EIS (Draft) WILLIAM STREET STORM SEWER OUTFALL IMPROVEMENTS

Dillon Consulting, April 2018, received by EEPAC at its May 2018 meeting

Reviewers: S. Levin, Dr. K. Moser, C. Therrien

INVASIVE SPECIES

It is interesting to note that Dillon points out on page 9 the "coverage of several other non-native and/or invasive species typically associated with areas of cultural disturbance, such as trails and pathways."

EEPAC is concerned that despite being in the study area, and despite the opportunity noted by Dillon on page 28, the area north of the channel works will not have an invasive species management plan (according to wastewater staff at the May EEPAC meeting). Given the pervasive buckthorn in this area, EEPAC is concerned that restoration works on the south side of the channel (currently Shallow Water Aquatic) will fail over time.

As well, phragmites is beginning to establish itself in this area. It is critical to deal with this within the project scope.

RECOMMENDATION 1: The proposed Invasive Species Management Plan mentioned on page 28 of the EIS include a buckthorn herbiciding program within the project budget for the city lands north of the channel within the study area.

RECOMMENDATION 2: The proposed Invasive Species Management Plan include eradication of phragmites.

RECOMMENDATION 3: The project budget include sufficient funds for monitoring of at least 5 years of the success of the site restoration and invasive species removal and control programs.

RECOMMENDATION 4: EEPAC receive the Plan for review and annually, receive a report on the progress of the implementation of the Invasive Species Management Plan.

EEPAC has yet to see any invasive species management plans despite many have been included as "to be developed and implemented" in many an EIS. Given this is a City project, there is an opportunity for EEPAC to provide its expertise in this matter as one of the current members of EEPAC is a PhD in plant biology and has extensive experience with management of some invasive species.

AQUATIC HABITAT

EEPAC supports the upgrading of the culvert under the TVP to four culverts of a larger size. This will greatly benefit fish. However, it is unclear why there is no recommendation to clear the blockage of Huron Creek that exists 550-560 m from the outfall (see page 15). Although it is outside the study area, there is no clear reason why

the blockage should remain. Removing it would result in a positive impact rather than "none" as shown in the Impact Assessment on page 23.

RECOMMENDATION 5: The culvert that is 90% by debris be cleared as this will remove a barrier to fish passage and regular inspections take place to ensure the culvert remains clear.

EEPAC is concerned that it appears that no water quality measurements have been taken of the Thames downstream of photo site10. Measurements of water quality at high flows and low flows pre-construction and post-construction would demonstrate either no change or improvement particularly given the spiny soft shell turtle habitat downstream. This EIS focuses on the area directly affected, but will undoubtedly impact areas downstream of the input to the Thames. This needs to be considered as Huron Creek does not stop where the study area stops.

RECOMMENDATION 6: The project include monitoring of water quality in the Thames pre and post construction for a period including three years from the conclusion of the separation of the combined sewer.

MIGRATORY BIRDS

It is unclear to EEPAC why migratory bird surveys were not done. Orioles and rose breasted grosbeak nest in the area, and a variety of aquatic birds such as blue herons, American bittern, Green herons and Bald Eagles have been observed in the area.

RECOMMENDATION 7: EEPAC would appreciate a response from a City Ecologist on this matter.

BEAVERS

If beavers return to the area, will the City implement its current protocol for beavers? Dead beavers were noted in the area by an EEPAC member in the early spring of 2017 at or near photo site 9.

AMPHIBIAN SURVEYS

It is unclear why only one amphibian survey spot selected. This is inconsistent with the Marsh Monitoring Protocol. There are many frogs in the area - you can hear them and see tadpoles.

MAP 5 DESIGNATION

EEPAC continues to believe that the entire area west of Adelaide as studied by Dillon and by Duggan should be included in Map 5 as ESA.