

ENVIRONMENT COMMITTEE AGENDA

April 11, 2013 - North Conference Room

21630 11th Avenue South – Des Moines 50319

5:45P – 6:50P

1. Approve minutes 3/14/13 meeting
2. SWM Rate Structure Study Consultant Briefing

MINUTES - ENVIRONMENTAL COUNCIL COMMITTEE MEETING 03/14/2013

The meeting was called to order @ 5:30 PM, Thursday, March 14, 2013, in the North Conference Room @ 21630 11th Avenue South, Des Moines with the following in attendance:

Council Members

Dave Kaplan, Chair
Melissa Musser
Dan Caldwell - absent

City Staff

Tony Piasecki, City Manager
Dan Brewer, Acting PW Director
Loren Reinhold, Enviro/Utilities Engineer
Peggy Volin, Admin Asst
Steve Schunzel, GIS Admin
John Blackburn, Acting Maint Superintendent

AGENDA:

1. Approve minutes of February 14, 2013
2. Cityworks Program Update
3. SWM Rate Structure Study Update

MEETING:

1. Minutes of February 14, 2013, were unanimously approved.
2. Cityworks Program Update: Dan introduced Steve Schunzel, who along with Anthony Jones, have been instrumental in providing technical assistance in getting the Cityworks Software program up and running. The 2008 WICA Public Works audit identified the need for documentation and maintenance of NPDES & asset management and was the trigger for purchasing a computer maintenance management system (CMMS). Steve gave the Committee a brief overview of the Cityworks program starting with the purpose and benefits to the City. He went on to describe how it is being used for NPDES tracking; the tracking of asset locations & attributes, and maintenance history for liability; managing service requests, work orders and inspections; - and supporting proactive maintenance and reporting. Also, the program has increased liability protection (both NPDES & WCIA); performance metrics and reporting; efficiency & accountability; a standardized work flow and transparency in reporting. The workflow of a request for City Services now has a standard pattern to follow resulting in efficiency and accountability. John Blackburn, Acting Public Works & Parks Maintenance Superintendent, showed the Committee the old ledger books and briefly described how service requests and asset management used to be done.

Currently, Cityworks is processing service requests and work orders for Surface Water Management (SWM) and Streets along with tracking work history for both. The next phases of the program include bringing on engineering; inspections; a management dashboard and field data input. This fall will include plugging in the Parks, Marina and

Fleet Services areas.

3. **SWM Rate Structure Study Update:** Loren referenced the memo from the FCS Group, dated March 4, 2013 which addressed questions that arose from the Issue Papers and a concern from Councilmember Burrage on private streets. Of particular issue was the rate charge to private streets. Loren cited in the memo the table where the jurisdictions were included, only Seattle exempted private streets and Des Moines partially exempted (discounted 70%) the charges whereas the rest of the jurisdictions fully charged for the private streets.

Loren then presented to the Committee a possible option whereby the utility could fully charge for the private streets yet, in most instances, reduce the rate charge for properties served by private streets.

Proposal:

The proposed method would be to combine the prorated portion of the impervious area of the private street with the measured impervious area of the residential lot. Currently, the rates as it applies to properties with private streets is the sum of the charge for the property plus a separate charge for the private street, giving a property a rate higher than 1.0 equivalent billing unit. In the case of Huntington Park for example, a residential property is charged 1.0 equivalent billing unit (EBU) plus .08 EBUs for the private street and another 0.07 EBU's for a pro-rata share of the common areas, or a total of 1.15 EBUs.

Given that the SFR rate as being recommended by FCS Group will be divided into a tiered system of small, medium, and large parcels (by impervious area) and because, in the case of Huntington Park, most of the properties have less impervious area than the average city parcel, most or all of the properties will qualify for the medium rate (1 EBU) or small rate (< 1 EBU), even when including the measurement of the private street and common areas. It is not anticipated that any of Huntington Park's properties will be paying a rate higher than 1 EBU.

For properties outside of Huntington Park served by private streets, under this method, will also likely see a reduced rate as the property with a large share of a private street, would be categorized as a large single family parcel (> 1 EBU) instead of being charged 1 EBU plus the 70% discounted rate for the street.

Under this method, Huntington Park could also apply for additional rate credits for its open spaces as well as any reduction of impacts to the public system by its stormwater facilities. However, any such credits that are adopted would also need to be made available to all other properties, city-wide.

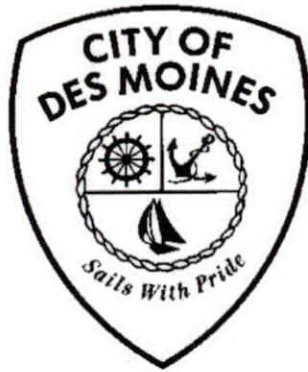
Loren stated that the proposed method is actually more equitable in the sense that there are many very large single family properties with long driveways that pay less than small properties with private streets.

At the next Environment Committee meeting, the consultant is scheduled to update the Committee.

Committee directed staff to explore with the consultant the proposal for calculating rates for properties with private streets.

Adjourned @ 6:26 PM

Submitted by: Peggy Volin, Administrative Assistant



City of Des Moines

Stormwater Rate Study Preliminary Draft Results

April 11, 2013



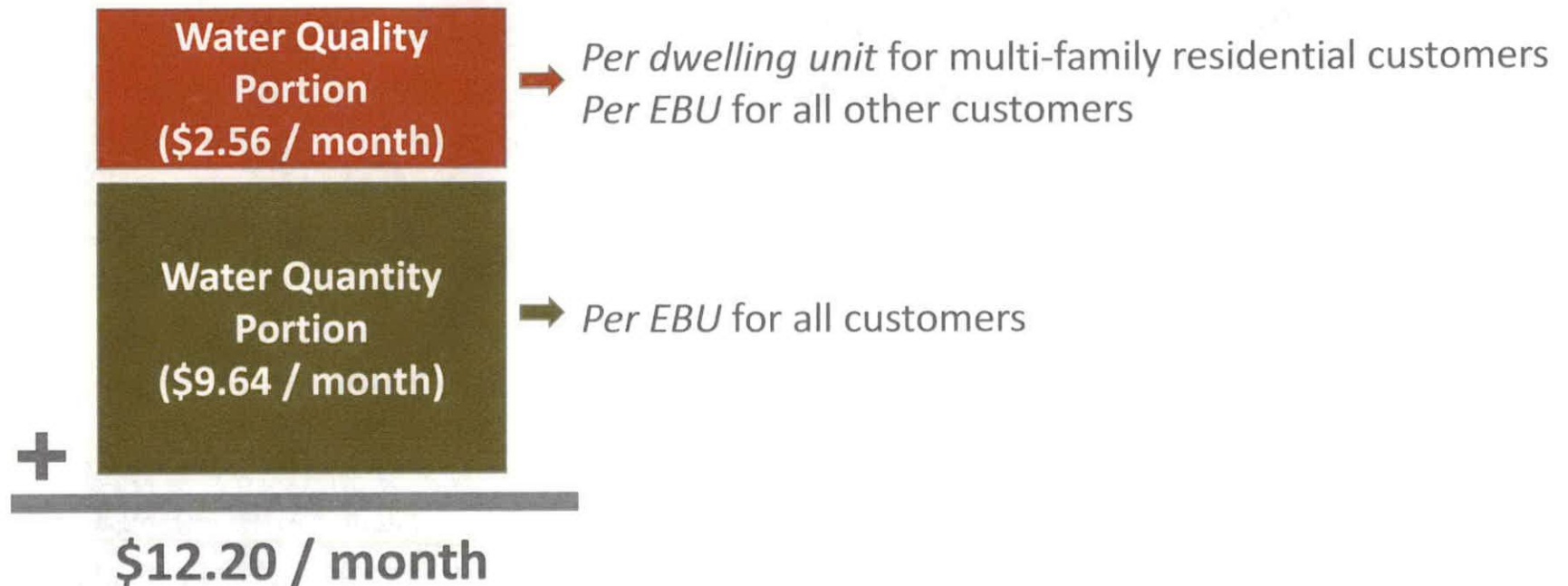
7525 – 166th Ave. NE, Suite D-215, Redmond, WA 98052 ■ 425-867-1802

