

# COMMITTEE AGENDA



TO **Planning & Building, Engineering and Environment  
Committee**

DATE June 10, 2014

LOCATION Council Chambers, Guelph City Hall, 1 Carden Street

TIME 2:00 p.m.

## DISCLOSURE OF PECUNIARY INTEREST AND GENERAL NATURE THEREOF

**CONFIRMATION OF MINUTES** – May 5, 2014 Open Meeting Minutes

**PRESENTATIONS** (Items with no accompanying report)

a)

## CONSENT AGENDA

*The following resolutions have been prepared to facilitate the Committee's consideration of the various matters and are suggested for consideration. If the Committee wishes to address a specific report in isolation of the Consent Agenda, please identify the item. The item will be extracted and dealt with separately. The balance of the Planning & Building, Engineering and Environment Committee Consent Agenda will be approved in one resolution.*

ITEM	CITY PRESENTATION	DELEGATIONS	TO BE EXTRACTED
PBEE-2014.16 Draft Grand River Watershed Water Management Plan	<ul style="list-style-type: none"> <li>Sandra Cooke, Senior Water Quality Manager, Grand River Conservation Authority</li> </ul>		√
PBEE-2014.17 2014 Solid Waste Management Master Plan	<ul style="list-style-type: none"> <li>Dean Wyman, General Manager, Solid Waste Resources</li> <li>Dr. Brajesh Dubey, Vice-Chair, Solid Waste Management Master Plan Review Steering Committee</li> </ul>		√

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Resolution to adopt the balance of the Planning & Building, Engineering & Environment Committee Consent Agenda.

## **STAFF UPDATES AND ANNOUNCEMENTS**

### **ITEMS EXTRACTED FROM CONSENT AGENDA**

Once extracted items are identified, they will be dealt with in the following order:

- 1) delegations (may include presentations)
- 2) staff presentations only
- 3) all others.

## **ADJOURNMENT**

**NEXT MEETING** – July 7, 2014

**Planning & Building, Engineering and Environment Committee  
Held in the Council Chambers, Guelph City Hall  
Monday, May 5, 2014 at 2:00 p.m.**

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**Attendance**

Members: Chair Bell, Mayor Farbridge, Councillors Guthrie, Laidlaw and Piper

Councillors: Councillors Furfaro, Hofland and Van Hellemond

Staff: Ms. A. Pappert, Chief Administrative Officer  
Dr. J. Laird, Executive Director of Planning & Building, Engineering and Environment  
Mr. T. Salter, General Manager, Planning Services  
Mr. B. Poole, Chief Building Official  
Mr. T. Myles, Termite Control Officer  
Mr. B. Bond, Zoning Inspector III/Senior By-law Administrator  
Mr. R. Reynen, Manager of Inspection Services  
Mr. B. Labelle, City Clerk  
Ms. D. Black, Council Committee Coordinator

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**Call to Order (2:00 p.m.)**

Chair Bell called the meeting to order.

**Disclosure of Pecuniary Interest and General Nature Thereof**

There were no disclosures.

**Confirmation of Minutes**

1. Moved by Councillor Guthrie  
Seconded by Mayor Farbridge

That the open meeting minutes of the Planning & Building, Engineering and Environment Committee held on April 7, 2014 be confirmed as recorded.

*VOTING IN FAVOUR: Mayor Farbridge, Councillors Bell, Guthrie, Laidlaw and Piper (5)*

*VOTING AGAINST: (0)*

CARRIED

**Consent Agenda**

The following items were extracted from the May 5, 2014 Consent Agenda to be voted on separately:

**PBEE-2014.13 Termite Control Program 2013 Annual Report**  
**PBEE-2014.14 Rental Housing Licensing Recommended Approach**  
**PBEE-2014.15 Building Services Annual Report**

## **Extracted Consent Items**

### **PBEE-2014.13 Termite Control Program 2013 Annual Report**

Dr. Tim Myles, Termite Control Officer, provided an update of the 2013 termite control program; explained the treatment and plan of action for the newly-discovered termite infestation in the King Street area and outlined the termite program goals for 2014. He noted that 2013 has been Guelph's most successful year to date for the containment and eradication of termites.

2. Moved by Councillor Piper  
Seconded by Councillor Wettstein

That the report from Planning, Building, Engineering and Environment dated May 5, 2014 entitled Termite Control Program 2013 Annual Report be received.

*VOTING IN FAVOUR: Mayor Farbridge, Councillors Bell, Guthrie, Laidlaw and Piper (5)*

*VOTING AGAINST: (0)*

CARRIED

### **PBEE-2014.14 Rental Housing Licensing Recommended Approach**

Mr. Bill Bond, Zoning Inspector III/Senior By-law Administrator provided background information regarding the rental housing licensing recommended approach. He explained the staff rationale for their recommendation and outlined the plans to address the components of the recommended approach.

Mr. Rob Reynen, Manager of Inspection Services advised that licensing could still occur if the current approach does not successfully address the issues. Staff will continue to implement the new initiatives in 2014 with the funding available in the current budget and will prepare a budget package for consideration during the 2015 budget process.

Discussion ensued regarding right of access, the search warrants process, set fines and penalties. The community engagement process was also discussed along with the issue of how enforcement should be financed and who would be responsible to pay the charges administered.

Mr. Allan Dyer, landlord stated he is supportive of the approach being recommended because licensing would not address behavioural issues or neighbourhood stabilization. He advised that the majority of people were against rental licensing, including tenants. He was supportive of the search warrant method and commended staff on the approach being recommended.

Mr. Aldo Martone, landlord and property manager believes the tax payers should not have to pay for the program. He noted licensing would not apply to group homes or student residents and should apply to all forms of rental units. He supports the alternative to licensing and believes the best and most cost efficient method of handling the issues will be to enhance the existing by-laws.

Mr. Andrew Arklie, homeowner and landlord, agrees with the recommended approach and believes licensing would be redundant, would fail to deal with problem tenants, would not resolve the issue of problem landlords because they would not register their units and the costs would be passed down to tenants. He agrees with increased fines and enforcement of current

bylaws and the increased involvement with the University of Guelph. He noted that Guelph does not have a landlord association but believes it would be beneficial for self-regulation.

Mr. John Gruzleski, representing the Old University Neighbourhood Residents Association stated they do not believe enhancement of current by-laws and existing tools will address the current issues of absentee landlords, floor plans and access. He advised the staff recommendations are not proactive enough, fail to recognize renting as a business and are lacking significant fines for noncompliance. He noted the data is insufficient to support the recommendations and the public consultation process was insufficient. He requested the report be referred back to staff.

Mr. Lyle McNair, real estate agent suggested that building permits and increased assessment of properties resulting from the rental units could assist with the costs of enforcement. He believes the 3-6 unit homes need to be addressed and he fully supports an enhanced education program. He is also in favor of increased fines for noncompliance and he does not believe licensing will capture the noncompliant landlords.

Mr. Tony Santoro, landlord, does not feel licensing would resolve the issues and believes educating students, landlords and home owners is the best solution.

*Councillor Bell vacated the Chair.  
Councillor Wettstein assumed the Chair.*

3. Moved by Councillor Guthrie  
Seconded by Councillor Bell
  1. That Report 14-29 from Planning, Building, Engineering and Environment regarding the Rental Housing Licensing Recommended Approach report dated May 5, 2014 be received.
  2. That Council approve, in principle, the recommended alternative approach to a rental housing licensing program described in Report 14-29 from Planning, Building, Engineering and Environment dated May 5, 2014, specifically:
    1. Continue the enhanced enforcement program and improve the Building Services proactive enforcement program;
    2. Research, develop and begin implementing a comprehensive and multi-stakeholder education/communications plan; and
    3. Continue to support community partnerships, explore strategies and develop community based responses to rental housing issues.
  3. That staff proceed with the implementation of the 2014 aspects of the recommended alternative approach to a rental housing licensing program which is already funded.

*Councillor Bell resumed the Chair.*

Discussion ensued regarding how to address non-compliant landlords and the various options of licensing - including the idea of a pilot program for a 2-3 year period. Staff advised even minimal licensing would require more resources including a new position to assist with enforcement.

Some issues with the report that were raised include: the ambiguity of the wording within the recommendations, the limited data provided to support the recommendations, the difference of

the professional opinions between the two reports, the report not addressing key issues that were referred back to staff, that correspondence received provided more information than the report, the lack of performance measures in place to determine success levels, the assumption of a budget increase and the lack of evidence of the value of money already invested.

### **First Amendment**

4. Moved by Karen Farbridge  
Seconded by Councillor Piper

**That the Rental Housing Licensing Recommended Approach report dated May 5, 2014 be referred back to staff as incomplete.**

*VOTING IN FAVOUR: Mayor Farbridge, Councillors Bell, Laidlaw and Piper (4)*

*VOTING AGAINST: Councillor Guthrie (1)*

CARRIED

Discussion ensued regarding neighbourhood stabilization; the lack of investment in available preventative tools, how to obtain search warrants and the fines not being prohibitive enough. Comments also addressed the lack of feedback from neighbourhood groups and the public at large and the need to establish a business case to support staff recommendations.

### **PBEE-2014.15 Building Services Annual Report**

Mr. Bruce Poole, Chief Building Official, provided a brief summary of the building services annual report.

There was some discussion regarding the feasibility of including the annual termite report within future building services annual reports.

5. Moved by Councillor Piper  
Seconded by Mayor Farbridge

That the report from Planning, Building, Engineering and Environment dated May 5, 2014 entitled Building Services 2013 Annual Report be received.

*VOTING IN FAVOUR: Mayor Farbridge, Councillors Bell, Guthrie, Laidlaw and Piper (5)*

*VOTING AGAINST: (0)*

CARRIED

### **Staff Updates and Announcements**

Dr. Laird, Executive Director, Planning, Building, Engineering and Environment, advised that the Environmental Review Tribunal has granted the City their appeal regarding the Dolime Permit to Take Water and staff will be reviewing the decision and reporting to Council at a future Council meeting.

### **Adjournment (4:20 p.m.)**

6. Moved by Councillor Guthrie  
Seconded by Mayor Farbridge

That the meeting be adjourned.

CARRIED

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City Clerk

**PLANNING & BUILDING, ENGINEERING and ENVIRONMENT COMMITTEE  
CONSENT AGENDA**

**June 10, 2014**

Members of the Planning & Building, Engineering and Environment Committee.

**SUMMARY OF REPORTS:**

The following resolutions have been prepared to facilitate the Committee's consideration of the various matters and are suggested for consideration. If the Committee wishes to address a specific report in isolation of the Consent Agenda, please identify the item. The item will be extracted and dealt with immediately. The balance of the Planning & Building, Engineering & Environment Committee Consent Agenda will be approved in one resolution.

