то:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MAY 28, 2018
FROM:	JAY STANFORD, M.A., M.P.A. DIRECTOR, ENVIRONMENT, FLEET & SOLID WASTE
SUBJECT:	ENVIRONMENTAL PROGRAMS ANNUAL OVERVIEW UPDATE

RECOMMENDATION

That on the recommendation of the Director – Environment, Fleet & Solid Waste:

- a) This report BE RECEIVED for information; and
- b) This report **BE FORWARDED** to the Advisory Committee on the Environment (ACE) for information.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

Relevant reports that can be found at www.london.ca under City Hall (Meetings) include:

 Environmental Programs Updates (April 24, 2017 meeting of the Civic Works Committee CWC, Item #8)

STRATEGIC PLAN 2015-2019

Municipal Council has recognized the importance of environmental and sustainability programs and projects in its 2015-2019 - Strategic Plan for the City of London (2015 – 2019 Strategic Plan). Specifically, all four Areas of Focus address at one level or another environmental and sustainability matters as follows:

Strengthening Our Community

Healthy, safe, and accessible city

Building a Sustainable City

- Robust infrastructure
- Convenient and connected mobility choices
- Strong and healthy environment
- Beautiful places and spaces
- Responsible growth

Growing our Economy

- Local, regional, and global innovation
- Strategic, collaborative partnerships

Leading in Public Service

- Collaborative, engaged leadership
- Excellent service delivery

BACKGROUND

PURPOSE:

The purpose of this information report is to provide Committee and Council with a single report that provides brief overview updates on 13 key programs, projects, and activities within the Environmental Programs Division that:

- indicates how the program or project contributes to Council's Strategic Plan 2015-2019
- highlights a number of the key programs and projects currently under way or in the planning stages
- provides key available data and observations, and
- indicates how the program or project is addressing cost impacts and/or value to customers.

DISCUSSION

The Environmental Programs Division's key focus is on being a central resource for environmental leadership, coordination with other service areas, and being easily accessed by the citizens and businesses of London for many projects and activities dealing primarily with the built environment.

The Division works closely with many Environmental & Engineering Services (EES) divisions as well as staff in Planning; Neighbourhood, Children & Fire Services; and Development & Compliance.

City staff in the Environmental Programs Division apply practical municipal and private sector experience with a focus on air quality, climate change, climate adaptation, energy conservation, active transportation (walking and cycling), transportation demand management, urban watershed management, natural landscaping, community capacity building and community engagement. Within EES, important project/program relationships and synergies exist with such areas as water conservation and wastewater treatment operations.

Some Environmental Programs' responsibilities include:

Community Environmental Action

- Implement community and business outreach and action; partnerships and capacity building
- Administer and evaluate existing environmental programs and initiatives

Environmental Programs Coordination and Management

- Respond to environmental inquiries and manage issues
- Undertake research and policy development
- Coordinate with other City of London divisions, agencies, boards & commissions on environmental and sustainability matters

Corporate Environmental Actions

- Design, implement, monitor and evaluate actions
- Undertake cost/benefit analyses and return on environmental investment

Benchmarking and Public Reporting

 Undertake comparative evaluations, analyses and public reporting on many programs.

KEY PROJECT / PROGRAM UPDATES (AT A GLANCE)

Appendix A contains a brief overview summary on the following 13 projects, programs, and initiatives undertaken between April 2017 and the end of March 2018, specifically:

- 1. Community Energy Action Plan
- 2. Corporate Energy Conservation and Demand Management Plan
- 3. Bike (Cycling) Program
- 4. Business Travel Wise Program
- 5. Downtown Transportation Alliance
- 6. Climate Change Adaptation Strategy
- 7. London Subwatershed Planning
- 8. Source Water Protection
- 9. Thames River Clear Water Revival
- 10. Active & Green Communities
- 11. London Environmental Network
- 12. CityGreen Environmental Education and Outreach
- 13. London Clean & Green

These Environmental Programs activities provide mutually-supporting benefits as outlined in Figure 1, as well as support for major City of London initiatives as outlined in Figure 2. For example, there are strong linkages between climate change mitigation (as addressed by the Community Energy Action Plan) and climate change adaptation (as

addressed by the Climate Change Adaptation Strategy) that could be built upon through a joint community engagement strategy in 2018.

Readers are encouraged to contact any of the following City staff should further details be required:

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Figure 1 - Inter-Connections within Key Environmental Program Activities

rigure i - inter-connection	ı	ı			ı	ı		_	ı	1	1	ı	1
	Community Energy Action Plan	Corporate Energy CDM Plan	Bike Program	Business Travel Wise Program	Downtown Transportation Alliance	Climate Change Adaptation Strategy	London Subwatershed Planning	Source Water Protection	Thames River Clear Water Revival	Active & Green Communities	London Environmental Network	CityGreen	London Clean & Green
Community Energy Action Plan		✓	✓	✓	✓	✓				✓	✓	✓	✓
Corporate Energy CDM Plan	✓					✓							✓
Bike Program	✓	✓		✓	✓					✓	✓	✓	✓
Business Travel Wise Program	✓		✓		✓					✓	✓	✓	✓
Downtown Transportation Alliance	✓		✓	✓						✓	✓	✓	
Climate Change Adaptation Strategy	✓	✓					✓	✓	✓		✓	✓	
London Subwatershed Planning						✓		✓	✓				✓
Source Water Protection						✓	✓		✓	✓		✓	
Thames River Clear Water Revival						✓	✓	✓					
Active & Green Communities	✓		✓	✓	✓			✓			✓	✓	✓
London Environmental Network	✓		✓	✓	✓	✓				✓		✓	✓
CityGreen	✓		✓	✓	✓	✓		✓		✓	✓		✓
London Clean & Green	✓	✓	✓	✓			✓			✓	✓	✓	

