



**REVISED AGENDA  
PUBLIC MEETING  
STANDING POLICY COMMITTEE ON  
ENVIRONMENT, UTILITIES  
AND CORPORATE SERVICES**

**Monday, April 11, 2016, 2:00 p.m.**

**Council Chamber, City Hall**

**Committee Members:**

**Councillor A. Iwanchuk (Chair), Councillor Z. Jeffries (Vice-Chair) , Councillor E. Olauson (Leave of Absence), Councillor M. Loewen, Councillor P. Lorje, His Worship Mayor D. Atchison (Ex-Officio)**

**Pages**

**1. CALL TO ORDER**

**2. CONFIRMATION OF AGENDA**

***Recommendation***

1. That the email from Candace Savage, dated April 9, 2016 submitting comments be added to item 6.3.1;
2. That the email from Chris Guerette, CEO of the Saskatoon & Region Home Builders Association, dated April 8, 2016 requesting to speak be added to items 7.2.6 and 7.2.7;
3. That the email from Laurie Bourgeois and Mike Thibault, dated April 7, 2016 requesting to speak be added to item 7.2.12; and
4. That the agenda be confirmed as amended.

**3. DECLARATION OF CONFLICT OF INTEREST**

**4. ADOPTION OF MINUTES**

***Recommendation***

That the minutes of Regular Meeting of the Standing Policy Committee on Environment, Utilities and Corporate Services held on March 8, 2016 be adopted.

**5. UNFINISHED BUSINESS**

**6. COMMUNICATIONS (requiring the direction of the Committee)**

## 6.1 Delegated Authority Matters

### Recommendation

That the requests for extension to The Noise Bylaw as outlined in 6.1.1 to 6.1.5 be approved subject to any administrative conditions.

- |       |  |         |
|-------|--|---------|
| 6.1.1 | Noise Bylaw Extension, Swingin' on the Saskatchewan, Tuesday evenings from May 3 to September 27, 2016, 7:00 p.m. to 10:00 p.m., River Landing Amphitheatre, Heidi Lazorko, President, Saskatoon Lindy Hop Inc. [File CK. 185-9] | 9 - 10  |
| 6.1.2 | Noise Bylaw Extension, Community Fun Day in the Park, June 11, 2016, 11:00 a.m. to 4:00 p.m., Mount Royal Park, Nicky Breckner [File CK. 185-9]  | 11 - 11 |
| 6.1.3 | Noise Bylaw Extension, 42nd Annual Civic Pancake Breakfast, June 16, 2016, 6:00 a.m. to 10:30 a.m., 23rd Street between 3rd and 4th Avenues, Yvonne Brooks, Chair, Civic Pancake Breakfast Organizing Committee [File CK. 185-9] | 12 - 12 |
| 6.1.4 | Noise Bylaw Extension, Mental Health and Addiction Services 4th Annual Fun Run, May 1, 2016, 9:00 a.m. to 1:00 p.m., Diefenbaker Park, Dawn Rain, Coordinator Reponse to Violence and Problem Gambling [File CK.185-9]           | 13 - 13 |
| 6.1.5 | Noise Bylaw Extension, The Kidney Foundation of Canada, Kidney Walk, May 28, 2016, 7:30 a.m. to 3:00 p.m., Kiwanis Park North, Erin Gray, Manager, Community Development, SK Branch [File CK. 185-9]                             | 14 - 14 |

## 6.2 Matters Requiring Direction

- |       |   |         |
|-------|---|---------|
| 6.2.1 | 2015 Annual Report - Saskatoon Environmental Advisory Committee (File CK. 430-19) | 15 - 34 |
|-------|---|---------|

The Saskatoon Environmental Advisory Committee has approved submission of the 2015 Annual Report.

### Recommendation

That the 2015 Annual Report of the Saskatoon Environmental Advisory Committee be forwarded to City Council for information.

## 6.3 Requests to Speak (new matters)

- |       |   |         |
|-------|---|---------|
| 6.3.1 | Development at the Swale - Louise Jones (File CK. 4131-5) | 35 - 38 |
|-------|---|---------|

A request to speak has been received from Louise Jones, Chair, The Northeast Swale Watchers, dated March 24, 2016 along with a statement of key points relating to development at the Swale.

An email submitting comments has been added to this item from Candace Savage.

**Recommendation**

1. That the speaker be heard and;
2. That the information be received.

**7. REPORTS FROM ADMINISTRATION**

**7.1 Delegated Authority Matters**

- 7.1.1 Request for Information - Managed Print Services (File CK. 1005-1) 39 - 41**

**Recommendation**

That the report of the General Manager, Corporate Performance Department dated April 11, 2016 be received as information.

**7.2 Matters Requiring Direction**

- 7.2.1 Service Saskatoon - April 2016 Progress Report (Files CK. 374-1 and CP. 372-2) 42 - 49**

A video presentation will be provided.

**Recommendation**

That the report of the General Manager, Corporate Performance Department, dated April 11, 2016, be forwarded to City Council for information.

- 7.2.2 Water Conservation Update - Response to Saskatoon Environmental Advisory Committee (SEAC) Report - April 2016 (Files CK. 7900-1 and CP. 7550-001) 50 - 60**

**Recommendation**

That the Standing Policy Committee on Environment, Utilities, and Corporate Services recommend to City Council:

1. That a rebate program for indoor plumbing fixtures be considered in the 2017 Business Plan and Budget deliberations as part of the Utility Business Line;
2. That the Administration continue to develop protocols for outdoor watering schedules based on annual monitoring of peak demand at the Water Treatment Plant;
3. That the Administration report back on how the Advanced

Metering Infrastructure (AMI) system will encourage water conservation; and

4. That the 'Be Water Wise' campaign continue and a plan for 2017 - 2019 be developed for the 2017 Business Plan and Budget deliberations as part of the Utility Business Line.

**7.2.3 Saskatoon GIS Applications Upgrade - Request for Proposal Award (File CK. 261-16) 61 - 64**

**Recommendation**

That the Standing Policy Committee on Environment, Utilities and Corporate Services recommend to City Council:

1. That a contract with Latitude Geographics Group Ltd. be approved for the enhancement of our web mapping applications to the newest platform at an estimated fee of \$493,545 plus applicable taxes; and
2. That the City Solicitor be requested to prepare the appropriate agreement and that His Worship the Mayor and the City Clerk be authorized to execute the agreement under Corporate Seal.

**7.2.4 2016 Membership: South Saskatchewan River Watershed Stewards (Files CK. 225-1 and CP. 155-1) 65 - 71**

**Recommendation**

That the Standing Policy Committee on Environment, Utilities, and Corporate Services recommend to City Council that the City of Saskatoon membership with the South Saskatchewan River Watershed Stewards Incorporated be renewed for 2016.

**7.2.5 Public Space Recycling (Files CK. 7830-5 and CP. 7837-004) 72 - 77**

**Recommendation**

That the report of the General Manager, Corporate Performance Department, dated April 11, 2016, be forwarded to City Council for information.

**7.2.6 Energy Efficient Retrofit Program (Files CK. 375-5 and CP. 0753-004) 78 - 85**

A request to speak has been received from Angie Bugg, Saskatoon Environmental Advisory Committee, dated March 28, 2016.

A request to speak has been added to this item from Chris

Guerette, CEO of the Saskatoon & Region Home Builders Association.

**Recommendation**

That the report of the General Manager, Corporate Performance Department, dated April 11, 2016, be forwarded to City Council for information.

**7.2.7 Energy Efficient Building Standards in New Dwelling Construction (Files CK. 540-1 and PL. 4350-242-14) 86 - 92**

A request to speak has been received from Angie Bugg, Saskatoon Environmental Advisory Committee, dated March 28, 2016.

A request to speak has been added to this item from Chris Guerette, CEO of the Saskatoon & Region Home Builders Association.

**Recommendation**

That the report of the General Manager, Community Services Department, dated April 11, 2016, be forwarded to City Council for information.

**7.2.8 2016 Materials Testing Services - Award of Engineering Services - Asphalt, Concrete, Soil and Micro-Surfacing (Files CK. 4110-1 and TU. 1000-1) 93 - 95**

**Recommendation**

That the Standing Policy Committee on Environment, Utilities and Corporate Services recommend to City Council:

1. That 2016 concrete testing in the East area and soil testing in the North area be awarded to AMEC Foster Wheeler, at a total estimated cost of \$45,500, plus GST;
2. That 2016 concrete testing in the West area be awarded to Clifton Associates Ltd. at a total estimated cost of \$15,000, plus GST;
3. That 2016 soil testing in the West area and asphalt testing in the East area be awarded to Englobe, at a total estimated cost of \$61,000, plus GST;
4. That 2016 asphalt testing in the north area be awarded to Golder Associates Ltd., at a total estimated cost of \$16,000, plus GST;
5. That 2016 asphalt testing in the West area, soils testing in the East area and micro-surfacing testing in the entire city

be awarded to PSI Technologies Ltd., at a total estimated cost of \$204,000, plus GST; and

6. That the City Solicitor be requested to prepare the appropriate agreement and that His Worship the Mayor and the City Clerk be authorized to execute the agreement under the Corporate Seal.

**7.2.9 City Compost Depots - Award of Contract - Consulting Advisor, Equipment and Operators (Files CK. 7830-4-2 and PW. 7832-2)** 96 - 99

**Recommendation**

That the Standing Policy Committee on Environment, Utilities and Corporate Services recommend to City Council:

1. That the proposal submitted by Wozniak and Sons Enterprises Ltd. to provide a consulting advisor, equipment and operators for a total cost of \$260,810.00 (including taxes) be approved; and
2. That the City Solicitor be requested to prepare the appropriate agreement and that His Worship the Mayor and the City Clerk be authorized to execute the agreement under the Corporate Seal.

**7.2.10 Solar Power Addition at the Landfill Gas Power Generation Facility - Award of Contract for Solar Photovoltaic System (Files CK. 2000-5, x 600-8 and SLP. 2000-10-7)** 100 - 103

**Recommendation**

That the Standing Policy Committee on Environment, Utilities and Corporate Services recommend to City Council:

1. That the proposal submitted by Rock Paper Sun Ltd. for the supply of a 27 kilowatt Solar Photovoltaic System for a total cost of \$152,725.65 (including taxes) be approved; and
2. That the City Solicitor be requested to prepare the appropriate agreement and that His Worship the Mayor and the City Clerk be authorized to execute the agreement under the Corporate Seal.

**7.2.11 Underground Locates One-Call System (Files CK. 2000-1, x 374-1 and SLP. 290-2)** 104 - 106

**Recommendation**

That the report of the General Manager, Transportation & Utilities Department dated April 11, 2016, be forwarded to City Council for information.

**7.2.12 Surface Flooding Control Strategy for the Storm Water Utility (Files CK. 7560-1 and TS. 7820-1)** 107 - 133

A PowerPoint presentation will be provided.

A request to speak has been added to this item from Laurie Bourgeois and Mike Thibault.

**Recommendation**

That the Standing Policy Committee on Environment, Utilities and Corporate Services recommend to City Council:

That the Administration develop a comprehensive Storm Water Utility Business Plan, including a longer-term capital and funding plan for storm water infrastructure, that considers the factors outlined in the report of the General Manager, Transportation & Utilities Department dated April 11, 2016.

**7.2.13 WWTP - Existing System Replacements - Lab Information Management System - Award of Professional Services (Files CK. 261-1, x 670-1 and TU. 7990-106)** 134 - 136

**Recommendation**

That the Standing Policy Committee on Environment, Utilities and Corporate Services recommend to City Council:

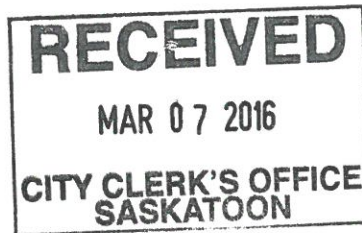
1. That the proposal for professional services, submitted by Promium LLC, for the supply, installation, and configuration of a new computerized Lab Information Management System for the Water and Environmental Labs, at an estimated cost of \$175,239.46 (including GST and PST), be approved; and
2. That the City Solicitor be requested to prepare the appropriate agreement and that His Worship the Mayor and the City Clerk be authorized to execute the agreement under the Corporate Seal.

8. MOTIONS (NOTICE PREVIOUSLY GIVEN)
9. GIVING NOTICE
10. URGENT BUSINESS
11. IN CAMERA SESSION (OPTIONAL)
12. ADJOURNMENT



**Heidi Lazorko**

802 Main Street  
Saskatoon, SK S7H 0K3  
(306) 260-9431  
heidi.lazorko@saskatoonlindyhop.ca



3rd March 2016

**City Clerk's Office**

% City Hall  
222 3rd Avenue North  
Saskatoon, SK S7K 0J5  
city.clerks@saskatoon.ca

**Re: Noise Bylaw Extension**

To Whom it May Concern,

On behalf of Saskatoon Lindy Hop Inc., I'm requesting an extension to the City of Saskatoon's Noise Bylaw. This request is for Swingin' on the Saskatchewan, held at the River Landing amphitheatre on Tuesday evenings from May 3rd to September 27th, inclusive. We request an extension of the Noise Bylaw to 10pm for these nights.

Saskatoon Lindy Hop provides a weekly opportunity for a free swing dance lesson and deejayed dance at the River Landing Amphitheatre. This event uses speakers and microphone headsets for the instructors, with amplified music until 10pm. This event has been happening at River Landing since 2008, with Saskatoon Lindy Hop Inc. taking over its operation in 2010. Enclosed is a sample poster regarding the event.

Summary of request details:

- Event: Swingin' on the Saskatchewan
- Contact info: Heidi Lazorko, phone (306) 260-9431, email heidi.lazorko@saskatoonlindyhop.ca
- Dates and Times: 7-10pm Tuesday evenings from May 3rd to September 27th, 2016 inclusive
- Location: River Landing Amphitheatre

Thank you for your consideration.

Sincerely,

**Heidi Lazorko**

President, Saskatoon Lindy Hop Inc.

# SWING DANCING AT RIVER LANDING

## SWINGIN' ON THE SASKATCHEWAN

SWING DANCING - TUESDAY EVENINGS ALL SUMMER  
[WWW.SASKATOONLINDYHOP.CA](http://WWW.SASKATOONLINDYHOP.CA)

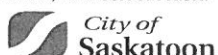
**RIVER LANDING AMPHITHEATRE**  
**BEGINNER DANCE LESSON: 7PM**  
**DANCING: 8PM TO 10PM**

**FREE • EVERY TUESDAY FROM MAY THROUGH SEPTEMBER**  
**COME ON YOUR OWN OR BRING A FRIEND • EVERYONE IS WELCOME**

FOR UPDATES, LIVE MUSIC DATES AND MORE DANCE OPPORTUNITIES VISIT:

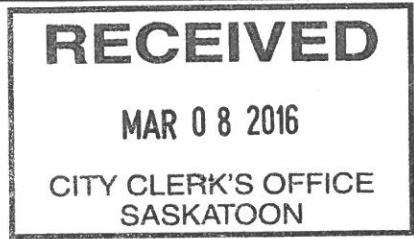
[WWW.SASKATOONLINDYHOP.CA](http://WWW.SASKATOONLINDYHOP.CA)

A SASKATOON LINDY HOP EVENT, WITH SUPPORT FROM:



185-9

**From:** Nicky Breckner <nbreckner@saskpower.com>  
**Sent:** March 08, 2016 9:30 AM  
**To:** Web E-mail - City Clerks  
**Subject:** Noise Bylaw Extension Request



Hi,

My name is Nicky Breckner and I am the President of the Mount Royal Community Association.

We have been approved for our 4<sup>th</sup> annual Community Fun Day in the Park to be held June 11, 2016 at Mount Royal Park next to Howard Coad School.

Our day will start at 11:00 am until 4:00 pm. We will be having live and taped music with amplifiers so I think I need to request a Noise bylaw extension.

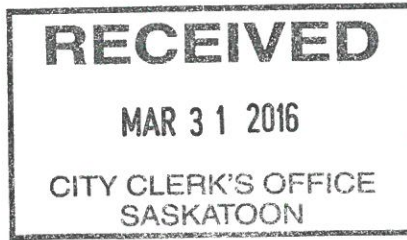
Please let me know how I proceed with this.

Thanks a bunch!

Nicky  
President - MRCA

*Nicky Breckner*  
CSR – Business Support  
Procurement and Supply Chain - Apparatus Stores  
Box 1560  
1370 Fletcher Road (SRSC)  
Saskatoon, SK S7K 5H2  
Phone – 306-668-8771  
Fax - 306-934-7917

This email including attachments is confidential and proprietary. If you are not the intended recipient, any redistribution or copying of this message is prohibited. If you have received this email in error, please notify us by return email, and delete this email.



March 30, 2016

His Worship the Mayor  
and Members of City Council

Your Worship and City Councillors:

**Re: Request for Extension of the Noise Bylaw  
42<sup>nd</sup> Annual Civic Pancake Breakfast  
Thursday, June 16, 2016 - 6:00 a.m. to 10:30 a.m.**

Once again, it is that time of year for the annual Civic Pancake Breakfast, scheduled to be held on 23<sup>rd</sup> Street between 3<sup>rd</sup> and 4<sup>th</sup> Avenues from 7:00 a.m. to 10:30 a.m. on Thursday, June 16, 2016.

The Civic Pancake Breakfast Organizing Committee is requesting that the Standing Policy Committee on Environment, Utilities and Corporate Services extend the hours under the Noise Bylaw to accommodate the amplified music from the live entertainment from 6:00 a.m. (for warm-up) through 10:30 a.m.

We are pleased to once again be hosting a "zero waste" event by using compostable dishes, cups, cutlery, and garbage bags, as well as providing an education to the public about living more sustainably.

As in previous years, there will be entertainment, celebrity servers, sunshine, and fun!

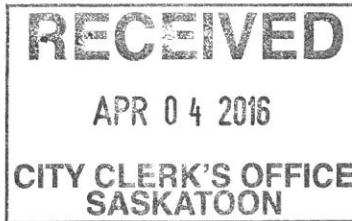
Yours truly,

**Yvonne Brooks, Chair**  
Civic Pancake Breakfast Organizing Committee



**MENTAL HEALTH AND ADDICTION SERVICES**

Community Adult Programs  
Saskatoon City Hospital, 701 Queen Street  
Saskatoon, SK S7K 0M7  
TEL (306) 655-8995  
FAX (306) 655-8806



April 4, 2016

To whom this may concern;

The purpose of this letter is to request an extension to the Noise Bylaw. I am on the committee for the Mental Health and Addiction Services Fun Run held on May 1, 2016. We are hosting our 4th Annual Fun Run event to promote health and wellness for our clients. It is a walk/run of 2, 5, 10, 16 and 20 km that takes place on Sunday, May 1 at 9am. We start and finish at Diefenbaker Park. There will be anywhere from 200 – 300 people participating. We will have a small band or music playing when people come in and we will have a microphone to start the event. We are requesting an extension as our event begins at 9am and it will likely be finished by 1pm. Thank you for your consideration.

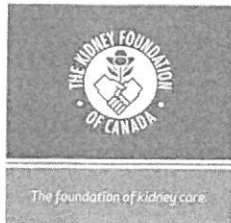
Sincerely,

A handwritten signature in cursive script that reads "Dawn Rain".

Dawn Rain, MSW, RSW  
Coordinator Response to Violence and Problem Gambling  
Saskatoon City Hospital  
701 Queen Street  
Saskatoon, SK S7K 0M7  
306-655-8995

185-9

185-9



**RECEIVED**  
APR 04 2016  
CITY CLERK'S OFFICE  
SASKATOON

**Saskatchewan Branch**  
1-2217 Hanselman Court  
Saskatoon, SK S7L 6A8  
T. 306.664.8588 / 888.664.8588  
F. 306.653.4883  
www.kidney.sk.ca

To Whom It May Concern:

I am writing to request a noise bylaw extension on Saturday, May 28<sup>th</sup>, 2016 for Kiwanis Park North.

The Kidney Foundation of Canada, Saskatchewan Branch has been granted approval to use the park for our Kidney Walk fundraising event. This event brings together approximately 150 members of the kidney community in Saskatoon and surrounding area for a fun run and walk of 1 km, 2 km or 5 km. As part of our event, we include speakers and music.

Set up will begin in the park at 7:00 a.m. but the entertainment will not begin until after 9:00 a.m. We have approval to use the park until 3:00 p.m.

If you have any questions or concerns, please don't hesitate to contact me. I look forward to your response.

Sincerely,

Erin Gray  
Manager, Community Development  
Saskatchewan Branch  
#1-2217 Hanselman Court  
Saskatoon, SK  
S7L 6A8

March 10, 2016

Secretary, Standing Policy Committee on  
Environment, Utilities & Corporate Services

Re: **2015 Annual Report**  
**Saskatoon Environmental Advisory Committee (SEAC)**

## **INTRODUCTION**

### **Purpose:**

The Saskatoon Environmental Advisory Committee has a dual mandate: (1) to provide advice to Council on policy matters relating to the environmental implications of City undertakings; and (2) to identify environmental issues of potential relevance to the City. SEAC was formed in 1973 by City Council and has been actively pursuing its mandate since that time, with the expertise of a dedicated, diverse, and knowledgeable roster of members.

SEAC has established that they will:

1. Be aware of the resources available to the City of Saskatoon for dealing with environmental issues.
2. Prepare and publish an annual report on the activities of the Committee over the past year.
3. Encourage liaisons between the City of Saskatoon and environmental agencies serving higher levels of government.

### **Reporting Relationship:**

The Environmental Advisory Committee reports to the Standing Policy Committee on Environment, Utilities and Corporate Services.

### **Composition:**

The Committee consists of 11 members, including one City Councillor, one representative of the Saskatoon Health Region, and nine additional members appointed by City Council.

Members are appointed for two-year terms, which are renewable up to six years. In the event that a member is unable to complete his/her term, a replacement may be named to complete that term. New appointments are made by City Council upon resignation of a member and on expiration of the term of public appointments. Members of SEAC should possess:

- sound general knowledge of the Saskatoon area and its existing and potential environmental issues;
- expertise in disciplines such as ecology, biology, chemistry, physics, geography, economics, demography, sociology, medicine, aesthetics, toxicology, engineering and conservation.

**Meetings:**

The Committee meets at 11:30 am on the second Thursday of each month except for July, August and December. All meetings are open to the public. Members of the public wishing to attend a meeting are able to review the agenda prior to the meeting on the City's web site at [www.saskatoon.ca](http://www.saskatoon.ca) (select "City Hall" tab, then "City Council, Boards & Committees.")

**THE YEAR IN REVIEW**

**Appointments and Reappointments made by City Council for 2015:**

Dr. Michael Hill, Chair  
Ms. Kathleen Aikens, Vice-chair  
Ms. Angie Bugg  
Ms. Aditi Garg  
Mr. Sean Homenick  
Ms. Namarta Kochar  
Mr. Brent Latimer (Saskatoon Health Region)  
Ms. Mairin Loewen (City Council)  
Dr. David McGrane  
Dr. Saeed Moshiri  
Mr. Brian Sawatzky

Administrative and City of Saskatoon staff support was provided by Ms. Brenda Wallace, Director, Environmental and Corporate Initiatives, and Ms. Debby Sackmann and Ms. Rhonda Rioux, City Clerk's Office, and Councillor Mairin Loewen.

**SEAC Priorities and Progress in 2015:**

The Committee held a task group meeting to establish priorities for 2015. Resulting from this meeting were five objectives, including (1) Greenhouse gas emissions targets and reductions strategies; (2) Organic waste diversion; (3)



Monitoring Wetland & Dark Sky Policy; (4) Developing greater linkages with the Standing Policy Committee on Environment, Utilities and Corporate Services; and (5) Continued support for the Subcommittee on Festival Sustainability. The 2015 Goals and Objectives were submitted to the Standing Policy Committee on Environment, Utilities & Corporate Services as information, in a report dated February 2015, (Attachment 1).

The following is a brief update on progress achieved in relation to the identified objectives. Progress by SEAC in relation to each goal and sub-goal is italicized.

- 1) Support greenhouse gas (GHG) targets and reduction strategies for the City of Saskatoon (corporate), industry, and community, through the following channels:
  - A) Advocate for, and support the facilitation of, public stakeholder consultations regarding targets for GHG emissions for corporate (City of Saskatoon), community, and industrial sector.  
*The Committee assisted financially, and with the facilitation of, stakeholder consultations on targets for community-wide GHG emissions reductions in March 2015. The Committee additionally drafted the report: "Rationale for Setting Emission Targets for the City of Saskatoon," which was submitted to the Standing Policy Committee on Environment, Utilities, and Corporate Services in December 2015.*
  - B) Advocate for an updated GHG inventory, as the most recent inventory was completed in 2005 with data from 2003.  
*The Committee submitted/presented a memo in June/July 2015 to the Executive Committee requesting funding for an updated GHG inventory for the City of Saskatoon (corporate and community emissions). The Division of Environmental and Corporate Initiatives indicated in Fall 2015 that they would reallocate resources to complete this inventory.*
  - C) Request information on the Solar City Initiative, which was removed from Council's 2015 (budget), and depending on information/recommendations received, advocate for inclusion of the Initiative in the 2016 Council budget.  
*Carried over to 2016.*
  - D) Identify areas of greatest leverage for GHG reductions, such as increasing energy efficiency of buildings and homes through bylaws, and/or incentive programs.  
*Carried over to 2016.*
- 2) Support city-wide organic waste diversion, through formal advocacy (e.g. providing letters of support), and support of public consultation on organic waste diversion options.  
*The Committee assisted financially, and with the facilitation of, stakeholder consultations on targets for waste diversion. The Committee submitted a*

*memo to the Executive Committee in support of establishing waste diversion targets.*

- 3) Continue to monitor progress of, and provide support for, previous reports and policies, including Dark Sky Policy and Wetlands Implementation Guide.

*The Committee continued to participate in discussions and offer recommendations in relation to these policy areas.*

- 4) Develop greater linkages with Council's Standing Policy Committee on Environment, Utilities & Corporate Services, through the provision of regular, in-person reports of SEAC to the Standing Policy Committee, and formal communication of annual goals.

*The Committee formally submitted its 2015 Annual Goals to the Standing Policy Committee in February 2015. The Committee additionally submitted the report: "Rationale for Setting Emission Targets for the City of Saskatoon" in December 2015.*

- 5) Continue to support the SEAC Subcommittee on Event Sustainability, including the festival audit recommendations submitted by the subcommittee in 2014, in partnership with Environment and Corporate Services.

*The Subcommittee on Event Sustainability appreciates the leadership of the division of Environmental & Corporate Initiatives in supporting waste diversion initiatives and education at community events. In recognition of the initiatives of festival organizers in supporting waste diversion and other sustainable activities, the Subcommittee determined not to pursue additional festival sustainability work for 2015.*

### **Summary of Actions from SEAC Meetings in 2015:**

#### **January 2015**

**Key items:** New members; Election of Chair & Vice-Chair; Presentation of draft 2015 SEAC goals.

**Budget spending in January:** \$0

**Budget remaining:** \$6500

- Welcome to three new SEAC members: Aditi Garg, Saeed Moshiri, and Brian Sawatzky.
- Election of Chair, Michael Hill, and Vice-Chair, Kathleen Aikens. The Chair and Vice-Chair were appointed to draft the SEAC 2014 Annual Report.
- Report from Administration: Environmental & Corporate Initiatives. The Committee requested updates on the Solar City Initiative, including any plans to revive the project.