**A Reports from Administrative Staff**

<b>REPORT</b>	<b>DIRECTION</b>
<p><b>PBEE-2014.16 DRAFT GRAND RIVER WATERSHED WATER MANAGEMENT PLAN</b></p> <p>1. That Council endorse, in principle, the Grand River Watershed Water Management Plan.</p> <p>2. That the City continue to collaborate with other Plan partners to develop and voluntarily implement the best value solutions to water management issues in the Grand River Watershed.</p>	Approve
<p><b>PBEE-2014.17 2014 SOLID WASTE MANAGEMENT MASTER PLAN</b></p> <p>1. That Council endorse in principle the recommendations contained in the 2014 Solid Waste Management Master Plan (SWMMP).</p> <p>2. That Council extend their appreciation to the members of the SWMMP Steering Committee for their efforts and dedication over the past year.</p>	Approve

attach.

# A Plan for the Grand

**A new water management study will address important issues in the Grand River watershed and provide strategies for addressing them over the next 25 years.**



**flood**control

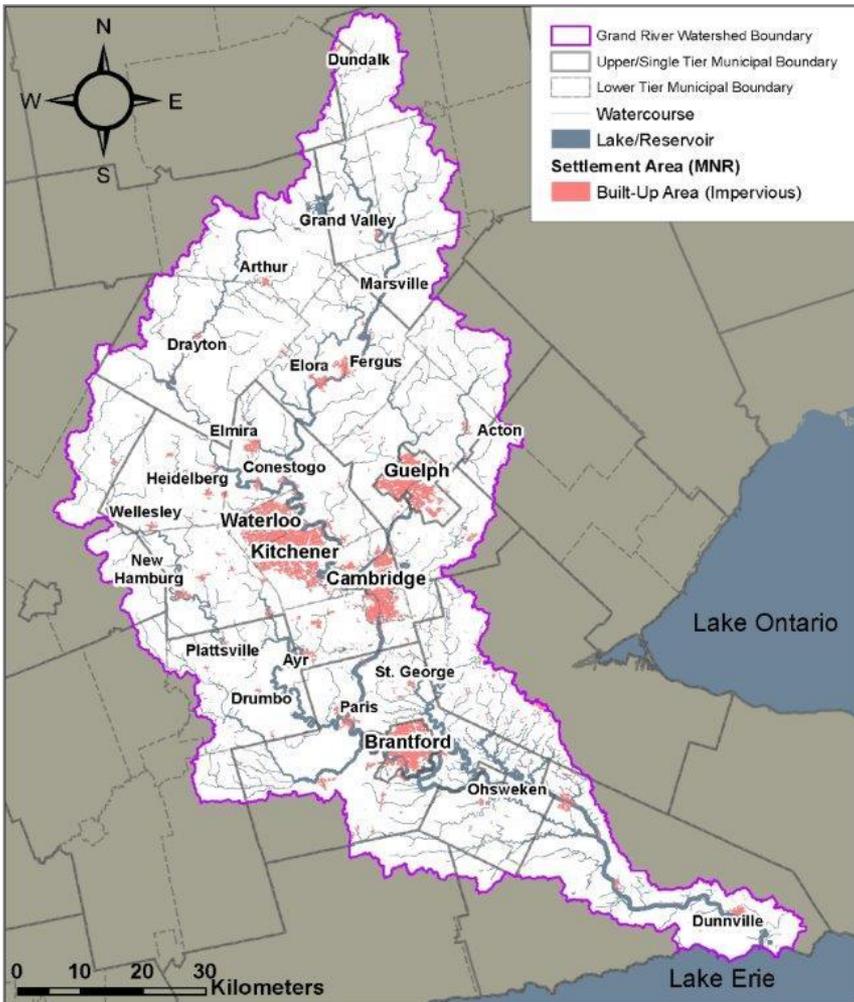


**water**quality



**water**supplies

# Grand River watershed



- Flows from Dundalk to Lake Erie
- About 11,000 km of rivers & streams
- Four major tributaries:
  - Speed River
  - Eramosa River
  - Nith River
  - Conestogo River
- 80% of the people live in 5 cities
- 30 wastewater treatment plants
- Most land is actively farmed

# Long history of water management



- 80 year history of water management planning
- Shared responsibility
- Successful collaboration

# Critical issues



## ➤ Population growth

- water supplies, sewage treatment have to keep pace
- impacts on water quality, groundwater recharge

## ➤ Extensive agriculture

- concerns about impact on water quality

## ➤ Climate change presents new challenges

- increased frequency of extreme events (droughts, floods)

# Grand River Watershed Water Management Plan

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## ➤ Joint Plan of Action to ...

- Improve water quality for improved river health and to reduce the Grand River's impact on Lake Erie
- Ensure water supplies for communities, economies & ecosystems
- Reduce flood damages
- Build resilience to deal with climate change



# Grand River Watershed Water Management Plan

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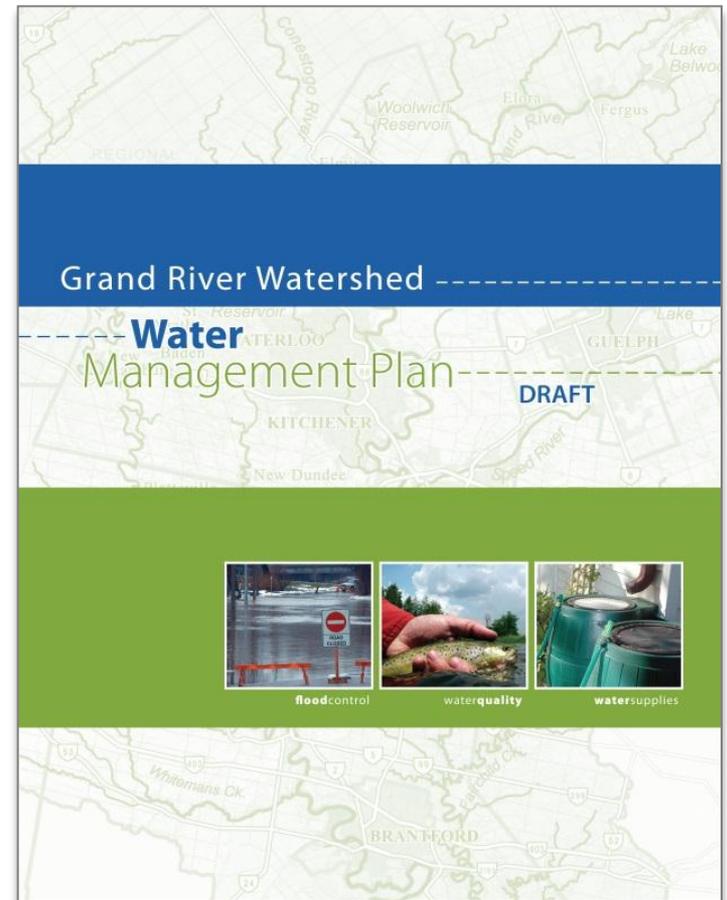
## ➤ Joint Plan of Action to ...

- Improve the natural environment and quality of life for your residents & communities,
- Ensure enough water for continued growth & prosperity,
- Strengthen partnerships: no one agency can do it all



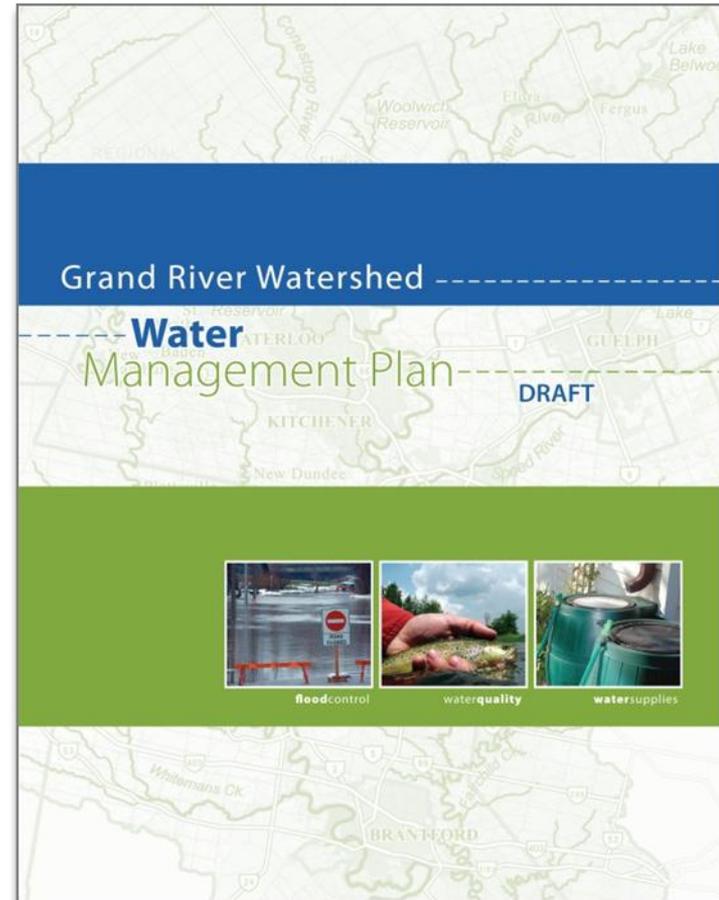
# The Integrated Action Plan

- **Joint, voluntary** plan – cooperation & shared responsibility
- Plan of **‘Best Practices’**
- No legal or financial obligations, no new spending
- **Aligns** partner workplans; actions plan partners have already planned.
- Commitment to **‘Best Value Solutions’**



# Plan partners

- Region of Waterloo
- Cities of Kitchener, Cambridge, Waterloo, Brantford, Guelph
- County of Brant
- Haldimand County
- Twp Centre Wellington
- Ministries of Agriculture, Environment, Natural Resources
- Six Nations
- Environment Canada
- GRCA



# Ensuring water supplies

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- There is enough water, now and for the future, but there is a need to be diligent in planning for future water needs
- Water use is sustainable but efficient water use by all sectors is encouraged
- Reservoir operating strategies provide sufficient flows for environmental, municipal and wastewater needs
- Although not limited by supply, there are areas of constraint or conflict. Proactive drought contingency planning will ease the constraint

# Improving water quality

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- Both wastewater treatment plants and non-point sources of pollution from rural and urban areas are important and must be managed
- A commitment to wastewater treatment upgrades and optimization will improve water quality
- Nonpoint sources of pollution (both rural & urban stormwater) will continue to be a challenge – rural water quality and urban stormwater programs will make a difference.
- Future opportunities to improve water quality may be found by removing old dams or modifying their operation

# Reducing flood damages

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- Much has been done for effective and efficient flood management; dams and dikes have reduced flood damages by 80%
- Asset management is imperative; ongoing investments are needed to ensure the sustainability of flood infrastructure
- Commitment to continuous improvement in flood preparedness, floodplain mapping, flood forecasting

# City of Guelph – Highlights

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- **Participate in Water Managers Working Group and the Implementation Committee;**
- **Collaborate with Plan Partners to Implement Grand River Water Management Plan.**

# City of Guelph – Highlights

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## ➤ Ensuring Sustainable Water Supplies:

- Complete current update of Water Supply Master Plan;
- Complete current update of Water Conservation Strategy;
- Participate in the Hydrology – Ground Water Working Group to share technical information on regional groundwater-surface water issues.

