

Appendix 'B'

One River Master Plan Environmental Assessment: Stage 2 Approach

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1.0 Purpose

The purpose of this Technical Memorandum (TM) is to present the approach for completing the One River Master Plan Environmental Assessment (EA) in 2018. In particular, the approach for completing the EA components for Stage 2 of the EA which focus on the Master Plan requirements for the Thames River Management Strategy, the Schedule “B” EA requirements for the Forks of the Thames which focuses on the “Back to the River” elements, and the Schedule “B” EA requirements which will examine the options for the decommissioning of Springbank Dam.

2.0 Background

2.1 Purpose of the One River Master Plan

The overall purpose of the One River Master Plan EA is to develop a comprehensive plan, through engagement with First Nations and Métis, and in consultation with the public, and agency stakeholders, for implementing various projects within the One River study area that are being considered within of the overall Master Plan. These projects represent both infrastructure needs and the community’s recreational and ecological vision for the Thames River in the City.

The One River Master Plan EA is being carried out in two Stages. Stage 1 of the Master Plan EA was completed in January 2018 with the selection of the preferred option for the Springbank Dam. The preferred option was to restore a free-flowing river by decommissioning the dam. Stage 2 of the One River Master Plan EA will include:

- Development of Master Plan Class EA concepts for river improvements that will form part of a long-term Thames River Management Strategy.
- Completion of Schedule “B” EA requirements for the selection of the preferred option for decommissioning the dam.
- Completion of Schedule “B” EA requirements for the selection of the preferred option for the “Forks of the Thames” with a focus on the “Back to the River” design elements.

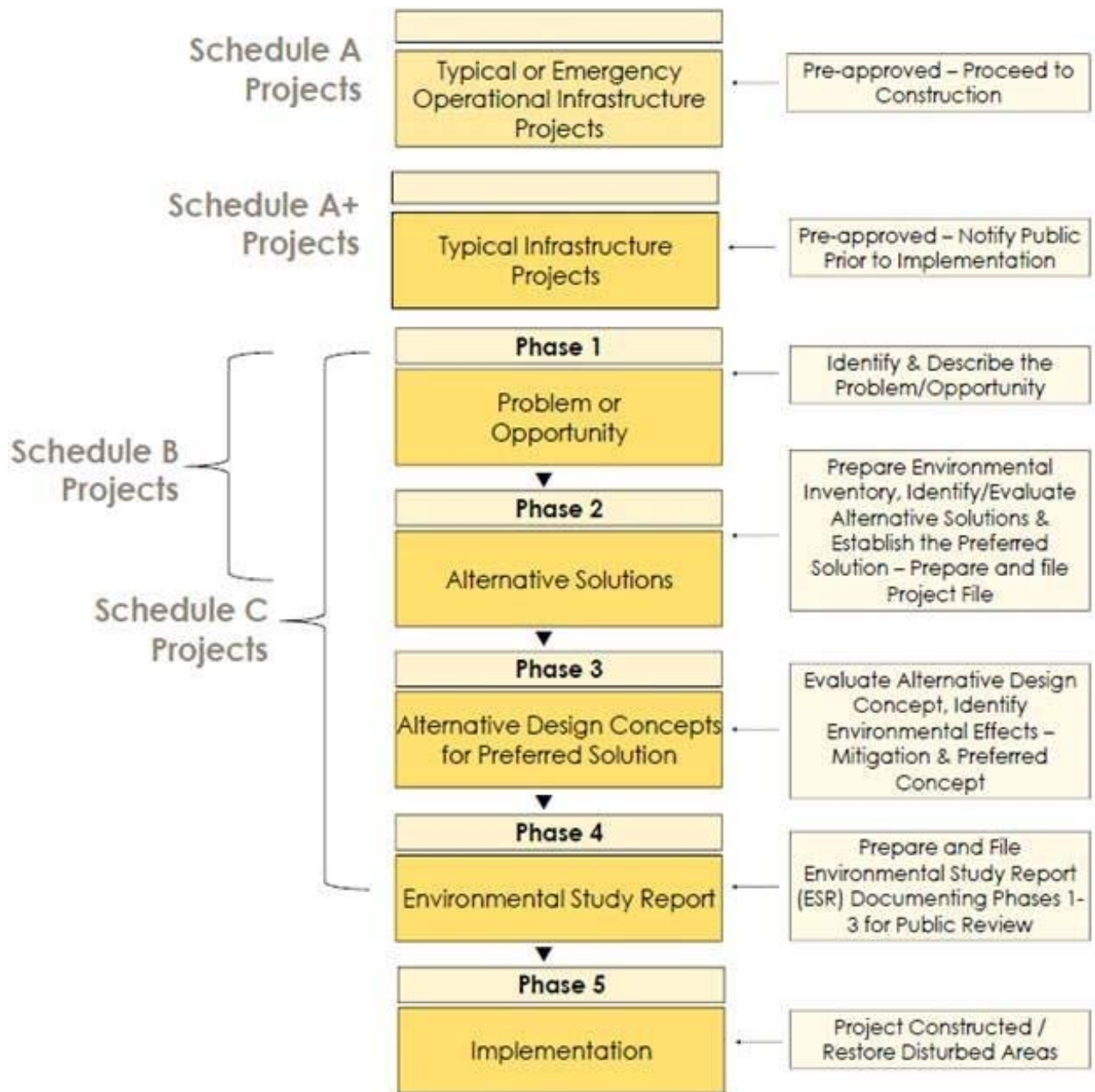
As part of the EA process, the results of the One River EA field investigations, public participation, stakeholder discussions, First Nations engagement and findings from other studies, plans, and projects will be taken into consideration in order to select preferred options for Stage 2 on the basis of their net social/cultural, environmental, technical, and economic impacts. Key amongst these other studies, plans, and projects to be incorporated into the evaluation process are The London Plan which has identified the vision for the Thames Valley Corridor, and the Thames Valley Corridor Plan (TVCP) which includes recommendations that relate to the improvement of the riverfront’s environment and accessibility.

