

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON APRIL 16, 2019
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 (May 28, 2018 meeting of the Civic Works Committee (CWC), Item #2.8)

STRATEGIC PLAN 2015-2019 AND DEVELOPMENT OF COUNCIL'S 2019-2023 STRATEGIC PLAN

Municipal Council has recognized the importance of environmental and sustainability programs and projects in the previous Strategic Plan (2015-2019) and the need for a more sustainable and resilient city in the development of its 2019-2023 Strategic Plan for London. This work touches on all four Areas of Focus:

- Strengthening Our Community
- Building a Sustainable City
- Growing our Economy
- Leading in Public Service

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 led by or in coordination with the Environmental Programs Division. The report:

- indicates how the program or project contributes to Council's Strategic Plan;
- highlights a number of the key programs and projects currently under way or in the planning stages;
- provides key available data and observations;
- indicates how the program or project is addressing cost impacts and/or value to customers; and
- provides details that can inform the community, businesses and employees on how to get engaged and actions that can be taken.

CONTEXT

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 City Planning; Neighbourhood, Children & Fire Services; Facilities; Development & Compliance; and Corporate Services.

City staff in the Environmental Programs Division apply practical municipal and private sector experience with a focus on air quality, climate change mitigation, climate change 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.

DISCUSSION

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 2018 and the end of March 2019, specifically:

1. Community Energy Action Plan
2. Corporate Energy Conservation and Demand Management (CDM) Plan
3. Bike (Cycling) Program
4. Business Travel Wise Program
5. Sustainable Mobility Initiatives – Downtown Focus
6. Climate Change Adaptation Initiatives
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

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.

Environmental Programs activities provide mutually-supporting benefits as well as support for major City of London initiatives. These linkages are captured in Appendix B in two figures:

- Figure 1 - Inter-Connections within Key Environmental Program Activities
- Figure 2 - Connections between Key Environmental Program Activities and Major City Initiatives

Some Highlights from 2018 (Appendix A)

- Partnered with Natural Resources Canada (NRCan) and the London Home Builders' Association (LHBA) to be the pilot project community for the Local Energy Efficiency Partnership (LEEP) for Retrofits energy efficiency technology demonstrations.
- Completed incentive applications and received approximately \$440,000 in incentives from Hydro One, Union Gas and London Hydro for energy savings projects in water and wastewater operations.
- Completed an application and was approved to develop a bike share business case including 50% of potential capital expenditures under the Ontario Municipal Greenhouse Gas (GHG) Challenge Fund. Although the Municipal GHG Challenge Fund was cancelled, the business case was still launched.
- Completed Stage 2 of the 'One River' Municipal Class Environmental Assessment, providing direction on options for the dam, management of the adjacent river shoreline and park improvements at The Forks.
- Supported the London Environmental Network (LEN) in the development and upcoming launch of Green Economy London, a target-based sustainability program for businesses in London. LEN and the City of London obtained \$200,000 in funding from the London Community Foundation to support establishment of Green Economy London.
- Expanded Carolinian Canada's annual regional "Go Wild Grow Wild" Green Expo to include the addition of a new 'Green Living Zone' where London's (built) environmental partners and programs were highlighted.

Some Priorities for 2019 (Appendix A)

- Develop of the 2019-2023 Community Energy Action Plan in consultation with key community energy partners and stakeholders.
- Develop the 2019-2023 Corporate Energy CDM Plan in partnership with key City of London energy-using service areas.
- Complete the bike share business case and proposed next steps for Council.
- Implement secure bike parking solutions in downtown London.

- Complete background details and prepare a business case for collaborative sustainable mobility activities and programs focused on employers and employees in downtown London and related business areas.
- Implement Commute Ontario's new commuter programs and incentives to Londoners and London businesses.
- Work with City Planning staff to further Climate Change Adaptation initiatives in conjunction with projects dealing with planning for sustainability and resiliency as part of the Green and Healthy City component of The London Plan.
- Support additional research for phosphorus removal technology in the Thames River watershed, which will be housed at a City facility to assist agricultural groups in reducing phosphorus at the field level.
- Support LEN in the launch and implementation of Green Economy London.
- Explore different approaches for Active & Green Communities, including multi-family residential buildings, workplaces, and daycare communities.

ACKNOWLEDGEMENTS

City staff are always grateful to work with the community, businesses and institutions and fully recognized the importance of doing more collaborative work. This report was prepared with assistance from Sneha Madur, Corporate Energy Management Engineer, Allison Miller, Transportation Demand Management Coordinator, and Greg Sandle, Environmental Outreach Coordinator.

