

<b>TO:</b>	<b>CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MAY 14, 2019</b>
<b>FROM:</b>	<b>KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL &amp; ENGINEERING SERVICES &amp; CITY ENGINEER</b>
<b>SUBJECT:</b>	<b>ONE RIVER MASTER PLAN ENVIRONMENTAL ASSESSMENT NOTICE OF COMPLETION</b>

### RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the One River Master Plan Environmental Assessment:

- (a) The preferred Alternative 3 for the One River Master Plan **BE ACCEPTED** in accordance with the Master Plan Environmental Assessment process requirements;
- (b) The preferred Alternative 2 for the decommissioning of Springbank Dam **BE ACCEPTED** in accordance with the Schedule B Municipal Class Environmental Assessment process requirements;
- (c) The preferred Alternative 2 for the Back to the River inaugural project at the Forks of the Thames **BE ACCEPTED** in accordance with the Schedule B Municipal Class Environmental Assessment process requirements;
- (d) A Notice of Completion **BE FILED** with the Municipal Clerk; and
- (e) The One River Master Plan Environmental Assessment project file **BE PLACED** on public record for a 30-day review period.

**IT BEING NOTED THAT** the pace for advancing the projects recommended through this Environmental Assessment will be addressed through existing programs and budgets and Council's decisions through the upcoming 2020-2024 Multi-year Budget process.

### PREVIOUS REPORTS PERTINENT TO THIS MATTER

Planning and Environment Committee – December 14, 2015 – Back to the River Design Competition

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

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

Civic Works Committee – February 2, 2016 – Springbank Dam

Civic Works Committee – March 8, 2016 - One River - Master Plan Environmental Assessment

Municipal Council - March 22, 2016 - One River- Master Plan Environmental Assessment: Background Information

Civic Works Committee – November 1, 2016 – One River Master Plan Environmental Assessment: Terms of Reference

Civic Works Committee – February 21, 2017 – One River Master Plan Environmental Assessment – Appointment of Consultant

Civic Works Committee – August 29, 2017 – One River Environmental Assessment Update: Technical Memorandum Stage One Work Plan and Community Consultation

## Plan

Civic Works Committee – September 26, 2017 – One River Environmental Assessment Update: Agency Advisory Committee Report

Civic Works Committee – January 9, 2018 – One River Environmental Assessment Update: Phase II Stage I Report

Civic Works Committee – March 19, 2018 – One River Environmental Assessment Update: Technical Memorandum Stage Two Work Plan

## 2015-19 STRATEGIC PLAN

The 2015 – 2019 Strategic Plan identifies these objectives under Building a Sustainable City: 1B – Managing our infrastructure; 3E -- Strong and Healthy environment through protection of the natural environment; 4E – Beautiful places and spaces through investing in making London’s riverfront beautiful and accessible for all Londoners. Under Growing our Economy: 2A – promote Urban regeneration through investing in London’s downtown as the heart of our city.

## BACKGROUND

### **Purpose**

The purpose of this report is to identify the One River EA’s preferred alternatives for the Springbank Dam decommissioning, Forks of the Thames project, and river management plan. It is also recommended that the Notice of Completion for the project be filed and to initiate the 30-day public review period for the One River Master Plan Environmental Assessment.

### **Context**

After a series of reports in 2016, Municipal Council directed that due to the broader social, economic and natural environment issues associated with the Springbank dam, Thames River Valley Corridor, and Back to the River projects, these projects would be studied together through a master plan Environmental Assessment.

In February 2017, CH2M (now Jacobs) was appointed the Consultant for the One River EA. The Notice of Commencement was published in The Londoner on July 20<sup>th</sup> and July 27<sup>th</sup> of 2017. Public consultation for Phase I and Phase II Stage I took place from July through December 2017. Council endorsed the recommendation of the Stage I report to decommission Springbank Dam in January 2018. Phase II Stage II was revised to include the Schedule B requirements for the decommissioning of Springbank Dam and for the inaugural Back to the River project at the Forks of the Thames, as well as the Master Plan requirements for the river management strategy.

