

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JULY 17, 2018
FROM:	KELLY SCHERR, P.ENG. MANAGING DIRECTOR ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	WATER AND EROSION CONTROL INFRASTRUCTURE (WECI) PROGRAM: 2018 PROVINCIALY APPROVED PROJECT FUNDING (SOLE SOURCED)

RECOMMENDATION

That, on the recommendation of the Managing Director Environmental & Engineering Services and City Engineer, the following action **BE TAKEN** with respect to City of London's contribution to infrastructure funded through the Ministry of Natural Resources and Forestry's Water and Erosion Control Infrastructure capital cost share program:

- a) The Upper Thames River Conservation Authority **BE AUTHORIZED** to carry out the following projects in concert with the City in the total amount of \$1,534,375.00, including contingency, excluding HST; noting the requirements of this provincial funding program are unique, in that only conservation authorities can apply, requiring 14.3.a) of the Procurement of Goods and Services Policy:
 - a. Dam Ice Safety Signs;
 - b. Fanshawe Dam Hoist Licensing and Refurbishment;
 - c. Fanshawe Dam Phase 5 Paint and Concrete Repairs;
 - d. Fanshawe Dam Roof Replacement; and,
 - e. West London Dyke Phase 4A Reconstruction.

- b) The financing for this work **BE APPROVED** as set out in the Sources of Financing Report attached hereto as Appendix "A";

- c) The Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this work.

PREVIOUS REPORTS PERTINENT TO THIS MATTER
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Civic Works Committee – July 17, 2017 – Water and Erosion Control Infrastructure (WECI) Program: 2017 Provincially Approved Project Funding (Sole Sourced)

Civic Works Committee – August 22, 2016 – Water and Erosion Control Infrastructure (WECI) Program: 2016 Provincially Approved Project Funding (Sole Sourced)

Civic Works Committee – February 2, 2016 – West London Dyke Master Repair Plan Municipal Class Environmental Assessment Study

Strategic Priorities and Policy Committee – January 28, 2016 – Downtown Infrastructure Planning and Coordination

Council – March 21, 2011 – UTRCA 2010 and 2011 Levies for Remediating Flood/Erosion Control, Dykes and Dam Structures within the City

2016-2019 CORPORATE STRATEGIC PLAN ALIGNMENT

The 2016-2019 Strategic Plan identifies the following objectives that relate directly to the recommendations provided by the West London Dyke Master Repair Plan EA:

- BUILDING A SUSTAINABLE CITY: 1B-Manage and improve stormwater infrastructure and services; and
- BUILDING A SUSTAINABLE CITY: 1E-Fund innovative ways to adopt to Climate Change.

BACKGROUND

Purpose

This report seeks approval to commit the City's share of projects eligible for 50% provincial capital funding through the Ministry of Natural Resource and Forestry (MNR) Water and Erosion Control Infrastructure (WECI) program.

Context

The WECI program is a MNR capital cost share program that provides funding for flood or erosion control structures such as dams and dykes. This funding can only be accessed by Conservation Authorities (CAs), but can be used for infrastructure owned by municipalities in cases where the infrastructure is maintained by the CA. Over the last 14 years, in partnership with the UTRCA, over \$10,000,000 in WECI funding has been used to repair and reconstruct City-owned infrastructure. This program contributes to public safety and natural hazard prevention at the local watershed level.

DISCUSSION

WECI Program

The WECI program provides matched funding to CAs for the major reconstruction and maintenance of flood or erosion control structures that are either owned or maintained by CAs. Because of this requirement, the City must use Clause 14.3.a) "*statutory or market based monopoly*" of its Procurement Policy to engage in this project.

The funding is provided through a prioritization process that includes existing flood and erosion control infrastructure. Projects are selected for funding by a committee made up of five CA representatives, one MNR representative, and one Conservation Ontario (CO) staff representative. There is one UTRCA staff member on this committee. The committee reviews and scores project submissions and determines the priority list of eligible projects on an annual basis.

Major projects must meet the following criteria:

1. Submissions are made by CAs.
 - The project must be for existing infrastructure. WECI funding is not for new infrastructure.

2. The Infrastructure must be CA owned or maintained.
3. The works proposed must involve an existing asset from one of the four main infrastructure categories:
 - a. Dams – these can range in size from small rural mill dams to large urban flood control structures.
 - b. Dykes – examples include those that protect urban core areas or agricultural areas, such as the West London Dykes and those near the Lake Erie shoreline.
 - c. Shoreline Erosion Protection – examples include erosion works along the Great Lakes shoreline and inland waterways and lakes.
 - d. Flood Control Channels – these typically involve river channels in urban areas and can also include diversion channels.
4. The program is a 50/50 cost share with the local municipality or other contributors with flood or erosion control infrastructure needs and must have a Council resolution or legally binding agreement to demonstrate financial commitment.
5. Projects must be completed in the fiscal year, April 1 to March 15, in which they are approved and funded.

