CITY OF BOULDER
WATER RESOURCES ADVISORY BOARD
AGENDA ITEM

MEETING DATE: March 20, 2017

AGENDA TITLE: Public hearing and consideration of a recommendation to City Council regarding changes to the utility rate structures.

PRESENTER/S
Jeff Arthur, Director of Public Works for Utilities
Ken Baird, Utilities Financial Manager
Eric M. Ameigh, Public Works Projects Coordinator

EXECUTIVE SUMMARY

The purpose of this item is for WRAB to consider a recommendation to City Council for changes to the Water, Wastewater, and Stormwater/Flood Management rate structures in the 2018 budget. The changes, if adopted, would take effect Jan. 1, 2018.

In 2015, Utilities staff began a project to analyze and potentially recommend changes to the rate structures of the city's three utilities. There were two main reasons for such an analysis. First, the Utilities Division periodically reviews its rate setting methodology to assure that utility rates are meeting community goals and are aligned with fee-based principles. Second, during 2014, Utilities staff met with customers to better understand the impacts of proposed 2015 utility rate increases. Many customers indicated they did not understand utility rate structures and/or had questions and concerns about the calculation of the charges on their utility bills.

A public engagement process during spring of 2015, in which 26,000 postcards were mailed to notify customers of the opportunity to provide input, did not indicate the need to make largescale changes to the rate structures. Staff and consultant analysis during 2015 and 2016 found the following key issues across the three rate structures:

- Components of the water budget rate structure, such as how the pricing blocks and residential indoor budgets are set, are resulting in unclear pricing signals for water conservation purposes.

- Water budgets, as currently designed, do not work well for diverse commercial, industrial, and institutional (CII) customers.

- Because of issues within the current water budget rate structure, both those described above and others, the utility is facing more weather-dependent revenue instability and unpredictability than it should.

- The wastewater utility is facing more revenue instability and unpredictability than it should because its fixed service charge is set too low and it is too dependent on the

volume of wastewater usage, especially when compared to other peer utilities in Colorado.

- Under the current stormwater monthly fee calculation, which uses the same basic methodology across all customer classes, customers other than single-family residential (SFR) are assessed charges based on the ratios of their lot size and impervious area to a typical SFR lot. One result of that approach is that the benefit of a large amount of land that absorbs stormwater is outweighed by the large size of the lot. Counterintuitively, the former is often canceled out by the latter. A different methodology might better account for the unique characteristics of atypical large-lot properties that are mostly grass.

After numerous WRAB discussions about the nature of these issues, and the best way to address them, the board has preliminarily offered support for specific rate structure adjustments. Based on WRAB feedback and guidance, staff has crafted a recommendation for moving forward with changes. At its March 20, 2017 meeting, WRAB will consider its own recommendation to City Council.

Overall, the recommended rate structure changes recommend improvements on discouraging wasteful use, increasing revenue stability, and increasing equity. As a result of these changes, some customers would experience bill increases, and some bills would decrease. Low-volume SFR users would see an increase of around $5 or $6 per month. The CII customers that would see the largest bill increase are those that have both mostly pervious surface (such as buildings and parking lots that do not absorb stormwater) and also a water budget that is higher than their current usage. In anticipation of these changes in January 2018, staff would conduct outreach utility-wide regarding these changes, and also targeted outreach to the CII customers most affected.

STAFF RECOMMENDATION

Staff recommends that WRAB make the following motion related to the Utility Rate Study:

The Water Resources Advisory Board recommends implementing the following changes to the utility rate structures to be effective January 1, 2018:

- Move Commercial/Industrial/Institutional customers with an Average Monthly Use water budget to the existing “CII Indoor/Outdoor” budget methodology, which will be renamed “CII AWC.”
- Reduce the residential indoor water budget by 1,000 gallons per month.
- Adjust the wastewater rate structure so that the fixed portion of the fee will account for 25 percent of billed revenues in the wastewater fund, and also adjust rates to account for declining wastewater usage.
- Adjust the stormwater/flood management rate structure to include a fixed charge and a charge based on impervious area.

