1.6
Annual street cleaning contractual service	\$	300,000	\$ 400,000	-
<b>Sub-total, Operations</b>	<b>\$</b>	<b>440,000</b>	<b>\$ 695,000</b>	<b>2.3</b>
<b>Engineering</b>				
Current personal services	\$	68,000	\$ 70,000	0.5
+1.5 new FTEs, including benefits	\$	-	\$ 200,000	1.5
Repayment to Sewer Fund for seed money	\$	-	\$ 50,000	-
Professional Services Agreement (25% of Capital)	\$	50,000	\$ 375,000	-
<b>Sub-total, Engineering</b>	<b>\$</b>	<b>118,000</b>	<b>\$ 695,000</b>	<b>2.0</b>
<b>Administrative</b>				
McMinnville Water and Light billing cost	\$	-	\$ 150,000	-
Internal transfer for support services (to General Fund, based on 7.3 FTE)	\$	-	\$ 170,000	-
Franchise fee @ 6% (based on annual revenue)	\$	-	\$ 240,000	-
<b>Sub-total, Administrative</b>	<b>\$</b>	<b>-</b>	<b>\$ 560,000</b>	<b>0.0</b>
<b>Total Operating</b>	<b>\$</b>	<b>620,315</b>	<b>\$ 2,465,000</b>	<b>7.3</b>
<b>Capital costs</b>				
Estimated capital	\$	-	\$ 1,500,000	
<b>Total Capital</b>	<b>\$</b>	<b>-</b>	<b>\$ 1,500,000</b>	
<b>ROUNDED, TOTAL ESTIMATED ANNUAL EXPENSES \$ 600,000 \$ 4,000,000 7.3</b>				

