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Presented by: Stephen Graham, Senior Business Analyst

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Date	Ver.	Action By	Action	Result
9/11/2017	1	City Council	recommend to Council	Pass

**TAMRMS#: B06**

**Stormwater Revised Rate Model**

Presented by: Stephen Graham, Senior Business Analyst

**RECOMMENDATION(S)**

That Administration develop a proposal for a stormwater rate system based on an impervious surface factor, complete with an implementation and communication plan by Q2 2018, and that the final proposal include a recommendation and possible alternatives for addressing outlier properties, competitiveness issues that may arise, and include an alternative for a phased implementation in 2 to 3 years.

**PURPOSE OF REPORT**

This report is a continuation of an ongoing investigation into the development of a new rate setting model for the Stormwater utility. In October, 2016, Administration requested from Council to continue working on this project with the goal of incorporating an imperviousness factor into the stormwater rate calculation. This report outlines those efforts, the related analysis and recommendations for the future of this project.

**COUNCIL DIRECTION**

On October 17, 2016 Council passed the following motions:

(CB-16-019)

That the unused portion (approximately \$8,000) of the previously approved project budget (of \$15,000) for the Storm Water Rate Model Implementation Plan be allocated to the investigation of

alternatives to the currently proposed stormwater rate model, with the objective of incorporating an impermeable surfaces factor into the solution, and that an additional \$40,000 be allocated from the stormwater reserve to fund the hiring of a term Senior Analyst position.

## **BACKGROUND AND DISCUSSION**

The origin of this project dates back to 2014 and early 2015 when some comments were received from residential utility rate payers questioning the fairness of the stormwater utility rates. At around the same time an information request on this same subject was received from a Council member. Administration began to investigate.

The City currently uses a flat rate system to recover all of the operating and capital costs required to maintain the stormwater system. There are four different flat rates that are applied to specific property classifications. The current 2017 rates can be found in the attachment titled Stormwater Revised Rate Model Tables - 2017 Rates.

A flat rate system creates inequities insomuch as no obvious cause and effect relationship exists between how a customer impacts the stormwater system and how much money that customer pays. Administration's investigation looked into best practices followed by other leading municipalities. What we learned was that the most important factor to take into account was the amount of impervious (water resistant) surface on a property. The premise being that properties with higher impervious areas will contribute more water to the stormwater system and therefore should pay a proportionally higher rate.

Armed with this new information, Administration began looking into what would be involved in developing a rate system based on impervious property area for the City. To begin with Administration focused on defining some guiding principles that would inform the development of a new rate system.

1. Fairness. The application of a user pays philosophy where customers are charged according to the degree that they impact the stormwater system.
2. Full Cost Recovery. The City will recover the costs, including administrative overhead costs, required to operate the stormwater system and pay for any necessary capital projects as defined in the 10 Year Utility Capital Plan. This is consistent with guidelines articulated in the Utility Fiscal Policy (C-FS-14).
3. Ease of application. The solution must be administratively manageable. A perfect system that requires significant resources is not the right solution for the City.

If the fairness principle was dependent on building an imperviousness factor into rate calculations, there were some issues to consider. One of the most important was the lack of data related to impervious surfaces at the individual property level. Given the potential expense related to getting this information a compromise was suggested. Instead of using impervious surfaces on a property we would look at a system based on the total property size.

The thinking at the time was this would be more easily achievable with available resources and would produce similar results. The working hypothesis used to reach this conclusion was that there would be a relatively high degree of correlation between total property size and the amount of impervious

surface on a property. In theory this would lead to a result where most of the benefits of a model based on imperviousness would be realized. This proposal was presented to Council in October 2015 and approved.

### Area Based

A concept based on the above premise was developed and presented to Council in September 2016 and passed in October 2016. Please see attached Agenda Report CB-16-019 "Standing Committee of the Whole Recommendation: Stormwater Rates Model & Implementation Plan".

### Rate Model Development

After presentation to Council in October 2016 administration began to investigate alternatives to the currently proposed stormwater rate model, which would incorporate an impermeable surface factor.

The key element of this phase of the project was the need to identify the impervious value for each and every property in the city. The City engaged Stantec Consulting Ltd. to provide this information. Stantec used aerial imagery to construct a property data set that delineated impervious surface from pervious surfaces.

Once this was complete, these individual values were simplified into median imperviousness values for each land use planning zone. These median values would be applied to all the properties according to whatever zone the property is associated with.