Work Plan

- ❖ Develop Rate Structure Policy Framework
 - Rate structure alternatives
 - Private streets and public right-of-way
 - Rate credits
 - Multi-family rates
 - Rates to public entities
- ❖ Revenue Neutral Rate Analysis
 - Recalculate equivalent billing unit (EBU) value and resulting total EBUs
 - Develop rate structure alternatives incorporating outcomes of the policy discussion

Existing Rate Structure

- ❖ Existing rate structure consists of two components:



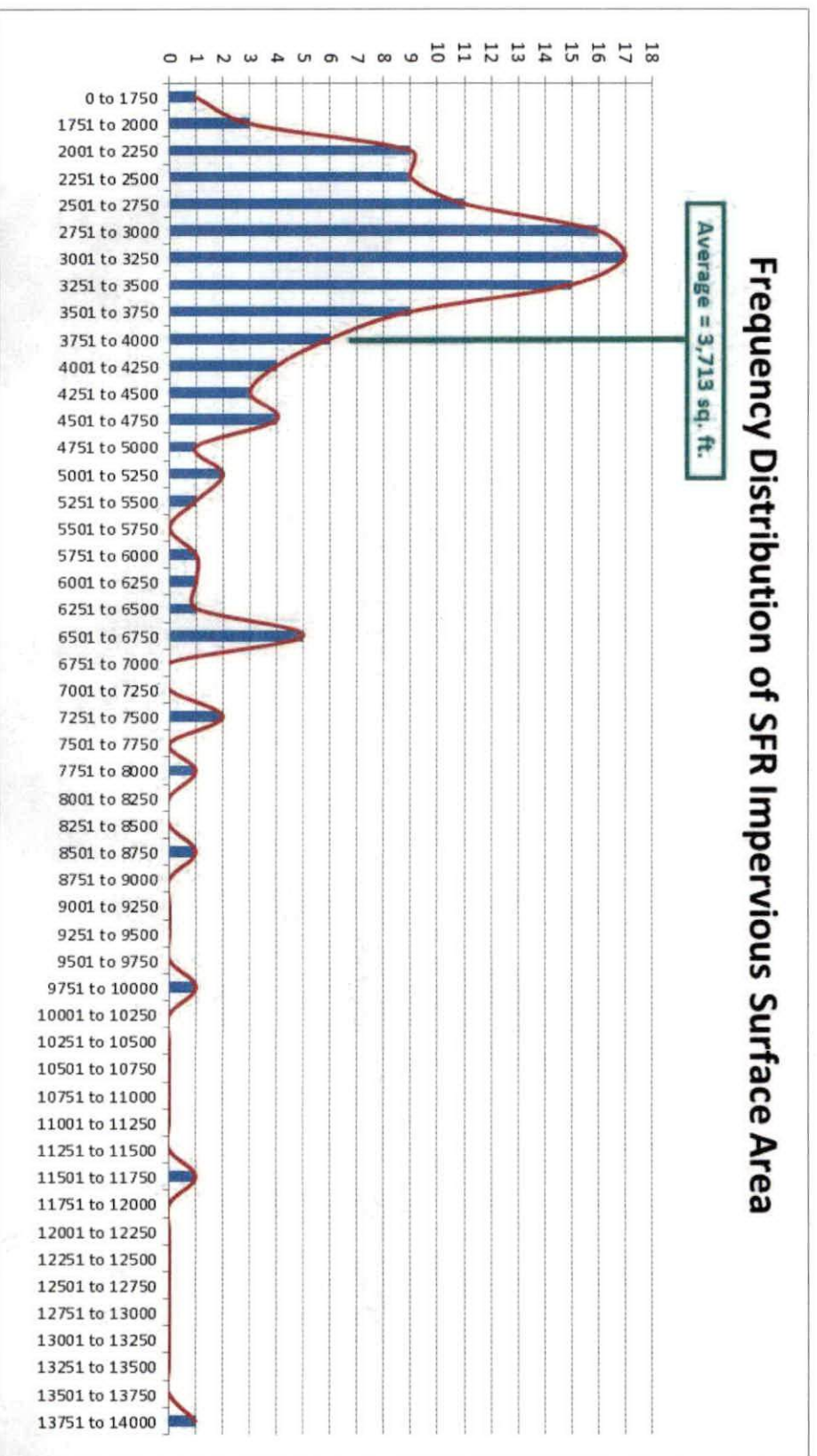
- ❖ One equivalent billing unit (EBU) is equal to one single family residential dwelling; 2,400 sq. ft. of impervious surface area for non-single family residential customers.

Rate Structure Recommendations

- ❖ Maintain the impervious rate basis
 - Impervious surface area is widely used and accepted as an appropriate measure of a property's contribution of runoff, providing a clear relationship, or "rational nexus", to service received from a stormwater program.
- ❖ Update the EBU definition to reflect the current average impervious surface area of single family residential customers.
 - Create tiered approach for small, medium, large, and extra large footprints
 - Charge extra large parcels based on measured impervious surface area
- ❖ Recalculate the water quality and water quantity rate components based on the utility's current program costs.
- ❖ Charge multi-family residential customers based on impervious surface area for both the water quality and water quantity components – similar to commercial customers. Eliminate per dwelling unit approach for multi-family customers.

EBU Definition Update

- ❖ A sample of 126 single family residential properties were measured as a starting point using statistical sampling techniques.



Rate Structure Recommendations (continued)

❖ Private Streets and Public Right-of-Ways

- Continue to exempt public streets because they are part of the stormwater conveyance system.
- Continue charging private streets, provide rate credits within the framework of a broader credit policy for on-site mitigation measures.

