

Greenway Wastewater Treatment Plant Climate Change Resiliency Class Environmental Assessment

PUBLIC NOTICE

May 2022

Project

The City of London is concluding the Greenway Wastewater Treatment Plant Climate Change Resiliency Class Environmental Assessment (EA). In April 2019, the City of London declared a climate emergency to deepen its commitment to protecting its economy, ecosystems, and communities from climate change. The purpose of this Class EA is to evaluate potential flood mitigation alternatives for improved climate change resiliency at the existing Greenway Wastewater Treatment Plant, located at 109 Greenside Avenue.



Process

The Class EA study was undertaken in accordance with the Ontario *Environmental Assessment Act* and has covered all necessary phases of Schedule 'B' of the Municipal Class EA Process. The Schedule 'B' process includes the definition of a problem or opportunity as well as the identification and evaluation of potential alternative solutions. At this time, a Project File Report has been completed to conclude the Schedule 'B' Municipal Class EA process to recommend the preferred solution for the Greenway Wastewater Treatment Plant. The Project File Report will be available online for review at <https://getinvolved.london.ca/greenway-climate-change>.

Interested persons may provide written comments to our project team by June 29, 2022. All comments and concerns should be sent directly to Kirby Oudekerk at the City of London or to Stephen Braun at Matrix Solutions Inc.

In addition, a request may be made to the Ontario Ministry of the Environment, Conservation and Parks for an order requiring a higher level of study (i.e., requiring an individual/comprehensive EA approval before being able to proceed) or that conditions be imposed (e.g., require further studies), only on the grounds that the requested order may prevent, mitigate, or remedy adverse impacts on constitutionally protected Aboriginal and treaty rights. Requests on other grounds will not be considered. Requests should include the requester contact information and full name.

Requests should specify what kind of order is being requested (request for conditions or a request for an individual/comprehensive EA); how an order may prevent, mitigate, or remedy potential adverse impacts on Aboriginal and treaty rights; and any information in support of the statements in the request. This will ensure that the Ministry is able to efficiently begin reviewing the request.

The request should be sent in writing or by email to:

Minister of the Environment, Conservation and Parks
777 Bay Street, 5th Floor
Toronto ON M7A 2J3
minister.mecp@ontario.ca

and

Director, Environmental Assessment Branch
Ministry of Environment, Conservation and Parks
135 St. Clair Ave. W, 1st Floor
Toronto ON M4V 1P5
EABDirector@ontario.ca

Requests should also be copied to Kirby Oudekerk and/or Stephen Braun by mail or by e-mail. Please visit the Ministry's website for more information on requests for orders under section 16 of the *Environmental Assessment Act* at <https://www.ontario.ca/page/class-environmentalassessments-part-ii-order>.

All personal information included in your request – such as name, address, telephone number, and property location – is collected under the authority of section 30 of the *Environmental Assessment Act* and is collected and maintained for the purpose of creating a record that is available to the general public. As this information is collected for the purpose of a public record, the protection of personal information provided in the *Municipal Freedom of Information and Protection of Privacy Act* (MFIPPA) does not apply (s.37). Personal information you submit will become part of a public record that is available to the general public unless you request that your personal information remain confidential.

Your feedback is important to us

To provide comments, obtain alternate formats, request additional information, or if you have any issues accessing the document for review, please contact a member of the project team below:

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Under the *Municipal Freedom of Information and Protection of Privacy Act* and the *Environmental Assessment Act*, unless otherwise stated in the submission, any personal information such as name, address, telephone number, and property location included in a submission will become part of the public record files for this matter and may be released, if requested, to any person.

EXECUTIVE SUMMARY – CLASS ENVIRONMENTAL ASSESSMENT FOR THE GREENWAY WASTEWATER TREATMENT PLANT CLIMATE CHANGE RESILIENCY

The City of London, consistent with its declaration of a climate emergency in 2019 and subsequent *Climate Emergency Action Plan* (London 2022), initiated a Municipal Class Environmental Assessment (EA) to assess and identify optimum flood mitigation strategies at the Greenway Wastewater Treatment Plant (WWTP). The EA was completed to identify a preferred solution for increasing resilience to flooding at the WWTP. A previous climate change risk analysis completed for the WWTP indicated increased resilience to flooding was a top priority in addressing the effects of climate change. The EA was also undertaken with regard given to the *Climate Change Adaptation for Wastewater Treatment Plants* standard published by CSA Group (2018).

Significant portions of the Greenway WWTP, located at 109 Greenside Avenue, are within the regulatory floodplain of the nearby Thames River. Floodplain mapping completed by the Upper Thames Conservation Authority (UTRCA) indicates predicted flooding resulting from a 1 in 250-year regulatory flow event. Under these conditions large portions of the WWTP would be inundated, potentially resulting in substantial flood damages to existing infrastructure.

Early in the EA process, a long-list of potential flood mitigation options was developed and analyzed to determine a suitable mitigation strategy for the WWTP. Long-list options included conveyance improvements, site-level flood protection, diversion of flows, online storage, and WWTP operational measures. A hydraulic study examined the feasibility of each long-list option, and it was determined that site-level flood protection (berm/floodwall) offered the optimal balance of flood protection, construction effort, cost, and minimized disturbance. The results of the hydraulic study of long-list items were presented in a Public Information Centre (PIC) held online on October 7th, 2021, which also included an overview of the project, alternative site-level flood protection solutions, and an invitation for public comment.

Following the first PIC, several different types and alternate configurations of site-level flood protection solutions were analysed to determine the solution which best addressed several criteria overall. These criteria included the degree of flood protection provided, economic impact, environmental impact, and social impact. To predict the effects of different available solutions, several studies were completed including a hydraulic study, an environmental impact study (EIS), archaeological Phase 1 study, and comprehensive analysis of flood-protection compatibility with existing infrastructure.

All the various site-level flood protection solutions examined included an effluent pumping station. This pumping station is needed to lift effluent from the WWTP to the flooded Thames River during the periods when the river level is too high for gravity drainage. The effluent pumping station was included as a key feature of all site-level flood protection solutions examined and will ensure the continued operation of the WWTP under high flood conditions.

An evaluation of available site-level flood protection solutions was presented at a second PIC that occurred March 10th, 2022. The PIC presented an overview of technical studies supporting the evaluation of alternative solutions, with the preliminary preferred solution of Blended Floodwall and Berm presented. This solution will also include a new effluent pumping station. In summary, the floodwall will be required where space is tight at the WWTP, including at the northern fence-line. Where space allows, including at the west fence-line and east of the site, a berm is proposed. Additionally, a portion of the entrance road east of the site will be raised to ensure flood protection.

Resilience for potential climate change effects has been incorporated into the preferred solution in accordance with UTRCA recommendations regarding Thames River flood levels. Flood mitigation works will be implemented to protect against the 1 in 250-year flood level plus a freeboard allowance of 0.6 m. This additional height is intended to account for potential future effects of climate change and increased flood flows.

From an ecological perspective, the Environmental Impact Study identified a number of natural heritage features adjacent to the WWTP, but direct impact to natural features due to implementation of the preferred solution is anticipated to be limited. Indirect impacts will be reduced through mitigation strategies. The Archaeological study has identified that areas within the WWTP generally offer limited archaeological potential, although some areas located east of the site will require Phase 2 study prior to implementing a berm.