



Implementing a Stormwater Utility

July 24, 2014



Outline



- Review of the Stormwater Utility Program
 - Key decisions
 - How it will work
- Follow-Up from Engagement and Case Studies
- Incentive Program Update
- Next Steps and Communications
- Overview of Changes to the Bylaw
- Future Focus Areas
- Recommendations



Team Stormwater

Collaborative Working Group

- Engineering and Public Works
 - Underground Utilities and Environmental Sustainability
- Sustainable Planning and Community Development
 - Community Planning, Development Permits, Permits and Inspection
- Finance
- Citizen Engagement and Strategic Planning

With Guidance from:

- Kitchener, Waterloo, Edmonton, Portland, Seattle

Our Stormwater System



- Over 15,000 property connection pipes
- 5,700 catch basins
- 253 km of stormwater mains (Victoria-Campbell River)
- 3 stormwater rehabilitation units
- 73 stormwater outlets

Rainwater Management



City projects include:

- Fisherman's Wharf Rain Garden
- Burnside Gorge Community Centre green roof, permeable paving
- Spirit Square Rain Garden at City Hall
- Trent Street Rain Garden

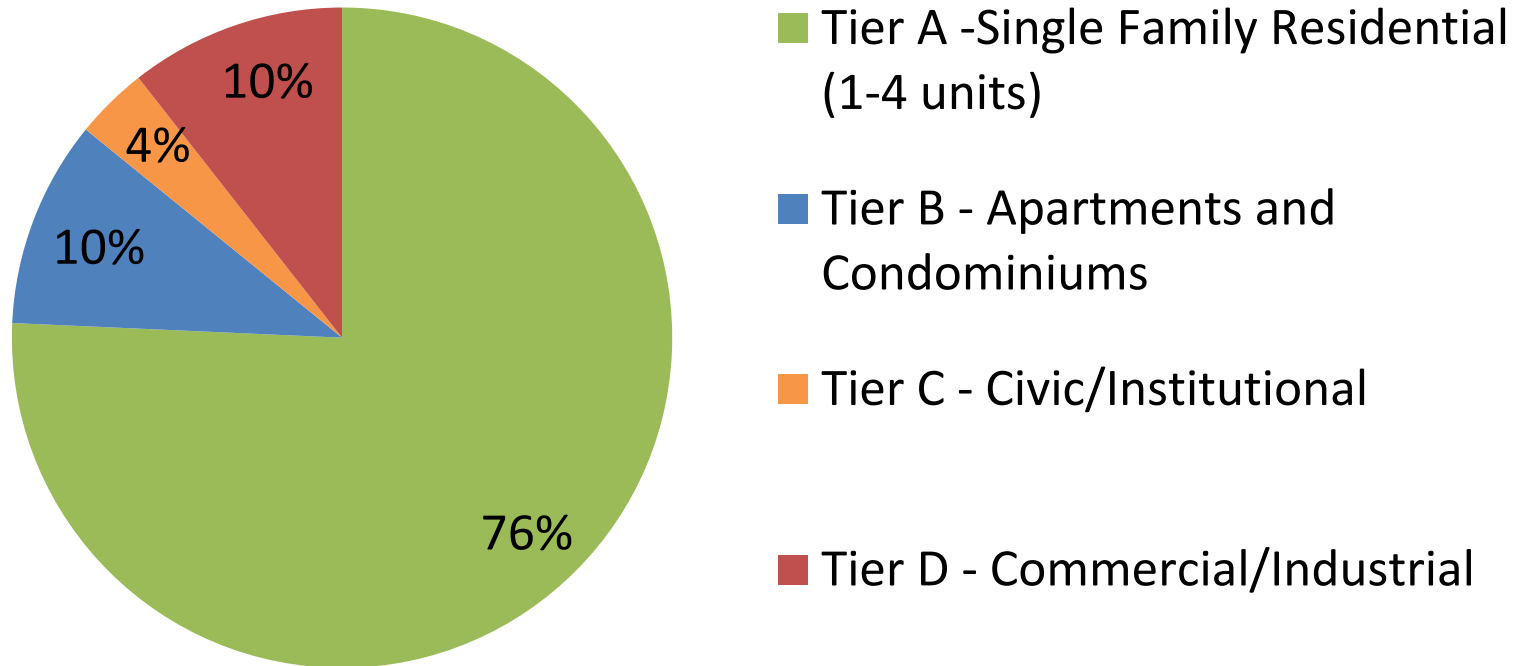


Stormwater Utility Objectives



- User pay: link impacts with costs
 - Property Value basis → Property Attribute basis
- All properties included
- Improve stormwater quality and reduce flow into system and onto beaches.
- Educate and change the way people view and treat rainwater that lands on their property
 - From problem → to opportunity/resource
- Development of Stormwater Reserve Fund
- Budget remains the same: old vs new system

