



Gladstone
Healthy Harbour
Partnership

SEAGRASS



FIVE FAST FACTS

1. Seagrass is an indicator for the environmental component of the Gladstone Harbour Report Card.
2. Seagrass meadows create nursery areas for juvenile fish and foraging areas for dugongs, turtles and large fish such as adult barramundi.
3. Seagrass ecosystem functions include: sediment stabilisation, nutrient cycling and carbon sequestration.
4. At peak distribution, seagrass meadows in Gladstone Harbour cover approximately **12,000ha**.
5. Fourteen seagrass meadows across **six zones** are monitored for the annual Gladstone Harbour Report Card.

THE GRADES

2016	2017	2018	Grading system
D	D	D	A Very good (0.85 - 1.00)
			B Good (0.65 - 0.84)
			C Satisfactory (0.50 - 0.64)
			D Poor (0.25 - 0.49)
			E Very poor (0.00 - 0.24)

HOW IS SEAGRASS MEASURED?

Seagrass surveys are conducted in Gladstone Harbour every year in November by a team of scientists from James Cook University. Surveys are undertaken by air in a helicopter and underwater by divers.

14 seagrass meadows within six zones are assessed each year.

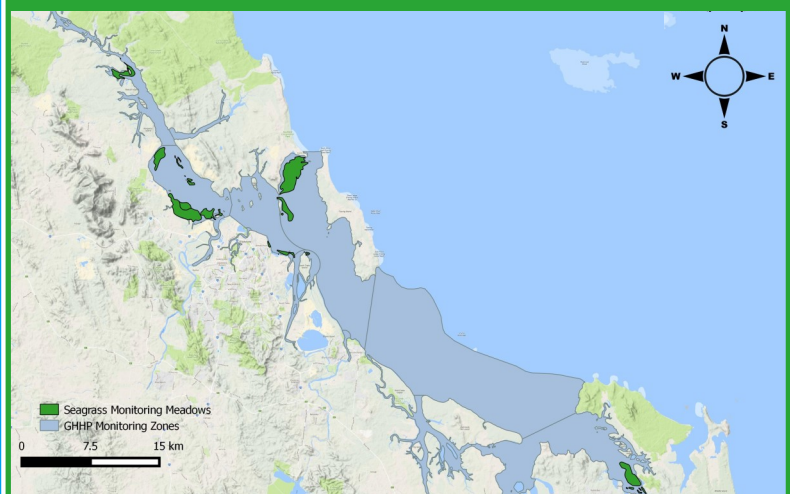
Three seagrass indicators are measured to calculate scores:

1. **Biomass:** measuring above ground biomass tells us how much seagrass there is in a meadow.
2. **Area:** boundaries are mapped to see if the area of seagrass is declining, stable or growing.
3. **Species composition:** the different types of seagrass are monitored. A meadow will receive a high score if the one species remains stable. It will receive a lower score if there is a shift from the main species to new colonising species.

WHAT DO THE GRADES MEAN?

Seagrass grades have remained poor since the first report card in 2015. Multiple years of high rainfall, river flows and cyclone activity in the Gladstone region may have reduced the condition of seagrass in the area. There were limited signs of seagrass recovery across the harbour between 2017 and 2018. The consistent overall poor condition of the seagrass meadows, indicates the seagrass in Gladstone Harbour remains in a stable but vulnerable state.

SEAGRASS MEADOWS MONITORED BY GHHP



Seagrass zones: The Narrows, Mid Harbour, South Trees Inlet, Rodds Bay, Inner Harbour and Western Basin.