

WATERWAY AND CATCHMENT REPORT CARD 2023

Reporting on data November
2022 to April 2023



Raingardens are self-watering, low maintenance gardens designed to protect our estuary by capturing stormwater which runs off hard surfaces when it rains. Installing a raingarden is one of many ways that you can help protect our waterways at home.

RESULTS 2023

The 2023 Report Card saw similar result to 2022 with 15 sites remaining at the same grade, 2 sites improving a grade and 3 sites decreasing a grade.

Higher algal growth strongly influenced the grades this year. This is likely due to lower rainfall than the previous year, which resulted in improved water clarity, less turnover of water within the waterbodies, and thus more light and more time for algae to grow.

MANNING RIVER ESTUARY

The Upper, Mid and Lower sections of the Manning River Estuary remained in good ecological condition this year.

Farquar Inlet improved to excellent condition. Water clarity and algal growth grades were both excellent.

The Dawson River Estuary remained in fair condition due to a fair grades for both water clarity and algal growth.

Browns Creek retained its fair grade with improved water clarity but a poor algal growth grade.

The Lansdowne River Estuary retained its fair grade this year. While there was an improvement in water clarity, algal growth increased.

Water clarity improved in Ghinni Ghinni Creek but algal growth was poor, leading to a drop in the overall water quality grade to fair.

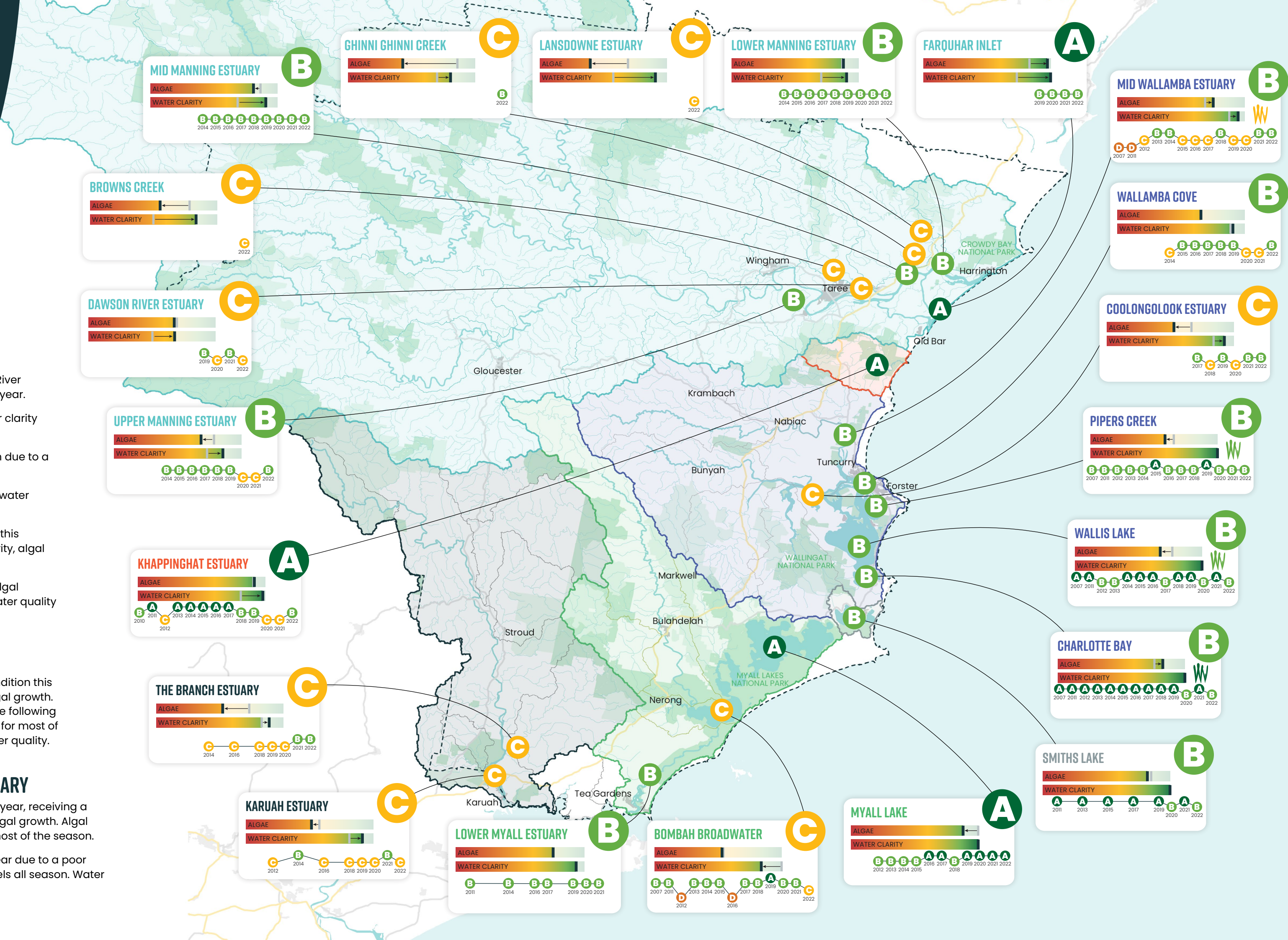
KHAPPINGHAT ESTUARY

The Khappinghat Estuary improved to excellent condition this year due to improved water clarity and very low algal growth. Water Quality in the estuary is continuing to improve following the bushfires in 2019-2020. The entrance was open for most of this year which may have also led to improved water quality.