- Review of 2015 SEAC Goals & Objectives. (See Attachment 1 for details.)  
Five priorities were identified:
  1. Greenhouse Gas Reductions
  2. Organic Waste Diversion
  3. Policies and reports such as Dark Sky Policy and Wetlands Policy
  4. Development of a greater linkage with City Council's Standing Policy Committee on Environment, Utilities and Corporate Services
  5. Festival Sustainability
- Saeed Moshiri was appointed to serve as representative on the evaluations for the Environmental Component of the Community Cash Grants Program.

### **February 2015**

**Key items:** Wetlands policy update; 2014 Annual report

**Budget spending in February:** \$0

**Budget remaining:** \$6500

- Report from Administration: Environmental & Corporate Initiatives:
  - Updates on composting, waste diversion, and water conservation were provided.
  - Update on committee priority area, Wetlands policy, was provided: A request for proposal to be awarded in March; wetlands assessment to be completed in August.
- The Committee determined that the draft letter from the Saskatoon Environmental Advisory Committee on 2015 SEAC Goals and Objectives be submitted and presented to the Standing Policy Committee on Environment, Utilities & Corporate Services as information. Member Brian Sawatzky was appointed to make the presentation.
- SEAC 2014 Annual Report was presented by the Chair. The Committee approved the report with minor typographical edits and moved that report be forwarded to the Standing Policy Committee on Environment, Utilities, & Corporate Services.
- The Committee considered a letter and request to speak from Darrin Qualman, in relation to climate change. The Committee moved to invite Mr. Qualman to speak at the following meeting.

### **March 2015**

**Key items:** Citizens' Hearings on Climate Change; Northeast Swale Master Plan; Performance targets for waste diversion & GHG emissions

**Budget spending in March:** \$500 allocated to stakeholder consultation meetings.

**Budget remaining:** \$6,300

- Mark Bigland-Pritchard, Peter Prebble, Sarina Gersher, Darrin Qualman and Bonnie Laurence, representing members of the Organizing Committee of the Citizens' Hearings on Climate Change, made a presentation to the Committee Both hard copies and a link for an

electronic version of the Final Report of the Citizens' Hearings on Climate Change were provided to the Committee prior to the meeting.

- Meewasin Valley Authority representatives, Alan Otterbein, Nola Stein and Sarina Gersher, were in attendance and presented the Committee with a power point presentation on the Northeast Swale master plan. The objective of the Master Plan is to design the physical space, including pathways and amenities in such a way that it supports resource management, education, and recreation uses consistent with Meewasin's Strategic Plan, *the Northeast Swale Resource Management Plan* and the Northeast Swale Development Guidelines.
- Environmental & Corporate Initiatives Director Brenda Wallace confirmed with the Committee their prior resolution to help facilitate the stakeholder consultations on Performance Targets in Waste Diversion and Greenhouse Gas (GHG) emissions as discussed at the Committee's October meeting. The Committee agreed to help facilitate the consultations and it was determined that the consultations would be held March 30, 2015. The Committee agreed to allocate \$500 from their 2015 budget toward the cost of providing a lunch for hosting the event.

#### **April 2015**

**Key items:** Performance targets for waste diversion & GHG emissions (Stakeholder consultation); 2016 Expenditures

**Budget spending in April:** \$1,800 (\$4,500 tentative for summer student)

**Budget remaining:** \$4,500 (\$0 if summer student hired)

- A draft document summarizing the feedback received from stakeholders participating in the Performance Target luncheon hosted by Saskatoon Environmental Advisory Committee on March 30 was circulated to Committee members via email. The Committee resolved to draft and present to the Standing Policy Committee on Environment, Utilities & Corporate Services, a letter in support of performance targets in waste diversion and Community GHG emissions reductions.
- Member Saeed Moshiri provided the Committee with an update on the Cash Grants Program Committee from its meeting in February 2015. The program received 13 applications for funding in 2015. The Cash Grants Program has an annual budget of \$10,000 for environmental initiatives. Seven applicants were chosen to be awarded funding, with a recommended allocation of \$1,400 each (exception of one applicant receiving \$1,600).
- Allocation of funds to the Student Action for a Sustainable Future program: \$1,800
- Allocation of funds up to a maximum of \$4,500 for hiring a summer student to work on festival waste audits. Funding was contingent upon cost sharing the expense 50/50 with the Environmental & Corporate Initiatives Division

## May 2015

**Key items:** GHG emissions reductions & inventory; SL&P power generation; Wetlands policy.

**Budget spending in May: \$0**

**Budget remaining: \$4,500**

- GHG subcommittee presented and discussed with all SEAC members the top six items they hope to address in relation to reducing greenhouse gas emissions: (1) Energy code for buildings; (2) Weir hydro-dam; (3) Densification in neighborhood & urban planning; (4) Better transit; (5) Renewable energy generation; (6) Industrial emissions.
- The Committee requested that Project Engineer Richards (in attendance) investigate what external resources are available to the Committee to help with compiling a GHG emission inventory.
- Saskatoon Light & Power representative, Nathan Ziegler, presented on SL&P's power generation portfolio and provided updates on several reports being presented to City Council including a proposal for a Hydro Station at the Weir and a Community Solar Power Co-operative.
- Education & Environmental Performance Manager, Amber Jones answered questions of the Committee regarding the status of the Wetland policy. Progress included establishment of a predevelopment protocol and work on a natural area strategy.
- Director of Environmental & Corporate Initiatives, Brenda Wallace confirmed that cost sharing for a summer student was not possible.

## June 2015

**Key items:** Dark Sky Lighting Policy; Community GHG Inventory; 2016 Expenditures

**Budget spending in June: \$0**

**Budget remaining: \$4,500**

- The Committee held discussions related to Dark Sky Lighting Policy. Mr. Richard Huziak, representing the Saskatchewan Light Pollution Abatement Committee provided comments on developing an integrated and comprehensive Dark Sky Lighting Policy.
- Development Review Section Manager Dawson reviewed the submitted memo from the Planning and Development Division; the memo outlined Civic Bylaws and guidelines that pertain to outdoor lighting. The Committee requested to receive updates on progress related to Dark Sky compliant initiatives.
- The Committee decided to draft and present a letter to City Council through the Executive Committee urging them to find the necessary funding for a Community GHG Inventory. The Committee appointed Dr. McGrane and Mr. Sawatzky to draft the letter on behalf of SEAC.
- The subcommittee on Event Sustainability met on May 26, 2015 to discuss the next steps on SEAC's festival and event portfolio; two recommendations were put forth from this discussion to the Committee: (1) that the subcommittee work with the Recreation & Sport Division to

include provision for those seeking special event permits to demonstrate their plans for waste management; and (2) that the subcommittee work with Environmental & Corporate Initiatives Division to assess what further information can be gained on festival and events through the Division's Let's Roll Recycling summer students.

- The Committee resolved to request funding from the City of Saskatoon for its 2016 Budget in the amount of \$6,800, allocated as follows: \$100 publications/reports; \$6,000 public education, information gathering; \$500 conferences/ workshops; \$200 membership fees

### **September 2015**

**Key items:** Growing Forward Plan; Energy efficient building standards

**Budget spending in September: \$0**

**Budget remaining: \$4,500**

- The Chair reported that City Council at its meeting held on August 20, 2015 resolved that the information submitted by SEAC regarding request for funding a community greenhouse gas emissions inventory be received and considered with the 2016 Business Plan and Budget review.
- Director of Planning & Development Alan Wallace along with Manager, Neighbourhood Planning Anderson were in attendance and together provided a PowerPoint and reviewed the memo from Planning and Development Division on "Growing Forward! Shaping Saskatoon."
- Director of Building Standards Fagnou updated the Committee to the adoption and implementation of energy efficient building standards. The Committee was advised that the Administration is working to promote consistent interpretation and application of building standards and establish collective partnerships to help achieve this goal. The Committee requested to that they continue to be updated on future information regarding energy efficient building standards.
- Director of Environmental & Corporate Initiatives Brenda Wallace briefly discussed the submitted report "Biodiversity Conservation: Recommendations for the City of Saskatoon."
- Director Wallace informed the Committee that a report on Natural Areas and Wetlands Policy was presented to the Standing Policy Committee on Planning, Development & Community Services at their meeting held September 8, 2015.
- Mr. Miguel Gaudet, Soils Engineer, Environmental & Corporate Initiatives presented the Committee with a PowerPoint on "Soil Handling Strategy."
- SEAC member Saeed Moshiri, reviewed the submitted report "Changes in Energy Intensity in Canada" with the Committee.
- Budget update: Director Wallace informed the Committee that the coordination costs of an outdoor water-bottle filling station were not feasible for the remaining budget.

## October 2015

**Key items:** Wetland & Natural Areas Policy; Environmental Leadership Performance Measures

**Budget spending in October: \$0**

**Budget remaining: \$4,500**

- The Committee reviewed a current statement of expenditures and discussed avenues for committing the remaining \$4,500, including: a water bottle filling station at a recreational facility; hiring a student to work on a GHG inventory; contracting a facilitator for Committee professional development.
- Planner Schulz reviewed the submitted report “Natural Areas and Wetlands Policy” with the Committee. In 2013, a new City Council policy for Wetlands was adopted; some elements of the policy are still under development. One of the next steps is compiling the accumulated data into a complete Wetland inventory. The creation of Wetland Development Guidelines is outstanding; however, the City continues its efforts to work toward these guidelines.
- Mr. Rick Huziak, representing the Northeast Swale Watchers, provided comments and noted that is imperative that guidelines are in place prior to the development of such areas and not afterwards.
- Angela Schmidt, Special Projects, Corporate Performance was in attendance and guided the Committee through the Environmental Leadership Performance dashboard on the City's website.
- The GHG subcommittee presented a report to SEAC, outlining several emissions reductions scenarios. The Committee resolved to (1) submit and present the report to the Standing Policy Committee on Environment, Utilities & Corporate Services, and (2) recommend the adoption of scenario 1, the most aggressive emissions reduction.
- Director of Environmental & Corporate Initiatives, Brenda Wallace advised the Committee that four reports are being considered by the Standing Policy Committee on Environment, Utilities & Corporate Services at its October 13, 2015 meeting including: (1) an updated Environmental Policy; (2) updates and launch of an online version of 'Our Environment; (3) the 2014 Integrated Waste Management Annual Report; and (4) a report providing recommendations for the 2016 Green Cart Program.
- The Committee approved meeting dates for 2016 meetings of SEAC.

## November 2015

**Key items:** Wetlands & Natural Areas Policy; Various reports; 2016 Expenditures

**Budget spending: \$0**

**Budget remaining: \$4,500**

- Chair Michael Hill completed his last meeting as SEAC member.
- The Committee considered the forwarded report “Integrated Waste Management Annual Report 2014.”
- The Committee considered the forwarded report “2015 Update to Our

- Environment: The City of Saskatoon's Environmental Leadership Report.”
- Director of Planning & Development Alan Wallace was in attendance and updated the Committee on the Wetlands and Natural Areas Policy, specifically, pre-development protocols for environmental protection.
  - Director of Environmental & Corporate Initiatives Brenda Wallace updated the Committee on the following items:
    - (1) Video from Student Action for a Sustainable Future project. The video can be viewed on the City of Saskatoon website.
    - (2) Landfill Ban Implementation Considerations,
    - (3) Compact of Mayors (signed by Saskatoon), and
    - (4) Letter presented by the Saskatchewan Environment Society with recommendations on best places to start reducing community-wide GHG emissions in Saskatoon.
  - Watershed Protection Manager Yobb was in attendance seeking input from the Committee regarding a stormwater management plan.
  - A current Statement of Expenditures was submitted by the Committee Assistant for the Committee's review. It was determined that the remaining 2015 funds could not be properly allocated at this time. The Committee's intention is to pursue such initiatives early in 2016.

## **REPORTS SUBMITTED:**

### **Reports/Recommendations Submitted to the Standing Policy Committee on Environment, Utilities and Corporate Services (Date submitted):**

- SEAC 2014 Annual Report (February 2015)
- SEAC 2015 Goals and Objectives (February 2015)\*
- Rationale for Setting Emission Targets for the City of Saskatoon (December 2015)\*

### **Memos Submitted to the Executive Committee (Date submitted):**

- Community Greenhouse Gas Emissions and Waste Diversion Targets (April 2015)\*
- Request for Funding - Community Greenhouse Gas Emissions Inventory (June 2015)\*

\*Included as Attachments on page 12

## **ACKNOWLEDGMENTS**

The Saskatoon Environmental Advisory Committee expresses appreciation for the continued support of City Council and the Standing Policy Committee on Environment, Utilities & Corporate Services.



The Committee wishes in particular to acknowledge the invaluable support of the following individuals and divisions:

- Debby Sackmann, Committee Assistant to the Saskatoon Environmental Advisory Committee. In particular, this 2015 Annual Report could not have been prepared without reliance on SEAC agendas and minutes prepared by Ms. Sackmann.
- Rhonda Rioux, City Clerk's office.
- Brenda Wallace, Amber Jones, and all members of the division of Environmental & Corporate Initiatives.

The Committee wishes to thank the following community members and organizations for presentations submitted to SEAC in 2015:

<b>Organization</b>	<b>Members</b>
Saskatchewan Citizens' Hearings on Climate Change	Darrin Qualman, Mark Bigland Pritchard, Sarina Gersher, Bonny Laurence
Meewasin Valley Authority	Alan Otterbein, Nola Stein, Sarina Gersher
Saskatchewan Light Pollution Abatement Committee	Richard Huziak
Northeast Swale Watchers	Richard Huziak

Yours truly,

*for* Kathleen Aikens, Chair  
Saskatoon Environmental Advisory Committee

**SEAC 2015 Goals and Objectives**

26 February 2015

The Saskatoon Environmental Advisory Committee presents as formal communication to the Standing Policy Committee on Environment, Utilities and Corporate Services the following goals and priorities for the 2015 calendar year.

In 2015, the Saskatoon Environmental Advisory Committee (SEAC) will:

- 1) Support greenhouse gas (GHG) targets and reduction strategies for the City of Saskatoon (corporate), industry, and community, through the following channels:
  - A) Advocate for, and support the facilitation of, public stakeholder consultations regarding targets for GHG emissions for corporate (City of Saskatoon), community, and industrial sector.
  - B) Advocate for an updated GHG inventory, as the most recent inventory was completed in 2005 with data from 2003.
  - C) Request information on the Solar City Initiative, which was removed from Council's 2015 (budget), and depending on information/recommendations received, advocate for inclusion of the Initiative in the 2016 Council budget.
  - D) Identify areas of greatest leverage for GHG reductions, such as increasing energy efficiency of buildings and homes through bylaws, and/or incentive programs.
- 2) Support city-wide organic waste diversion, through formal advocacy (e.g. providing letters of support), and support of public consultation on organic waste diversion options.
- 3) Continue to monitor progress of, and provide support for, previous reports and policies, including Dark Sky Policy and Wetlands Implementation Guide.
- 4) Develop greater linkages with Council's Standing Policy Committee on, and Corporate Services, through the provision of regular, in-person reports of SEAC to the Standing Policy Committee, and formal communication of annual goals.
- 5) Continue to support the SEAC Subcommittee on Event Sustainability, including the festival audit recommendations submitted by the subcommittee in 2014, in partnership with Environment and Corporate Services.

## Rationale for Setting Emission Targets for the City of Saskatoon

As per the most recent Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) in 2013, snow and ice are diminishing, water is warming and the concentration of greenhouse gases (GHG) is increasing. Climate response, or climate change, occurs when the global mean surface temperature increases due to cumulative emissions and changes to the Earth's surface.

These anthropogenic influences are measurable through regional feedback cycles here in Saskatoon such as changes in watershed, variance in precipitation, decreased air quality and irregular weather patterns. For example, the IPCC modeled that variances in temperature will increase based on this warming such that weather will be even less predictable (Figure 1).

The City of Saskatoon completed a GHG inventory in 2003 with the goal to use 2006 as a baseline to set target emissions up until 2020 (Figure 2). Since then the estimates have not been revised, reviewed or measured. IPCC research indicates we are not meeting global or national targets and need to better understand our local emissions in Saskatoon before we can influence change.

We offer four scenarios for the next 30 years based on reaching an 80% reduction by 2050 (Figure 3). This is based on the United Nations' goal of preventing a global temperature increase of 2°C; we are currently headed towards an increase of 4°C. Each scenario requires a feasibility study to justify emission outputs and show where the greatest impact will be felt. For example, the logistics of removing major polluters such as coal firing power plants.

The fourth scenario offers a more lenient start opposed to immediate aggressive action. This would eliminate the need to act now by pushing more pressure and more dramatic actions onto our future generations. Compared to other provinces, we are already big emitters per capita due to energy-intensive industries and coal-fired power plants (Figure 4). The first three possible scenarios presented in Figure 3 offer an opportunity for Saskatoon, as a city, to model good policy and best practices in emission reduction. We offer these raw scenarios with the hope that a more thorough public report may be prepared by the city within the next six months.

Possible policy changes include a carbon tax, a cap and trade system or industry specific incentives. We recommend that the following specific sectors be examined: energy generation, transportation, waste management, agricultural land use and industrial processes.

Setting attainable and meaningful targets will allow Saskatoon to improve socio-economic indicators. We foresee growth in two main areas: 1) job creation and economic growth through innovation in reducing emissions and development of green economy 2) increased usage and reduced costs in alternative transportation that may also benefit the community's overall health.

## Figures

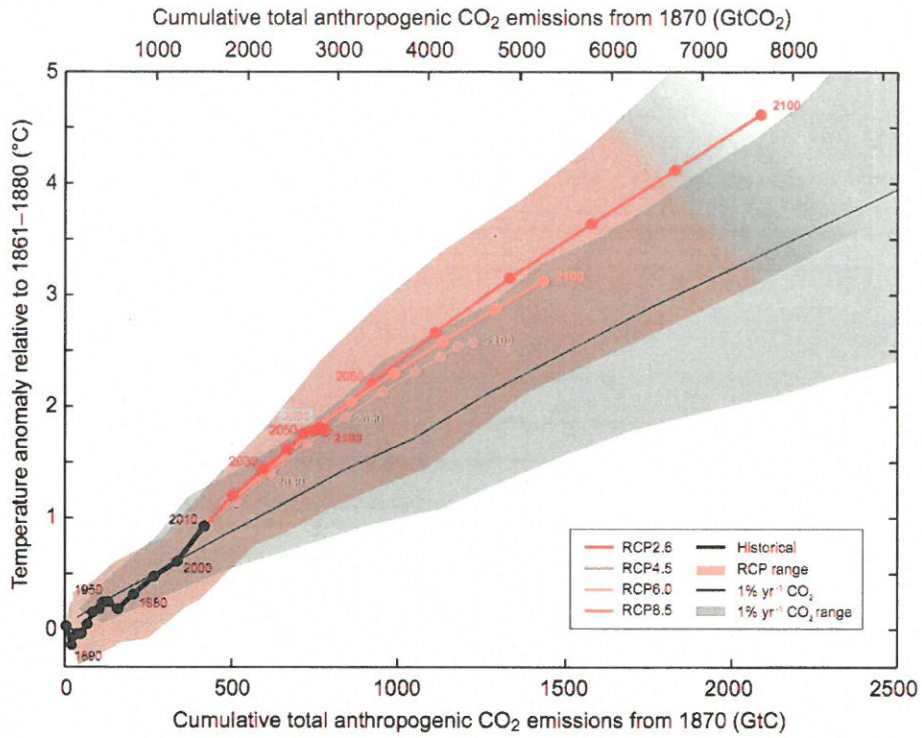
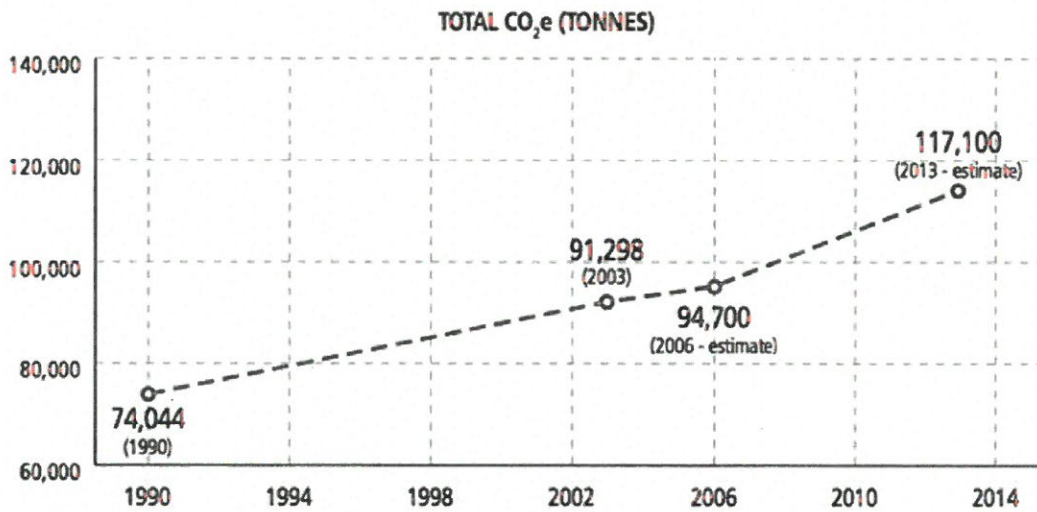


Figure 1 IPCC, 2013: Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis



Sources: ICLEI Energy Services, 2005; City of Saskatoon - Environmental & Corporate Initiatives

Figure 2 The City of Saskatoon's 2014 Environmental Leadership Report

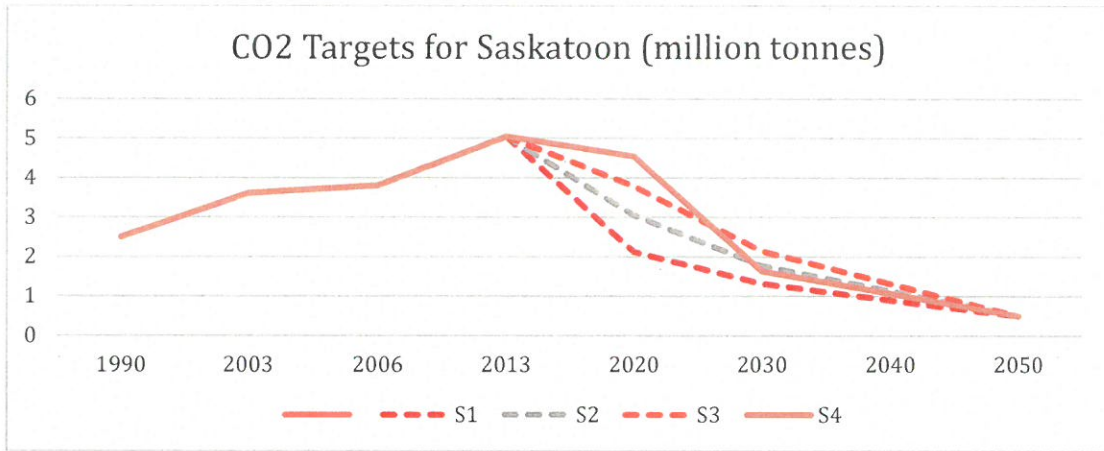


Figure 3 SEAC GHG sub-committee's target scenarios for Saskatoon. Data in Table 1

- S1: 15% below 1990 by 2020, 80% below 1990 by 2050
- S1: 20% below 2006 by 2020, 80% below 1990 by 2050
- S3: 25% below 2013 by 2020, 80% below 1990 by 2050
- S4: 10% below 2013 by 2020, 35% below 1990 by 2030, 80% below 1990 by 2050

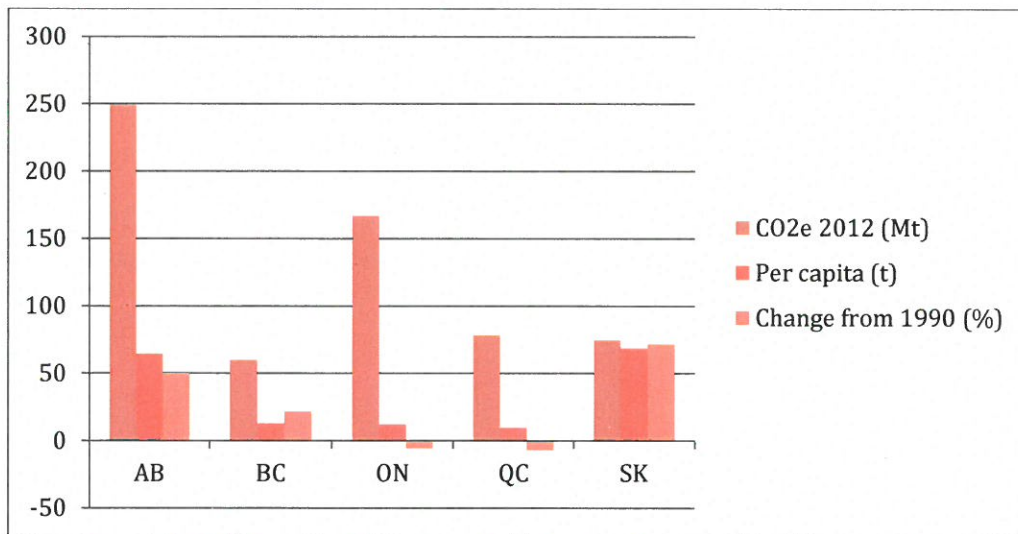


Figure 4 Saskatchewan CO<sub>2</sub> compared to other Canadian provinces. Data in Table 2



output by 30% this would result in only a 0.7% reduction in total City GHG's. Any major dent in reducing the entire City's GHG's can only come about by including and concentrating on the City as a whole.

At the stakeholder consultations, the group discussing GHG's unanimously decided that the most important target for the City to choose is total community GHG emissions.

With strong leadership from Council, Administration and Saskatoon's residents and businesses can meet these goals. SEAC looks forward to helping Council and Administration choose appropriate targets and effective actions to meet those targets.

### **Waste Diversion Target**

While the participants at the stakeholder consultation were broadly supportive of the 70% waste diversion target, there was discussion about additional targets that would be aimed at waste reduction. The rationale behind these suggestions was that Saskatoon citizens should be encouraged to reduce the amount of waste that they produce. Reducing the overall waste produced by our city is the best way to meet our environmental goals and not be obliged to build another landfill. Ideas for waste reduction targets could include a desired per capita amount of waste that each citizen would be allotted or a target to decrease the total tonnes of waste that is landfilled.