❖ Rate Credits / Discounts

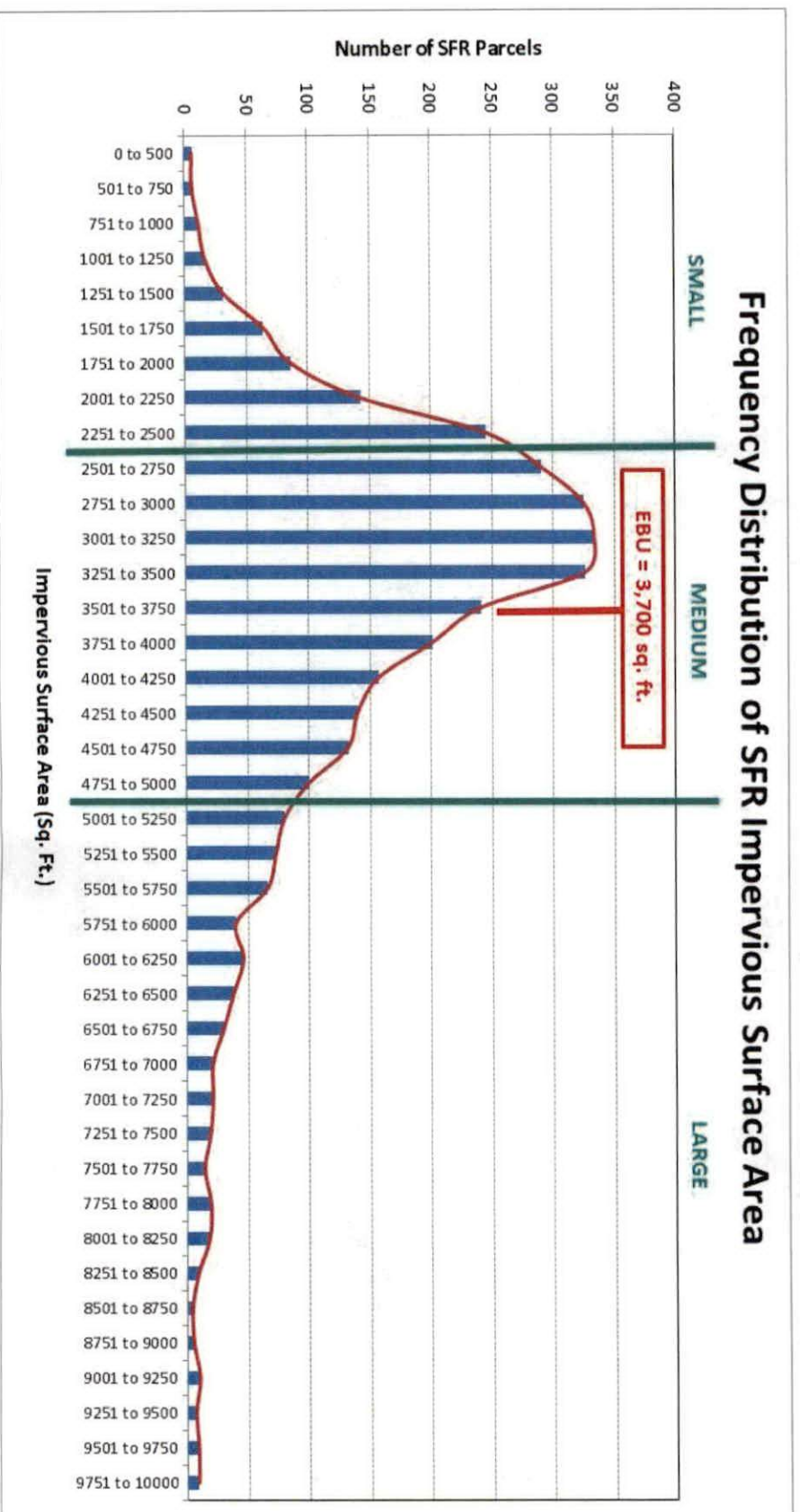
- Continue providing low-income senior or disabled rate discounts.
- Institute a rate credit policy for qualifying on-site mitigation.

PARTIAL CUSTOMER BASE

EBU Definition Update

❖ City staff started measuring each parcel using geographic information system (GIS) data and techniques.

➤ Approximately half of the measurements are completed.



PARTIAL CUSTOMER BASE

EBU Definition Update

- ❖ One EBU is set equal to 3,700 square feet of impervious surface area.

Tier Classifications & Tresholds	No of Customers	Average Impervious Surface Area (sq. ft.)	
		Up to Upper Treshold	Within Each Block
Small (0 to 2,500 sq. ft.)	608	2,034	2,034
Medium (2,500 to 5,000 sq. ft.)	2,247	3,183	3,494
Large (5,000 to 10,000 sq. ft.)	538	3,697	6,420
subtotal	3,393		
Measured (> 10,000 sq. ft.)	130		
TOTAL	3,523		

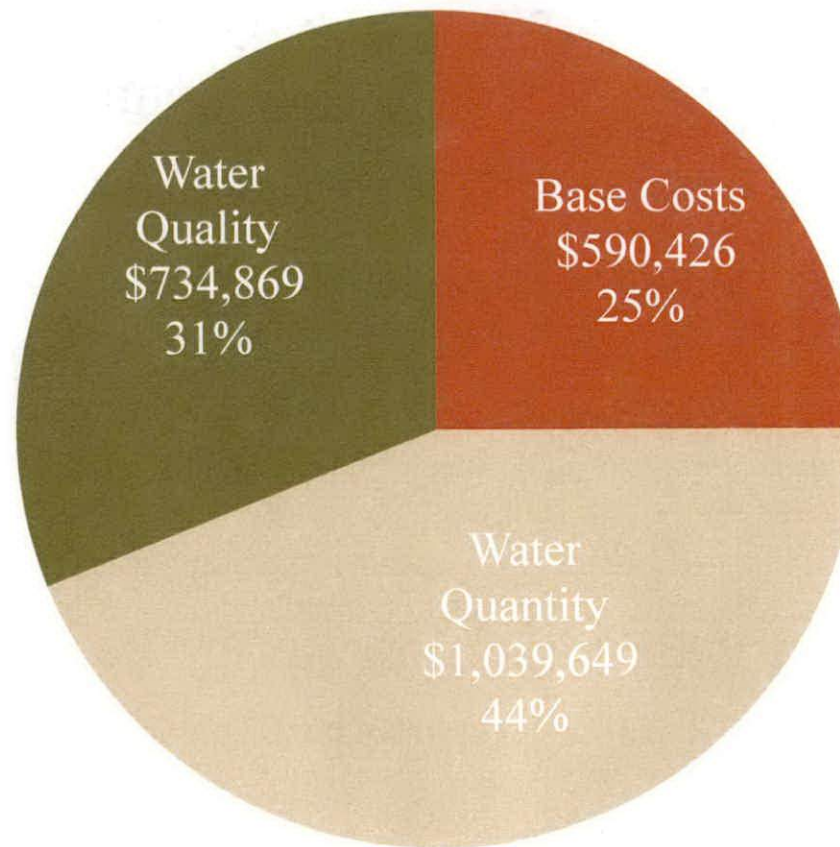
Equivalent Billing Unit Conversions			
Small (0 to 2,500 sq. ft.)	$2,000 / 3,700 =$	0.54	EBU
Medium (2,500 to 5,000 sq. ft.)	$3,700 / 3,700 =$	1.00	EBU
Large (5,000 to 10,000 sq. ft.)	$6,400 / 3,700 =$	1.73	EBU

Assumptions Used in the Rate Analysis

- ❖ Number of EBU's that benefit from rate discounts for having and maintaining on-site mitigation measures
 - 5% with full credit
 - 10% with partial credit
- ❖ Rate discounts are assumed to be
 - 100% for full credit
 - 50% for partial credit
- ❖ Actual credit amounts (i.e. percentage of rate discounts) will be determined based on site analysis by City staff upon property owners' application
 - Calculated rates will provide for the maximum allowable credit amount

Functional Breakdown of Utility Costs

2013 Budgeted Rate Revenues
\$2,364,945



Calculated Monthly Rates

PRELIMINARY DRAFT

Rate Design	Base	Water Quality		Water Quantity		Total
		Direct	Indirect	Direct	Indirect	
Revenue Requirements	\$ 590,426	\$ 320,943	\$ 413,927	\$ 369,874	\$ 669,775	\$ 2,364,945
Weighted Number of EBUs [a]	13,895	13,374	13,895	13,374	13,895	
Monthly Rates per EBU	\$ 3.54	\$ 2.00	\$ 2.48	\$ 2.30	\$ 4.02	\$ 14.34
Single Family Residential Customers						
Small (0.54 ERU)	\$ 3.54	\$ 1.08	\$ 1.34	\$ 1.25	\$ 2.17	\$ 9.38
Medium (1.00 ERU)	\$ 3.54	\$ 2.00	\$ 2.48	\$ 2.30	\$ 4.02	\$ 14.34
Large (1.73 ERU)	\$ 3.54	\$ 3.46	\$ 4.29	\$ 3.99	\$ 6.95	\$ 22.23
Discounted Rate for On-site Mitigation (per EBU)						
With Full Credit	\$ 3.54	\$ -	\$ 2.48	\$ -	\$ 4.02	\$ 10.04
With Partial Credit [b]	\$ 3.54	\$ 1.00	\$ 2.48	\$ 1.15	\$ 4.02	\$ 12.19
Percent Discount for On-site Mitigation						
With Full Credit	0%	100%	0%	100%	0%	30%
With Partial Credit	0%	50%	0%	50%	0%	15%

[a] Assumes 5% of non-single family residential customers would benefit from full discount, and 10% of non-single family residential customers would benefit from partial discount.