Figure 2 - Connections between Key Environmental Program Activities (Columns) and Major City Initiatives (Rows)

and Major City Initiatives (F		,											
Major City Initiatives	Community Energy Action Plan	Corporate Energy CDM Plan	Bike Program	Business Travel Wise Program	Downtown Transportation Alliance	Climate Change Adaptation Strategy	London Subwatershed Planning	Source Water Protection	Thames River Clear Water Revival	Active & Green Communities	London Environmental Network	CityGreen	London Clean & Green
60% Waste Diversion Action Plan	✓									✓	✓	✓	✓
Active & Safe Routes to School	✓		✓							✓			✓
Bus Rapid Transit	✓		✓	✓	✓							✓	
Cycling Master Plan	✓		✓	✓	✓					✓	✓	✓	✓
Flooding Matters						✓	✓			✓		✓	
Water Conservation & Efficiency	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓
Green and Healthy City Strategy	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
London Strengthening Neighbourhoods Strategy	✓		✓		✓			✓		✓	✓	✓	✓
Parks & Recreation Master Plan			✓			✓	✓		✓				✓
Resource Recovery Strategy	✓	✓								✓	✓	✓	
Smart City Strategy	✓	✓	✓	✓	✓	✓				✓	✓		
Stormwater Management						✓	✓	✓	✓	✓		✓	
Urban Forest Strategy	✓					✓	✓	✓		✓	✓	✓	✓

In Appendix A, where possible, estimated annual City expenditures and/or in-kind services from the community and business partners are noted by project. These expenditures do not include City staff time. For in-kind services/funds offered by the community or businesses, the following scale is used:

Annual Community In-kind Hours	Annual Business In-kind Hours or Financial
Minor (less than 49 hours)	Minor (less than 24 hours and/or under \$1,000)
Moderate (50 – 99 hours)	Moderate (25 – 49 hours and/or under \$5,000)
Major (over 100 hours)	Major (over 50 hours and/or over \$5,000)

In a number of the projects, City staff time and expenditure activities are embedded as part of broader services and/or infrastructure requirements; therefore it is not possible to extract reasonable estimates from overall project or program costs.

City staff are always grateful to work with the community, businesses and institutions and fully recognized the importance of doing more collaborative work.

ACKNOWLEDGEMENTS

This report was prepared with assistance from Allison Miller, Transportation Demand Management Coordinator, and Greg Sandle/Tim Conlon, Environmental Outreach Coordinator.

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Appendix A Environmental Programs - Key Projects and Initiatives (At a Glance)

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APPENDIX A

1. Community Ene	ergy Action Plan (CEAP)
Website	<u>City of London – Community Energy Action Plan</u>
Connections to Council's Strategic	Building a Sustainable City
Plan 2015-2019	Growing Our Economy
Brief Description	The CEAP was adopted by Council in July 2014, and the timeframe for Phase 1 of the plan is 2014-2018. The CEAP's goals are to increase the local economic benefit of sustainable energy use and reduce GHG emissions to 15% below 1990 levels by 2020.
Community	Audiences – public, communities, key energy-using sectors
Engagement - levels and methods used (or to be used)	Methods – CityGreen is being used to engage the general public at public events, while Active & Green Communities engages Londoners though the community they belong to. Key energy-using sectors are engaged using a mix of workshops and other direct one-on-one discussions.
Project/Program partners	London Hydro, Union Gas, Project Neutral, London Environmental Network, Western University, QUEST Canada, Federation of Canadian Municipalities, Clean Air Partnership, other key energy stakeholders
Value to Customers	In 2016, London spent about \$1.4 billion on energy, and almost 90 percent of this money left London.
	Since 2010, Londoners have avoided around \$400 million in energy costs through energy efficiency and conservation.
Estimated City	City of London = \$40,000
expenditures and/or in-kind	Business Partners = Major
	Community Partners = Moderate
Key Results for April 2017 – March 2018	Completed the Active & Green Home Check-up (home energy conservation) and MyCarma London (vehicle fuel efficiency education) pilot projects. Both pilots showed potential for future program activities.
	Supported the London Environmental Network (and its volunteers from the business community) in its development of a target-based sustainability program for businesses in London.
	Delivered a mid-term review of the CEAP with input from key energy stakeholders. (see website for details)
	Developed innovative new public engagement videos to celebrate mid-term CEAP progress.
	Worked with Project Neutral to support their major upgrade of their carbon footprint calculator used for both CityGreen and Active & Green Communities activities.
	Completed the London phase of the FCM Green Municipal Fund funded Feasibility Study: Municipal Tools for Catalyzing Net-Zero Energy Development.
	As part of the multi-municipality Community Energy Knowledge & Action Partnership, worked with Western University to establish research topic for the London component of the project.
	continued

1. Community Ene	ergy Action Plan (CEAP)
Key Results (continued)	Successfully applied to participate in QUEST Canada's Community Energy Scorecard pilot project for use in development of the 2019-2022 CEAP.
	Continued to follow and support activities undertaken by the Clean Air Partnership for a province-wide pilot program for using Local Improvement Charges (LICs) for energy retrofits.
	Worked in partnership with Natural Resources Canada and the London Home Builders' Association (LHBA) be the pilot community for the London Energy Efficiency Partnership (LEEP) for Retrofits energy efficiency technology demonstrations.
Next Steps	Develop and implement an integrated framework for community engagement for both climate change mitigation and adaptation to help guide the development of both the 2019-2022 CEAP and Climate Change Adaptation Strategy.
	Incorporate the learnings from QUEST Canada's Community Energy Scorecard pilot project in to the development of the 2019-2022 CEAP.
	Continue to support the development of a target-based sustainability program for businesses in London.
	Support Western's research into social behavior associated with personal vehicles choices and options for municipalities to encourage more-sustainable choices.
	Support the Clean Air Partnership application to the Green Ontario (GreenON) Fund incentive programs for the province-wide LIC pilot program.
	Identify opportunities to build upon outcome from LEEP for Retrofits workshops
	Work with Planning staff to develop the CEAP aspects of creating a "Culture of Resiliency" to support implementation of the Green and Healthy City component of The London Plan.
Further information	Ontario's Climate Change Strategy
	Canada's Action on Climate Change
	Project Neutral
Next CWC reports	General framework for community engagement for climate change mitigation and adaptation (Summer 2018)
	2017 community energy and greenhouse gas emissions inventory (Summer 2018)
	2014-2018 Community Energy Action Plan final report, including stakeholder actions (Winter 2019)