The Master Plan is intended to satisfy the Problem/Opportunity statement that was approved by Municipal Council on November 8, 2016. The detailed problem/opportunity statement is as follows:

“The river that flows through London’s downtown has many names:

- Deshkan Ziibiing (known to the Anishnaabeg and Lenape of the Great Lakes);
- Kahwy`hatati (ONYOTA:KA); and,
- The Thames (John Graves Simcoe)

This river is both our inheritance and our living legacy. It is our collective responsibility to maintain and enhance this shared natural, cultural recreational and aesthetic resource. The One River Master Plan Environmental Assessment will consider the area historically influenced by the Springbank Dam and will provide a

plan that coordinates critical infrastructure projects in ways that improve the overall health of the river, identifies and creates an understanding of potential impacts these projects may have on downstream communities, species at risk and/or endangered species and where possible avoids them and respects the vision of Back to the River's "The Ribbon of the Thames" concept plan. This study, in the context of many other ongoing initiatives, will preserve for future generations this valuable resource and allow people of all abilities to enjoy and access this designated Canadian Heritage River."

## DISCUSSION

### Summary of Consultation

Consultation is a pivotal part of the Master Plan EA process. As such, the project team utilized several methods to solicit input from the public, key stakeholders, and Indigenous, First Nations, and Métis communities.

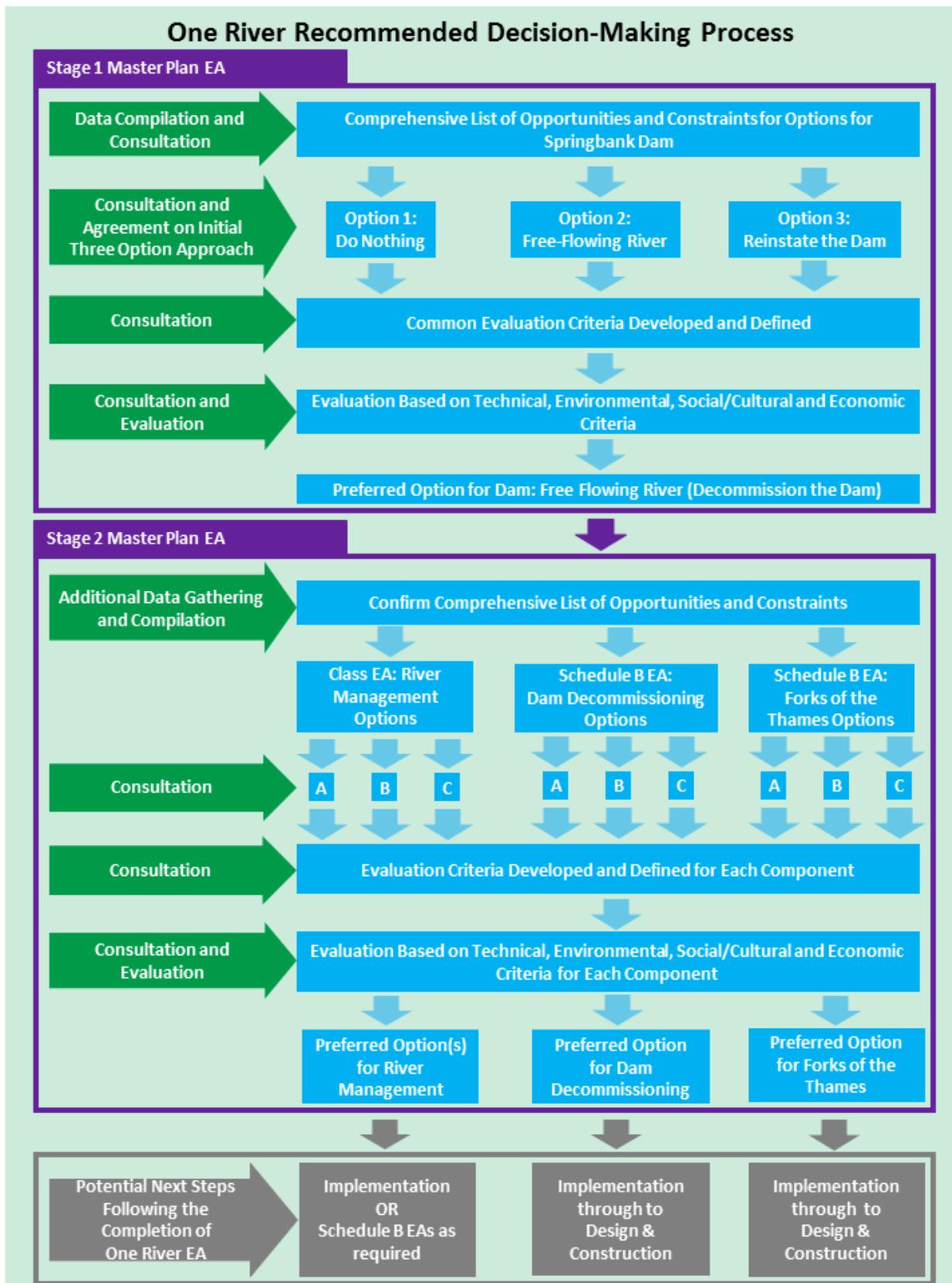
For Stage I, early consultation started in July 2017 to introduce the One River Master Plan EA to the community and direct people to the website to learn more about the EA and complete the survey on river use. Meetings were held with key stakeholders throughout August and September 2017. Public Information Centres were held in October 2017 to solicit feedback on the problem/opportunity statement and the preferred option for Springbank Dam. An additional Public Information Centre was held at Chippewas of the Thames First Nation, with Muncee-Delaware and Oneida Nations also invited.