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Appendix A Environmental Programs - Key Projects and Initiatives (*At a Glance*) (April 2018 and the end of March 2019)

Appendix B Projects, Programs and Initiatives (Activity) Linkages

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APPENDIX A

Environmental Programs - Key Projects and Initiatives (*At a Glance*) (April 2018 and the end of March 2019)

1. Community Energy Action Plan (CEAP)	
Website	City of London – Community Energy Action Plan
Connections to Council's Strategic Plan	Building a Sustainable City Growing Our Economy
Brief Description	<p>The CEAP was adopted by Council in July 2014, and the timeframe for the first phase of the plan was 2014-2018. In 2019, the focus will be on developing the scope of the CEAP for 2019-2023.</p> <p>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, 37% below by 2030, and 80% below by 2050.</p>
Community Engagement - levels and methods used (or to be used)	<p>Audiences – public, communities, key energy-using sectors.</p> <p>Methods – CityGreen is being used to engage the general public at public events, while Active & Green Communities engages Londoners through the community they belong to. Key energy-using sectors are engaged using a mix of workshops and other direct one-on-one discussions.</p>
Project/Program partners	London Hydro, Union Gas, Project Neutral, London Environmental Network, Green Economy London, Western University, QUEST Canada, Federation of Canadian Municipalities, Clean Air Partnership, other key energy stakeholders.
Value to Customers	In 2017, London spent about \$1.5 billion on energy, and almost 90 percent of this money left London. Since 2010, Londoners have avoided over \$500 million in energy costs through energy efficiency and conservation.
Estimated City expenditures and/or in-kind	<p>City of London = \$40,000</p> <p>Business Partners = Major</p> <p>Community Partners = Moderate</p>
Key Results for April 2018 – March 2019	<p>A final report on the implementation of the 2014-2018 CEAP was presented to the CWC on April 2, 2019 (Agenda #2.6)</p> <p>Supported the London Environmental Network in the development and upcoming launch of Green Economy London, a target-based sustainability program for businesses in London.</p> <p>Worked with Project Neutral to upgrade and re-launch their carbon footprint calculator used for both CityGreen and Active & Green Communities activities.</p> <p>Completed the FCM Green Municipal Fund funded Feasibility Study: Municipal Tools for Catalyzing Net-Zero Energy Development.</p> <p>As part of the multi-municipality Community Energy Knowledge & Action Partnership (CEKAP), supported Western University's research on the barriers to local adoption of electric vehicles.</p> <p>Participating in QUEST Canada's Community Energy Scorecard pilot project for use in development of the 2019-2023 CEAP.</p> <p style="text-align: right;"><i>continued</i></p>

1. Community Energy Action Plan (CEAP)	
	Partnered with Natural Resources Canada and the London Home Builders' Association (LHBA) be the pilot community for the Local Energy Efficiency Partnership (LEEP) for Retrofits energy efficiency technology demonstrations.
Next Steps	<p>A report on the development of the 2019-2023 CEAP was presented to the CWC on April 2, 2019 (Agenda #2.7)</p> <p>Continue to support the start-up of Green Economy London.</p> <p>Incorporate the learnings from QUEST Canada's Community Energy Scorecard pilot project in to the development of the 2019-2023 CEAP.</p> <p>Incorporate the learnings from Western's CEKAP on local EV adoption in to the development of the 2019-2023 CEAP.</p> <p>Participate in the Clean Air Partnership's Climate Action Support Centre (CASC) project studying a potential province-wide approach for a Local Improvement Charge (LIC) and Property Assessed Clean Energy (PACE) based home energy retrofit program.</p> <p>Identify opportunities to build upon outcomes from LEEP for Retrofits workshops, such as continued public education (through Home Green Home displays) as well as pilot projects (e.g., Fanshawe College's Kestrel Court Net-Zero Energy retrofit of student residential townhomes, pilot projects emerging from the CASC project, etc.)</p> <p>Work with City Planning staff to integrate the CEAP aspects into their Long-Range Planning and Sustainability activities</p>
Further information	<p>Ontario's Environment Plan</p> <p>Canada's Action on Climate Change</p> <p>Project Neutral</p>
Next CWC reports	<p>2018 community energy and greenhouse gas emissions inventory (Summer 2018)</p> <p>Draft 2019-2023 Community Energy Action Plan (Winter 2020)</p>