KARUAH RIVER AND THE BRANCH ESTUARY

The Karuah River Estuary retained its fair grade this year, receiving a good grade for water clarity but a poor grade for algal growth. Algal growth in the estuary exceeded desired levels for most of the season.

The Branch Estuary returned to fair condition this year due to a poor grade for algal growth which exceeded desired levels all season. Water clarity in The Branch Estuary remained good.



WALLIS LAKE

Wallis Lake, Charlotte Bay and Pipers Creek retained their good grade this year due to excellent water clarity.

Mid Wallamba Estuary retained its good grade with an improved grade for both water clarity and algal growth. Wallamba Cove was in good condition again this year.

Coolongolook Estuary dropped a grade to fair condition, driven by a poor grade for algal growth.

ESTUARY SCORE KEY

very poor excellent

Indicator scores: 2022 score 2023 score

Overall grade: This represents ecological condition, it is a combination of algae and water clarity scores.

ESTUARY

Seagrass depth range score: The seagrass score indicates how deep the seagrass is growing and if the seagrass area is expanding or contracting. Where there are no seagrass results, no data was collected at these locations.

Historical grades

A Excellent **B** Good **C** Fair **D** Poor **F** Very poor

For more details on the scientific methods and results contained in this Report Card (Waterway and Catchment Technical Report) www.haveyoursay.midcoast.nsw.gov.au/waterway-report-card

SMITHS LAKE

Smiths Lake retained its good grade during 2023. The lake remained open for most of the summer contributing to excellent water clarity and low algal growth.

MYALL LAKES

Myall Lake remained in excellent condition this year despite an increase in algal growth. Bombah Broadwater retained its fair grade with improved water clarity but saw an increase in algal growth this year.

Myall River Estuary was in good condition with excellent water clarity and low levels of algal growth for most of this year.

PROTECTING OUR ESTUARIES

SETTING THE DIRECTION

Estuaries are where freshwater from our rivers meets salt water from the ocean. They are an important environmental zone, brimming with a diversity of life.

The Southern Estuaries of the MidCoast region, including Wallis, Myall and Smiths Lakes, Karuah River, North Arm Cove, Kore Kore and Khappinghat Creeks and Black Head Lagoon are some of its greatest assets. They strengthen the MidCoast economy, they are some of the reasons our community love where they live and others come to visit.

MidCoast Council is preparing a Coastal Management Program (CMP) for its Southern Estuaries. This program will set the direction for the future of our estuaries and help MidCoast Council to identify, understand, prepare for, and respond to current and emerging pressures on these estuaries.

What you told us you love about MidCoast Estuaries

During Stage One our community provided insight into what they love about and how they use our Southern Estuaries. As the program continues this information will play an important role in deciding where to put the most effort in order to protect our environment and our community.

The main values and uses identified were:

- Environmental protection
- Nature observation
- Recreation on and in the water (kayaking, swimming, canoeing)
- Exercise (walking, running)
- Picnics and barbeques

The Southern Estuaries Coastal Management Program will guide how we protect and enhance biodiversity and help to achieve water quality conditions to support our community values.

Pressures on our estuaries

Stage One of the project also assessed the present and emerging threats to our estuaries. Some of those identified include:

- Tidal inundation
- Bushfires and drought
- Sea level rise
- Invasive fauna
- Gaps in ecological knowledge
- Overcrowding of waterways

Building our knowledge to inform future management

Stage Two is currently in progress and involves undertaking detailed studies including coastal wetland mapping, tidal inundation studies and risk assessments for Khappinghat Creek and Black Head Lagoon that will help identify management actions across all of our beautiful estuaries.

Have your say

Over the next 12 months there will be opportunities for you to get involved with the program simply sign up on our website bit.ly/3ts76F5.

TIMELINE

complete

underway

STAGE
1

STAGE
2

STAGE
3

STAGE
4

STAGE
5

Scoping
study

Technical
studies

Options
assessment

Coastal
Management
Program
finalisation

Implementation
and evaluation

WATER-WISE URBAN LIVING

Urban areas alter the way that water flows into the natural environment. Hard surfaces such as roads, pathways and roofs create more runoff which carries pollutants such as nitrogen, phosphorus, sediments and litter, impacting on our sensitive waterways.

Science informs us that the best way to minimise the impacts of urban stormwater is with Water Sensitive Urban Design (WSUD). WSUD is about including water into urban planning, slowing down stormwater and introducing wetlands and raingardens to filter pollutants before they reach our waterways. These systems are designed to reintroduce natural processes into our urban landscape.

Protecting our waterways at home

Raingardens are small scale, specialised garden beds that slow and clean stormwater before it drains into our waterways. They look similar to a normal garden, but below the surface they are working hard to filter out pollution.

Raingardens are effective in removing up to 90% of nutrients and up to 80% of sediments from stormwater runoff. They allow for more water to infiltrate into the ground than a conventional lawn and are a great option for drought resistant gardens.

They can treat water from a single home or runoff from large residential estates. In the MidCoast area you may be required to install a raingarden when building or renovating a home, but anyone can install a raingarden and ensure that every drop of water counts.

Benefits of a raingarden

- Improves water quality in our estuaries
- Looks great and adds to the aesthetic of your home
- Preserves native vegetation
- Helps prevent flooding
- Attracts beneficial birds, butterflies and insects
- Easy to maintain after establishment

The key principles of Water Sensitive Urban Design are:

- to protect and enhance the quality of waterways
- to reduce the demand for drinking water by using alternative sources of water such as rainwater
- to minimise the generation of stormwater
- to treat wastewater to a suitable standard for re-use and/or release into local waterways
- to use stormwater in the urban landscape to improve the visual and recreational amenity of developments.