DRS

cc: Chair, Saskatoon Environmental Advisory Committee



**Request for Funding - Community Greenhouse Gas Emissions Inventory**

CITY OF SASKATOON

---

**Office of the City Clerk**

To: City Clerk, Executive Committee	Date: June 23, 2015
	Phone: 306-975-3240
	Our File: CK. 375-4 x 430-72
From: Debby Sackmann, Committee Assistant Saskatoon Environmental Advisory Committee	Your File:

**Re: Request for Funding - Community Greenhouse Gas Emissions Inventory**

The City of Saskatoon is exploring setting new greenhouse gas emissions reduction targets for both its corporate operations and for the entire community. Such reduction targets are laudable. However, it is impossible to find solutions to problems that you cannot properly define and understand. For future greenhouse gas reduction efforts to be successful, it is essential that City Council, City administration, businesses, and citizens have reliable and up-to-date information on the sources of greenhouse gas emissions in Saskatoon. The last greenhouse gas emission inventory for Saskatoon was completed in 2005 using 2003 data. As such, our knowledge about the sources of greenhouse gas emissions in our city is twelve years old. Up-to-date information on the sources of greenhouse gas emissions in Saskatoon will allow our community to understand what changes have taken place in our greenhouse gas emissions over the past decade and to identify successes and failures. As such, the Saskatoon Environmental Advisory Committee (SEAC) at its meeting held June 11, 2015 determined that it was prudent for the Committee to write a letter to be presented to City Council through the Executive Committee. It was resolved that the Committee urges City Council to find the appropriate funding for a Community Greenhouse Gas Inventory in the 2016 Business Plan and Budget

It is only once a greenhouse gas emission inventory has been completed that Saskatoon can begin to make concrete plans to meet new greenhouse gas emission reductions targets. Without a proper inventory of greenhouse gas emissions in Saskatoon, it is impossible to begin work on finding solutions to the most pressing environmental problem facing Saskatoon and the world. Without

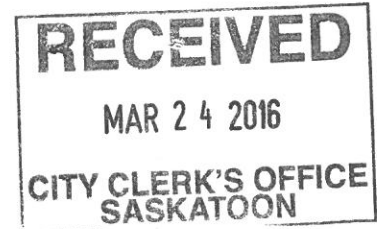
this inventory completed this year, we will be unable to move forward on this important environmental challenge and more time will be lost. The problem will worsen and will be even harder to solve if we do not act now.

DRS

cc: His Worship the Mayor, Chair, Executive Committee  
City Manager  
Saskatoon Environmental Advisory Committee, Chair

4131-5

**From:** Louise Jones <louise.jones@sasktel.net>  
**Sent:** March 24, 2016 10:53 AM  
**To:** Web E-mail - City Clerks  
**Subject:** Environment and Utilities Committee meeting April 11  
**Attachments:** Twelve main points for protecting the Swale.pdf



To City Clerks:

The Northeast Swale Watchers have prepared a statement of key points relating to development at the Swale. We would like to present these to the Environment and Utilities Committee Meeting on Monday, April 11th. I have attached the document.

Thank you,  
Louise Jones, Chair

RECEIVED

MAR 24 2016

CITY CLERK'S OFFICE  
SASKATOON

4131-5

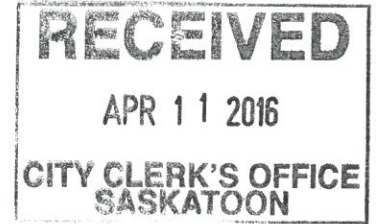
## Twelve Main Points for City-responsible Protection of the Swale

An integrated *City-administered Swale Buffer Plan*, parallel to the *MVA NE Swale Master Plan*, should be implemented since the surrounding City development creates disruptions and pollutants that will potentially affect and degrade the Swale. This Plan should include, as a minimum, all points below.

1. Include Petursson's Ravine and Central Avenue Crossing within the Swale as indicated in the *MVA Northeast Swale Master Plan*.
2. Insist that the Province relocate the Perimeter highway to Clark's Crossing to go around the Swale within the Greater Saskatoon area region.
3. Impose Dark-sky policy lighting standards in neighbourhoods adjacent to Swale though zoning bylaw changes that include neighbourhood roadways, residential and commercial properties, lit signage, and minimally-lit roadways through the Swale.
4. Eliminate bottlenecks for safe wildlife passage, modelling from Edmonton's *Wildlife Passage Guidelines*, and ensure that there is an ecological network in place to enable the wildlife to move unimpeded from the river through the Swale and back.
5. Ensure that wildlife crossings over roads and small animal crossings under roads are designed and installed for all roadways. The success of these crossings should be monitored.
6. Ensure that traffic-calming measures, including an enforced 50 kph speed limit, are implemented on all roads through the Swale.
7. Ensure that there is minimum damage to the Northeast Swale and Small Swale during road and neighbourhood construction. Follow the City's *Predevelopment Protocol* and the MVA's Construction Protocols (articulated under the revised Development Review process) in a proactive way that includes environmental monitors with stop work authority.
8. Ensure that the MVA has sufficient funding to finance the *MVA Northeast Swale Master Plan* and expand the *Master Plan* to include the Small Swale.
9. Enact long-term legal protection of the Northeast Swale and the Small Swale though a change to the Zoning bylaw though a special designation mandated by City Council.
10. Ensure that the UH3 area is either not developed, or that the current design is scrapped and redeveloped as a model sustainable community as suggested in Moriyama's *100-Year Plan*. The current plan does not support designated environmental reserve lands that should be in excess of the minimal 10 per cent for parks, playing field etc. and does not allow for an efficient public transportation plan.
11. Ensure that the storm water handling systems do not allow contaminants to enter the adjacent wetlands. They are experimental so careful monitoring will be needed, especially since regulations for the *Pesticide Use policy* and the *Wetlands policy* are not in place.
12. Ensure that environmental protection policies are coordinated and adopted with the P4G group through the Saskatoon North Regional Study for the entire Swale region.

4131-5

**From:** Candace Savage <candace.savage@sasktel.net>  
**Sent:** April 09, 2016 1:46 PM  
**To:** City Council  
**Subject:** Form submission from: Write a Letter to Council



Submitted on Saturday, April 9, 2016 - 13:45  
Submitted by anonymous user: 216.174.141.161  
Submitted values are:

Date: Saturday, April 09, 2016  
To: His Worship the Mayor and Members of City Council  
First Name: Candace  
Last Name: Savage  
Address: 302 Albert Avenue  
City: Saskatoon  
Province: Saskatchewan  
Postal Code: S7N1G1  
Email: candace.savage@sasktel.net

Comments:  
To the Standing Policy Committee on Environment, Utilities and Corporate Services re Agenda item 6.3

I am writing to express strong support for the Twelve Points for City-Responsible Protection of the Swale, developed by the Northeast Swale Watchers and presented to you on April 11 by Louise Jones.

As you know, the Swale Watchers are a group of highly skilled individuals, representing a long list of respected organizations. Their goal is to provide a fair-minded, expert assessment of plans for development in and around the Northeast Swale conservation zone. The depth of experience, knowledge and commitment among Swale Watchers is impressive, and every meeting is a short course on some aspect of urban planning or policy.

Although the Swale Watchers' expertise is offered to the City free of charge, it has enormous value if taken seriously. Solving the problems identified in the Twelve Points will make the difference between success and failure in conserving the ecological integrity of the Swale.

In addition to the Twelve Points, I would also like to draw your attention to a newly released report entitled "Meewasin Valley Authority Northeast Swale Mitigation Planning." This document is available online at <http://meewasin.com/assets/upload/resources/DevelopmentReview/cannorth-report-for-board-and-website-56f41c7586f64.pdf>

The Mitigation Planning report substantiates many of the Swale Watchers concerns. In addition to identifying serious inadequacies in the design of the North Commuter Parkway system – which the report describes as an irremediable barrier to deer and other large mammals – the report also notes disruptions associated with Lowe Road. The report's authors recommend seasonal closures of this road, which runs through the centre of the Swale, to provide respite for breeding birds and animals. Obviously, seasonal closures would create confusion for drivers, and it would be preferable to close

this road all together, thereby fostering a zone of peace and quiet in the heart of the Swale for all concerned.

With 8 new lanes of traffic slated to pass through the Swale via the North Commuter Parkway system, carrying upwards of 65,000 cars a day, Lowe Road will not be needed for emergency access or efficient traffic flow. Closing it would be painless for the City and highly beneficial to the protection of the Swale.

By unanimously accepting the MVA Master Plan for the Northeast Swale, City council became a champion for the conservation of this unique and irreplaceable ribbon of green. But the protection of natural areas is never easy, and good intentions have to be backed up by clear-headed policies, regulations and decisions. I encourage you to give these issues your urgent consideration.

The results of this submission may be viewed at:  
<https://www.saskatoon.ca/node/398/submission/84491>

---

## Request for Information – Managed Print Services

### Recommendation

That the Administration proceed with a Request for Information for Managed Print Services as outlined in this report.

### Topic and Purpose

The purpose of this Report is to better understand options for management of Corporate Printers including potential efficiencies and cost savings. The Administration is requesting approval to proceed with a Request for Information (RFI) to poll industry leaders.

### Report Highlights

1. Management of corporate printers and multifunction devices requires significant effort / resources within the IT Division;
2. There are many large agencies (including Saskatoon Police Services) who have moved to Managed Print Services and have realized significant cost savings and efficiencies; and
3. The IT Division will use the results of this RFI to determine which vendors are capable of providing Managed Print Services and invite them to participate in a Request for Proposals (RFP) process.

### Strategic Goal

This report supports the Strategic Goal of Continuous Improvement and the four-year priority to identify targeted opportunities to implement specific continuous improvement tools within the department. Moving towards a Print services partner will divest the IT Division of the administrative and maintenance support of our printer fleet and gain efficiencies and cost savings in these areas.

### Report

Management of corporate printers and multifunction devices requires significant effort / resources within the IT Division. The time saved from doing this maintenance will be reallocated to provide better IT support services to our other various business lines.

There are many large agencies (including Saskatoon Police Services) who have moved to Managed Print Services – Managed Print Partner and have realized significant cost savings and efficiencies.

A Managed Print Partner will lead to efficiencies for the maintenance and supply of printers across the Corporation. It will look at a strategic approach to printers and look at the optimal mix of printers required across the Corporation.

The IT Division will use the results of this RFI to determine which vendors are capable of providing Managed Print Services and invite them to participate in a RFP process.

The objectives of the RFI process are to:

- Understand the level of interest and availability of potential vendors that could provide MPS solutions to the City of Saskatoon;
- Gain a more comprehensive understanding of MPS business models and industry best practices;
- Identify issues, roadblocks, and barriers to successful MPS business models and industry best practices; and
- Understand the potential pros and cons of Data loss prevention that could be deployed and the technology available to mitigate the angst from the user community.

### **Options to the Recommendation**

- Reject the RFI proceed directly to RFP.
  - We don't recommend this option as we believe the RFI will provide us with details on cost savings, strategic approaches, and efficiencies from the vendors, which we can use to ensure the RFP is more successful.

### **Public and/or Stakeholder Involvement**

Primarily, internal stakeholders will be impacted and will be consulted throughout the process.

### **Communication Plan**

The RFI will be issued by the City of Saskatoon and posted to the SaskTenders website, SaskTenders.ca. Agencies previously engaged by the City of Saskatoon and those who have expressed interest will be contacted directly to invite them to participate in the RFI.

### **Financial Implications**

Subject to the results of the RFI process, the estimated annual contract value range is \$400,000-\$600,000 per year for a five year contract period. This figure, along with cost savings and efficiency improvements, will be estimated in the RFI process and confirmed in the RFP process.

### **Other Considerations/Implications**

There are no policy, environmental, privacy or CPTED implications or considerations.

### **Due Date for Follow-up and/or Project Completion**

The Administration will report back to Committee prior to issuing the RFP for the vendor services.

### **Public Notice**

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.



**Report Approval**

Written by: Kevin Shewchuk, Manager, IT Business Strategy & Support  
Reviewed by: Paul Ottmann, Director of Information Technology  
Approved by: Catherine Gryba, General Manager, Corporate Performance  
Department

Request for Information – Managed Print Services.docx

---

---

## Service Saskatoon – April 2016 Progress Report

### Recommendation

That the report of the General Manager, Corporate Performance Department, dated April 11, 2016, be forwarded to City Council for information.

### Topic and Purpose

The purpose of this report is to provide information on the launch of Service Saskatoon and outline the first five Public Works' services with which citizens can expect to have a Customer Relationship Management (CRM) experience. In addition, it will review the Citizen Advisory Panel that was created to be used for gathering citizen input.

### Report Highlights

1. Service Saskatoon was officially launched on April 6, 2016. Service Saskatoon is a new and improved model for service delivery. Providing good customer service has always been important for the City of Saskatoon (City); however, the corporation is making a new commitment to improve upon the delivery of customer service. The new model is built on four pillars: Citizen Input, Systems, Standards, and Staffing.
2. A new CRM system is the technology centerpiece of the new model and supports the Systems pillar. It will help the City manage citizen requests and inquiries more efficiently and effectively. As part of the Service Saskatoon launch, five water and sewer services within Public Works have been identified to be the introductory pilot services for citizens to experience the CRM model.
3. The Administration is repurposing an existing software solution to provide an improved citizen experience. Since the concept of 311 was first launched, mobile technology has advanced and made it easier for consumers to access online self-services. The temporary CRM will reduce duplication of incidents and provide the ability to create a unique number to track the status and completion of work. Citizens will be able to request these services by phone or by completing an easy-to-use online form.
4. Citizen input is key to accomplishing the City's goal. The Administration will create more opportunities for citizens to shape the design of the City's services including the opportunity to participate in a new Citizen Advisory Panel.
5. The Administration will begin work to add five more water and sewer services to the CRM model. Additional services will continue to be added and will be based in large part on citizen input and priorities.

### Strategic Goals

This report supports the Strategic Goal of Continuous Improvement with the 4-year priority to begin the process of implementing Service Saskatoon as a coordinated approach to responding to citizen calls and inquiries on programs and services. It also

supports the 4-year priority to pursue opportunities to “modernize” civic government to reflect best practices, and changing expectations. In addition, the reports supports the 10-year strategy to provide a coordinated approach to customer service with quick and accurate responses, and to leverage technology and emerging trends to reach our goals, serve citizens and connect meaningfully with our stakeholders.

## **Background**

At its meeting on January 25, 2016, City Council received the Service Saskatoon – 2015 Progress Report from the GM of Corporate Performance. This report indicated a further update will be provided on the Service Saskatoon 311/Customer Relationship Management System in spring 2016.

## **Report**

### Launching Service Saskatoon

Service Saskatoon was officially launched on April 6, 2016, and is a new and improved model for service delivery. Providing good customer service has always been important for the City, however, the City is making a new commitment to improve upon the delivery of customer service. It's about helping citizens connect to the right people and information they need from the City – quickly, simply and seamlessly. The goal for citizens is to eliminate the guess work involved in finding the right information or department needed. The City wants to create multiple channels for citizens to access the information and answers they need. It's a City-wide shift in how we deliver front-line services are delivered, respond to requests, and improve services into the future.

A Service Saskatoon model has been developed to help establish a clear relationship between the CRM system and the other components of the wider initiative. The four pillars of Citizen Input, Systems, Standards, and Staffing will help the Administration focus on major work under each area and provide a structure for reporting progress. Attachment 1 shows the Service Saskatoon Model.

The remainder of this report focuses on providing a progress report on the major initiatives under the Systems and Citizen Input pillars.

### Systems Pillar

The City's goal is to make it easier for citizens to access information, request services, and track request progress from start to finish.

A new CRM system is the technology centerpiece of the new model and will help staff manage citizen requests and inquiries more efficiently and effectively. For citizens, the service experience does not always end after they send an email or hang up the phone. They want to know what and when to expect service, the progress the City is making on a service request or when it is complete.

Experience from other cities shows better success when breaking a CRM project down into manageable pieces. The Administration focused on reviewing the processes and technology for five Public Works services. These first five services have been identified as the pilot areas to introduce citizens to the CRM model and will be: water outages, hydrants, water connection troubleshooting and service requests, water and sewer locates, and sewer backups.

A CRM software is a critical piece of the citizen experience, but the corporation currently does not have a CRM solution. It is anticipated that a detailed list of functional requirements for choosing an enterprise based CRM to support a long term customer service strategy will be completed by fall 2016. Any decisions on an enterprise based CRM will also need to consider the corporate direction on integrated business solutions/systems.

In the short term, the Administration is repurposing an existing software solution to provide an improved citizen experience with the five Public Works services. This temporary CRM is similar to the “Report a Pothole” application and will only be available to Customer Service Representatives (CSRs). This system will reduce duplication of incidents and provide quicker responses to many citizens on the same incident from start to completion of work.

Citizens who make a service request by phone or online will automatically receive a unique tracking number for these five services. During the pilot, citizens will be limited to following up on the status of their service request by calling 306-975-2476 (Public Works Customer Service Centre). In the future, once there is a CRM software solution, the service status updates will be available online.

The Administration is also committed to addressing other aspects of the CRM initiative as shown in Attachment 2. These are important elements to creating a sustainable and responsive CRM system.

#### Holding on the 311

The capital project for the Service Saskatoon 311/CRM began with the concept of creating a centralized call centre and adopting a 311 phone number. However, best practices are showing that does not always work best for every city.

Since the concept of 311 was first launched, mobile technology continues to advance and make it easier for consumers to access online self-services. This has changed expectations of citizens who now want to be able to interact with government from their smart phones or tablets whenever they think of a question or want to request a service.

After reviewing original assumptions and through some key learnings from other municipalities, the Administration’s focus will be to provide on-line service first to Service Saskatoon and a CRM, with self-service as a priority. However, the City will ensure the CRM provides responsive service with other channels including on the phone and in person. Refer to Attachment 3 for the Service Saskatoon priority pyramid.

This digital approach will provide the ability to more easily adapt and respond to changing citizen expectations and quickly adjust to changing business conditions. In addition, there are also potential savings related to improving self-service as transaction costs are lower with online service versus telephone or in person.

#### Citizen Input Pillar

Citizen input is key to accomplishing the goal of a “citizen first” approach to the design and delivery of services. More opportunities for citizens will be created for citizens to have input.

As part of the broader Shaping Saskatoon community engagement initiative, a new Citizen Advisory Panel has been created. The first input opportunity for the panel will be for Service Saskatoon.

Over 1,100 citizens have already signed up for the panel and the invitation is included in the promotional campaign for Service Saskatoon. Participants on the panel will be asked regularly for input on ways to improve upon the delivery of services and what services are most important to them to be added to the CRM experience.

In addition, in fall 2015, the Administration began sending out citizen satisfaction surveys to people who used the *Contact Us Form* on the website. Work is continuing to expand the survey to citizens requesting information or service in-person, through email or mail, and on the phone. The feedback collected from citizens will be used to continuously improve on the quality and consistency of the City's service delivery.

#### Next Services

Public Works has over 200 services and there are many more services provided by the City. As the Administration gathers citizen input on service priorities, it is important that the work continue to build the CRM and improve the citizen experience. As a result, five additional water and sewer services have been identified and will be added to the CRM. These include inspection or repair requests for catch basins, manholes, retention ponds, sanitary sewer mains, and storm sewers.

#### **Public and/or Stakeholder Involvement**

The City of Saskatoon website – Service Saskatoon page will be built by residents, for residents, as the public's input and insight on their expectations and priorities is valued.

The Administration has started the process of engaging citizens through satisfaction surveys. This work will continue throughout 2016 and will help to develop business requirements for this feature in a Request For Proposal for an enterprise CRM.

In addition, the Administration will use the Citizen Advisory Panel to help establish priorities for other online services.

#### **Communications Plan**

Service Saskatoon was promoted through an official launch and news release. Banners in the lobby of City Hall serve as a reminder to the public and civic staff around the commitment to Service Saskatoon and the pillars of success. A webpage has been created to provide background information and updates on the major initiatives under each pillar. The webpage can be accessed from the homepage or using [www.saskatoon.ca/servicesaskatoon](http://www.saskatoon.ca/servicesaskatoon).

A variety of digital tools will be used to help inform and promote Service Saskatoon including social media posts on the City's Facebook and Twitter channels, eBill online advertisements, digital banner advertising, and promotional videos. Print materials including tent cards and business card sized ads will be made available to encourage individuals to sign up for the Citizen Advisory Panel. Additional opportunities include print ads in the City Pages.

### **Financial Implications**

There are no financial implications.

### **Other Considerations/Implications**

There are no other options, policy, environmental, privacy, or CPTED implications or considerations.

### **Due Date for Follow-up and/or Project Completion**

Progress reports on Service Saskatoon will be presented to City Council on a quarterly basis.

### **Public Notice**

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

### **Attachments**

1. Service Saskatoon Model
2. Other Aspects of the CRM Initiative
3. Service Saskatoon Priority Pyramid

### **Report Approval**

Written by: Rob Gilhuly, Project Manager  
Reviewed by: Carla Blumers, Director of Communications  
Pat Hyde, Director of Service Saskatoon  
Approved by: Catherine Gryba, General Manager, Corporate Performance Department

Service Saskatoon – Progress Report.docx

# Attachment 1 Service Saskatoon Model



## Citizen Input

We will take a "citizen first" approach to the design and delivery of services.



## Systems

We will make it easier for citizens to access information, request services and track our progress from start to finish.



*City of*  
**Saskatoon**

## Service Saskatoon



## Standards

We will strive to deliver quality and consistent service to every citizen, every time.



## Staffing

We will ensure dedicated customer service staff are trained, equipped and ready to respond.

## **Attachment 2**

### **Addressing Other Aspects of the CRM Initiative**

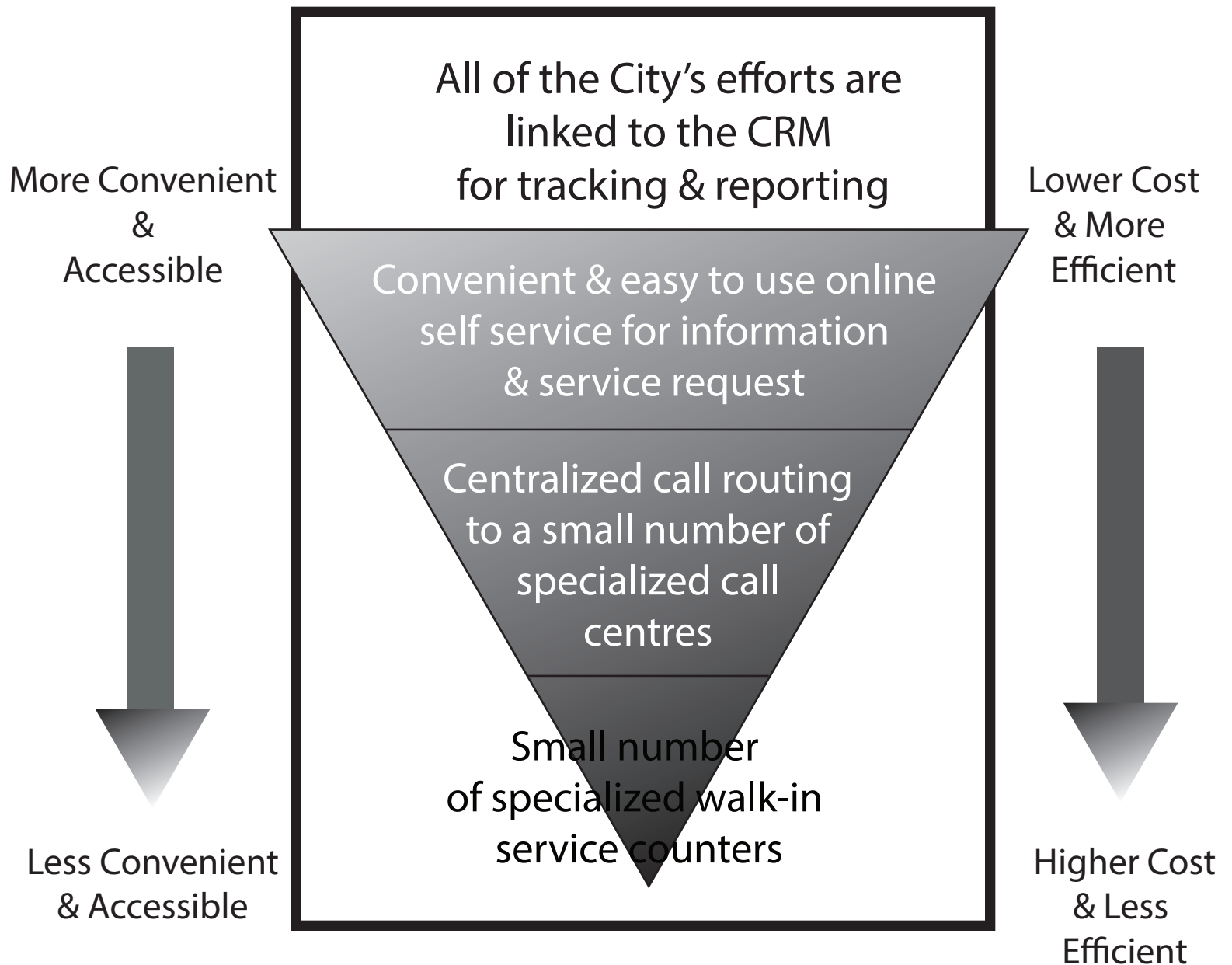
**Knowledge Base** – A repository of all the necessary information/documentation to provide citizens with excellent customer service. Although there is not currently a centralized knowledge base, work is progressing to document complete and consistent information, and frequently asked questions for all types of inquiries. The enterprise CRM solution will support centralized access to this citizen service information.

CSRs currently have to access several different sources of knowledge to assist citizens. Administration will add map-based views in the temporary CRM solution to assist CSRs to provide increased service to citizens. In addition, an online Corporate Directory to look up employee contact information within the organization is being developed.

**Citizen/Customer List** – Currently the City has a number of online services where citizens are forced to create separate login accounts. Our vision is to provide citizens with one login account that will allow them to access all of our online services.

**Work Order Management Software** – The City's current work order management system in Public Works is an older system that does not easily integrate to a CRM. Service Saskatoon is transforming the way we operate and will therefore be looking at streamlining and providing efficient tools for us to complete work.





---

---

## **Water Conservation Update – Response to Saskatoon Environmental Advisory Committee (SEAC) Report – April 2016**

### **Recommendation**

That the Standing Policy Committee on Environment, Utilities, and Corporate Services recommend to City Council:

1. That a rebate program for indoor plumbing fixtures be considered in the 2017 Business Plan and Budget deliberations as part of the Utility Business Line;
2. That the Administration continue to develop protocols for outdoor watering schedules based on annual monitoring of peak demand at the Water Treatment Plant;
3. That the Administration report back on how the Advanced Metering Infrastructure (AMI) system will encourage water conservation; and
4. That the 'Be Water Wise' campaign continue and a plan for 2017 - 2019 be developed for the 2017 Business Plan and Budget deliberations as part of the Utility Business Line.

### **Topic and Purpose**

This report is the Administration's response to recommendations made by the Saskatoon Environmental Advisory Committee (SEAC) on water conservation policy and provides a plan for Water Conservation programs in 2016 and 2017.

### **Report Highlights**

1. Inefficient water fixtures have been largely eliminated from the marketplace.
2. Toilet rebate programs have demonstrated water conservation in other jurisdictions.
3. The effectiveness of outdoor water schedules at reducing water consumption varies depending on purpose and length of the restriction.
4. A water monitoring program is being implemented through the Advanced Metering Infrastructure (AMI) system and will be deployed within the next five years.
5. Civic water conservation programs include the 'Be Water Wise' campaign, as well as internal water-saving practises.