2. Corporate Ener	gy Conservation and Demand Management (CDM) Plan
Website	City of London - Corporate Energy Management Program
Connections to	Building a Sustainable City
Council's Strategic Plan 2015-2019	Leading in Public Service
Brief Description	The Corporate Energy Conservation and Demand Management (CDM) Plan is a mandatory requirement of the Ontario <i>Green Energy Act</i> .
	The plan has a timeframe of five years (2014-2018), and was adopted by Council in July 2014.
	The plan's goal is to reduce corporate energy use 10 percent from 2014 levels by 2020, which requires a service delivery energy efficiency (energy used per Londoner) improvement of 15 percent to accommodate London's growth.
Staff Engagement	Audiences – employees, key energy-using service areas
 levels and methods used (or to be used) 	Methods – different employee engagement activities have been tested under the <i>It's Within Reach</i> program; management from energy-using service areas were consulted in person to determine actions to include in the Plan
Project/Program partners	London Hydro and Union Gas (incentives); Federation of Canadian Municipalities Green Municipal Fund (GMF); Ontario Municipal GHG Challenge Fund
Value to Customers	In 2016, the Corporation spent about \$21 million on energy and this is forecast to increase to \$26 million by 2020 if energy efficiency remains unchanged.
	If the plan's goals are met, the Corporation's annual energy costs will be around \$4 million lower than forecast and the Corporation's annual energy-related greenhouse gas emissions will be around 3,900 tonnes CO _{2e} lower ear compared to 'business-as-usual'.
Estimated City	City of London = \$5,000 (excluding project capital costs)
expenditures and/or in-kind	Business Partners = Major
ana, or in kina	Community Partners = None
Key Results for April 2017 – March	Corporate energy use has decreased by 7 percent from 2014 levels, which has avoided over \$2 million per year in energy costs.
2018	Reported the 2016 corporate energy and greenhouse gas emissions inventory. (see website for details)
	Reported on the status of implementation of the Corporate Energy CDM Plan. (see website for details)
	Applied for Ontario Municipal GHG Challenge Fund financing for five projects – Renewable Natural Gas (RNG) production, fleet compressed natural gas (CNG) infrastructure, building energy retrofits, wastewater energy retrofits, and bike share. Successful with two applications - fleet CNG infrastructure and bike share.
	Successful application to Union Gas RNG request for expressions of interest for upgrading landfill gas to RNG for pipeline injection.
	Applied to Ontario's Workplace Electric Vehicle Charging Incentive Program – on the waiting list due to high demand.
	continued

2. Corporate Energy Conservation and Demand Management (CDM) Plan						
Next Steps	Outcome of Union Gas RNG request for proposals is expected after the provincial election.					
	Identify opportunities for consideration in the second round of Ontario Municipal GHG Challenge Fund applications due July 13, 2018.					
	Develop space heater and temperature settings policy in liaison with Facilities division for City employee locations.					
	Test the use of Environmental Champions in key facilities to promote energy/environmental activities in these work areas.					
	Work in coordination with Greenway PCP staff and London Hydro to implement the Organic Rankine Cycle engine project.					
	Increase Culture of Conservation (employee) activities for employee engagement.					
Further information	Ontario Ministry of Energy - Conservation for Public Agencies					
Next CWC report	2017 corporate energy consumption report (Summer 2018)					

3. Bike (Cycling) F	Program
Websites	City of London - Cycling (new content under development)
Connections to Council's Strategic Plan 2015-2019	Strengthening Our Community Building a Sustainable City Leading in Public Service
Brief Description	Cycling is a key component of the City of London's Transportation Demand Management (TDM) program – specifically as part of Active Transportation promotion.
	Cycling promotion and awareness activities are closely tied to Transportation Planning & Design, Environmental & Parks Planning, Roads Operations, and Parks & Recreation Operations.
	Current cycling activities are closely tied to the London ON Bikes Cycling Master Plan (2016).
	Cycling infrastructure and relationships to Bus Rapid Transit are key to overall mobility in the city.
Community Engagement - levels and methods used (or to be used)	Audiences – Public, community groups, and employees Methods – General promotion, social media, one-on-one meetings, presentations, and special events
Project/Program partners	Cycling Advisory Committee, Middlesex-London Health Unit, Thames Region Ecological Association, London Cycle Link, local employers, Federal Public Transit Infrastructure Fund (PTIF), Ontario Municipal GHG Challenge Fund
Value to Customers	These activities make it easier for more Londoners to ride a bicycle for transportation. Better end-of-trip facilities are also being addressed, with secure
Estimated City expenditures and/or in-kind	bike parking and working with employers. City of London = \$25,000 Business Partners = Moderate Community Partners = Major
Key Results for April 2017 – March 2018	City and partners hosted the inaugural London Celebrates Cycling 5 day event in June 2017 working with: Boler Mountain Byron Community Organization Fanshawe College Go Green Go Dutch Go Bike London Cycle Link London Clean & Green Middlesex London Health Unit Urban League As part of the LCC, the City held its first formalized bike ride called the Canada 150 bike ride (June 24th). That event drew about 200 participants for rides of 5 km, 10 km, 30 km and 75 km. Successful application to the Ontario Municipal GHG Challenge Fund financing for establishing a bike share program in London.

