

# Palmerston Lakes Water Quality Report Card 2025

## **AT A GLANCE**

- No presence of Salvinia in the lakes
- ✓ Dissolved oxygen levels were good in most lakes
- ✓ Some lakes showed improvements from the last quarter's rating
- No high turbidity recorded in most of the lakes
- High nutrient load present in most lakes which may lead to algae growth

Water quality surveys were undertaken across 18 Palmerston Lakes on 15 October 2025.

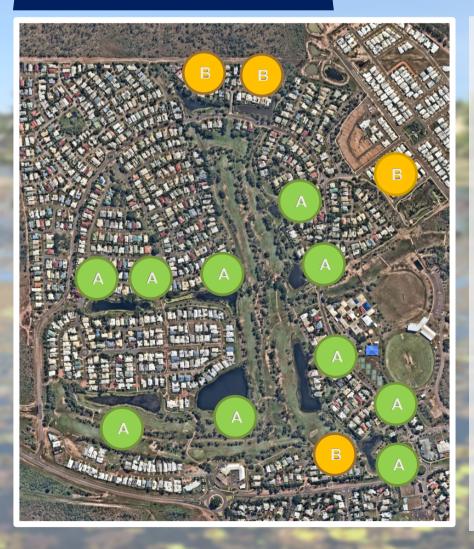
There was no presence of Salvinia across the surveyed lakes.

The only Lakes to experience a deterioration in water quality was 1A, 1B, 7C, and SA (Sanctuary A).

Water quality at 9 and 10B have improved since the last monitoring round, they now meet the criteria to be listed as good.

No high turbidity levels were recorded in any of the lakes during the recent survey.

High nutrient loads were recorded in lakes 1A, 1B, 3, 6, 7C, ML (Marlow Lagoon), SA (Sanctuary A) and DH1 (Basin).



## LAKE CONDITION RATING

A

### **GOOD**

Lake is well oxygenated, has low turbidity, low nutrients and low Salvinia coverage



B

Lake is moderately to well oxygenated but shows some evidence of low water quality, such as high nutrients, turbidity and Salvinia coverage

### POOR

C

Lake is moderately to poorly oxygenated with other signs of poor water quality, such as high nutrients, high turbidity, algae and Salvinia coverage

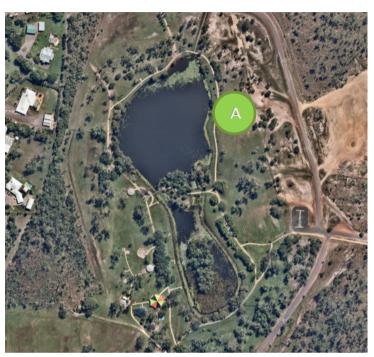
### **VERY POOR**



Lake is poorly oxygenated, has high nutrients, high turbidity, algae and Salvinia growth



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## How does this report card work?

Each of the 18 lakes are surveyed and assessed based on factors such as dissolved oxygen and turbidity, nutrient concentrations (nitrogen, phosphorus), amount of *Salvinia* surface coverage, and other notable findings relevant to lake condition.

Each lake is given a condition rating based on the characteristics of the lake during the survey. The criteria for this rating is derived from the features of a healthy lake outlined in the *Townsville Constructed Lakes Design Guideline* (Design Flow and RPS 2010).

A healthy lake is typically dominated by macrophytes (i.e. emergent and submerged rooted water plants); as opposed to floating water plants (e.g. algae, the declared weed Salvinia molesta), microscopic algae (phytoplankton), and cyanobacteria. Macrophyte-dominated lakes help maintain low turbidity via uptake of nutrients and prevention of re-suspension of sediments.

Note that lake characteristics will change seasonally as water plants cycle through periods of growth and die-back. The rating given to each lake will differ between quarterly surveys and consistently poor or very poor ratings will require management action.