# City of Guelph – Highlights

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## ➤ Improving water quality:

- Continue Optimization Program at our Wastewater Treatment facility to meet the voluntary performance targets;
- Continue to share Guelph's Optimization Program successes with the Water Manager's Working Group;
- Share our Sewer Use By-Law for proactive maintenance and enforcement;
- Participate in an annual update on implementation of actions to reduce frequency/severity of bypasses and spills;

# City of Guelph – Highlights

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## ➤ Improving water quality (cont'd):

- Continue to support the Rural Water Quality Program;
- Participate with Plan Partners in Stormwater Management Working Group to pursue stormwater best management practises and to optimize current stormwater monitoring;
- Continue activities and programs to promote reduced salt use for de-icing;
- Continue activities and awareness regarding use of water and salt efficient water softeners.

# City of Guelph – Highlights

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## ➤ Reducing Flood Damages

- Complete Stormwater Funding Study to ensure sustainable funding of our stormwater assets.

# Looking Forward ...

- Seeking endorsement from Plan partners & watershed municipalities in 2014
- Public launch/celebration in early 2015
- Maintain the Water Managers Working Group
- Regular reporting on implementation, progress & watershed conditions



# STAFF REPORT



TO Planning & Building, Engineering and Environment Committee

SERVICE AREA Planning, Building, Engineering and Environment

DATE June 10, 2014

**SUBJECT Draft Grand River Watershed Water Management Plan**

REPORT NUMBER

## EXECUTIVE SUMMARY

### PURPOSE OF REPORT

To obtain Council's endorsement of the draft Grand River Watershed Water Management Plan.

### KEY FINDINGS

The draft Grand River Watershed Water Management Plan addresses several key issues:

- Ensure sustainable water supplies for communities, economies and ecosystems;
- Improve water quality to continually better river health and reduce the river's impacts on Lake Erie;
- Reduce flood damage potential; and
- Increase resiliency to deal with climate change and extreme weather events.

The Plan was developed through collaboration with the Plan partners, specifically: municipalities, First Nations, the GRCA, provincial ministries, and federal departments.

This is a voluntary Plan and imposes no legal obligations on the Plan partners.

### FINANCIAL IMPLICATIONS

This is a voluntary Plan and imposes no financial obligations on the Plan partners. A spirit of co-operation and shared responsibility will be critical to its success.

For Guelph, our Water and Wastewater capital budget supports the implementation of the Plan recommendations.

# STAFF REPORT

## **ACTION REQUIRED**

To endorse the draft Grand River Watershed Water Management Plan and agree to continue to work with the Plan partners to implement the recommendations.

## **RECOMMENDATION**

1. That Council endorse, in principle, the Grand River Watershed Water Management Plan;
2. That the City continue to collaborate with other Plan partners to develop and voluntarily implement the best value solutions to water management issues in the Grand River Watershed.

## **BACKGROUND**

The draft Grand River Watershed Water Management Plan addresses new challenges that are impacting the Grand River watershed, including those brought on by high population growth, extensive agriculture and climate change. The draft Plan is built on the foundation of earlier plans, in particular the 1982 Grand River Basin Water Management Study.

The draft Plan focusses on the next 20-30 years and will guide future actions to maintain and improve the Grand River watershed to ensure the environment remains healthy and sustainable as the population grows.

City of Guelph staff have participated for four years on both the Steering Committee overseeing the development of the Plan and on Project Teams.

## **REPORT**

The goals of the draft Grand River Watershed Water Management Plan are to:

- Improve water quality,
- Secure water supplies,
- Reduce flood damage potential, and
- Address the effects of climate change.

The draft Plan is the product of a voluntary partnership of the following agencies:

- Regional Municipality of Waterloo;
- County of Brant;
- County of Haldimand;
- City of Guelph;
- City of Brantford;
- City of Kitchener;
- City of Waterloo;

# STAFF REPORT



- City of Cambridge;
- Township of Centre Wellington;
- Six Nations of the Grand River;
- Ontario Ministry of the Environment;
- Ontario Ministry of Natural Resources;
- Ontario Ministry of Agriculture and Food / Ministry of Rural Affairs;
- Environment Canada; and
- Grand River Conservation Authority

The Plan has been developed in a collaborative process focused on finding the most effective and efficient ways to address the goals. The Plan aligns the existing projects and programs of the partners so we can work together to improve the management of water issues throughout the watershed.

The Executive Summary (Appendix "A") provides an overview of the Plan and its recommendations (the complete document can be viewed at [www.grandriver.ca](http://www.grandriver.ca)).

The Plan also includes specific recommendations and action items brought forward by Plan partners on behalf of their organizations. These are generally action items the Plan partners are already doing, or plan to do, that will implement the recommendations. Appendix "B" summarizes the City of Guelph action items.

## **CORPORATE STRATEGIC PLAN:**

3.1. Ensure a well-designed, safe, inclusive, appealing and sustainable City

## **FINANCIAL IMPLICATIONS:**

This is a voluntary Plan and imposes no financial obligations on the Plan partners. A spirit of co-operation and shared responsibility will be critical to its success.

Our Water and Wastewater capital budget supports the implementation of the Plan recommendations.

## **DEPARTMENTAL CONSULTATION:**

Grand River Conservation Authority communicated with the Wastewater Services, Water Services, Engineering Services, Planning Services and Public Works Departments.

# STAFF REPORT

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## **COMMUNICATIONS:**

GRCA has implemented a comprehensive public communication plan throughout the development of the draft Plan.

## **ATTACHMENTS**

- |              |   |
|--------------|---|
| Appendix "A" | Draft Grand River Watershed Water Management Plan - Executive Summary |
| Appendix "B" | City of Guelph Action Items   |

Original Signed by:

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### **Prepared and Recommended By**

Janet L. Laird, Ph.D.  
Executive Director  
Planning, Building, Engineering  
and Environment  
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janet.laird@guelph.ca

## Water Management Plan

Executive Summary– March 2014

### A Water Management Plan for the Grand River Watershed

The Grand River lies at the heart of one of the richest, fastest growing regions in Ontario. The vitality of the Grand River watershed has been linked to the river and the natural environment.

Much has been done in the past 100 years to protect and improve the natural environment. Many of those improvements came about through the implementation of water management plans developed through partnerships involving the Grand River Conservation Authority, municipalities, the Province of Ontario and the Government of Canada.

The Grand River watershed faces new challenges brought on by high population growth, extensive agriculture and climate change.

This Water Management Plan addresses those issues. It is built on the foundation of earlier plans, especially the 1982 Grand River Basin Water Management Study.

This plan looks ahead 20 to 30 years and will guide future actions to maintain and improve the

### The goals of the plan

The plan is an integrated water management plan with goals to:

- Ensure sustainable water supplies for communities, economies and ecosystems;
- Improve water quality to improve river health and reduce the river's impact on Lake Erie;
- Reduce flood damage potential; and
- Increase resiliency to deal with climate change.

environment of the Grand River watershed to ensure the environment remains healthy and sustainable as the population grows.

It is a joint plan by municipalities, First Nations, the GRCA, provincial ministries and federal departments to align their efforts and identify practical actions that will make the biggest difference.

It is a voluntary plan, not a legal requirement, so a spirit of cooperation and shared responsibility is critical to its success.

### The Issues

#### Population growth

The Grand River watershed has a population of about 985,000 which is expected to reach 1.53 million by 2051.

The cities of Kitchener, Waterloo, Cambridge, Guelph and Brantford are among the fastest growing in the province.

Municipal drinking water comes

from more than 100 municipal wells and four river intakes. That same river also receives the treated effluent from 30 sewage treatment plants. More people means more demand on water resources for drinking water, stormwater management and sewage treatment.

#### Climate change

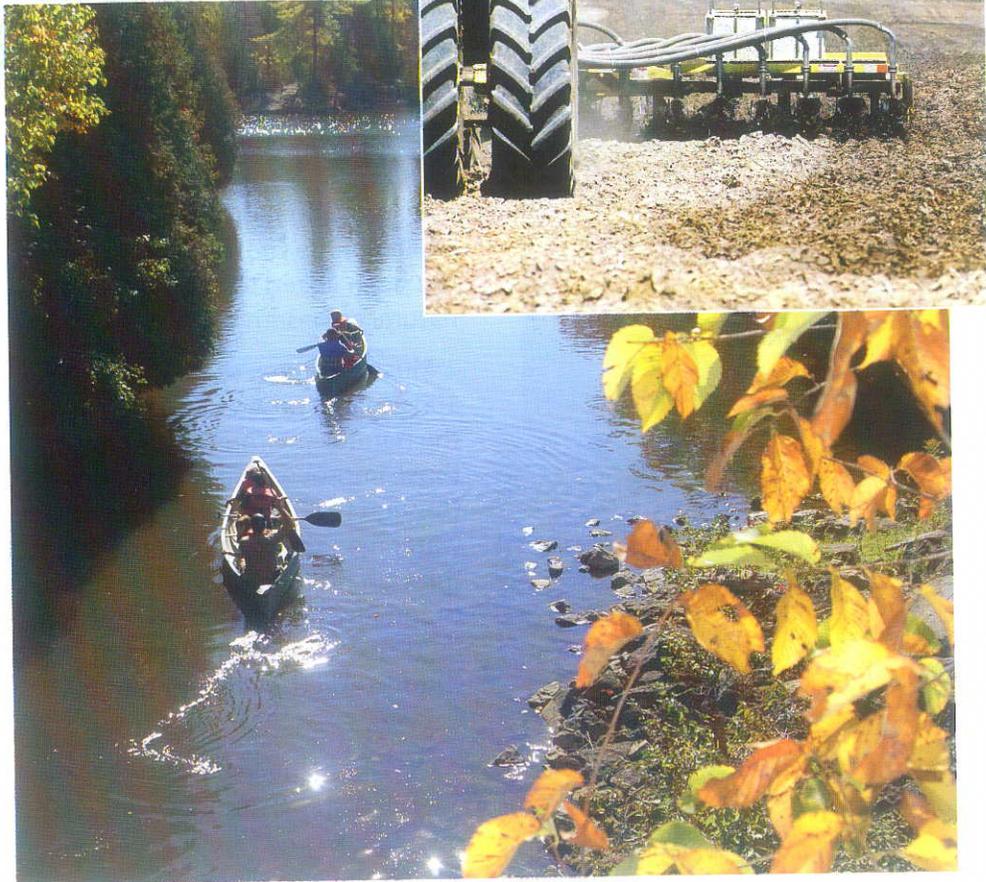
Warmer air and water temperatures, bigger rainstorms,

longer periods of drought — the possible consequences of climate change could pose new challenges in managing floods, improving water quality and securing water supplies for municipalities, farmers, industry and the natural environment.