3. Bike (Cycling) F	Program
Key Results for April 2017 – March 2018 (continued)	The use of bike corrals (installed in one on-street vehicle parking space that provides parking for up to 14 bikes) has proven to be popular, and developed plans for expanded deployment.
	In response to public demand for bike parking for winter cyclists, worked with one Old East business to test the use of two bike racks for the winter season.
	Established a new cycling project collaboration with Fanshawe College to update London's Bike & Walk Map and create new ways to access this popular information. Students were also instrumental in creating easy-to-read maps for the inaugural Celebrate 150 Bike Rides in June, 2017.
	The Active & Safe Routes to School Committee was successful in an application to the Ontario Active School Travel Fund, in part to pilot providing well-designed bike racks to some School Travel Planning schools. Environmental Programs staff has been involved in determining style of rack, costs, and how to award to schools.
	Explored cycling research opportunities with Western University (which continues to move ahead).
Next Steps	Phase One (business case development) will be undertaken for the bike share system.
	Secure downtown bike parking will be implemented using PTIF and City funding.
	Neighbourhood Bike Parking Concepts Study will be undertaken.
	New, redesigned Bike Map and Walk Map are underway in partnership with Fanshawe College. Also creating maps for the London Celebrates Cycling Bike Rides in June 2018.
	Cycling content on the City website is being updated and consolidated to make it easier to find local information online.
	Planning is underway for the 2018 London Celebrates Cycling event in June.
	Two more bike corrals are in production.
	A fourth bike fix-it station will be installed at City Hall, allowing cyclists in the downtown area to make quick repairs to their bike.
	Plan and/or implement other outreach components of the Cycling Master Plan.
Further information	none
Next CWC report	Bike Share business case (Winter 2019)

Other bike program details to be included in Environmental Programs update report (Spring 2019)

4. Business Trave	4. Business Travel Wise Program	
Website	Regional Rideshare	
Connections to Council's Strategic Plan 2015-2019	Strengthening Our Community Building a Sustainable City Growing Our Economy	
Brief Description	The purpose of this program is to engage local employers in implementing programs to encourage their employees to carpool, take transit, walk or cycle to and from work. The program also facilitates more efficient work-related travel.	
Community Engagement - levels and methods used (or to be used)	Audiences – London employers and public Methods – London employers will be engaged through the Business Travel Wise Program, targeted invitations, and general promotion. The general public will be engaged through social media, posters, billboards, etc.	
Project/Program partners	Several existing employers; Pathway Intelligence (the Regional Rideshare carpool-matching web service provider), neighbouring municipalities, SustainMobility	
Value to Customers	These activities make it easier for more Londoners to use options other than driving alone for commuting. Better end-of-trip facilities at many workplaces, which is of value to	
	employees and customers.	
Estimated City expenditures	City of London = \$10,000	
and/or in-kind	Business Partners = Moderate Community Partners = Unknown	
Key Results for April 2017 – March 2018	City has partnered with SustainMobility on the three year CommuteOntario project, funded by the Ontario Trillium Foundation. The project will build on the Business Travel Wise Program by testing new commuter programs and incentives on a broader scale.	
	The project builds on a successful employer engagement model in the GTA and aims to expand this province-wide.	
	It also builds on London and surrounding communities' carpool promotion, primarily through the <u>Regional Rideshare</u> website. The partnership has expanded and currently includes: the counties of Huron, Middlesex, Oxford and Perth, the Cities of London, St. Thomas and Stratford, and the Town of St. Marys. Since expanding into surrounding communities, over 2,000 people have registered on Regional Rideshare, and of those over 800 are active and about 130 carpools have been formed.	
Next Steps	Expand citywide promotion to employers & Londoners.	
	Regional Rideshare will be incorporated into upcoming work around establishing a transportation management association for downtown London.	
Further information	SustainMobility	
Next CWC report	Next Environmental Programs update report (Spring 2019)	

5. Downtown Transportation Alliance (London's first Transportation Management Association)	
Website	None
Connections to	Strengthening Our Community
Council's Strategic Plan 2015-2019	Building a Sustainable City
1 1011 2010 2010	Growing Our Economy
	Leading in Public Service
Brief Description	A Transportation Management Association (TMA) is a non-profit, member-controlled organization that provides transportation services in a particular area, such as a commercial district, mall, or industrial park. They are generally public-private partnerships, consisting primarily of area businesses with local government support. They are usually more cost effective than programs managed by individual businesses.
	TMAs allow businesses to provide commuter option services for their employees that encourage more efficient use of transportation and parking resources.
Community Engagement -	Audiences – downtown London employers and their employees. May also include downtown residents.
levels and methods to be used (or to be used)	Methods – London employers will be engaged through targeted invitations, Rapid Transit construction updates, and general promotion. Residents will be engaged through social media, posters, meetings
Project/Program partners	Downtown employers; Downtown London BIA; Old East Village BIA; central London neighbourhood associations (People of Downtown, SoHo, Woodfield)
Value to Customers	These activities make it easier for more Londoners to use options other than driving alone for commuting.
	Better end-of-trip facilities at many workplaces, which is of value to employees and customers.
	Will ease difficulties as the Rapid Transit system is built through the downtown.
Estimated City expenditures and/or in-kind	This \$150,000 project (estimated) has 50% funding through the Public Transit Infrastructure Fund (PTIF). The City's contribution of \$75,000 is approved through capital project TS5031 (Transportation Demand Management).
Key Results for	There are no TMAs in London or the surrounding region.
April 2017 – March 2018	Development of the business and employee engagement processes for the central London business community.
Next Steps	Document existing commuter and transportation situation.
	Research and provide recommendations on governance models.
	Define geographic area for the TMA.
	Research TMA programs and incentives for use in London.
Further information	Smart Commute
Next CWC report	Next Environmental Programs update report (Spring 2019) and Downtown Transportation Alliance business case (Fall 2019)