2. Corporate Energy Conservation and Demand Management (CDM) Plan	
Website	City of London – Corporate Energy Management Program
Connections to Council's Strategic Plan	Building a Sustainable City Leading in Public Service
Brief Description	<p>The Corporate Energy Conservation and Demand Management (CDM) Plan is a mandatory requirement of the Ontario Regulation 507/18, <i>Electricity Act – 1998 (former Green Energy Act)</i>.</p> <p>The plan has a timeframe of five years (2014-2018), and was adopted by Council in July 2014. This Plan needs to be updated every five years with next five year CDM Plan due on July 1st, 2019.</p> <p>The 2014 plan's goal is to reduce corporate energy use by 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.</p>
Staff Engagement - levels and methods used (or to be used)	<p>Audiences – employees, key energy-using service areas.</p> <p>Methods – different employee engagement activities have been tested under the <i>Culture of Conservation</i> program; management from energy-using service areas were consulted in person to determine actions to include in the Plan.</p>
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	Since 2014 Plan implementation the corporation has accumulated \$9.8 million in cost avoidance. If the plan's goals are met, the Corporation's annual energy costs will be \$8 million lower than forecast and the Corporation's annual energy-related greenhouse gas emissions will be around 3,900 tonnes lower compared to 'business-as-usual'.
Estimated City expenditures and/or in-kind	<p>City of London = \$8,500 (excluding project capital costs) plus one time capital investment of \$31,000 on new electric vehicle (EV) chargers</p> <p>Business Partners = Major</p> <p>Community Partners = None</p> <p style="text-align: right;"><i>continued</i></p>

2. Corporate Energy Conservation and Demand Management (CDM) Plan	
Key Results for April 2018 – March 2019	<p>Reported the 2017 corporate energy and greenhouse gas emissions inventory. The Corporation has achieved its 10 percent reduction in energy use target in 2017, three years ahead of the 2020 goal, but staff expect to see increased energy use in 2018 due to colder weather. Energy efficiency improvements between 2014 and 2017 resulted in \$2.6 million per year in avoided energy costs. (see Corporate Energy website for details)</p> <p>Reported on the status of implementation of the Corporate Energy CDM Plan. (see Corporate Energy website for details)</p> <p>Found alternative approach for proceeding with fleet compressed natural gas (CNG) infrastructure in response to the loss of the Ontario Municipal GHG Challenge Fund.</p> <p>Completed incentive applications and received approximately \$440,000 in incentives from Hydro One, Union Gas and London Hydro for energy savings projects of water and wastewater operations.</p> <p>Responded to the FortisBC Renewable Natural Gas (RNG) request for expressions of interest for upgrading landfill gas to RNG for pipeline injection.</p>
Next Steps	<p>Participate in the Clean Air Partnership’s Climate Action Support Centre (CASC) project supporting municipal corporate energy management programs across Ontario.</p> <p>Develop funding strategy for energy efficiency projects.</p> <p>Implement the space heater and temperature settings policy in liaison with Facilities division for City employee locations.</p> <p>Test the use of Environmental Champions in key facilities to promote energy/environmental activities in these work areas.</p> <p>Work in coordination with Greenway Wastewater Treatment Plant staff to implement the Organic Rankine Cycle engine project.</p> <p>Increase Culture of Conservation (employee) activities for employee engagement.</p> <p>Develop the 2019-2023 Corporate Energy CDM Plan with new goals and initiatives.</p> <p>Further discussions with FortsBC and Enbridge to take place on RNG from landfill gas.</p>
Further information	Ontario Ministry of Energy - Conservation for Public Agencies
Next CWC report	2019-2013 Corporate Energy CDM Plan (Summer 2019)

3. Bike (Cycling) Program	
Websites	City of London - Cycling (updated and new content)
Connections to Council's Strategic Plan	Strengthening Our Community Building a Sustainable City Leading in Public Service
Brief Description	<p>Cycling is a key component of the City of London's Transportation Demand Management (TDM) program – specifically as part of Active Transportation promotion.</p> <p>Cycling promotion and awareness activities are closely tied to Transportation Planning & Design, Environmental & Parks Planning, Roads Operations, and Parks & Recreation Operations.</p> <p>Current cycling activities are closely tied to the London ON Bikes Cycling Master Plan (2016).</p> <p>Cycling infrastructure and relationships to Bus Rapid Transit are key to overall mobility in the city.</p>
Community Engagement - levels and methods used (or to be used)	<p>Audiences – Public, community groups, and employees.</p> <p>Methods – General promotion, social media, one-on-one meetings, presentations, and special events.</p>
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).
Value to Customers	<p>These activities make it easier for more Londoners to ride a bicycle for transportation.</p> <p>Better end-of-trip facilities are also being addressed, with secure bike parking and working with employers.</p>
Estimated City expenditures and/or in-kind	<p>City of London = \$25,000</p> <p>Business Partners = Moderate</p> <p>Community Partners = Major</p>
Key Results for April 2018 – March 2019	<p>City and partners hosted the second annual London Celebrates Cycling 8 day event in June 2018 working with:</p> <ul style="list-style-type: none"> • Big Bike Giveaway • Boler Mountain • Byron Community Organization • Fanshawe College • London Cycle Link • London Clean & Green • Middlesex London Health Unit • MEC • Urban League <p>As part of LCC, the City held a formalized series of bike rides called London Bike Rides (June 16th). Despite the rainy start, the event drew about 200 participants for rides of 10 km, 35 km and 75 km.</p>