### Extensive agriculture

The Grand River watershed is one of the richest agricultural regions in Canada. About 70 per cent of the land is actively farmed and there are hundreds of thousands of hogs and cattle.

Fertilizers, farm chemicals and animal waste must be properly stored, handled and used to minimize impact on rivers, streams and groundwater. Erosion needs to be addressed to protect farmland and water quality.



### The Partnership

**The Plan is a voluntary, collaborative process that brings various agencies together as partners.**

The focus of the Plan is to promote the adoption of best practices and the implementation of projects and programs that provide the greatest benefits relative to the investment.

By working together, these agencies have set out a strategy, based on agreed-upon local objectives and targets, to meet the needs of the ecosystem and watershed communities. The strategy will assist each partner to fulfill their role and to support each other throughout the process.

Many groups and organizations

have provided input to the plan through a variety of communication and engagement opportunities. That includes members of municipal councils, the agricultural community, aggregate producers, urban development organizations, environmental non-government organizations, other groups and the interested public.

### Water Management Plan Partners

These agencies took part in the plan development and had members on the Project Team and/or Steering Committee.

Municipalities represented by:

- Regional Municipality of Waterloo
- County of Brant
- County of Haldimand

- City of Guelph
- City of Brantford
- City of Kitchener
- City of Waterloo
- City of Cambridge
- Township of Centre Wellington

Six Nations of the Grand River

Ontario Ministry of the Environment

Ontario Ministry of Natural Resources

Ontario Ministry of Agriculture and Food / Ministry of Rural Affairs

Environment Canada

Grand River Conservation Authority

# Water Management Plan

## The Integrated Action Plan

### Introduction

The Water Management Plan consists of two sections:

- The first part is an overview of issues and the latest scientific information on those issues
- The second part is the Integrated Action Plan.

The Integrated Action Plan is a compilation of Recommendations and Action Items brought forward by the members of the Project Team on behalf of their organizations.

- The Recommendations identify the steps to be taken to reach the goals of the Plan.
- The Action Items are the tasks the partner agencies are already taking or plan to take to implement the Recommendation.

This document is a summary of the Recommendations in the Integrated Action Plan.

For the complete text of the Recommendations and the Action Items, please consult the Water Management Plan available at [www.grandriver.ca](http://www.grandriver.ca)

### **A** Maintain a process of reporting, updating and continuous improvement

The success of the Water Management Plan will depend on:

- clear, regular communication,
- a commitment by each partner to implement the actions,
- a collective understanding of the gaps and barriers to implementation, and
- celebration of the collective successes of the actions.

Through this adaptive approach, the goals of the Water Management Plan will be achieved.

### Recommendations

**A1** Senior officials from the partner agencies will form an Implementation Committee to meet at least once a

year to review progress on the plan.

A second group, called the Water Managers Working Group, will be made up of representatives of the plan partners who are responsible for water management issues within their municipalities and organizations. The water managers will meet regularly to develop solutions to water issues, oversee work plans, implement actions, report on implementation and evaluate the effectiveness of actions.

**A2** Regular communication and reporting are important for accountability, showing progress, celebrating success, identifying set-backs and achieving the results of the Plan.

Annual progress reports will be issued starting in 2015. A more detailed technical report on the progress toward achieving improvements in the watershed will be issued every five years.

**A3.** The Water Management Plan should be reviewed and updated regularly, particularly if changes are contemplated for some of the major assumptions in the Plan, such as:

- if there is a plan by a municipality to expand its urban boundary,
- if there is renewed consideration of a Great Lakes pipeline as a water supply source, or
- if plans arise to develop a new municipal wastewater treatment plant

### **B** Maintain a framework for water management

The best natural geographical unit for managing water resources is the watershed. It is also important to keep in mind the links between the land, water and related resources.

### Recommendations

**B1** To ensure sustainable water supplies, improve water quality and reduce flood damages, key hydrologic processes such as groundwater recharge, groundwater discharge and surface runoff must continue to be maintained or managed.



It is important to protect important features that provide these functions.

It is also important to recognize these features in municipal planning documents and subwatershed plans.

**B2** A set of Broad Water Objectives for the Grand River Watershed was developed as part of the Water Management Plan.

These objectives express the uses, needs and values for water. The objectives were used to develop a series of indicators and targets used to measure changes in water conditions and evaluate the effectiveness of the Plan. Work should continue to expand and refine the suite of indicators and targets.

## **C** Ensure sustainable water supplies for communities, economies and ecosystems

There is enough water in the Grand River watershed to reliably meet future water supply needs of communities, economies and ecosystems.

However, as water use increases, the resiliency of the watershed to deal with increasing population growth, shifts in agricultural production, climate variability (i.e. floods and droughts) and climate change is reduced.

Efficiency in water use is strongly encouraged across all sectors including municipal supply, crop irrigation and other commercial, industrial and domestic uses.

The following Recommendations are intended to ensure sustainable water supplies by improving security, reliability and resiliency to deal with variability and change.

### **Recommendations**

**C1** Municipalities, particularly those with growth centres, should maintain long-term Water Supply Master Plans to identify future needs and sources.

**C2** Municipalities should consider steps they can take to manage the demand for water. They should establish objectives for reducing demand and promote water conservation.

**C3** It is important that municipalities, provincial agencies and the GRCA continue to share information and maintain strong working relationships to reduce regulatory uncertainty and ensure the security of water sources. The Water Managers Working Group will provide a forum for this.

**C4** Agricultural irrigation is important in the area around several creeks: Whitemans, Mount Pleasant and McKenzie.

To maintain the sustainability of water supplies, particularly in a time of climate change:

- Irrigation water should be sourced from storage ponds and/or groundwater to avoid direct withdrawal from streams during low flow periods
- Advice on water use efficiency should continue to be provided to farmers to minimize evaporation, overspray and other water loss. Soil moisture should be assessed prior to irrigating, and ponds should be big enough to satisfy summer irrigation needs.
- Information should be kept current on water use to observe trends across the watershed.

**C5** The GRCA operates seven reservoirs that supply water to augment river flows during the summer and fall. Water is released to meet the requirements for wastewater treatment plants and municipal water supplies at key locations in the river system. The current target flows should be maintained

**C6** Climate change studies indicate there will be a shift in the timing and type of precipitation in the future, particularly during the winter. Therefore, the GRCA should consider a more flexible operating policy for reservoirs during the spring.

**C7** Water from the reservoirs also assists with the assimilation of effluent from wastewater treatment plants. Studies have identified specific river flows (called 7Q20) that can be used for designing upgrades or expansions of wastewater treatment plants in the Grand, Conestogo and Speed rivers downstream of reservoirs.

**C8** New Permits to Take Water from the Grand, Conestogo and Speed rivers in areas downstream of the reservoirs should contain requirements that the permit holder

St.  
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reduce the rate of taking when flows in the river drop below the operational low flow targets.

- C9** Aquatic life need certain river flows to remain healthy. A set of low-flow thresholds have been identified in the Plan to protect aquatic life. These need to be field verified. They may be used to help manage reservoir operations and drought management planning.
- C10** Groundwater is an important source of municipal water. Groundwater that discharges to streams helps support aquatic life. More work needs to be done, particularly in the central Grand area, to understand the links between recharge areas, water supply sources and important groundwater discharge areas.
- C11** To ensure future groundwater supplies, municipalities with urban areas should protect important groundwater recharge areas and take these areas into account when developing growth strategies.
- C12** Local water management plans can help resolve potential conflicts among water users. These plans are recommended for Whitemans, Mount Pleasant and McKenzie creek subwatersheds, in the Norfolk Sand Plan area of Oxford and Brant counties.
- C13** Droughts may become more common as a result of climate change. Proactive drought contingency plans should be developed among water users to deal with low water conditions.

## **D** Improve water quality to improve river health and reduce the river's impact on Lake Erie

Surface and ground water quality issues vary across the watershed and are influenced by human activities and natural processes.

Water quality issues include nutrients, sediment, chloride and pathogens. Generally speaking, pollutants come from two types of sources:

- point sources are fixed locations, such as sewage treatment plants
- non-point sources include surface runoff from areas such as rural and urban land.

It is important that actions are implemented to manage both point and non-point sources.

## **Recommendations: Point Sources**

- D1** River water quality will improve greatly as wastewater treatment plants are upgraded over the next 10 years in Centre Wellington, Region of Waterloo, Guelph and Brant. These municipalities should continue with their plans.
- D2** The managers and operators of wastewater treatment plants can improve the performance of their plants by adopting the Composite Correction Program. Municipalities that undertake the program are encouraged to adopt voluntary targets for effluent quality improvement.
- D3** It is important that wastewater treatment plant operators have a good understanding of the materials coming into their plants. Municipalities should have and enforce sewer use bylaws.
- D4** To reduce the frequency and severity of sewage spills and bypasses from municipal wastewater treatment plants, it is recommended that municipalities, the GRCA and the Ministry of the Environment continue to implement the actions identified in the report: "Best Practices: Municipal Wastewater Treatment Plant Bypass and Spill Preventions and Reporting in the Grand River Watershed."
- D5** The Grand River Simulation Model (GRSM) is an effective tool to evaluate the cumulative impacts of the 10 wastewater treatment plants in the central Grand River and lower Speed River. The GRCA should continue to maintain this decisions support tool for future municipal wastewater planning.
- D6.** Best value solutions for wastewater treatment options for smaller municipalities may be identified through broader subwatershed studies. It is



recommended that studies be completed or updated for the upper Grand, upper Conestogo, and upper Nith rivers, as well as Fairchild and Canagagigue creeks.