[b] Assumes partial credit amount is 50% of direct water quality and water quantity costs.

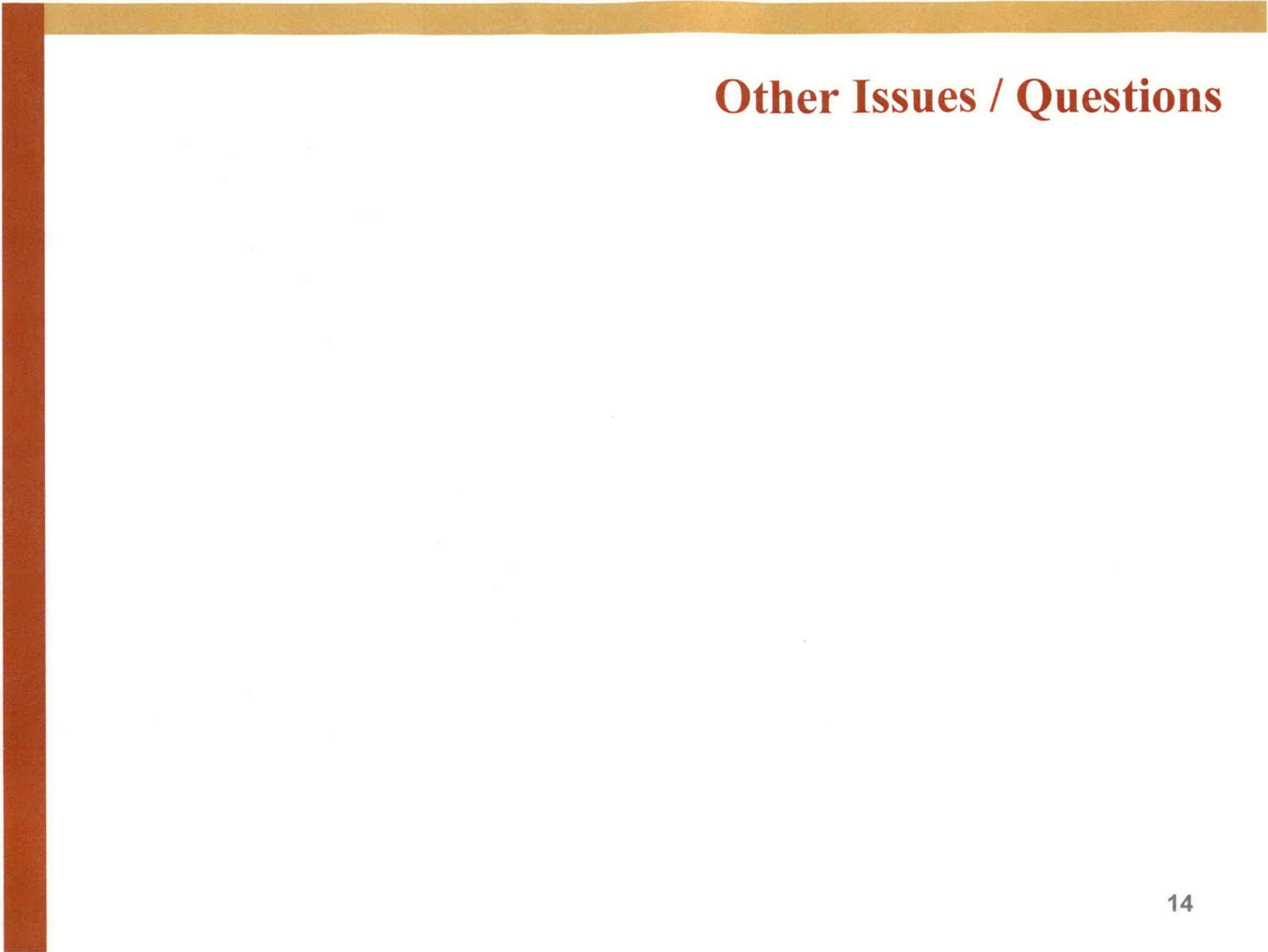
Creditable Rate Portion

Implementation of the New Rate Structure

- ❖ Regularly inspect for proper maintenance of on-site facilities, and require periodic renewal / application process for rate credits.
- ❖ Amount of credit will be dependent on site-specific analysis by City staff.
- ❖ Credits for on-site mitigation measures will be only available for non-single family residential customers.

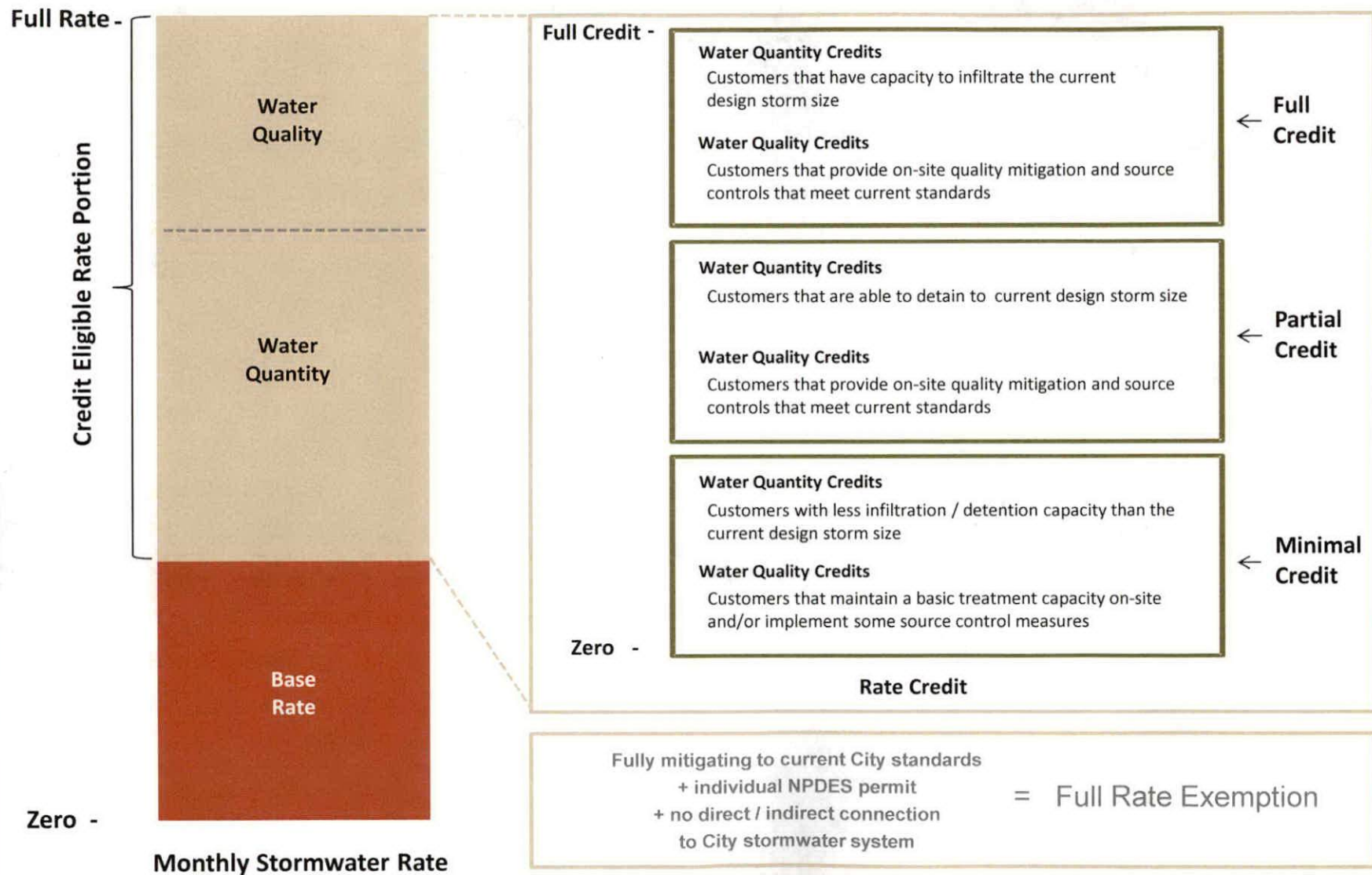
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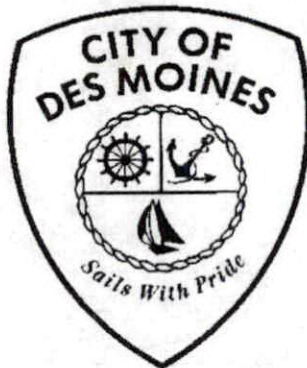