### Establishing a Rate for Each m2 of Billable Property

The billing rate ultimately depends on two variables; the amount of money that must be recovered through rates and the amount of billable property. The amount of costs to be recovered includes operating costs for the pending budget year and capital costs based on an average of the forecasted ten years of capital spending (10 Year Utilities Capital Plan) less any funding receivable from other sources, such as MSI grants and gas tax proceeds. The opening balance in the stormwater capital reserve is also deducted from this total.

### Results

With the inclusion of an imperviousness factor there is a further shift in costs recovered from non-residential customers. The graph titled "% of Costs Recovered By Property Type" (found in the attachment titled Stormwater Revised Rate Model Tables) shows this shift from the existing system through to this proposal.

Under an imperviousness based rate model, analysis indicates that about 76% of residential customers will pay less than they are now under the existing system. Annual cost reductions have an approximate range of between \$10 and \$80. Residents in stacked housing (apartment style housing) will all pay less under the new system, most in excess of \$100 less.

Of the 24% of residential customers that will pay more, only 4% will pay more than an additional \$100 annually. A relatively small number of residential customers will see more substantial increases which can be found in the chart titled "Residential Customers Paying More" in the attachment titled Stormwater Revised Rate Model Tables.

57% of commercial/industrial customers will pay less but of the 43% that will pay more, some will pay substantially more. This result is in line with the intention that those properties with greater amounts of impervious surfaces would be responsible for a greater share of costs. Commercial/industrial customer properties tend to have more impervious surface and many of them are also larger properties. The chart titled “Commercial/Industrial Customers Paying More” (found in the attachment titled Stormwater Revised Rate Model Tables) demonstrates the impact on these properties.

### Competitiveness

In a review of competitiveness with City of Edmonton commercial/Industrial stormwater rates, we have found that there is a competitive advantage to Edmonton’s rates. Although it is difficult to pinpoint the exact reasons for the discrepancies, there are several possible explanations.

1. Edmonton’s ratio of non-residential to residential property may be higher than the City of St. Albert. Because non-residential property tends to have higher imperviousness values, a higher proportion of this property would serve to absorb more costs shifted from the residential property with lower imperviousness values.
2. Scale. Edmonton is obviously much bigger than the City of St. Albert and has significantly more billable property to allocate costs to. Edmonton’s total operating and annual Capital costs per square meter of billable property may be lower than the City of St. Albert.
3. The forecast period for capital costs in Edmonton’s model may be longer than the 10 years used in the City of St. Albert model.

A possible resolution of the competitiveness issue on the largest commercial/industrial customers would be to implement a cap, or maximum, on the rate. A cap would increase costs to the remainder of the customers. This cap would be investigated in more detail during the next stage of work.

### Conclusion

In general the proposed system accomplishes the main goal of distributing costs among rate payers in a more equitable manner. A positive consequence of the change is that the majority of customers will pay less than they are now. However, the proposed solution is not without challenges. Significant increases for a minority of large residential properties is one. Another is competitiveness with Edmonton’s stormwater rates for non-residential customers. Some strategies to mitigate both of these problems have been considered and tested. Additional work to investigate strategies to counteract the challenges while still upholding the guiding principles would be recommended.

## **STAKEHOLDER COMMUNICATIONS OR ENGAGEMENT**

The strategy for community engagement has not yet been determined. This will be part of the implementation plan if recommendations to Council are approved.

## **IMPLICATIONS OF RECOMMENDATION(S)**

### Financial:

None at this time. There will be no change in the amount of money recovered through stormwater rates.

Legal / Risk:

None at this time.

Program or Service:

Organizational:

There will be some impact on resources required to maintain the proposed rate system. Changes to properties may have to be reviewed and any new multi-unit properties would have to be reviewed to ensure that common area is properly allocated to customers.

## **ALTERNATIVES AND IMPLICATIONS CONSIDERED**

1. Administration could be directed to develop a flat rate system that addresses some of the inequities that currently exist.
2. Council could amend the current recommendations.
3. Status quo. The current rate system could be left in place as is.

## **STRATEGIC CONNECTIONS**

### **ECONOMIC**

From a strategic standpoint there is some concern that increases in costs to commercial/industrial properties would be a deterrent to the City's stated intent to increase the commercial base. Utility rates should be considered as a part of the overall costs and benefits of locating in the City.

Any proposed changes to the stormwater rate model will conform to overall utility guiding principles defined in the Utility Fiscal Policy (C-FS-14).

Report Date: September 11, 2017

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Committee/Department: Financial Services

General Manager: Michelle Bonnici, GM of Corporate Services

City Manager: Kevin Scoble