6. Climate Change	e Adaptation Strategy
Website	City of London – Adapting to Climate Change
Connections to	Building a Sustainable City
Council's Strategic Plan 2015-2019	Leading in Public Service
Brief Description	Background research was completed in 2011 by Western University focusing on water resource infrastructure, modelling and IDF curves update.
	Climate Change Adaptation Phase 1: Vulnerability Assessment was completed in 2014 as an internal review led by Risk Management Division. It was designed to take action on upcoming capital projects.
	Climate Change Adaptation Phase 2: Strategy creation and partnership collaborations and implementation. Using synergies with the CEAP Phase 2.
Community Engagement -	Audiences – public, communities, key educational and institutional sectors
levels and methods used (or to be used)	Methods – CityGreen (Item 12) is being used to engage the general public at public events, while Active & Green Communities (Item 10) engages Londoners though the community they belong to. Key sectors will be engaged using a mix of workshops and other direct one-on-one discussions.
Project/Program partners	School Boards, Middlesex London Health Unit, Conservation Authorities, London businesses, hospitals and educational institutions
Value to Customers	Estimates have been provided that for every \$1 spent in adaptation avoids \$4 in future costs related to climate change.
Estimated City	City of London = ranges with each phase
expenditures and/or in-kind	Business Partners = Major
	Community Partners = Moderate
Key Results for April 2017 – March 2018	Included adaptation concepts into capital projects (e.g. transportation, wastewater and stormwater projects); reviewed other municipal adaptation approaches (e.g., Durham, Vancouver, Toronto, Windsor) for application to London; and continued engagement with research and risk management groups active in adaptation work (Institute of Catastrophic Loss Reduction).
Next Steps	Develop and implement an integrated framework for community engagement for both climate change mitigation and adaptation to help guide the development of both the 2019-2022 CEAP and Climate Change Adaptation Strategy.
	Work with London's large employers including hospitals and educational institutions to research local adaptation applications.
	Work with Planning staff to develop the Strategy with aspects of creating a "Culture of Resiliency" to support implementation of the Green and Healthy City component of The London Plan.
Further information	See website above
Next CWC report	General framework for community engagement for climate change mitigation and adaptation (Summer 2018)

7. London Subwatershed Planning	
Website	City of London – Creeks and Watersheds
Connections to Council's Strategic Plan 2015-2019	Strengthening Our Community
	Building a Sustainable City
Brief Description	London is divided into 17 subwatersheds categorized by their main watershed (Thames River or Kettle Creek) and by the characteristics of the urban drainage pattern (e.g., creeks and streams) in the corresponding neighbourhoods.
	Program delivery is tailored to the subwatershed issues, the infrastructure condition, and the community interest.
	The implementation of plans, updates, and strategies respond to each areas' unique characteristics. (e.g., the Coves Plan focused primarily on public access and water quality)
	High profile projects such as the 2015 London Community Foundation "Back to the River" project (a design competition for 5 km of the downtown riverfront) enabled subwatershed planning principles to be incorporated. This initiative continues in 2018 with on-going discussions related to sustainability.
	The watershed perspective is embodied in the Thames River Clear Water Revival initiative providing engagement and implementation opportunities.
Community Engagement – levels and methods used (or	Audiences – public, community groups, neighbourhoods, schools Methods – direct delivery of materials, briefings, presentations, workshops, webpage, videos, social media interaction
to be used)	(Facebook and Twitter), workshops, community-led events
Project/Program partners	Upper Thames River, Lower Thames Valley, and Kettle Creek Conservation Authorities; Others are numerous and varied (e.g., Thames River Rally, Thames River Paddling Routes).
Value to Customers	These initiatives provide environmental awareness, community building opportunities, and activities designed for environmental action.
	City infrastructure, specifically related to stormwater and flooding are wisely managed through these processes.
	Community implementation opportunities and environmental stewardship lead to stronger neighbourhoods and improved environmental conditions.
Estimated City expenditures	City of London = No discrete budget - rather is contained as part of three water/wastewater infrastructure budgets
and/or in-kind	Business Partners = Minor
	Community Partners = Major
	continued

7. London Subwatershed Planning	
Key Results for April 2017 – March 2018	The Friends of the Coves Subwatershed Inc. continue to fundraise and create access to the Environmentally Significant Area via trail development. Elmwood Gateway has officially opened as a trail head and gazebo for the associated trails. The Silver Creek – East Branch that drains to the Coves, was awarded funds for a natural channel design project from the Ontario Trillium Foundation (\$150,000) and is now awaiting implementation funds.
	City of London Fish & Paddle Guide was created by Fanshawe Design students as an awareness and promotion guide for the river. The project steered by the London Urban Fishing Pilot Project had sponsors including 'Back to the River', fishing and paddling clubs as well as fishing tackle and paddling commercial businesses. Printed copies are available at tourism outlets and are available online.
	One River Municipal Class Environmental Assessment proceeded through Stage 1 determining that Springbank Dam will not be repaired. Stage 2 will now provide direction on options for the dam, management of the adjacent river shoreline and park improvements at The Forks.
Next Steps	Continue to guide subwatershed plans, updates and strategies as per direction contained in The London Plan.
	Assist the Stormwater Engineering Service Area with Master Drainage Plans / Dingman Creek Subwatershed Pilot Projects / One River EA.
	Assist with the creation of London's first Thames River Festival (name to be confirmed) to be hosted at the Forks & Museum tentatively scheduled for the fall.
Further information	Friends of the Coves
	Upper Thames River Conservation Authority
	Lower Thames River Conservation Authority
	Kettle Creek Conservation Authority
Next CWC report	Update reports by individual EES project managers are planned for Spring and Summer 2018