### **Strategic Goal**

The contents of this report support the Environmental Leadership priority to consider mitigation strategies for the impact of severe weather events on the City's infrastructure and the long-term strategy to reduce greenhouse gas (GHG) emissions tied to City operations.

## **Background**

SEAC forwarded a report to the Administration and Finance Committee on February 10, 2011, titled “Water Conservation Policy”. It was resolved that the information be received and forwarded to the Administration for review and report with comments.

At the May 9, 2013, Administration and Finance Committee the “Water Conservation Initiative – Be Water Wise Campaign” report outlined a phased and strategic approach to first target outdoor residential water use, then large water users within the Industrial, Commercial and Institutional (ICI) sector, and finally indoor residential water use.

This report provides comments on the remaining recommendations made by SEAC along with an update on ‘Be Water Wise’.

## **Report**

SEAC Recommendation 1: Amend existing bylaws to require water efficient fixtures (low-flow toilets and showerheads) for new and existing building construction and renovations in residential, commercial, industrial, and institutional sectors.

The Administration’s Response: Regulatory requirements for water efficient fixtures typically occurs at the provincial or state level including Ontario, British Columbia, Alberta and California. Due to regulation in other places, the marketplace is dominated by efficient fixtures, including areas without such regulations such as Saskatchewan. More information is available in Attachment 1.

The National Plumbing Code of Canada 2015 (the code) was made available in February, 2016. The Province of Saskatchewan’s Plumbing Regulation (October 1, 2011) has adopted the 2005 version of the code, and it is unknown whether the 2015 code will be adopted. Federal-level consultations on water conservation (including water conservation fixtures) were held in conjunction with the development of the code. The Administration will continue to liaise with the provincial government to keep abreast of any proposed changes at the Provincial level that would align with the code.

Due to the high availability of efficient fixtures and uncertainty with Provincial regulations, the Administration does not recommend pursuing any bylaw changes at this time.

SEAC Recommendation 2: Implement a low-flow toilet rebate program similar to other Western Canadian municipalities.

The Administration’s Response: Toilet rebate programs are common in other jurisdictions and have demonstrated results in water conservation (see Attachment 2 for results). The Administration recommends that a toilet and/or other indoor fixture rebate (showerheads or faucet aerators), be brought forward to the 2017 Business Plan and Budget deliberations. Further information describing the scope and implications of such a program will be brought forward with the report on water rates.

SEAC Recommendation 3: Enact a bylaw implementing an outdoor water schedule.

The Administration's Response: Implementing an outdoor water schedule can be an effective way to reduce water demand if implemented for a short time and for a specific purpose (e.g. in response to a water shortage). Schedules are less effective for long-term water conservation and must be supported by strong communications and enforcement. See Attachment 3 for more information.

The Waterworks Bylaw (Bylaw No. 7567) was amended in 2011 to allow for temporary outdoor water restrictions to be put in place when necessary. A water restriction was imposed to respond to a filtration issue at the Water Treatment Plant that limited water supply.

The Administration believes that increased education programs would be more effective in reducing total water consumption than implementing irrigation schedules. Water restrictions help manage peak flows but do not tend to reduce total consumption.

SEAC Recommendation 4: Report back on a strategy to implement a water monitoring program.

The Administration's Response: The Advanced Metering Infrastructure (AMI) system is being implemented. AMI compatible meters have been installed since 1994 and the AMI communication modules will be installed within the next five years. The AMI system will provide customers with more accurate and detailed billing information that has been demonstrated to reduce water consumption by 10% in other jurisdictions. The AMI system will also assist in leak detection for both customers and the utility (see Attachment 4).

SEAC Recommendation 5: Promote and develop new programs and incentives for water conservation.

The Administration's Response: Some civic facilities and operations use alternative water sources for irrigation or vehicle washing but it is not a widespread practice. Water conservation, including substituting potable water with alternative sources, will be addressed in the sustainable building policy currently under development. More information is available in Attachment 5.

The 'Be Water Wise' education campaign was launched in 2012. A summary of the campaign is available in Attachment 5 and proposed activities for 2017 to 2019 will be outlined in a report on water rates.

### **Public and/or Stakeholder Involvement**

Environmental and Corporate Initiatives consulted with Saskatoon Water and Building Standards to develop this response. A verbal update on research findings was provided at the January SEAC meeting.

The Saskatoon Curbside Recycling Survey included questions about the perceived importance of addressing environmental challenges. Water conservation ranked third in importance, after air quality and conserving natural areas, with 55% of those surveyed ranking it as very important and another 28% ranking it as important.

### **Financial Implications**

\$90,000 has been allocated within Capital Project #2197 to complete the Water Conservation Strategy. An additional funding request will be brought forward as part of a report on water utility rates for 2017 to 2019 to be considered during the 2017 Business Plan and Budget deliberations.

### **Environmental Implications**

Water treatment, distribution, and waste water treatment is the source of 35% of corporate greenhouse gas (GHG) emissions. Water conservation will therefore be a key component to achieving GHG reduction targets. Water conservation will also reduce the impact of severe weather events on the City's water treatment infrastructure, such as extended periods of drought or hotter summer temperatures.

### **Other Considerations/Implications**

There are no policy, privacy or CPTED implications or considerations, and a communication plan is not required.

### **Due Date for Follow-up and/or Project Completion**

A report outlining the scope and implications of an indoor water fixture rebate program and a water conservation plan and budget for 2017 - 2019 will be included as part of the water utility rate setting process. In 2017, a report will be prepared on how AMI will encourage water savings.

### **Public Notice**

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

### **Attachments**

1. Background to Recommendation 1
2. Background to Recommendation 2
3. Background to Recommendation 3
4. Background to Recommendation 4
5. Background to Recommendation 5

**Report Approval**

Written by: Katie Burns, Environmental Coordinator  
Reviewed by: Amber Weckworth, Manager of Education and Environmental Performance  
Brenda Wallace, Director of Environmental and Corporate Initiatives  
Reid Corbett, Director of Saskatoon Water  
Jeff Jorgenson, General Manager, Transportation and Utilities Department  
Akhil Kumar, Building Inspections Manager  
Randy Grauer, General Manager, Community Services Department  
Approved by: Catherine Gryba, General Manager, Corporate Performance Department

Water Conservation Update – Response to SEAC.docx

**SEAC Recommendation 1: Amend existing Bylaws to require water efficient fixtures**Availability of Efficient Fixtures in the Marketplace

Manufacturers and retailers have responded to provincial regulations where they exist. As a result, water efficient fixtures are now widely available everywhere and water “inefficient” fixtures have been largely eliminated.

- All new water fixtures in the United States are required to meet basic conservation standards (toilets 6L/flush and showerheads 9.5L/min).
- Over one half of the Canadian population and the State of California (a population greater than Canada’s) are required by provincial or state regulations to exceed the basic conservation standards (toilets 4.5-4.8L/flush and showerheads 7.6L/min)
- A cursory survey of major retailers of water fixtures in Saskatoon did not find water fixtures that used more water than the basic conservation standards.

National Plumbing Code of Canada

The recent release of the National Plumbing Code of Canada 2015 (the code) will provide an opportunity for the City to liaise with the Province regarding water conservation and water efficient fixtures. Three levels of government play a role in plumbing regulation:

- Government of Canada: updates the code every five years. The most recent update in 2015 included consultations on water conservation.
- Province of Saskatchewan: requires municipalities to enforce Saskatchewan Plumbing Regulation. It is based on the National Plumbing Code of Canada 2005, with some amendments.
- City of Saskatoon: administers and enforces the provincial regulation. The Plumbing Permits Bylaw (No. 6583) does not have any additional technical requirements.

**SEAC Recommendation 2: Implement a low-flow toilet rebate program similar to other Western Canadian municipalities.**

Toilet rebate programs continue to be common in cities across Canada including: Calgary, Richmond, Guelph, Winnipeg, Nanaimo, North Vancouver, and Halton Region.

A rigorous longitudinal study of rebate programs for a variety of water fixtures, appliances and outdoor landscaping from Albuquerque, New Mexico, indicated that low-flow toilet rebates result in measurable water savings:

- Low-flow toilet rebates offered the largest reduction in water use, with an average household reduction of 12.86%
- Rebate programs focused on indoor fixtures and appliances (toilets, showerheads, washing machines and dishwashers) showed greater household water savings over the long term than rebate programs for outdoor fixtures or landscaping.

A low-flow toilet rebate has high potential to reduce household water use in Saskatoon and to save residents money:

- According to Statistics Canada, the average Canadian household uses 30% of indoor water to flush toilets and only about half of households in Saskatchewan had a low-flow toilet in 2013.
- Saskatoon Neighbourhood Profiles shows that 57% of the city's dwellings were built between 1961 and 1990 and therefore are more likely to have an inefficient toilet (based on the findings of the Albuquerque study).
- The savings potential for replacing an old toilet with a water-efficient toilet are: \$137 per year for a single flush and \$148 for dual flush.



**SEAC Recommendation 3: Enact a bylaw implementing an outdoor water schedule**

The effectiveness of outdoor water schedules at reducing water consumption depends on the purpose and length of time that the schedule is implemented.

- A long-term water schedule that is implemented for the summer months every year will redistribute when water is used (called peak demand management) but often does not reduce overall water consumption.
- A short-term water schedule that is used during a water shortage is effective at both redistributing when water is used and reducing water consumption.

Long-term outdoor water schedules are not a proven method to conserve water.

- Municipalities including Calgary, Abbotsford, Barrie, Waterloo, Kingston, and Vancouver adopted long-term water schedules to change when outdoor water was used. It is an effective best practice for reducing peak daily demand.
- Academic research has found that the most effective methods for municipalities to reduce outdoor water use include conservation-oriented pricing, increased information available to customers, and campaigns focused on attitude and behaviour change. Long-term water schedules were not found to be effective.

Short-term outdoor water schedules during a period of water shortages have proven to be effective for water conservation, including for the City of Saskatoon.

- The City of Saskatoon now has a mechanism for a short-term outdoor water schedule in The Waterworks Bylaw (Bylaw No. 7567).
- In June and July of 2011, mandatory outdoor water restrictions were implemented after capacity at the Water Treatment Plant (WTP) was reduced as a result of poor river water quality and mechanical issues.
- A thesis by University of Saskatchewan graduate student Abdul Qader Sheikh Alzoor found that outdoor water use decreased by 17% and overall water use by 9% during these restrictions. He used statistical methodologies to eliminate other variables such as temperature and precipitation to compare water use during the restrictions to water use between 2004 and 2012.
- Similar results have been found during short-term mandatory water restrictions in other jurisdictions.
- Academics have identified the “good-will” of residents and stronger communication and enforcement during a short-term water shortage as the reasons for reduced water consumption

During the June and July 2011 mandatory water restrictions, the Administration monitored water use closely and will use this information in the event another water restriction is required.

**SEAC Recommendation 4: Report back on a strategy to implement a water monitoring program.**

The AMI system remotely measures and records actual water usage by time intervals throughout the day, and transmits that data wirelessly over a secure network to a central data management system.

The AMI system will result in:

- Utility bills that are based on actual readings and not estimates.
- Residents being able to track their water use and detect unusual consumption such as water leaks.
- Improved citizen service as meter readers will no longer need access to citizens' property.

In jurisdictions already using the technology, AMI has been demonstrated to reduce water consumption by at least 10%. Better leak detection has resulted in significant savings for customers and the utility.

<b>Jurisdiction</b>	<b>Results</b>
Abbotsford-Mission	Measured a 15% reduction through behaviour change and early leak detection
New York City	Leak notification for 12,000 customers saved \$10 million in first year
Sacramento	Pilot of 2,360 meters detected 216 leaks (9%) equal to 19,031 CF (cubic feet) per month
Santa Maria	Pilot identified leaks in 3% of customers, ~500,000 gallons saved

**SEAC Recommendation 5: Promote and develop new programs and incentives for water conservation**Substitution of potable water with alternative water sources

The current plumbing bylaws allow for the substitution of potable water with alternative water sources.

- If alternative water sources are used for non-human use (such as irrigation or washing vehicles) no plumbing permit is required. Building Standards receives inquiries but does not track community projects.
- If alternative water sources are used for human use (such as toilets, showering and bathing, or faucets), a plumbing permit is required and would fall under “Alternative Solutions for Plumbing”. There is no record of plumbing permits given for alternative water sources in Saskatoon, including no City of Saskatoon examples.

The City of Saskatoon has the following examples of using alternative water sources:

- The Access Transit building harvests rainwater for bus washing.
- The New Civic Operations Centre will re-use water for bus washing.
- Irrigation of some civic properties is done with raw, untreated river water.

The Administration is in the process of developing a civic building sustainability policy. The policy will consider the substitution of potable water with alternative sources, as well as water conservation.

The promotion of water conservation by civic facilities and operations

Water conservation initiatives by civic facilities and operations include:

- Water conservation at spray parks and padding pools:
  - Spray parks: temperature sensors controlling water on/off, piloting moisture sensors, and setting a maximum gallons per minute as part of design
  - Paddling pools: a ‘do not fill’ procedure for certain inclement weather criteria
- Reducing irrigation requirements:
  - A smart irrigation system at Access Transit
  - Xeriscaping (landscaping and gardening that reduces or eliminates the need for supplemental water from irrigation) at Fire Hall #8
  - Drought-resistant plants and moisture sensors at the Police Station
  - Development of naturalized parks that do not require irrigation
- Installing low-flow water fixtures:
  - Low-flow showerheads and toilets installed at various locations including the Bus Mall, Police Station, and Fire Halls #8 & #9
  - Low-flow fixtures are used to replace failing equipment

The Administration is developing a “leading by example” strategy for water conservation in civic buildings and operations to increase and promote water conservation.

### Education programs and incentives to encourage water conservation

The ‘Be Water Wise’ education campaign started in 2012. The following is a timeline of water conservation activities that have been completed:

- 2010 – A Water Conservation Implementation Plan developed as part of the Water Treatment Plant Long Term Capital Development and Expansion Plan
- 2011 – Mandatory water restrictions required between June 13 and July 11 due to issues with filtration at the Water Treatment Plant. Plans for launching a water conservation program are placed on-hold because of this unprecedented event.
- 2012 – The ‘Be Water Wise’ campaign is launched with a focus on outdoor water use. The campaign includes the development of a website, community events, newspaper ads and social media.
- 2013 – The ‘Be Water Wise’ campaign is expanded, with the addition of a video, display, brochure, radio ads and permaculture workshops.
- 2014 – The ‘Be Water Wise’ campaign continues with utility bills inserts, instore displays, and increasing the rain barrel rebate amount to \$20. Research on options for a conservation program for the Industrial, Commercial, and Institutional (ICI) sector begins.
- 2015 – The ‘Healthy Yards’ campaign is developed with partner organizations and results in the integration of outdoor water conservation with home composting, pesticide reduction, local food, and other complementary initiatives.

In 2016, additional water conservation programs and strategies are being implemented or developed:

- **Outdoor Water Conservation:** The ‘Healthy Yards’ campaign continues to encourage outdoor water conservation and leverage complementary initiatives through workshops, trade shows, and rebates for rain barrels and composters.
- **Industrial, Commercial, and Institutional (ICI) Water Conservation:** A pilot water audit program for hotels will inform an education and awareness campaign and the development of an ongoing water conservation audit or incentive program.
- **Indoor Residential Water Conservation:** A pilot education program, using community-based social-marketing (CBSM), will be developed and implemented in 2016, along with an indoor water fixture rebate program that could be implemented as early as 2017.
- **Civic Buildings and Operations Water Conservation:** In 2016, a strategy will be developed to target water conservation, including metered and unmetered uses and methods to promote water conservation initiatives.
- **Student Action for a Sustainable Future (SASF):** The SASF program established a water conservation component in 2016, which will be renewed annually.
- **Proposed New Park Landscaping Design Standards that Reduce Irrigation Needs**

---

---

## Saskatoon GIS Applications Upgrade – Request for Proposal Award

### Recommendation

That the Standing Policy Committee on Environment, Utilities and Corporate Services recommend to City Council:

1. That a contract with Latitude Geographics Group Ltd. be approved for the enhancement of our web mapping applications to the newest platform at an estimated fee of \$493,545 plus applicable taxes; and
2. That the City Solicitor be requested to prepare the appropriate agreement and that His Worship the Mayor and the City Clerk be authorized to execute the agreement under Corporate Seal.

### Topic and Purpose

The purpose of this report is to request City Council's approval to proceed with a contract to engage Latitude Geographics Group Ltd. for programming and related services for the upgrade of 55 Corporate GIS web mapping applications to our newest platform.

### Report Highlights

1. The Current GIS Platform is no longer economical to continue to develop and maintain applications for the growing demand of the City.
2. Applications developed over the past 20 years must be reengineered to meet changes in the GIS Platform and to take advantages of advancement in technology that allows applications to be viewed on any electronic device (including mobile devices) and to expand the use of information entry to allow for near real-time reporting on situations.
3. On January 12, 2016, the City issued a Request for Proposal (RFP) for Saskatoon GIS Applications Upgrade (RFP #16-0154).
4. Latitude Geographics Group Ltd. will reengineer existing web mapping applications including the conversion and migration of the City's information and mapping services to better enable and support the Corporation's current and future business needs.
5. Efficiency improvements will be realized by having shared information readily available to internal staff and to meet the information and communication needs for the citizens of Saskatoon as part of Service Saskatoon.
6. The recommendation is that Latitude Geographics Group Ltd, the Preferred Proponent, be awarded the contract for the applications development services.

### **Strategic Goal**

This report supports the strategic goal of Continuous Improvement and the four-year priority of pursuing opportunities to “modernize” civic government to reflect best practices, changing demands, etc. It also supports the ten-year strategy of leveraging technology and emerging trends to reach our goals, serve citizens, and connect meaningfully with our stakeholders.

### **Background**

The development of the Corporate Geographical Information System (GIS) began in 1990 with the conversion of engineering drawings into a platform capable of electronically storing and retrieving information using interactive maps. This was a desktop technology primarily limited to skilled GIS/CAD users.

In 1996, web based technology was introduced allowing interactive mapping to be quickly accessed by staff at their desk for viewing and reporting on information about incidents, assets, activities, and programs.

From 1996 to date, the number of web based GIS mapping applications and processes currently in use at the City has grown to over 120. The web mapping applications are available to staff on their desktops, tablets and laptops. The GIS Platform also provides citizens access to information and is used to advise the City and citizens of situations using public facing applications including the Pothole Application, Service Saskatoon, Schedule Application, Road Restrictions and Construction Projects Application, available on the City’s Website.

The City’s existing Corporate GIS platform is significantly past the threshold for replacement. The upgrade will provide new functionality, improved performance and assist in meeting the growing demands for information by citizens and staff of the corporation.

### **Report**

This project involves the supply of programming and technical services to convert designated internal GIS applications and related services to the current standard for use on desktops, laptops, tablets, and smart phones.

In support of the Service Saskatoon initiative, the upgraded GIS technology will make it easier for citizens to access current information, request services and track our progress from start to finish from any device anywhere. New GIS tools will help staff more efficiently manage and respond to Citizens calls and inquiries on programs and services.

Throughout the duration of this project, the consultant will provide support and guidance to the City’s IT GIS Services staff so they will have capacity and the expertise to provide sustainable and ongoing support for current and future application development at project conclusion.

## Saskatoon GIS Applications Upgrade – Request for Proposal Award

---

This contract includes:

- Conversion of existing web mapping applications and related services to conform to our new GIS Enterprise environment.
- Migration of existing geodatabases and data to conform to our new GIS Enterprise environment.
- Implementation of support and documentation for applications, geodatabases, and other related services.
- Implementation of all converted applications, geodatabases, and services in the new GIS Development Environment.
- Implementation of support for rollout of all converted applications, geodatabases, and services to the Corporate GIS Framework.

### RFP for Saskatoon GIS Applications Upgrade

An RFP for Saskatoon GIS Applications Upgrade for programming and related services for the upgrade of web mapping applications to the newest platform was issued on January 12, 2016, with a closing date of February 23, 2016.

Responses were received from:

- Latitude Geographics Group Ltd.

The RFP Review Team is composed of the IT Manager of Business Solutions - Operations, IT Coordinator from the Business Solutions – Operations Team, IT Systems Analyst from the Business Solutions – Operations Team. The team evaluated the proposal based on the following criteria detailed in the RFP

<b>Category</b>	<b>Points</b>
Company	5
Project Management	15
Project Team	35
Proposed Approach and Methodology	35
Project Cost	10
<b>TOTAL</b>	<b>100</b>

### Preferred Proponent

Upon completion of the evaluation, the RFP Review Team determined that the proposal submitted by Latitude Geographics Group Ltd. met the requirements of the RFP. Therefore, the recommendation is to award the RFP to Latitude Geographics Group Ltd as detailed below:

The contract would run for the approximately 18-month project engagement at an estimated fee of \$493,545, plus applicable taxes.

### **Options to the Recommendation**

The option is to continue with current internal resources to complete the upgrade. This will require minimizing opportunities for new applications, forgoing improved

performance and functionality, and lead to an extended upgrade cycle to the point where the next upgrade should start before the current upgrade would be completed.

**Public and/or Stakeholder Involvement**

Consultations have transpired with the leadership of Transportation & Utilities to review and solicit feedback and support for the upgrade.

**Communication Plan**

Ongoing communications will continue to bridge the gap and support the role of Corporate IT as a strategic business partner to foster innovation and improve service delivery to citizens and the corporation

**Financial Implications**

The justification of technology investments is considered a strategic corporate objective to continue innovation and utilize resources effectively. Standardization and corporate alignment will increase efficiencies and provide opportunities to reduce operating costs.

**Other Considerations/Implications**

There are no policy, environmental, privacy or CPTED implications or considerations.

**Due Date for Follow-up and/or Project Completion**

Progress reports from Corporate IT will be submitted on a semi-annually basis.

**Public Notice**

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

**Report Approval**

Written by: Glen Boos, Coordinator, IT Enterprise GIS  
Reviewed by: Paul Ottmann, Director of Information Technology  
Catherine Gryba, General Manager, Corporate Performance Department  
Approved by: Jeff Jorgenson, Acting City Manager



---

---

## 2016 Membership: South Saskatchewan River Watershed Stewards

### Recommendation

That the Standing Policy Committee on Environment, Utilities, and Corporate Services recommend to City Council that the City of Saskatoon membership with the South Saskatchewan River Watershed Stewards Incorporated be renewed for 2016.

### Topic and Purpose

The Administration recommends continuing membership with the South Saskatchewan River Watershed Stewards Incorporated (SSRWSI), a non-profit organization that delivers targeted programs to protect our watershed and the source of our drinking water.

### Report Highlights

1. The SSRWSI leads the implementation of the Source Water Protection Plan for the South Saskatchewan River watershed and contributes to local initiatives that support the 25-Year Water Security Plan for the Province of Saskatchewan.
2. Membership in the SSRWSI promotes initiatives that have a direct and beneficial impact on the City of Saskatoon's (City's) source of drinking water.

### Strategic Goal

Continued membership with the SSRWSI supports the strategic goal of Environmental Leadership. Specifically, membership supports the 10-year strategy of improving the quality and reducing the quantity of storm water run-off.

### Background

The City joined the SSRWSI as a founding member in 2007 and is engaged in watershed protection initiatives via this organization. There are two City representatives on the SSRWSI Board of Directors: one City Councillor and one member from the Administration.

### Report

#### Watershed Initiatives

Membership in the SSRWSI benefits the City economically, environmentally, and socially. Socially, membership enables the City to establish positive relationships with other communities in our watershed and with community organizations with an interest in watershed protection.

Working together to protect water quality and quantity for the health and welfare of our citizens results in environmental and economic benefits, such as: raising awareness of watershed issues and promoting behavior that benefits water quality. Being able to collectively identify threats to our common drinking water source enables us to leverage

funding and resources to develop and implement projects to protect this important resource.

Watershed initiatives undertaken by SSRWSI in 2015 are described in Attachment 1.

#### Benefits to Drinking Water Quality

Projects that have a direct and beneficial impact on the City's source of drinking water include groundwater well decommissioning, sediment and erosion control, fish habitat assessment, invasive species awareness and monitoring, and source water protection planning.

#### **Options to the Recommendation**

City Council may choose to not renew membership with SSRWSI, as membership is voluntary.

#### **Public and/or Stakeholder Involvement**

The SSRWSI has developed partnerships with other organizations with an interest in watershed protection, and has a membership base from across the entire watershed. Attachment 1 lists members and partners of the organization.

#### **Communication Plan**

Updates on the activities of the SSRWSI will be provided to City Council annually when membership fees are due.

#### **Financial Implications**

The annual membership fee for the City to participate in the SSRWSI is \$20,000. Funds have been allocated in the 2016 operating budget for this expenditure. Participation in watershed protection efforts through SSRWSI allows the City to leverage its efforts and resources.

#### **Environmental Implications**

Continued membership in the SSRWSI enables the City to participate in initiatives that protect the overall health of our watershed and our source of drinking water.

#### **Other Considerations/Implications**

There are no policy, privacy, or CPTED implications or considerations.

#### **Due Date for Follow-up and/or Project Completion**

An update to City Council will be provided in May 2017.

#### **Public Notice**

Public Notice pursuant to Section 3 of Policy No. C01-021, *Public Notice Policy*, is not required.

#### **Attachment**

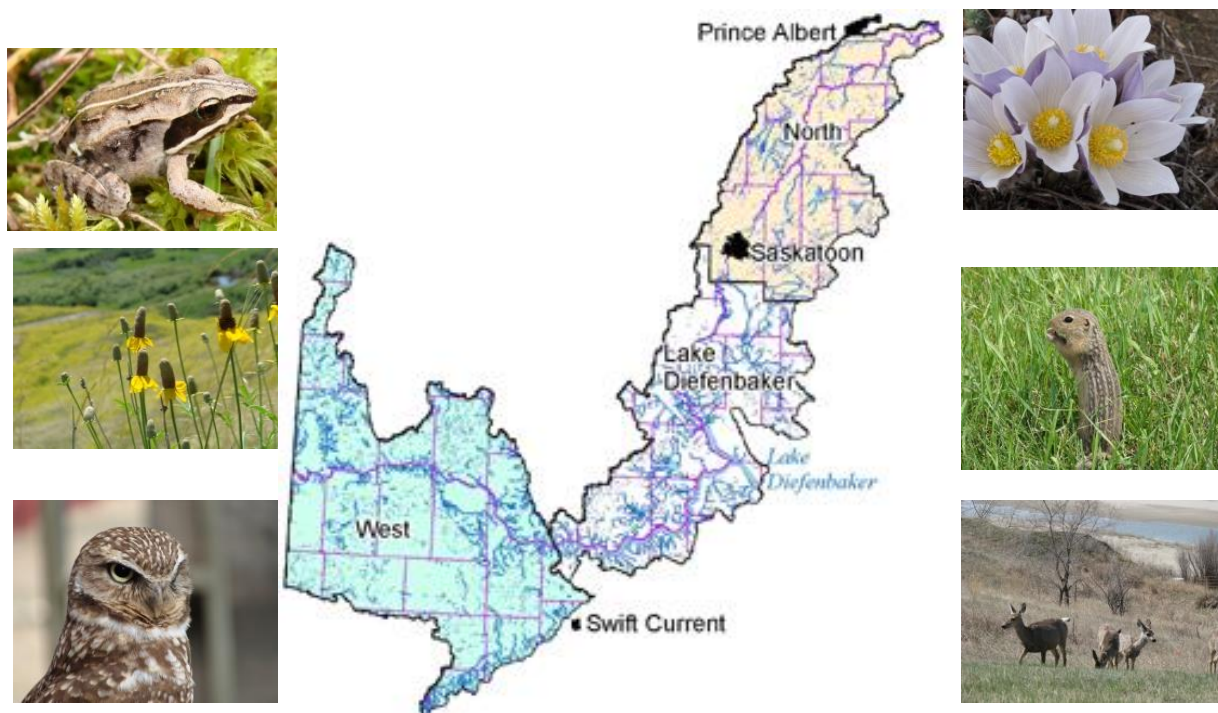
1. Watershed Protection

**Report Approval**

Written by: Twyla Yobb, Watershed Protection Manager  
Reviewed by: Brenda Wallace, Director of Environmental and Corporate Initiatives  
Reid Corbett, Director of Saskatoon Water  
Jeff Jorgenson, General Manager, Transportation and Utilities Department  
Approved by: Catherine Gryba, General Manager, Corporate Performance Department

2016 Membership SSRWSI.docx

## Watershed Protection



*Photos and map courtesy of the South Saskatchewan River Watershed Stewards, Inc.*

### Overview

The South Saskatchewan River is central to the community, culture, and heritage of Saskatoon. Citizens live, work, and play in and around the river, which also supplies our drinking water and receives storm water and treated waste water.

