

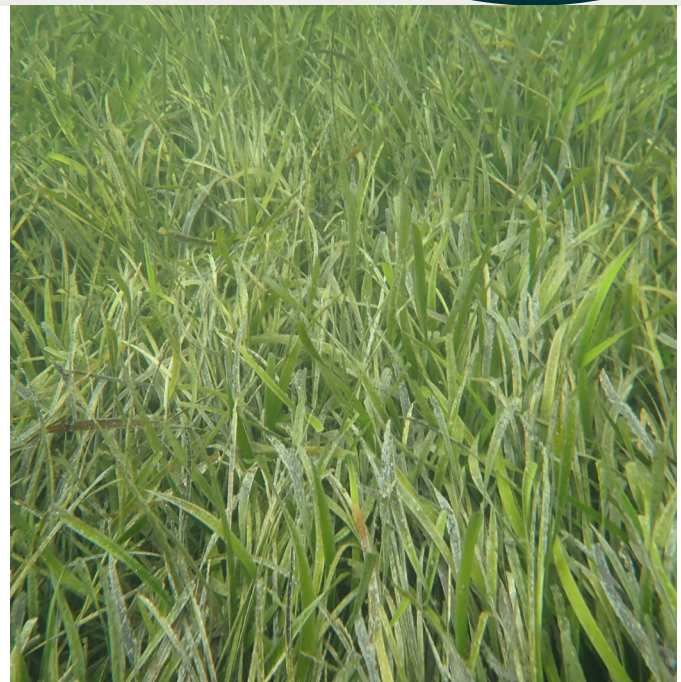
Seagrass snapshot: Miaritch (Oyster Harbour) 2024-25

Through the State Government’s Healthy Estuaries WA program, the Department of Water and Environmental Regulation (the department) monitors the condition and area of seagrass in five estuaries in south-west Western Australia (WA), including Oyster Harbour. This snapshot provides an update on the distribution of seagrass in Oyster Harbour in January 2025. The collection of annual snapshots is available at estuaries.dwer.wa.gov.au/seagrass.

Understanding seagrass condition helps to guide how we manage our estuaries

Oyster Harbour is a shallow estuary located in the Great Southern region of WA, near Albany. The estuary is permanently open to the ocean through a channel at Emu Point. Catchment clearing and excessive nutrient inputs in the 1970s and 1980s caused a collapse of the ecosystem and extensive loss of seagrass in the estuary. In the decades since, water quality has greatly improved due to better catchment management practices, supporting the recovery of seagrass meadows in the estuary.

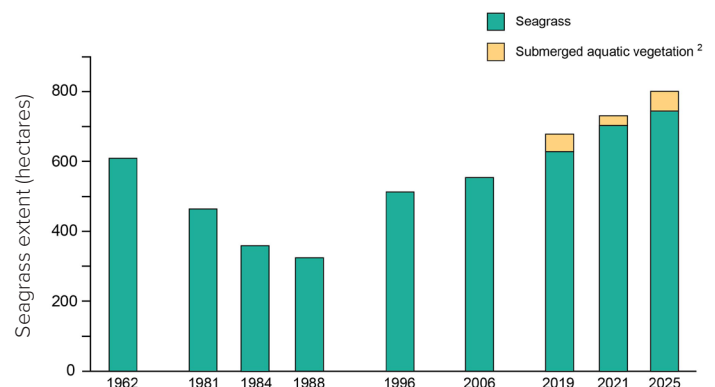
The seagrass habitat in Oyster Harbour is dominated by two species: *Posidonia australis* and *Posidonia sinuosa*. While these species look similar, *Posidonia australis* has wider leaves than *Posidonia sinuosa*. Maintaining healthy seagrass meadows is crucial for overall estuary health, as they provide food and habitat for animals, and improve water quality by producing oxygen and absorbing excess nutrients.



Seagrass over time

- In 1962, seagrass was distributed across 610 hectares.
- Widespread loss of seagrass occurred in the 1980s due to excess nutrients promoting epiphyte¹ growth, reducing the light available to seagrass for growth.
- A community-led seagrass restoration effort aided seagrass recovery from the mid-1990s.
- While seagrass recovered to span across 556 hectares by 2006, the density of seagrass cover was generally low.
- By 2019, seagrass meadows had further recovered to extend across more than 600 hectares of the estuary, exceeding the extent reported in 1962. Additionally, the density of meadows had also increased, indicating an improvement in seagrass condition since 2006.

The department monitored the condition of seagrass in Oyster Harbour in 2019, 2021 and 2025. The recovery of seagrass is the result of work in the catchment to improve water quality and more than 20 years of seagrass restoration.



¹ Epiphytes are small organisms growing on the surface of seagrass leaves.

² Submerged aquatic vegetation refers to unidentified vegetation (macroalgae or seagrass) that was inferred from remote image assessment.

