



# FRESHWATER LAKE OPTIONS COMPARISON TABLES

We've summarised the information contained in the reports to compare the options. Table 1 is a comparison of options against the principles, and Table 2 is the similarities and differences between the options. For further detail, please refer to the reports available at [yoursaycharlessturt.com.au/freshwater-lake](https://yoursaycharlessturt.com.au/freshwater-lake)

**Table 1: Comparison of options against principles**

Future Option	Principles						
	Reset lake water quality	Remove carp and enhance biodiversity	Remove sludge	Secure and maintain water supply	Reduce water losses	Improve water circulation and increase lake water turn over	Develop an effective and sustainable water quality treatment process
Option 1: Existing system	YES	YES	YES	YES	NO	NO	NO
Option 2A: Off-line treatment	YES	YES	YES	YES	YES	YES	YES
Option 2B: In-line treatment	YES	YES	YES	YES	YES	YES	YES

**Table 2: Side-by-side comparison of options**

Considerations	Actions	Option 1 Existing system	Option 2A Off-line treatment	Option 2B In-line treatment
Water quality	Optimises water quality and water turnover	NO	YES	YES
Water circulation	Improves water circulation	NO	YES	YES
Water conservation	Reduces water loss	NO	YES	YES
Sludge removal frequency	Reduces need to drain and remove sludge from the lake	NO	YES	YES
Sludge removal interval	Years before sludge removal may be needed again	5-10 years	20-30 years	10-15 years
Biodiversity	Improves aquatic habitat	NO	YES	YES
	May increase numbers of birds on site including ibis	NO	NO	YES
	Removes carp	YES	YES	YES
	Keeps existing desired flora and fauna such as turtles and waterlilies	YES	YES	YES
Changes to water views	Maintains existing open water views of the lake	YES	YES	NO
	Offers a mix of wetland and open water views of the lake	NO	NO	YES
	May obscure or block current water view from some properties	NO	NO	YES
Appearance of lake environs	Changes the look of the lake by introducing either reedbeds or floating wetlands	NO	NO	YES
Protection of plantings during establishment period	Plants will be protected by netting for 12-18 months to prevent grazing by birds during establishment	Not required	Not required	YES
Energy efficiency	Improves energy efficiency	NO	YES	YES
Lake management	Reactive management of water quality	YES	NO	NO
	Planned and proactive management of water quality	NO	YES	YES
On-site works required	On-site works (e.g. install pipework, drain lake, remove sludge and carp)	YES	YES	YES
Equivalent annual costs averaged over 30 years	Costed on WGA report only using 2022 costs.	\$421,800 average per year	\$366,400 average per year	\$377,900 average per year