The river is part of a larger ecological entity called the South Saskatchewan River Watershed that connects us to our neighbours up and downstream of Saskatoon. Because the river is so vital to our citizens, it is important that we take part in protection of this resource.

Saskatoon is engaged in watershed protection initiatives through membership in a non-profit organization that delivers targeted programs to protect the quality and quantity of water in the watershed; the South Saskatchewan River Watershed Stewards Inc. (Stewards).

### What is a Watershed?

A watershed is an area of land that is linked by a common connection to one watercourse. All the storm runoff and snow melt in this area is carried or “shed” to this common watercourse. Water moving within the watershed is affected by everything it comes into contact with including soil, vegetation, wildlife, and people. The activities that we do on the land have impacts on the water quality that is available to others downstream. Likewise, the water quality that is available to Saskatoon is impacted by the activities of those who live upstream.

### The South SK River Watershed

The South Saskatchewan River is the single largest supplier of water for drinking, irrigation, industry, and recreation in the province. Approximately 45% of the provincial population relies on the river for their daily water needs.

The river begins in the Rocky Mountains in Alberta. The Oldman River, Bow River, and Red Deer River all combine to form the South Saskatchewan River just after crossing the Alberta-SK border.

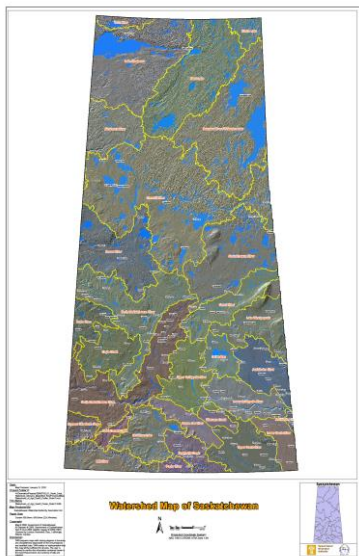
In Saskatchewan, the River travels northeast to Lake Diefenbaker, where Gardiner Dam controls flow moving toward Saskatoon. Downstream of the city, the South and North Saskatchewan Rivers join to form the Saskatchewan River. The river continues to the Delta near the Manitoba-SK border, then through Lake Winnipeg and Nelson River into the Hudson Bay.

The upstream boundary of the South SK River Watershed is the Alberta-SK border. The downstream boundary is in the northeast where the South SK and North SK Rivers join.

## Source Water Protection Planning

The Province initiated watershed planning for the South Saskatchewan River in 2004. Watershed residents and leaders participated in the creation of a work plan, called the Source Water Protection Plan, to protect our common water resources.

The Stewards were formed in 2007, with Saskatoon as one of the founding members, to implement the resulting Source Water Protection Plan.



Map courtesy of the Province of Saskatchewan

## Why is Saskatoon a Member?

Membership with the Stewards supports the strategic goal of Environmental Leadership. The ten year strategy of improving the quality and reducing the quantity of storm water run-off is specifically supported.

Initiatives implemented by the Stewards that support the City's long term goals include:

- General education and awareness of watershed issues.
- Water quality monitoring and research to identify land uses or human activities that can adversely impact water quality.
- Programs to raise awareness of issues related to agriculture. Funding is available for producers who wish to implement beneficial management practices for watershed protection.
- Awareness and monitoring for aquatic and terrestrial invasive species.
- Source water protection planning for rural communities and First Nations.

## Benefits of Membership

### 1. Economic Benefits to the City

- Leverage additional funding for watershed protection projects. The Stewards are able to use the City's contributions to leverage additional funds and resources from other partners and funding agencies.
- Identify future threats to water quality and quantity, develop projects, and identify funding sources to address issues.

### 2. Environmental Benefits

- Raise awareness of watershed issues and promote behavior that benefits water quality.
- Initiate projects that implement best management practices for the protection of water quality and quantity.
- Improved understanding of terrestrial and aquatic ecology in the watershed.
- Improved ability to monitor the watershed for issues, such as invasive species, and take measures to reduce environmental and financial impacts.
- Improved understanding of watershed hydrology.

### 3. Social Benefits

- Protect water quality and quantity in the River for the health and welfare of our citizens.
- Better relationships with other communities that live upstream and downstream of Saskatoon.
- Productive relationships with community organizations with an interest in watershed protection.

### What Are the Consequences of Not Doing this Work?

- Saskatoon would not have access to the provincial Source Water Protection Planning initiative and related projects.
- Saskatoon would not take advantage of an opportunity to develop better relationships with communities up and downstream on the South Saskatchewan River.
- The City would not be able to easily demonstrate involvement with protection of water quality and quantity for the health and welfare of our citizens.

### What is the Timing of the Project?

Ongoing membership with the Stewards is dependent upon Council approval on an annual basis.

### 2015 Activities

Watershed initiatives undertaken in 2015 included:

- Aquatic Invasive Species Public Awareness Program
  - \$1400 grant, COS Environment Fund
  - 16 presentations and monitoring sites
  - 13 signs posted to increase awareness
  - 6 shoreline assessments completed
- Source Water Protection Planning
  - \$99,000 grant (2 year), Eco Action Fund for Beardy's and Okemasis First Nation.
  - Provided technical support for Pike Lake Cottage & Watershed Association plan.
- Agri-Environmental Group Plans
  - \$100,000, Ministry of Agriculture funding

- Assistance with over 60 applications to implement agricultural best management practices.
- Invasive weed workshops/ field tours.
- Promotion of agricultural best management practices throughout the watershed.
- Fish Habitat Assessment
  - \$45,000, Federal Habitat Stewardship Program funding
  - Conducted habitat assessments on 10 river tributaries.

### 2016 Activities and Deliverables

Projects in the 2016 SSRWSI Business Plan that will directly benefit Saskatoon include:

- Continued promotion and assistance with implementation of agricultural best management practices.
- Continued awareness and monitoring for aquatic and terrestrial invasive species.
- Continued source water protection planning initiatives.
- Promoting development of an allocation strategy for the South Saskatchewan River.
- Support for development of a Master Naturalist Program and a Valley-Wide Resource Management Plan.
- Partnership with Watershed Canada to initiate riparian health assessment projects in Saskatchewan.

### Who Are The Sponsors?

#### Council

- Councillor Zach Jeffries

#### Corporate Performance

Environmental & Corporate Initiatives:

- Brenda Wallace, Director
- Twyla Yobb, Land & Water Section

## Who Are The Stakeholders?

### Corporate Performance:

Environmental and Corporate Initiatives

- Education & Environmental Performance
- Land & Water Section

### Community Services

Parks:

- Maintenance NW District
- Maintenance SE District

Community Development:

- Community Initiatives

### Transportation and Utilities

Saskatoon Water:

- Water Treatment
- Wastewater Treatment
- Stormwater Utility

## Partnerships

Partnerships that are available to Saskatoon via the SSRWSI include:

- Saskatchewan Association of Watersheds (members include 10 other provincial watershed groups)
- Meewasin Valley Authority
- Native Plant Society of Saskatchewan
- Saskatoon Nature Society
- Saskatchewan Environmental Society
- Saskatchewan Invasive Species Council
- Saskatchewan Wildlife Federation
- Nature Saskatchewan
- Swale Watchers
- Wild About Saskatoon
- Pike Lake Cottage and Watershed Association
- North Saskatchewan River Basin Council
- PARTNERS for the Saskatchewan River Basin
- Ducks Unlimited Canada
- Global Water Security Institute
- National Hydrology Research Centre
- School of Environment and Sustainability
- Environment Canada
- Fisheries and Oceans Canada
- SK Ministry of Environment
- SK Ministry of Agriculture

## 2015 Members

Members of the Stewards in 2015 were:

### Urban:

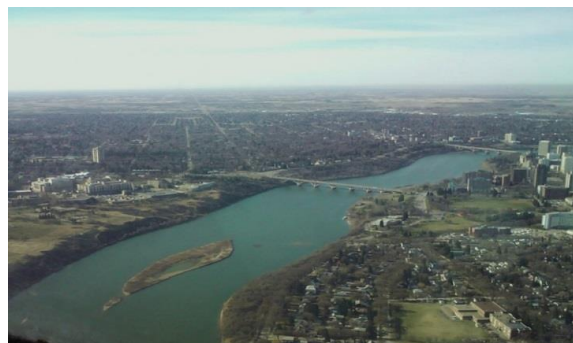
- City of Saskatoon
- Town of Cabri
- Town of Cudworth
- Town of Elbow
- Town of Eston
- Town of Kindersley
- Town of Leader
- Town of Osler
- Village of Mistusinne

### Rural

- R.M of Chesterfield #261
- R.M. of Corman Park #344
- R.M. of Deer Forks #232
- R.M. of Excelsior #166
- R.M of Fertile Valley #285
- R.M of Fish Creek #402
- R.M of Happyland #231
- R.M. of Kindersley #290
- R.M. of Loreburn #254
- R.M of Lacadena #228
- R.M. of Miry Creek #229
- R.M. of Montrose #315
- R.M. of Newcombe #260
- R.M of Prince Albert #461
- R.M. of Rudy#284
- R.M. of Saskatchewan Landing #167
- R.M. of Snipe Lake #259
- R.M. of St. Louis #431
- R.M. of Vanscoy #345
- R.M. of Victory #226

### Special Interest

- Meewasin Valley Authority
- Pike Lake Cottage and Watershed Assoc.



*Photo courtesy of the South Saskatchewan River Watershed Stewards, Inc.*

---

---

## Public Space Recycling

### Recommendation

That the report of the General Manager, Corporate Performance Department, dated April 11, 2016, be forwarded to City Council for information.

### Topic and Purpose

The purpose of this report is to provide an update on the Public Space Recycling program.

### Report Highlights

1. Several pilot projects are being used to determine effective servicing options for a fully expanded public space recycling program, including:
  - Bottle baskets for recycling beverage containers in parks
  - Paper recycling containers along 22<sup>nd</sup> Street in the Downtown Business Improvement District (BID)
  - Expanded bottle basket recycling to all BIDs
  - Deposit beverage recycling containers in River Landing
2. The financial implications of rolling out a city-wide Public Space Recycling program that covers all pedestrian-oriented commercial areas, parks, and sporting facilities will be calculated based on a long-term program design that is informed by the results of the various pilots.

### Background

At its meeting on September 28, 2015, City Council resolved:

- “1. That the RFP for Public Space Recycling issued in July 2015 be canceled; and
2. That the Administration proceed with interim solutions and continue to develop a long-term plan for the program, reporting back with program options by April 2016.”

### Strategic Goal

The recommendations in this report support the four-year priority to promote and facilitate city-wide recycling under the Strategic Goal of Environmental Leadership.

### Report

#### Interim Public Space Recycling Program in Pedestrian-Oriented Commercial Areas

The current level of service for public space recycling includes the separation of deposit beverage containers and paper from the regular garbage stream to enable recycling. To maintain the current level of service in pedestrian-oriented commercial areas, the current MetroBin program with Creative Outdoor Advertising has been extended until a new recycling service can be developed. All MetroBins will be removed by December



## Public Space Recycling

---

31, 2017. Between now and the end of 2016, a number of pilot projects are being used to determine effective servicing options such that a new program can be implemented for the long-term.

### Deposit Beverage Container Recycling Options

The lowest cost method for diverting cans and bottles is through bottle baskets which have been implemented in various locations since 2014 (see Attachment 1). Installation of bottle baskets will be expanding throughout the BIDs in 2016, with slight adjustments to the design based on BID feedback.

Bottle baskets were also installed in eight (8) civic parks in October of 2015; three (3) more will be installed with new garbage containers this spring. The corporate sponsor for this pilot project is Sarcan. At this time it is unknown whether bottle baskets, which provide a good solution in shopping areas, will work in park settings. Results will be known by the end of June and reported on.

The number of deposit beverage recycling containers in River Landing are also being expanded this season; six (6) existing garbage containers will be converted for beverage recycling. This project is also being funded by corporate sponsorship through Sarcan. During 2016, Administration will observe how these containers are utilized, how effective they are compared to bottle baskets, and also determine servicing requirements. This information will be used to help develop public space recycling for special use parks across the City of Saskatoon (City).

Based on the results of these pilots, expanding deposit beverage container recycling throughout the city utilizing bottle baskets and separately serviced containers will continue through 2016 and 2017.

### Paper Recycling

To maintain the current level of service for public space recycling into the future, the City will need to determine methods for collecting paper for recycling. Feedback from the BIDs indicate preference for a paper recycling container that attaches or sits next to an existing garbage container; eight (8) containers will be piloted this summer.

A prototype has been developed by Urban Design (see Attachment 2). To service these new containers, the City will be providing funding to The Partnership, whose street ambassadors will service the paper recycling units and also collect information on tonnage and other important metrics. The information collected in the pilot will be used to develop a service plan.

### Special Event Recycling

Administration has researched options for providing recycling at special events and outdoor sporting facilities. The City currently provides garbage containers to numerous events during the year. Administration researched options for providing recycling containers when garbage containers are dropped off. Experience with festival and event recycling to date has shown that recycling containers that are unsupervised result

in contamination levels so high that the container effectively becomes garbage. The same servicing challenges that exist for paper recycling in pedestrian-oriented commercial areas also currently prevent the City from servicing the recycling containers as required. No viable private or community-based servicing options exists at this time either due to the contamination issue.

As a starting point for developing special event recycling, Administration will look at ways of ensuring deposit beverage containers are recycled at all special events. This will be completed by examining the application approval process for special events, working to find a suitable recycling container for deposit beverage containers, and working with community groups to find a suitable way of emptying the containers.

### **Public and/or Stakeholder Involvement**

The BIDs have been consulted in the development and execution of the pilot initiatives and the proposed plan reflects their feedback. They will continue to be involved as the long-term program is developed.

While the preference of the BIDs is that a City-run program be operating in spring 2016, there is support for a spring 2017 launch of public space recycling as described in this report.

### **Communication Plan**

Where the opportunity exists, Public Space Recycling messaging and design will be similar to the curbside and multi-unit recycling programs. General awareness for the program will be communicated through the news media, social media, and where applicable, other recycling communications materials.

### **Policy Implications**

Until such time as recycling pilot projects are complete for City parks, and the results reviewed, there is no plan to recommend amendments to Bylaw No. 7767 dealing with advertising in parks.

### **Financial Implications**

#### 2016 Pilots

A pilot for servicing paper recycling containers in the downtown will cost the City \$8,000. These funds are available in the 2016 operating budget. This money will allow The Partnership to service the eight (8) units biweekly and collect information using their street ambassadors. A service plan to expand paper recycling into City parks is being developed to help determine servicing requirements unique to civic parks.

The costs to develop and install the prototype for the paper recycling pilot in pedestrian-oriented commercial areas will be covered by the existing Urban Design capital budget.

The capital costs of the beverage container recycling pilot projects are being covered through a partnership with Sarcan. To date, approximately \$4,500 has been provided to purchase bottle baskets and convert existing containers.

## Public Space Recycling

---

### Program Launch in BIDs (2017)

The financial implications of rolling out a city-wide Public Space Recycling program that covers all pedestrian-oriented commercial areas will be calculated based on a long-term program design that is informed by the results of the various pilots in 2016. Public Works does not have this service level in their current operating budget (including equipment and staffing). A report on implementation will be prepared for the 2017 Business Plan and Budget deliberations.

### Program Launch in Parks

Pilots within parks and at sporting facilities will be implemented in 2016 and 2017. Information about equipment and staffing will be gathered through this exercise as Parks does not have this service level in their current operating. Recycling for parks and sporting facilities will be considered within the review of the service levels for Parks.

### **Other Considerations/Implications**

There are no new environmental, privacy or CPTED implications or considerations.

### **Due Date for Follow-up and/or Project Completion**

The performance of Public Space Recycling will be reported annually as part of the Integrated Waste Management Annual Report. Administration will bring a report forward to the 2017 Business Plan and Budget deliberations outlining the implementation considerations for a long-term program covering pedestrian-oriented commercial areas. A future report on service levels within Parks will address implications of recycling.

### **Public Notice**

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

### **Attachment**

Attachment 1 - Bottle Baskets

Attachment 2 - Paper Recycling Prototype

### **Report Approval**

Written by: Daniel Mireault, Environmental & Corporate Initiatives

Reviewed by: Amber Weckworth, Manager Education and Environmental Performance, Environmental & Corporate Initiatives  
Brenda Wallace, Director Environmental & Corporate Initiatives

Approved by: Catherine Gryba, General Manager Corporate Performance

Public Space Recycling.docx

**Downtown Bottle Baskets**



Location: 3rd Ave from 19th Street



Location: 20<sup>th</sup> Street West and Ave E

**Bottle Basket Pilot in Parks**



Location: Albert Park

**Paper Recycling Container Prototype**



---

---

## Energy Efficient Retrofit Program

### Recommendation

That the report of the General Manager, Corporate Performance Department, dated April 11, 2016, be forwarded to City Council for information.

### Topic and Purpose

The purpose of this report is to outline potential options for providing assistance to individual property owners for energy efficient retrofits through a City of Saskatoon (City) program.

### Report Highlights

1. The City could establish an energy efficient retrofit program through property tax abatements, grants, or a third-party loan offering backed by City funds. The Administration will report further if Committee wants to pursue any of these options.
2. A study of the potential benefit a home energy retrofit program might provide in Saskatoon revealed that 83% of homes would benefit from energy-related upgrades and 33% of homes already need minor or major repairs.

### Strategic Goal

This report addresses the four-year priority of continuing to implement the Energy and Greenhouse Gas Reduction Plan under the Strategic Goal of Environmental Leadership.

### Background

The Standing Policy Committee on Planning, Development and Community Services, at its meeting held on August 17, 2015, resolved:

“That the Administration submit a report on opportunities to use the property tax system to administer an energy efficient retrofit program in Saskatoon and other options to provide assistance to individual property owners for such a program.”

### Report

There are energy efficient retrofit programs in a variety of communities across North America. Some programs are offered by utility companies as a means of reducing energy demand and the need to invest in expanded power generation capacity. Other programs are offered by local governments to support affordability (by reducing utility costs borne by businesses and residents), environmental goals (such as air quality improvement or greenhouse gas reduction), or to establish a leadership image or brand.

## Energy Efficient Retrofit Program

---

### Potential Financial Assistance Options

The Administration has identified three options by which the City could provide financial assistance in support of energy efficiency for existing homes. If City Council is interested in establishing a program that provides assistance to individual property owners for energy efficient retrofits, it is possible to create new policies or amend existing policies to allow the following three opportunities:

- property tax abatements
- grants
- third-party loan backed by the City

For further detail on these three opportunities, please see Attachment 1. Subject to the direction of Committee, the Administration could report further on these options. This report provides only a high-level summary of the potential options.

### Other Options Considered

Section 361 of *The Cities Act* allows the City to enter into an agreement with an individual property owner for the City to perform work and be repaid over time. This approach is currently used for water and sewer service line replacements where the property owner asks the City to replace lines on private property at the time it replaces City lines. Related costs are payable in the year they are incurred as *The Cities Act* prevents the City from extending payments across multiple years. Any amount which is not paid within the year the costs were incurred may be added to the tax roll for the property.

Energy efficiency retrofits are not related to any other work performed by the City. Therefore, this mechanism is not available.

**Local Improvement Charge:** *The Local Improvements Act, 1993 (The Act)* sets out what qualifies as a local improvement and does not allow for the City to use this approach for work on private property. The intent of *The Act* is to allow the City to use a Local Improvement Charge for work done to public assets that benefit the public at large but provide a proportionately larger benefit to the properties abutting or otherwise directly benefiting from the improvement.

The City may apply to the Saskatchewan Municipal Board to authorize public work as a local improvement. As energy efficient retrofits are private works, they do not qualify as local improvements under *The Act*.

**Loan provided by the City:** *The Cities Act* provides strict limits on the City's ability to loan money. The City can only lend (or guarantee a loan) to a non-profit organization, a controlled corporation, or a business improvement district. Therefore, the City cannot loan property owners money to carry out energy efficient retrofits.

**Utility Bills:** *The Cities Act* defines public utilities as providing services for public consumption, benefit, convenience or use. Energy efficient retrofits do not qualify as

## Energy Efficient Retrofit Program

---

public utilities and their benefits are deemed to accrue privately rather than to the public, so the utility bill would not be an appropriate mechanism.

### Financial Implications

The Administration studied options for establishing an energy efficient retrofits program in 2014. The study found that 83% of Saskatoon homes were of a vintage likely to benefit from improvements in energy efficiency, and 33% of homes were identified by Statistics Canada (2009) as requiring minor or major repairs. In addition, the majority of furnaces in the city are more than ten years old, suggesting that replacement with the higher efficiency equipment of today may be warranted.

The feasibility study indicated that a likely program uptake rate for the initial years of a program may be 0.5% or 80 homes per year. The cost for a typical package of energy efficient retrofits has not yet been studied for Saskatoon but may be greater than \$15,000 per home and include:

- additional roof and wall insulation
- replacement of windows
- space and water heating equipment replacement
- adding or replacing air exchanging equipment
- replacing fixtures, appliances and lighting with high efficiency options
- sealing joints, corners and cracks to improve air tightness

Administration has identified three program ideas for providing assistance that City Council may wish to consider. There are no identified funding sources for any of these program options at this time. If City Council is interested in any of these approaches, further investigation by the Administration would be required.

- (1) If delivered as a property tax abatement program, it would be unique from other City programs that are funded from the incremental assessments generated by the property improvements. No linear relationship exists between costs and appraised (and therefore assessed) value. To date, investments in home energy efficiency have not demonstrated that they generate enough incremental assessed value to leverage for a program. The City would therefore have to fund the full cost of the program until real estate and assessed values demonstrate there is a premium for energy efficiency.
- (2) If delivered as a grant, the City would have to fund the full amount of the program costs each year.
- (3) If delivered as a third-party loan backed by the City, the amount of funding the City would have to provide is dependent on the program design (i.e. how low the interest rate is or what risks the City is willing to back-stop with a loan-loss reserve fund).



## Energy Efficient Retrofit Program

---

### **Other Considerations/Implications**

There are no policy, environmental, privacy, or CPTED implications or considerations, and a communication plan is not required.

### **Due Date for Follow-up and/or Project Completion**

A further report on a specific energy efficient retrofit program would be developed as directed by City Council. The financial incentive mechanisms described in this report may also be used to promote solar energy. A report outlining a proposed strategy for solar energy will be presented to the Standing Policy Committee on Environment, Utilities and Corporate Services in May.

### **Public Notice**

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

### **Report Approval**

Written by: Brenda Wallace, Director of Environmental and Corporate Initiatives

Reviewed by: Clae Hack, Director of Finance  
Kara Fagnou, Director of Building Standards  
Kerry Tarasoff, CFO/General Manager, Asset and Financial Management Department  
Randy Grauer, General Manager, Community Services Department

Approved by: Catherine Gryba, General Manager, Corporate Performance Department

Energy Efficient Retrofit Program.docx

Type of Assistance	How It Might Support Individual Property Owners	Current Status
Property Tax Abatements	The City could abate all or a portion of property taxes owed on properties that implement approved energy efficient retrofits for a period up to five (5) years. The abatement amount and term would be based on the approved value of the retrofits.	The City currently utilizes tax abatements for the following: <ul style="list-style-type: none"> <li>• attainable housing</li> <li>• new rental housing</li> <li>• development on vacant lands, brownfields or within vacant buildings in established areas of the city</li> <li>• health care facilities (during period of construction)</li> <li>• municipally-designated heritage properties</li> <li>• eligible culture organizations</li> </ul>
Grant	The City could provide cash grants to cover the costs of approved energy efficient retrofits.	The City currently utilizes grants for: <ul style="list-style-type: none"> <li>• non-profit corporations offering sport, culture or recreation to Saskatoon residents</li> <li>• non-profit social service groups</li> <li>• non-profit corporations implementing environmental initiatives</li> <li>• certain non-profit sports programs</li> <li>• special events</li> <li>• qualifying non-profit culture organizations</li> <li>• multi-unit dwellings utilizing metal waste containers</li> <li>• businesses located in established commercial areas that improve or conserve their building façade</li> <li>• qualifying homebuyers of entry-level housing</li> <li>• corporations constructing new rental housing or an eligible affordable housing project</li> <li>• municipally-designated heritage properties</li> <li>• corporations developing a project on eligible vacant sites</li> </ul>
Third Party Loan Backed by the City	The City could provide funding to be managed by a third party organization that provides preferred-rate loans to cover the	The City provides 5% down payment loans for the purchase entry-level homes to eligible households through

<b>Type of Assistance</b>	<b>How It Might Support Individual Property Owners</b>	<b>Current Status</b>
	costs of approved energy efficient retrofits. The third-party would be responsible for the qualification of participating lenders and hold an agreement for repayment with the property owner.	the Equity Building Program offered in partnership with Affinity Credit Union.

**From:** Angie Bugg <angie.bugg@sasktel.net>  
**Sent:** Monday, March 28, 2016 12:51 PM  
**To:** City Council  
**Subject:** Form submission from: Write a Letter to Council



Submitted on Monday, March 28, 2016 - 12:51  
Submitted by anonymous user: 207.47.243.164  
Submitted values are:

Date: Monday, March 28, 2016  
To: His Worship the Mayor and Members of City Council  
First Name: Angie  
Last Name: Bugg  
Address: 308 Albert Ave  
City: Saskatoon  
Province: Saskatchewan  
Postal Code: S7N 1G1  
Email: angie.bugg@sasktel.net

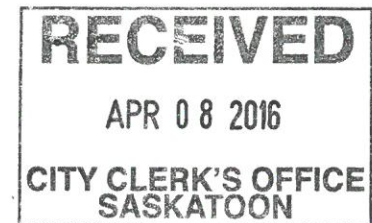
Comments: At the March 10 meeting of Saskatoon Environmental Advisory Committee, we were told that two reports are to be presented to the Standing Policy Committee on Environment, Utilities and Corporate Services at their next meeting. One on Building Standards (energy performance and building code) and one on an Energy Efficient Retrofit Program. SEAC would like 5 minutes to speak to each of these reports (i.e. 2x 5minute spots).

