# Central and East Northland

Sands Lake at Mangawhai, (East Northland), NRC Lake No. 309A





Sands Lake is a dune lake now within an area for which residential development is planned.

# Summary 2008

### Overall ranking:

Moderate: A small lake with mostly native aquatic species.

#### Threats

Water quality could change markedly with residential development if used for residential storm water. Invasive species could be introduced by future residents.

#### Management recommendations

If the natural character of the lake is to be retained, careful consideration needs to be given to maintaining water quality and native biota.

#### Description

This dune lake (1742260E, 6004678N NZTM) is about 1 ha in area with a maximum depth of 1.6 m (in April 2008 during low water levels). The catchment was mostly pasture, but with plans for residential development. There are no inflow or outflow streams or boat launching points.

#### Wetland vegetation

The lake is surrounded by emergent vegetation mostly 10 m wide, extending from the shoreline to a maximum of 1.4 m depth. The dominant species were *Eleocharis sphacelata* and *Machaerina articulata*.

## Submerged vegetation

The whole lake was vegetated. No turfs were present because of the dense encircling reed beds. *Chara fibrosa* was the dominant submerged plant with surface-reaching *Potamogeton cheesemanii* common. The invasive *Utricularia gibba* was common sprawling through emergent and over submerged species throughout the lake.

## Water birds

Fernbird (*Bowdleria punctata vealeae*) were heard and mallard ducks (*Anas platyrhynchos*) were seen.

## Fish

Not recorded.

#### Aquatic invertebrates

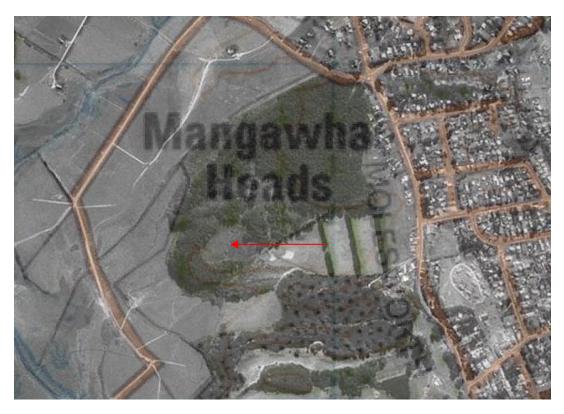
Sigara arguta and a diving beetle were common in the lake.

## **Endangered species**

Fernbird are classed as At Risk Declining.

# Lake Ecological Value

Lake Ecological Value of 3 "Low", now surrounded by houses, with likely disturbance of wetland birds.



1995/96 aerial photograph showing the position of the Sands Lake, Mangawhai.

# Threats

There is some debate about the natural status of this lake. A 1995/96 aerial photograph (Map Toaster 2008) shows no open water and the area surrounded by a pine plantation. Since the removal of pines it may have become wetter and possibly earth works could have deepened parts of the area. There are few dune water bodies of this type between Whangarei and the Auckland Region border so it does have some significance. Residential development has the potential to threaten the current status of Sands Lake.

# Management recommendations

It is currently a shallow coastal dune waterbody with strong native floristic elements offering good bird habitat. If these values are to be retained or enhanced consideration needs to be given to catchment development activities.