Breakdown of Properties



Total of 13,553 properties



Stormwater Utility Fee Factors



1. Impermeable Surfaces Factor

- For Tier A, building footprint + 3% representing all other hard areas
- For Tier B, C & D, actual measurement from plans and photos

2. Frontage Factor

- Cost per meter of frontage –Downtown, Arterial, Collector, Local
- For cleaning of streets and sidewalks, to keep pollutants out of system

3. Intensity Factor

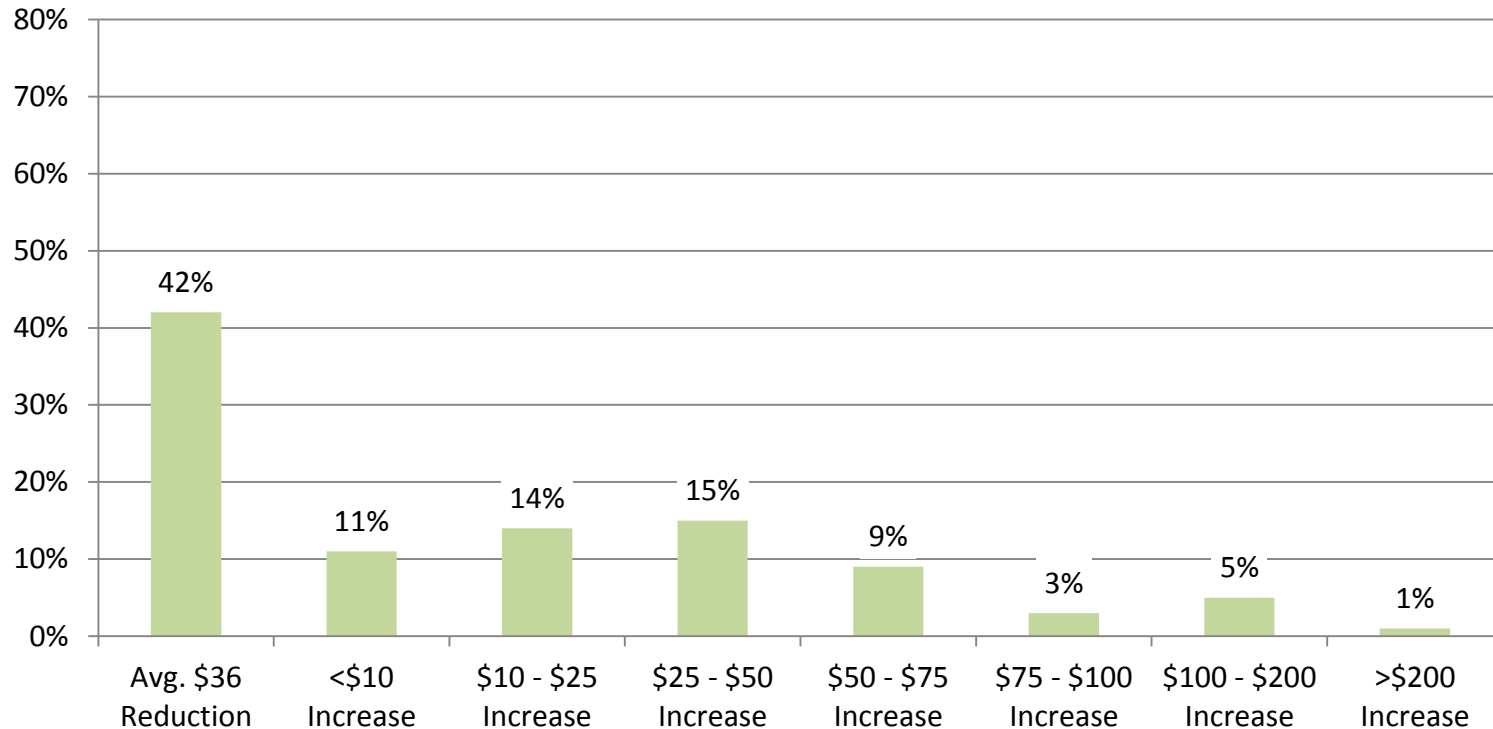
- For impact of property type on Stormwater System. Based on BCA codes