2.2 Municipal Class Environmental Assessment

The Ontario Environmental Assessment Act allows municipalities to meet the requirements of the Act either through “Individual” EAs or approved categories of “Class” EAs. Projects implemented to protect and enhance the Thames River will meet the EA Act requirements by following the requirements outlined in the MEA’s Municipal Class EA document (as amended in 2007 and 2011, and 2015). The MEA process is illustrated in Figure 2.1, and identifies project Schedules (i.e. A, A+, B and C) based on their potential impacts.

The Municipal Class EA is not only applicable for Master Plans that involve considering infrastructure systems or groups of related projects, but also for individual projects that require Schedule “B” project level investigation as is the case with One River.

Figure 2.1: Municipal Class Environmental Assessment



3.0 One River Master Plan EA Process

3.1 Overview of EA Process

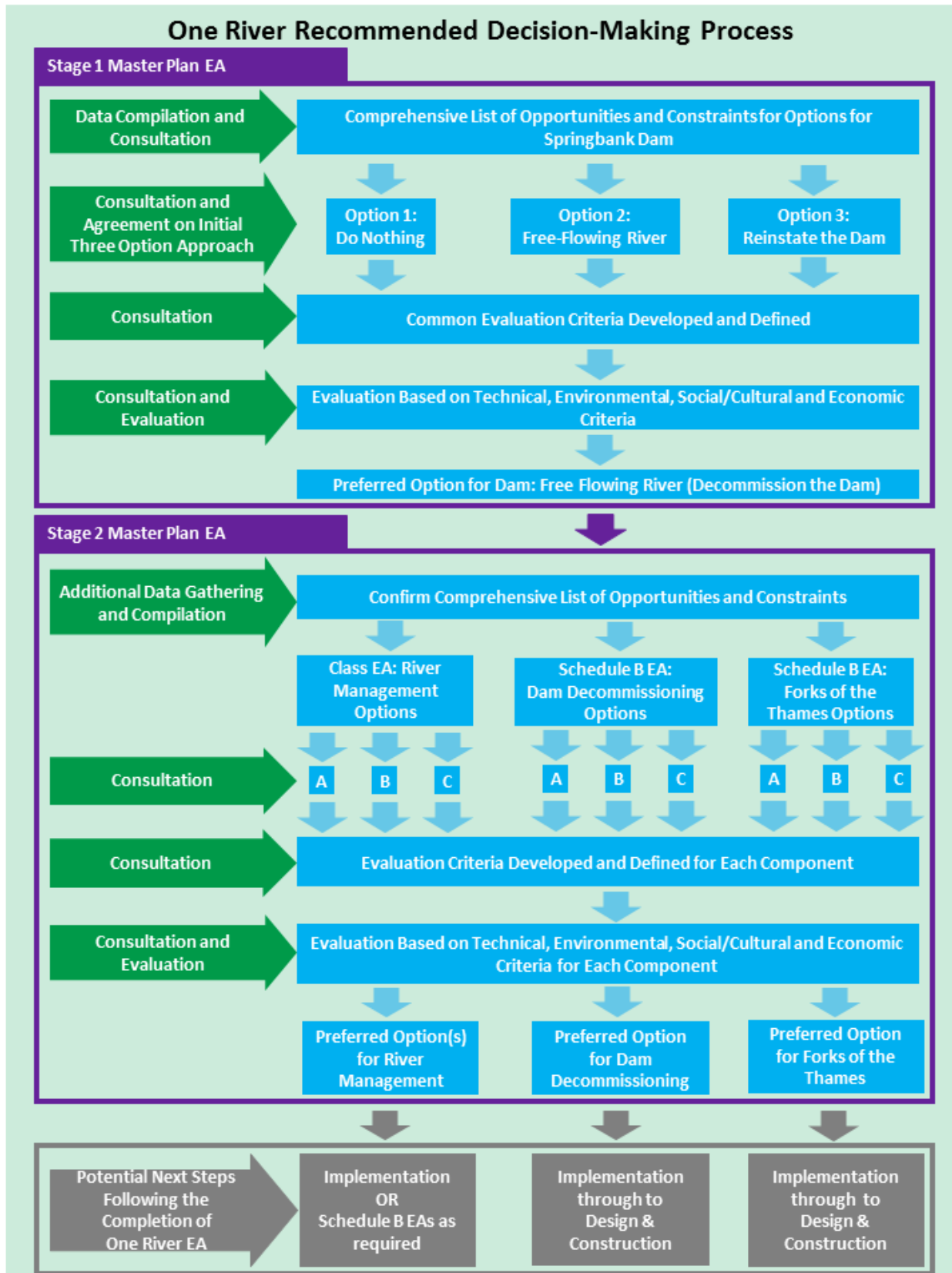
Phase 1 of the Master Plan EA process includes the collection and review of background information and the confirmation of the problem opportunity /problem definition, Phase 2 of the Master Plan EA process includes the development and assessment of alternatives and the selection of the preferred strategy through a comprehensive evaluation process. The development and assessment of alternatives and the selection of the preferred strategy for the various components of the One River EA are being carried out in the following two stages:

