



THE CITY OF  
**CALGARY**

# Utilities & Environmental Protection



## **2015-2018 Indicative Drainage Charge C2014-0324**

**2014 May 5**



## Previous Council Direction

- At the 2014 February 26 meeting, the SPC on UCS received the Drainage Financial Plan report for information and forwarded it to the March 17 Strategic Meeting
- At the 2014, March 17 meeting, Council adopted the 2015-2018 Drainage Fee Scenarios report and directed Administration to:
  - Develop the indicative Drainage charge based on accelerated delivery for financial compliance and meets requirements for the remaining four program elements; and
  - Provide scenarios for acceleration for some urgent activities based on capacity



## Drainage Financial Plan

To build the Drainage financial plan, the Utilities considered:

- The long term capital and operating pressures facing the Drainage line of service
- Alignment with the Utilities Financial Plan (2011)
- The City of Calgary Long Range Financial Plan (2011)
- The Drainage Financial Policies approved in 2013



# Utilities & Environmental Protection

## Drainage Financial Targets

Policy Area	Target
Debt vs. Cash Financing	100% cash financing of capital maintenance
Debt Limit	\$300 million
Debt Servicing Limit	40% of revenues
Sustainment Reserve	10% of revenues

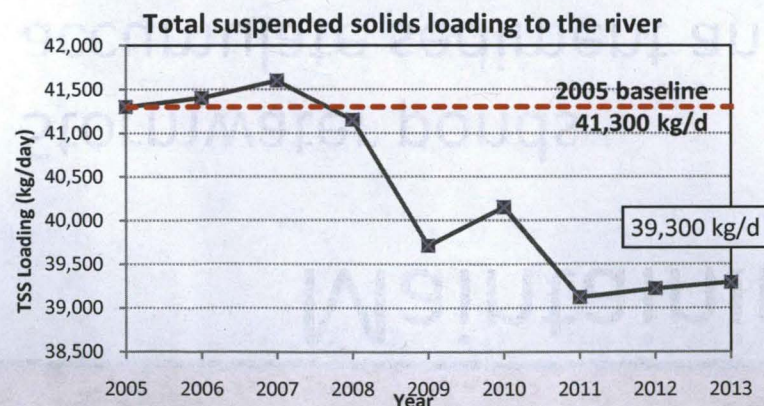
- Recommended timeline to achieve financial policies and targets will be four years (by 2018).



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## Regulatory and Environmental Protection

- The City of Calgary Wastewater Approval to Operate includes targets for total sediment loadings
- In 2013, Water Resources developed a riparian strategy in consultation with key stakeholders.





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## Maintaining our Assets

- Stormwater ponds accumulate sediment and need to be cleaned out periodically to restore the pond function
- The network infrastructure (pipes and lift stations) are aging