4. Codes of Practice Factor

- Only for properties with 10+ parking spaces or specific industry

What this change means for Single Family Residential

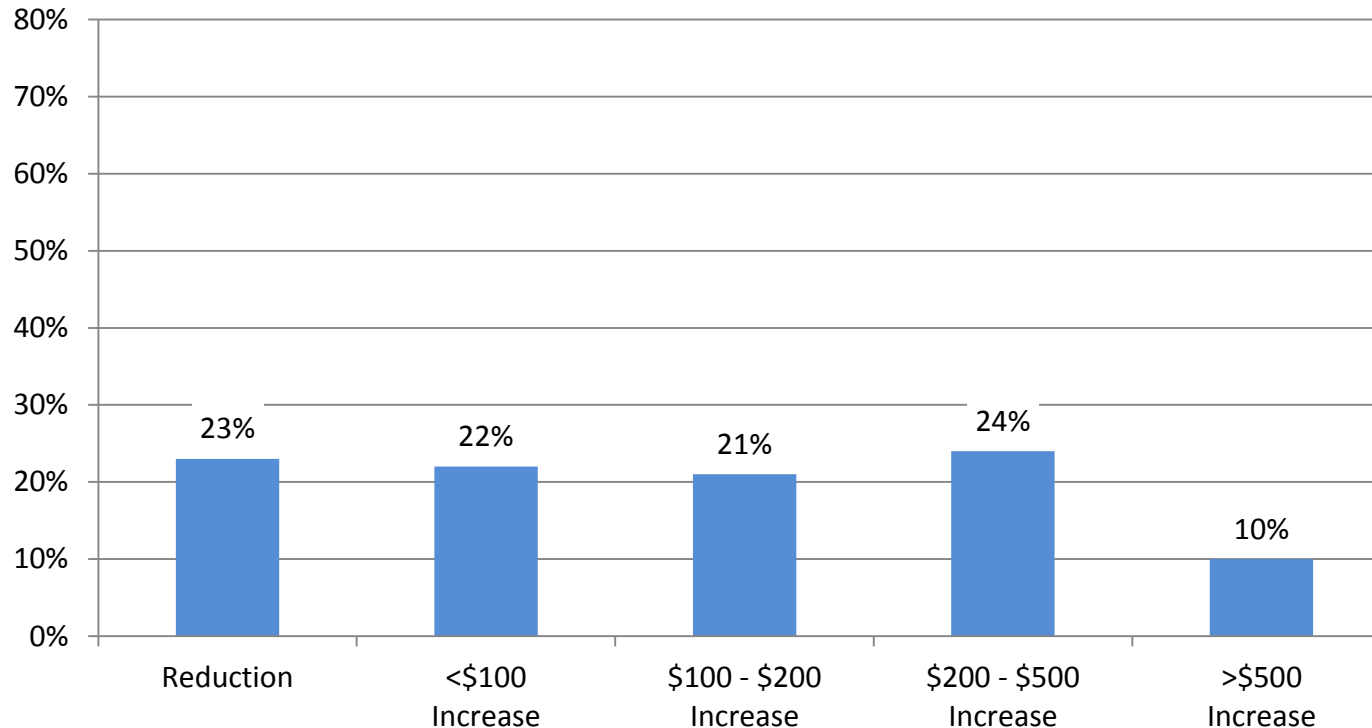
Approximate Fee Change for Single Family Residential



- 10,385 properties
- Average fee is \$147 (including Property Tax portion)