BACKGROUND

In 2014, Utilities Division staff met with customers to better understand the impacts of proposed 2015 utility rate increases. Many customers indicated they did not understand utility rate

structures and/or had questions and concerns about the calculation of the charges on their utility bills.

The Utilities Division periodically reviews its rate setting methodology to assure that utility rates are meeting community goals and are aligned with fee-based principles. These findings led staff to propose an evaluation of the rate structure and associated calculations for water, wastewater, and stormwater/flood management utilities as part of the 2015 work plan. As a first step, a public engagement process was implemented to solicit broader feedback across all customer classes. The initial public engagement process took place in April and May 2015 and consisted of three open houses and an online survey. More than 26,000 postcards were mailed to utilities customers to notify them about the engagement opportunities.

In June 2015, staff presented to WRAB the results of the public engagement process, as well as options for the Utility Rate Study's guiding principles and its areas of study (the June 2015 packet can be found here). Guiding principles are high-level goals and speak to what the rate structures should be designed to accomplish. The public engagement process did not indicate a desire to change the five existing guiding principles for the water rate structure. WRAB recommended that the guiding principles should apply not only to water but also to the other two utilities. In addition, it was determined that the stormwater/flood management utility should have a guiding principle specifically encouraging development that minimizes stormwater impacts. These discussions resulted in recommended guiding principles and their application across the three utilities, as shown in the following table.

Table 1 – Adopted Rate Guiding Principles

Principle	Water Utility	Wastewater Utility	Stormwater/Flood Management Utility
Discourage wasteful use, while promoting all justified types and amounts of use.	X		
Be effective in yielding total revenue requirements.	X	X	X
Provide revenue stability and predictability for the utilities.	X	X	X
Fairly allocate the total cost of service across customer classes to attain equity.	X	X	X
Be dynamic and proactive to address changing supply and demand conditions, as well as the city's sustainability and resilience goals.	X		
Encourage low-impact development to decrease stormwater impacts.			X

During the same meeting, WRAB also agreed with the project's following suggested areas of study. The original areas of study included:

- Stormwater/Flood Management Calculation Methodology
- Effectiveness of Water Budgets
- Fixed vs. Variable Charges
- Cost of Service
- Outside City vs. Inside City Charges

As the evaluation got underway, the exact nature of the areas of study evolved, the focus narrowed, and they were more specifically defined as key issues. For example, a detailed revisiting of inside vs. outside city rates was ultimately a lower priority than other items for the project. Consultant analysis indicated that the outside city multiplier is similar to an approach used by other communities. The other key issues are described in more detail later in the memo.

Following the June 2015 meeting and discussion, staff prepared and distributed an Information Packet memorandum for City Council to update them on the project's progress. Based on WRAB feedback and guidance related to guiding principles and areas of study, staff developed a scope of work for the analysis phase of the project. The scope of work informed a request for consultant proposals (RFP) which was issued in early November 2015. Staff received four complete proposals and selected Denver-based Raftelis Financial Consultants (RFC) to assist with the project.

The analysis component of the project was roughly divided into three phases, as follows:

Phase 1 – Investigation and Assessment
RFC assisted the staff in comprehensively understanding what was happening within the rate structures and the pros and cons of the current systems. The consultant team and staff presented these preliminary findings to WRAB at the August 2016 meeting. WRAB's feedback helped determine which identified issues required a new approach within the rate structures.

Phase 2 – Analysis of Potential Alternatives
Based on WRAB feedback at the August, September, and October meetings, RFC developed and analyzed options to address issues identified in the first phase. Alternatives were developed and tested across all three utilities and all customer classes and bill impacts were calculated. Staff and RFC presented the results of the options analyses at the January and February 2017 meetings.

Phase 3 – Recommendations
Based on the results of the second phase and WRAB discussion in January and February 2017, staff and RFC have refined the analysis and draft recommendations for WRAB's acceptance and recommendation to council.

Findings: Key Utility Rate Structure Issues
The analysis completed by staff and RFC in Phase 1 revealed a number of findings, the most significant of which are outlined below at a summary level.

The key findings and supporting analysis were all developed through the filter of the guiding principles. Where applicable for each area of study, RFC explored questions of revenue sufficiency and stability, water conservation, customer equity, and other goals inherent in the guiding principles.