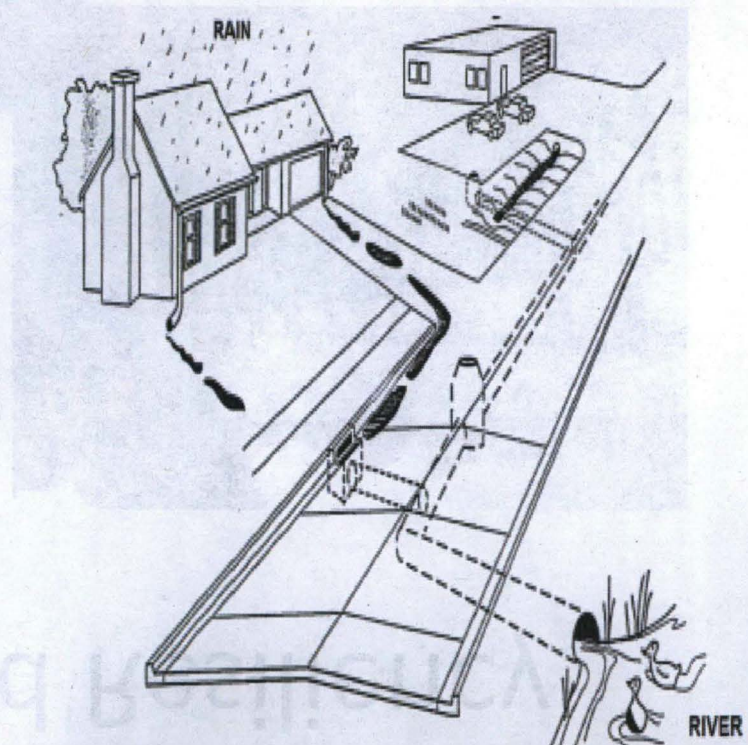




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## Community Drainage Improvements

The CDI program delivers stormwater infrastructure upgrades in older communities that were built before the use of modern drainage techniques and standards.





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## Flood Recovery and Resiliency

The June 2013 flood significantly impacted riverbank areas and stormwater infrastructure





Program ► Service Level ▼	Regulatory and Environmental Protection	Maintaining Assets	Community Drainage Improvements	Flood Recovery and Resiliency	Financial Policy and Target Compliance
<b>Current Service Level (12- 14)</b>	<ul style="list-style-type: none"> <li>Meets current Wastewater Approval to Operate water quality objectives for sediment loadings to the river.</li> <li>Achieved through the implementation of stormwater treatment facilities</li> </ul>	Typical O&M activities include: <ul style="list-style-type: none"> <li>Pipe flushing</li> <li>Catch basin cleaning</li> <li>Lift station maintenance</li> <li>Vegetation control</li> <li>Select storm pond cleaning and maintenance activities</li> </ul>	<ul style="list-style-type: none"> <li>With current investment, 24 years to deliver all projects on the list. Total program cost \$170 million.</li> </ul>	<ul style="list-style-type: none"> <li>Coordination of flood preparedness</li> <li>Coordination of flood recovery and resiliency projects</li> <li>** 2014 capital and operating related to flood were funded by FSR</li> </ul>	Targets are being established.
	<b>Total Capital: \$3.79, Total Operating: \$5.41</b>				
	<b>Total Monthly Drainage Charge \$9.20</b>				
<b>Meets Requirements &amp; Standards</b>	<ul style="list-style-type: none"> <li>Continues to meet regulatory requirements</li> <li>Development of an implementation plan for the riparian strategy</li> </ul>	<ul style="list-style-type: none"> <li>Pond cleanings to restore WQ function</li> <li>Maintenance for new assets</li> <li>Establish asset condition assessment, main replacement and rehabilitation programs</li> <li>Research to inform and refine operational and maintenance practices.</li> </ul>	<ul style="list-style-type: none"> <li>Accelerate program to deliver upgrades to all projects on the list within 16 years. Total program cost \$170 million.</li> </ul>	<ul style="list-style-type: none"> <li>Flood recovery and resiliency projects including bringing infrastructure up to current design standards</li> </ul>	Compliance by 2022 of debt limit, debt servicing limit, cash financing of capital maintenance and reserves
	<b>Additional Capital \$0.22</b>	<b>Additional Capital \$0.50</b>	<b>Additional Capital \$0.27</b>	<b>Additional Capital \$0.09</b>	<b>Included in capital</b>
	<b>Additional Operating \$0.16</b>	<b>Additional Operating \$0.20</b>	<b>Additional Operating \$0.01</b>	<b>Additional Operating \$0.01</b>	
<b>Accelerated Delivery</b>	<ul style="list-style-type: none"> <li>Accelerate delivery of local stormwater infrastructure and features</li> <li>Accelerate the implementation of the riparian strategy to start in the 2015-2018 budget cycle</li> </ul>	<ul style="list-style-type: none"> <li>Expand research scope to include emerging operational and maintenance issues.</li> <li>Accelerate storm pond cleanings</li> <li>Accelerate condition assessment, and trunk / main replacement program</li> </ul>	<ul style="list-style-type: none"> <li>Accelerate program delivery to 12 years, and include additional projects from study areas still be to completed. Total program cost \$220M.</li> </ul>	<ul style="list-style-type: none"> <li>Implementation of recommendations from the River Flood Mitigation Panel</li> <li>Accelerate recovery and resiliency projects</li> </ul>	Compliance by 2018 of debt limit, debt servicing limit, cash financing of capital maintenance and reserves
	<b>Additional Capital \$0.32</b>	<b>Additional Capital \$0.60</b>	<b>Additional Capital \$0.48</b>	<b>Additional Capital \$0.63</b>	<b>\$0.20</b>
	<b>Additional Operating \$0.20</b>	<b>Additional Operating \$0.25</b>	<b>Additional Operating \$0.02</b>	<b>Additional Operating \$0.04</b>	



