

--	--

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MONDAY, DECEMBER 1, 2015
FROM:	JOHN BRAAM, P.ENG MANAGING DIRECTOR - ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER
SUBJECT	FLOODING MATTERS WORK PLAN PROPOSAL

RECOMMENDATION

That on the recommendation of the Managing Director - Environmental & Engineering Services & City Engineer, the proposed Work Plan for investigation of flooding causes and recommended remedial actions **BE APPROVED.**

PREVIOUS REPORTS PERTINENT TO THIS MATTER
--

- CWC Report of 2015-10-06, Item 6, Flooding Matters, Terms of Reference
- CWC Report of 2015-07-20, Item 5, Update on Rainfall Event of June 23, 2015
- CWC Report of 2014-09-22, Item 9, Update on Rainfall Event of September 10, 2014

2015 – 19 STRATEGIC PLAN

This report and its recommendation supports the Strategic Plan under Building a Sustainable City – Strong and healthy environment, by finding new ways to help residents protect their basements from flooding.

BACKGROUND

Purpose:

The purpose of this report is to satisfy Council recommendations made at its meeting held on October 13, 2015, requiring Civic Administration to develop a Work Plan in dealing with flooding matters, specifically relating to high intensity, short duration rainfall events.

Context:

Similar to many municipalities across Southwestern Ontario, the City of London has been experiencing high intensity, short duration rainfall events. On July 20, 2015, a report was submitted to the Civic Works Committee providing information specific to this year’s June 23rd and June 27/28th significant weather events. As a result Civic Administration was directed to develop a proposed Work Plan for dealing with flooding. Further, Administration is required to report out information appropriately as the staff advances this flooding matters initiative towards completion.

--	--

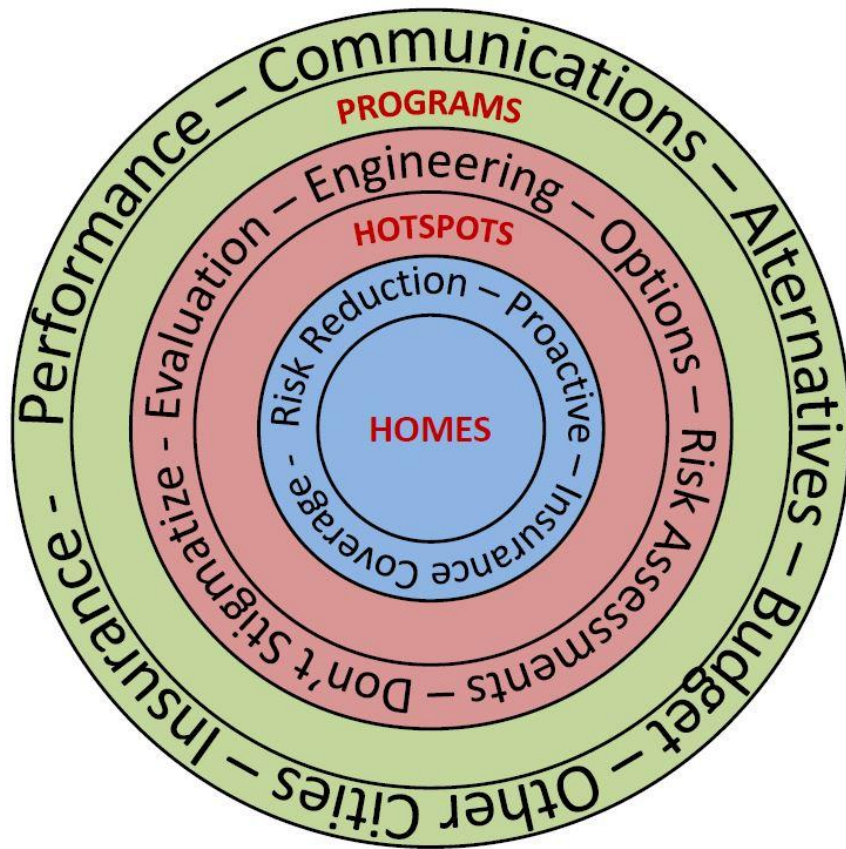
DISCUSSION

Approach to the Work Plan

The following is an illustration of the approach to the Work Plan which places a target on reducing the risk of HOMES flooding, maintenance of insurance coverage and being proactive.