Q&A



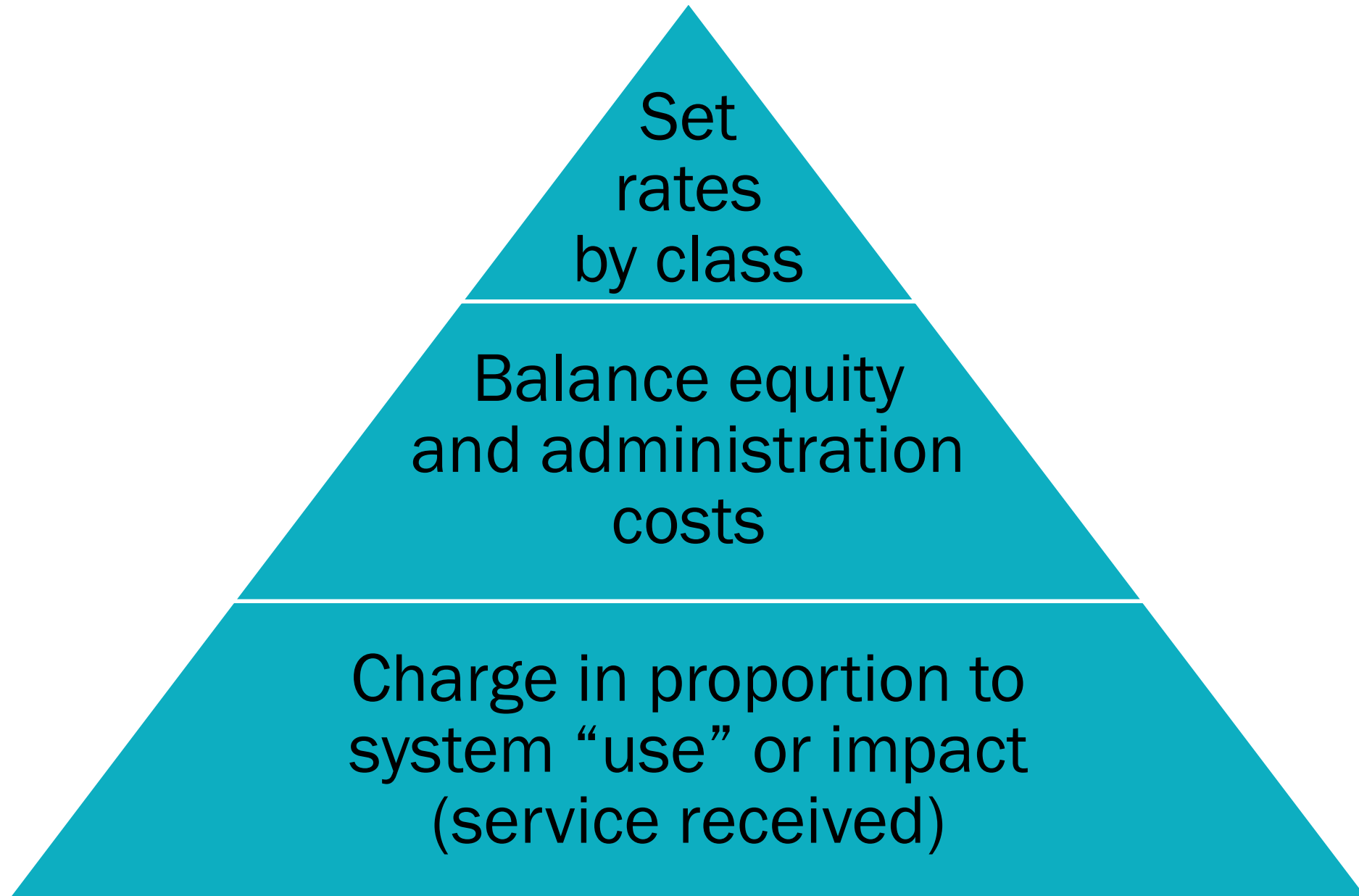
**City of  
McMinnville**

## **STORMWATER RATE STRUCTURE DEVELOPMENT**

**Project Advisory Committee Meeting  
December 5, 2023**



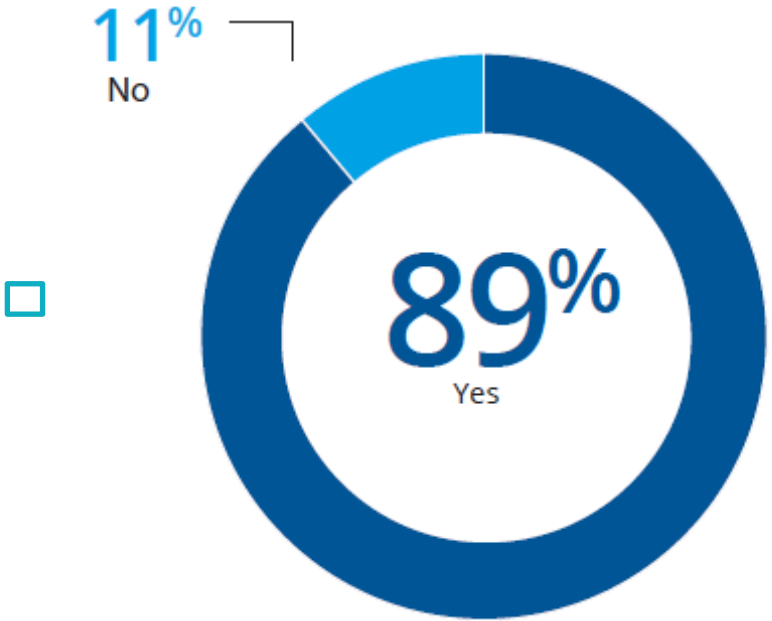
# Rate Setting Principles & Practices



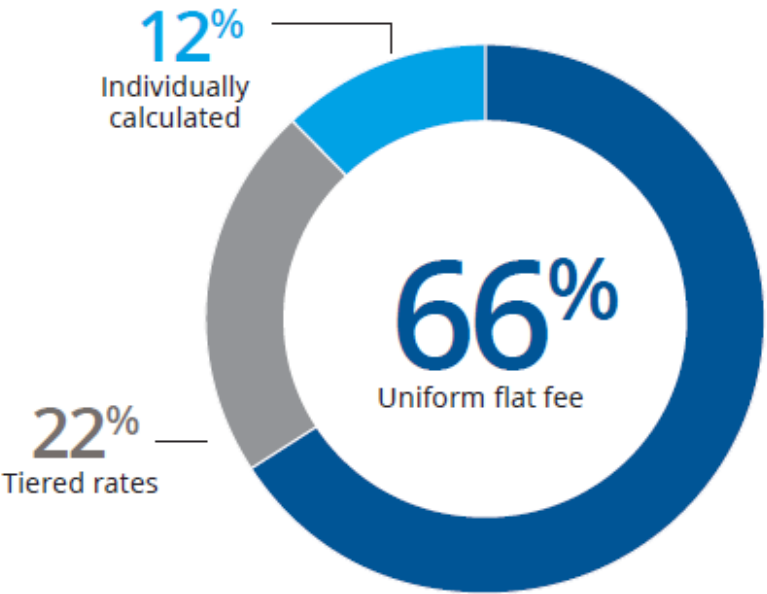
# Rate Structures (Nationally)



Is your stormwater user fee based on some form of parcel area such as gross and/or impervious area?