continued

3. Bike (Cycling) Program	
Key Results for April 2018 – March 2019 (continued)	<p>Despite the loss of the Ontario Municipal GHG Challenge Fund, City staff developed an alternative approach for proceeding with a bike share business case. The project was launched and phase one is expected to be complete late Spring 2019.</p> <p>The bike share project included a public feedback component, primarily sought through Social Media. Feedback was received from over 700 people.</p> <p>In response to public demand for bike parking for winter cyclists, tested leaving and maintaining two bike corrals out for the winter season.</p> <p>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 London Bike Rides event in June, 2018.</p> <p>The Active & Safe Routes to School Committee (of which the City is an active member) piloted school wayfinding signage to encourage more families to walk and bike racks to encourage more students to ride.</p> <p>Supported cycling research with Western University. Results will support City cycling priorities and programming.</p> <p>A fourth bike fix-it station was installed at City Hall, allowing cyclists in the downtown area to make quick repairs to their bike.</p>
Next Steps	<p>Phase One (business case development) of bike share will be completed and findings presented to Council.</p> <p>Secure downtown bike parking will be implemented using PTIF and City funding.</p> <p>Neighbourhood Bike Parking Study will be undertaken.</p> <p>New, redesigned Bike Map and Walk Map will be finalized in partnership with Fanshawe College.</p> <p>Planning is underway for the 2019 London Celebrates Cycling event in June.</p> <p>Two more bike corrals are in production.</p> <p>Plan and/or implement other outreach components of the Cycling Master Plan.</p>
Further information	none
Next CWC report	<p>Bike Share business case (Spring 2019)</p> <p>Other bike program details to be included in Environmental Programs update report (Spring 2020)</p>

4. Business Travel Wise Program	
Website	Regional Rideshare
Connections to Council's Strategic Plan	Strengthening Our Community Building a Sustainable City Growing Our Economy
Brief Description	<p>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.</p> <p>In 2018, City partnered with SustainMobility on a three year Commute Ontario project, funded by the Ontario Trillium Foundation. The project builds on the Business Travel Wise Program by testing new commuter programs and incentives on a broader scale. The project is based on a successful employer engagement model in the Greater Toronto Hamilton Area (GTHA) and aims to expand this province-wide.</p> <p>It also builds on London and surrounding communities' carpool promotion, through the Regional Rideshare 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 2,500 people have registered on Regional Rideshare, and of those 900 are active and about 150 carpools have been formed.</p>
Community Engagement - levels and methods used (or to be used)	<p>Audiences – London employers and public.</p> <p>Methods – Both the City of London and SustainMobility are playing a role in engagement. London employers continue to be engaged through direct contact from City staff, targeted invitations, and general promotion. The general public will be engaged through social media, posters, billboards, etc.</p>
Project/Program partners	Several existing employers; Pathway Intelligence (the Regional Rideshare carpool-matching web service provider), neighbouring municipalities, SustainMobility.
Value to Customers	<p>These activities make it easier for more Londoners to use options other than driving alone to/from work.</p> <p>Better end-of-trip facilities at many workplaces, which is of value to employees and customers.</p>
Estimated City expenditures and/or in-kind	<p>City of London = \$10,000</p> <p>Business Partners = Moderate</p> <p>Community Partners = Unknown</p>
Key Results for April 2018 – March 2019	<p>All existing Regional Rideshare employers received personal contact to introduce Commute Ontario program.</p> <p style="text-align: right;"><i>continued</i></p>

4. Business Travel Wise Program	
Next Steps	<p>Expand citywide promotion to employers & Londoners partnered with Commute Ontario.</p> <p>Regional Rideshare will be incorporated into upcoming work around establishing a transportation management association for downtown London.</p> <p>City of London Corporation to join Commute Ontario and lead by example.</p>
Further information	SustainMobility
Next CWC report	Next Environmental Programs update report (Spring 2020)

5. Sustainable Mobility Initiatives – Downtown Focus	
Website	None
Connections to Council's Strategic Plan	Strengthening Our Community Building a Sustainable City Growing Our Economy Leading in Public Service
Brief Description	Collaborative sustainable mobility activities and programs focused on employers and employees in downtown London and related business areas can take many forms of implementation. One is a Transportation Management Association (TMA), 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.
Community Engagement - levels and methods to be used (or to be used)	Audiences – downtown London employers and their employees. May also include downtown residents. 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.
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 April 2018 – March 2019	There are no TMAs in London or the surrounding region. Development of the business and employee engagement processes for the central London business community. Concept introduced and potential geographic areas defined.
Next Steps	Document existing commuter and transportation situation. Research and provide recommendations on governance models. Research TMA programs and incentives from elsewhere for use in London.
Further information	Smart Commute
Next CWC report	Next Environmental Programs update report (Spring 2020) and a business case (Winter 2020)