8. Source Water Protection Program	
Website	Thames - Sydenham & Region Drinking Water Source
	Protection Laboration Boots of the Boots of
	Lake Erie Source Protection Region
	Ausable Bayfield Maitland Valley Source Protection Region
Connections to	Strengthening Our Community
Council's Strategic Plan 2015-2019	Building a Sustainable City
Brief Description	Source Water Protection (SWP) - London maintains two surface water intakes to the Great Lakes via our Regional Water Supply System and local back-up wells that draw groundwater for emergency situations.
	Using provincial government funding, we are ensuring the safety of municipal drinking water by managing water at the source, and working to ensure the long-term protection of local groundwater aquifers and water quality.
	Given our regional interests in water supply and our location in two watersheds (Thames River and Kettle Creek), we are partners in two Regional Source Water initiatives (Thames-Sydenham Region and Lake Erie Region) and maintain an interest in a third region (Ausable Bayfield Maitland Valley).
Community	Audiences – public, communities, businesses, neighbourhoods
Engagement - levels and methods used (or to be used)	Methods – direct delivery of materials, briefings, presentations, workshops, webpage, social media interaction (Facebook and Twitter), workshops, community-led events, NGO-led seminars/workshops
Project/Program partners	SWP Steering Committee (15 members in total with London maintaining a representative for 11 years during plan creation. Middlesex County will now provide a member representing both their interests and London during the implementation stage). Thames Sydenham Region has 3 First Nation representatives covering the interests of 8 First Nations; Upper Thames River, Lower Thames Valley, and Kettle Creek Conservation Authorities
Value to Customers	Water stewardship is the key message. This program promotes water quality in general, and specifically municipal drinking water supplies for London and surrounding watershed communities who share the Regional Water Supply infrastructure.
Estimated City	City of London = \$33,000 for Risk Management Services
expenditures and/or in-kind	Business Partners = Major
anu/or in-kinu	Community Partners = Minor
Key Results for April 2017 – March 2018	Previous reports to Council have documented the stages of the work leading up to the completion of the Plan including technical and assessment work (or the "scientific" work) for the two standby well fields. Policies have been prepared for the Region including London, and the Plan was approved in 2016. Implementation is now in process utilizing Risk Management expertise at the Upper Thames River CA and education and awareness programs at the Ministry of the Environment & Climate Change.
	continued

8. Source Water Protection Program	
Next Steps	Implementation by municipalities using land use planning tools (e.g., The London Plan) and risk management expertise. London's back-up emergency wells are scheduled to be decommissioned in 2018 thereby reducing the SWP implementation requirements.
Further information	Refer to the websites listed above as well as a proposed May 5 2018 CWC report regarding Steering Committee membership.
Next CWC report	Update reports are planned by Water Engineering for Fall 2018 to document the back-up, emergency well decommissioning process.

9. Thames River C	Clear Water Revival Initiative
Website	Thames River Clear Water Revival
Connections to Council's Strategic Plan 2015-2019	Strengthening Our Community Building a Sustainable City Growing Our Economy
Brief Description	Thames River Clear Water Revival (CWR) is a collaborative stewardship initiative to create a water management plan for the entire Thames River from headwaters to the outlet into Lake St. Clair. The previous plan for this watershed was completed in 1975.
	London benefits from the existence of the Thames River flowing through the city for a whole host of reasons including environmental, social, and economic reasons. London is the largest municipality by geographic size and population in the Thames watershed and therefore a logical municipal leader for this effort.
	Using federal and provincial government funding focused on water quality in the Great Lakes, we are working in conjunction with our watershed partners to ensure the long-term protection and enhancement of the Thames River water quality.
	Considerable interest by First Nations has resulted in four communities being actively represented on the Steering Committee.
Community Engagement - levels and methods used (or to be used)	Audiences – public, communities, businesses, neighbourhoods Methods – Direct delivery of materials, briefings, presentations, workshops, webpage, social media interaction (Facebook and Twitter), workshops, community-led events, NGO-led seminars/workshops
Project/Program partners	CWR involves a Steering Committee composed of staff from Environment Canada, three provincial ministries, two Conservation Authorities, four First Nations, and City of London. City staff currently co-chair the Committee.
Value to Customers	Water stewardship is the key message of this initiative. This program safeguards water quality in general, and specifically river water quality for London and surrounding watershed communities.
Estimated City	City of London = \$25,000 for general project support
expenditures and/or in-kind	Business Partners = Major Community Partners = Minor
Key Results for April 2017 – March 2018	The multi-partnership Steering Committee created to represent the wide interest in the initiative is now assisting in informing the proposed Domestic Action Plan for Lake Erie as the Thames River is an identified source of Phosphorus.
	Representation on the committee remains constant including federal, provincial, First Nations, two CAs and the City.
	continued

9. Thames River Clear Water Revival Initiative	
Key Results for April 2017 – March 2018 (continued)	The project manager continues to direct the work of the group and is managing the Water Management Plan creation, and the website that helps to communicate the initiative to the wider public.
	Western University research housed at the Adelaide Pollution Control Plant, has capitalized on the initiative to attract water quality funding for phosphorus reduction in our waterways.
	First Nations engagement has increased given the ability of the communities to mobilize interest with their youth.
Next Steps	Water Management Plan scheduled for completion in Fall 2018
Further information	See website above and previous CWC report April 17 2018.
Next CWC report	Scheduled in Fall 2018 by Environmental Programs after completion of the Water Management Plan.

