Adelaide Waste Water Treatment Plant Flood Management EIS

Preliminary Comments from EEPAC Feb. 7, 2022

Summary

It is important to protect the Adelaide Wastewater Treatment Plant, but it is also important to improve the protection of the natural heritage features in the study area. The study area includes several natural features, is connected to the Thames River and represents an incredible diversity of wildlife. This area is an ESA and should be treated as such.

Comments

Study Area

The description of the study area should note that the study site is 300 m from the Thames River, which is a significant valleylands. The EIS Executive Summary shows that the area meets the criteria to be an ESA, and therefore, work done in the region has the potential to impact the Thames River and SAR that reside there. It is critical to note that all construction in this area should assume that this project has the potential to impact an ESA and take necessary precautions to protect the ESA.

Page 10

A key ecological goal of the *City of London Thames Valley Corridor Plan*
is to preserve, enhance, and create ecological corridors and linkages between natural features in order to establish a continuous corridor along the Thames River and enhance linkages to tributary watersheds
(Dillon Consulting and D.R. Poulton 2011).

What can this project do to help achieve this goal – anything?

p. 12

Unfortunate that the Dougan SLSR for the TVP which was included in the Scoping document seems not to have been consulted? Why? It included the significant trees to a greater extent than the Dillon EIS. A significant number of trees were removed for the bridge project. Which means the potential bat maternal colonies were reduced then, so no surprise that what is currently there did not meet the threshold. Death by a 1000 cuts. New plantings do not replace habitat trees!

p. 16

Section 5.2 says that there are no ESAs within the study area; however, an outlet channel flows from the study area into an area that is an ESA based on the data provided in this report and others (e.g. Dillon). This should be noted in this part of the EIS.

Any opportunity to address invasives such as Loosestrife and Phragmites as part of this project? And the buckthorn in CUT 1b? Remove it all and replant it.

No breeding bird stations in the Significant Woodland. Why not? Stns 5 and 6 were outside the study area north and west of the PCP. (Figure 2)

p. 23 – sure if you limit it to the study area! Therefore, the forested communities within the study area are not considered SWH for bat maternity roosting.

Which trees are to be removed? The EIS is not clear from page 22-3. table 4? Does Figure 3 show the ones to be removed? There are 8 marked on this figure. P. 22 says seven are high quality snag trees.

Identifying suitable roost trees for Little Brown Myotis and Northern Myotis includes recording the location of all snags that exhibit appropriate attributes including cavities, loose bark, cracks, or knot holes. Identifying suitable roost trees for Tri-Coloured Bats includes recording the location of any Oak trees greater than 10 cm diameter at breast height (DBH), Maple trees greater than 10 cm DBH if the tree includes dead/dying leaf clusters, and any Maple tree greater than 25 cm DBH. A formal leaf-on habitat assessment was not completed, though the presence of appropriately sized Oak and Maple trees were noted during subsequent ELC field studies.

p. 25

Section 5.5.1. Both in the fish and mussel sections, the EIS suggests that because the Thames River is 300m away from the study area and proposed project, it is unlikely to have any impact on the river or water species. However, this is misleading since there is an outlet that flows from the study area to the Thames River. This is particularly concerning given there are SARs identified in the Thames where the outlet enters the river.

p. 26

The works associated with this project are unlikely to have any impact on the river, and therefore, will not impact these species.

However, part of the project is a pumping station to allow sewage to continue to flow when gravity won't work in high water situations. Not clear where this is constructed or if there is a new outlet. Or if this is only treated water? Was told the work was within fence line but the berm seems to be outside, or at least, the construction of it will include outside the fence. It would be helpful to show what areas would be affected directly by construction and where the berm/wall will be. The presentation at PIC 1 shows a nice neat line at the fence line. This is clearly not the case based on the impact table and the text on p. 42-3 – It would be appreciated if this could be shown at the EEPAC meeting

“Along the western side of the proposed berm, there will be some vegetation removal, which is located within 25 m of a stormwater outfall that outlets into the Thames River. Mitigation measures have been put in place to protect this outfall and the Thames River from erosion, sedimentation, and spills. Any trees removed should be replaced at a 3:1 ratio, which will result in a long-term net benefit for the area once the trees and vegetation reach maturity.”

