



**MIDCOAST**  
council

# WATERWAY AND CATCHMENT REPORT CARD

Reporting on data  
November 2020 to  
April 2021

**2021**

CELEBRATING  
10 YEARS



This project is funded by MidCoast Council's Environmental Rate and supported by the New South Wales Government through its Coast and Estuary Program and Department of Planning, Industry and Environment.





# MANNING RIVER ESTUARY

Overall, the condition of the Mid Manning and Lower Manning Estuaries remained good however higher than desired algal growth in the Upper Manning Estuary resulted in a continuation of its fair grade. Turbidity was consistently moderate throughout the Upper, Mid and Lower Manning Estuaries.

The Dawson River returned to good condition, and a good grade was also recorded at Farquhar Inlet. The result was pleasing at Farquhar Inlet since the inlet was closed for four out of the six sampling periods. Although there has been some minor improvements at these sites to achieve a good grade, ongoing improvements in nutrients and sediment management from land use activities within the Manning River Catchment is required to maintain and improve on these results.

Samples taken after the large flood in March 2021 showed no ongoing impacts to water quality results. It is likely that the wet summer created consistent high flows that transported contaminants out of the river.

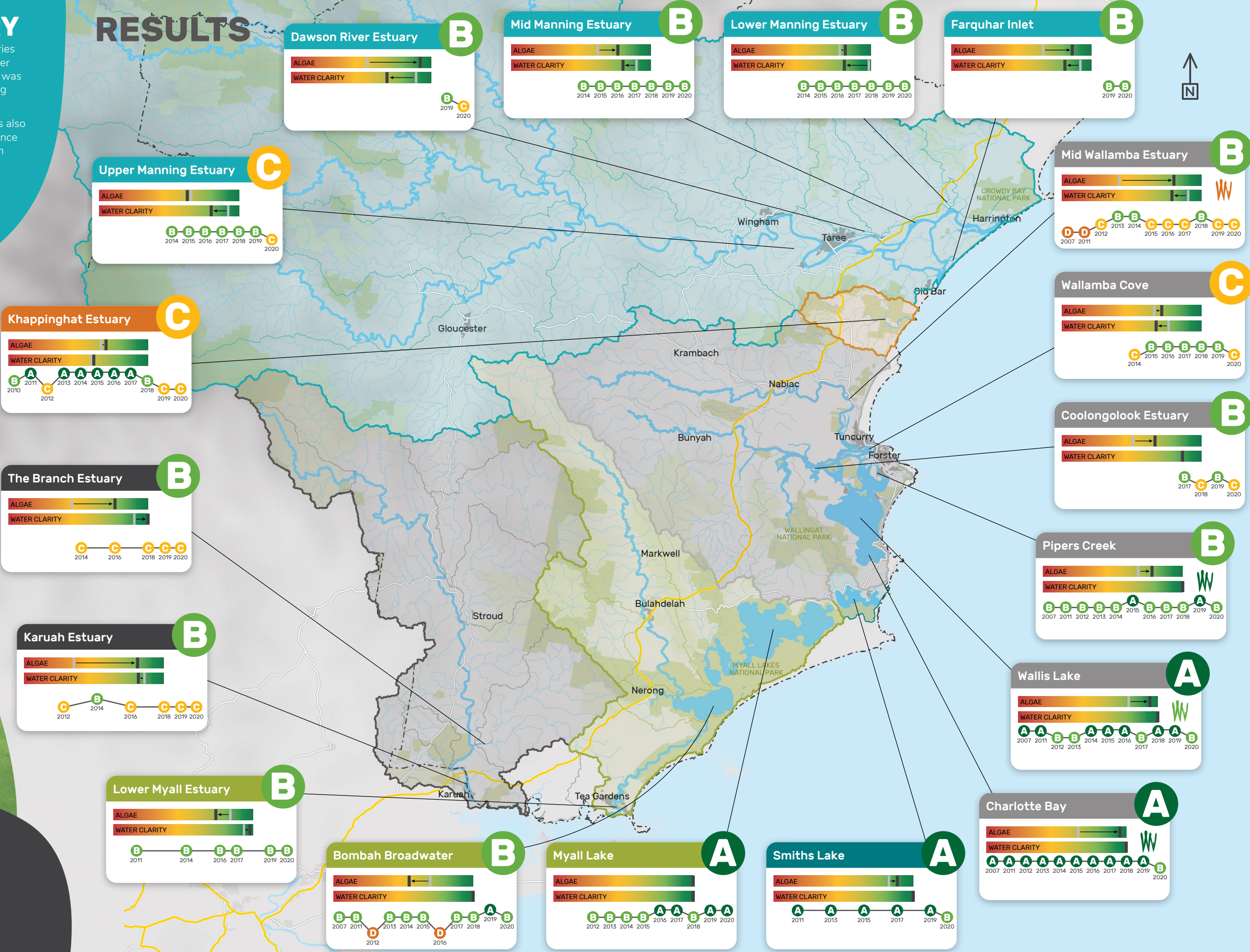
# KHAPPINGHAT ESTUARY

Continued moderate algal growth and poorer than expected water clarity resulted in a fair grade in the Khappinghat Estuary. These conditions have been influenced by a wet summer and it is also possible that the extensive fires within the Khappinghat catchment in 2020 have had an ongoing impact on estuary health.

# KARUAH RIVER ESTUARY

The Karuah River and The Branch Estuaries improved to a good grade, but still show signs of impaired estuary health with much higher than desired algal growth in The Branch Estuary. It is possible that strong river flows from the wet summer have transported contaminants out of the river resulting in the improved grades.

