

## Estuary Health & Water Quality Report Card 2022-23

Overall Grade **B**

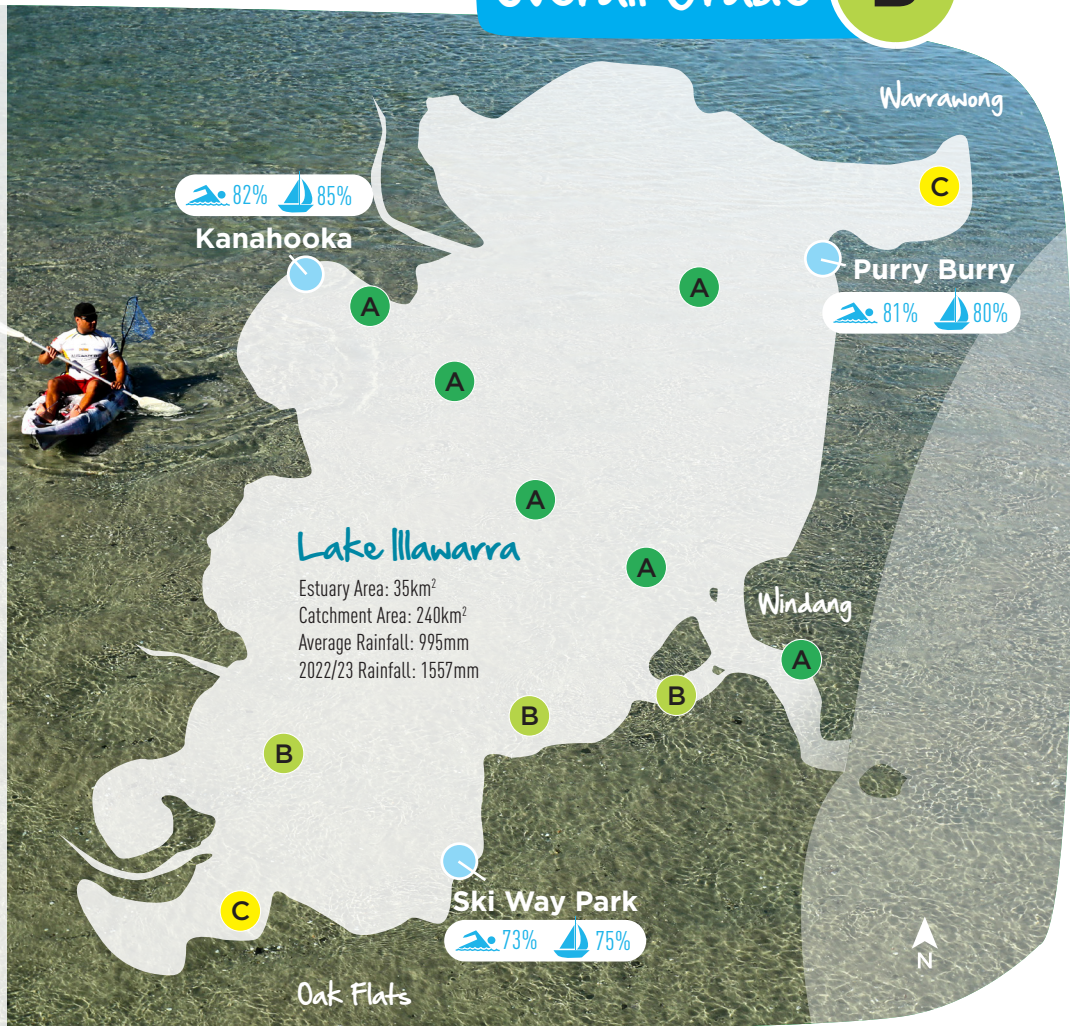
### Estuary Health Condition Ratings

- A** Very Good
- B** Good
- C** Fair
- D** Poor
- E** Very Poor

### Recreational Water Quality

● % of occasions meeting primary and secondary contact recreational water quality guidelines