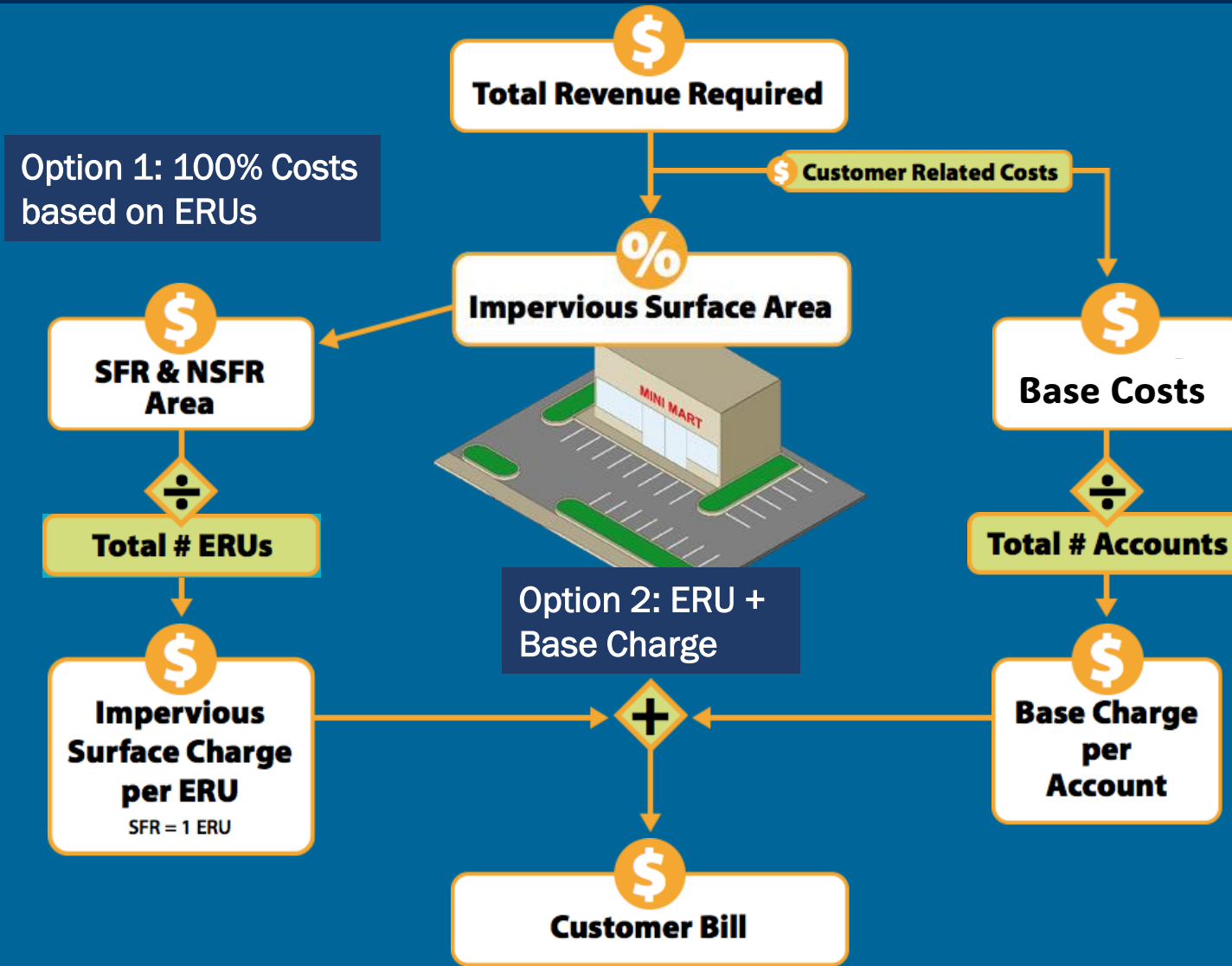


What type of rate structure does your utility have for the family residential parcels? (Select all that apply)



Source: 2021 Black & Veatch Stormwater Survey

# Rate Option Development



ERU = Equivalent Residential Unit, SFR = Single Family Residential, NSFR = Non-single family residential

# Preliminary Rate and Bill Calculations

- All rates and bills are preliminary
- Factors affecting ERU estimates
  - Refinements to impervious area measurements for individual properties (customer driven)
  - Policy decisions regarding exemptions and credits
- Factors affecting revenue requirements
  - Stormwater billing costs from McMinnville Water & Light
  - City indirect cost allocations developed through 2024-25 budget process



- 100% annual costs scaled based on ERUs.
- ERUs adjusted down 5% to reflect *estimated* credits and impervious area adjustments.