Water Utility, including Water Budgets
RFC identified the following five key issues relative to the existing water utility rate structure.

1. Water budget rate structures do not work well for diverse commercial, industrial and institutional (CII) customers.
2. Blocks 1 and 2 could be combined into a single block to provide for more consistent monthly water budgets. Alternatively, a modified definition could be applied where, quite simply, block 1 is defined as the indoor budget and block 2 as the outdoor budget.
3. Residential indoor water allocations exceed recent indoor water use.
4. Reliance on revenue generated in Blocks 3, 4 and 5 results in a level of revenue instability that could adversely impact utility operations.
5. Block width and block pricing may not be aligned with City pricing objectives.

Wastewater Utility
RFC identified the following two key issues relative to the existing wastewater utility rate structure.

1. Revenue insufficiency due to:
    a. declining volume sales and
    b. amount of revenue recovered through monthly service charge.
2. Industrial Pre-Treatment fees do not recover the costs incurred.

Stormwater/Flood Management Utility
RFC identified the following two key issues relative to the existing stormwater utility rate structure.

1. Non-single family rate structure is unnecessarily complex.
2. The current rate structure undervalues the benefit of a large amount of land that absorbs stormwater. Impervious area (where the ground cannot absorb water) creates stormwater impacts during storm events as water runs off the surfaces. But large-lot customers with large amounts of pervious area (where the ground can absorb water) do not proportionally benefit from their ability to absorb water during a storm event.

<u>Additional Considerations</u>
During the course of the project, a number of additional items were raised as potential areas of exploration. As WRAB discussed the topics at various points during the project, it was determined that they fell outside the scope of the rate study but that they may be considered in the future.

Affordability

WRAB discussed whether affordability should be considered more heavily in the rate structure. In particular, there was a potential concern that those with the lowest utility bills (i.e. those who use the least amount of water) could see some of the largest increases if fixed service charges were to increase. However, water and wastewater volume use does not correlate with income, and so low-volume customers cannot be assumed to have low incomes. Research suggests that water, wastewater, and stormwater utility bills are only a small portion of most household budgets, regardless of income. And, for those who do struggle to pay their bills, assistance is available from social service providers. Staff shared information with WRAB about affordability issues and programs at the December 2016 meeting.

More Aggressive Water Conservation
Questions emerged during the project about whether water budget levels and related pricing signals are as effective as they could be. WRAB was supportive of some rate structure adjustments that will strengthen the price signal but also acknowledged that the city is in the process of a climate modeling and water conservation needs analysis which will help determine the city's overall conservation goals for the future. That work, and subsequent policy discussions by WRAB and City Council, will inform future decisions about water conservation goals and how they should be pursued through water budgets or other conservation mechanisms.

Fundamental Restructuring
Understanding that the current water rate structure does not perfectly address all guiding principles, or other utility goals, WRAB asked whether the city might pursue a wholly different structure. Besides the ongoing work on future conservation needs mentioned above, there are other reasons to put off such a decision into the future. Chief among them is that the city's current meter technology and billing infrastructure is approximately 15 years old and the state of the art is changing all the time. A fundamentally new rate structure, while attractive in concept, may not be supportable by existing city technology at this time. Staff suggested that the city explore alternative rate structures in conjunction with a future meter replacement project. New applications of technology, such as real time data reporting, may support future innovation in water pricing and customer communication. Recognizing these realities, WRAB maintained the scope of the project as a collection of smaller adjustments, which was also in keeping with public feedback received during the 2015 public engagement process. The city will also be upgrading to a new customer billing portal in 2018, which may create opportunities for enhanced communication with customers.

ANALYSIS

Alternatives Developed to Address Key Issues

At their September and October 2016 meetings, WRAB confirmed the key issues as the right ones to address. The board also expressed support for alternatives that staff and RFC should explore in order to address the key issues.