- Stage 1 (**completed**): The selection of the option for Springbank Dam is the determining factor in the identification and evaluation of the additional river management strategies in Stage 2. These Stage 2 strategies include concepts for overall river improvements that will form part of a long-term Thames River Management Strategy, the plan for decommissioning the dam and the plan for developing the “Forks of the Thames”. It was therefore necessary to determine the preferred option for the dam first so that the dam option selected can inform the decision-making process on the river management strategies.
- Stage 2: Now that the option for the Springbank Dam has been selected, alternative strategies for river management, which consist of different types of projects related to infrastructure and

river improvements, will be developed and assessed. These include the Master Plan Class EA river improvements as well as the identified Schedule “B” level projects. A preferred and integrated strategy for each of these three components of the project will be selected based on environmental, social/cultural, technical and cost criteria.

Figure 3.1 illustrates the two Stages of the One River Master Plan EA approach. At key milestones, project details will be provided to Council for their guidance or approval. Details of the process are described in more detail in the following sections.

Figure 3.1: One River Recommended Decision-Making Process



3.2 Establishing Environment Conditions

To assess the Stage 2 alternatives, the existing conditions in the study area must be identified and the impacts of alternatives on existing conditions must be determined analysis but there are additional site specific efforts required to fulfill the Schedule “B” requirements for the evaluation of the dam decommissioning options and the “Forks of the Thames” options.