Other Issues / Questions

Application of Credit Approach





City of Des Moines

Stormwater Rate Study Preliminary Draft Results

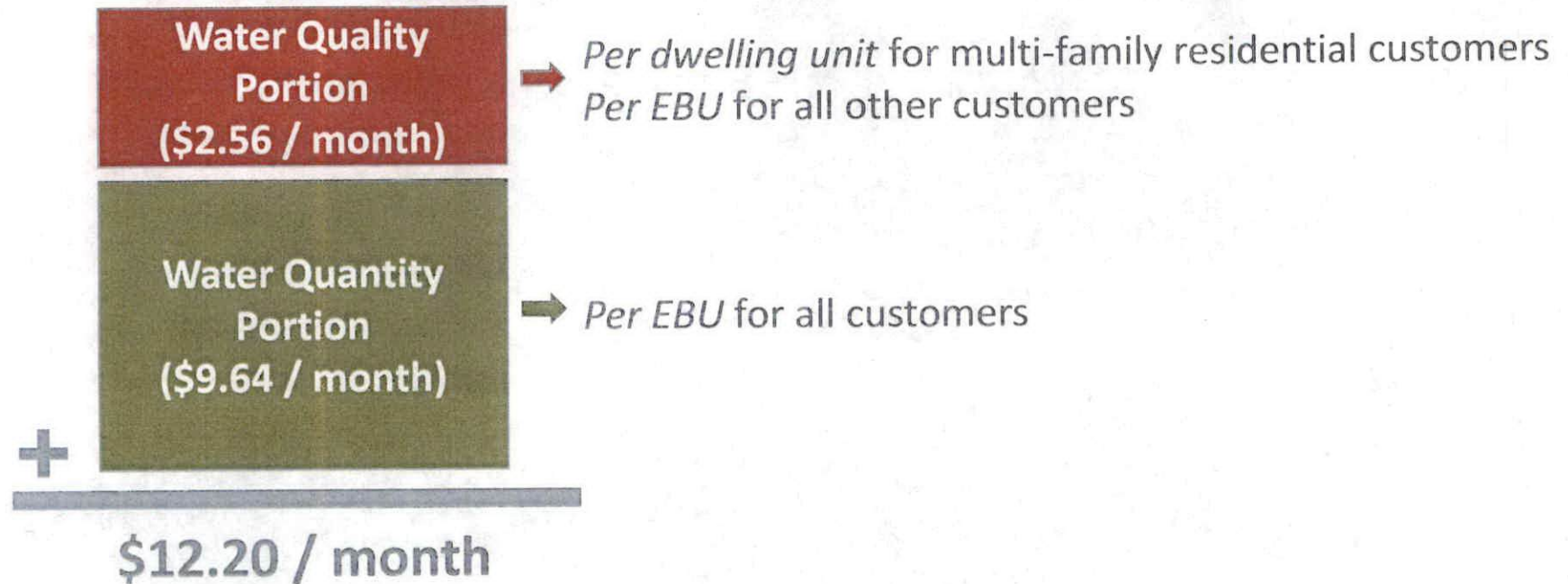
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Rate Structure Recommendations (continued)