- Primary contact
- Secondary contact



### Estuary Health Condition

Water quality, including nutrients and estuary health indicators are measured every month at 11 sites. The estuary health condition grading is based on chlorophyll a and turbidity levels from November to the end of April. Results were better than last year with six sites being in very good condition, three in good condition and two sites rated as fair. These good results could be related though to the much lower rainfall we had over this summer (nearly a third less than last summer!) with a large amount of rain occurring over winter instead. Despite this it was still the second wettest year total since 2009, and overall, the Lake received a B (good) grade. This shows the resilience of the Lake, but it is important we keep trying to decrease nutrients and sediments coming into the lake for its long-term health.

### Recreational Water Quality

Three sites were sampled over summer for enterococci levels to give an indication of recreational water quality for primary (safe for swimming) and secondary contact (safe for boating and watercraft activities only). All sites had a higher compliance meeting the recreational water quality guidelines than last year. This is most likely due to less rainfall over the summer period compared to last year. This means less urban and rural run-off and stormwater coming into the Lake. For estuarine sites it is recommended not to go swimming for three days after rain.

**For more detailed information on the monitoring program, please scan the QR code at the end of this report card or visit [wollongong.nsw.gov.au/lake-illawarra](http://wollongong.nsw.gov.au/lake-illawarra)**

### Estuary health indicators

Chlorophyll a is a measure of microscopic algae biomass in water. Excessive input of nutrients from catchment runoff can increase chlorophyll a levels, leading to algal blooms and detrimental effects on estuarine plants and animals.

Turbidity is a measure of light scattered by suspended particles such as sediment, algae and dissolved material in the water. Having low turbidity levels in the estuary is important for seagrasses, fish and other organisms.



# What's Happening?

For more information visit  
[wollongong.nsw.gov.au/lake-illawarra](http://wollongong.nsw.gov.au/lake-illawarra)



## Funding the Lake Illawarra Coastal Management Program

Since 2020, Wollongong City Council and Shellharbour City Council have attracted more than \$1.5 million in grant funding to implement actions of the Lake Illawarra Coastal Management Program. NSW Government funding bodies include:

- Department of Planning and Environment - Coasts and Estuaries
- Department of Primary Industries - Fisheries
- Environmental Protection Authority
- Local Land Services



## Natural Areas Restoration

We have undertaken considerable vegetation restoration around the foreshore of Lake Illawarra and along the creeks in the catchment area. There are now 19 sites in the program covering 90 hectares of vegetation restoration including the planting of 20,000 native plants. These works aim to decrease weeds and improve the biodiversity and condition of native vegetation to reduce erosion of the foreshore areas. A big thank you to all our Bushcare volunteers working to keep our natural areas beautiful!



## Great results for the Luv the Lake Litter Prevention Program

The "Luv the Lake" program was supported by funding from the NSW EPA to deliver a series of litter prevention initiatives. This included two large-scale clean-up events, regular small-scale community clean-ups, litter education campaigns, and increased signage and bins. The program saw an estimated 1,200 kilograms of litter removed from the foreshore and up to a 40% litter reduction at targeted sites. A huge thanks to our community and volunteers who helped us achieve this wonderful result!

## Bathymetric Survey

Since October, we have conducted bathymetric surveying of Lake Illawarra to measure the depth of the water. Bathymetry involves trawling the entire lake with an echo sounder which sends a beam down and collects data as it bounces back. A report that explains the changes in depth will be available on the Wollongong City Council website later this year and will be used to inform future management options around the lake. Preliminary results indicate we need to continue efforts to reduce sediments coming into the lake.

## Community Engagement and Participation

Both councils have been busy working with agency and community stakeholders to develop an Engagement and Participation Strategy for Lake Illawarra. The strategy outlines a suite of activities and initiatives — like walk and talk sessions, community movie nights, a tourism expo and citizen science — to build engagement, education, and action in caring for the lake. It will be adopted and added to council websites in the coming months.

