1 MacKays to Peka Peka Expressway

Ecology

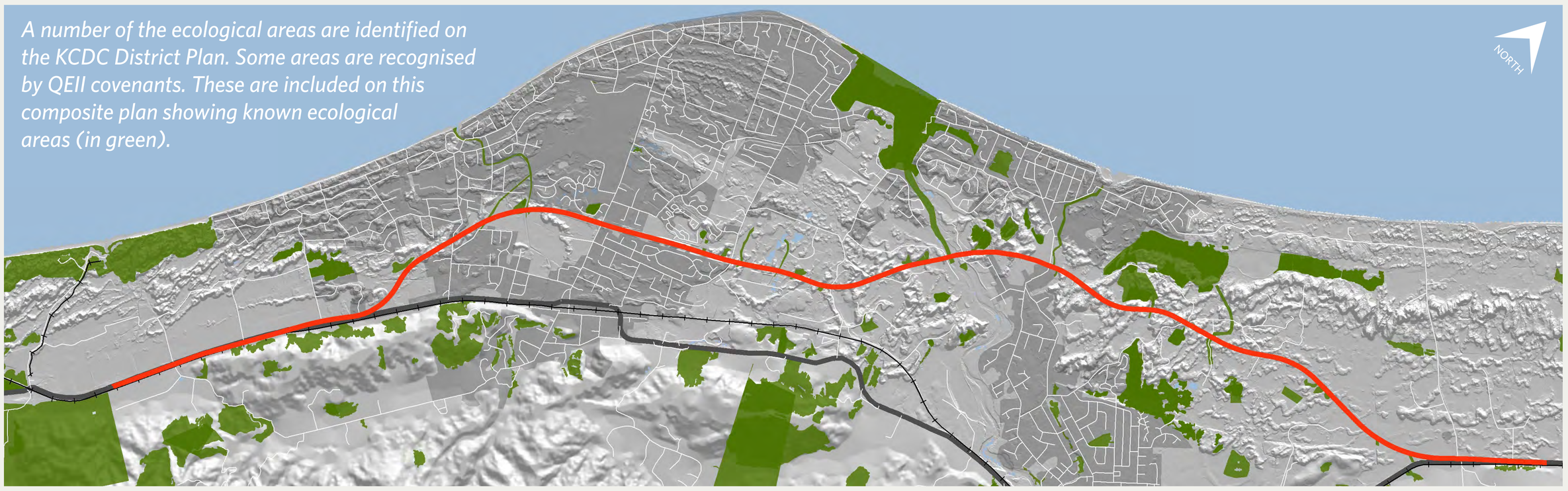
11

The Kāpiti Coast environment has been highly modified over the years by vegetation clearance and wetland drainage for farming and urban development.

Because there is so little left of the original wetlands and coastal vegetation the remaining areas are of ecological significance. This significance is because they provide:

- assistance to east-west bird movements between Kāpiti Island, Hemi Matenga Reserve and the Tararua Ranges – the wetlands and water bodies are staging points for bird movements
- habitat for rare or threatened freshwater fish species, including giant kokopu, brown mudfish and long-finned eel
- habitat for a wide range of plant species including naturally uncommon wetland species such as dwarf mistletoe (*Korthalsella salicornioides*)
- potential habitat for native birds and lizards in the wetlands and isolated stands of regenerating manuka, kanuka and mahoe.

Left: Patches of indigenous vegetation provide habitats for birds and connections within the east-west bird movement corridors. Right: Nesting Fernbird.



A number of the ecological areas are identified on the KCDC District Plan. Some areas are recognised by QEII covenants. These are included on this composite plan showing known ecological areas (in green).

To recognise and provide for the ecological values in this area the expressway design will use the following approaches:

- undertake ecological investigations to understand the values of the wetlands and other habitats
- identify places where wetlands can be restored or upgraded from their current state in association with the expressway
- ensure the alignment of the expressway avoids as many ecological areas as practicable
- existing wetlands will not be used to treat stormwater which would degrade these further. The new wetlands created for stormwater treatment can also provide habitat value but their key function will be to treat stormwater
- recognise the importance of groundwater flows in the engineering design, as these are required to sustain wetlands
- design the landscape around the expressway to support wetland areas and habitat through the use of locally appropriate vegetation.

Ecological investigations at Waimeha Stream.

Investigations are used to confirm fish species – this is an example at Paetaea watercourse.

Existing wet areas that would have once been wetlands can be restored and can assist with stormwater management where they are close to the expressway.

Scattered patches of indigenous vegetation and wetlands provide habitat for birds and connections within the east-west bird movement corridors.