For Stage II, a Public Information Centre was held in June 2018 to solicit ideas for the three aspects of the project – the decommissioning of the dam, the Forks of the Thames, and the river management strategies. A duplicate meeting was held at Oneida First Nation. A second Public Information Centre was held in October 2018 to present how the study work and public input had shaped preferred alternatives. This information was also presented at Chippewas of the Thames First Nation.

The full list of consultation activities and meetings can be found in Section 8 of the EA report.

### One River Decision-Making Process

Stage I of the One River Environmental Assessment considered the fate of the Springbank Dam and selected a free-flowing river as the preferred option. Upon Council approval of this option Stage II commenced and was completed in three components: development of Master Plan Class EA concepts for river improvements, completion of Schedule B environmental assessment requirements for the decommissioning of Springbank Dam, and completion of Schedule B environmental assessment requirements for the selected design components at the Forks of the Thames. Figure 1, below, illustrates the decision-making process for the One River EA.



**Figure 1: One River Decision-Making Process**

The entire One River process has now concluded and is ready for final consideration by Council and the start of the 30-day public notice period. It is anticipated that the notice period would be completed in late June. Completing the EA process for the One River projects will provide Council a completed Environmental Assessment that does not bind future decisions of Council, can be amended if necessary, and provides flexibility in future project implementation. The following section summarize the preferred alternative for each of the three project components.

### **Preferred Alternative for River Management Strategy**

The river management strategy seeks to balance human interaction with the natural environment with protection of that environment. The alternatives are defined by levels of access to the river and the included environmental management components.

**Table 1: Score Summary by Category – River Management**

<b>Criteria Category</b>	<b>1: Existing Conditions</b>	<b>2: Naturalized River Corridor</b>	<b>3: Strategic Use and Access</b>	<b>4: Enhanced Use and Access</b>
Natural Environment	2.7	4.5	3.8	2.2
Social/Cultural Environment	1.9	3.1	4.3	4.4
Technical and Economic	3.3	3.4	3.4	2.9
<b>Total Score</b>	<b>2.6</b>	<b>3.7</b>	<b>3.8</b>	<b>3.1</b>

The preferred alternative is Alternative 3, strategic use and access to the river corridor. Specific recommendations include:

- Bank improvements along Harris Park
- Invasive species management
- Erosion remediation at identified sites
- Upgrade of storm sewer outfalls that have been left well above normal water levels and are contributing to erosion
- Removal or remediation of boat launch near Mud Creek
- Improve safety and condition of existing access points including pathways, fishing and boat access, and lookouts.