❖ Private Streets and Public Right-of-Ways

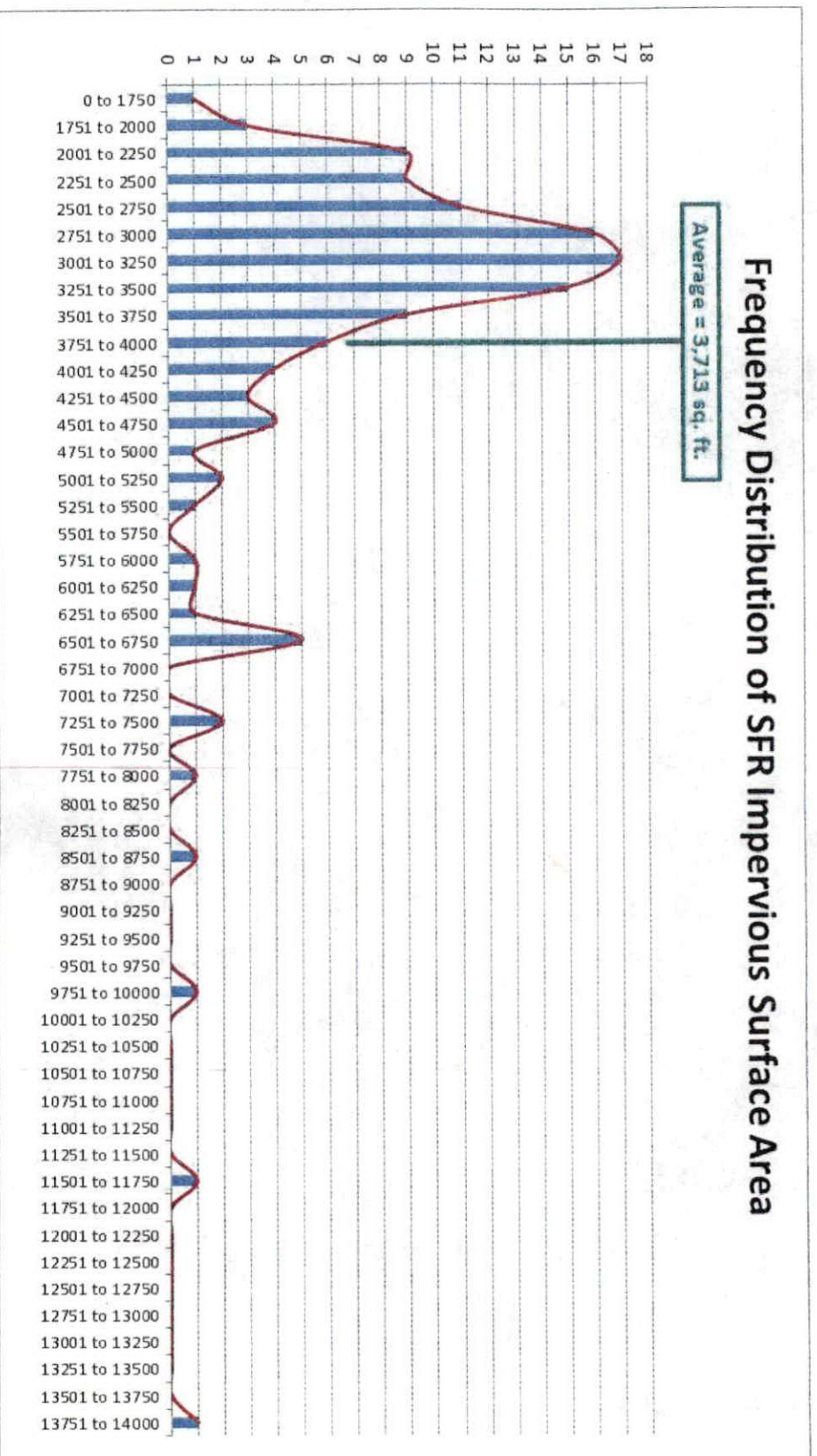
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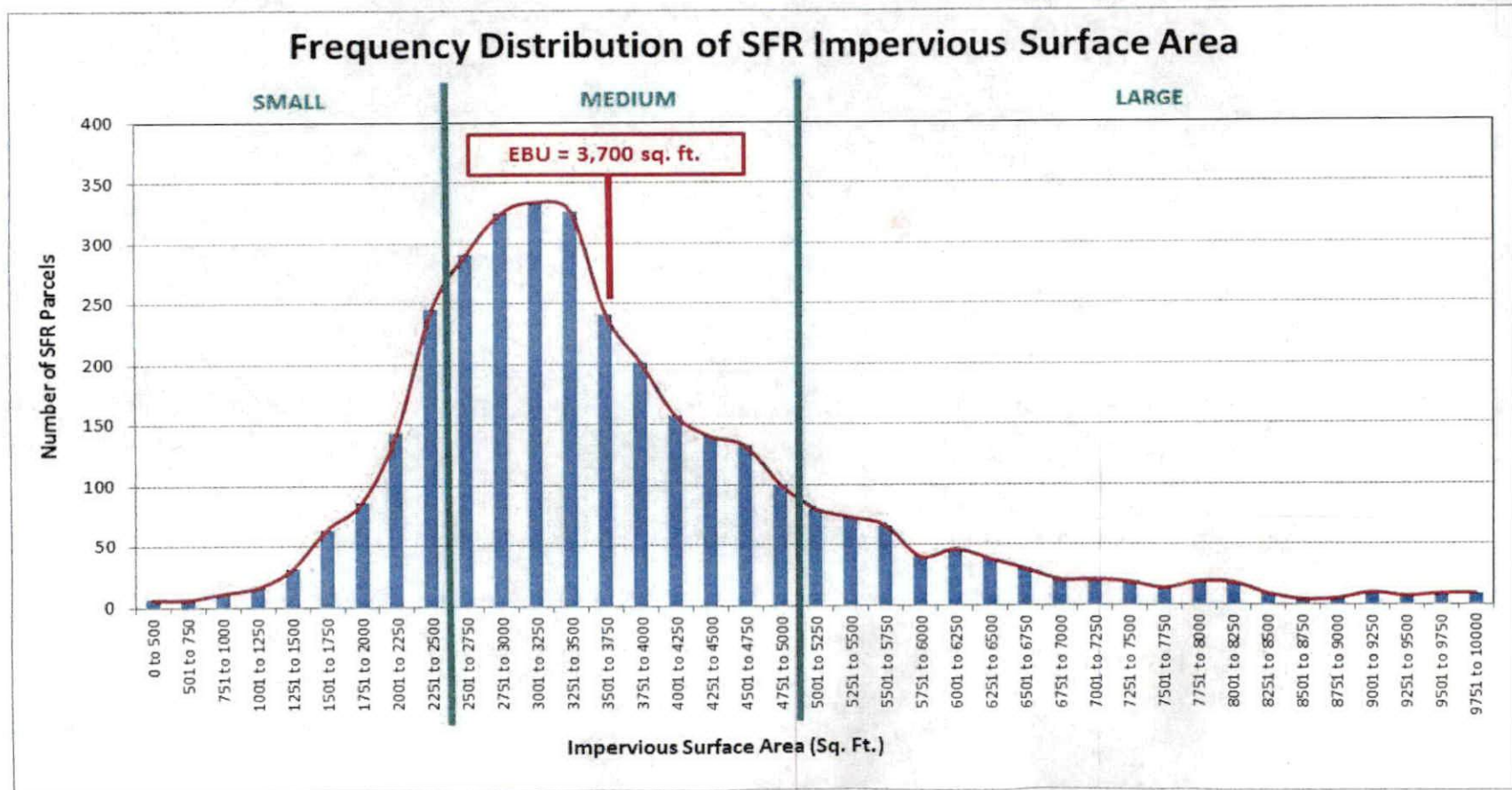
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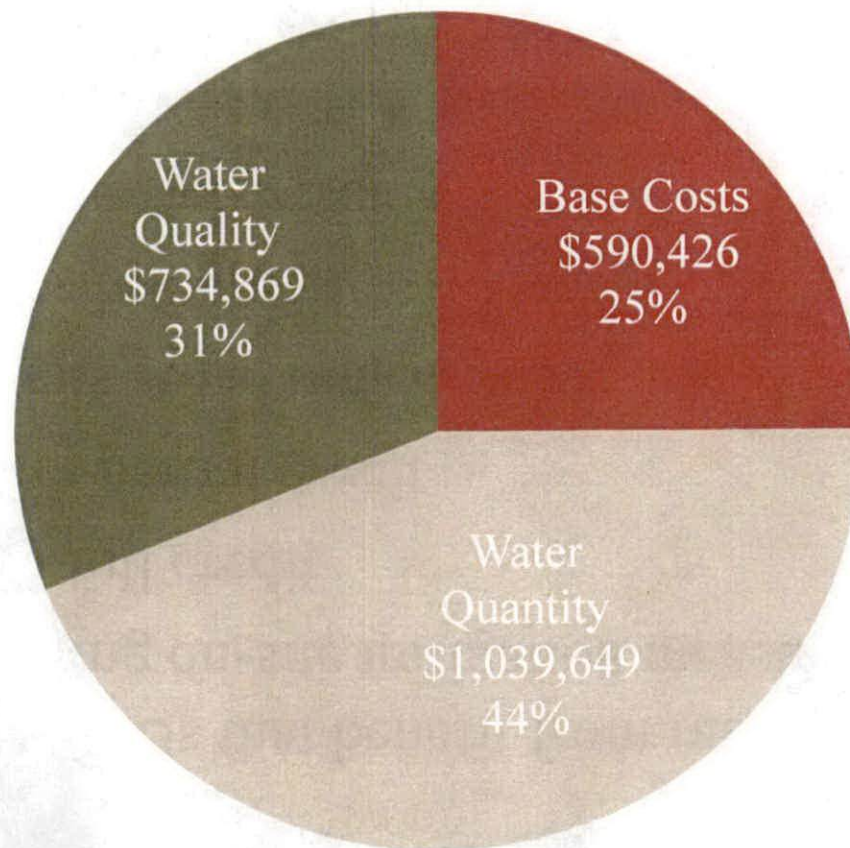
