Proposed Waimakariri Coastal zone

The strip of land behind the coastal dunes, between the Ashley/Rakahuri and Waimakariri Rivers, is an extensive area of historical wetland. It was also a significant cultural site for the significant Kaiapoi Pa site and associated extensive cultural food gathering area.

It is still dominated by wetland features including a complex of ponded areas around Waikuku Beach township, the wetland areas of the Pegasus township Eastern Management Area (EMA), Tutaepatu lagoon, Pines Beach lagoon, and numerous other wetland areas (including the Wakeman property wetlands) and poorly drained farmland up to three kilometres inland of the dunes. It includes large areas of Council owned land, much of it vested in the Te Kōhaka o Tūhaitara Trust that is administered as the Tūhaitara Coastal Park. The Tūhaitara Trust has also excavated several additional wetland sites within the park for educational and scientific purposes, and both established additional native vegetation and has MPI permits to liberate wetland fish species such as the Canterbury Mudfish throughout this zone. Significant further restoration activities in Tūhaitara Coastal Park and in private land areas in this area have been funded by the Zone Committee Immediate Steps funding.

This area is primarily managed and increasingly being restored as an extensive complex of wetlands, ponds, lagoons and drainage channels. It is therefore deserved of recognition as a diffuse static water body (much like a lake or wetland), and statutory tools that recognise it as a lake or wetland rather than as its constituent drainages/streams. The area has also undergone some land subsidence following the 2011 Canterbury earthquakes, further enhancing the wetland nature and making land drainage more challenging. Most Council land (Waimakariri District and Environment Canterbury) is now increasingly reserved or managed for wetland values rather than as productive drained farmland.

For water <u>quantity</u> management, it is appropriate to maintain the water <u>levels</u> of this dispersed water body, and <u>minimise any further abstractive allocation of water</u> from its surface water and shallow groundwater. This is an appropriate approach for sustainable management of lakes or wetlands to prevent them being drained, and will ensure the ongoing health and values of the wetland complex. Wetlands are also sensitive to nutrient enrichment and, like lakes, are often maintained to defined trophic (nutrient) state. Nutrient input management consideration may be required to ensure appropriate wetland vegetation and water quality (algal blooms) are avoided or managed. Therefore, increased nutrient allowances and high nutrient emitting land uses in this zone should be discouraged.

For these reasons, this area should be identified as a specific management zone and not be lumped in with adjacent and more highly developed surface (SWAZ) and groundwater (GAZ) allocation zones. We understand the MKT (Maahanui Kurataiao Ltd) reports are likely to recommend a Cultural Zone in this area for similar historic and cultural reasons. This is an opportunity for management alignment of ecological and cultural sensitivities and values.

An indicative cultural zone boundary is drawn that includes the several existing surface wetland features. Its boundary is therefore of the Wetland/lake area boundary rather than a groundwater zone area. Pegasus Township is included in this area because it has been raised out of this natural area.

Map 1. Suggested Coastal zone reflecting wetland and lake/lagoon areas.



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