Water Utility, Including Water Budgets
In the water utility, RFC's Phase 1 analysis indicated that the following issues were the most important to address:

1. Water budgets do not work well for diverse Commercial, Industrial, Institutional (CII) customers. This is especially true of those customers using the Average Monthly Use (AMU) methodology to determine their budgets. AMU budgets are based on outdated 2005 usage data that results in overly generous budgets for some customers and unnecessarily restrictive budgets for other customers.
2. Block 1 of the rate structure sends an inconsistent pricing message for single-family residential (SFR) customers. For example, in the winter months a portion of indoor use can be priced at Block 2, and in the summer months all indoor use is priced at Block 1
3. Residential indoor water allocations exceed recent indoor water use, indicating that residential water budgets may be set in such a way as to undermine some utility goals.
4. Reliance on revenue generated in Blocks 3, 4 and 5, which are considered "out of budget" blocks and represent levels of water use that customers should not regularly be reaching, results in a level of revenue instability that could adversely impact utility operations.

Staff and RFC developed an alternative in which small adjustments to existing rate structure components, when taken together as a package, work to address the issues listed above. This alternative, when compared to the status quo structure (which includes a projected, but not approved, 8 percent rate increase for 2018), improves revenue stability and predictability, increases equity within and between customer classes, maintains the water budget rate structure to discourage wasteful use, and also promotes justified use by better aligning CII water budgets with expected efficient use. The main components of the alternative included:

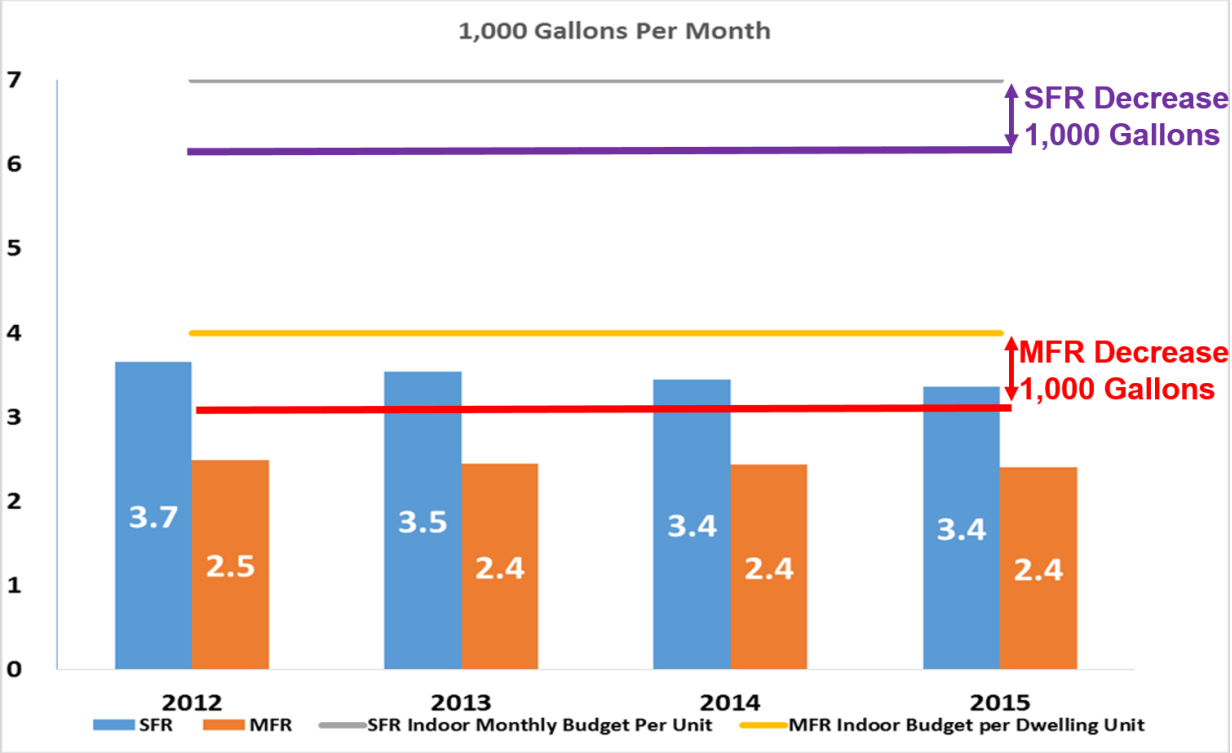
- Increasing the fixed service charge to better reflect costs of service.
- Combining the existing Blocks 1 and 2 to eliminate an unclear price signal and improve revenue stability.
- Decreasing the residential indoor allocation, which regularly exceeds actual indoor use. SFR would be reduced from 7,000 gallons to 6,000 and multi-family (MFR) would be reduced from 4,000 to 3,000.
- Moving existing CII customers using the AMU water budget category to the Indoor/Outdoor category in order to better align budgets with normal use.

