

9 Environment / Ecology

The Environmental / Ecological impacts from this project can be classified as impacting the terrestrial habitat or the Aquatic habitat.

9.1 Terrestrial Habitat

The project area is a highly urbanised streetscape predominantly comprising buildings and areas of hard surfacing. There are no substantial areas of vegetation likely to be affected. Vegetation potentially affected by the project is mainly limited to mature trees, including Pohutukawa, and amenity grassland around the edge of the Basin Reserve, and along the central median dividing Cambridge and Kent Terraces.

The nearest areas to the Basin Reserve supporting continuous tracks of vegetation are around Government House and the Massey University site to the west. These areas may support indigenous vegetation; however they are outside the impact zone of the various options, and should not be affected by any works.

The terrestrial urban landscape is expected to support a range of common introduced urban bird species such as blackbird, house sparrow, starling and potentially various finch species. In addition, native species such as tui may be attracted to the area, particularly when the pohutukawa are in flower.

The Wellington District Plan and Wellington Regional Plan do not list any sites of ecological significance in the project area, or its immediate vicinity.

9.2 Aquatic Habitat

There are no open streams or waterbodies in the vicinity of the Basin Reserve. However, there are a number of sub-surface drainage structures which pass beneath it. These are stormwater pipes and potentially old stream channels which have been culverted to facilitate development. These sub-surface drains converge on the northern side of the Basin Reserve, flow northwards along Cambridge / Kent Terraces, eventually discharging into Lambton Harbour. The drains are tidal up to the intersection of Vivian Street and Cambridge / Kent Terrace. Within the upstream catchment of the Basin Reserve there are small sections of open stream in Prince of Wales Park, where banded kokopu, koaro and koura (freshwater crayfish) have been recorded this year¹. These are located almost 1km to the south-west of the Basin. Migration of fish through the stormwater drains potentially impacted by the project is likely, and it is also possible that some species, particularly eels, find temporary or permanent habitat in them.

No information has been obtained regarding the species of eel present; however, longfin eel is the most commonly recorded freshwater fish in the Wellington Region² and therefore there is a high probability that at least this species is present. The occurrence of longfin eel is particularly significant as it is classified as a threatened species on the basis that it is believed to be undergoing a gradual decline in population³.

¹ Greater Wellington Regional Council, Personal Communication, Alton Perrie.

² Strickland and Quaterman, 2001

³ Hitchmough et. al., 2007

9.3 Considerations for Option Development

From a terrestrial ecology perspective, the project is unlikely to present any significant issues. While the mature street trees, particularly native species such as pohutukawa contribute to the ecology of the urban environment, they are not significant ecological features in terms of Section 6(c) of the RMA. As a consequence, their presence is not a substantial matter for consideration in terms of option selection from an ecological perspective. However, attention should be paid to retaining and minimising the impact on healthy specimens during construction where reasonably practical, whichever option is selected. Vegetation planting associated with landscaping works for any of the options provides opportunities to bring native trees and plants into the locality which will have some limited benefits in terms of urban ecology.

The potential effects of the options on the underground drainage structures need to be addressed as part of the design process. Maintaining fish passage in these watercourses is an important ecological issue for the project, however this should be able to be accommodated as part of the works necessary to ensure there is no disruption to stormwater flows. Also, as part of this project, it may be possible to improve fish passage in the subsurface drainage structure if there are currently obstacles to fish movement.



Figure 9.1: Pohutukawa trees along Rugby Street