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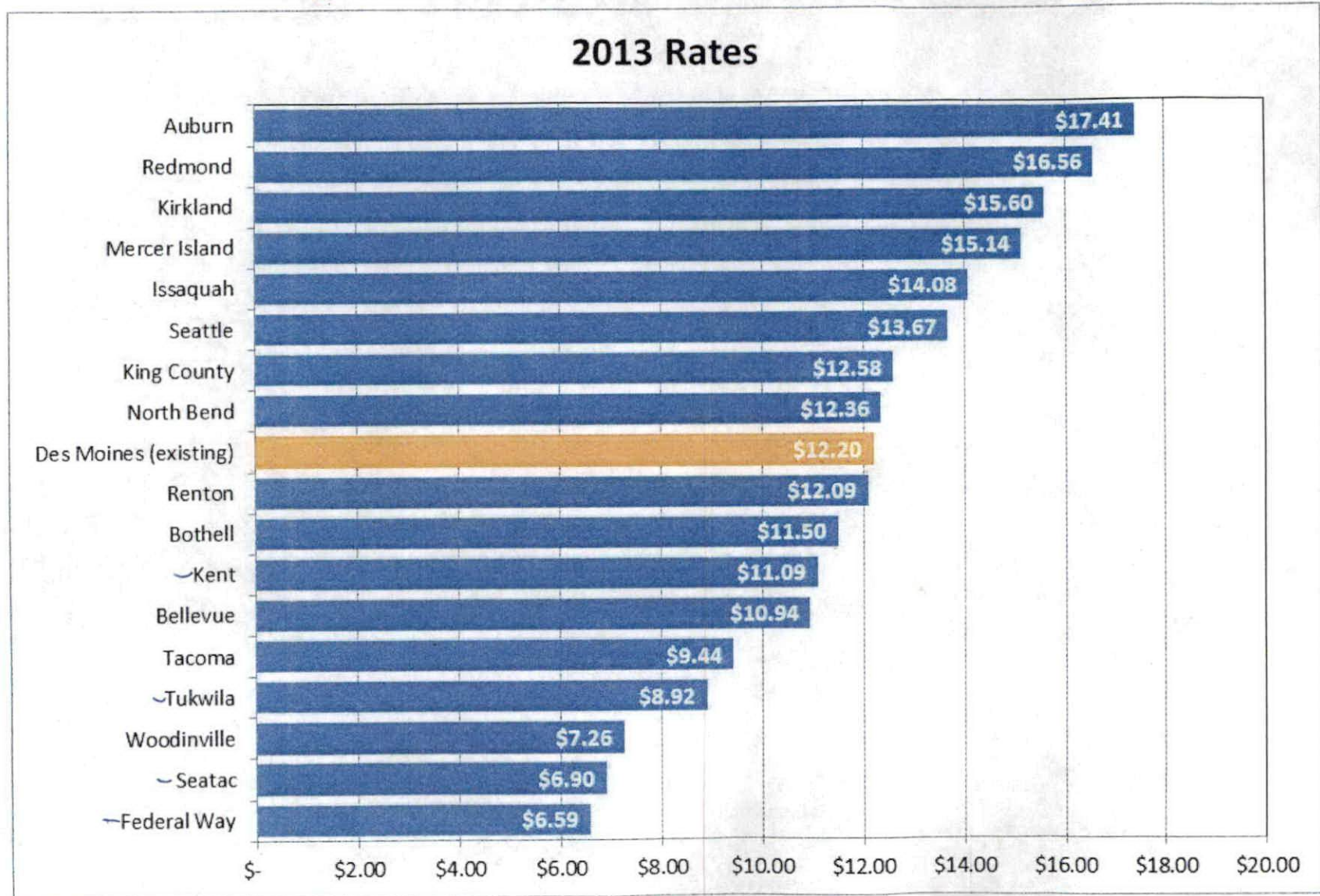
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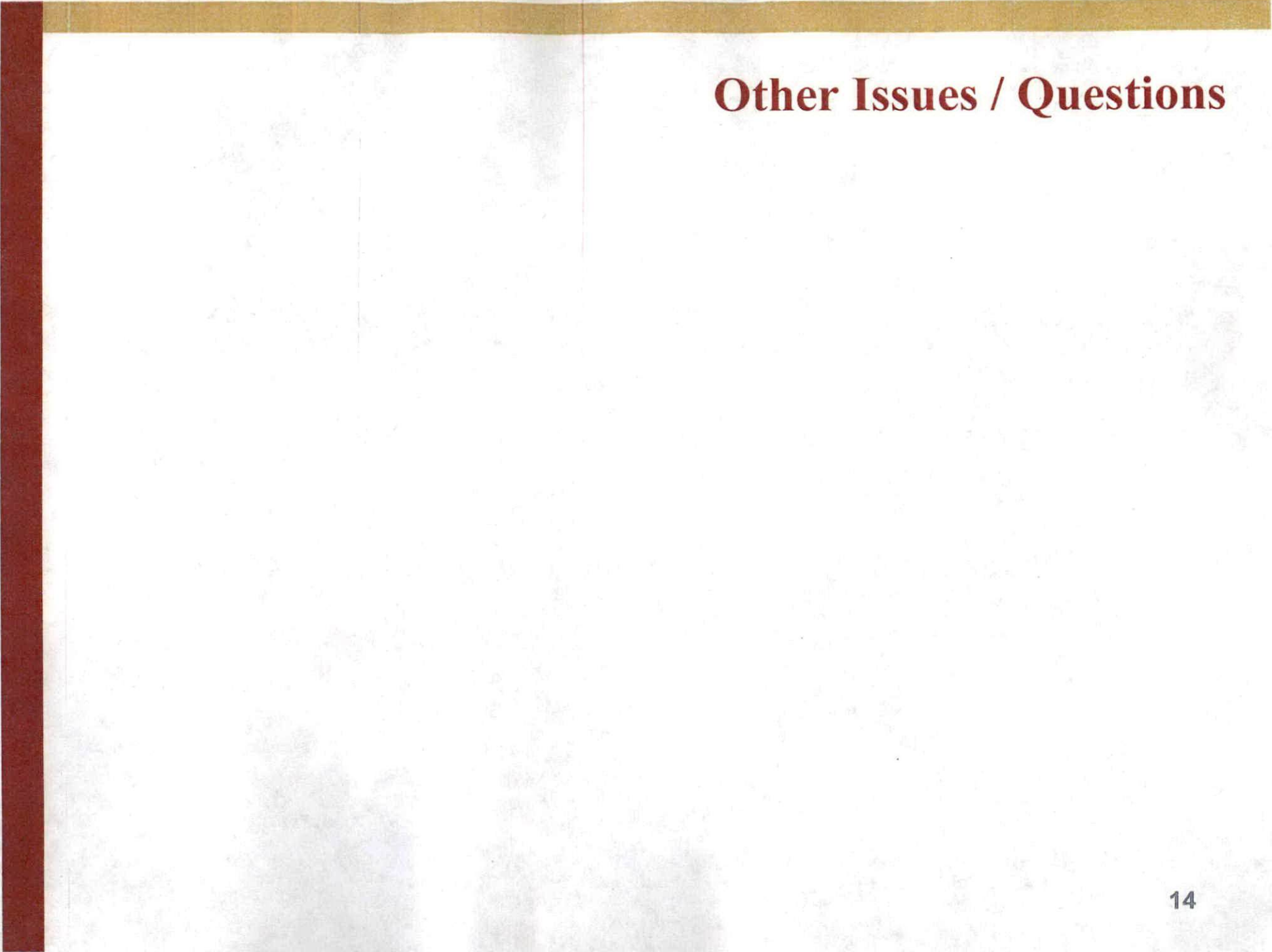
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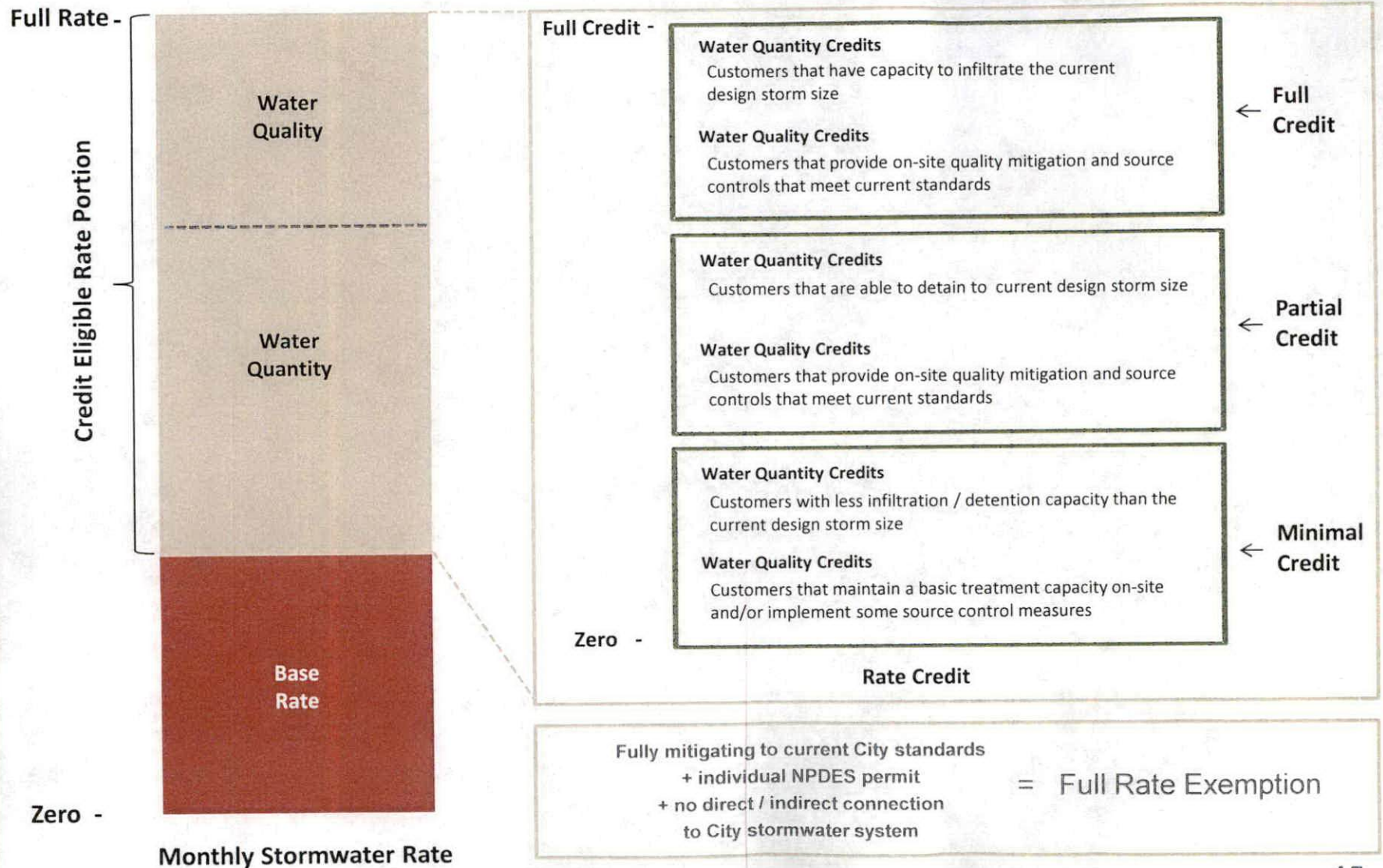
Comparison of Rates with Other Jurisdictions