What this means for Apartments and Condos

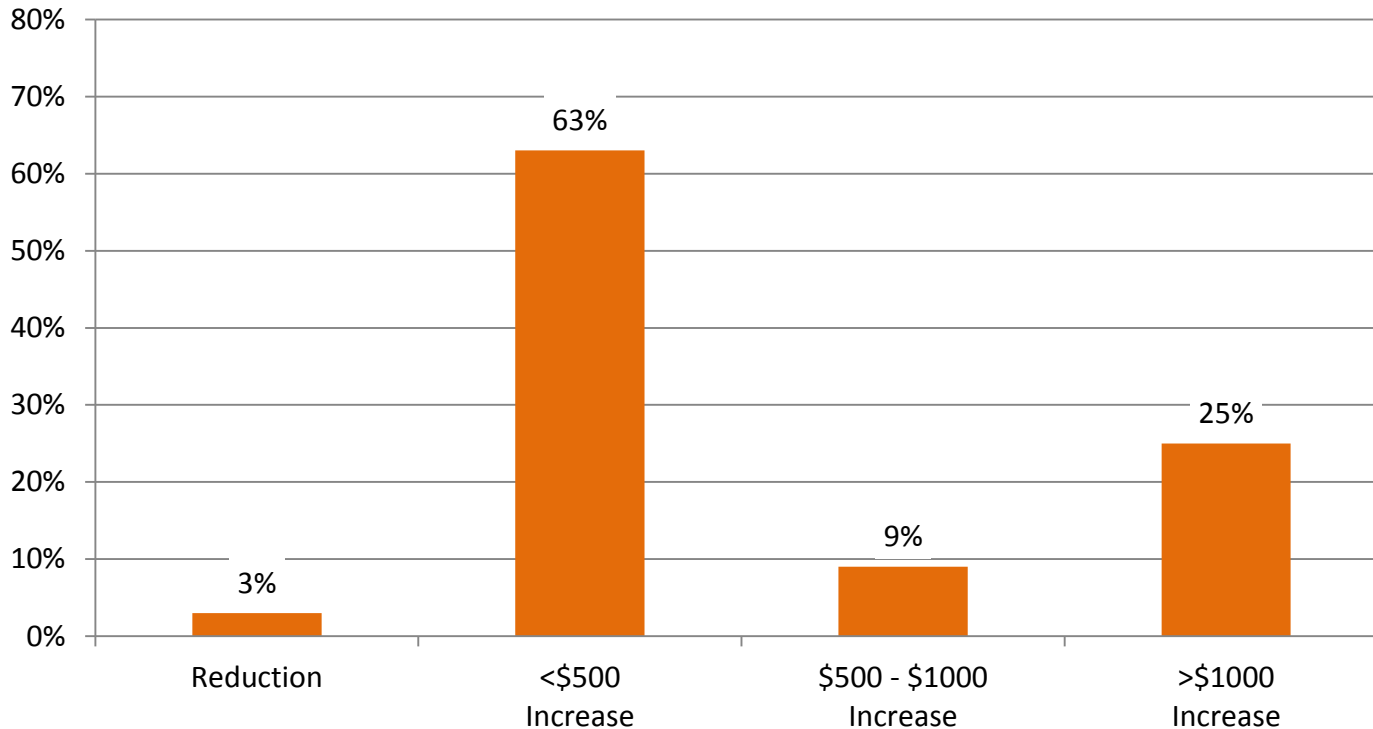
Approximate Fee Change for Apartments and Condos



- 1,428 properties
- Note: Fees shown represent groups of 5 or more units.