In order to assess Springbank Dam decommissioning options, “Forks of the Thames” options and River Management strategies, the impacts on the natural, social and cultural environment as well as the technical implications and costs of the options and strategies must be evaluated. The findings of the

existing conditions effort conducted out in Stage 1 will be carried forward to Stage 2 but the level of information being collected becomes more detailed as the Phase 2 evaluation proceeds for the river management options and for the Schedule “B” components of the effort. To assess the River Management strategies and the Schedule “B” components, more detailed inventories and evaluations including river hydraulics, will be undertaken to better understand the impacts on the social, cultural, and natural environment in the area of Springbank Dam and the Forks of the Thames River. Detailed site-specific field investigations will be undertaken on individual projects as identified in the detailed Stage 2 Work Plan.

It should be noted that the level of detail for the environmental program will be sufficient to meet the City’s Environmental Impact Study (EIS) and Subject Lands Status Report (SLSR) requirements for Schedule “B” projects.

3.3 Consultation and Engagement

Consultation and engagement is an integral part of the Master Plan process and various methods will be used to solicit input from various stakeholders, the public and First Nations and Métis. These are described below.

3.3.1 Stakeholder Consultation

Stakeholder meetings were held in Stage 2 to solicit input on various river uses and options for continued recreational opportunities to continue on the Thames River. Additional input from these stakeholders will be gathered through correspondence and meetings were required.

3.3.2 Public Consultation

Public consultation in Stage 2 will include Public Information Centres (PICs) and the continuation of the City’s online communications platform that was very successful in soliciting input and communicating to the public in Stage 1. This will provide more opportunities to receive continued feedback from members of the public through the use of short, electronic surveys.

3.3.3 First Nation and Métis Engagement

First Nations and Métis input is key to Master Plan success. As part of the scope of work for Stage 1 of the EA, the goal was to have early and continuous input from the First Nations on the problem definition, alternatives, evaluation criteria and the overall preferred strategy. During Stage 1, all First Nations in the Study Area were contacted to provide them with project information and solicit feedback. Stage 1 also included a First Nations PIC. The City recognizes the importance of continuing engagement throughout the process, and being proactive in seeking their input. A second and third First Nations PIC is planned for Stage 2.

3.3.4 Steering Committee Meetings

The Internal Steering Committee is comprised of City staff and is responsible for the business issues associated with the project and for providing guidance and support to the sponsor, project manager and project team. The Steering Committee consists of staff who are representative of the business area(s) and have a direct, vested interest in realizing the project’s deliverables and objectives. Steering Committee meetings will be continued in Stage 2.

3.3.5 Agency Advisory Committee Meetings

An Agency Advisory Committee was formed in Stage 1 to provide guidance on regulatory processes and issues that may arise as the project progresses. These agencies include the MNRF, MOECC, UTRCA, LTRCA and DFO. The intent of the Agency meetings in Stage 1 was to determine the issues and challenges around permitting and approvals for the dam alternatives. In Stage 2, continued consultation with agencies for infrastructure and river management options will continue.

3.4 Integration of Existing River Management Planning

3.4.1 “Forks of the Thames”, Back to the River Design Integration

The Back to the River “Ribbon of the Thames” award-winning design incorporates a number of elements that support a River vision that has been called bold and exciting. It focuses on bringing people back to the River to enjoy a significant cultural and heritage resource and engage in activities that reflect the River’s beauty and cultural significance. Development of the preferred option for the “Forks of the Thames” will be carried out in Stage 2 as a Schedule “B” component of the One River EA. Coordination will be done with the Ribbon of the Thames Civitas/Stantec team on how the design elements of Back to the River can be integrated into the EA evaluation.

3.4.2 TVCP Integration

The City has developed a corridor based plan for the Thames River that looks at the multifunctional role of the river corridor. Recommendations from that plan will be considered and integrated into the EA process.

3.4.3 Official Plan Integration

As required by the Planning Act, all municipal works shall comply with the City’s Official Plan (OP). Proposed projects under this EA will be reviewed against all OP policies.

4.0 Schedule for Stage 2

The approximate schedule for major deliverables and consultation activities that are part of Stage 2 are illustrated in Table 4.1.

