

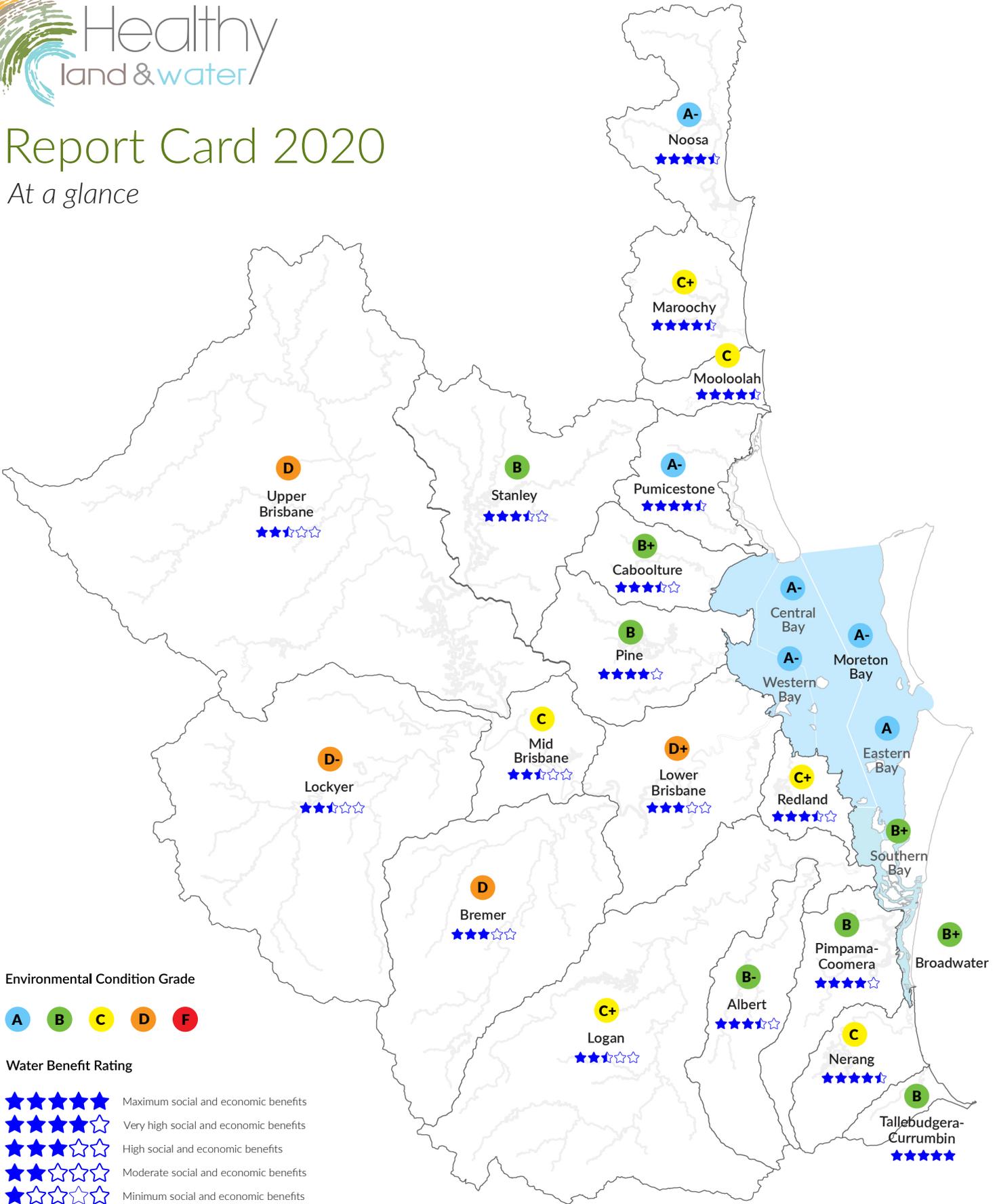
# Report Card 2020

*At a glance*



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At a glance



Environmental Condition Grade



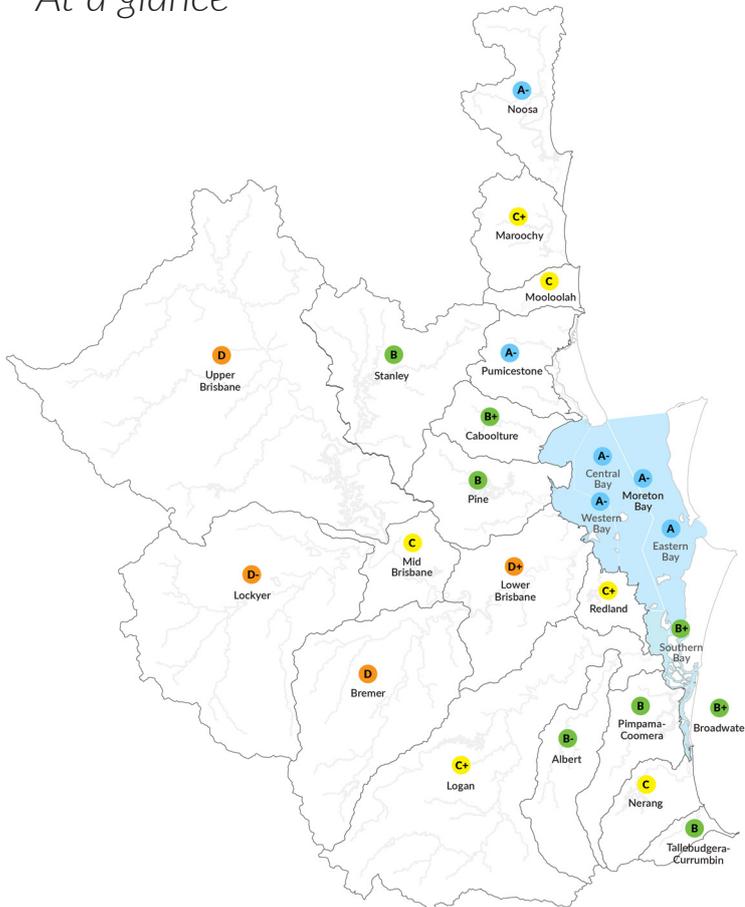
Water Benefit Rating

- ★★★★★ Maximum social and economic benefits
- ★★★★☆ Very high social and economic benefits
- ★★★★☆ High social and economic benefits
- ★★★☆☆ Moderate social and economic benefits
- ★★☆☆☆ Minimum social and economic benefits



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## Environmental Condition Grade

The Environmental Condition Grade is comprised of multiple indicators, assessing key freshwater and estuarine aspects of the waterways. Indicators are assessed against established guidelines and benchmarks, resulting in a single grade for each catchment or bay zone. The data used to calculate the grade is an integration of modelling and field monitoring.

- A** Excellent: Conditions meet all guidelines. All key processes are functional and critical habitats are in near pristine condition.
- B** Good: Conditions meet guidelines for most of the reporting area. Most key processes are slightly impacted and most critical habitats are intact.
- C** Fair: Conditions are close to meeting guidelines in most of the reporting area. Key processes are impacted but still functional and critical habitats are impacted.
- D** Poor: Conditions meet few of the guidelines in most of the reporting area. Many key processes are not functional and most critical habitats are impacted.
- F** Fail: Conditions do not meet the set guidelines. Most key processes are not functional and most critical habitats are severely impacted.

## The Environmental Condition Story of 2020

The 2020 results revealed that most western catchments remained poor or declined further while coastal catchments generally remained in moderate to very good condition. Lower than average rainfall limited river inputs, providing some respite for Moreton Bay. Recent improvement in Bay grades, driven by the flushing of mud out of the bay through oceanic circulation, and by recovery of seagrass, has been maintained in 2020.

The latest mapping has revealed an overall decline in the extent of freshwater wetlands across most of South East Queensland. Since 2013 alone there has been a further reduction of 280 hectares of wetland recorded across the region, with only 45% of pre-clearing wetlands remaining. Wetlands are important for reducing floods, producing clean water and food for humans, industry, and agriculture, improving water quality, and providing habitat for animals and plants<sup>1</sup>. Losses are mainly due to the draining and filling or clearing of wetlands for intensive agriculture, infrastructure, and urbanisation in lowland parts of the catchments<sup>2</sup>.