It would be helpful at EEPAC to show the area of disturbance expected – the consultants probably estimated one to do the impacts table. Why there would be any in water work is unclear but mentioned on page 39.

p. 27

Section 6 The EIS reports that neither ESAs or significant valleylands are within the study area, however, they are in close proximity and connected by an outlet from the study area. This should be explained.

p. 29

Section 6.4 Here it states that the outlet channel supports fish habitat within the Thames River through the supply of water and nutrients. This then supports my concern that sediments and toxins from construction during the project could also enter the Thames River.

This section also suggests that the determination of dead fish is done by self-assessment. What does this mean?

Will the wetlands be evaluated? We suspect not despite the policy requirement. Page 43 says: “Confirm wetland boundaries, complete the OWES evaluation and confirm buffer/setbacks. Unevaluated wetlands at the Adelaide study area should be evaluated by a qualified person in accordance with the OWES, with the evaluation approved by the MNRF, to determine its significance. Once the boundaries are confirmed, and evaluation of the appropriate setback should be conducted.”

Under City policy - The wetlands are unevaluated wetlands and should be evaluated by a qualified person in accordance with the Ontario Wetland Evaluation System (OWES; MNRF 2014), with the evaluation approved by the MNRF, to determine its significance.

Page 29 – SAM 2 ecosite? Do you mean MAM2?

p. 31 from recovery strategy for Kentucky Coffee Tree (Ontario species at risk web site)

Sites where Kentucky Coffee-tree has been planted as part of a restoration program will not be considered for critical habitat identification until it can be determined that the plantings are successful. Determination of restoration success and viability, as measured through plant vigour and fitness, must precede identification of critical habitat at restoration sites at this time.

Critical habitat may be identified at restoration sites following long-term monitoring to determine success, extent of suitable habitat and site occupancy.

p. 32

Table 10 Should show that although a significant valleyland is not directly in the study area, the channel outlet connects it to the Thames. Table 10 also shows that this is an ESA.

p. 35

Section 8 Again significant valleylands should be included in the list.

Both direct and indirect impacts on natural heritage features and functions can occur as a result of the
preferred alternative. Impacts and residual effects on natural heritage features were assessed based on
the following criteria:
• duration: long or short-term
• extent: localized or expansive
• permanent: permanent or temporary
• severity: positive or negative

p. 37

Table 12 A potential impact noted is a spill yet no mitigation measure is described. This is particularly troubling given the channel outlet linking the study area to the Thames and the SAR identified in the Thames River.

Impacts – Table 12
Technically, this is outside the study area although ELC work was done.

Near-water works to create the floodwall/berm along the western section of the Adelaide WWTP (25m from storm water outfall)

Page 39 – good – will this be in tender/construction docs? - 4B: Enlist an environmental monitor onsite to provide advice and ensure that activities will not have any negative effects. Information for site-specific SAR should be posted in construction trailer.

p. 40 – agree - Retain an Arborist during detailed design to create a tree preservation plan to protect as many healthy, native trees as possible through the process.

p. 41 – agree - Develop a restoration plan to prescribe when and how disturbed areas will be restored. Plantings should consist of native trees, shrubs and seed mixes. Tree replacement should be at a MIN 3:1 tree replacement ratio.

Must also include invasive species removal (Phrag, Loosestrife and Buckthorn)

Also no equipment should be fueled within 30 m of river or wetland

p. 42

Section 9.6 Species at Risk – I am assuming that you mean section 6.6 Table 9 here?

Can you tell us how this is done at detailed design? SAR habitat is protected under the ESA; therefore, at the detailed design stage it will be important to confirm potential occurrence (i.e., location of SAR and SAR habitat) as well as permitting report requirements under the ESA. Permitting and additional studies are discussed further in Section 11.

p. 44 – please explain when this will be done and by who - identified candidate SWH habitat and potential SAR habitat will need to be reviewed in more detail once the area of impact is confirmed for this project.