

Central and East Northland

Tauanui (Central Northland) Lake No. 198



Plate: Lake Tauanui a volcanic lake with steep boulder strewn margins.

Summary surveyed in 2011

Overall ranking

Moderate-Low: There was a native vegetation cover to 4 m water depth and no exotic species present.

Threats

An isolated lake with low potential for inadvertent pest fish and plant introductions. Water quality is impacted by farming and a nutrient rich volcanic catchment.

Management recommendations

Lake native biodiversity value monitoring every 5 years.

Description

This lake (1677769E 6071132N) is 6.2 ha in area and about 9 m deep. The surrounding catchment is in pasture and grazed native forest. Access is off Mangakahia Road and via 2 km of farm tracks.

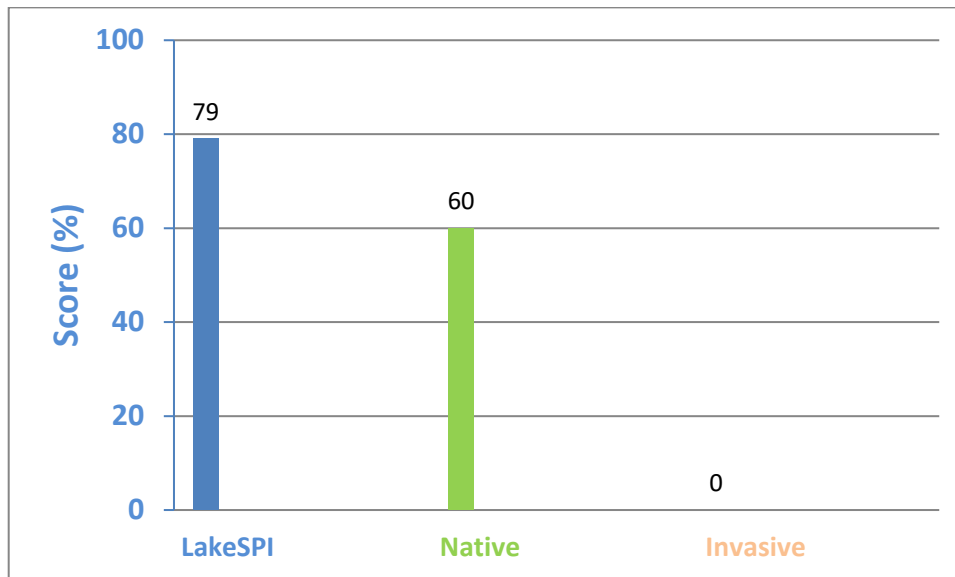
Wetland vegetation

There was little emergent or other wetland vegetation present, apart from isolated patches of kuta (*Eleocharis sphacelata*) and *Machaerina articulata* on the shore of the north eastern island.

Submerged vegetation

The whole lake was vegetated to 4 m. There was a diverse native community with charophyte meadows dominated by *Chara fibrosa* and *Nitella* sp. aff. *cristata*. *Potamogeton ochreatus* was the tall growing native plant present and *Glossostigma elatinoides* was the dominant turf plant, with lesser amounts of *Elatine gratioloides*, a plant rarely encountered in Northland lakes.

LakeSPI



LakeSPI Index for Tauanui as % of potential score, Native Condition Index, and Invasive Impact Index (from left to right).

The LakeSPI score was excellent at 95% reflecting an indigenous submerged flora with high covers and diversity. No weed species were present.

Water birds

Black swan, paradise ducks, mallard, pied shag, kingfisher, spur winged plover, observed.

Fish

No information. A survey by Mike McGlynn setting 27 traps at 4 locations, 26-27 September 2011 caught nothing. No fish have been observed.

Aquatic invertebrates

No mussels or koura seen, *Physa* abundant.

Endangered species

No endangered species were seen.

Lake Ecological Value

Tauanui had a Lake Ecological Value score of 5 (“Moderate to Low”) with charophyte meadows recorded in shallow water, but poor water quality and low diversity.

Threats

Water quality is eutrophic and could be threatened by stratification and anoxic bottom waters releasing nutrients from bottom sediments. If exotic weeds were introduced they would have a high impact as conditions would favour extensive growths.

Management recommendations

Lake native biodiversity value monitoring every 5 years.

Survey lake for fish.