The results of this submission may be viewed at:  
<https://www.saskatoon.ca/node/398/submission/79894>

375-5

x 540-1

**From:** Chris Guérette <cguerette@saskatoonhomebuilders.com>  
**Sent:** April 08, 2016 9:26 AM  
**To:** City Council  
**Subject:** Form submission from: Write a Letter to Council



Submitted on Friday, April 8, 2016 - 09:26  
Submitted by anonymous user: 142.165.246.126  
Submitted values are:

Date: Friday, April 08, 2016  
To: His Worship the Mayor and Members of City Council  
First Name: Chris  
Last Name: Guérette  
Address: 2 - 3012 Louise Street  
City: Saskatoon  
Province: Saskatchewan  
Postal Code: S7J 3L8  
Email: cguerette@saskatoonhomebuilders.com  
Comments: Chris Guérette, CEO of the Saskatoon & Region Home Builders Association wishes to speak at the upcoming SPC on EU&CS, Monday, April 11, 2:00 pm on two items: 7.2.6 - Energy Efficiency Retrofit Programs and 7.2.7 - Energy Efficient Building Standards in New Dwelling Construction. (5 mins x 2). Please confirm request. Thank you.

The results of this submission may be viewed at:  
<https://www.saskatoon.ca/node/398/submission/84296>

---

---

## Energy Efficient Building Standards in New Dwelling Construction

### Recommendation

That the report of the General Manager, Community Services Department, dated April 11, 2016, be forwarded to City Council for information.

### Topic and Purpose

The purpose of this report is to provide information in response to an inquiry made at the September 28, 2015 City Council meeting, related to how other municipalities administer energy efficiency standards regarding new dwelling construction and the effectiveness of energy rating programs versus building code regulation.

### Report Highlights

1. With the exception of the city of Vancouver, which is a charter city and is granted different powers from what other communities have under British Columbia's *Local Government Act*, energy efficient building standards are regulated through provincial adoption of the building code and then administered through a local municipality's building permit program.
2. Energy rating and labelling programs are tools used to evaluate and rate a home's energy performance. These programs also encourage industry to use more comprehensive building practices that go beyond minimum code requirements, in order to achieve energy efficient performance.
3. The Province of Ontario (Ontario) legislates advanced energy targets in correlation with updates to the building code. The advanced energy targets are legislated in a five-year cycle to provide industry time to learn the upcoming energy requirements and for supporting code to be developed.
4. Building energy efficiency performance gains for new dwelling construction in Saskatoon can be achieved through collaborative partnerships, energy rating and labelling programs, capacity building programs, and incentives. By way of a working group, work has started on this initiative.

### Strategic Goal

This report supports the City of Saskatoon's (City) Strategic Goal of Environmental Leadership by providing information related to the development of programs and practices that support energy efficient building practices.

### Background

The Building Standards Division provided an update to City Council, on September 28, 2015, regarding the status of the provincial adoption and implementation of energy efficient building standards in new dwelling construction within Saskatchewan. At that meeting, City Council resolved:

“That Administration report back on the following matters:

1. Information on municipalities that have building codes that differ from provincial-wide codes, including which municipalities and how the codes differ;
2. The impact of the Ontario efficiency code on builder costs and improvement in efficiency;
3. Any evidence that compares the effectiveness of a labelling program versus building code regulation in achieving energy efficiency gains.”

### **Report**

#### Energy Regulation Across Canada

The Building Standards Division reached out to 12 municipalities across Canada to gather information related to provincial and/or municipal regulation of energy performance in building construction.

With the exception of the city of Vancouver, which is a charter city and is granted different powers from what other communities have under British Columbia’s *Local Government Act*, energy efficient building standards are regulated through provincial adoption of the building code and then administered through a local municipality’s building permit program.

Toronto, Vancouver, and Whitehorse have implemented Green Standard programs that incorporate development standards to achieve energy performance beyond the minimum requirements of the building code.

The Toronto Green Standard (TGS) has been developed over the course of ten years and has undergone several iterations. The process was developed with internal and external stakeholders and supported by third party cost-benefit analysis. TGS is a two-tier set of performance measures, with supporting guidelines, for sustainable site and building design for new development. Tier 1 is mandatory for all new development and is focused on development standards to achieve energy performance. Tier 2 is voluntary and incorporates incentives to encourage builders to incorporate energy-efficient building design that exceeds the building code. The program is also focused on the commercial sector where larger energy gains can be made.

#### Role of Energy Rating and Labelling Programs

The EnerGuide Rating System was developed by Natural Resources Canada as a tool to rate a home’s energy performance. Using the standardized evaluation method, a home can be assigned an energy rating from 0 to 100 (zero being extremely poor energy efficiency and 100 being net-zero energy). As a result, energy performance between rated homes can be compared.

Energy labelling programs, such as ENERGY STAR® and R-2000, require specific levels of energy efficiency and include prescriptive building requirements to achieve a performance certification. Energy labelling programs are also designed to challenge

builders to build homes with an energy performance that exceeds the minimum performance of the building code. An ENERGY STAR®-certified home is approximately 20% more efficient than a home built to the minimum building code. An R-2000-certified home is approximately 50% more efficient than a home built to the minimum building code.

There are many benefits to energy rating and labelling programs, which include:

- a) providing a mechanism for transforming the level of energy efficiency by offering a mechanism for the market to recognize and value continuous improvement in the energy efficiency, and conservation that is not reliant on minimum building code requirements;
- b) building industry knowledge and facilitating industry-wide change, when coupled with capacity building initiatives. Energy rating and labelling programs are a successful tool to assist in transforming the level of energy efficiency in the market;
- c) providing consumers with a means to benchmark new ground-oriented residential construction and make informed investment decisions on the basis of energy performance. This, in turn, encourages builders, developers, and designers to provide buildings with higher levels of energy efficiency, thus, reducing long-term energy use in the residential sector;
- d) presenting information in a manner that consumers are familiar with (similar to cars and appliances), thus creating energy awareness; and
- e) market place advantage – the North Carolina Energy Efficiency Alliance’s ENERGY STAR® Market Impact Study finds that new ENERGY STAR®-certified homes sold, with a \$5,500 premium, 90 days sooner than other homes.

### Success of Ontario’s Energy Transformation

The success of Ontario’s energy transformation demonstrates how provincially-legislated building codes and energy labelling programs work together.

Shortly after the 2006 Ontario Building Code (OBC) was implemented, Ontario legislated future mandatory energy targets for the 2012 OBC. Voluntary labelling programs, such as ENERGY STAR® and R-2000, were specifically designed to achieve 2012 OBC energy targets. Coupling voluntary labelling programs with education, awareness, mentorship programs, pilot programs, and incentives worked to build capacity in the building and manufacturing industry to support the future 2012 energy targets. Minimum building code requirements to support the mandated energy targets were developed during 2006, and implemented for all buildings on January 1, 2012. At the same time, the energy target for the 2017 OBC was set to continue the cycle. The legislated advanced energy target allows for industry to be engaged in the process change and to remain stable, while learning how to meet the future energy targets.

Direct builder costs associated with the implementation of the 2012 OBC and the associated energy efficiency gains for new dwelling construction within Ontario are not



readily available. However, the Ontario Ministry of Energy's 2013 Conservation First report estimated that the 2012 OBC, along with product efficiency standards, helped improve the energy efficiency of new buildings and appliances, and that for every \$1 invested in energy efficiency, Ontario has avoided approximately \$2 in costs to the electricity system.

### Next Steps for Saskatoon

Energy-efficiency performance gains for new dwelling construction can be achieved through collaborative partnerships, energy rating and labelling programs, capacity building programs, and incentives.

A working group, comprised of members from the Saskatoon and Region Home Builders' Association (SRHBA), SaskPower, SaskEnergy, and the City's Planning and Development, Environmental and Corporate Initiatives, and Building Standards Divisions, has been created with the goal of creating a sustainable energy program aligned with the City's energy performance goals and supported by industry. Components of a sustainable and successful program include: energy rating, energy labelling, incentives, financing, education, capacity building programs, and regulation.

The working group will focus, firstly, on the development of an energy performance program for new one- and two-unit dwelling construction, and then work on developing a sustainable energy program for other building types, such as new commercial development and existing buildings.

### **Options to the Recommendation**

City Council has the option to direct the Administration to focus on the energy performance gains related to other sectors, such as the commercial sector or existing housing stock. The Administration prefers to begin with new one- and two-unit dwellings, and then work to expand the program at an appropriate pace.

### **Public and/or Stakeholder Involvement**

The Building Standards and Environmental and Corporate Initiatives Divisions have been working closely with internal and external stakeholders and have created a working group dedicated to further advancement of energy efficiency in residential building construction.

To date, the SRHBA, which represents approximately 65% of builders for one- and two-unit residential dwellings in Saskatoon, SaskPower, and SaskEnergy, have committed to working on this initiative.

### **Communication Plan**

A communication and marketing plan will be developed in conjunction with the energy performance program.

**Other Considerations/Implications**

There are no policy, financial, environmental, privacy, or CPTED implications or considerations at this time.

**Due Date for Follow-up and/or Project Completion**

A follow-up report outlining an energy performance program for new one- and two-unit dwellings will be provided with a target implementation date of July 2017.

**Public Notice**

Public notice, pursuant to Section 3 of Public Notice Policy No. C01-021, is not required.

**Report Approval**

Written by: Kara Fagnou, Director of Building Standards

Reviewed by: Brenda Wallace, Director of Environmental and Corporate Initiatives

Catherine Gryba, General Manager, Corporate Performance Department

Approved by: Randy Grauer, General Manager, Community Services Department

S/Reports/2016/BS/EUCS – Energy Efficient Building Standards in New Dwelling Construction/lc

**From:** Angie Bugg <angie.bugg@sasktel.net>  
**Sent:** Monday, March 28, 2016 12:51 PM  
**To:** City Council  
**Subject:** Form submission from: Write a Letter to Council



Submitted on Monday, March 28, 2016 - 12:51  
Submitted by anonymous user: 207.47.243.164  
Submitted values are:

Date: Monday, March 28, 2016  
To: His Worship the Mayor and Members of City Council  
First Name: Angie  
Last Name: Bugg  
Address: 308 Albert Ave  
City: Saskatoon  
Province: Saskatchewan  
Postal Code: S7N 1G1  
Email: angie.bugg@sasktel.net

Comments: At the March 10 meeting of Saskatoon Environmental Advisory Committee, we were told that two reports are to be presented to the Standing Policy Committee on Environment, Utilities and Corporate Services at their next meeting. One on Building Standards (energy performance and building code) and one on an Energy Efficient Retrofit Program. SEAC would like 5 minutes to speak to each of these reports (i.e. 2x 5minute spots).

The results of this submission may be viewed at:  
<https://www.saskatoon.ca/node/398/submission/79894>

**From:** Chris Guérette <cguerette@saskatoonhomebuilders.com>  
**Sent:** April 08, 2016 9:26 AM  
**To:** City Council  
**Subject:** Form submission from: Write a Letter to Council



Submitted on Friday, April 8, 2016 - 09:26  
Submitted by anonymous user: 142.165.246.126  
Submitted values are:

Date: Friday, April 08, 2016  
To: His Worship the Mayor and Members of City Council  
First Name: Chris  
Last Name: Guérette  
Address: 2 - 3012 Louise Street  
City: Saskatoon  
Province: Saskatchewan  
Postal Code: S7J 3L8  
Email: cguerette@saskatoonhomebuilders.com

Comments: Chris Guérette, CEO of the Saskatoon & Region Home Builders Association wishes to speak at the upcoming SPC on EU&CS, Monday, April 11, 2:00 pm on two items: 7.2.6 - Energy Efficiency Retrofit Programs and 7.2.7 - Energy Efficient Building Standards in New Dwelling Construction. (5 mins x 2). Please confirm request. Thank you.

The results of this submission may be viewed at:  
<https://www.saskatoon.ca/node/398/submission/84296>

---

## 2016 Materials Testing Services - Award of Engineering Services – Asphalt, Concrete, Soil, and Micro-Surfacing

### Recommendation

That the Standing Policy Committee on Environment, Utilities and Corporate Services recommend to City Council:

1. That 2016 concrete testing in the East area and soil testing in the North area be awarded to AMEC Foster Wheeler, at a total estimated cost of \$45,500, plus GST;
2. That 2016 concrete testing in the West area be awarded to Clifton Associates Ltd. at a total estimated cost of \$15,000, plus GST;
3. That 2016 soil testing in the West area and asphalt testing in the East area be awarded to Englobe, at a total estimated cost of \$61,000, plus GST;
4. That 2016 asphalt testing in the north area be awarded to Golder Associates Ltd., at a total estimated cost of \$16,000, plus GST;
5. That 2016 asphalt testing in the West area, soils testing in the East area and micro-surfacing testing in the entire city be awarded to PSI Technologies Ltd., at a total estimated cost of \$204,000, plus GST; and
6. That the City Solicitor be requested to prepare the appropriate agreement and that His Worship the Mayor and the City Clerk be authorized to execute the agreement under the Corporate Seal.

### Topic and Purpose

The purpose of this report is to obtain City Council approval to award asphalt, concrete, soil, and micro-surfacing material testing for the 2016 construction season.

### Report Highlights

1. Proposals were received from twelve firms to provide material testing services for City of Saskatoon construction projects.
2. Proposals were evaluated based on qualifications, fee schedules and available capacity. The five proponents with the highest scores are being recommended.

### Strategic Goal

The recommendations in this report support the Strategic Goal of Asset and Financial Sustainability as the request for proposals for the selection of consultants to provide material testing services ensured the highest value to the City.

### Background

On March 2, 2016, Requests for Proposals (RFP) were issued for asphalt, concrete, soil and micro-surfacing material testing services for various capital infrastructure projects. Proposals were received on March 14, 2016, from the following twelve consulting firms:

- Allnorth Consultants Limited
- AMEC Foster Wheeler
- Clifton Associates Ltd.
- Englobe Corp.
- Golder Associates Ltd.
- Nighat Geo Services Inc.
- P. Machibroda Engineering Ltd.
- PSI Technologies Inc.
- SNC-Lavalin Inc.
- Tetra Tech EBA Inc.
- Thurber Engineering Ltd.
- WSP Canada Inc.

Material testing contracts are awarded annually to provide quality assurance within capital infrastructure projects. In 2015, \$1,000,000 of testing was awarded to qualified, licensed, professional testing firms to provide this service. These contracts are funded annually through the approved 2016 Capital Projects.

### **Report**

In 2016, an estimated 5,500 tests will be done to ensure quality work is completed by contractors on 40 capital projects, including land development, water, sewer, and roadways preservation and rehabilitation. This third-party testing provides quality assurance.

The Administration grouped material testing into four separate types: asphalt, soil, concrete, and micro-surfacing; and the city was divided into three geographic areas: North, East and West. Selections were based on the engineering consultants' qualifications, which included national lab certifications, members of the team and their roles within the proposed team. Competitive fee schedules and the consultants' capacity to complete the work in a timely manner were also factors.

After an extensive evaluation of the proposals, the five proponents with the highest scores are being recommended as follows:

- Concrete testing in the East and soil testing in the North area be awarded to AMEC Foster Wheeler, at a total estimated cost of \$45,500, plus GST;
- Concrete testing in the West area be awarded to Clifton Associates Ltd. at a total estimated cost of \$15,000, plus GST;
- Soil testing in the West area and asphalt testing in the East area be awarded to Englobe, at a total estimated cost of \$61,000, plus GST;
- Asphalt testing in the north area be awarded to Golder Associates, at a total estimated cost of \$16,000, plus GST;
- Asphalt testing in the West area, soils testing in the East area and micro-surfacing testing in the entire city be awarded to PSI Technologies Ltd., at a total estimated cost of \$204,000, plus GST.

### Options to the Recommendation

Material testing services could be awarded for each individual construction project. This option is not recommended as the amount of testing on any individual project is small, and the grouping of testing services into geographic areas and types of testing, across multiple projects, lowers costs through economies of scale.

### Financial Implications

The total net cost to the City for the engineering services for all 2016 material testing is as follows:

Total Base Fees	\$341,500
GST	17,075
Total Fees	<u>\$358,575</u>
GST Rebate	<u>(17,075)</u>
Total Net Cost to the City	<u>\$341,500</u>

Funding for the material testing services will be from the various approved 2016 Capital Projects that require these services.

### Environmental Implications

The primary environmental aspect associated with the various materials testing requirements is the use of fossil fuels relating to transportation to/from test sites. The overall use of fuel and resulting greenhouse gas emissions are not known at this time.

### Other Considerations/Implications

There are no public and/or stakeholder involvement, communications, policy, privacy or CPTED implications or considerations.

### Due Date for Follow-up and/or Project Completion

A follow-up report is not required. Project completion will coincide with the completion of the various 2016 construction projects that the material testing will be provided for.

### Public Notice

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

### Report Approval

Written by: Tyrone Borsa, Technologist, Construction and Design  
Reviewed by: Rob Dudiak, Engineering Manager, Construction and Design  
Reviewed by: Celene Anger, Director of Construction & Design  
Approved by: Jeff Jorgenson, General Manager Transportation & Utilities Department

---

---

## City Compost Depots – Award of Contract – Consulting Advisor, Equipment and Operators

### Recommendation

That the Standing Policy Committee on Environment, Utilities and Corporate Services recommend to City Council:

1. That the proposal submitted by Wozniak and Sons Enterprises Ltd. to provide a consulting advisor, equipment and operators for a total cost of \$260,810.00 (including taxes) be approved; and
2. That the City Solicitor be requested to prepare the appropriate agreement and that His Worship the Mayor and the City Clerk be authorized to execute the agreement under the Corporate Seal.

### Topic and Purpose

The purpose of this report is to request City Council approval for the Award of Contract for a consulting advisor, equipment and operators for the two City Compost Depots.

### Report Highlights

1. A Request for Proposal (RFP) was advertised on January 8, 2016, seeking an experienced contractor to provide a consulting advisor, equipment and operators for the two City Compost Depots.
2. Of the five proposals received, Wozniak and Sons Enterprises Ltd. was determined to be the most favourable.

### Strategic Goals

This report supports the Strategic Goal of Environmental Leadership by encouraging the beneficial end use of waste materials by processing them in a way that minimizes greenhouse gas emissions while manufacturing a valuable topsoil amendment for use in park establishment and maintenance, local food production, and landscaping. In addition, this report supports the Strategic Goal of Sustainable Growth as this is an important step in attaining the goal of 70% waste diversion from the Landfill.

This report also supports the goals of Asset and Financial Sustainability and Continuous Improvement, acting as an interim component while the City moves toward establishing Recovery Park and the role compost will play at this permanent facility. A benefit of a medium term agreement is to provide a consistent operating environment during the development period for users of the depots.

### Background

Public Works Waste Stream Management section maintains two City compost depots where yard waste materials are delivered. These products are managed in a way that sustainably diverts these materials from the Landfill and produces a valuable soil



amendment product. The City annually awards a contract for provision of owned and operated equipment for the purpose of materials handling and site maintenance.

The volume of materials received at the compost depots has grown substantially during the ten seasons of operation since opening of the McOrmond Road Compost Depot. The Depots receive between 45,000 and 50,000 customers per season. During these ten years, an estimated 86,000 tonnes of waste has been diverted from the Landfill. Close to 40% of landfill waste is compostable organics.

City Council has recognized the value of the Landfill as an asset to the City and has set a goal of 70% diversion of waste from disposal at the Landfill by 2023. Diversion of organics will significantly impact achieving this target.

## **Report**

### **Request for Proposal**

An RFP was advertised on the SaskTenders website on January 8, 2016. The purpose of the RFP was to invite interested proponents to prepare and submit a competitive response to provide consulting and advisory services to ensure the introduction of food waste through the Green Cart Program is appropriately monitored, one wheel loader with operator, and one tandem truck and operator, all on an as-needed basis. The terms of the RFP include five additional one-year contract extensions provided that certain conditions are met.

The following five proposals were received on February 2, 2016:

- The Lawn Loggers Ltd. (Saskatoon, SK)
- Wozniak & Sons Enterprises Ltd., (Saskatoon, SK)
- Bio-cycle Solutions Ltd., (Okotoks, AB)
- ABS Excavating Ltd., (Saskatoon, SK)
- Don Wehage & Sons Trucking & Excavating (Saskatoon, SK)

Following a review, the evaluation team determined Wozniak and Sons Enterprises Ltd. to be the most favourable.

### **Options to the Recommendation**

An alternative to the recommendation is to cancel the RFP and pursue a simple tender for the provision of equipment and operators. Administration is not recommending this option as the introduction of food waste through the Green Cart Program will require monitoring by an experienced advisor. The consultation and advisory services do not have a significant impact to the overall cost of the contract.

### **Communication Plan**

The hours of operation and locations will remain the same for the two compost depots as in 2015. Food waste was introduced to the Green Cart Program; however, food waste will not be accepted for drop-off at the depots by the public or commercial customers. Hours of operation, location and general information is available at

Saskatoon.ca/compost, with service alerts to communicate any unplanned service interruption.

### Financial Implications

This work is funded through the Compost Depots and Landfill 2016 Operating Budgets. The net cost to the City is as follows:

On-site Consultant/Advisory	\$ 2,100.00
Wheel Loader and Operator	216,000.00
Tandem Dump and Operator	<u>19,000.00</u>
Subtotal	\$237,100.00
GST	11,855.00
PST	<u>11,855.00</u>
Total	\$260,810.00
GST rebate	<u>(11,855.00)</u>
Net Cost to City	<u>\$248,955.00</u>

The total funding identified in the approved budget for Loader Contract is \$112,000 for 2016, with the remainder of \$136,955 to be funded by Landfill operations.

### Environmental Implications

The environmental performance of the Compost Depots will become increasingly important as the City of Saskatoon enters into acceptance of food waste as part of the feedstock profile. Expertise in on-site material handling operations will ensure the City meets its goals of protecting air, water, and soil quality in a fiscally responsible manner.

The activities associated with the recommendation will result in the consumption of fuel and subsequent greenhouse gas (GHG) emissions. However, composting operations will also result in the avoidance of overall GHG emissions, when compared to the alternative scenario of landfilling organic materials. The impact on GHG emissions will not be known until the end of the 2016 operating season.

### Other Considerations/Implications

There are no policy, public and/or stakeholder involvement, privacy or CPTED implications or considerations.

### Due Date for Follow-up and/or Project Completion

The Compost Depots are open to the public beginning on April 11, 2016 and extending through November 13, 2016.

### Public Notice

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

### Report Approval

Written by: Roland Rusnell, Environmental Technologist, Public Works

**City Compost Depots – Award of Contract – Consulting Advisor, Equipment and Operators**

---

Reviewed by: Russ Munro, Logistics & Procurement Manager  
Trent Schmidt, Acting Director of Public Works  
Brenda Wallace, Director of Environmental and Corporate Initiatives

Reviewed by: Catherine Gryba, General Manager, Corporate Performance Dept.  
Approved by: Jeff Jorgenson, General Manager, Transportation & Utilities Department

EUCS RR – Compost Depots – Award of Contract – Advisor-Equipment-Operators

---

## **Solar Power Addition at the Landfill Gas Power Generation Facility - Award of Contract for Solar Photovoltaic System**

### **Recommendation**

That the Standing Policy Committee on Environment, Utilities and Corporate Services recommend to City Council:

1. That the proposal submitted by Rock Paper Sun Ltd. for the supply of a 27 kilowatt Solar Photovoltaic System for a total cost of \$152,725.65 (including taxes) be approved; and
2. That the City Solicitor be requested to prepare the appropriate agreement and that His Worship the Mayor and the City Clerk be authorized to execute the agreement under the Corporate Seal.

### **Topic and Purpose**

Saskatoon Light & Power (SL&P) and the Saskatchewan Environmental Society Solar Co-operative (SESSC) have received and evaluated proposals for the supply and installation of a Solar Photovoltaic (PV) System for the Solar PV Demonstration Site. This partnership is recommending that City Council award a contract to Rock Paper Sun Ltd.

### **Report Highlights**

1. SL&P and SESSC are prepared to jointly own and operate a solar photovoltaic generation system.
2. Six proposals were received in response to a Request for Proposal (RFP) issued on January 13, 2016.
3. The proposal submitted by Rock Paper Sun Ltd. was the highest rated respondent to the RFP, based on a combination of price, quality and environmental factors, and is within budget.
4. The SESSC continues to grow its membership.

### **Strategic Goals**

This report supports the long-term strategy to increase the use of renewable energy in City operations, and to reduce greenhouse gas emissions tied to City operations under the Strategic Goal of Environmental Leadership.

This report also supports the four-year priority to continue implementation of the Energy and Greenhouse Gas Management Plan, under the Strategic Goal of Environmental Leadership. The Energy and Greenhouse Gas Management Plan lays out a number of actions related to the development of renewable energy, and promotes community wide demonstration projects.

## **Background**

At its meeting held on October 13, 2015, City Council resolved that the City Solicitor prepare a Memorandum of Agreement with the SESSC for the co-ownership of the Solar PV Demonstration Site. Administration stated it would follow up with a recommendation for award of a contract to the successful proponent for supply and installation of the solar power system.

## **Report**

### Solar PV Demonstration Site in Partnership with SESSC

SL&P is partnering with SESSC, the first power generation co-operative in the province, to create a Solar PV Demonstration Site. The key benefits of the project include:

- Provides important information on the performance of different solar array arrangements, as well as capital cost versus production analysis;
- Provides important information and operating experience required to understand the benefits/disadvantages of both passive and active collection of solar for the purpose of generating electricity. In the future, it is anticipated that a much larger scale solar project will be built near this smaller demonstration project; and
- Creates a source of PV generation for the SESSC.

### Request for Proposal

An RFP was issued January 13, 2016, for the design, supply, installation, and commissioning of a Solar PV System. Six proposals were received on February 11, 2016, and all were deemed compliant with the requirements defined within the RFP.

All six proposals were evaluated by an evaluation team with members from SL&P and the SESSC. Evaluations were based 60% on total price; 15% on design and specifications; 15% on environmental considerations; and 10% on previous experience. Proposals were submitted by:

- Rock Paper Sun Ltd. (Saskatoon, SK)
- Roots Rock Solar (Saskatoon, SK)
- Enviro Energy (Whitefish, ON)
- Points Athabasca Contracting LP (Saskatoon, SK)
- Triumph Construction Inc. (Saskatoon, SK)
- Sound Solar Systems Inc. (Kronau, SK)

### Successful Proponent Selected

The proposal submitted by Rock Paper Sun Ltd. was rated the highest in the evaluation and was determined to be the most favourable for the City and the SESSC. The total price of \$152,725.65 (including taxes) is within budget. The SESSC Board has reviewed and accepted the evaluation team's recommendation.