## Option 1, ERU only monthly billing

Annual cost	\$4,000,000.00
Total number of ERUs	26,656
<b>Monthly charge/ERU</b>	<b>\$ 12.50</b>

ERU = Equivalent Residential Unit

# Rate Option 2

- Base charge = estimated billing costs (4% annual costs)
- ERU Charge = other costs (96% annual costs)
- Franchise fees (6% charge on total revenue generated)
  - Split between base and ERU charge (4%/96%)

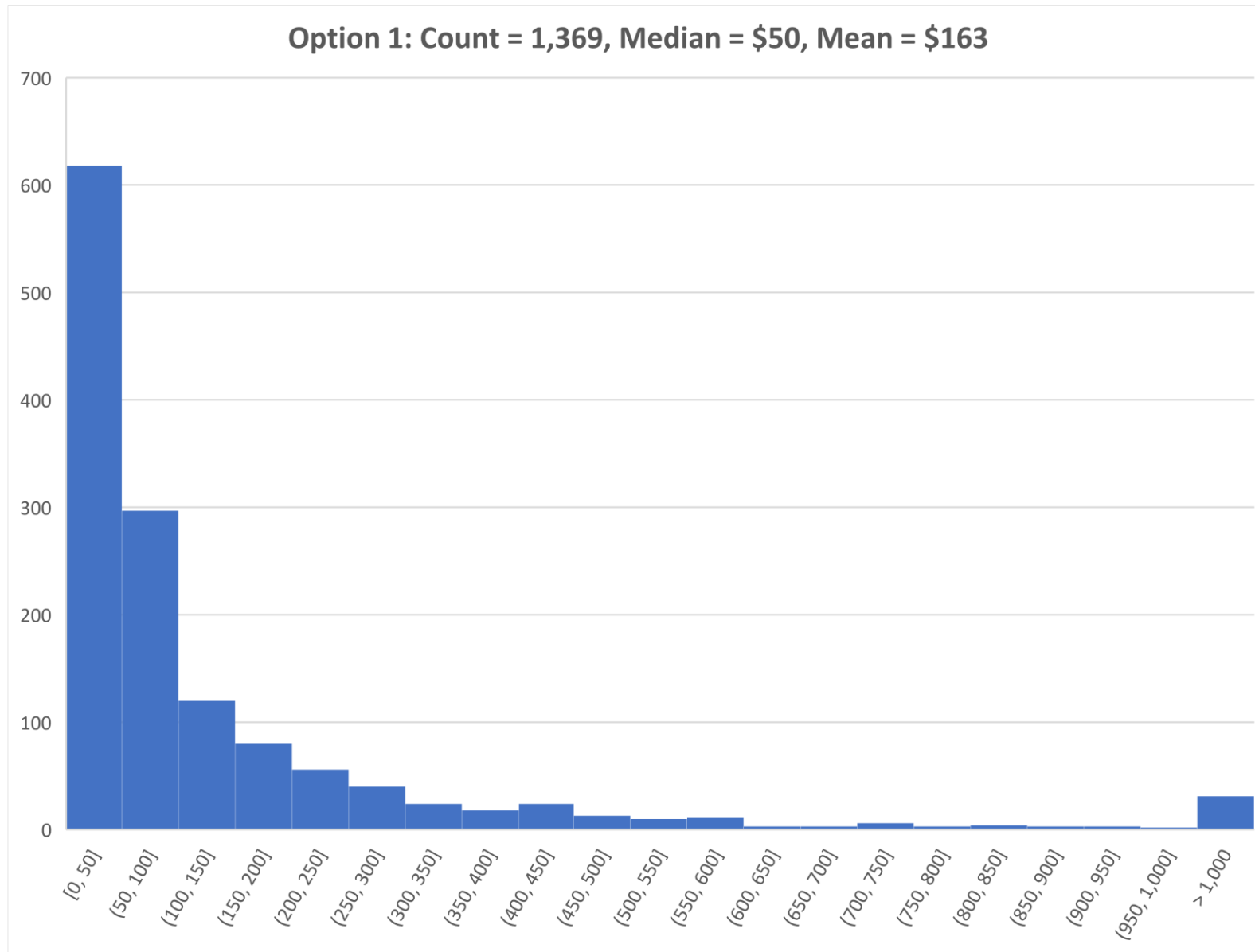
<b>Option 2, Base fee + ERU monthly billing</b>	
<i>Base monthly charge (billing + franchise fee)</i>	
Customer Billing	\$ 150,000
Franchise Fee (billing share)	9,574
Total estimated billing accounts	11,486
<i>Monthly base charge (Rounded)</i>	<b>\$ 1.20</b>
<i>Variable monthly charge (total less base)</i>	
Variable annual cost	\$ 3,840,426
Total estimated ERUs	26,656
<i>Monthly variable charge/ERU (Rounded)</i>	<b>\$ 12.00</b>
<b>Monthly charge/SFR</b>	<b>\$ 13.20</b>