Recommended projects are listed in detail in Section 6 of the EA report, as well as the associated Class EA Schedule. Many projects fall under Schedule A and may proceed on the basis of this Master Plan, while other projects will require additional Schedule B or C Environmental Assessment work.

The pace by which Council wishes to advance these multiple projects is not the subject of this report, and will be addressed through existing programs and budgets and the upcoming multi-year budget.

### **Preferred Alternative for Decommissioning of Springbank Dam**

Upon the conclusion of Stage I of the One River EA, Council approved the decommissioning of the Springbank Dam. The purpose of Stage II of the EA was to establish how the dam would be decommissioned and considered three alternatives: do nothing (leave as-is), partial removal, and full removal. Partial removal would include removing components such as hydraulics, electronics, and potentially the steel gates that currently sit on the bed of the river. Full removal would also remove the concrete superstructure. Both removal options include the restoration of the riverbank in the vicinity of the dam.

**Table 2: Score Summary by Category – Springbank Dam**

<b>Criteria Category</b>	<b>1: Do Nothing</b>	<b>2: Partial Removal</b>	<b>3: Full Removal</b>
Natural Environment	2.8	3.7	4.8
Social/Cultural Environment	3.0	4.1	3.9
Technical and Economic	4.3	4.2	2.7
<b>Total</b>	<b>3.4</b>	<b>4.0</b>	<b>3.8</b>

As indicated by the scores above, partial removal is the preferred alternative for the decommissioning of Springbank Dam. The long term environmental benefits of full removal are clear; however, the concrete superstructure has significant anticipated useful life remaining. It may be of benefit to the City to repurpose this structure to utilize

the remaining asset value. The dam can be rendered unusable for retaining water without removal of the full structure. Section 9 of the attached EA report recommends that detailed design be initiated and include maintenance of the concrete structure, removal of hydraulic equipment, gates, and control room. Improvements to address dam structure stability, an ongoing preventative maintenance and safety inspection program, shoreline remediation, and habitat improvement are also included.

The Schedule B EA allows for flexibility regarding the future use of the dam concrete superstructure. Additional design and improvements would be required to accommodate public access to the dam. The Master Plan EA recognizes that in the long term the concrete will reach the end of its useful life and it is anticipated that the dam structure would be fully removed at that time.

### **Preferred Alternative for Back to the River: Forks of the Thames**

Back to the River is an initiative in partnership with London Community Foundation and the Upper Thames River Conservation Authority that aims to revitalize a reach of the river within the City's Core Area. An international design competition was won by Civitas for their Ribbon of the Thames vision. The inaugural project is designed to provide greater access and programming opportunities at the Forks of the Thames. It includes terracing, seat walls, a boardwalk connected to existing pedestrian infrastructure, amphitheatre, elevated lookout over the Thames River and shoreline stabilization. .

The evaluation of alternatives for the Forks of the Thames was completed by considering the original competition winning design as well as alternatives that were variations of that design. Each were compared against the baseline existing condition, which is the "Do Nothing" alternative. The alternatives for the walkway were evaluated separately from the alternatives for the terracing. Hardscape and softscape terracing was evaluated. The primary difference between the two alternatives is that softscape terraces have more planters, greenery, and "soft" areas, whereas hardscape terraces are predominantly hard materials such as stone and concrete.

The original design by Civitas that won the Back to the River competition featured a walkway supported by piers in the Thames River. The EA also considered a suspended walkway, extending Kensington Bridge to provide a lookout area, and a land based walkway that does not extend as far over the river. Renderings of each of the alternatives, as well as the terrace alternatives, can be seen in Section 5 of the EA report.