Staff analysis and subsequent WRAB discussion supported the idea that increasing the fixed charge and combining the first two blocks would not increase revenue stability and predictability to a great enough degree to outweigh the impacts of making such changes. However, WRAB preliminarily supported a reduction in the residential indoor allocation and the movement of existing CII AMU customers to the Indoor/Outdoor water budget option. The reasoning behind lowering the indoor allocation is to better align budgets with actual use and to strengthen the conservation pricing signal. The board requested that staff return with analysis of the impacts of implementing these two changes to the water budget rate structure.

Analysis completed by staff and RFC indicates that with the CII change and the reduction in the indoor allocation, the revenue recovery burden would be shifted to the MFR customer class in the amount of approximately $400,000. This results because of the different gaps between use and budget in these two customer classes. Currently, the SFR average use is under 50 percent of the indoor budget, and MFR average use is 60 percent of the indoor budget. If MFR indoor

budgets are lowered in the same amount as SFR, then MFR customers will more often exceed those budgets and pay higher volume rates in the out-of-budget pricing blocks. Figure 1 below illustrates average monthly indoor use for SFR and MFR customers over a four-year period in relation to the budgeted indoor allocations.

Figure 1 – Average Indoor Use vs. Budget for SFR and MFR Customers (2012-2015)



Reducing only the SFR indoor budget by 1,000 brings these two classes more in line with each other. This also reduces the revenue shift between classes. While reducing the allocation for both classes shifts the $400,000 of revenue burden onto MFR, reducing only the SFR allocation shifts around $200,000 to SFR. A shift to the SFR class may be more appropriate given that SFR indoor budgets are currently higher relative to use than are MFR budgets.

Table 2 – Changes in 2018 Revenue Recovery vs. Existing Structure, by Class

	CII Change and Indoor Allocation Decrease for **SFR and MFR**	CII Change and Indoor Allocation Decrease for **SFR Only**
SFR	-$40,000	**+$200,000**
MFR	**+$400,000**	-$55,000
Irrigation	-$145,000	-$45,000
CII	-$400,000	-$250,000

Wastewater Utility

The wastewater quantity, or volume, charges for residential customers are billed using actual water use or Average Winter Consumption (AWC), whichever is less. AWC means the average water use per month during the most recent December through March time period. Non-residential customers are billed for wastewater quantity charges based on actual use or indoor