10. Active & Green Communities	
Websites	City of London – Active & Green Communities
Connections to Council's Strategic Plan 2015-2019	Building a Sustainable City
	Strengthening Our Community
Brief Description	A community engagement pilot project addressing concerns about our environment, health, household finances, and community wellbeing.
	Two-way exchange of ideas between participating communities and the City (and its partners).
	Provides simple and convenient access to programs and information from the City of London and partners.
	Provides "test markets" for small-scale pilot projects to test new tools and ideas.
Community Engagement -	Audiences – public, communities, workplaces (new for 2018), non-profit organizations
levels and methods used (or to be used)	Methods – community champions, community meetings & events, informal one-on-one discussions, web-based tools (Active & Green Calculator provided by Project Neutral)
Project/Program partners	Project Neutral, London Hydro, Union Gas, Upper Thames River Conservation Authority, Middlesex-London Health Unit, Ontario Ministry of Energy
Value to Customers	Residents within participating communities get quicker access to City and partner programs.
	City staff can test new program ideas at a small scale to reduce the risk associated with trying new ideas.
Estimated City	City of London = \$20,000
expenditures and/or in-kind	Business Partners = Moderate
aria/or iii kiila	Community Partners = Major
Key Results for April 2017 – March 2018	City-led projects (Active & Green Home Check-Ups, MyCarma London) implemented in Byron, Kensington Village, Old East, SoHo, and Willingdon.
	Feedback obtained on the Active & Green Calculator being incorporated by Project Neutral for their new, completely-redesigned carbon/cost footprint tool.
	Working with neighbourhood associations has had mixed results, depending upon the alignment of Active & Green Communities, the priority issues for those neighbourhoods, and their capacity to take on additional projects.
	Workplace-based activities (e.g., MyCarma London) proven to be cost-effective for engaging Londoners.
	Worked with Big Bike Giveaway (cycling promotion/awareness), Urban Roots London (urban agriculture), London Electric Vehicle Association (LEVA) and We Are Building Better (home energy retrofits) to explore joint interest in community engagement.
	Promoted Active & Green Communities engagement approaches to London Environmental Network through collaboration sessions and information exchanges.
	continued

10. Active & Green Communities	
Next Steps	Explore additional approach for Active & Green Communities, such as, at a minimum, commitment from communities to include community-specific environmental topics within their communication tools (e.g., newsletter, social media, or website).
	Expand Active & Green Communities to engage directly with additional local environmental non-profits (e.g., London Electric Vehicle Association) both for shared interest in engaging Londoners as well as a "community" of people.
	Develop community-scale environmental project ideas for inclusion within the Strengthening Neighbourhood Strategy's Neighbourhood Decision Making's Ideas Bank as well as Active & Green Communities.
	Develop and test engaging Londoners through workplaces (i.e., Active & Green Workplaces), such as Lunch & Learn events as well as existing employer-led events.
	Work with Project Neutral to utilize their new, completely-redesigned carbon/cost footprint tool within Active & Green Communities.
	Discussions are underway with several community groups specializing in agriculture, cycling, energy conservation and mobility.
Further information	Program website noted above and NeighbourGood London
Next CWC report	Next Environmental Programs update report (Spring 2019)

11. London Environmental Network	
Website	London Environmental Network
Connections to Council's Strategic Plan 2015-2019	Building a Sustainable City
	Strengthening Our Community
	Leading in Public Service
Brief Description	The London Environmental Network (LEN) is an environmental non-government organization (NGO) that builds strong, stable & resilient organizations so they can be more effective at creating positive change over the long term. It also acts as a hub for Londoners to learn about environmental efforts in our city and how they can get involved.
	The City of London has a seat on the Steering Committee.
Community	Audiences – public, community groups, neighbourhoods, schools
Engagement - levels and methods used (or to be used)	Methods – direct delivery of materials, presentations, workshops, webpage, videos, social media interaction (Facebook and Twitter), workshops, community-led events, social events (Green Drinks), NGO-led seminars/workshops
Project/Program partners	LEN has grown to 45 local and regional members with direct members, volunteers and participants of over 10,000 people.
Value to	Facilitate collaboration between environmental organizations.
Customers	Provide training and shared resources to make groups stronger and more effective.
	Empower member organizations to communicate their stories better and become more effective at making change.
	Be a central source for Londoners to learn about environmental groups, events and activities.
	Recruit volunteers and supporters for member organizations.
Estimated City	City of London = \$5,000 (not including City Community Grant)
expenditures and/or in-kind	Business Partners = Major
and, or in tails	Community Partners = Major
Key Results for April 2017 – March 2018	LEN has been working with Green Economy Canada (formerly Sustainability CoLab) alongside volunteers (with experience from Green Economy North in Sudbury, Sustainable Waterloo Region, and Sustainable Hamilton-Burlington) to launch a target-based sustainability program for businesses.
	LEN has over 2,100 followers on social media and e-newsletters and promoted almost 290 events in 2017.
	LEN has seen growing attendance with the re-launched Green Drinks events, and has introduced event fees for cost recovery.
	Over 200 people attended the Resilient Cities Conference in November 2017.
Next Steps	Continue the development process for launching the target-based sustainability program for businesses.
	Apply for not-for-profit status and form a Board of Directors
Further information	London Environmental Network
Next CWC report	Next Environmental Programs update report (Spring 2019)

12. CityGreen - Enhancing Environmental Outreach and Strengthening Community Capacity		
Website	City of London CityGreen	
Connections to Council's Strategic Plan 2015-2019	Strengthening Our Community Building a Sustainable City Leading in Public Service	
Brief Description	CityGreen is an environmentally focused display that delivers a key message – Working Together for Sustainability. All environmental areas (built environment, natural environment) of the City of London engage with information and staff depending on the event. The goal is to be a one-stop-shop for environmental information, knowledge, hands-on-displays, and how to take action in your own community.	
	CityGreen assists other City service areas with major community outreach activities (e.g., Bus Rapid Transit, London ON Bikes) and assist community groups with gaining additional exposure.	
	CityGreen is also the brand name for the London Hydro bill insert that advertises London's environmental programs and special events.	
	CityGreen operates throughout the year at major indoor and outdoor events in London.	
Community Engagement - levels and methods used (or to be used)	Audiences – public, community groups, businesses, business associations, schools, neighbourhoods	
	Methods – interactive displays of various sizes at existing community events (from small tabletop displays to over 3000 square foot display at the Lifestyle Home Show), outdoor festivals (mobile display trailer and tents)	
Project/Program partners	City of London service areas with environmentally-related programs and activities (Environmental & Engineering Services, Planning, Neighbourhood, Children & Fire Services and Development & Compliance)	
Value to Customers	Through the use of eye-catching, easy-to-understand and interactive engagement materials, increase the capacity of Londoners of all ages to take action that benefits our environment, their health, and their pocketbook.	
	Participation in existing and new outreach activities with a wide range of communities. (e.g., community associations, arts and cultural institutions, local employers, service clubs, and faith-based organizations)	
Estimated City expenditures and/or in-kind	City of London = \$30,000	
	Business Partners = Minor	
	Community Partners = Minor	
	continued	