### Recommendations: Rural Non-Point Sources

**D7** The Rural Water Quality Program provides farmers with knowledge and financial incentives to reduce the amount of nutrients and sediment entering watercourses. The program should be enhanced to:

- a) expand the range of best management practices eligible for grants in some areas to provide a well-rounded watershed-wide program
- b) promote the adoption of conservation practices in addition to the current grants for capital projects;
- c) enhance assistance in priority areas or subwatersheds;
- d) extend the program to rural non-farm properties;
- e) include funding for well decommissioning across the watershed to protect aquifers; and
- f) include a monitoring program to measure the effectiveness of implementation.

**D8** River nitrate levels tend to be high during winter and are expected to increase. Most nitrates come from non-point sources. To reduce nitrate concentrations, it is recommended that nitrogen application to land in areas of high groundwater recharge be optimized to maintain productivity while minimizing environmental losses in priority subwatersheds including the central Grand River, lower Nith River and Whitemans Creek.

**D9** Municipal drains remove excess water from the land to facilitate farming. To facilitate management of sediment loads, soil erosion and flooding, municipalities should pursue best practices for municipal drain design and maintenance.

### Recommendations: Urban Non-Point Sources

**D10** Urban stormwater contributes significantly to phosphorous and sediment levels in the Central Grand River. It is recommended that municipalities implement practices that focus on sustainable funding of stormwater programs; development of stormwater management master plans; improvements to sediment and erosion control; enhanced communication and education; opportunities to retrofit existing uncontrolled areas, and maintenance and operation of facilities.

**D11** Chloride levels are increasing, particularly in urban areas and areas of groundwater recharge. Municipalities should continue to manage chloride use by following Environment Canada's Code of Practice, participating in programs such as Smart About Salt, and promoting salt- and water-efficient water softeners.

**D12** Pathogens (e.g. bacteria) are a concern to communities that get their drinking water from rivers. Studies should be carried out to understand the conditions when pathogens are of greatest concern so appropriate actions can be identified to mitigate these conditions.

### Recommendations: In-River Improvements

**D13** Water quality in the southern Grand River is poor, in part because of the cumulative impact from areas upstream, but also because of the lake-like conditions created by the Dunnville Dam. Studies should be done of possible ways to modify the dam or its operation to reduce its impact on water quality.

**D14** Small dams and other in-river structures can alter the natural flow of the river, which causes sediment and phosphorous to accumulate behind them. Studies should be done to evaluate the likelihood that modifications or removal of these structures will improve water quality.

### Recommendation: Data Collection & Monitoring

**D15** It is important that water management decisions be based on adequate and reliable data. Gaps in existing data collection networks need to be addressed. More water quality data is needed to evaluate current conditions, monitor trends and report on progress



# Water Management Plan

toward achieving water quality targets. The GRCA will continue to implement web-based tools for sharing data

## E Reduce flood damage potential

The flood risk reduction program is relatively mature and the combination of structural and non- structural methods is effective.

It is estimated that structural measures implemented to this date have reduced average annual flood damages by 80 per cent.

Floodplain regulation has avoided creation of new flood damage potential and is helping to reduce future flood damage potential and risk to life.

Potential for large floods still exist. Climate change may increase the frequency and time of year that floods occur. The following recommendations are intended to enhance flood preparedness, adapt to a changing climate and continue to reduce the flood damage potential over time.

### Recommendations

- E1** The seven multipurpose dams and reservoirs, and the extensive dike systems, are significant infrastructure assets that require ongoing investment, maintenance and operation. The GRCA will complete or update dam and dike safety studies.
- E2** An increase in the frequency and magnitude of severe storms will put stress on urban stormwater systems. Municipalities should assess their major stormwater systems to reduce their vulnerability. Consideration should be made for climate change.
- E3** Accurate floodplain maps help to prepare for emergencies, carry out flood damage assessment and manage development in flood-prone areas. The GRCA will complete digital floodplain mapping in flood damage centres, along the large rivers and on urban watercourses.
- E4** Maps showing potential flood depth levels and a database of vulnerable structures will help municipalities prepare for floods and carry out emergency plans. The GRCA will continue to create the



maps and work with municipalities to develop the database and develop flood warning lists.

- E5** The GRCA will maintain a watershed wide voice radio system so communication can be maintained even during severe weather when other communications systems may not be working.
- E6** The GRCA will continue to improve flood forecasting and its decision support tools (such as its computerized watershed models) as new data and technologies become available.
- E7** The GRCA will continue to refine the delivery of flood warning messages and work with other agencies to improve flood warning.
- E8** Additional ways to reduce flood damages in several flood-prone communities should be investigated: Drayton, Grand Valley, Paris, New Hamburg, Ayr, Caledonia, Cayuga and Dunnville.
- E9** Ice jams have the potential to cause significant flooding, especially in areas prone to jams such as Grand Valley, West Montrose, Paris, Brantford, Cayuga and Dunnville. The technical report, "Ice Jams in the Grand River Basin," will be updated and site-specific ice jam investigations will be carried out.

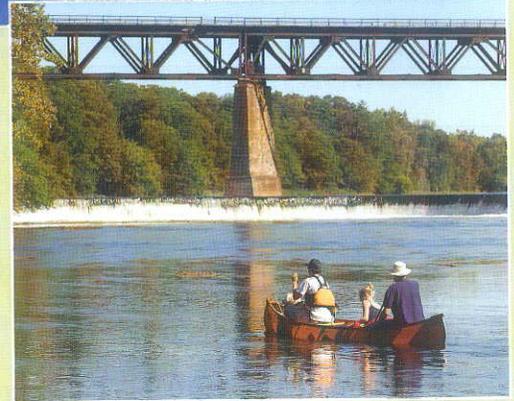
## F Next steps

For innovative, best value solutions to manage water beyond 2030 Water Managers must keep local, regional and watershed-scale water planning a priority in their work plans. Steps need to be taken now to update and improve decision-support tools with adequate information and data. Furthermore, water managers should continue to consider for new ideas and push for innovative approaches to managing water and wastewater. Policies and best practices will need to be developed for these new approaches.

# Grand River Watershed

## A well managed river

The long history of water management has drawn national and international acclaim. In 1994 the Grand River and its tributaries became Canadian Heritage Rivers. In 2000 the Grand was recognized as one of the best managed rivers in the world when it won the Thies International Riverprize.



Grand River Conservation Authority, 400 Clyde Road, Cambridge, N1R 5W6  
 519-621-2761 | [www.grandriver.ca](http://www.grandriver.ca)

This project was undertaken with the financial support of the Government of Canada through the Federal Department of the Environment. This project has received funding support from the Government of Ontario. Such support does not indicate endorsement by the Government of Ontario of the contents of this material.

### Action items

#### City of Guelph

The goals of the *The Grand River Watershed Water Management Plan* are to improve water quality, sustain water supplies, reduce flood damages and increase resiliency to address climate change.

It includes an *Integrated Action Plan*, which is a compilation of Recommendations and related Action Items brought forward by the members of the Plan's Project Team on behalf of their organizations.

- The Recommendations identify the steps to be taken to reach the goals of the Plan.
- The Action Items are the tasks the partner organizations are already taking or plan to take to implement the Recommendations. Some Action Items are "best practices" that could be adopted voluntarily by a municipality.

The Action Items for your municipality are shown below. They are listed under the number of the related recommendations in the *Water Management Plan Executive Summary*.

For the full text of the Recommendations and Action Items, refer to the complete *Water Management Plan* document at [www.grandriver.ca](http://www.grandriver.ca)

#### Maintain a process of reporting, updating and continuous improvement.

##### A1

- Guelph and other Water Management Plan partners will name senior representatives to an Implementation Committee. The Implementation Committee will prepare a terms of reference and 5-year project charter to be signed by participating agencies.
- The Water Managers' Working Group will include representatives from the Guelph and other Plan partners and will update its terms of reference to reflect its responsibility to the Implementation Committee for project management related to the joint implementation and continuous improvement of the Water Management Plan.

#### Ensure sustainable water supplies for communities, economies and ecosystems.

##### C1

- Guelph has initiated a Water Supply Master Plan Update that is expected to be completed in 2014.

##### C2

- Guelph plans to update its water demand management objectives as part of its 2013-14 Water Supply Master Plan update.

##### C7

- When planning assimilative capacity studies, Guelph and other municipalities (Region of Waterloo; Haldimand, Brant, Brantford, Centre Wellington and Grand Valley) will consult with the MOE and GRCA to determine whether the 7Q20 equivalents for the regulated reaches have changed significantly from those presented in the Water Management Plan.

##### C10

- Guelph will participate in the Hydrology – Groundwater Working Group along with the Ontario Geologic Survey, Environment Canada, Region of Waterloo, County of Brant, researchers and others to provide a forum to discuss and share technical information on regional groundwater-surface water issues, research and projects.

#### Improve water quality to improve river health and reduce the river's impact on Lake Erie.

##### D1

- Guelph plans to implement the Anammox process for sidestream treatment of high strength dewatered filtrate, with anticipated completion in 2015. It is anticipated that nitrate loading from the Guelph WWTP to the Speed River may be reduced following the implementation of this process.

##### D2

- Guelph will continue to apply the Composite Correction Program and maintain their focus on waste water treatment plant performance to meet the voluntary performance targets for total phosphorus of 0.15 mg/L and total ammonia of 1 mg/L.

*Continued on next page*

- Municipalities implementing CCP will share their successes and benefits with the Water Managers' Working Group.

### D3

- Guelph and other municipal members of the Water Managers' Working Group will share information on sewer use bylaws for proactive maintenance and enforcement to ensure effective wastewater treatment.

### D4

- Guelph, other municipalities who own wastewater treatment plants and sewage collection systems, the GRCA and the MOE will provide an annual update at a Water Managers' Working Group meeting on the implementation of the actions to reduce the frequency and severity of sewage spills and bypasses including:
  - ✓ spills reporting procedures and information management;
  - ✓ infiltration and inflow reduction programs;
  - ✓ implementation of backup power at pumping stations and wastewater treatment plants;
  - ✓ wastewater master planning;
  - ✓ continuous improvements in the time of travel model for spill notification; and
  - ✓ wastewater treatment plant performance and the watershed community of practice for wastewater optimization (as recommended in IAP D.2).

### D5

- GRCA will continue to work with Guelph and other municipalities (Region of Waterloo, Centre Wellington, Brantford and Brant) to continually improve the Grand River Simulation Model through ongoing data collection for model calibration/validation for effective long-term watershed wastewater planning.

### D7

- Guelph, Wellington County, Region of Waterloo, Brant, Brantford and Haldimand intend to continue supporting the Rural Water Quality Program.