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## Potential Programs to be Accelerated

- Regulatory and Environmental Protection:
  - Increase LID pilots, monitoring and research
  - Increase maintenance of riparian areas
  - Increase riparian education and outreach
  - Improved source control program
- Maintaining Assets
  - Additional monitoring & evaluation of maintenance requirements for green infrastructure
  - Increased installation of sediment capture devices (from 1/year to 10/year)



Program ► Service Level ▼	Regulatory and Environmental Protection	Maintaining Assets	Community Drainage Improvements	Flood Recovery and Resiliency	Financial Policy and Target Compliance
<b>Current Service Level (12- 14)</b>	<ul style="list-style-type: none"> <li>Meets current Wastewater Approval to Operate water quality objectives for sediment loadings to the river.</li> </ul>	Typical O&M activities include pipe flushing, catch basin cleaning, lift station maintenance, vegetation control, select storm pond cleaning and maintenance activities	<ul style="list-style-type: none"> <li>With current investment, 24 years to deliver all projects on the list. Total program cost \$170 million.</li> </ul>	<ul style="list-style-type: none"> <li>Coordination of flood preparedness</li> <li>Coordination of flood recovery and resiliency projects</li> </ul>	Targets are being established.
	Total Capital: \$3.79, Total Operating: \$5.41				
	Total Monthly Drainage Charge \$9.20				
<b>Meets Requirements &amp; Standards</b>	<ul style="list-style-type: none"> <li>Continues to meet regulatory requirements.</li> <li>Development of an implementation plan for the riparian strategy</li> </ul>	<ul style="list-style-type: none"> <li>Pond cleanings to restore WQ function</li> <li>Establish asset condition assessment, main replacement and rehabilitation programs</li> <li>Research to inform and refine operational and maintenance practices.</li> </ul>	<ul style="list-style-type: none"> <li>Accelerate program to deliver upgrades to all projects on the list within 16 years. Total program cost \$170 million.</li> </ul>	<ul style="list-style-type: none"> <li>Flood recovery and resiliency projects including bringing infrastructure up to current design standards</li> </ul>	Compliance by 2022 of debt limit, debt servicing limit, cash financing of capital maintenance and reserves
	Additional Capital \$0.22	Additional Capital \$0.50	Additional Capital \$0.27	Additional Capital \$0.09	Included in capital
	Additional Operating \$0.16	Additional Operating \$0.20	Additional Operating \$0.01	Additional Operating \$0.01	
<b>Revised Accelerated</b>	<ul style="list-style-type: none"> <li>Additional research includes: pilot features, LID performance verifications, surface/subsurface interactions</li> <li>Increased riparian area maintenance and education/outreach</li> </ul>	<ul style="list-style-type: none"> <li>Additional monitoring and evaluation of maintenance requirements for green infrastructure</li> <li>Increased installation of sediment capture devices</li> </ul>	Limited capacity to accelerate	Limited capacity to accelerate	N/A
	Additional Capital \$0.22	Additional Capital \$0.54	N/A	N/A	N/A
	Additional Operating \$0.21	Additional Operating \$0.21	N/A	N/A	
<b>Accelerated Delivery</b>	<ul style="list-style-type: none"> <li>Accelerate delivery of local stormwater infrastructure and features</li> <li>Accelerate the implementation of the riparian strategy to start in the 2015-2018 budget cycle</li> </ul>	<ul style="list-style-type: none"> <li>Expand research scope to include emerging operational and maintenance issues.</li> <li>Accelerate storm pond cleanings</li> <li>Accelerate condition assessment, and trunk / main replacement program</li> </ul>	<ul style="list-style-type: none"> <li>Accelerate program delivery to 12 years, and include additional projects from study areas still be to completed. Total program cost \$220M.</li> </ul>	<ul style="list-style-type: none"> <li>Implementation of recommendations from the River Flood Mitigation Panel</li> <li>Accelerate recovery and resiliency projects</li> </ul>	Compliance by 2018 of debt limit, debt servicing limit, cash financing of capital maintenance and reserves
	Additional Capital \$0.32	Additional Capital \$0.60	Additional Capital \$0.48	Additional Capital \$0.63	\$0.20
	Additional Operating \$0.20	Additional Operating \$0.25	Additional Operating \$0.02	Additional Operating \$0.04	