What this means for Civic/Institutional

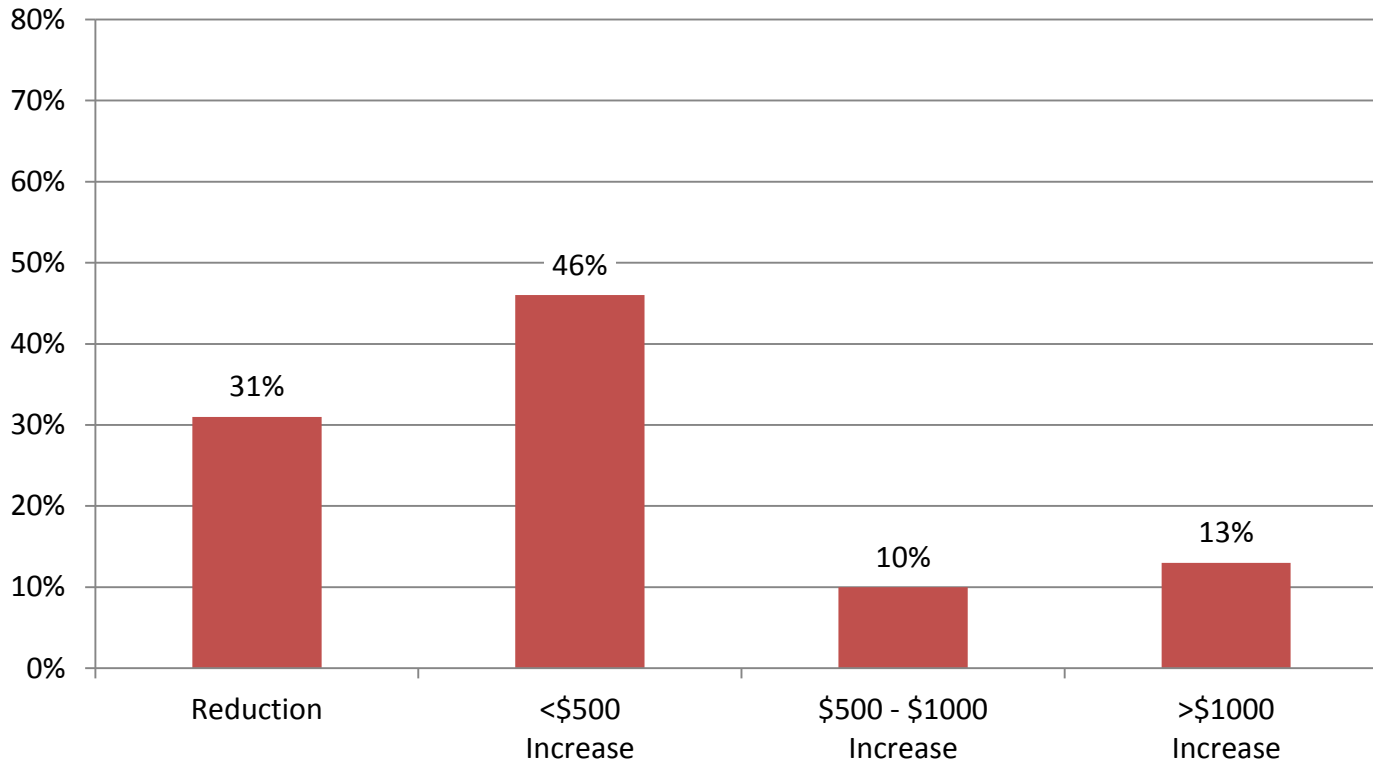
Approximate Fee Change for Civic/Institutional



- 287 properties

What this means for Commercial/Industrial

Approximate Fee Change for Commercial/Industrial



- 1,453 properties
- Note: Many of these properties include multiple units.



Impact on City Budget

- This change is revenue neutral. The impact on the City's budget is the same as it would have been with funding coming from Property Taxes.
- The redistribution is based on property attributes rather than on property values.



Special Consideration



- **Tax Exempt Properties**
 - Permissive Tax Exempt: 3 year phase in to full fees (2016 - 2018)
 - Balance of Tax Exempt properties will not have a phase in
- **Properties with No Connection**
 - Will be exempted from the Impermeable Surface Factor amount, but will be assessed for other portions:
 - Must have their own discharge straight to ocean; or
 - Must have an approved Rock Pit on their property instead of a SW connection
 - Have no main on their frontage
 - A property with a stormwater lateral connected into a sewer main is considered to have a valid connection (grandfathered)



Special Consideration: SD 61



Ownership: Most schools located on many individual lots with different ownership: SD #61, City of Victoria, and In-trust

- Are considered to be leased to SD #61, City does not maintain them

Changes to Billing:

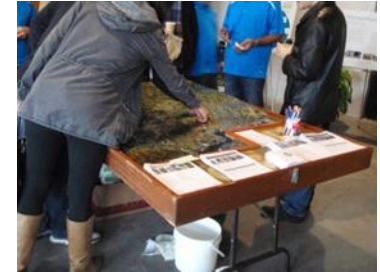
- Impermeable Surfaces Factor:
 - Including area for buildings, parking lots & drop-off areas
 - Excluding “greater community use” areas (playgrounds, courts, etc.)
- Only being billed for one Intensity Factor per school, not per property