6. Climate Change Adaptation Initiatives	
Website	City of London – Adapting to Climate Change
Connections to Council's Strategic Plan	Building a Sustainable City Leading in Public Service
Brief Description	<p>Background research was completed in 2011 by Western University focusing on water resource infrastructure, modelling and IDF curves update.</p> <p>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.</p> <p>Climate Change Adaptation Phase 2: Strategy creation for EES components and collaborations using synergies with the 2019-2023 CEAP and sustainability activities within City Planning.</p>
Community Engagement - levels and methods used (or to be used)	<p>Audiences – public, communities, key educational and institutional sectors</p> <p>Methods – CityGreen (Item 12) is being used to engage the general public at public events, while Active & Green Communities (Item 10) engages Londoners through the community they belong to. Key sectors will be engaged using a mix of workshops and other direct one-on-one discussions.</p>
Project/Program partners	School Boards, MLHU, 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 expenditures and/or in-kind	<p>City of London = ranges with each phase</p> <p>Business Partners = Major</p> <p>Community Partners = Moderate</p>
Key Results for April 2018 – March 2019	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 (e.g. Institute of Catastrophic Loss Reduction).
Next Steps	<p>Develop and implement an integrated framework for community engagement for both climate change mitigation and adaptation to help guide the development of both the 2019-2023 CEAP and Climate Change Adaptation Strategy.</p> <p>Work with London's large employers including hospitals and educational institutions to research local adaptation applications.</p> <p>Work with City Planning staff to develop the Strategy in conjunction with a "Sustainability Plan" to support implementation of the Green and Healthy City component of The London Plan.</p>
Further information	See website above
Next CWC report	General framework for community engagement for climate change mitigation and adaptation.

7. London Subwatershed Planning	
Website	City of London – Creeks and Watersheds
Connections to Council's Strategic Plan	Strengthening Our Community Building a Sustainable City
Brief Description	<p>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.</p> <p>Program delivery is tailored to the subwatershed issues, the infrastructure condition, and the community interest.</p> <p>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).</p> <p>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 2019 with on-going discussions related to sustainability.</p> <p>The watershed perspective is embodied in the Thames River Clear Water Revival initiative providing engagement and implementation opportunities.</p>
Community Engagement – levels and methods used (or to be used)	<p>Audiences – public, community groups, neighbourhoods, schools.</p> <p>Methods – direct delivery of materials, briefings, presentations, workshops, webpage, videos, social media interaction (Facebook and Twitter), workshops, community-led events.</p>
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	<p>These initiatives provide environmental awareness, community building opportunities, and activities designed for environmental action.</p> <p>City infrastructure, specifically related to stormwater and flooding are wisely managed through these processes.</p> <p>Community implementation opportunities and environmental stewardship lead to stronger neighbourhoods and improved environmental conditions.</p>
Estimated City expenditures and/or in-kind	<p>City of London = No discrete budget - rather is contained as part of three water/wastewater infrastructure budgets</p> <p>Business Partners = Minor</p> <p>Community Partners = Major</p> <p style="text-align: right;"><i>continued</i></p>

7. London Subwatershed Planning	
Key Results for April 2018 – March 2019	<p>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. 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.</p> <p>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.</p> <p>The ‘One River’ Municipal Class Environmental Assessment proceeded through Stage 2 providing direction on options for the dam, management of the adjacent river shoreline and park improvements at The Forks.</p> <p>Co-hosted the creation of London’s first River Festival (named The River Talks) at the Forks & Museum London. The three-day event attracted over 400 people and included First Nations, the Arts and Social Justice topics.</p>
Next Steps	<p>Continue to guide subwatershed plans, updates and strategies as per direction contained in The London Plan.</p> <p>Assist the Stormwater Engineering Service Area with Master Drainage Plans / Dingman Creek Subwatershed Pilot Projects / One River EA.</p>
Further information	<p>Friends of the Coves</p> <p>Upper Thames River Conservation Authority</p> <p>Lower Thames River Conservation Authority</p> <p>Kettle Creek Conservation Authority</p>
Next CWC report	Update reports by individual EES project managers are planned for Spring and Summer 2019