**Table 3:** Score Summary by Category – Forks of the Thames

<b>Criteria Category</b>	<b>Natural Environment</b>	<b>Social/Cultural Environment</b>	<b>Technical and Economic</b>	<b>Total Score</b>
Do Nothing	2.7	2.3	3.7	2.9
1: Walkway with Piers in River	1.7	3.6	2.0	2.4
<b>2: Suspended Walkway</b>	2.7	4.0	2.7	<b>3.1</b>
3: Bridge Extension	3.0	2.9	2.2	2.7
4: Land Based Walkway	2.7	3.1	2.8	2.9
1: Terrace - Hardscape	2.0	4.1	2.3	2.8
<b>2: Terrace - Softscape</b>	3.2	4.0	3.1	<b>3.4</b>

The preferred alternative, the suspended walkway with softscape terraces (Alternative 2), includes a walkway suspended over the river at the Forks, providing a scenic view of all three branches of the river. The double suspension support frames views of both the river and the city. Amphitheatre event seating faces the prow of the ribbon which can be used as a stage. The terraces that slope towards the river provide public gathering space. There is also some naturalization of a portion of shoreline within Ivey Park as well as boat dock.

### **Environmental Impact Study**

A River Characterization report, Springbank Dam Environmental Impact Study (EIS) and Forks of the Thames EIS were completed to satisfy the requirements of the Master Plan and Schedule B EAs. These documents describe the natural heritage features within the study areas and identify potential impacts the preferred alternatives may have. The EIS recommends strategies to avoid or mitigate these potential impacts. Specific recommendations for mitigation of impacts during the construction and post-construction phase include:

- Mitigate effects on aquatic and terrestrial habitats by removing trees outside the breeding bird window and restrict in-water works to the allowable window (July through March)
- Construction monitoring, long-term monitoring, compensation plans, and adaptive management plans to be developed during detailed design phase
- Take preventative measures during construction to reduce disturbance and mortality of wildlife by marking habitat, limiting on-site traffic, and installing wildlife exclusion fencing

A complete summary of the recommendations is available in Section 9 of the EA report. The River Characterization study, Springbank Dam EIS, and Forks of the Thames EIS can be found in appendices A-1, A-5, and A-4 respectively.

### **Next Steps**

Following completion of the Schedule B EA, the decommissioning of Springbank Dam can move into detailed design and construction. The EA estimates this work will cost between \$1,000,000 and \$4,000,000. There is currently \$3.48 million available in ES3068 which includes receipt of the final legal settlement from 2015. Some of the work in this estimate is to address erosion and bank stabilization and could be potentially funded from the wastewater capital budget.

Upon completion of the Master Plan there are several projects in the river management plan that can be implemented subject to Council approval and budget allocation. These projects will be guided by the Implementation Plan in Section 7 of the attached EA report. Thirteen of these projects are included in the proposed 2020-2023 Strategic Plan and are related to shoreline restoration and ecological enhancements.

The completion of the Schedule B EA for the Forks of the Thames allows that project to proceed to detailed design, pending Council endorsement of the project. London Community Foundation has private donors that have committed to contribute \$2,000,000 to the walkway lookout portion of the Forks of the Thames project.

**Table 4: Financial Summary – Forks of the Thames**

	PD1215	Wastewater Capital Budget	Earmarked in Economic Development Reserve Fund	LCF	Cost Estimate	Funding Gap
Forks of the Thames	\$486,643	\$763,358	\$5,000,000	\$2,000,000	\$12,403,400	\$4,153,399

This project is part of the larger Back to the River initiative, which is included in Council's 2019-2023 Strategic Plan. With this environmental assessment completed for the inaugural Back to the River project at the Forks of the Thames, Council can consider the funding gap and make decisions on advancing the project through the 2020-2023 Multi-year budget process. A business case for Council's consideration will be provided, through the budget process, accordingly.

<b>CONCLUSION</b>
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The attached One River Master Plan Environmental Assessment Report provides a comprehensive review of the options for river management strategies, the decommissioning of Springbank Dam, and for the Forks of the Thames. As such, it is the recommendation of staff that the preferred options be adopted and that the Notice of Completion for the One River Master Plan Environmental Assessment be issued.

This report was prepared by Ashley Rammeloo, MMSc., P.Eng., Division Manager, Engineering.

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Attach: Appendix 'A' – One River Master Plan Environmental Assessment Executive Summary

cc. S. Stafford, D. Hsia, A. Macpherson