- Option 2 results in +\$0.70/month increase for single unit residential and a 3-4% reduction for measured ERU customers.

Customer class	Impervious area (SQ FT)	ERUs (Rounded)	Option 1, ERU only (monthly fee)	Option 2, Base charge + ERU (monthly fee)
Single Unit Residential	3,500	1.0	\$12.50	\$13.20
Single Unit Attached (per Unit)	2,450	0.7	\$8.75	\$9.60
Multi-Unit (Apartment Complex)	94,500	27.0	\$337.63	\$325.20
Commercial (small)	28,000	8.0	\$100.04	\$97.20
Commercial (large)	395,500	113.0	\$1,413.06	\$1,357.20
Industrial (small)	45,000	13.0	\$162.56	\$157.20
Industrial (large)	961,812	275.0	\$3,438.87	\$3,301.20
Institutional	255,500	73.0	\$912.86	\$877.20

*\*Updated to reflect ERU Rounding*

# Non-Single Family Residential Monthly Bills Histogram



# Preliminary Rate Structure Evaluation

Evaluation Criteria	Option 1 ERU Only	Option 2 ERU+ Base
Defensibility	●	●
Consistency w/Other Stormwater Utilities	●	○
Consistency w/Water & Sewer Structures	○	●
Revenue Adequacy & Stability	●	●
Residential Affordability	●	○
Nonresidential Affordability	○	●
Support Environmental Stewardship	●	●
Support Administrative Efficiency	●	○
Ease of Understanding/ Transparency	●	●
<b>Legend (degree to which option aligns with criteria):</b>		
Strongly aligned	●	
Moderately aligned	○	