8. Source Water Protection Program	
Website	Thames - Sydenham & Region Drinking Water Source Protection Lake Erie Source Protection Region Ausable Bayfield Maitland Valley Source Protection Region
Connections to Council's Strategic Plan	<p>Strengthening Our Community</p> <p>Building a Sustainable City</p>
Brief Description	<p>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.</p> <p>Using provincial funds, technical work was accomplished to ensure 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.</p> <p>Given regional interests in water supply and the City's location in two watersheds (Thames River and Kettle Creek), the City partners in two Regional Source Water initiatives (Thames-Sydenham Region and Lake Erie Region) and maintains an interest in a third region (Ausable Bayfield Maitland Valley).</p>
Community Engagement - levels and methods used (or to be used)	<p>Audiences – public, communities, businesses, neighbourhoods</p> <p>Methods – direct delivery of materials, briefings, presentations, workshops, webpage, social media interaction (Facebook and Twitter), workshops, community-led events, NGO-led seminars/workshops</p>
Project/Program partners	<p>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).</p> <p>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</p>
Value to Customers	<p>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.</p>
Estimated City expenditures and/or in-kind	<p>City of London = \$33,000 for Risk Management Services</p> <p>Business Partners = Major</p> <p>Community Partners = Minor</p>
Key Results for April 2018 – March 2019	<p>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 now continues utilizing Risk Management expertise at the Upper Thames River CA and education and awareness programs at the Ministry of the Environment. Conservation & Parks (MECP).</p>

continued

8. Source Water Protection Program	
Next Steps	Continued 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 2019, thereby reducing the associated risk and SWP implementation requirements.
Further information	Refer to the websites listed above
Next CWC report	Update reports are planned by Water Engineering for Summer 2019 to document the back-up, emergency well decommissioning process.

9. Thames River Clear Water Revival Initiative	
Website	Thames River Clear Water Revival
Connections to Council's Strategic Plan	Strengthening Our Community Building a Sustainable City Growing Our Economy
Brief Description	<p>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.</p> <p>London benefits from the existence of the Thames River flowing through 43 km of 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.</p> <p>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.</p> <p>Considerable interest by First Nations has resulted in four communities being actively represented on the Steering Committee.</p>
Community Engagement - levels and methods used (or to be used)	<p>Audiences – public, communities, businesses, neighbourhoods</p> <p>Methods – Direct delivery of materials, briefings, presentations, workshops, webpage, social media interaction (Facebook and Twitter), workshops, community-led events, NGO-led seminars/workshops</p>
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 expenditures and/or in-kind	<p>City of London = \$25,000 for general project support</p> <p>Business Partners = Major</p> <p>Community Partners = Minor</p>
Key Results for April 2018 – March 2019	<p>The multi-partnership Steering Committee created to represent the wide interest in the initiative informed the upper government Domestic Action Plan for Lake Erie as the Thames River is an identified source of Phosphorus.</p> <p>Representation on the committee remains constant including federal, provincial, First Nations, two CAs and the City.</p> <p style="text-align: right;"><i>continued</i></p>

9. Thames River Clear Water Revival Initiative	
Key Results for April 2018 – March 2019 (continued)	<p>The project manager has completed the creation of the Water Management Plan, and the website that helps to communicate the initiative to the wider public.</p> <p>Western University research housed at the Adelaide Wastewater Treatment Plant, has capitalized on the initiative to attract water quality funding for phosphorus reduction in our waterways.</p> <p>Additional research is planned for phosphorus removal technology, which will be housed at a City facility to assist agricultural groups in reducing phosphorus at the field level. This is a collaboration of Ontario Federations of Agriculture (OFA) and the Great Lakes Cities Initiative.</p> <p>First Nations engagement has increased given the ability of the communities to mobilize interest with their youth.</p>
Next Steps	Water Management Plan scheduled for final approval in Summer 2019
Further information	See website above and previous CWC report April 17 2018.
Next CWC report	Scheduled in Summer 2019 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	Building a Sustainable City Strengthening Our Community
Brief Description	<p>A community engagement pilot project addressing concerns about our environment, health, household finances, and community wellbeing.</p> <p>Two-way exchange of ideas between participating communities and the City (and its partners).</p> <p>Provides simple and convenient access to programs and information from the City of London and partners.</p> <p>Provides “test markets” for small-scale pilot projects to test new tools and ideas.</p>
Community Engagement - levels and methods used (or to be used)	<p>Audiences – public, communities, workplaces (new in 2018), non-profit organizations</p> <p>Methods – community champions, community meetings & events, informal one-on-one discussions, web-based tools (carbon footprint calculator provided by Project Neutral)</p>
Project/Program partners	NCFS, London Bridge Daycare Centres, Project Neutral
Value to Customers	<p>Residents within participating communities get quicker access to City and partner programs.</p> <p>City staff can test new program ideas at a small scale to reduce the risk associated with trying new ideas.</p>
Estimated City expenditures and/or in-kind	<p>City of London = \$20,000</p> <p>Business Partners = Moderate</p> <p>Community Partners = Major</p>
Key Results for April 2018 – March 2019	<p>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. City staff working on revising approach for working with neighbourhood associations.</p> <p>Developed community-scale environmental project ideas for inclusion within the Strengthening Neighbourhood Strategy's Neighbourhood Decision Making's Ideas Bank. However, none were selected in 2018.</p> <p>Working in partnership with London Bridge Daycare Centres to explore the potential for environmental outreach involving children, their parents, and employees.</p> <p>Met with Sifton Properties, who have agreed to work with City staff to explore environmental outreach opportunities at Sifton's multi-family residential locations (e.g., West 5, Berkshire). Sifton is also willing to connect City staff to other multi-family residential property owners through the London Property Management Association (LPMA).</p> <p style="text-align: right;"><i>continued</i></p>