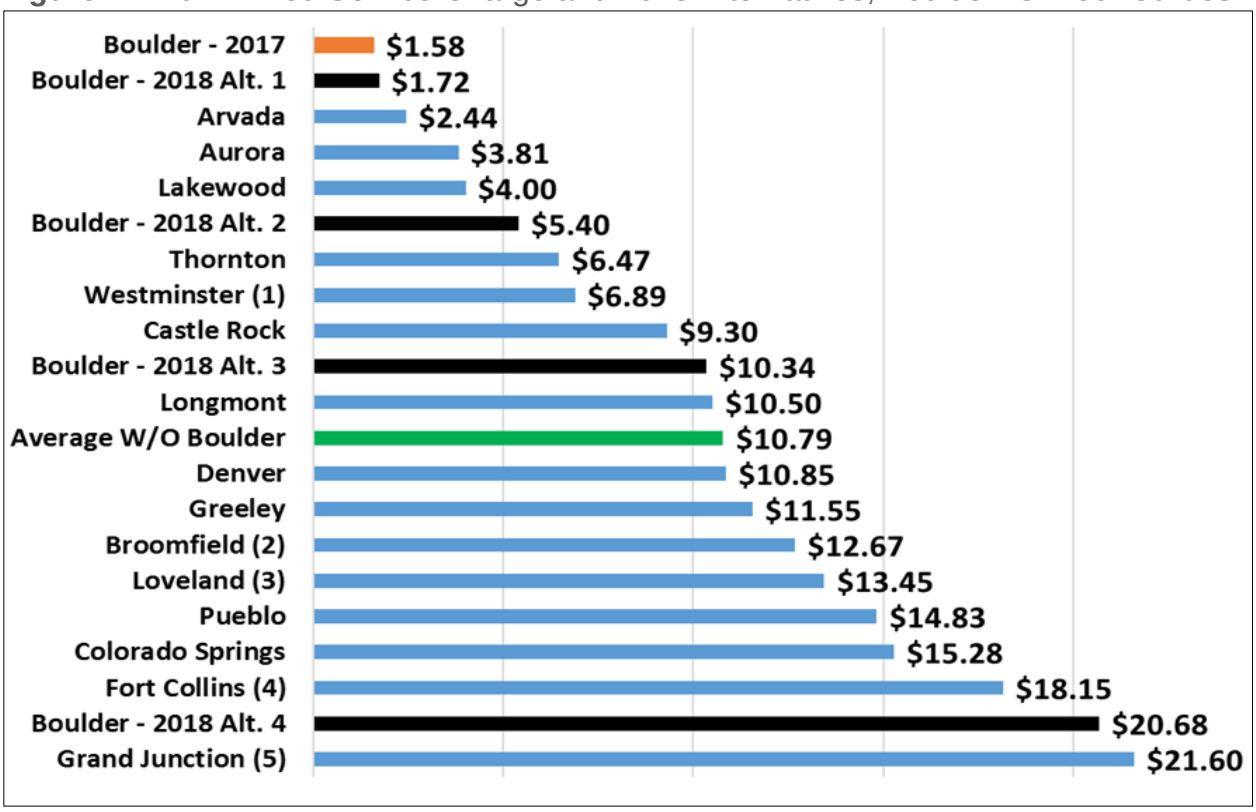
water budget allocation depending on their selected water budget option. The rationale for using winter water use as a basis for wastewater charges is that winter water use is an accurate approximation of how much wastewater is produced. In other words, nearly all water used in the winter is used indoors and therefore eventually finds its way down the drain or flushed down a toilet. As water-using fixtures and appliances, such as shower heads, toilets, washing machines, and dishwashers, have become more efficient over time, they are able to send the same amount of waste into the system with much less water. The wastewater system's costs of operation do not decline proportionally with less water use because the system must still treat the same amount of waste, even if less water is used to move the waste through the system. In fact, the vast majority of the wastewater utility's costs are fixed costs.

RFC's Phase 1 analysis identified an issue of revenue insufficiency due to declining volume sales and amount of revenue recovered through the monthly service charge. The decrease in indoor water use due to those more efficient fixtures and appliances has meant less volume revenue for the wastewater utility. To address this, RFC proposed the following four wastewater rate structure alternatives for consideration. All alternatives incorporated an assumed 2 percent per year decrease in billed volumes per account, consistent with recent trends, while accounting for future revenue needs projected in the utility's financial planning.

1. Increase rates sufficiently to address declining wastewater use and sales, but leave the existing structure itself intact.
2. Increase the fixed service charge sufficiently to recover fixed customer costs. Decrease the volume rate accordingly.
3. Increase the fixed service charge to recover 25 percent of annual user charge revenue. Decrease the volume rate accordingly.
4. Increase the fixed service charge to recover 50 percent of annual user charge revenue. Decrease the volume rate accordingly.

The potential need to increase rates more than previously projected in order to address declining wastewater volume will be addressed through the annual budget and rate setting process.
As for the structural increase in the fixed service charge, WRAB considered alternatives at three levels: cost of service based (Alt. 2, approximately 13 percent of total user revenues), 25 percent of total user revenues (Alt. 3), or 50 percent of total user revenues (Alt. 4). The chart below illustrates where any of the alternatives would place the city's fixed charge for a ¾ inch residential water meter customer in relation to peer utilities.