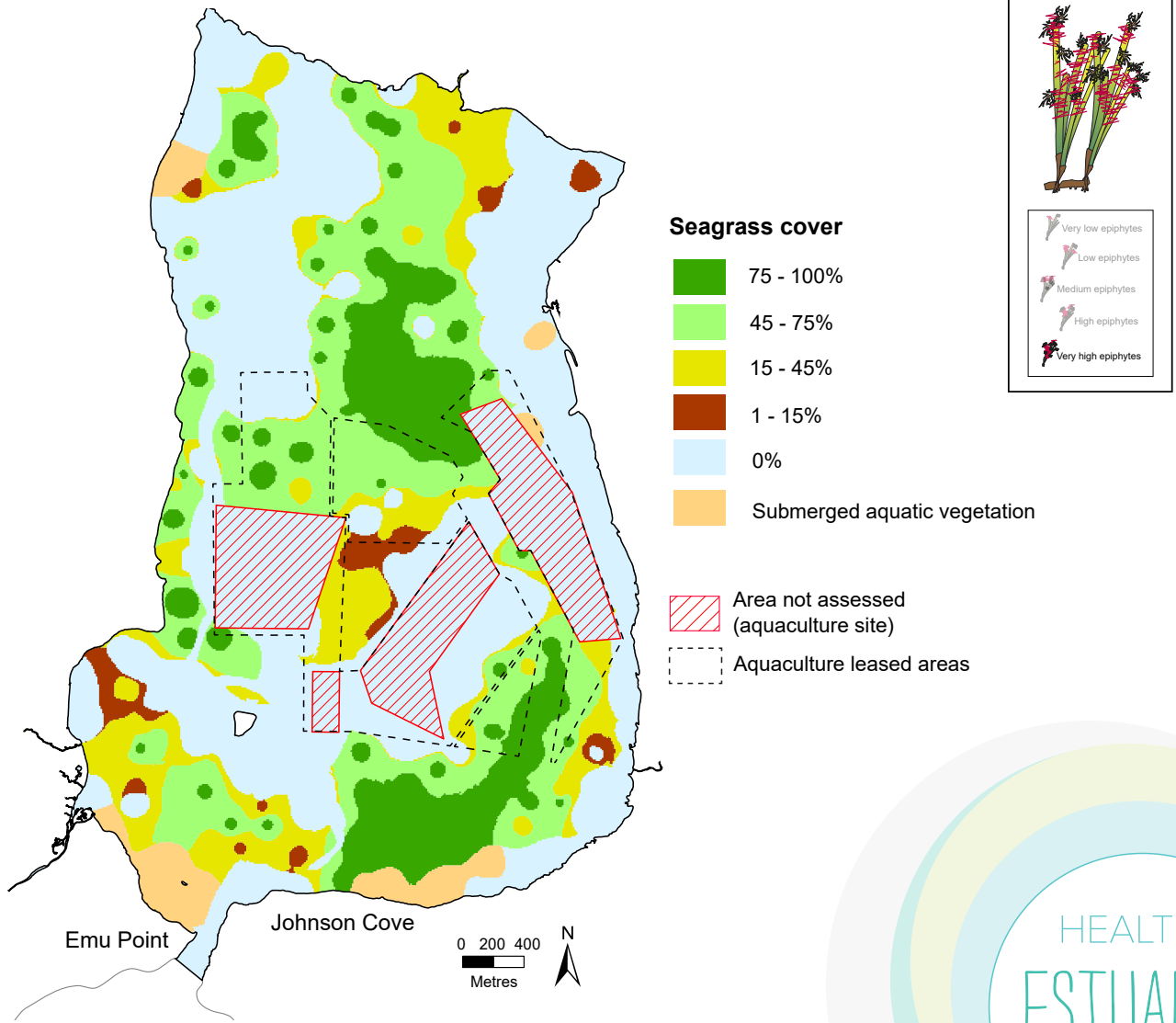
Seagrass distribution in January 2025

In January 2025, seagrass was estimated to extend across 744 hectares³, indicating about a 40 hectare increase since 2021. Seagrass meadows along the southern bank near Johnson Cove and in the central basin north of the aquaculture areas continue to have the densest seagrass cover. Seagrass meadows are continuing to recover in some parts of the estuary, particularly in the southern harbour near Emu Point. However, while seagrass extent has increased in the areas near Emu Point, there was a slight decline in the density of these meadows compared with 2021. In 2025, approximately 19 per cent (143 hectares) of the total seagrass extent in Oyster Harbour occurs within the assessed aquaculture leased areas.

Posidonia australis remains the most dominant species and is found throughout the estuary. *Posidonia sinuosa* was typically observed in mixed meadows with *Posidonia australis* and has continued to expand

its range in the northern half of the harbour. The department also observed the abundance of small organisms growing on seagrass leaves (epiphytes), which can reduce light availability and impact seagrass growth. Epiphyte cover was very high across the estuary in January 2025, an increase from the medium cover observed in 2021. In addition, macroalgae abundance has increased since seagrass monitoring began in 2019.

Overall, seagrass in Oyster Harbour was in a stable and good condition in January 2025 and continues to show signs of recovery. However, increases in epiphyte cover and macroalgae abundances could indicate an increase in nutrients in recent years. This highlights the importance of continued efforts to improve water quality, including catchment management to reduce nutrient runoff, to sustain long-term seagrass recovery.



³ An additional 57 hectares of submerged aquatic vegetation was inferred from remote image assessment