### D10

- Guelph will participate in a Stormwater Management Working Group along with Region of Waterloo, Kitchener, City of Waterloo, Cambridge, Centre Wellington, Brantford, Brant and the GRCA. The group will host biannual meetings to share information and identify roles and responsibilities among watershed urban municipalities.
- Guelph and other municipalities including Brant (Paris), Brantford, Centre Wellington (Fergus, Elora), City of Waterloo, Kitchener and Cambridge plan to pursue stormwater management best practices as listed in the *Best*

*Practice Guide for Reducing Urban Non-point Source Pollution of the Grand and Speed Rivers.*

- The GRCA, Guelph and other municipalities (Region of Waterloo, City of Waterloo, Kitchener, Cambridge, Centre Wellington, Brant and Brantford) will work together to optimize current stormwater monitoring programs to characterize the effects.

### D11

- Guelph, Region of Waterloo and City of Waterloo plan to continue activities and programs to promote reduced salt use for de-icing, both public and private.
- Guelph and Region of Waterloo plan to continue activities and awareness regarding the use of water and salt efficient water softeners.

## Reduce flood damage potential

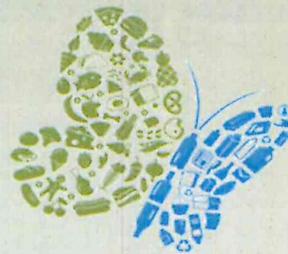
### E2

- Guelph completed a Stormwater Management Master Plan in 2012. Major system assessments were undertaken and plans to take action to reduce the vulnerability to severe storm events were part of the Master Plan work. A stormwater funding study commenced in 2013 to review the funding requirements of the Stormwater Management Master Plan and to sustainably fund city stormwater assets.

## Next Steps

- Guelph will continue to participate in the Water Managers Working Group.

# **Solid Waste Management Master Plan Review and Update**



**Give Waste  
a New Life**

## Introduction

- 2014 Plan provides strategic direction to 2031
- Review conducted by City staff assisted by GENIVAR and a Public Steering Committee
- Process included a current state review and a future state review
- Included extensive public consultation
- Recommendations build on Guelph's leadership in waste minimization and diversion

## Current State

The City achieved 68% diversion in 2012, the highest diversion rate in Ontario

### Baseline

- Review of the community profile and current waste management system programs

### Performance

- Findings show the City made significant progress on completing the recommendations of the 2008 Plan

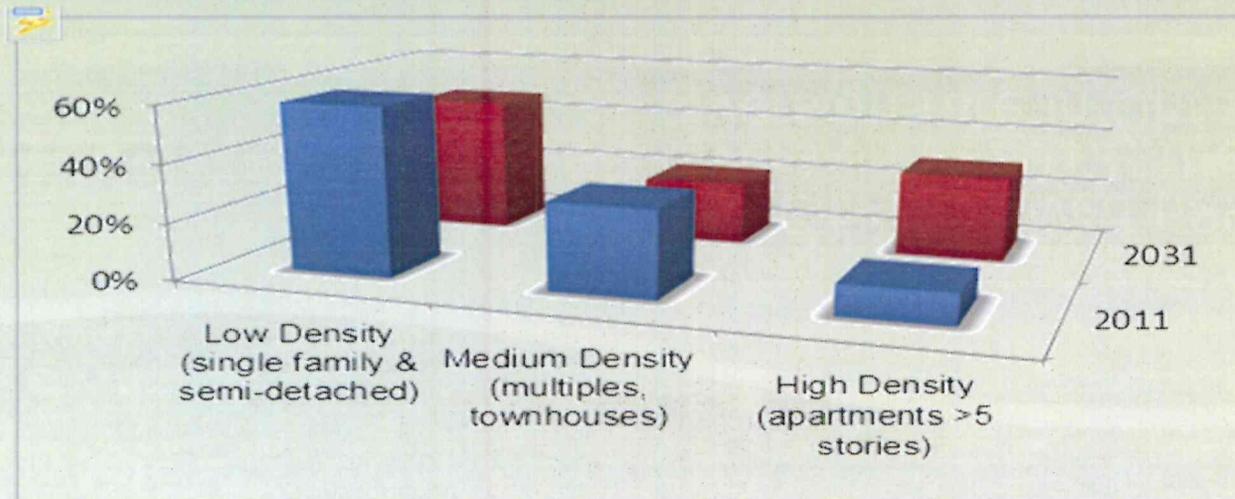
### Comparisons

- Review indicates Guelph doing well with respect to waste diversion and reduction programs and targets compared with communities across Ontario, the USA and Europe

## Future State

Review of growth and trends shaping waste generation rates to 2031:

- Waste management and diversion trends
- Projected population growth
- Housing type changes



## Public Consultation

Two surveys: telephone (400) and online (209)

Two open houses (28 and 15)

Four Stakeholder focus groups (18)

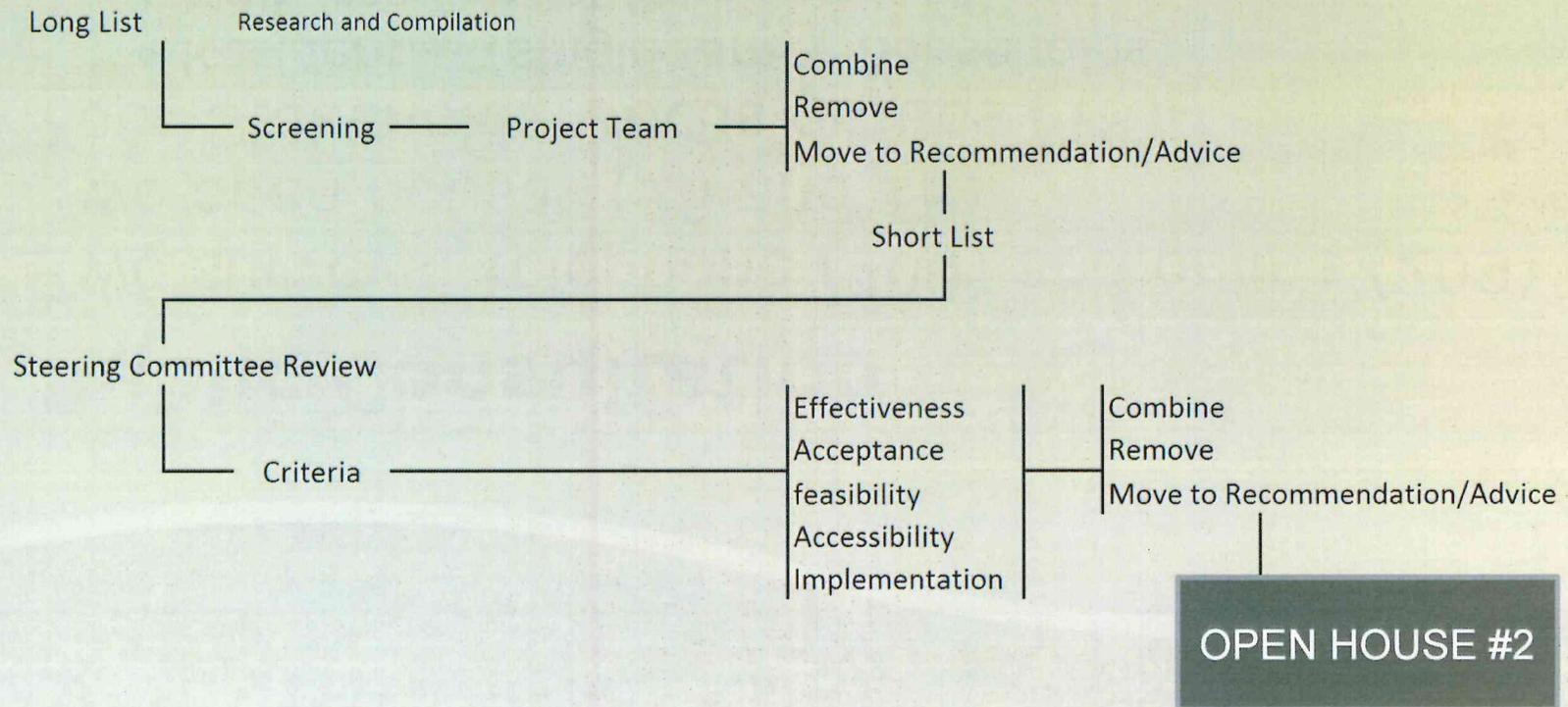
- Residential (single family households)
- Multi-residential (two sessions)
- Commercial, downtown and institutional

Online and email comments (12)

682 Points of  
Contact

# Options and Opportunities

How the recommendations were developed



## Recommendations

29 recommendations for waste minimization, diversion and disposal under five categories:

- Municipal
- Residential
- Multi-residential
- Industrial, Commercial and Institutional
- Construction and Demolition

## Ambitious Targets

Achieved 68% diversion in 2012, surpassing the first two diversion targets ahead of schedule:

- 55% by 2011
- 65% by 2016
- 70% by 2021

### Winner of the Ron Lance Memorial Award



Guelph Mayor, Karen Farbridge, accepting the Award from Waste Diversion Ontario.

## Reaffirmed target

Recommendations are projected to increase the diversion rate to 70%

Waste diversion target and timeline was reaffirmed at 70% by 2021

- Focus on driving behavioral changes that prevents the generation of waste
- Packaging trends - light weighting of recyclables
- Future legislative impacts on extended producer responsibility
- Impact of diversion from growth in multi-residential developments
- A need to target discrete and specific elements in the non-residential sector (e.g. IC&I)

## **Implementation**

- To turn recommendations into actions, staff developed an implementation schedule
- 2014 Plan provides strategic direction that will build on Guelph's leadership in waste minimization and diversion for a sustainable, service-focused and economically viable future

# STAFF REPORT



TO Planning & Building, Engineering and Environment Committee

SERVICE AREA Planning, Building, Engineering and Environment

DATE June 10, 2014

**SUBJECT 2014 Solid Waste Management Master Plan**

REPORT NUMBER

## EXECUTIVE SUMMARY

### PURPOSE OF REPORT

To advise Council on the success of the implementation of the 2008 Solid Waste Management Master Plan.

To seek Council's endorsement of the recommendations contained in the 2014 Solid Waste Management Master Plan – a guiding document that provides strategic direction on waste minimization and diversion for the next 20 years.