Figure 2 – 2017 Fixed Service Charge and 2018 Alternatives, Boulder vs. Peer Utilities



In order to increase revenue stability for the utility, WRAB preliminarily supported increasing the fixed charge to a level that would recover 25 percent of revenues. The most significant impact of such a change would be to the lowest volume wastewater customers. As the fixed charge increases, and the volume rate decreases accordingly, the existing financial benefit of using a low volume of wastewater decreases. Under WRAB's preferred alternative, a low volume customer who is billed for 2,000 gallons of wastewater use would have a bill of $21.18 instead of $15.58, which is the projected monthly charge if no change is made. This outcome is equitable for two reasons. First, as described above, the cost for waste treatment does not vary proportionately to the amount of water used. Second, the vast majority of wastewater system costs are fixed, and each customer should pay a commensurate fixed charge in recognition of that reality.

The analysis also found that fees in the Industrial Pre-Treatment program were not recovering the full program costs. It will be addressed through the 2018 budget and related fee setting process without a need to change policy.

Stormwater/Flood Management Utility
RFC identified the following two key issues relative to the existing stormwater utility rate structure.

1. Non-single family rate structure is unnecessarily complex.

2. The current rate structure undervalues the benefit of a large amount of land that absorbs stormwater. Impervious area (where the ground cannot absorb water) creates stormwater impacts during storm events as water runs off the surfaces. But large lot customers with large amounts of pervious area (where the ground can absorb water) do not proportionally benefit from their ability to absorb water during a storm event.

RFC proposed three stormwater rate structure alternatives for consideration. All alternatives incorporated modifications to address large lot and atypical properties while accounting for future revenue needs projected in the utility's financial planning documents.

1. Simplify the formula for clarity but leave the structure unchanged; address atypical large lot customers with large amounts of pervious area through credit policies.
2. Change the fee calculation to include only a fixed charge (reflecting fixed costs) and a charge based on impervious area.
3. Change the fee calculation to include a fixed charge (reflecting fixed costs) and a formula incorporating both pervious and impervious area.

The table below provides projected rates, which reflect projected revenue needs in 2018, under the three alternatives.

Table 3 – Projected SFR Stormwater Rates

Size of Parcel	2017	Alt. 1 – Status Quo	Alt. 2 – Fixed and Impervious Area Charge	Alt. 3 – Fixed, Impervious and Pervious Area Charge
Up to 15,000 sq. ft.	$15.12	$16.40	$15.61	$17.99
15,000 to 30,000 sq. ft.	18.89	20.50	18.89	21.87
30,000 sq. ft. or more	22.69	24.60	22.17	25.74

Table 4 – Projected Non-SFR Rates

Size of Parcel	2017	Alt. 1 – Status Quo	Alt. 2 – Fixed and Impervious Area Charge	Alt. 3 – Fixed, Impervious and Pervious Area Charge
Base Rate	$15.12	$16.40	N/A	N/A
Fixed Charge	N/A	N/A	$2.50	$2.50
Impervious Area Charge (per 1,000 sq ft impervious area unit)	N/A	N/A	5.70	4.65
Pervious Area Charge (per 1,000 sq ft pervious area unit)	N/A	N/A	N/A	1.02

Staff and WRAB were in agreement that an unchanged rate structure with a credit system to address atypical large lot customers was not a preferred option. It would represent a "work

around" instead of fundamentally addressing the structural issue and would add complexity to an already complex method of determining stormwater/flood management charges.

Of the remaining alternatives, WRAB preliminarily supported Alt.2, which is calculated based on a fixed charge and an impervious area charge. This alternative removes pervious area from the fee calculation in recognition of the fact that pervious area has less of a stormwater and flood impact than impervious area. Under the alternative, all customers are charged on the same basis, with a fixed charge of $2.50 (for fixed costs regardless of customer property characteristics) and an area charge of $5.70 per 1,000 square feet of impervious area. Similar to the existing rate structure, the SFR class has three tiers to account for the limited variability in SFR property characteristics.