The UTRCA and City of London have successfully received nearly \$10,000,000 in funding through this program since 2003. The most recent reconstruction of West London Dyke Phase 3, from Rogers Avenue to Carothers Avenue, was completed in 2017. This project also increased the wall height of the previously constructed Phase 1 dyke, from Queens Avenue to Rogers Avenue, by approximately 1m. This project was funded through WECl with a City commitment of \$1,800,000 as well as support from the federal government's National Disaster Mitigation Program (NDMP).

Multi-year Budget Funding

The multi-year budget includes funding for the renewal of the City of London's flood and erosion control infrastructure. The multi-year budget item "ES2474 UTRCA Remediating Flood Control Works within City Limits" provides the City's share of WECl eligible maintenance and reconstruction works with a total of \$6,100,000 over the four year period. This investment would result in \$12,200,000 in overall capital renewal works by 2020.

Project Management

UTRCA and City of London staff have worked closely to manage WECl-related projects. These projects often are located in high profile areas (West London Dyke) or within the natural heritage system (the City's various earthen dykes). As the WECl funding program provides funding directly to CAs, all project procurement and project management is the ultimate responsibility of the UTRCA project manager and the UTRCA Board of Directors. With this being the case, UTRCA has been diligent in collaborating with City staff in the delivery of the various WECl projects.

Financial Administration

As required by the WECl funding guidelines, a resolution is made by the UTRCA Board annually to demonstrate its financial commitment and willingness to complete the funded project within the WECl fiscal year (April 1 to March 15). All funding and related project billing is managed directly by the CA. As the CA is responsible for all of the administrative aspects of the project, the procurement for the study and construction contracts are made directly by the CA in accordance with its established procurement policies. The municipality is subsequently billed a 50% share of eligible costs.

Table 1 summarizes the 2018 provincially approved WECl project funding:

Table 1: 2018 Approved WECl Project Funding

Project	Full Project Amount	NDMP Funding	WECl Share	London Share
Dam Ice Safety Signs at Fanshawe Dam	\$5,000	-	\$2,500	\$2,500
Fanshawe Dam Hoist Licensing and Refurbishment	\$20,000	-	\$10,000	\$10,000
Fanshawe Dam Phase 5 Paint and Concrete Repairs	\$1,037,750	-	\$518,875	\$518,875
Fanshawe Dam Roof Replacement	\$30,000	-	\$15,000	\$15,000
West London Dyke Phase 4A Reconstruction ¹	\$2,800,000	\$1,435,000	\$377,000	\$988,000 ¹
Total	\$3,892,750	\$1,435,000	\$923,375	\$1,534,375

¹The City portion is less than 50% for this project due to additional NDMP funding in the amount of \$1,435,000. In this instance, the WECl portion is reduced to approximately \$377,000.

2018 WECl Projects

The 2018 WECl projects largely focus on repairs and maintenance at the Fanshawe Dam with some continued work to reconstruct the West London Dykes.

The Fanshawe Dam is owned by the UTRCA. It was constructed between 1950 and 1952 at a cost of \$5,000,000. At that time, the construction of the dam was funded by the Federal and Provincial governments and the UTRCA. The purpose to the dam is to assist flood control by regulating the flow of water from the upstream reservoir (Fanshawe Lake) into the downstream Thames River prior to it passing through the City. As a result, the peak flow of the river is reduced, in turn reducing the high water level of the Thames River and limiting the extent of potential flooding. The City entirely receives the benefit from this structure and, thus, are ultimately responsible for 100% of the capital costs of any repairs. The WECl program helps to offset the costs of these repairs.

The continuation of the West London Dykes Phase 4A project will extend the reconstructed section of the dyke from Carothers Avenue to south of Blackfriars Bridge.



Figure 1: West London Dykes Phase 3 (2017)

CONCLUSIONS

City staff and UTRCA staff will continue to work closely to ensure the best technical and public outcomes for each identified WECl funded project.

Both teams will continue to work together to complete the current program of approved WECl funded projects and endeavour to maximize the City of London's potential to receive future provincial funding for City-owned flood and erosion control infrastructure.

This report was prepared by Chris McIntosh, P. Eng., of the Stormwater Engineering Division.

SUBMITTED BY:	REVIEWED AND CONCURRED BY:
SHAWNA CHAMBERS, P. ENG. DIVISION MANAGER, STORMWATER ENGINEERING	SCOTT MATHERS, MPA, P. ENG. DIRECTOR, WATER AND WASTEWATER
RECOMMENDED BY:	
KELLY SCHERR, P. ENG., FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER	

July 6, 2018

Attach: Appendix 'A' – Source of Financing
Appendix 'B' – Locations Map