A contract will be prepared between the City and Rock Paper Sun Ltd. The key terms of the contract will be as follows:

## Solar Power Addition at the Landfill Gas Power Generation Facility - Award of Contract for Solar Photovoltaic System

---

- 1) Rock Paper Sun Ltd. will provide all design services, permits, materials, labour, equipment, commissioning, and incidentals necessary to install the three PV arrays, for a total of 27 kilowatts (kW) as specified in the RFP document.
- 2) The scope of work to be performed by Rock Paper Sun Ltd includes: Site layout and design; Structural/mechanical design of the PV arrays' mounting systems, foundations, site leveling; Electrical design of PV arrays', power system design, monitoring and communication system, and system protection and control, procurement and installation of all equipment; Project management and inspection services during construction; Commissioning, and training on the operation and maintenance requirements.
- 3) 25 year warranty for PV modules, 5 years for mounting system, 10 years for inverters, and 2 years for all other equipment and workmanship.

### SESSC

The SESSC is an initiative launched by the Saskatchewan Environmental Society (SES). The SESSC has grown to 97 members, and has started planning for a second solar installation, which is also to be in the SL&P service area.

The SESSC provides the following key benefits:

- Ability for members to invest in one solar panel at a time; thus, avoiding the large up-front capital expenditure usually needed for a solar installation.
- Ideal for those who want to invest in solar power, but do not have the means to install solar panels on their house or apartment.
- Opportunity for members to make a contribution to greenhouse gas reduction and to demonstrate the viability of solar power in our community.

### **Public and/or Stakeholder Involvement**

Upon completion of the installation, which is anticipated to be finished by the end of July 2016, the public will be invited to an open house at the site.

### **Communication Plan**

The saskatoon.ca website has been updated with information about this project. Appropriate communication materials and on-site signage will be jointly prepared by the City and the SESSC to share the project details with city residents.

### **Financial Implications**

Sufficient funding is available in approved Capital Project #1281 - Sustainable Power Generation Options.

A breakdown of the proposal price is as follows:

Proposal Price	\$145,453.00
GST (5%)	<u>7,272.65</u>
Total Cost	\$152,725.65
Less GST Rebate	<u>(\$7,272.65)</u>
Net Cost to the City	<u>\$145,453.00</u>

## Solar Power Addition at the Landfill Gas Power Generation Facility - Award of Contract for Solar Photovoltaic System

---

The cost of the Solar PV System will be shared 54.4% for 14 kW by SL&P, and 45.6% for 13 kW by SESSC, as shown in the following table:

Group	Generation Capacity	Cost
SL&P	14 kW	\$79,146.00
SESSC	13 kW	\$66,307.00

This project qualifies for SaskPower's Net Metering Rebate for a total amount of \$20,000, and will be shared proportionally between SL&P and the SESSC. The SESSC's funding includes a \$25,000 contribution towards the project by the SES.

The power generated from both SL&P's and SESSC's share of the Solar PV System are used to offset electricity that would have otherwise been purchased from SaskPower for the operation of the Landfill Gas Power Generating Station. By reducing the electricity purchased from SaskPower, the payback of the capital cost for the City is estimated at 25 years.

The City will quarterly pay the SESSC an equivalent portion of the operating cost savings for their share of the Solar PV System, and as such is a net-zero change to operating cost to the City. Payment to the SESSC will be funded from SL&P's 2016 Operating Budget.

### Environmental Implications

The electricity bought from SaskPower for use in the facility has 107 tonnes of CO<sub>2e</sub> per year associated with it. By generating electricity using solar panels rather than buying it from SaskPower, a 27 kW project is estimated to reduce annual greenhouse gas emissions by 23 tonnes CO<sub>2e</sub>, which is equivalent to removing five cars from the road each year.

### Other Considerations/Implications

There are no options, policy, privacy, or CPTED implications or considerations.

### Due Date for Follow-up and/or Project Completion

The project is expected to be completed by July 31, 2016.

### Public Notice

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

### Report Approval

Written by: Nathan Ziegler, Sustainable Electricity Engineer  
Reviewed by: Trevor Bell, Director of Saskatoon Light & Power  
Approved by: Jeff Jorgensen, General Manager, Transportation & Utilities Department

EUUS NZ - Solar Power Addition at Landfill Gas Facility - AoC - Solar PV System.docx

---

---

## Underground Locates One-Call System

### Recommendation

That the report of the General Manager, Transportation & Utilities Department dated April 11, 2016, be forwarded to City Council for information.

### Topic and Purpose

The purpose of this report is to provide an update on Saskatoon Light & Power's (SL&P) partnership with Sask1stCall to provide an improved service for locating underground facilities.

### Report Highlights

1. Since February of 2015, SL&P has been utilizing Sask1stCall "Before You Dig" services for receiving underground locate requests from contractors and the public.
2. The one-call system provides improved customer service by reducing the number of calls people need to make for their request, and by providing them with an option to submit their request on-line 24 hours a day, seven days a week.
3. The new system is part of a province-wide cooperative effort.

### Strategic Goal

Alignment with a provincial one-call underground locate system supports the City's Strategic Goal for Continuous Improvement.

### Background

For anyone digging or performing excavation work, it is important to do so safely and responsibly. Whether it is for road work, water or sewer maintenance, installing a driveway, deck, or fence, it is important to know if there are any underground facilities at that location. If a line is cut while digging, it could cause unsafe conditions at the site and also for those who depend on the services of that line. SL&P has always provided an underground locate service, but until recently, had to be contacted separately from other underground facility owners.

Many North American jurisdictions have a mandatory one-call system for underground locates. Saskatchewan has a voluntary one-call underground locate system called Sask1stCall. This one-call agency was originally formed as a group of 16 pipeline companies and has expanded to include many other agencies with underground facilities, including SaskPower, SaskTel, and SaskEnergy.

### Report

#### Now Using Sask1stCall for Excavation Notifications

In February 2015, SL&P joined over 60 other subscribers to the Sask1stCall "Before You Dig" location screening and notification service. Under this new system, initial



## Underground Locates One-Call System

---

locate requests are now handled by the Sask1stCall call centre. SL&P has provided information about the location of its underground facilities to Sask1stCall. When a locate request is made, a Sask1stCall representative uses specialized screening software to determine whether SL&P has underground facilities at that location. SL&P is then automatically notified by the system that a line locate is required, and the request and relevant information is sent to SL&P via email. Emergency locate requests are also followed up with a phone call. SL&P Locate staff are then able to perform the locate, as required, and notify the excavator when the locate is complete.

### One-Call System Provides Improved Customer Service

For the contractor or homeowner planning to dig or excavate, the one-call system simplifies the locate request by reducing the number of calls that need to be made. The call centre is staffed 24/7 and Sask1stCall also offers online locate requests and locate requests from mobile devices (options not previously available through SL&P). Additionally, all locate requests are automatically recorded and tracked through the automated system.

Participating in the one-call system also improves safety performance. In the past, SL&P has not always been notified when excavations impacted SL&P facilities, particularly for out-of-province contractors that are used to one-call systems. Being part of the one-call system reduces the risk of excavations occurring near SL&P facilities without notification.

Another benefit of the one-call system is that SL&P staff are not required to answer phone calls for the initial locate requests and can gather facility information before talking with the excavator.

Utilization of the one-call system is high and SL&P has seen a marked increase in notifications. Since joining Sask1stCall in February, SL&P received nearly 20,000 locate requests in 2015, of which more than 5,000 requests required onsite locates with flags and paint. This is three times as many calls, and approximately twice as many on-site locates, compared to 2013 or 2014.

### New System Province-Wide Cooperative

Sask1stCall is a member of the Saskatchewan Common Ground Alliance (SCGA) a member driven, non-profit organization dedicated to ensuring worker and public safety, environmental protection and the integrity of services. They promote effective damage prevention practices in connection with underground infrastructure activities. The SCGA has recommended that the Saskatchewan government initiate a process to investigate development of a mandatory one-call service for Saskatchewan.

The number of agencies on Sask1stCall's list of subscribers continues to increase, making the one-call system more valuable to those doing excavation work. They also continue to look for ways to enhance the provided service through the use of technology.

### **Communication Plan**

SL&P's Underground Locate phone and fax redirects callers to Sask1stCall for underground locate requests. SL&P's Customer Information Guide includes the new information regarding underground locates and the guide has been sent to all registered electrical contractors working in Saskatoon. The other public information locations, including the City's website and the phone book Blue Pages, have been updated with the new Underground Locate contact information.

In addition, Sask1stCall has updated their membership list to include SL&P for all communications, and SL&P has advertised the change to the Sask1stCall membership through the Saskatchewan Construction Safety Association.

### **Financial Implications**

SL&P pays a monthly fee to Sask1stCall based on the number of locate requests. Annual cost is expected to be approximately \$35,000 (\$1.75 per locate request), which will be funded from SL&P's operating accounts. By having calls taken by Sask1stCall, SL&P is more efficiently preparing for and performing site locates. Being part of the one-call system also reduces the possibility of not being notified and having costly damage from an excavator digging into unmarked lines.

### **Other Considerations/Implications**

There are no options, public and/or stakeholder involvement, policy, environmental, privacy, or CPTED implications or considerations.

### **Due Date for Follow-up and/or Project Completion**

The use of Sask1stCall "Before You Dig" location screening and notification service has been in place since February 2015. No follow-up is required at this time.

### **Public Notice**

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

### **Report Approval**

Written by: Brendan Lemke, Engineering Manager, Saskatoon Light & Power  
Reviewed by: Trevor Bell, Director of Saskatoon Light & Power  
Approved by: Jeff Jorgenson, General Manager, Transportation & Utilities  
Department

EUCS BL - Underground Locates One-Call System

---

---

## Surface Flooding Control Strategy for the Storm Water Utility

### Recommendation

That the Standing Policy Committee on Environment, Utilities and Corporate Services recommend to City Council:

That the Administration develop a comprehensive Storm Water Utility Business Plan, including a longer-term capital and funding plan for storm water infrastructure, that considers the factors outlined in this report.

### Topic and Purpose

The purpose of this report is to outline the cost magnitude of infrastructure improvements to reduce the likelihood of surface flooding affecting private property, and to outline other financial pressures for the Storm Water Utility.

### Report Highlights

1. The Storm Water Utility is funded through a user-pay principle.
2. The cost to provide “1 in 10 year” flood protection for 130 houses in three high risk sites is estimated to be approximately \$17.3 million.
3. Other pressures for the Storm Water Utility’s \$6 million annual budget include assessing the structural integrity of existing infrastructure, ongoing maintenance and rehabilitation, and repairing east riverbank slumping.
4. A comprehensive business plan, including a longer-term capital and funding plan for storm water infrastructure, is recommended for completion in 2016.

### Strategic Goals

This report supports the Strategic Goal of Asset and Financial Sustainability as one of the primary goals of the Storm Water Utility is to optimize the maintenance and rehabilitation of storm water assets. It also supports Continuous Improvement as the Administration continues to revise and improve its operations and level of service.

### Background

The storm water system in Saskatoon is designed to utilize combinations of pipe and surface storage and conveyance. In neighbourhoods constructed after 1989, design changes were implemented to ensure surface storm water flow paths drained to designed low areas, often ponds, to reduce the risk of property damage. However, many areas in Saskatoon constructed before 1989 were not designed with the same provision; therefore, some residents are concerned about property damage as a result of a major rain event.

To add to the problem, Saskatoon has received more precipitation in the last decade than any other similar period dating back to 1900. This precipitation has led to an increase in ground water elevation which has caused a higher level of saturation in the

soil. As well, the rainfall intensity and frequency has increased the risk of property damage in many areas of Saskatoon.

The severity and extent of property damage from sanitary sewer backup has been significantly greater than from surface flooding. For instance, more than 800 homes experienced flooding from sanitary sewer backup on June 29, 2005, with an average claim value of more than \$10,000. The City has made significant investments since that time through the Flood Protection Program, which included construction of surcharge tanks, lift station bypasses, and weeping tile disconnects.

### **Report**

#### **Storm Water Utility Funding**

The Storm Water Utility is funded through a user-pay system. Rates are proportional to storm water generated based on property size and surface imperviousness. Single residences pay \$4.40 per month (\$52.80 annually), which forms the Equivalent Runoff Unit (ERU) for charging other property types.

Commercial/industrial properties can generate significantly more storm water; therefore, they are charged multiple ERUs, from a minimum of two ERUs (\$105.60 annually) to a maximum of 70 ERUs in 2016 (\$3,696 annually). The maximum will increase to 85 ERUs in 2017 and 100 ERUs in 2018 (\$5,280 annually).

In 2016, residential properties will account for about 65% and commercial/industrial about 35% of approximately \$6 million annual revenues. The 2016 budget includes:

- 45% (\$2.7 million) for Public Works to maintain the storm water system (i.e. storm mains, manholes, catch basins, culverts, ditches, ponds, fall street sweeping, etc.);
- 45% (\$2.7 million) for capital improvements and projects (asset management and rehabilitation of storm water infrastructure, such as storm mains, ponds, outfalls, surface drainage, river bank stability, etc.); and
- 10% (\$0.6 million) for utility billing and administration.

#### **Surface Flooding Location Prioritization**

Thirty sites, listed in Attachment 1, page 7, were evaluated and prioritized for flood risk based on risk of surface water reaching the property, risk of surface water reaching the building, classification of roadway affected, and number of properties potentially affected.

The following areas were identified as the highest ranking sites and were examined in detail to provide estimated costs for improvements:

- Taylor Street trunk at Ruth-Cairns
- 1st St-Dufferin
- Cascade-Dufferin

## Surface Flooding Control Strategy for the Storm Water Utility

---

Based on testing of several options for each site, a large scale infrastructure solution, using local ponds and increased pipe sizes, was determined to provide various service levels to minimize surface flooding. Costs for these three sites at various service levels are shown in the table below. More details are in Attachment 2.

Funding Requirements (over 5 years) to Provide Flood Control at Three Sites				
Service Level	Cost	Number of Houses Benefiting	Required ERU Rate	% Increase
1 in 10 year	\$17.3 million	130	\$6.74	53%
1 in 25 year	\$37.5 million	197	\$9.56	117%
1 in 100 year	\$52.3 million	286	\$11.60	163%

Although solution costs have not been researched for other sites, it is reasonable to assume costs would be a similar order of magnitude; approximately \$200,000 per house protected. Based on this assumption, approximately \$174 million is needed to provide a “1 in 100 year” service level for the top ten sites within ten years. This approximately represents a 280% increase in the ERU rate to over \$16 per month (\$200 per year for residential and up to \$20,000 per year for commercial). Providing this level of improvements at 30 sites would require greater rate increases. Flood wall installation would be considerably less expensive, but is not effective in some cases and community engagement deemed these to be less desirable than the infrastructure-based improvements. See Attachment 3 for the Community Engagement Summary of the Surface Flooding Control Strategy.

The value of benefits from reducing surface water flooding is complex to estimate because the number and severity of intense rain events over the long-term cannot be predicted. Traditionally, insurance providers have not insured for surface flooding or seepage, and unless there is negligence, cities are not liable for damages.

The provincial government designed the Saskatchewan Provincial Disaster Assistance Program (PDAP) to assist eligible property owners in recovering from events such as flooding, by covering loss to uninsurable, essential property (PDAP does not cover damage caused by sanitary sewer backups). PDAP reported that 880 claims related to specific flood events were paid in Saskatoon between 2010 and 2014 (none in 2015). These flood damage claims totalled \$4.8 million and ranged from \$300 to \$157,200, averaging approximately \$5,500. PDAP does not track claim numbers by type; however, the Administration believes these were mostly ground water seepage claims with some overland flooding claims (i.e. flooded window wells, etc.). PDAP sent claim reimbursements to over 350 postal code areas in Saskatoon, implying that storm flooding impacts significantly more than the 30 prioritized sites.

### Next Steps

A comprehensive, multi-year business plan and funding strategy is proposed to include:

- Critical storm water infrastructure condition assessment and preservation plan
- Storm water management level of service options and costs
- Drainage capacity expansions and enhancements
- East riverbank stabilization

- Emergency measures flood response
- Other risk mitigation measures
- Continuous improvement initiatives
- Citizen awareness and engagement

Funding options for expanded infrastructure for the highest ranking flood sites and other business plan components will be evaluated. Unless otherwise directed, the funding strategy options could include one or more of the following:

- Storm Water Infrastructure ERU increase (City properties are also charged ERUs so this option also will impact the mill rate).
- Continuation and redirection of the temporary Flood Protection Program (FPP) levy scheduled to end in 2018. The FPP was established to mitigate sanitary sewer back-ups caused by high intensity storm events.
- Neighbourhood levies for areas prioritized for infrastructure expansions.
- Redirection of Storm Water Utility funding currently directed to riverbank stabilization.

Additional details are available in Attachment 4. The business plan and capital plan will include recommended service levels and specific options for City Council to consider when setting future rates for the Utility.

### **Options to the Recommendation**

1. City Council could direct that the business plan be focused on maintenance and rehabilitation of existing infrastructure and other mitigation alternatives within current budgets.
2. City Council could provide the Administration with direction on preferred funding sources for infrastructure capacity expansions for the priority sites.

### **Public and/or Stakeholder Involvement**

The attached 'Community Engagement Summary – Surface Flooding Control Strategy' summarizes the stakeholder engagement undertaken for the surface flooding strategies. Stakeholders most directly affected by the risk of surface flooding in the five priority zones provided feedback on preferred solutions.

The broader residential and business communities in Saskatoon were not consulted about increasing Storm Water Utility rates to collectively fund infrastructure capacity expansion projects to reduce risk of flooding for the 30 identified sites.

### **Communication Plan**

A communication plan will be developed to inform residents in the five highest risk areas for surface flooding regarding the results of the earlier community engagement and the strategy for addressing these locations. Acknowledging that these residents are anxious for remediation and concerned about their property, the Administration will investigate resources and opportunities to support homeowners in reducing impacts of flooding on their property. For instance, a new emergency response plan for intense rainfall events could incorporate a notification to subscribers when high-risk weather is

forecasted for the area. A public engagement strategy will be developed to get input on funding options. The proposed business plan will include a communication strategy for all phases.

**Financial Implications**

The development of the proposed business plan will be funded through the existing Storm Water Utility budget so there are no immediate financial implications. The proposed Business Plan and Capital Plan will identify future financial implications.

**Other Considerations/Implications**

There are no policy, environmental, privacy, or CPTED implications or considerations.

**Due Date for Follow-up and/or Project Completion**

The proposed Storm Water Management Business Plan and Funding Strategy will be completed in 2016.

**Public Notice**

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

**Attachments**

1. Surface Flooding Control Strategy Report – Storm Water Management
2. Surface Flooding Control Strategy: Conceptual Remediation Options
3. Community Engagement Summary – Surface Flooding Control Strategy
4. Proposed Storm Water Management Business Plan and Funding Strategy

**Report Approval**

Written by: Galen Heinrichs, Water & Sewer Engineering Manger  
Angela Schmidt, Acting Manager of Storm Water Utility

Reviewed by: Reid Corbett, Director of Saskatoon Water

Approved by: Jeff Jorgenson, General Manager, Transportation & Utilities  
Department

EUCS AS – Surface Flooding Control Strategy – Storm Water Utility.docx

# **Surface Flooding**

# **Control Strategy Report**

## Storm Water Management

Saskatoon Water  
Transportation & Utilities Department



## TABLE OF CONTENTS

Background .....	1
Introduction .....	2
Methodology.....	3
Site Risk.....	3
Building Risk .....	4
Road Risk .....	5
Combined Risk.....	6

## LIST OF FIGURES

Figure 1: An example of flooded sites during a 5 year storm. ....	3
Figure 2: An example of flooded buildings during a 5 year storm.....	4

## LIST OF TABLES

Table 1: Road Type Summary .....	5
Table 2: Flood Zone Risk Analysis Results .....	7

## BACKGROUND

The storm sewer in Saskatoon is designed to fill and flood onto the street during major rain events. In neighbourhoods constructed after 1989, the water in the street was accounted for as part of the design to try and limit property damage. However, many areas in Saskatoon constructed before 1989 were not designed with the same provision. Therefore, many residents are concerned about property damage as a result of a major rain event.

To add to the problem, Saskatoon has recently received more precipitation than any other similar period, dating back to 1900. This precipitation has led to an increase in ground water elevation which has caused a higher level of saturation in the soil. As well, the rainfall intensity and frequency has increased the risk of property damage in many areas of Saskatoon.

In response, the Storm Water Management Group within Saskatoon Water has developed a surface flooding control strategy. The strategy is to prioritize all the known flooding locations and investigate possible remedial options. Thirty flood zones have been assessed and the top five have been identified to address first.

## INTRODUCTION

The 2007 city-wide model produced flood contours for four different storms with the following return periods: 2 year, 5 year, 10 year, and 100 year.

## METHODOLOGY

### Site Risk

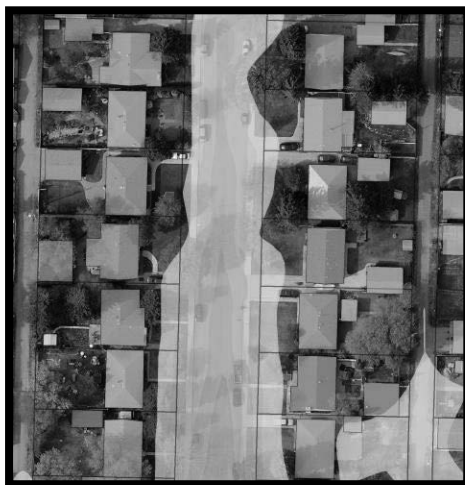
Site Risk is an indicator of the probability that any given site will flood within a specific flood zone. For each of the flood zones, the number of residential flooded sites and the number of commercial flooded sites were counted for each of the four storms. A site was assumed to be flooded if any amount of water touched or surpassed its boundaries. As well, it should be noted that residential sites are those sites with a subclass of RES (residential), MRES (multi-residential), or COND (condominium), while commercial sites are those sites with a subclass of COMM (commercial). For this analysis, residential property is considered to be more important than commercial property. Therefore, the following formula was used to determine the total number of flooded sites within a flood zone:

$$\text{Number of Flooded Sites} = 2 \times \left( \text{Number of Residential Flooded Sites} \right) + \left( \text{Number of Commercial Flooded Sites} \right) \quad (1)$$

The above formula resulted in four values for each flood zone, one for every storm event. These values were then used in the following formula to determine the Site Risk for each storm within each flood zone:

$$\text{Site Risk} = \frac{\text{Number of Flooded Sites}}{\text{Return Period of Storm}} \quad (2)$$

This resulted in four Site Risk values for each flood zone, one for each storm event. Finally, the Site Risk for each flood zone was determined to be the largest of the four resulting values.



**Figure 1:** An example of flooded sites during a 5 year storm.

## METHODOLOGY

### Building Risk

Similar to Site Risk, Building Risk is an indicator of the probability that a building will flood within a specific flood zone. For each of the flood zones, the number of residential flooded buildings and the number of commercial flooded buildings were counted for each of the four storms. A building was assumed to flood if any amount of water touched or surpassed the boundaries of the building. It was also assumed that a building was residential if it was located on a site with a subclass of RES, MRES, or COND. Commercial buildings were those buildings located on sites with a subclass of COMM. Once again, this analysis assumed that residential property was more important than commercial property. Therefore, the following formula was used to determine the total number of flooded buildings within a flood zone:

$$\text{Number of Flooded Buildings} = 2 \times \left( \text{Number of Residential Flooded Building} \right) + \left( \text{Number of Commercial Flooded Buildings} \right) \quad (3)$$

The above formula resulted in four values for each flood zone, one for every storm event. These values were then used in the following formula to determine the Building Risk for each storm within each flood zone:

$$\text{Building Risk} = \frac{\text{Number of Flooded Buildings}}{\text{Return Period of Storm}} \quad (4)$$

This resulted in four Building Risk values for each flood zone, one for each storm event. Finally, the Building Risk for each flood zone was determined to be the largest of the four resulting values.



**Figure 2:** An example of flooded buildings during a 5 year storm.

## METHODOLOGY

### Road Risk

Throughout Saskatoon, there are eight different road types, each classified based on their importance to and impact on the public. For this analysis, each road type was assigned a value between one and eight to indicate how the public would be affected if the road was flooded. An eight indicates that the majority of the public would be affected if the road was flooded, while a one indicates that very few people would be affected if the road was flooded. This value is referred to as Road Criticality. It should be noted that a road was considered to be flooded if any amount of water was on the road. A summary of the different road types, and their corresponding Road Criticality values, can be seen below in Table 1.

**Table 1:** Road Type Summary

Road Type	Road Criticality
Highway	8
Expressway	7
Expressway Ramp	6
Arterial Major	5
Arterial Minor	4
Collector	3
Local	2
Grid Road	1

For each storm event, the total number of roads that experienced flooding were counted for each unique road type within each flood zone. Once this information was collected, the following formula was used to determine the Road Risk for each storm within each flood zone:

$$\text{Road Risk} = \frac{\sum (\text{Road Criticality} \times \text{Number of Flooded Roads})}{\text{Return Period of Storm}} \quad (5)$$

This resulted in four Road Risk values for each flood zone, one for each storm event. Finally, the Road Risk for each flood zone was determined to be the largest of the four resulting values.

## METHODOLOGY

### Combined Risk

Finally, a Combined Risk was calculated for each of the flood zones by taking into account Building Risk, Site Risk, and Road Risk. For this analysis, each of the three risk factors were given different levels of importance. Building Risk was considered the most important since damage to a building due to flooding can be costly to fix and has a large impact on the well-being of the public. Road Risk was considered the least important since roadways constructed after 1989 are designed to convey overland flow. The following formula was used to determine the Combined Risk for each flood zone:

$$\text{Combined Risk} = (3 \times \text{Building Risk}) + (2 \times \text{Site Risk}) + \text{Road Risk} \quad (6)$$

The following Table provides the Combined Risk for each of the thirty flood zones, as well as the resulting priority for each zone.

