

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JANUARY 9, 2018
FROM:	KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	ONE RIVER ENVIRONMENTAL ASSESSMENT UPDATE: PHASE II STAGE I REPORT

RECOMMENDATION

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

- (a) The attached One River Master Plan Environmental Assessment Phase II Stage I Report **BE RECEIVED**; and
- (b) The recommended option to decommission the Springbank Dam **BE APPROVED**.

PREVIOUS REPORTS PERTINENT TO THIS MATTER
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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

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 update members of Council on the One River Master Plan Environmental Assessment (EA) process and seek approval of the preferred option for the Springbank Dam. The Executive Summary of the One River Master Plan Environmental Assessment Phase II Stage I Report is attached. The full report is available at getinvolved.london.ca/OneRiver.

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 order to provide a clearer process for the public, the Environmental Assessment was further split into phases. First the question about the future function of the Springbank Dam would be answered. River management strategies would then be developed that were appropriate in the context of the decision on the dam.

In February 2017, CH2M was appointed the consultant for the One River EA. The Notice of Commencement was published in The Londoner on July 20 and July 27 of 2017. Public consultation for Phase I and Phase II Stage I took place from July through December 2017.

DISCUSSION

Summary of Consultation

Consultation is a critical component 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. Prior to commencing the EA process, a Terms of Reference was developed for the One River EA. Staff engaged in a series of meetings with all of the key agencies and with the interested First Nations communities to discuss the Terms of Reference document. The final Council approved Terms of Reference provided a high-level road map and engagement strategy for the One River Environmental Assessment.

Community consultation began in July 2017 with a series of pop-up events, the goal being to introduce the One River Master Plan EA to the community and direct people to the website to learn more about the EA. These pop-up events also included an opportunity for the public to complete a survey with questions related to how the residents interact with the river. Small group meetings were held with key stakeholders throughout August and September 2017. Two Public Information Centres were held in October 2017 to solicit feedback on the problem/opportunity statement and the preferred option for Springbank Dam. A community meeting was held at Chippewas of the Thames First Nation on December 7 with attendees from Chippewas of the Thames First Nation, Muncee-Delaware and Oneida Nations. The full list of consultation activities and meetings can be found in Section 7 of the attached EA report.

Problem/Opportunity Statement

Through the aforementioned consultation process, the project team solicited feedback on 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, identify and create an understanding of potential impacts these projects may have on downstream communities, species at risk and/or endangered species, and where possible, avoid them and respect 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 this valuable resource for future generations and allow people of all abilities to enjoy and access this designated Canadian Heritage River."

The majority of respondents indicated that nothing had been missed in the above problem/opportunity statement. The responses received are summarized in Section 7 of the attached EA report.

Options Considered for Springbank Dam

An essential part of Environmental Assessment process is the consideration of various options to arrive at the preferred solution. The options considered for the Springbank Dam are as follows.

Option 1: Do nothing. The EA process requires the consideration of a "do nothing" alternative. Under this option the dam would be kept in its current condition.

Option 2: Free-flowing river. The dam would be decommissioned and no longer provide a water retention function. The extent to which components are removed or repurposed would be determined during the second phase of the EA, via the river management strategies.

Option 3: Reinstating the dam. The dam would be repaired or reconstructed to facilitate higher water levels for recreation.

Engagement Survey Results

A survey regarding the PIC material and the options for Springbank Dam was made available at the PIC and online for one week following the meetings. The majority of respondents felt that the information presented at the PIC was clear and useful, and that the consultation steps taken to date were sufficient. Of those that completed the survey, 70% of respondents supported unobstructed river options (Option 1 Do Nothing and Option 2 Free-Flowing River), with only 24% of respondents in support of reinstating the dam (Option 3 Reinstating the dam). The remaining 6% were in favour of a combination of options or did not provide a response. First Nations received the same survey at a PIC held at Chippewas of the Thames First Nation, which Oneida and Munsee-Delaware Nations were also invited to attend. Of those that completed the survey, 75% of respondents were in support of Option 2, 8% were in support of Option 3, and 17% did not provide a response.

Evaluation Categories and Criteria

The EA process for the selection of a preferred option is meant to capture a wide range of criteria that provide the opportunity to examine the impact of each of the options on the issues identified through the problem/opportunity statement. The criteria for Springbank Dam were developed through consultation with project stakeholders, the general public, and engagement with First Nations. The criteria cover the range of potential changes from what is considered the baseline condition, which is the existing conditions in the river within the study area, to the current condition of the dam. The

baseline condition was established through the examination of various databases on water quality and the ecological environment, consultation and engagement, and field studies.

The three categories of criteria represent potential impacts on the natural environment, the social/cultural environment, and technical/economic considerations.