## RESULTS



# WALLIS LAKE

Grades for Wallis Lake and Charlotte Bay both returned to excellent this year with significant reductions in algal growth. Pipers Creek remained in the good range with algal levels continuing to be fuelled by runoff from the urban catchment.

Mid Wallamba and Coolongolook Estuaries reported improvements to their grade to good, however excess nutrient runoff resulted in higher than desired algal growth. It is possible that strong river flows from the wet summer have also diluted and transported contaminants out of the river.

Wallamba Cove maintained its fair grade this year due to greater than desired algal growth and poor water clarity. This site continues to be affected by the quality of stormwater runoff from Tuncurry.

The depth range where seagrass is able to grow has remained excellent at most sites, but has declined to good at Wallis Lake. Seagrass depth range has declined to poor in the Mid Wallamba Estuary, similar to 2018 and 2019 which may be influenced by increased turbidity in the Wallamba River.



# SMITHS LAKE

Smiths Lake's grade bounced back to excellent this summer, despite a wetter than usual year with rainfall occurring throughout the sampling period. Increased rainfall brought in nutrients which triggered some algal growth, but not enough to impact overall scores.

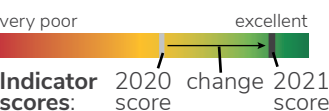
# MYALL LAKES

Grades in Myall Lake, Bombah Broadwater and Lower Myall Estuary remained the same as last summer.

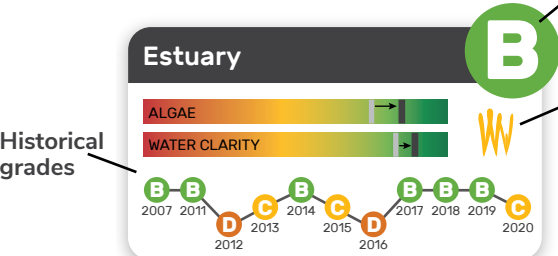
The condition of Bombah Broadwater and to some extent Myall Lake is strongly influenced by runoff from the Myall River Catchment. Rains in January and March produced excess algal growth including low levels of blue-green algae which influenced the algae results.