Reducing the risk requires dealing with HOTSPOTS – neighbourhoods prone to flooding. Work Plan effort is on identifying these through risk assessment, evaluating their conditions and engineering solutions while not stigmatizing an area.

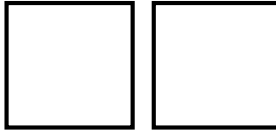
Our existing PROGRAMS applicable to HOMES and HOTSPOTS would be reviewed for their performance, consideration of alternatives by gaining an understanding for what other cities do, consulting with the insurance industry and developing better communication and budget strategies.



Work Plan Process - A Phased Approach

In order to manage the anticipated volume of data and the potential complexities associated with this initiative, the full Work Plan will be sectioned into manageable portions or 'Phases'. Only the details of Phase I have been determined at this time, as it provides the scope of next steps. Future Phases will be developed through a natural progression of this initiative. The accumulation of deliverables throughout the work term will include, but is not limited to the subject material identified in the Work Plan illustration.

This phased approach affords elected officials the opportunity to invest in this flooding matters initiative through direct discussions on the Civic Administration reports that will be periodically submitted. These will reveal outcomes of research and analyses, and make recommendations specific to guide the subsequent work plan Phase.



The following topics, associated strategies and questions will be researched under Phase I of the Work Plan, noting that at least one topic is, by necessity, extracted from each of the three planning circles shown on the Work Plan approach illustration.

Phase I Work Plan

- Homes – proactive -- insurance coverage
 - Connect with the insurance industry to gain a better understanding of their risk model.
 - Why are some residents having a difficult time maintaining their insurance?
 - What is the insurance industry's tolerance for repeat flooding incidents?
 - How might the City support their risk model to the benefit of homeowners in maintaining insurance coverage?

- Hotspots – proactive identification
 - Without stigmatizing, where are the known localized flooding areas recorded to date that are a direct result of high intensity, short duration rainfall events?
 - What are the common elements associated with known flooding locations?
 - Are there similar non-affected locations, (neighbourhoods) that exhibit similar attributes? (potential implementation of proactive strategies)
 - Has some form of engineering (i.e. modelling) been implemented to address these localized areas? Were conclusions drawn and if so, can they be applied to other localized areas, or applied city wide.
 - Can a standard risk assessment matrix be developed to study known localized flooding areas, accept and prioritize new localized flooded areas?
 - Which ones are of high priority for further analysis.

- Programs – other cities
 - What are the best strategies, methods, programs and communication tools used by others?
 - How do we compare?

- Programs – effective communication
 - Should the City establish a protocol for broadcasting potential flood warnings, independent of weather sources such as the Ministry of Environment?
 - Are there legal implications associated with such warnings?
 - Can the City do a better job communicating post severe weather event information? If so, what kind of information is important to the citizens and what forums are most effective?

Four months are anticipated to properly address the questions assigned under Phase I of the proposed Work Plan. A full report will be submitted to the Civic Works Committee in early spring to reveal the results of this initial undertaking.

Summary

The City of London is gaining a history of high intensity, short duration rainfall events. These extreme weather events not only create grief for the citizens and businesses in the City of London, leading to this review of our current mitigating processes and programs. This flooding work program is an opportunity for the Municipal Council to extend current efforts to explore the variables that factor into our response to high intensity, short duration rainfall events. The topics identified in the proposed Work Plan are a framework to guide the Working Group through this initiative to completion. The implementation of a phased approach enables Civic Administration to deliver outcomes and recommend

--	--

solutions based on research outcomes in manageable size portions (Phases), and allows Civic Works Committee and Municipal Council members to engage throughout the process as results and conclusions of the research are conveyed into future work plan phases.

There are no immediate additional operating costs associated with this initiative; however, some additional costs may be identified as progress and corresponding recommendations are made by the Working Group.

PREPARED BY:	SUBMITTED BY:
RICK PEDLOW, C.E.T. DIVISION MANAGER SEWER OPERATIONS	JOHN LUCAS, P.ENG. DIRECTOR, WATER & WASTEWATER
RECOMMENDED BY:	
JOHN BRAAM, P.ENG. MANAGING DIRECTOR ENVIRONMENTAL AND ENGINEERING SERVICES & CITY ENGINEER	