10. Active & Green Communities	
Next Steps	<p>Work with NCFS to make greater use of their existing relationships with neighbourhood associations to identify those neighbourhoods with an interest in environmental outreach.</p> <p>Explore additional approach for Active & Green Communities with neighbourhood associations, such as, at a minimum, commitment to include community-specific environmental topics within their communication tools (e.g., newsletter, social media, or website).</p> <p>Work with Sifton Properties to develop environmental outreach activities to test at Sifton’s multi-family residential locations (e.g., West 5, Berkshire). Once activities have been delivered & evaluated, results will be presented to other multi-family residential property owners through the London Property Management Association (LPMA).</p> <p>Continue to work with London Bridge Daycare Centres to test environmental outreach involving children, their parents, and employees.</p> <p>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.</p> <p>Develop and test engaging Londoners through workplaces (i.e., Active & Green Workplaces), such as Lunch & Learn events as well as existing employer-led events. Explore delivery through Green Economy London once launched.</p> <p>Continue to work with Project Neutral to promote their carbon footprint tool to Londoners and explore opportunities for ongoing engagement with London households who make use of this tool.</p>
Further information	Program website noted above and NeighbourGood London
Next CWC report	Next Environmental Programs update report (Spring 2020)

11. London Environmental Network	
Website	London Environmental Network
Connections to Council's Strategic Plan	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 is a Strategic Advisor to the Board of Directors.
Community Engagement - levels and methods used (or to be used)	Audiences – public, community groups, neighbourhoods, schools. 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 Customers	Facilitate collaboration between environmental organizations. 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 expenditures and/or in-kind	City of London = \$5,000 (not including City Community Grant) Business Partners = Major Community Partners = Major
Key Results for April 2018 – March 2019	LEN has been working with Green Economy Canada alongside volunteers (with experience from Green Economy North in Sudbury, Sustainable Waterloo Region, and Sustainable Hamilton-Burlington) to launch Green Economy London, a target-based sustainability program for businesses in May 2019. Obtained \$200,000 in funding from the London Community Foundation to support establishment of Green Economy London, including hiring a Green Economy London Hub Manager. LEN has over 4,100 followers (almost double that of 2017) on social media and e-newsletters and promoted 245 events in 2018. LEN has seen growing attendance with the re-launched Green Drinks events, and has introduced event fees for cost recovery. Obtained not-for-profit status and formed a Board of Directors.
Next Steps	May 2019 launch of Green Economy London.
Further information	London Environmental Network
Next CWC report	Next Environmental Programs update report (Spring 2020)

12. CityGreen - Enhancing Environmental Outreach and Strengthening Community Capacity	
Website	City of London CityGreen
Connections to Council's Strategic Plan	Strengthening Our Community Building a Sustainable City Leading in Public Service
Brief Description	<p>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.</p> <p>CityGreen assists other City service areas with major community outreach activities (e.g., water conservation, London ON Bikes) and assist community groups with gaining additional exposure.</p> <p>CityGreen is also the brand name for the London Hydro bill insert that advertises London's environmental programs and special events.</p> <p>CityGreen operates throughout the year at major indoor and outdoor events in London.</p>
Community Engagement - levels and methods used (or to be used)	<p>Audiences – public, community groups, businesses, business associations, schools, neighbourhoods.</p> <p>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).</p>
Project/Program partners	City of London service areas with environmentally-related programs and activities (Environmental & Engineering Services, City Planning, Neighbourhood, Children & Fire Services and Development & Compliance)
Value to Customers	<p>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.</p> <p>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)</p>
Estimated City expenditures and/or in-kind	<p>City of London = \$30,000</p> <p>Business Partners = Minor</p> <p>Community Partners = Minor</p> <p style="text-align: right;"><i>continued</i></p>

