

## Poutō Peninsula

Whakaneke (Poutō), NRC Lake No. 390



**Whakaneke** surrounded by manuka scrub with dense emergent vegetation dominated by *Typha orientalis* and *Schoenoplectus tabernaemontani*.

### Summary

**Survey dates** 2005, 2012.

### Overall ranking

Moderate: Isolated and set within indigenous vegetation and dense emergent margins, with excellent water bird habitat and good populations of several endangered birds, but with no submerged vegetation and very poor water clarity.

### Threats

Low risk of introduction of invasive weeds as it is isolated and conditions are unsuitable for submerged plants. Elevated nutrients have likely severely impacted ecological condition. A nutrient budget is recommended.

### Management recommendations

No monitoring

### Description

A dune lake (1696559E, 5973120N) of 20.5 ha size, about 2.5 m deep, set within a manuka scrub covered area. There were no inflow streams but it appears that water flows south from Mokeno via areas of wetland, with an outflow at the entry point on the western shore, discharging to the entrance to Kaipara Harbour via an extensive wetland. A dune face is

situated to the east and rough pasture, wetland and mobile sand dunes to the west. Access is by 4-WD through forestry and Māori land (15 km of tracks, some very boggy) requiring passage through a locked gate. No boat access.

### Wetland vegetation

The lake was fringed by dense 10-20 m wide beds of *Typha orientalis* and *Schoenoplectus tabernaemontani* extending from the shore to 0.5 m deep. *Eleocharis sphacelata*, *E. acuta* and *Machaerina articulata* were present in the emergent zone, with the indigenous *Persicaria decipiens* and *Isachne globularis* commonly sprawling amongst these emergent beds.

### Submerged vegetation

No submerged vegetation was found in 2007 and 2012 and only occasional stalks of *Myriophyllum triphyllum* and *Chara australis* fragments were found in 2005 during a more detailed search of the lake.

### LakeSPI

Whakaneke receives a default LakeSPI index of 0% (Non-vegetated) on account of submerged plants being recorded at <10% cover.

### Water birds

The lake and surrounding wetlands provide excellent bird habitat. The nationally rare bittern (*Botaurus poiciloptilus*) and 20 of the regionally threatened dabchick (*Poliiocephalus rufopectus*), 10 scaup (*Aythya novaezeelandiae*) and a spotless crake (*Porzana tabuensis plumbea*) were observed from the lake margin in 2007. Other threatened species reported include the regionally significant banded rail (*Rallus philippensis assimilis*) and fernbird (*Bowdleria punctata vealeae*). Brown teal (*Anas aucklandica chlorotis*) were recorded in this area. Bird observations were hampered by lack of light in 2012.

### Fish

Common bullies (*Gobiomorphus cotidianus*) were seen.

### Aquatic invertebrates

Backswimmers (*Sigara arguta*), snails *Potamopyrgus antipodarum* and *Physella acuta* (exotic species) were present with a large number of benthic chironomids.

## Endangered species

No threatened species were observed in 2012.

## Lake Ecological Value

Based on the 2012 survey, a Lake Ecological Value score of 6 "Moderate" was allocated. The lake is situated within indigenous vegetation, with good buffering but water quality appeared poor, with no submerged vegetation.

## Changes in indicators

No submerged plant indicators to monitor. The lake is likely to support good populations of a number of endangered birds and although not seen in 2012, this visit was carried out near dusk so visibility was poor.

## Threats

Isolation provides a lower risk of introduction of invasive weeds and establishment is unlikely should this occur as water clarity is currently very low.

## Management recommendations

No monitoring recommended.