## METHODOLOGY

**Table 2: Flood Zone Risk Analysis Results**

Priority	Flood Zone	Neighbourhood(s)	Combined Risk
1	Ruth - Cairns	Adelaide / Churchill	103.4
2	1 <sup>st</sup> Street - Dufferin	Haultain / Buena Vista / Queen Elizabeth	80.4
3	Cascade - Dufferin	Avalon	78.4
4	Early - Tucker	Brevort Park	64.2
5	7 <sup>th</sup> Street - Cairns	Haultain / Holliston	60.4
6	24 <sup>th</sup> Street - 3 <sup>rd</sup> Avenue	City Park / Central Business District	56.6
7	Centennial - Dickey	Pacific Heights	53.6
8	Main - Cumberland	Varsity View / Grosvenor Park / Holliston / Haultain	49.4
9	John A MacDonald - McCully	Confederation Park	47.9
10	Junor - Makaroff	Dundonald / Westview	41.0
11	Louise - Taylor	Holliston	38.6
12	21 <sup>st</sup> Street - Avenue W	Pleasant Hill / Meadowgreen / Mount Royal	38.6
13	King - 5 <sup>th</sup> Avenue	City Park	38.2
14	Confederation - Laurier	Massey Place / Confed Suburban Centre / Confed Park	38.2
15	Meighen Crescent	Confederation Park	36.0
16	East - Louise	Eastview / Nutana Suburban Centre	32.2
17	Kingsmere - Brightsand	Lakeridge	32.0
18	14 <sup>th</sup> Street - Cumberland	U of S South Area / Varsity View / Grosvenor Park	30.9
19	Eastview Streets	Eastview	30.2
20	Grosvenor - Taylor	Holliston	28.3
21	Eastlake - Willow	Queen Elizabeth	26.6
22	1 <sup>st</sup> Avenue - 46 <sup>th</sup> Street	North Industrial	22.0
23	Byers - Selkirk	Westview / Hampton Village	21.2
24	Ruth - York	Avalon / Queen Elizabeth	19.4
25	Albert - Bute	Avalon / Adelaide / Churchill	17.6
26	Idylwyld - Circle	North Industrial / Airport Business Area	17.3
27	Kingsmere - Wakaw	Lakeview	14.6
28	Smith - McCormack	Parkridge	11.0
29	1 <sup>st</sup> Avenue - 50 <sup>th</sup> Street	North Industrial	9.5
30	Northumberland - Mackie	Massey Place	6.6



## Surface Flooding Control Strategy: Conceptual Remediation Options

The first three of five risk level one flood zones were analyzed to determine the feasibility and relative cost of remediation. These three zones include:

1. Ruth - Cairns
2. 1st – Dufferin
3. Cascade - Dufferin

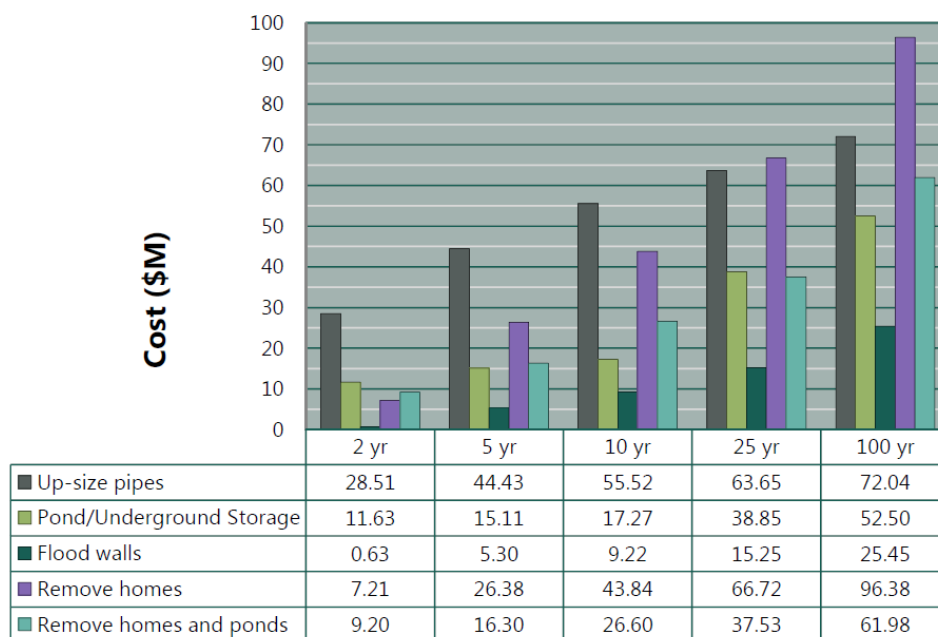
The following five remediation solutions were considered:

1. Up-sizing the storm sewer pipes,
2. Storm water pond or underground storage,
3. Flood walls,
4. Removal of at-risk homes, and
5. Combination of storm water ponds and removal of homes

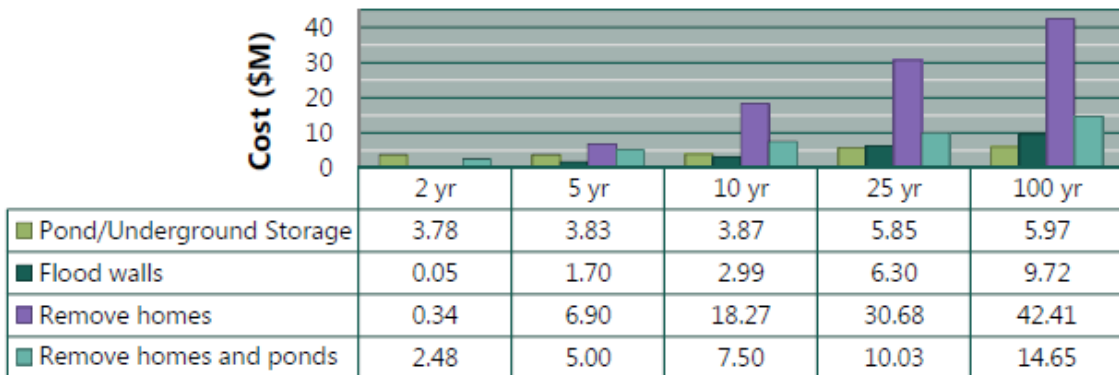
The necessary conceptual design for each method was evaluated against five different design storms: 2, 5, 10, 25, and 100 years.

The following tables and graphs below outline the estimated cost in millions of dollars for the five options and five design storms. The pipe up-size option is not included in the individual flood zone tables and graphs as this solution would be a coordinated cost sharing amongst the three zones. Generally, the cost for the combination option is between removal of homes and storm water ponds or storage.

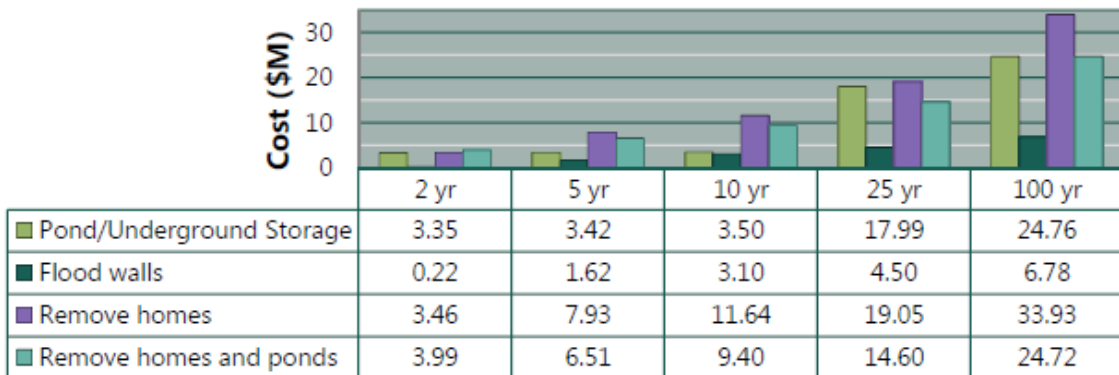
### Total for All Three Zones



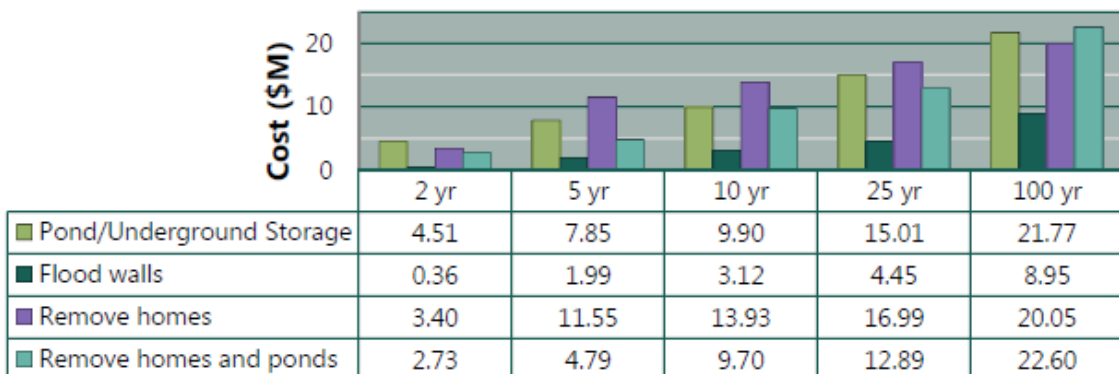
### Flood Zone 1: Ruth - Cairns



### Flood Zone 2: 1st - Dufferin



### Flood Zone 3: Cascade - Dufferin





October 2014

# Community Engagement Summary

## *Surface Flooding Control Strategy (SFCS)*



## **Community Engagement Summary**

### ***Surface Flooding Control Strategy (SFCS)***

#### **Project Description**

Storm sewers in Saskatoon are designed to fill and flood onto the street during major rain events. In new neighborhoods designed after 1989 this water in the street was accounted for as part of the design to try and limit property damage. However for many of the older areas of Saskatoon this same provision was not made. Therefore in major rain events many residents face the fear of property damage as water rises in the street.

To add to the problem, Saskatoon is currently in the wettest decade on record and within this period there has been a higher frequency of the major events that cause surface flooding. This has made it very trying for the residents who are at risk for flooding.

In response, the Storm Water Management Group of Saskatoon Water has developed the Surface Flooding Control Strategy. The strategy is to prioritize all the known flooding locations and investigate possible remedial options that can be constructed. Thirty flood zones have been assessed and the top five have been identified to address first.

On June 16, 2014, Executive Committee was briefed and agreed to move ahead with this strategy. The critical first step in the process has been identified as communication with the residents.



## Community Engagement Strategy

The purposes of the Community Engagement Strategy are as follows:

1. Provide residents an opportunity to tell us what they are experiencing
2. Obtain actual field information from the residents that may assist us in our investigation
3. Obtain community level input on what residents may like to see in a proposed design solution
4. Answer questions and educate homeowners on how the storm water system works and the cause and effects of surface flooding

Notification of the community engagement meeting was given by door-to-door flyers to over 600 homes defined within the five flood zones. (see copy of flyer attached)

The meeting consisted of an open-house format. Each of the five flood zones were represented with large overview maps. A brief presentation on the causes and solutions to flooding was given at the beginning and midway point of the evening. In between the presentations an informational video ran continuously providing the same information.

Residents were encouraged to "mark-up" the map in any way that would provide us with further information on what they experience in their area. There was also large and small comment sheets to allow a place to provide ideas or give input.

City staff was present at each zone throughout the evening to talk with residents and answer their questions.

The feedback received from the residents has been compiled into this document. It will be used in future council reports to verify the social aspects of any recommended alternatives.



## Summary of Community Engagement Feedback

A total of sixty-two people attended the open house; thirty-three people attended the 5:00pm presentation and twenty-nine people attended the 7:00pm presentation. However, only a small number of people left comments regarding the options presented at the open house. The results of the feedback provided for each zone is summarized below.

### **1<sup>st</sup> – Dufferin**

Based on the feedback provided by eight residents in this neighbourhood, the following list ranks the options from 1 to 5, with 1 being the best option and 5 being the worst option.

1. Larger Pipes
2. Storm Water Ponds
3. Relocation
4. Traffic Control Gates
5. Flood Walls

Although the residents were the most satisfied by larger pipes, they were concerned about the resulting disruptions and costs associated with this option. The only other option that was brought up was the idea of using porous pavement on the streets that experience surface flooding.

### **Cascade – Dufferin**

Based on the feedback provided by five residents in this neighbourhood, the following list ranks the options from 1 to 5, with 1 being the best option and 5 being the worst option.

1. Storm Water Ponds
2. Larger Pipes
3. Relocation
4. Flood Walls
5. Traffic Control Gates

Although the residents were most satisfied by storm water ponds, they were concerned about their proximity to schools and the possibility that they may attract more mosquitoes in the spring and summer.

Other options brought forward by the residents of this neighbourhood include super-pipes for storm water, catch basins and pipes in the alley between William Ave and Dufferin Ave, and re-grading or lowering the alley between William Ave and Dufferin Ave.



### **Early-Tucker**

Based on the feedback provided by four residents in this neighbourhood, the following list ranks the options from 1 to 5, with 1 being the best option and 5 being the worst option.

1. Larger Pipes
2. Storm Water Ponds
3. Traffic Control Gates
4. Flood Walls
5. Relocation

Other options brought forward by the residents in the area include raising the sidewalks on Early Drive, re-grading the back alleys to prevent water from flowing into backyards, and lowering the streets and sidewalks.

### **Ruth – Cairns**

Based on the feedback provided by four residents in this neighbourhood, the following list ranks the options from 1 to 5, with 1 being the best option and 5 being the worst option.

1. Storm Water Ponds
2. Larger Pipes
3. Traffic Control Gates
4. Flood Walls
5. Relocation

Although the residents were most satisfied by storm water ponds, one of the residents is concerned that it will not help since there is already a storm water pond in Churchill Park. On the other hand, some of the residents believe that storm water ponds, in conjunction with traffic control gates, would be the optimal solution.

### **7<sup>th</sup> – Cairns (6 Residents Responded)**

Based on the feedback provided by the residents in this neighbourhood, the following list ranks the options from 1 to 5, with 1 being the best option and 5 being the worst option.

1. Larger Pipes
2. Relocation
3. Traffic Control Gates
4. Flood Walls
5. Storm Water Ponds

Many of the residents in this area had mixed feelings on traffic control gates. One resident believes it would be a good idea since the traffic creates damaging waves while another



resident believes it would not correct the problem, only control it at the time of the storm. Other options brought forward by the residents in this area include installing speed bumps on 7<sup>th</sup> St, installing valves to regulate the inflow of water, and an auxiliary pump system to take water away (permanent on City property in an attractive shed).

## **Next Steps**

Work is still ongoing with determining the feasible options in each zone to recommend to Council. When this report is prepared it will include the feedback received from this community engagement meeting. It will help to show the social effects of any recommended alternative and facilitate a “triple-bottom-line” decision.

It has not yet been decided exactly how the results of this work will be communicated back to the residents but the goal is through a report and another community meeting. We will also continue to communicate and work with the residents should any of the remediate options be chosen to be implemented.

*Prepared by:*

Kelsea Lindenias  
Andrew Hildebrandt

Engineering & Planning  
Saskatoon Water  
October 16, 2014





## Surface Flooding Control Strategy OPEN HOUSE

Tuesday, September 16, 2014

**5:00 p.m. to 8:00 p.m.**

Aden Bowman Collegiate Cafeteria (1904 Clarence Ave. S.)

**A brief presentation will be given at 5:00 p.m. and again at 7:00 p.m.**

Do you have questions or concerns about flooding in your neighbourhood?

Please join us at an open house to discuss a Surface Flooding Control Strategy. This strategy will involve hearing your experiences and understanding the problem so that solutions may be developed.

Staff will be available to gather your input and provide information about options to control surface flooding in your neighbourhood.

The map below outlines, in red, the five areas that will be discussed at the open house.  
**We invite all residents within each of these areas to attend.**



**For more information, please contact:**

**Andrew Hildebrandt, P.Eng | tel 306.975.3854**

Senior Storm Water Engineer

City of Saskatoon | 222 3rd Avenue North | Saskatoon, SK S2N 0J5

andrew.hildebrandt@saskatoon.ca

## **Attachment 4**

### **Proposed Storm Water Management Business Plan and Funding Strategy**

The current replacement value of the Storm Water Utility infrastructure is estimated to be \$2 billion. A comprehensive multi-year business plan and funding strategy will review and incorporate the following:

1. Critical storm water infrastructure condition assessment and preservation plan
2. Storm water management level of service options and costs
3. Drainage capacity expansions and enhancements
4. East riverbank stabilization
5. Emergency measures flood response
6. Other risk mitigation measures
7. Continuous improvement initiatives
8. Citizen awareness and engagement
9. Funding

#### **1. Critical Storm Water Infrastructure Condition Assessment and Preservation Plan**

Identifying our City's aging storm water system's current condition is necessary to develop a proactive preservation plan to reduce the long-term life cycle asset costs. The condition of approximately 4% of 698 km of storm water mains has been evaluated. Assessment has been reactive when failures occur or in conjunction with road reconstruction. Cost for assessment is between \$30 and \$50 per metre. A long-term plan for completing the assessment will be provided with priorities to include aging storm water trunk systems servicing the 30 risk areas and the east riverbank area.

The 2016 capital budget for Storm Trunk and Collector and Storm Pond Preservation is \$2.064. Most preservation spending has primarily been reactive to address infrastructure failures. In 2015, for instance, the budget was mostly allocated to fixing a storm water main at Mackie Crescent. In previous years, emergency repairs for outfalls have been funded.

#### **2. Maintenance Level of Service Options**

The Storm Water Utility 2016 maintenance budget allocated to Public Works is \$2.74 million (e.g. repairing and maintaining storm sewer mains, manholes, catch basins, outfall basins, ponds, and the fall street sweep to reduce catch basin blockages.) The unit cost for maintenance services will be identified and level of service options presented to prioritize funding.

### **3. Drainage Capacity Expansions and Enhancements**

In addition to remediating the 30 sites assessed for surface flooding risk, the City receives ongoing requests to remediate drainage issues related to easements, ditches, alleys, and other surface drainage that may require engineered design and reconstruction that can exceed \$100,000. Clarity is needed on how the City will respond to these types of requests, and responsibilities of the City and property owners.

### **4. East Riverbank Stabilization**

Part of the storm water infrastructure on the east riverbank has been compromised as a result of slumping caused by record high groundwater levels. In 2014, approximately \$1.9 million was spent for east riverbank sub-drainage preservation, slope stabilization (17<sup>th</sup> Street/ Saskatchewan Crescent) and monitoring. The 2016 East Riverbank capital budget of \$3.2 million includes repairing City property caused by riverbank slumping adjacent to 16<sup>th</sup> Street/ Saskatchewan Crescent, stabilizing the slope, and monitoring. Recommendations will be identified for the 16 sites on the east river bank that may require additional monitoring and potential remediation.

### **5. Emergency Measures Flood Response**

An Emergency Measures Flood Response Plan will be developed to maximize safety and minimize property damage from intense rain events. This will include collaboration with Environment Canada's Meteorological Services to identify when high intensity rain events are forecast so that additional short-term measures may be deployed in collaboration with the Government of Saskatchewan to reduce impacts of flooding.

Site 14 at Confederation Drive and Laurier Drive and Site 26 at Idylwyld Drive and Circle Drive in Attachment 1 (Surface Flooding Control Strategy Report) represent locations where traffic intersection control could be implemented rather than an infrastructure solution designed to control flood water. These sites have significant surface flooding history, and although it may not be possible to implement further engineering measures (to limit the frequency, severity, and extent of the flooding) it may be possible to limit the potential damage and hazard to vehicles and improve safety by implementing traffic control measures such as gates and warning lights to alert drivers to the potential danger. It is estimated that intersection solutions could be created at these two sites for approximately \$700,000. The Administration will further investigate this possibility in cooperation with the Transportation and Public Works divisions.

### **6. Other Risk Mitigation Options**

Administration will undertake further investigation into more affordable options that may reduce the impact of surface water flooding. For instance, although insurance providers have not traditionally insured damage from surface water flooding, companies have

## **Proposed Storm Water Management Business Plan and Funding Strategy**

started to offer coverage in some provinces (e.g. Alberta, Ontario). Discussions with companies will determine the feasibility for coverage to be offered in Saskatchewan.

Other mitigation options that the City or property owners could take to reduce the impact of flooding will be considered. Options may include installation of backflow valves, appropriate weeping tiles, sump pumps, landscaping, etc.

### **7. Continuous Improvement Initiatives**

The Storm Water Utility will review the process for assessment and billing in collaboration with Revenue Branch to ensure that billings for multi-residential, commercial, industrial, and institutional properties incorporate changes that impact storm water run-off. Other opportunities for continuous improvement that increase the utility's efficiency and/or effectiveness will be identified.

### **8. Citizen Awareness and Engagement**

A communication and engagement plan will include best practices to increase awareness of storm water and actions that citizens can take to use storm water as a resource and to reduce property flood damage (e.g. low impact design guidelines).

A communication strategy will also inform citizens about the City's storm water infrastructure and drainage into the Saskatchewan River with a goal of reducing discharges of potentially harmful materials into the system. Opportunities will be investigated for community partnerships that engage students and other citizens in appropriate drainage (e.g. "Yellow Fish Road").

The awareness and engagement strategy will include a variety of communication vehicles (i.e. social media, improvements to the Storm Water website page, utility bill inserts, video, and traditional media).

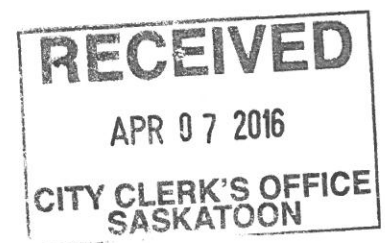
### **9. Funding Strategy**

Funding options for expanded infrastructure for high risk flood sites and other business plan components will be evaluated. Unless otherwise directed, the funding strategy options could include one or more of the following:

- Storm Water Infrastructure ERU increase (City properties are also charged ERUs so this option also will impact the mill rate)
- Continuation and redirection of the temporary Flood Protection Program (FPP) levy scheduled to end in 2018. The FPP was established to mitigate sanitary sewer back-ups caused by high intensity storm events.
- Neighbourhood levies for areas prioritized for infrastructure expansions
- Redirection of Storm Water Utility funding currently directed to riverbank stabilization

7850-2

**From:** Laurie Bourgeois <l.bourgeois@sasktel.net>  
**Sent:** April 07, 2016 7:25 AM  
**To:** City Council  
**Subject:** Form submission from: Write a Letter to Council



Submitted on Thursday, April 7, 2016 - 07:25  
Submitted by anonymous user: 207.195.120.195  
Submitted values are:

Date: Thursday, April 07, 2016  
To: His Worship the Mayor and Members of City Council  
First Name: Laurie  
Last Name: Bourgeois  
Address: 725 1st St E  
City: Saskatoon  
Province: Saskatchewan  
Postal Code: S7H 1S9  
Email: l.bourgeois@sasktel.net

Comments:  
I and my husband, Mike Thibault, would like to speak to the committee regarding our street flooding. I spoke to council in 2011. Council then said this should be dealt with. It is now 5 years later, and we have yet to hear of a solution.  
Thank you,  
Laurie Bourgeois

The results of this submission may be viewed at:  
<https://www.saskatoon.ca/node/398/submission/84034>

---

---

## **WWTP – Existing System Replacements – Lab Information Management System – Award of Professional Services**

### **Recommendation**

That the Standing Policy Committee on Environment, Utilities and Corporate Services recommend to City Council:

1. That the proposal for professional services, submitted by Promium LLC, for the supply, installation, and configuration of a new computerized Lab Information Management System for the Water and Environmental Labs, at an estimated cost of \$175,239.46 (including GST and PST), be approved; and
2. That the City Solicitor be requested to prepare the appropriate agreement and that His Worship the Mayor and the City Clerk be authorized to execute the agreement under the Corporate Seal.

### **Topic and Purpose**

The purpose of this report is to obtain approval to award a contract to Promium LLC to provide professional services for the supply, installation, and configuration of a new computerized Lab Information Management System (LIMS) for the Water and Environmental Labs.

### **Report Highlights**

1. The Water and Environmental Labs require a computerized LIMS solution which is required as part of regulatory and accreditation compliance.
2. A Request for Proposal (RFP) was posted on SaskTenders asking for supply, installation, configuration, and customization of a LIMS on November 30, 2015. Of the six proposals received, Promium LLC was rated as superior.

### **Strategic Goal**

The recommendations in this report support the Strategic Goal of Sustainable Growth. The work completed will ensure that as workload continues to increase in the Water and Environmental Labs, they are able to maintain effective and efficient processes to ensure regulatory and accreditation compliance.

### **Background**

Saskatoon Water operates two separate labs, the Water Lab and the Environmental Lab:

- The Water Lab is located at the Water Treatment Plant (WTP). This lab is Canadian Association for Laboratory Accreditation (CALA) accredited and generates data regarding raw water quality, treatment process monitoring, and drinking water quality.
- The Environmental Lab is located at the Wastewater Treatment Plant (WWTP). This lab maintains a separate CALA accreditation and generates data regarding

wastewater quality, treatment process monitoring, industrial effluent quality, groundwater quality, and storm water quality.

Data generated by the laboratories is used for reporting to provincial and federal regulators, reports to the public, process optimization at the WTP and WWTP, and fulfillment of requirements for ISO/IEC 17025:2005 certification.

At present, both labs use Microsoft Excel spreadsheets to record data, perform calculations, and store data and reports. Saskatoon Water needs to implement a LIMS in order to comply with its Permit to Operate and to maintain accreditation.

## **Report**

### Computerized LIMS Solution

In addition to satisfying accreditation and Permit to Operate requirements, the LIMS will increase lab efficiency by streamlining workflow and automation of data collection. This will reduce the amount of effort required to enter/login samples, input test results, track sample progress through the lab, and assemble reports and electronic deliverables.

The LIMS will increase lab data quality by eliminating manual and redundant data entry, managing quality control standards, and maintaining accurate electronic audit trails. The LIMS will also increase the ease of access to past tests and lab information through database searches.

### Request for Proposal

An RFP was advertised on November 30, 2015, on SaskTenders and six proposals were received from the following proponents:

- Labtopia Informatix (Houston, TX)
- Promium LLC (Bothell, WA)
- Accelerated Technology Laboratories Inc. (West End, NC)
- Ethosoft, Inc. (Norcross, GA)
- Saskatchewan Research Council (Saskatoon, SK)
- Autoscribe Informatics, Inc. (Falmouth, MA)

Following a systematic evaluation of all proposals, the evaluation committee rated the proposal from Promium LLC as superior and confirmed it met the scope-of-work defined in the Terms of Reference.

## **Options to the Recommendation**

The City could choose to build a system rather than buy an existing system. LIM systems are commonly used in professional laboratory environments and are considered best practice. Therefore, the Administration recommends implementation of a commercially available system.

**Financial Implications**

The net cost to the City for the professional services, as submitted by Promium LLC, would be as follows:

Supply, Install, and Training	\$144,826.00
Contingency (10%)	<u>14,482.60</u>
Sub-total Upset Fee	\$159,308.60
GST (5%)	7,965.43
PST (5%)	<u>7,965.43</u>
Total Upset Fee	\$175,239.46
GST Rebate	<u>(7,965.43)</u>
Net Cost to City	<u>\$167,274.03</u>

There is sufficient funding in Capital Project #0687-06 – WWT – Existing System Replacements and Capital Project #2264 – Sewer Baseline Program. Funding for the initial cost of this program will be split 50/50 between these funds.

Ongoing support and maintenance for the LIMS is expected to cost \$4,800 per year and will be funded from the Environmental Lab Operating Budget and the Water Lab Operating Budget.

**Other Considerations/Implications**

There are no public and/or stakeholder involvement, communications, policy, environmental, privacy, or CPTED implications or considerations.

**Due Date for Follow-up and/or Project Completion**

The project will be completed by October 31, 2016.

**Public Notice**

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

**Report Approval**

Written by: Jared Nelson, Project Engineer, Saskatoon Water  
Reviewed by: Larry Schultz, Engineering Services Manager, Saskatoon Water  
Reid Corbett, Director of Saskatoon Water  
Approved by: Jeff Jorgenson, General Manager, Transportation & Utilities Department