Non-SFR customers with the largest amounts of impervious area (such as large parking lots) would experience the largest bill increases. In general, large lot customers with large amounts of pervious surface (such as large areas of grass) would experience a bill decrease. This alternative would minimize impact to SFR customers as their bills would be slightly lower compared to the status quo alternative.

The table below describes how different types of customers would fare under the preferred alternative.

Table 5 – 2018 Monthly Impacts for Different Customer Types, Status Quo vs. Alternative

Customer Type (impervious area)	2017 Current	2018 Status Quo	2018 Alt.
Single Family Residential (2,300 sq. ft)	$15.12	$16.33	$15.61
Shopping Center with Large Parking Lot (380,000 sq. ft.)	$1,800	$1,900	$2,200
Large Industrial with a lot of greenspace (390,000 sq. ft.)	$3,200	$3,500	$2,200
Urban Agricultural	$490	$530	$100

Total Bill Impacts of Preferred Alternatives
In summary, the recommended alternatives based on WRAB feedback to date are as follows:

1. In the water rate structure, the indoor allocation for SFR and MFR customers will be reduced by 1,000 gallons and all existing CII AMU customers would be moved to the Indoor/Outdoor budget methodology.
2. In the wastewater rate structure, the fixed service charge would be increased to an amount sufficient to recover 25 percent of user charge revenues.
3. In the stormwater/flood management rate structure, the fee calculation methodology for non-SFR customers would be changed to include only a fixed charge and a charge for each square foot of impervious area.

For the SFR class, the main impact is for low volume users who will experience an increase in the fixed wastewater charge without an offsetting reduction in the volume charge, due to their low use. The impact may be somewhat mitigated by the reduction in the stormwater/flood management fee.

Table 6 – Total Monthly Impacts for Average Single Family Customer, January and July

January – 5,000 Gallons	2018 Status Quo	2018 Alt.
Water	$28.33	$27.73
Wastewater	$36.37	$37.44
Stormwater	$16.33	$15.61
Total	$81.03	$80.78

July – 20,000 Gallons	2018 Status Quo	2018 Alt.
Water	$79.99	$77.47
Wastewater	$36.37	$37.44
Stormwater	$16.33	$15.61
Total	$132.69	$130.52

Table 7 – Total Monthly Impacts for Lower Volume Single Family Customer, January and July

January – 2,000 Gallons	2018 Status Quo	2018 Alt.
Water	$18.64	$18.40
Wastewater	$15.58	$21.18
Stormwater	$16.33	$15.61
Total	$50.55	$55.19

July – 14,000 Gallons	2018 Status Quo	2018 Alt.
Water	$56.50	$55.72
Wastewater	$15.58	$21.18
Stormwater	$16.33	$15.61
Total	$88.41	$92.51

In the MFR and CII classes, impacts are more difficult to generalize, as the classes are more diverse in their attributes and water and wastewater usage patterns. As a rule, the following impacts will result from the changes, if enacted:

- CII AMU customers with budgets that were previously set far below their normal use will experience a decrease in water charges.

- CII AMU customers with budgets that were previously set far above their normal use will experience an increase in water charges.

- MFR customers can generally expect nominal increases in water charges due to the reduction in the indoor allocation for MFR water budgets and the possibility that their use will more easily reach the out-of-budget blocks. (This impact can be largely mitigated by leaving the MFR indoor allocation at its current level of 4,000 gallons, as referenced earlier in this memo.)

- CII and MFR customers with large amounts of impervious area, including both buildings and parking lots, will see an increase in stormwater/flood management fees.

- CII AMU customers with both previously generous budgets and large amounts of impervious area will see larger increases in their total utility bill each month due to increases in the water and stormwater/flood management charges. Some of these customers will be better served by moving to the Historical Monthly Usage water budget category and/or conducting a water audit to see if there are any opportunities for increased efficiency and lower water charges. This category of customers, those substantially impacted in two utilities, are candidates for targeted outreach by staff.

- CII AMU customers with previously low budgets relative to use and with large lots but little impervious area will benefit substantially from reductions in both their water and stormwater/flood management charges.

NEXT STEPS

Second Quarter – Staff will present project results, WRAB recommendations, and implementation next steps to City Council for their consideration and guidance for including rate structure changes in the 2018 budget.