Factors remaining unchanged: Frontage Factor, Codes of Practice Factor

Other Considerations:

- Given 3 year phase-in period
- Eligible for annual 10% Education Credit, in addition to 40% credit if managing rainwater sustainably.
- Included in case studies, will be invited to workshops

Follow-up from Engagement



- Case Studies
 - Explore return on investment
 - Involve associations to look at a variety of property types
- Consider a rebate program
- Credit program: make it flexible and easy to use
- City to provide support to help property owners undertake credit program
- Increase communication and education
- Offer more time so property owners can plan for change



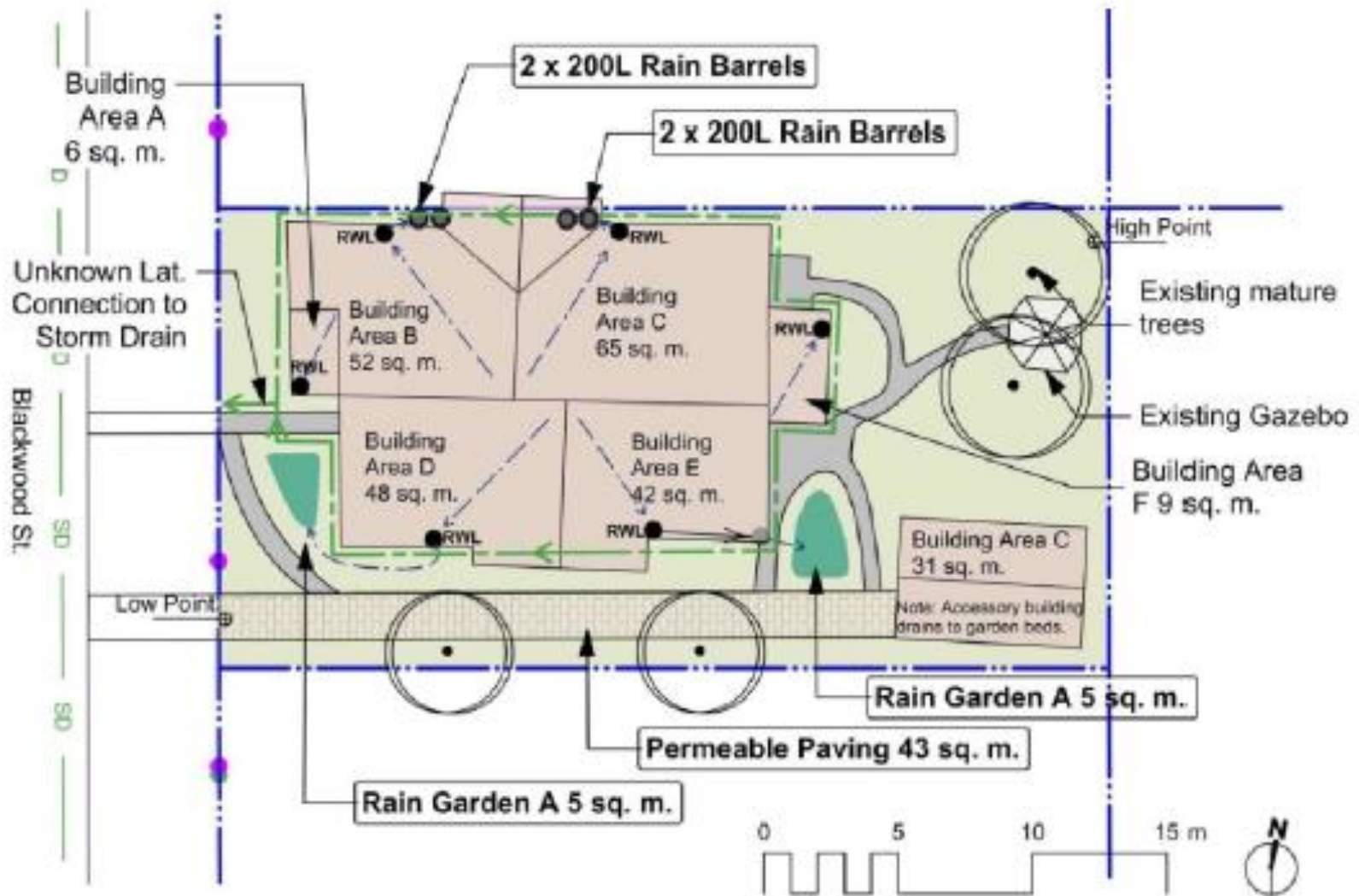
Case Study Report



- KWL studied 20 properties across all Tiers
- Very useful – helped to revise Credit program
 - Emphasis on improving stormwater quality, less on flow reduction
 - Rainwater management practices that reduce flow into system will not help peak flows in severe storms
 - Proposed changes to the Credit program – one single method could have larger impact and be less costly than two smaller ones
 - Supported idea of rebates
 - Tie incentives to the amount of impermeable area being managed
 - Secondary benefits are significant (education, reduced use of potable water related water & sewer fees, increased property values)



Single Family Property – Example of Case Study



Incentive Program



Goals

- Rewards sustainable rainwater management : storage & reuse, mimicking the natural water cycle
- Improve quality of stormwater and reduce the rate of flow to the stormwater system
- Influence sustainable choices for those who are planning to undertake work on their property

Bottom line

- Not a high ROI. Projects are expensive
- Where a property owner is already planning to work, may help them choose a “green” option

Incentive Program

Credits: Ongoing reduction off the stormwater utility fee, must be renewed every five years (for all property types)

Rebates: One-time, upfront payment to help reduce installation costs (only for single family homes)

Note: Will return with final rebate details this winter.



Incentive Details

Tier B, C & D Properties – Larger credit

- Fees and credits are more significant in value and impact on stormwater system is also more significant, when compared to single-family properties
- Credits range from 2.5%-40% , plus educational credit of 5-10% if applicable, maximum credit of 50%



Credits – Tier B, C, and D