### KEY FINDINGS

The City has made significant progress with the recommendations of the 2008 Solid Waste Management Master Plan. Findings from the review indicate that we are doing well with respect to existing waste diversion and reduction programs and targets when compared with communities across Ontario, the United States and Europe. In 2012, the City of Guelph achieved the highest waste diversion rate in the province, well above the provincial average, and also diverted the highest percentage of organic waste, had the lowest residential waste generation rate and the lowest residential disposal rate within its municipal comparator group (source: *Waste Diversion Ontario Municipal Datacall*).

Guelph's 2014 Solid Waste Management Master Plan (SWMMP) provides strategic direction for the next 20 years, including recommendations that build on Guelph's leadership in waste minimization and diversion for a sustainable, service-focused and economically viable future.

The plan's focus is on developing and enhancing waste minimization and diversion initiatives that will enable the City to meet the plan's reaffirmed waste diversion target of 70% by 2021. The plan includes 29 recommendations that fall into the following categories: municipal; residential; multi-residential; industrial, commercial and institutional; and construction and demolition.

The plan was developed through extensive research, analysis, and community and stakeholder engagement. Feedback from over 680 residents and

# STAFF REPORT

stakeholders was obtained through various engagement opportunities, including open houses, focus groups and surveys.

The plan's recommendations reflect the current and future needs of our growing community, waste management and diversion trends, and potential economic, environmental and social factors, ensuring our ability to deliver effective waste management programs and services for Guelph.

## **FINANCIAL IMPLICATIONS**

The total estimated impact on the City's Operating budget of implementing the 29 recommendations is \$102,200 in total over the next five years. The current recommendation to "Explore expanding the type of collection services offered to multi-residential properties" will result in the development of a business case and a future recommendation for Council's consideration. (Note: Staff estimate the annual operating cost to expand service to this sector would be an additional \$325,000, plus one time capital costs of \$595,000).

As always, staff will look for efficiencies within existing operations to minimize actual costs. Requests for additional funding will be brought forward for Council's consideration during the annual operating and capital budget process.

## **ACTION REQUIRED**

Endorse in principle the recommendations of the Solid Waste Management Master Plan and thank the members of the Steering Committee.

## **RECOMMENDATION**

1. That Council endorse in principle the recommendations contained in the 2014 Solid Waste Management Master Plan (SWMMP).
2. That Council extend their appreciation to the members of the SWMMP Steering Committee for their efforts and dedication over the past year.

## **BACKGROUND**

In September 2008, Council adopted the recommendations of the Solid Waste Management Master Plan (SWMMP) – a guiding document that provides strategic direction for Guelph's waste management operations and programs by exploring a wide range of waste minimization, diversion and disposal options.

The 2008 Plan called for a review of both program implementation and target achievement in 2013 and 2018. In March 2013, Council appointed members of the SWMMP Steering Committee to guide the review of the plan. The review took place from spring 2013 to spring of 2014.

## REPORT

The review of the 2008 Solid Waste Management Master Plan (SWMMP) provided recommendations that build on Guelph's leadership in waste minimization and diversion for a sustainable, service-focused and economically viable future.

The review was conducted by City staff with the assistance of GENIVAR and a Steering Committee made up of Guelph residents and representatives from the University of Guelph, the business community and the City's Environmental Advisory Committee.

The Steering Committee and project team assessed the progress of the SWMMP over the past five years and the strategic direction for the next 20 year planning period, identifying waste minimization and diversion initiatives that will enhance or introduce waste programs and services across the community.

Findings from the review indicate that Guelph is doing well with respect to existing waste diversion and reduction programs and targets, when compared with communities across Ontario, the United States and Europe. The City has made significant progress with the recommendations of the 2008 SWMMP. Since implementing the plan, the City's residential diversion rate has increased 30 per cent to 68 per cent in 2012, exceeding the first two targets set in the 2008 SWMMP. In 2012, the City of Guelph achieved the highest diversion in the province at 68%, well above the provincial average of 47%. The City also diverted the highest percentage of residential organic waste at 32% and had the lowest residential waste generation rate and residential disposal rate within its municipal comparator grouping (source: *Waste Diversion Ontario Municipal DataCall*).

Community engagement was an important and integral part of the review process. Feedback from over 680 residents and stakeholders was obtained through various engagement opportunities, including open houses, focus groups and surveys. After extensive community consultation and on-going input from the Steering Committee, the review team identified potential waste reduction and diversion options that build on Guelph's success and take current and future needs into consideration.

The 2014 SWMMP's recommendations reflect the current and future needs of our growing community, waste management and diversion trends, and potential economic, environmental and social factors, ensuring our ability to deliver effective waste management programs and services for Guelph. The 2014 plan provides 29 recommendations for waste minimization, diversion and disposal that fall into the following categories: municipal; residential; multi-residential; industrial, commercial and institutional; and construction and demolition.

Key recommendations from the Steering Committee include:

## **Municipal**

- Explore alternative methods for recovery of designated materials;
- Promote “waste less” principles and policies, share and reuse initiatives;
- Transfer responsibility for public space waste collection throughout the City to Solid Waste Resources (Note: As this recommendation involves more than one Department, Council’s endorsement will result in interdepartmental discussions of potential costs and benefits);
- Explore alternatives to landfill.

## **Residential**

- Establish a Food Waste Reduction Campaign;
- Re-instate the twice per year curbside yard waste collection service;
- Implement Grasscycling Program;
- Outreach for residential waste minimization and diversion programs.

## **Multi-residential**

- Outreach for multi-residential waste minimization and diversion programs;
- Expand the involvement of Solid Waste Services staff in the development approval process to promote waste diversion in multi-residential properties;
- Explore expanding the type of collection services offered to multi-residential properties (Note: Council’s endorsement of this recommendation does not include an endorsement of a change in current service levels).

## **Industrial, Commercial, and Institutional**

- Provide assistance to industrial, commercial and institutional (IC&I) establishments.

## **Construction and Demolition**

- Develop a construction and demolition (C&D) waste diversion strategy.

The 2014 plan further enhances Guelph’s efforts to achieve its waste diversion goals and Zero Waste philosophy. After consideration of public input, future trends in waste management and the recommendations established in the review, the Steering Committee reaffirmed the previously established waste diversion target of 70% by 2021. A schedule for the recommendations was developed as part of the process outlining proposed start and end dates for a variety of the activities.

Staff will report annually on the implementation of the Plan as part of the Solid Waste Services Annual Report to Council. Program implementation and target achievement will be reviewed again in 2018 and 2023.

## **CORPORATE STRATEGIC PLAN**

- 1.2 Develop collaborative work teams and apply whole systems thinking to deliver creative solutions.
- 1.3 Build robust systems, structures and frameworks aligned to strategy.
- 2.1 Build an adaptive environment for government innovation to ensure fiscal and service sustainability.
- 2.2 Deliver public services better.
- 2.3 Ensure accountability, transparency and engagement.
- 3.3 Strengthen citizen and stakeholder engagement and communications.

## **FINANCIAL IMPLICATIONS:**

Upon Council endorsement of the recommendations, staff would initiate work as set out in the attached Implementation Schedule. Recommendations which require future funding will be brought forward for Council's consideration during the annual operating and capital budget process.

The total estimated impact on the City's Operating budget of implementing the 29 recommendations is \$102,200 in total over the next five years. The current recommendation to "Explore expanding the type of collection services offered to multi-residential properties" will result in the development of a business case and a future recommendation for Council's consideration. (Note: Staff estimate the annual operating cost to expand service to this sector would be an additional \$325,000, plus one time capital costs of \$595,000).

As always, staff will look for efficiencies within existing operations to minimize actual costs.

## **DEPARTMENTAL CONSULTATION**

Community and Social Services has been advised of the recommendation concerning waste collection in public space. Subject to Council's endorsement of this recommendation, staff would initiate interdepartmental discussions to explore potential costs and benefits.

## **COMMUNICATIONS**

A communication plan has been developed to ensure that Guelph residents and business community are aware of Guelph's updated 2014 Solid Waste Management Master Plan, recognize its importance, and understand that everyone has a role to play in managing our waste.

# STAFF REPORT



## ATTACHMENTS

- \*Attachment 1 Solid Waste Management Master Plan
- Attachment 2 Proposed Implementation Schedule

\* Attachment 1 is available on the City of Guelph website at <http://guelph.ca/plans-and-strategies/solid-waste-management-master-plan/>.

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Proposed Implementation Schedule		2014		2015				2016				2017				2018				2019				
TASK	Recommendation Name and Description	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
1.0	<b>Explore alternative methods for recovery of designated materials</b>																							
1.1	City to explore alternative methods to provide recovery service for a range of divertible materials such as construction and demolition waste, electronics, batteries, household hazardous waste, and textiles. Alternatives may include collection events, special mobile services, additional curbside collection opportunities, depots, bulky item program expansion, other departmental environmental initiatives																							
2.0	<b>Examine diversion of additional materials at the public drop off depot</b>																							
2.1	Conduct a review to expand the number of materials diverted at the drop off depot, e.g. expansion of construction and demolition materials (carpet, window glass, vinyl siding), mattresses, furniture, organic collection, plastic film																							
3.0	<b>Investigate establishment of a reuse centre at the public drop off depot</b>																							
3.1	The City would possibly partner with community benefit organizations to manage reusable goods, such as C&D materials, gently used goods, textiles																							
3.2	Opportunities may also include partnering with an educational institution or program to provide fix/repair materials for apprenticeship training																							
4.0	<b>Promote "waste less" principles and policies</b>																							
4.1	Residents would be provided further education in making purchasing decisions that promote waste reduction and reuse through a variety of policy instruments (e.g., pre-cycling, smart shopping, extended producer responsibility, eco-labelling on retail shelves)																							
5.0	<b>Conduct a comprehensive audit review</b>																							
5.1	Conduct a four season waste audit for single family, multi residential properties, and the public drop off to better understand issues of waste generation, contamination of materials, and diversion opportunities. May include set out and capacity monitoring as part of the study. Residue from WRIC site activities such as the Material Recovery Facility and Organic Waste Processing Facility may also be valuable.																							