# Utilities & Environmental Protection

## 2015 Incremental Increase to the Monthly Drainage Charge Based on the Recommended Levels of Service

	Regulatory & Environmental Protection	Maintaining Assets	Community Drainage Improvements	Flood Recovery and Resiliency	Financial Policy and Target Compliance	Total
Capital	\$0.22	\$0.50	\$0.27	\$0.09	\$0.20	\$1.28
Operating	\$0.16	\$0.20	\$0.01	\$0.01	Included in capital	\$0.38
Total Fee Increase	\$0.38	\$0.70	\$0.28	\$0.10	\$0.20	\$1.66



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## Indicative Drainage Charge

2015-2018 Indicative Drainage Charge Based on Recommended Levels of Service  
(Scenario 1)

	2014 (current)	2015	2016	2017	2018
Proposed Monthly Drainage Charge Increase		\$1.66	\$1.95	\$2.31	\$2.72
<b>Proposed Monthly Drainage Charge</b>	\$9.20	<b>\$10.86</b>	<b>\$12.81</b>	<b>\$15.12</b>	<b>\$17.84</b>

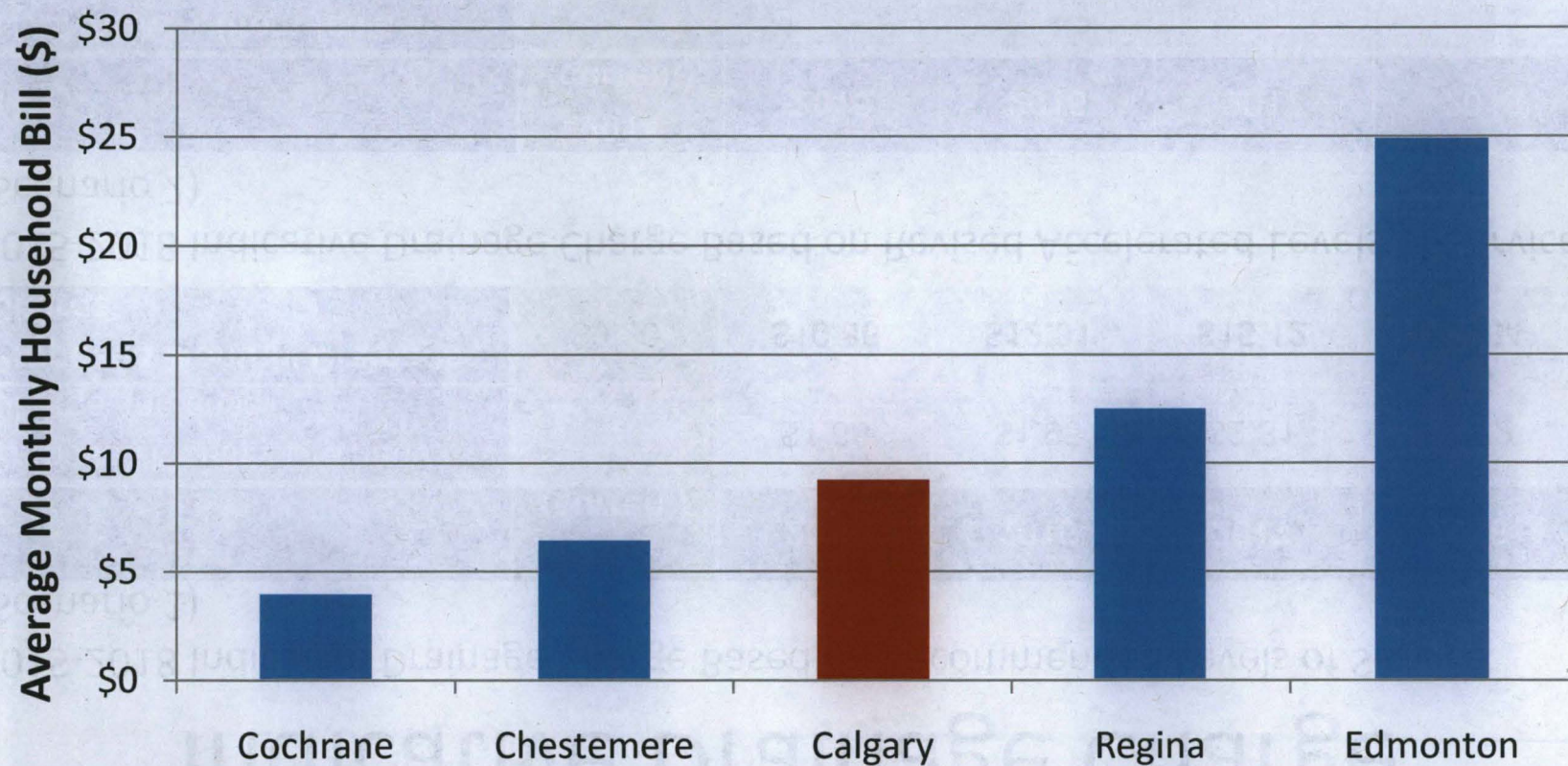
2015-2018 Indicative Drainage Charge Based on Revised Accelerated Levels of Service  
(Scenario 2)

	2014 (current)	2015	2016	2017	2018
SCENARIO 1 (from Table 5) Proposed Monthly Drainage Charge	\$9.20	\$10.86	\$12.81	\$15.12	\$17.84
Incremental Increase for Scenario 2		\$0.10	\$0.24	\$0.42	\$0.67
<b>SCENARIO 2 - Proposed Monthly Drainage Charge</b>	\$9.20	<b>\$10.96</b>	<b>\$13.05</b>	<b>\$15.54</b>	<b>\$18.51</b>



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## 2014 Drainage Monthly Fee





## Cost of Service Study

- Study reviews the equitable allocation of costs among customer classes
- Results/recommendations could result in changes to the fee structure
- An implementation plan for the results of the cost of service study will be developed

**Drainage**

Single  
Customer  
Class



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## Recommendations

### That Council:

1. Direct Administration to prepare the 2015-2018 Action Plan based on:
  - a. The recommended Drainage Indicative Charges in Attachment 2, Table 1;
  - b. The inclusion of the accelerated scenario and the incremental increase which results in the Drainage Indicative Charge shown in Attachment 2, Table 2;
  - c. An implementation plan for the results of the cost of service study;
2. Direct Administration to incorporate a cost of service study and a review of the Drainage Financial Plan, including program areas for potential acceleration in 2019-2022, into the 2015-2018 Action Plan;
3. Direct Administration to report back no later than 2016 June with an update on the Drainage Financial Plan progress; and
4. Direct that this report is kept confidential until rise and report; and that the in camera presentations and discussions remain confidential under Sections 23(1)(b), 24(1)(a) and (b) of the *Freedom of Information and Protection of Privacy Act* or until directed otherwise.