Method	Minimum Roof Area Treated (%)	Minimum Driveway Area Treated (%)	Other factors considered	Cost Estimates*	Ongoing Credit	Credit Amount (based on a sample utility bill of \$1,200)
Cistern	25%-90%	N/A	(hand use/unpermitted, plumbed/used for irrigation, plumbed indoor use)	\$6,000 Avg per unit: Above ground \$1,030/m ³ Below ground \$1,920/m ³	2.5% - 25%	\$30- \$300
Rain Garden Bioswale Infiltration Chamber	25%-90%	0-90%	N/A	\$20,000 Avg per unit: Rain Garden \$215/m ² Bioswale \$320/m ² Infil. Chamber \$3255/m ³	5% - 40%	\$60-\$480
Permeable Paving	0-90%	25% - 90%	(also considers infiltration pipe or no pipe, etc)	\$35,000 Avg per unit: \$300/m ²	5% - 40%	\$60-\$480
Green Roof	25-90%	N/A	Extensive or intensive	\$60,000 Avg per unit: \$590/m ²	5% - 30%	\$60-\$360
Education	N/A	N/A	Educate Employees/ Public		5% - 10%	\$60-\$120

* Estimates are variable, as property size and amount of impermeable areas vary greatly for these tiers. Average figures will be lower for larger installations.

Incentive Details

Tier A- Single Family Properties – Rebate + smaller credit

- Value of original credit program was small (average maximum \$59 annually) and would likely not encourage participation
- One time rebate would be more significant (estimated \$375 to \$1,500 and smaller rebate for rain barrels)
- Rebates would be capped annually. Final rebate details will be brought to Council this winter.
- Maximum credit of 10%



Credit & Draft Rebates – Tier A

Method	Minimum Size	Minimum Roof Area Treated (m2)	Average Cost for methods – based on case studies (actual costs likely less if only treating a portion of area)	Ongoing Credit	Credit Amount (based on average Single Family SW Utility Bill: \$147)	Draft Minimum Rebate(under development)
Rain Barrel	400L	N/A	\$150	N/A	N/A	\$25
Cistern	1,200 L	25	\$2,000	10%	\$14.70	\$375
Infiltration Chamber	*	25	\$9,000	10%	\$14.70	\$625
Rain Garden	*	25	\$3,000	10%	\$14.70	\$625
Bioswale	*	25	\$3,000	10%	\$14.70	\$625
Permeable Paving – no infiltration trench/piping	10 m2	N/A		10%	\$14.70	\$200
Permeable Paving – infiltration trench/piping	*	25	\$8,000	10%	\$14.70	\$750

* Minimum size will be dictated by the Roof Area Treated



Streamlining Permit Process

- Several rainwater management methods would likely require Development Permits or Heritage Alteration Permits, and be subject to zoning regulations.
- Potential for poorly designed rainwater management facilities.
- Report follows with recommendations regarding exemptions and zoning changes to streamline permit process where appropriate.



