

# Seagrass snapshot: Leschenault Estuary 2020–21

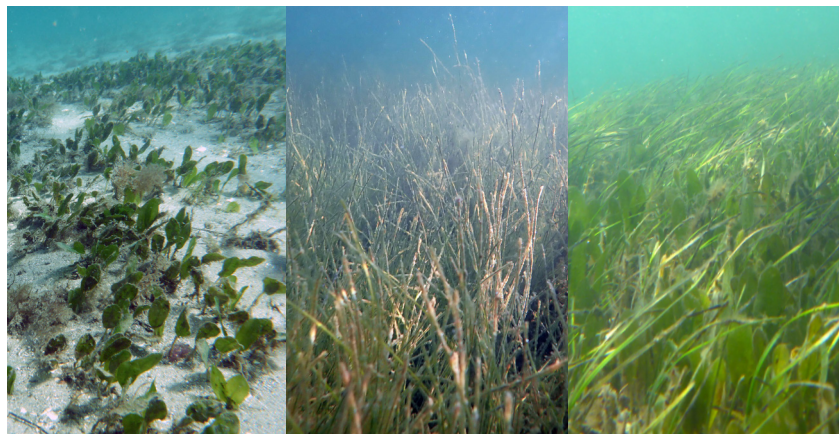
Through the Healthy Estuaries WA program, the condition and area of seagrass is being monitored in five South West estuaries, including Leschenault Estuary. This snapshot provides an update of the distribution of seagrass in Leschenault Estuary in February 2021.

It updates information from previous years available at [estuaries.dwer.wa.gov.au/seagrass](http://estuaries.dwer.wa.gov.au/seagrass).

Understanding seagrass condition helps to guide how we manage our estuaries

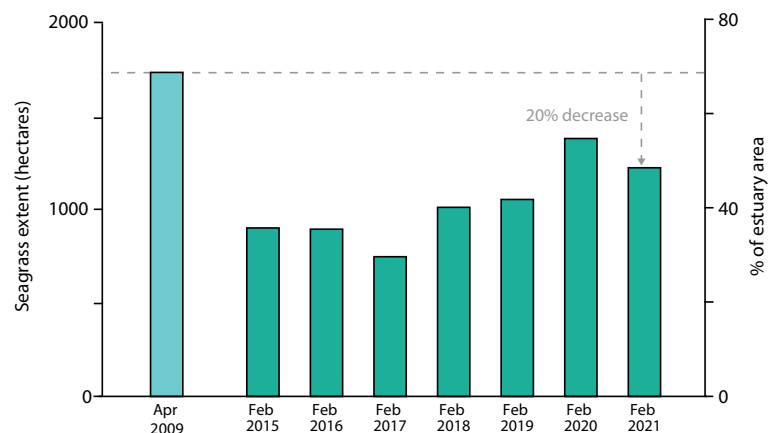
The Leschenault Estuary is a long, shallow coastal lagoon, located north of Bunbury. The estuary is permanently open to the ocean due to an artificial channel called ‘the Cut’. Increased urbanisation, land clearing, agricultural activities and drainage modification have impacted water quality. There have been signs of eutrophication since the 1990s, such as nuisance and harmful algal blooms, low oxygen, fauna deaths and a reduction in seagrass distribution. Recently, however, the estuary’s water quality has been relatively good thanks to better catchment management practices, and seagrass condition is improving.

Three species of seagrass occur in the Leschenault Estuary. *Halophila ovalis* (left image) is dominant, and is generally found throughout the estuary basin. *Ruppia megacarpa* (centre image) is often observed along the eastern shoreline. *Zostera muelleri* (right image) is found near the Cut, where the waters are more marine.



## Seagrass over time

- In the 1980s and '90s, seagrass was widely distributed in the estuary, particularly in the northern area, and absent only in a small area of deep water in the centre of the estuary.
- In April 2009, seagrass extended across 1,741 hectares – about 69 per cent of the estuary area.
- In 2014, there was a substantial loss of seagrass, which prompted monitoring to start in 2015.
- Seagrass is slowly recovering but is yet to return to the extent reached in 2009.



The Department of Water and Environmental Regulation has monitored seagrass annually from 2015 to 2021. Seagrass distribution was estimated to be only 37 per cent of the estuary area in 2015, but this has increased to nearly 50 per cent in recent years. Additionally, in 2020, seagrass had begun to recolonise the northern estuary, which hasn’t been observed in the area since 2009.

# Seagrass distribution in February 2021

In early 2021, the department estimated seagrass was spread across 1,229 hectares of the estuary, which is about 49 per cent of the estuary area. The areas with the densest seagrass cover were close to the Cut and along the eastern shoreline, north of Australind. Compared with 2020, there was a slight decrease in the extent of seagrass and the density of cover. *Halophila* remains the most dominant species. *Ruppia* continues to expand its range, particularly along the eastern shoreline. *Zostera* has maintained localised distribution close to the Cut, where salinity levels are most stable.

The department also observed the abundance of small organisms growing on the seagrass leaves (epiphytes), which can reduce light availability and impact seagrass growth. On average, the epiphyte cover was high across the estuary in February 2021.

Overall, in February 2021, seagrass in the Leschenault Estuary was in a stable and good condition. However, recovery of seagrass in the northern basin is slow and highlights the importance of continuing work to improve water quality.