Table 4.1: Stage 2 Schedule

Task/Deliverable	February	March	April	May	June	July	August	September	October
Final Work Plan Approval									
Short List of Alternatives									
First Nations PIC #1									
Public PIC #1									
Modelling Report									
Natural Environment Study Reports									
Draft Implementation Plan									
Draft Master Plan									
First Nations PIC #2									
Public PIC #2									
Second Draft Master Plan									
30 Day Review Period									
Final Master Plan									

5.0 Next Steps

The Stage 2 assessment of River Management strategies will be a more detailed evaluation of various requirements for the specific works identified in this memorandum. Development of more detailed environmental conditions will begin for the Schedule “B” project areas and integration of the “Back to the River” design for the “Forks of the Thames” project area will begin through discussions with the Civitas/Stantec design team. The existing Thames River model will be refined to provide the hydraulic details necessary to assess the project works.

Consultation and engagement activities will be initiated to provide input into Stage 2 alternatives development. In Stage 2, these alternatives for river management will be evaluated and criteria for this evaluation process will also be established as drafted in Table 5.1. The criteria will be based on consultation with the City, and in consideration of community, First Nation, Métis, and agency inputs during the Class EA and Schedule “B” consultation process, to best reflect the priorities of all stakeholders and First Nations. River management strategies and Schedule “B” projects for the “Forks of the Thames” and decommissioning the dam will be scored and ranked to establish the preferred Strategy that best addresses the problem/opportunity statement and **“will preserve for future generations this valuable resource and allow people of all abilities to enjoy and access this designated Canadian Heritage River”**.

Table 5.1: Draft Evaluation Criteria for Assessing River Options

Category & Criterion	Description
Natural Environmental	
Water Quality	The potential of the option to maintain or improve water quality to Provincial Water Quality Objectives (PWQOs) or better.
Geomorphology	The potential of the option to result in a stable streambank condition with respect to slope stability and erosion (upstream and downstream).
Sedimentation	The potential for the option to optimize sediment transport to a stable sediment load condition.
Species at Risk	The potential of the option to protect sensitive species and species at risk (both aquatic and terrestrial).
Terrestrial Habitat	The potential for the option to maintain or enhance terrestrial habitat by protecting sensitive areas.
Aquatic Habitat	The potential for the option to maintain or enhance aquatic habitat that supports benthic and fish communities.
Groundwater	The ability of the option to protect groundwater resources from a quality and quantity perspective.
Social/Cultural Environment	
Cultural Heritage	The potential of the option to protect cultural/heritage resources.

Public Health & Safety	The potential of the option to minimize risk or liability to community health and safety resulting from flooding.
Recreation Opportunity	The potential of the option to provide or enhance recreational activities.
Downtown Integration	The potential of the option to impact the integration of the River with the downtown area.
River Destinations	The potential for the option to permit city-wide destinations that include both built (mixed-use developments) and natural places.
Urban Waterfronts	The potential for the solution to permit an “urban” waterfront in certain locations.
Aesthetics	The ability of the option to maintain or enhance the visual character of the study area.
Stakeholder Acceptance	The potential of the option to be accepted by stakeholders including landowners, First Nations, Métis, and the public based on comments and feedback received through public consultation during the study.
The London Plan Integration	The ability of option to incorporate recommendations from The London Plan.
TVCP Integration	The ability of option to incorporate recommendations from the TVCP.
Technical and Economic	
Flood Control	The ability of the alternative to allow for the required flooding control.
Erosion Control	The ability of the alternative to mitigate streambank erosion upstream and downstream of Springbank Dam.
Constructability, Implementation, and Work Scope	The ability of the option to be constructed and implemented on a technical, regulatory, and practical basis; within a reasonable scope of work. In particular, the ability of the option to meet required approvals from the City of London and regulating agencies (UTRCA, MNRF, MOECC, DFO).
Operations & Maintenance	The ability of the option to be operated and maintained within regular operating parameters at the City. (Operational and Maintenance requirements of the options will be described).
Compatibility with existing and planned infrastructure projects	The ability of the option to be compatible with existing and planned projects.
Relative Capital Cost	Estimated capital cost relative to other options.