The Lower Myall Estuary upstream of Tea Gardens is strongly influenced by the condition of the outflow of water from the Bombah Broadwater. This is reflected in the increase in algal levels when compared to last year.

## ESTUARY SCORE KEY



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



**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.

For more details on the scientific methods and results contained in this Report Card (Waterway and Catchment Technical Report) [www.midcoast.nsw.gov.au/reportcard](http://www.midcoast.nsw.gov.au/reportcard)



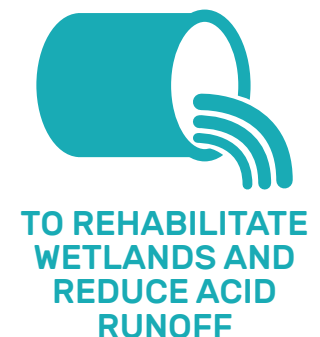
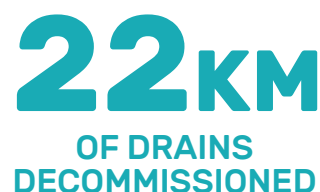
Our estuaries are unique and diverse ecosystems that are sensitive to catchment inputs.

Improving the health of the Mid Wallamba Estuary has been the focus of MidCoast Council for many years.

Spurred into action by oyster and fishing industry concerns about its health, Council partnered with agencies, industry, landholders and end users to protect and rehabilitate the catchment and riverbanks. Extensive efforts include establishing an agreement with water skiers and wake boarders to restrict boat wash and prevent erosion, stabilising banks, removing cattle from the foreshore, restoring wetlands and riparian zones and protecting natural areas.

Together, the success of these actions is demonstrated in the Report Card results with the Mid Wallamba Estuary improving from poor to good ecological health (D-B grade) over the last ten years. The results for the Wallamba River Estuary show how measurable improvements can be achieved when industries, communities and agencies work together towards a common goal.

# MEASURABLE IMPROVEMENTS IN THE MID WALLAMBA ESTUARY





The MidCoast community values the health of our natural environment. Our annual report card is a tool to monitor ecological health of the beautiful lakes and rivers that make up the MidCoast region. Since 2011 the Department of Planning, Industry and Environment has been monitoring MidCoast catchments as part of a state-wide program providing independent scientific evaluation of waterway health.

Over time, in partnership with MidCoast Council, the program has expanded to cover key sites across the Wallis, Smiths and Myall Lakes, Karuah and Manning River Estuaries and Khappinghat Estuary. More sites continue to be added to the monitoring program to provide even greater insight into our waterways.

**10** ANNUAL  
REPORT  
CARDS

**6** CATCHMENTS  
MONITORED

**1910**  
SAMPLES TAKEN

## The importance of data

The Report Card provides a high-level assessment of the ecological health of our waterways. It helps us track their condition over time and understand how our waterways are faring when compared to estuaries across NSW. The results identify 'problem areas' for further investigation and on-ground action is targeted to those areas. In this way, the Report Card helps us to protect the waterways that our community values.

The quality of the water that runs off the catchment impacts the ecological health scores. They can also be impacted by natural variations to climatic conditions: drought, bushfires or heavy rains. As we face a changing climate, long term monitoring is a valuable tool in recognising how our waterways are being impacted by more frequent and extreme weather events such as bushfires and large floods.

Ten years of data also provides us with a deeper understanding of our waterways, identifying important patterns, trends, cycles and key issues that could be addressed through management actions.



## Where to from here?

Over the next few years MidCoast Council will be working with our community, industry and agencies to prepare Estuary and Catchment Management Programs (ECMPs) for catchments and estuaries across the region.

These programs will set the long-term direction for the coordinated management of our waterways and catchments, identifying issues and actions required to address these in a strategic and integrated way.

The last ten years of Report Card data is our baseline. Not only will it inform the actions included in the ECMPs, it establishes a basis for comparing the current conditions with what we might see in the future following on-ground action.