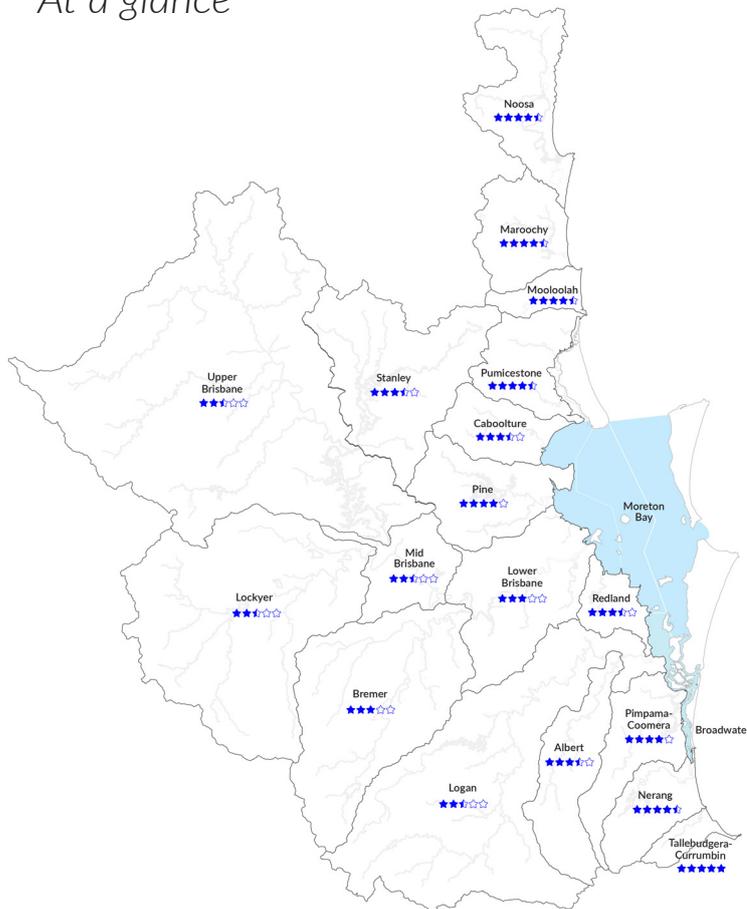
Despite a decline in wetland habitat extent across most catchments, in the lower estuaries and bay, mangroves are

increasing in spatial extent. However, the many benefits of increasing mangrove habitat may be counterbalanced by encroachment in certain specific locations including saltmarshes and unvegetated sand and mud flats. This may lead to reductions in some high tide roosting sites and feeding grounds used by migratory shorebirds, critical to their survival.

During the recent dry weather conditions, discharge from point sources comprised a large proportion of flow within the waterways. Pollutants (nutrients) generally accumulate adjacent to the release points of these facilities, due to less water to dilute the discharge, and are flushed into Moreton Bay with other rural and urban catchment contaminants when rainfall driven flow increases. Considerable improvements in the management of water pollution sources, particularly through advances in wastewater (sewage) treatment, have occurred over the past 20 years. This has resulted in considerable reductions in nitrogen pollution, however ongoing effort is critical to mitigate pressure from population growth and changes in climatic conditions.

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## Waterway Benefit Rating

South East Queenslanders gain many benefits from their local waterways. Rivers, creeks, lakes and beaches that are easily accessible and usable are an important place of recreation where locals can walk, cycle, swim, boat, fish, camp, picnic, socialise and relax while enjoying nature. Locals also spend and save money using local waterways for recreation which contributes to the economic value of the area.

Waterways and catchments also provide financial benefits to local communities by contributing to low-cost drinking water, as treatment is needed for purification.

The waterway benefit rating provides an assessment of these social and economic benefits, which are combined to reach an overall rating.



### The Waterway Benefit Story of 2020

South East Queenslanders have long enjoyed the lifestyle, cultural, and economic benefits of the region's expansive, diverse, and scenic waterways (creeks, rivers, lakes, beaches, and bays) and continued to do so during a tumultuous year. Waterways are more important than ever, reportedly having a calming, therapeutic, and restorative effect on people during a challenging time of drought, bushfires, and especially COVID-19 and its ensuing economic hardship.

Opportunities for recreation and social activities such as swimming and fishing are greater in catchments with good water quality. People also enjoy picnicking and exercising alongside waterways and adjacent parks, with walking and cycling activities increasing these past 12 months, contributing to community mental and physical wellbeing.

Investment in projects to protect and improve catchments and their waterways will continue to support the health of our communities as well as bolster long-term economic recovery. Catchment restoration projects have the potential to generate substantial numbers of jobs, for less initial investment than other industries<sup>3</sup>.

Catchments in good condition also provide greater support for tourism, farming of agricultural land, and drinking water production, and are more resilient to the impacts of major weather events<sup>3</sup>.

*Healthy Land and Water is committed to understanding the pressures facing our waterways so we can better protect them, and the benefits they provide, for future generations. For over 20 years we have conducted a comprehensive monitoring program, and data from the program has been compiled and analysed to form the annual Report Card.*

<sup>1</sup> <https://wetlandinfo.des.qld.gov.au/wetlands/>

<sup>2</sup> Department of Environment and Heritage Protection, (2011). State of the Environment Report. [online] Available at: <http://www.ehp.qld.gov.au/state-of-the-environment/report-2011/> [Accessed 10 October 2012].

<sup>3</sup> <https://watersource.awa.asn.au/technology/research/water-projects-job-creation/>