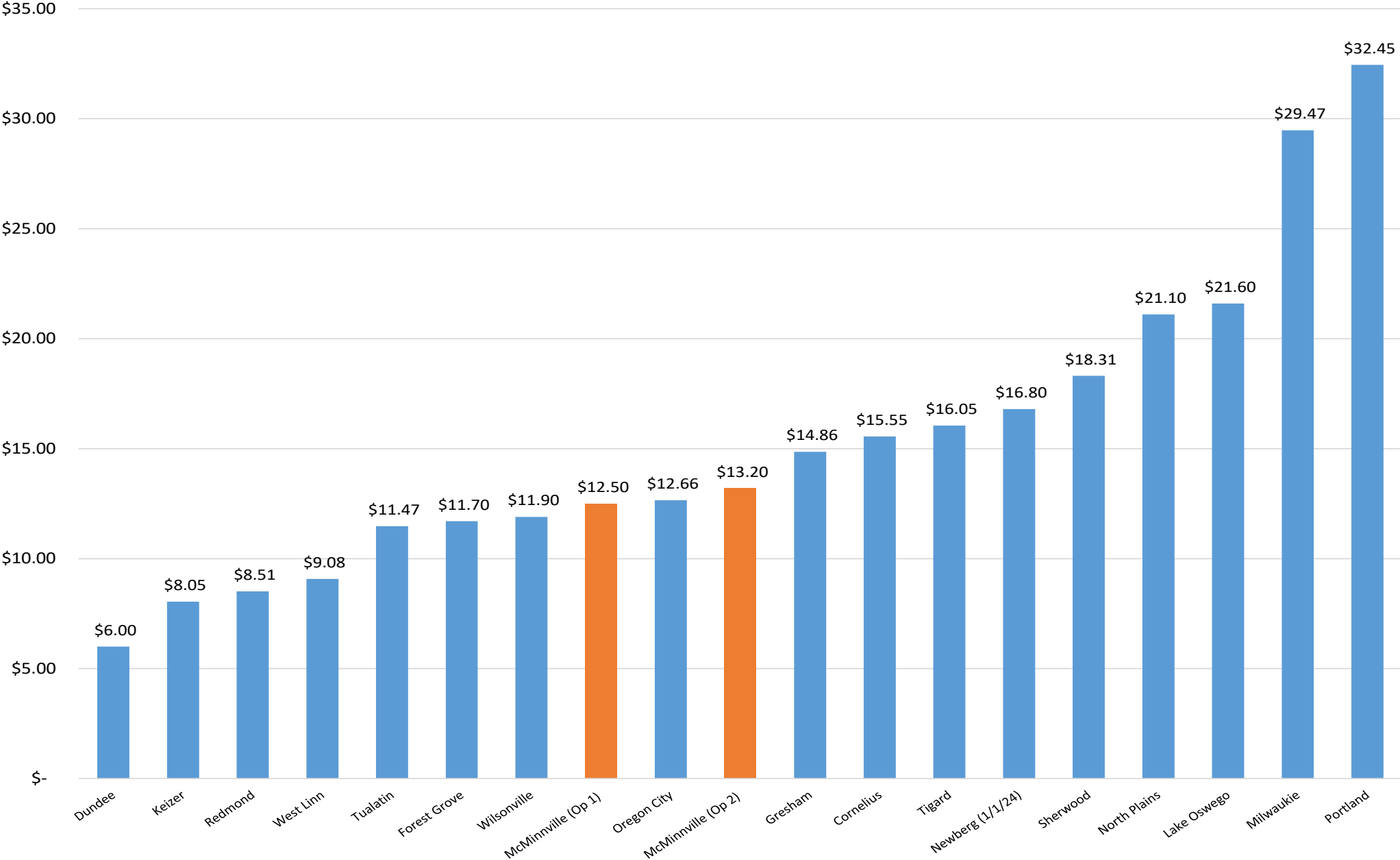
Does your stormwater rate structure include a separate billing, collection or service charge?



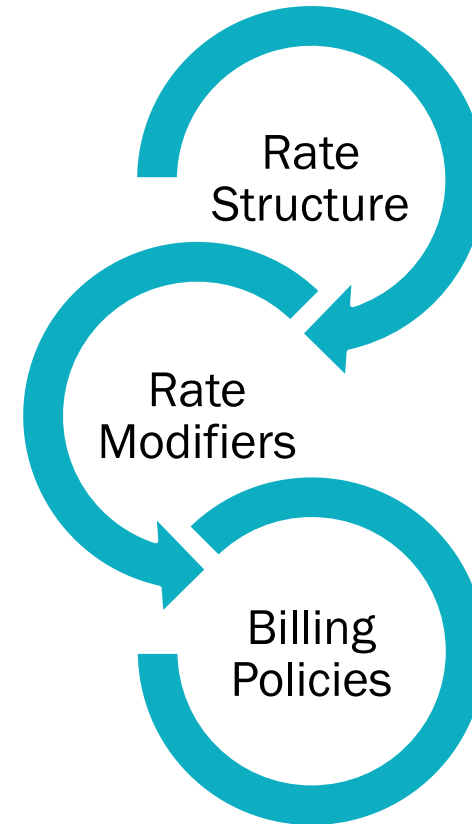
Source: 2021 Black & Veatch Stormwater Survey

*Sample Oregon cities with stormwater base charges: Eugene, Salem, Albany*

# Single-Family Residential Stormwater Bill Comparison



- Rate Structure
  - Option 1: ERU Only (Recommended)
  - Option 2: ERU +Base
- Rate Modifiers & Policies (Next meeting)
  - Exemptions/discounts
  - Stormwater credit program
  - Appeals & billing procedures



Q&A



# Next Steps

- February 2023:** Discussion/Recommendations of Rate Modifiers (credits/discounts)
- March 2023:** Hold community meeting to discuss the Stormwater Utility
- April 2023:** Present recommendations to City Council at a work session
- May 2023:** City Council considers adoption of a Stormwater Utility Committee begins discussion of sewer utility rates and SDCs
- August 2023:** If adopted by City Council, begin billing for Stormwater Utility