12. CityGreen - Enhancing Environmental Outreach and Strengthening Community Capacity

Key Results for April 2017 – March 2018 Londoners are now recognizing CityGreen as being a regular feature at community events. Events attended are listed below. The estimated attendance is for the entire time period that CityGreen booth was staffed. The number of people that visited the CityGreen booth for a discussion, to pick up information and/or or glance at information provided varies by event and will always be less than the estimated attendance:

Event	Estimated Attendance
2017 London Bicycle Expo	250
Anderson Ale Trivia Night	30
Bud Gardens "Green Game"	9,000
Canada 150 Sesquifest	1,000
Carolinian Canada's Go Wild Grow Wild Expo	3,000
EnviroWestern EnviroWeek	250
Forest of Flavours	500
Gathering on the Green (June and August)	3,000
Grickle Grass Festival	250
Home County Festival (daytime only)	20,000
Inspiration Fest	100
LHBA Lifestyle Home Show	18,000
London Hydro Health Fair	200
London Life Health Fair	300
Neighbourhood Fun Day (Westminster)	500
Resilient Cities Conference	200
Seedy Saturday	500
Social Services London East Open House	50
Sunfest (daytime only)	50,000

New engagement materials designed to improve the experience and create a message that can be more easily remembered.

Obtained commitment from Carolinian Canada to host their regional "Go Wild Grow Wild" Green Expo in London a third year in 2018, including the addition of a new 'Green Living Zone' where London's (built) environmental partners and programs will be highlighted.

Successfully engaged the public and solicited their feedback at the 2018 Lifestyle Home Show (over 1,600 respondents) using a low-cost, popular incentive (desk-side blue boxes).

Rebranded and relaunched the story-telling website, Reduce Impact London, as CityGreen Stories.

Produced 6 issues of the London Hydro bill insert titled "CityGreen" that each included several environmental topics, outlined programs and provided engagement opportunities.

Next Steps	Continue to build upon and improve environmental outreach methods and tools
Further information	City of London – Environmental Initiatives CityGreen Stories
Next CWC report	Next Environmental Programs update report (Spring 2019)

13.London Clean & Green Program		
Website	London Clean & Green	
Connections to Council's Strategic Plan 2015-2019	Strengthening Our Community	
	Building a Sustainable City	
	Leading in Public Service	
Brief Description	The program started in 1996 with 30 people on a Saturday morning - it now boasts participation of between 5,000 and 10,000 people over the course of over 2 months.	
	In 2012 the program grew to include both "Clean" and "Green" activities; "cleaning" including litter and graffiti removal and "greening" being the various activities to protect and improve our environment through stewardship.	
	A calendar of events is produced annually to advertise the opportunities in the community (mid-April until late June).	
Community Engagement - levels and methods used (or to be used)	Audiences – public, community groups, businesses, business associations, schools	
	Methods - direct delivery of materials, briefings, mass media (print, radio), presentations, webpage, social media interaction (Facebook and Twitter), community-led events	
Project/Program partners	Amway, Canada 150 Program, Dillon Consulting, Goodwill Industries, Joe Kools, Labatt Brewery, London Environmental Network, London Heritage Council, London Home Builders' Association, London Public Library, Miller Waste Systems, Million Tree Challenge, NeighbourGood London, ReForest London, Thames Region Ecological Association, TD, Thames River Rally, Thames Talbot Land Trust, Trails Open London, Try Recycling, Upper Thames River Conservation Authority	
Value to Customers	The event coordinates activities, advertises events and provides a way for groups to engage in community building.	
	In recent years there has been an increased focus on "cleaning" activities under the banner 12 Days of Cleaning. The goal is to make Londoners and businesses aware that there are numerous locations to drop-off items that may otherwise become litter and garbage. (i.e., a focus on preventing the creation of litter, garbage and illegal dumping).	
Estimated City expenditures and/or in-kind	City of London = \$30,000	
	Business Partners = Major	
aria/or iii kiiia	Community Partners = Major	
Key Results for April 2017 – March 2018	Neighbourhood strengthening, increased awareness of our actions, the condition of our neighbourhoods and how stewardship starts with the individual.	
	The material collected is substantial (18 to 20 tonnes on average) and provides the reminder that waste prevention starts at home and at your place of business.	
	As noted, the London Clean & Green Program is a collaboration between individuals, community groups, businesses and the City of London. The 2018 edition marks 23 years of being in the cleaning and greening business, a significant milestone.	
	continued	

13.London Clean & Green Program	
Key Results for April 2017 – March 2018 (continued)	Expanded partnership to align with Canada 150 events and the desire to "clean up" London to get ready for the Canada 150 events.
	Introduced the Earth Day 150 Weekend that combined the 20 Minute London Makeover (Friday), Community-wide Cleanup (Saturday) and Earth Day London (Sunday) and created a Canada 150 Signature event.
Next Steps	London Clean & Green, will continue to look for opportunities to expand the collaborative messaging and increase the number of partners for the 2018 launch in April.
Further information	Consult the website for events, locations and activities
Next CWC report	Next Environmental Programs update report (Spring 2019)