<b>Proposed Implementation Schedule</b>		2014		2015				2016				2017				2018				2019			
<b>TASK</b>	<b>Recommendation Name and Description</b>	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
6.0	<b>Explore share and reuse initiatives</b>																						
6.1	Work with community groups and/or organizations to establish initiatives that promote waste reduction and reuse, such as an art exchange centre, tool share libraries, fix-it clubs, swapping/share events and little free libraries. These may be neighbourhood initiatives and/or city wide initiatives.																						
7.0	<b>Analyze expansion of downtown core public space recycling</b>																						
7.1	Work with the downtown residential and business sector to complete a study determining the most effective recycling approaches, containers, promotion and educational materials.																						
8.0	<b>Continue to enforce proper waste sorting practices</b>																						
8.1	The collection crew has the authority to not collect material that contains improperly sorted or non-collectable materials such as construction and demolition materials and household hazardous waste																						
8.2	Consider adding more materials to the non-collectable waste (e.g. materials that have a number of convenient alternative collection programs, such as depots and Take It Back programs)																						
9.0	<b>Explore alternatives to landfill</b>																						
9.1	Explore alternatives to landfill at appropriate times in agreements and waste disposal contract cycles including technologies that would support the Community Energy Plan																						
10.0	<b>Finalize the City's Green Procurement Policy</b>																						
10.1	Explore bringing forward the Green Procurement Policy as part of the amendments to the Procurement Bylaw																						

<b>Proposed Implementation Schedule</b>		2014		2015				2016				2017				2018				2019			
<b>TASK</b>	<b>Recommendation Name and Description</b>	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
11.0	<b>Explore Pay-As-You-Throw</b>																						
	All or part of waste management costs are covered by a subscription rate rather than through taxes; properties pay according to the amount of garbage set out for disposal as opposed to a "flat" rate; Promotes a fair and equitable cost for the service received. City would also examine a range of policies such as exploring a hybrid approach which might involve:																						
11.1	- subscription rates based on the size or number of grey garbage carts beyond the standard and invoiced similar to a utility																						
11.2	- a tiered garbage rate system with preference to those properties that have implemented successful recycling and organic programs and meet waste diversion targets																						
11.3	- enables opportunities for properties interested in receiving specialized or preferential service levels (e.g. increased collection frequency, staging containers so they are accessible for collection)																						
11.4	- providing collection service to interested non-residential parties for a cost-recovery fee, such as, organics collection, front end bin service, etc.																						
12.0	<b>Adopt municipal household disposal rate target</b>																						
12.1	Investigate establishing a goal to reduce the residential annual waste disposal based on a weight or volume per capita; progress could be monitored against a fixed target																						
13.0	<b>Develop waste diversion targets for municipally operated buildings</b>																						
13.1	Expand waste reduction and diversion programs for municipally operated buildings; City would lead by example																						
14.0	<b>Explore Public-Private Partnerships (P3) to increase waste diversion</b>																						
14.1	Explore innovative waste diversion partnerships with the private sector or other municipalities as opportunities arise. Benefits include promoting local innovation and stimulating a local green economy. Example - Edmonton's partnership with Greys Recycling in which Edmonton supplies paper from city facilities and Greys Recycling converts it back to paper which the City purchases																						

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<b>TASK</b>	<b>Recommendation Name and Description</b>	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
15.0	<b>Investigate an additional public drop off centre</b>																							
15.1	Investigate an additional public drop off centre at a location in the City to augment the current location at the Waste Resource Innovation Centre to improve customer service levels and accommodate growth in the City. Consider expanding household hazardous waste to include small quantity generator waste from businesses																							
16.0	<b>Transfer responsibility for public space waste collection throughout the City to Solid Waste Resources</b>																							
16.1	Internalize waste collection at all remaining city facilities (e.g. Victoria Road, West End, etc.);																							
16.2	Transfer responsibility and resources for waste collection in public spaces to Solid Waste Resources. Target areas would include parks, outdoor spaces and transit stop locations enabling expansion for recycling and organic opportunities																							
16.3	Establish as a formal policy that any waste generated by City operations and contracts is transferred, processed or disposed through the Waste Resource Innovation Centre (e.g., construction and demolition materials, recyclables, shredded paper, clean fill, brush, and other materials acceptable for diversion)																							
17.0	<b>Establish a food waste reduction campaign</b>																							
17.1	Establish a food waste reduction campaign to promote reduction and avoid unnecessary waste generation and preserve resources associated with food production, packaging and transport																							
18.0	<b>Develop an enhanced promotion and education program</b>																							
	City to develop an enhanced promotion and education program, which may include a range of opportunities such as:																							
18.1	- enhancing the on-line local business directory (Take It Back directory),																							
18.2	- developing waste exchange programs enabling residents to donate and exchange reusable goods																							
18.3	- implementing incentive and reward programs																							

**Proposed Implementation Schedule**

Proposed Implementation Schedule		2014		2015				2016				2017				2018				2019			
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
18.4	- introducing targeted diversion or problematic materials causing contamination campaigns																						
18.5	- information promoting available EPR opportunities																						
18.6	- developing a waste application available to residents that will provide useful information about Guelph's collection schedules, notices and waste diversion opportunities																						
18.7	- use of infographics to relay information																						
19.0	<b>Develop a 2015 operating budget expansion for Council to consider twice per year curbside yard waste collection service</b>																						
20.0	<b>Implement grasscycling program</b>																						
20.1	Educate residents about the benefits of leaving grass clippings on the lawn; Reduces collection and processing requirements while maintaining soil quality																						
20.2	Remove grass clippings as an acceptable material for curbside collection.																						
21.0	<b>Outreach for residential waste minimization and diversion programs</b>																						
	Outreach uses tools that directly engage the resident in an action to foster and maintain behaviour change. Communities may use staff, citizens and/or students to promote waste management initiatives. Outreach programs may include:																						
21.1	- Community Animators, Green Teams and Master Composter or Recycler volunteers																						
21.2	- Friendly "best recycling neighbourhood" challenges																						
21.3	- Engaging the public with staff or volunteers at community events																						
22.0	<b>Enhance and target promotion and education (P&amp;E) campaigns for the multi-residential sector</b>																						
	City to launch an enhanced P&E campaign targeting the multi-residential sector. Activities may include:																						
22.1	- enhance the dedicated website for superintendents/property managers and tenants to explain the how, why, and what of waste diversion																						
22.2	- P&E materials that can be printed and used in the building																						
22.3	- develop tool kits and handbooks																						

<b>Proposed Implementation Schedule</b>		2014		2015				2016				2017				2018				2019			
<b>TASK</b>	<b>Recommendation Name and Description</b>	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
23.0	<b>Develop an enhanced database for multi-residential properties</b>																						
23.1	Continue to build a multi-residential database to manage and monitor multi-residential waste programs																						
24.0	<b>Outreach for multi-residential waste minimization and diversion programs</b>																						
	Outreach uses tools that directly engage the resident in an action to foster and maintain behaviour change. Develop outreach program to encourage waste reduction and diversion at multi-residential properties. Outreach activities may include:																						
24.1	- establish a multi-residential waste diversion working group that includes property managers, superintendents, landlords, condominium owners, tenants and City staff to discuss challenges and solutions to increasing waste diversion																						
24.2	-using students to go door-to-door to explain waste diversion																						
24.3	- ask residents and owners to sign a pledge and place sticker on door showing support for waste diversion																						
24.4	- establish property waste reduction challenges																						
24.5	- using trained volunteers as building champions or ambassadors to promote waste diversion in buildings																						
24.6	- request property owners and managers to develop waste management plans																						
24.7	- request property owners and managers to provide feedback to residents about waste diversion progress, such as a "recycling barometer", property initiatives or concerns about contamination, etc.																						
24.8	- provide training to property management, landlords and superintendents on how to maximize waste reduction and diversion on their property																						
25.0	<b>Expand development approval process to promote waste diversion in multi-residential properties</b>																						
	Ensures new multi-residential properties are designed to facilitate three stream waste diversion; Review process may consider the following waste diversion opportunities:																						
25.1	- Formalize guideline for the site approval process that ensures waste diversion is as convenient as garbage (e.g., three chutes, automated separation equipment and on-floor sorting stations)																						

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TASK	Recommendation Name and Description	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
25.2	- Require deposits by New Building owners to ensure that an effective waste diversion program is established and maintained – letter of credits are returned after two years																						
26.0	<b>Explore types of collection services provided to multi-residential properties</b>																						
26.1	Review types of collection service offered to multi-residential properties willing to source separate into three streams; May require reconfiguring the collection fleet with specialized vehicles for medium and high density multi-residential properties																						
26.2	Staff to bring forward a report to Council outlining recommendations and costs associated with expanding the type of collection service offered to multi-residential properties																						
26.3	May include a front-end bin cost recovery service to City operated facilities and other interested parties																						
27.0	<b>Provide assistance to industrial, commercial and institutional (IC&amp;I) establishments</b>																						
	City staff to explore creative options to provide assistance to the IC&I sector to help them develop more effective waste diversion programs. Services may be provided through partnering opportunities, contracted services, funding from organizations, or on a cost recovery basis. Services may include																						
27.1	- provide assistance to businesses and institutions to promote waste reduction and diversion in their establishments																						
27.2	- develop waste reduction training and/or provide waste diversion consultation, such as in the case of the downtown area, or on an individual business basis																						
27.3	- develop a Green Business Recognition Program or support/partner with existing Community Business Recognition programs																						
27.4	- explore a Business case for conducting waste audits or waste audit planning and/or training																						
27.5	- establish IC&I sector working groups on waste diversion																						
27.6	- support the development of Eco-Industrial zones or networks, where local business coordinate complementary exchanges of useful products and by-products to avoid waste and add value to their process; and																						
27.7	- enhanced/target P&E and outreach campaigns for business sector																						

Proposed Implementation Schedule		2014		2015				2016				2017				2018				2019			
TASK	Recommendation Name and Description	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
28.0	<b>Explore requirements as part of the permit process for new building construction and demolition (C&amp;D) that would result in waste diversion</b>																						
	The City would explore a number of requirements as part of the permit process for new building construction and demolition that would result in waste diversion. May include:																						
28.1	- municipal construction and demolition project must submit a waste diversion plan																						
28.2	- mandatory waste diversion targets for all new municipal construction, demolition and renovations																						
28.3	- mandate that all C&D materials associated with municipal construction must be diverted to a C&D recycling facility																						
28.4	- feebates in which buildings that achieve a certain waste diversion and other green targets receive rebates back from the municipality during construction																						
28.5	- establish policies such as fast tracking permits for achieving waste diversion targets during construction or issuing occupancy permit upon receipt of waste diversion invoices																						
28.6	- refundable deposit programs require that all construction projects (usually above a specified size) pay a deposit as part of the building permit.																						
29.0	<b>Develop a construction and demolition (C&amp;D) waste diversion strategy</b>																						
	Offer assistance to C&D businesses to promote and help them develop more effective waste diversion programs. Services may include																						
29.1	- establish on site waste reduction and diversion programs																						
29.2	- develop waste reduction training and/or provide waste diversion consultation																						
29.3	- provide assistance to help educate developers about waste diversion in green building design standards																						
29.4	- establish a C&D sector working group to facilitate discussions to address common waste reduction and diversion challenges																						