

Estuary Health & Water Quality Report Card 2021-22

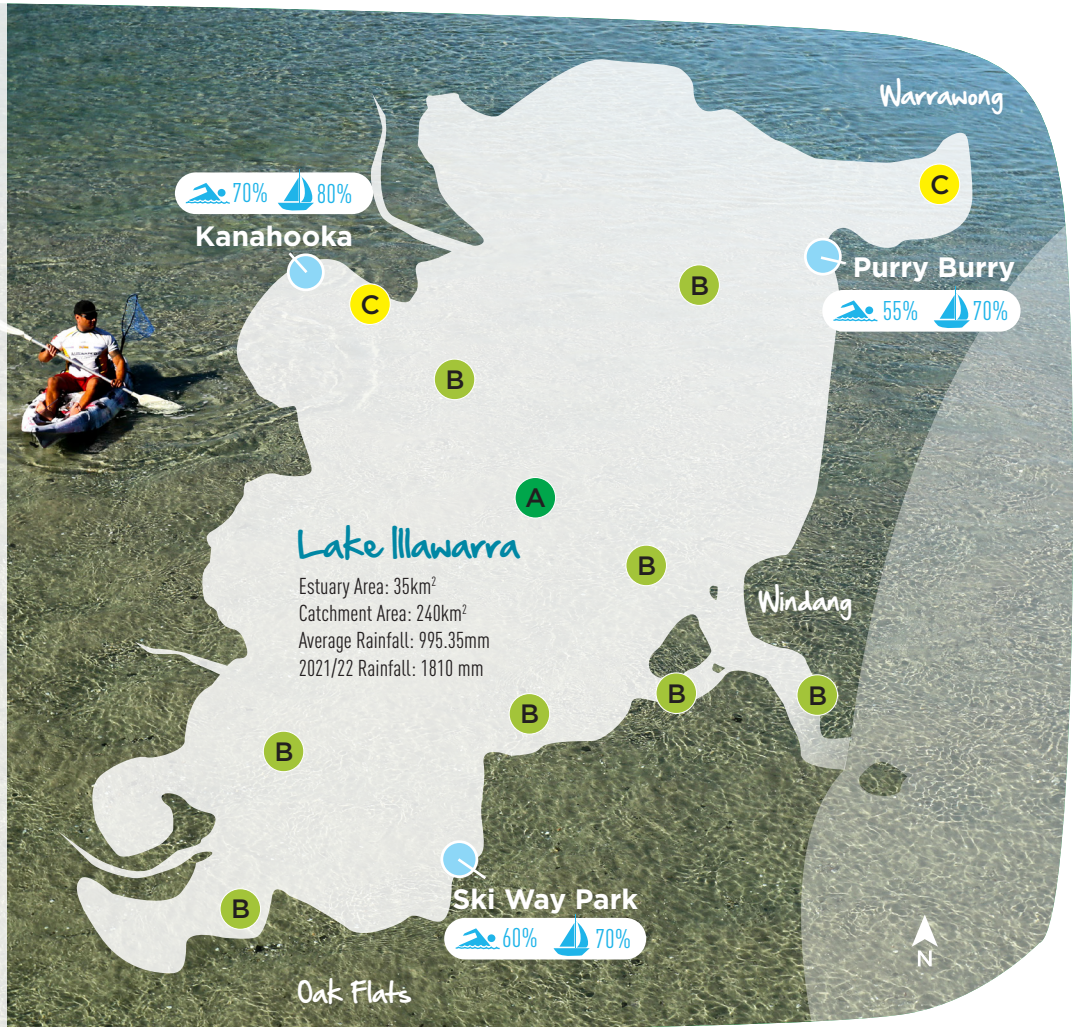
Estuary Health Condition Ratings

- 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 over the summer. The majority of sites were rated to be in good condition, with one site in the main body of the lake rated very good. Griffins Bay and Kanahooka were rated fair. This was due to catchment and stormwater run-off from the high rainfall events experienced in summer and early autumn. Several sites are showing a long-term decreasing trend over time in nutrients and chlorophyll *a*. This is good news, as despite this being the wettest summer experienced since the beginning of the program in 2013 and hence more catchment run-off, the health of the estuary is in good condition.

Recreational Water Quality

Three sites were sampled over summer for enterococci levels to give an indication of recreational water quality for primary and secondary contact. Estuarine sites are particularly impacted by sources of faecal contamination, including stormwater and urban and rural run-off, with rainfall being the major driver of pollution to recreational waters. All sites had lower percentage compliance than the previous year, particularly at Kanahooka and Ski-Way Park. This is most likely due to the wet weather conditions and associated flooding over summer. For estuarine sites it is recommended not to go swimming for three days after rain.

For more detailed information on the monitoring program, please refer to the accompanying technical report on Council's website.

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?

There's a lot of work happening around Lake Illawarra, read all the latest news here.

Funding the Lake Illawarra Coastal Management Program

There has been great success in obtaining grant funding for implementation of actions in the CMP. Over \$1.5M for joint projects between Wollongong City Council and Shellharbour City Council has been awarded since the CMP was certified in December 2020. This has led to the commencement of 8 projects that address up to 14 individual CMP actions.

Funding bodies include the following NSW Government Agencies -

- Department of Planning and Environment (DPE) Coast and Estuary Grants Program
- Local Land Services (LLS)
- EPA Litter Grants
- DPI Fisheries Habitat Action Grants



Natural Areas Restoration

Wollongong City Council and Shellharbour City Council have been undertaking vegetation restoration in the Lake Illawarra catchment. In the past few years over 80 hectares of estuarine and riparian vegetation has been managed to increase biodiversity and prevent invasion by weed species.

We have been working hard to expand the program over the last few years and it now covers multiple lake side reserves across over eight suburbs.

Of course, we must say a big thank you to all the dedicated Bushcare volunteers working to keep our natural areas beautiful!

Lake Illawarra CMP Implementation Group

The Lake Illawarra CMP Implementation Group oversees and, where needed, provides advice on the implementation of actions within the CMP. It is a platform for relationship-building between councils, the community and other lake managers such as the NSW Government. All group members share a goal to maintain and improve Lake Illawarra's ecological, social, and economic value, now and into the future.



Luv the Lake Litter Prevention Program

Luv the Lake is a program delivered in partnership with Shellharbour City Council and funded through the EPA Council Litter Prevention grants program. The aim of the project is to increase community pride, respect and ownership of Lake Illawarra and its surroundings; improve litter reduction and prevention around the lake foreshore; and deliver a multi-pronged approach that aligns with the EPA Litter Prevention Strategy. Check Council's website regularly to see how you can get involved, or if you'd like to help right away check out Council's Rise & Shine Program and consider starting your own clean up group.



Bank Management Strategy

Wollongong City Council and Shellharbour City Council, in partnership with the NSW Department of Planning and Environment, have engaged a consultant to develop a Bank Management Strategy (BMS) for Lake Illawarra and its major tributaries and smaller creeks.

The objective of the BMS is to assess the current bank condition of the foreshore and identify and map effective, efficient, and consistent best management practice to treat foreshore erosion at an estuary scale. This will allow land managers to better manage cumulative impacts of erosion with evidence based defensible decision making. A copy of the BMS and an easy to read summary will be available on Council's website in late 2022.