Other Issues / Questions

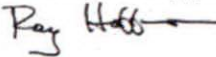
Application of Credit Approach



Private Street Rate Options (Huntington Park Example)

Note: There are 321 single family homes and 24 condominiums. For comparison, only the rates as they are applied to single family homes are shown. The below amounts include the 6% utility tax.

	SFR	Annual Amount	Total	
Current (w/ separate pvt. Street charge @ 30%)	321	\$ 178.14	\$ 57,182.94	Based on 2400 sf EBU
EBU Adjustment (w/ separate pvt. Street charge @ 30%)	321	\$ 191.06	\$ 61,330.26	Based on 3700 sf EBU
Tiered System (w/ separate pvt. Street charge @ 30%)	132 Small	\$ 131.78	\$ 17,394.96	< 2,500 sf
	187 Medium	\$ 191.06	\$ 35,728.22	2,500 - 5,000 sf
	2 Large	\$ 285.31	\$ 570.62	> 5,000 sf
	321	Total	\$ 53,693.80	
Tiered System (pvt. street full charge - included with parcel)	34 Small	\$ 115.24	\$ 3,918.16	< 2,500 sf
	271 Medium	\$ 174.52	\$ 47,294.92	2,500 - 5,000 sf
	16 Large	\$ 268.77	\$ 4,300.32	> 5,000 sf
	321	Total	\$ 55,513.40	

Title Qualifying Streets for Drainage Fee Exemption	Number FIN-211.1	Rev. no. 0
Responsibility Finance Division	Supersedes N/A	Pages 2
SPU Director's Approval  Ray Hoffman	Effective Date January 9, 2012	

1. PURPOSE

To ensure that owners of parcels requesting an exemption from drainage rates pursuant to SMC 21.33.030.A.5 are qualified fairly and consistently.

2. DEFINITIONS

City Streets: For the purposes of SMC 21.33.030.A.3, includes Public Places, as defined pursuant to SMC 15.02.046, that are under the jurisdiction of any City department, except that unopened or unimproved right-of-way, squares or triangles, or other areas may be excluded if they were not designed and constructed to provide a drainage conveyance function similar to Figure 4-10 of the "Right of Way Improvement Manual."

Drainage Discharge Point: As defined by SMC 21.33.010.F, the end or receiving point of the City's stormwater system that a parcel's stormwater flows to, which may include a combined or sanitary sewer treatment facility, a large body of surface water, or a major creek basin, which dictates the type of stormwater performance goals and management facilities that may be required or accepted to manage the flow or quality, or both, of stormwater from that parcel.

Other Streets: For the purposes of SMC 21.33.030.A.5, the private or public roadways that are for vehicular traffic or road purposes, owned in fee or by easement by a person or private or public entity ("Owners") other than the City of Seattle or State of Washington. Sidewalks on Other Streets are generally not considered exempt unless it is demonstrated that they were designed and constructed to provide a drainage conveyance function similar to Figure 4-10 of the "Right of Way Improvement Manual." Parking lots and driveways act as part of a private collection system and are not considered Other Streets eligible for exemption from drainage charges.

Public Place: As defined by SMC 15.02.046.D, includes streets, avenues, ways, boulevards, drives, places, alleys, sidewalks, and planting (parking) strips, squares, triangles and right-of-way for public use and the space above or beneath its surface, whether or not opened or improved.

3. RULE

In accordance with SMC 21.33.030.A.3 and A.4, City Streets and State of Washington Highways are exempt from the payment of drainage fees.

Owners of Other Streets must apply in order to be considered for an exemption from drainage fees. In order to qualify for such an exemption, Other Streets must provide drainage service in a manner similar to City Streets, as further described.

A. Functional Criteria to Qualify for Other Streets Exemption

- 1) Streets on properties not covered as a Co-Permittee or a Secondary Permittee with the City of Seattle under the NPDES Phase I Municipal Stormwater Permit must collect stormwater from more than one property, including property(s) with an owner distinct from the property on which the Other Street is located.
- 2) Streets on properties covered as a Co-Permittee or a Secondary Permittee with the City of Seattle under the NPDES Phase 1 Municipal Stormwater Permit may collect stormwater from one property or from more than one adjacent property with the same owner of record.
- 3) All Other Streets and associated drainage facilities must convey stormwater runoff to a Drainage Discharge Point.

B. Maintenance of Other Streets by Owners

- 1) Owners of Other Streets must comply with the maintenance requirements of Volume 3, Appendix D of the "Stormwater Manual" (Joint Director's Rule: DPD 17-2009/SPU 2009-005).
- 2) Owners must provide a maintenance plan and maintenance history for Other Streets.

C. Eligibility Confirmation for Other Streets Exemption

Prior to approving an exemption for Other Streets from the payment of drainage fees, and annually thereafter, the Utility shall have the right to inspect the Other Streets to confirm application information and continued eligibility for the credit. Inspection may include review of maintenance history and confirmation that the Other Street meets conveyance requirements and that all drainage facilities including catch basins are maintained in accordance with Volume 3, Appendix D of the "Stormwater Manual."

4. AUTHORITY/REFERENCES

- SMC 21.33, Storm Drainage Utility Rates and Charges