12. CityGreen - Enhancing Environmental Outreach and Strengthening Community Capacity																															
Key Results for April 2018 – March 2019	<p>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:</p> <table border="1"> <thead> <tr> <th>Event</th> <th>Estimated Attendance</th> </tr> </thead> <tbody> <tr> <td>2018 London Celebrates Cycling</td> <td>250</td> </tr> <tr> <td>3M Sustainability Fair</td> <td>100</td> </tr> <tr> <td>Bud Gardens “Green Game”</td> <td>9,000</td> </tr> <tr> <td>Carolinian Canada’s Go Wild Grow Wild Expo</td> <td>3,000</td> </tr> <tr> <td>Civic Engagement Fair</td> <td>100</td> </tr> <tr> <td>EnviroWestern EnviroWeek</td> <td>250</td> </tr> <tr> <td>Gathering on the Green (June and August)</td> <td>3,000</td> </tr> <tr> <td>Grickle Grass Festival</td> <td>250</td> </tr> <tr> <td>Home County Festival (daytime only)</td> <td>20,000</td> </tr> <tr> <td>LHBA Lifestyle Home Show</td> <td>18,000</td> </tr> <tr> <td>Ramadan Expo</td> <td>50</td> </tr> <tr> <td>Seedy Saturday</td> <td>500</td> </tr> <tr> <td>Sunfest (daytime only)</td> <td>50,000</td> </tr> <tr> <td>The River Talks - Thames River Summit</td> <td>400</td> </tr> </tbody> </table> <p>New engagement materials designed to improve the experience and create a message that can be more easily remembered.</p> <p>Expanded Carolinian Canada’s annual regional “Go Wild Grow Wild” Green Expo to include the addition of a new ‘Green Living Zone’ where London’s (built) environmental partners and programs were highlighted.</p> <p>Successfully engaged the public and solicited their feedback at the 2018 GWGW Green Expo and 2019 Lifestyle Home Show (about 850 and 750 respondents respectively) using a low-cost, popular incentive (desk-side blue boxes).</p> <p>Tested the use of incentives to encourage Londoners to share stories through CityGreen Stories.</p> <p>Produced 6 issues of the London Hydro bill insert titled “CityGreen” that each included several environmental topics, outlined programs and provided engagement opportunities.</p>	Event	Estimated Attendance	2018 London Celebrates Cycling	250	3M Sustainability Fair	100	Bud Gardens “Green Game”	9,000	Carolinian Canada’s Go Wild Grow Wild Expo	3,000	Civic Engagement Fair	100	EnviroWestern EnviroWeek	250	Gathering on the Green (June and August)	3,000	Grickle Grass Festival	250	Home County Festival (daytime only)	20,000	LHBA Lifestyle Home Show	18,000	Ramadan Expo	50	Seedy Saturday	500	Sunfest (daytime only)	50,000	The River Talks - Thames River Summit	400
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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 2020)																														

13. London Clean & Green Program	
Website	London Clean & Green
Connections to Council's Strategic Plan	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 1 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.
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, 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, WinMar, Fanshawe College, Budweiser Gardens, Sifton Properties.
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 Community Partners = Major
Key Results for April 2018 – March 2019	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 24 years of being in the cleaning and greening business.
Next Steps	London Clean & Green, will continue to look for opportunities to expand the collaborative messaging.
Further information	Consult the website for events, locations and activities
Next CWC report	Next Environmental Programs update report (Spring 2020)

APPENDIX B

Projects, Programs and Initiatives (Activity) Linkages

Thirteen (13) 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.

Readers are encouraged to contact any of the following City staff should further details be required by calling 519-661-2489:

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Figure 1 - Inter-Connections within Key Environmental Program Activities

	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)

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	✓		✓							✓			✓
Smart Moves Transportation Master Plan	✓		✓	✓	✓							✓	
City Planning – Long-Range Planning & Sustainability	✓		✓	✓	✓	✓	✓						
Climate Change/Severe Weather Adaptation Strategy	✓	✓				✓	✓						
Corporate Asset Management Plan	✓	✓	✓			✓							
Cycling Master Plan	✓		✓	✓	✓					✓	✓	✓	✓
Flooding Matters						✓	✓			✓		✓	
Water Conservation & Efficiency	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓
Green and Healthy City (part of The London Plan)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
London Strengthening Neighbourhoods Strategy	✓		✓		✓			✓		✓	✓	✓	✓
Parks & Recreation Master Plan			✓			✓	✓		✓				✓
Regeneration Plan for community housing	✓					✓							
Resource Recovery Strategy	✓	✓								✓	✓	✓	
Smart City Strategy	✓	✓	✓	✓	✓	✓				✓	✓		
Stormwater Management						✓	✓	✓	✓	✓		✓	
Urban Forest Strategy	✓					✓	✓	✓		✓	✓	✓	✓