Next Steps

Pre Launch:

Communicate timelines to stakeholders

Industry Education

Celebrate Rainwater Management in Victoria

Phase 1:

Launch Rainwater Management Incentive Program and Provide SW Property Assessment Notice

Rainwater Management Workshops

Phase 2:

2016 Property Taxes adjusted to reflect SW utility

Introduce Rainwater Management Standards for New Development

Phase 3:

First Stormwater Utility Bills Issued

City continues to develop own set of rainwater management guidelines for City properties, buildings, roads and right s of way

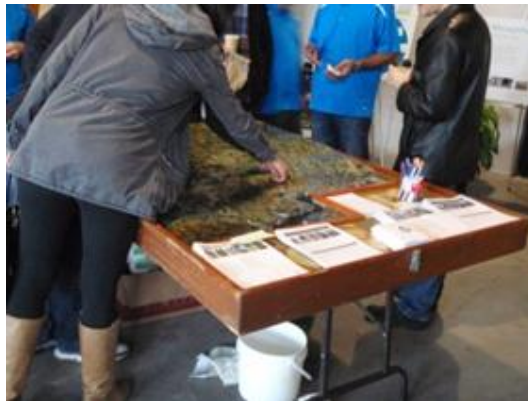
Communications: Pre Launch

- Keep momentum going
- Update stakeholders on what to expect in 2015/2016.
- Continue to celebrate City and private properties that are managing rainwater sustainably ie. VicMap Rain Garden Gnome layer, etc.
- Education program for rainwater management industry.



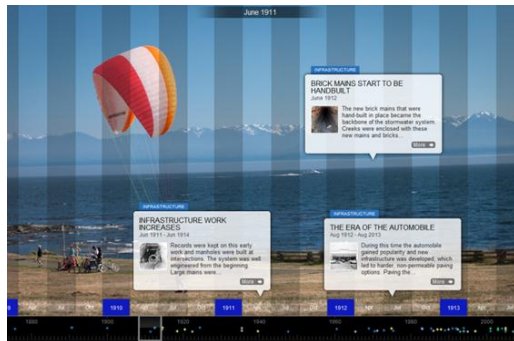
Communications: Launch

- In March 2015 all property owners will receive:
 - A Stormwater Property Assessment Notice
 - property characteristics and budgeting information for 2016
 - Information about Rainwater Management Incentives
 - Educational opportunities to learn about rainwater management and how to apply for incentives.



Communications: 2016

- Spring: At tax time, property owners will be reminded about the change in how stormwater services are billed.
- Fall: First stormwater utility bills will be issued, along with additional information about the stormwater system and the incentive program.





Bylaw Updates



- Stormwater Utility is included in Sewer Bylaw, and is being updated to include these and other changes.
 - Rebates not included in bylaw.
- Changes to sewer sections include:
 - Inspection of lateral for major building projects
 - Possible rehabilitation of existing laterals where applicable
 - Exemptions of sewer charges for water used for irrigation (on select properties)
 - Allowance for sewer overflows from private systems to City system
 - Refunds for utility customers for billing errors

Future Focus Areas - Stormwater

- Explore potential for changes related to new development, to incorporate rainwater management principles.
- Develop rainwater management design guidelines for incorporation into City projects on roads, rights of ways, City property and buildings.





Motions for GPC



1. That Council adopt the Stormwater Utility and model as outlined in this report.
2. That Council adopt the revised Sanitary Sewer and Stormwater Utilities Bylaw (Appendix A).
3. That Council instructs staff to amend the City of Victoria Reserve Fund Policy to establish a Stormwater Utility Reserve Fund. The purpose of this reserve is to provide funding for stormwater equipment and infrastructure.
4. That Council amend the 2014-2018 Financial Plan Bylaw for the 2016 year, to reduce the property value taxes line item by \$5,481,982 and add a stormwater utility fee line item in the same amount.

Questions?

