



Gladstone  
Healthy Harbour  
Partnership

# SEAGRASS



## FIVE FAST FACTS

1. Seagrass meadows create nursery areas for juvenile fish and foraging areas for dugongs, turtles and large fish such as adult barramundi.
2. Seagrass ecosystem functions include: sediment stabilisation, nutrient cycling and carbon sequestration.
3. At peak distribution seagrass meadows in Gladstone Harbour cover approximately **12,000ha**.
4. Fourteen seagrass meadows in Gladstone Harbour are monitored for the annual GHHP report card.
5. Scientists assess and monitor seagrass by helicopter and diving.

THE GRADES		
2015	2016	Grading system
<b>D</b>	<b>D</b>	<b>A</b> Very good (0.85 - 1.00)
		<b>B</b> Good (0.65 - 0.84)
		<b>C</b> Satisfactory (0.50 - 0.64)
		<b>D</b> Poor (0.25 - 0.49)
		<b>E</b> 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 GHHP monitoring zones are assessed each year.

**Three** seagrass indicators are measured to calculate scores for the Gladstone Harbour report card:

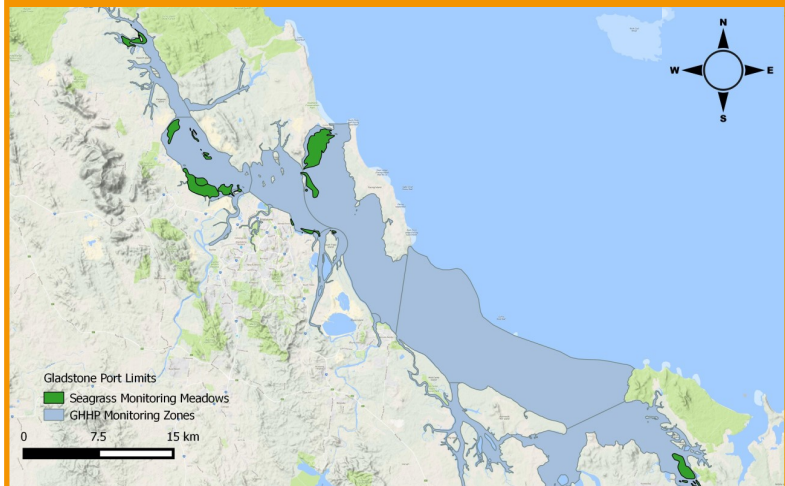
1. Biomass - measuring the above ground biomass tells us how much seagrass there is in a meadow.
2. Area - Boundaries are mapped to see if the area of seagrass is declining, stable or growing.
3. Species composition - the different types of seagrass are monitored. A meadow will receive a high score if 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.

However, seagrasses in Queensland have a demonstrated ability to recover from past impacts. Condition improvements recorded for some meadows in Gladstone Harbour suggest that seagrasses remain resilient and have the capacity to recover.

## SEAGRASS MEADOWS MONITORED BY GHHP



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