The criteria for the natural environment category include water quality, species at risk—terrestrial and aquatic habitat—as well as geomorphology (slope and river bottom stability) and groundwater and surface water interactions.

The criteria for the social/cultural category include various forms of recreation, public health and safety, urban revitalization, First Nations concerns, cultural heritage, and so forth.

Technical and economic considerations include constructability, approvability (the ability to obtain required permits and approvals), operations and maintenance, relative capital costs, flood hazard, carbon footprint, and compatibility with existing and planned infrastructure projects.

Further detail on each of the criteria and how they are rated to measure impacts can be found in Section 4 of the EA report.

Evaluation of Options

The detailed evaluation matrix is provided in Appendix F of the report. Table 1 below provides a summary of the scores. This table appears as Table 6 in Section 5.4 of the EA report. A summary table of the evaluation of each option is included below.

Table 1: Score Summary by Category

Criteria Category	Option 1: Do Nothing	Option 2: Free Flowing River	Option 3: Reinstate Dam
Natural Environment	3.0	4.5	1.3
Social/Cultural Environment	2.1	4.3	4.1
Technical and Economic	3.7	3.1	2.1
Total	8.8	12.0	7.6

Option 2, free-flowing river, ranked first in its ability to provide a benefit to the natural environment. It has the potential to improve water quality, aquatic and terrestrial habitats, and protect and enhance species a risk.

Options 2 and 3, free-flowing river and reinstate the dam respectively, have similar ratings. Each of these options have potential to maintain and enhance social and cultural resources in the study area, albeit in different ways.

For the technical and economic factors, Option 1, Do Nothing, rates highest as it is the easiest to implement with the least costs. Option 3 would be the most challenging to implement, in large part due to the anticipated difficulties in receiving permits and approvals.

Based on the overall assessment, Option 2 - Free-Flowing River rates the highest as it provides the most benefits and best meets the objectives of the problem/opportunity statement to “maintain and enhance this shared natural, cultural, recreational and aesthetic resource” and “preserve for future generations this valuable resource and

allow people of all abilities to enjoy and access this designated Canadian Heritage River”.

Next Steps

Subject to Council approval of this report, the One River EA project will move ahead as three separate work streams to be completed in parallel. The Stage II Work Plan Technical Memorandum will be brought forward for Council approval in Q1-2018 and will provide complete details on the major One River EA project tasks moving forward. The following sections describe several highlights of the upcoming process.

One River EA: Forks of the Thames

The One River EA Forks of the Thames will consider all aspects proposed in “The Ribbon of the Thames” Plan in the areas described as “Harris Park”, “Bridgetown Banks” and “The Forks”. “The Ribbon of the Thames” submission was endorsed by Council as the long-range concept plan for further enhancement of the Thames Valley Corridor between Oxford Street, Wharnccliffe Road and Adelaide Street South.

One River EA: River Enhancements

Second, the One River Master Plan EA will recommend river enhancement and improvements based on the adoption of the preferred option for Springbank Dam and the ecological and hydro-geomorphological studies undertaken, and the public amenities suggested during the first phase of the EA process. This will include consideration of the following types of projects:

- Canoe and kayak launch locations,
- Improvements to existing public amenity/look-out spaces,
- Natural heritage, stewardship and protection projects, and
- Erosion improvements.

One River EA: Springbank Dam Decommissioning

The One River EA: Springbank Dam Decommissioning will provide a recommendation on the decommissioning of the Springbank Dam. This process will include a structural analysis of the dam and an evaluation of the environmental impacts of various decommissioning options and permitting requirements. Based on this analysis opportunities to repurpose some aspects of the dam will also be considered.

First Nations Connections

Throughout the next stage of the One River EA the Project Team will continue to engage Indigenous, First Nations, and Métis communities. The Project Team would like to discuss with the communities opportunities to include First Nations art, commemorative signage, and/or the traditional uses of the river in the planning and design of future One River EA projects.

Quick Start Work

Opportunities to initiate work in the short term will also be discussed in the Q1 2018 work plan. This work could include beginning the process of removing invasive species from the area impacted by the removal of the dam.

CONCLUSION

The attached One River Master Plan Environmental Assessment Phase II Stage I Report provides a comprehensive review of the options for the Springbank Dam. The

evaluation clearly demonstrates Option 2, decommission the dam, as the preferred option. It is the recommendation of staff that the preferred option be adopted and Springbank Dam be decommissioned, and that the One River Master Plan Environmental Assessment proceed to Phase II Stage II.

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

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Attach: Appendix 'A' – One River Environmental Assessment Phase II Stage I Report Executive Summary

cc. J. Fleming, S. Stafford, D. Hsia