

Attention: Steph Wilson – Barker

**CC:** Fraser McNutt – Barker; Caleb Pearson – Unity Developments

**Date:** 28 Oct. 25

From: Chad Croft – ecoLogical Solutions

RE: Minute 2 of Expert Panel Ashbourne FTAA -2507-1087

## 1. INTRODUCTION

The following provides a response to the ecological matters raised by the expert panel in their request for additional information as outlined in minute 2. Specifically, the following quotes the requests for additional information as they relate to ecological matters followed by the specific response to each request.

- [2] The Expert Panel directs the following information be provided by the Applicant:
- (i) The effects on the Oxbow lakes of the existing drain being diverted away from these lakes and discharging into the Waitoa River.

## Response

The primary hydrological influence on the oxbow wetlands is thought to be the Waitoa River (Clare Houlbrooke WGA, personal communication October 22, 2025). Flood modelling undertaken by Maven shows that Oxbow wetland 2 is mostly inundated during the 2yr ARI and completely during the 10 yr ARI (Figure 1). Oxbow wetland 2 has an RL of c. 59-60 m. Flood modelling indicates the regular storm event based on data from a gauge downstream is 60.04 m while the 2yr event has a water surface level (WSL) of 61.92 m and the 100yr event has a WSL: 63.68 m (Maven 2025).



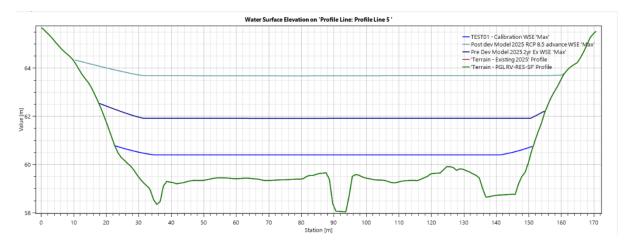


Figure 1: Flood modelling - Waitoa River at Ashbourne site (Maven 2025).

While there are surface water contributions to Oxbow wetland 2 via the main drain during certain times of the year, and groundwater contributions which are expected to be more consistent, these are expected to be minor hydrological inputs overall. Groundwater volume contributions to Oxbow wetland 2 are expected to remain similar to the predevelopment levels (Clare Houlbrooke WGA, personal communication October 22, 2025).

Details of hydrological influences including groundwater nutrient concentrations are provided in the response prepared by Clare Houlbrooke of WGA. Specifically, she states that the groundwater is high in nitrate concentration attributable to the current land use and that the future land use change is expected to improve the shallow groundwater quality.

Consequently, effects on the ecological values of Oxbow wetland 2 are expected to be low as a result of the Greenway diversion.

(j) The details and description of any proposed landscape treatment in and around the Oxbow lakes including integration with the esplanade reserve and pedestrian connectivity with the Greenway (including across the discharge channel armouring) and outline if there are any consent implications of any works proposed within this area.

## Response

No specific landscape planting is proposed in and around the oxbow wetlands. The existing vegetation communities around these features were characterised as mature, mixed exotic and native. The existing vegetation communities were providing adequate shade, organic recruitment and bank stabilisation. This current level of riparian function was deemed effective and therefore not in need of replacement. In addition, the oxbow wetlands are not expected to be subjected to any significant adverse effects attributable to the proposed development and therefore, there is no effects management (remedy or mitigate) required.

Proposed landscape treatment within the proposed esplanade reserve is to be addressed via the landscape plan response prepared by Simon Wilson of Greenwood Associates. This treatment is proposed if Council decides to take the esplanade reserve and the applicant vests, in accordance with conditions of subdivision consent.