

Blue Carbon Opportunities in South Australia



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Government of South Australia
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and Water



Saltmarsh



Mangroves



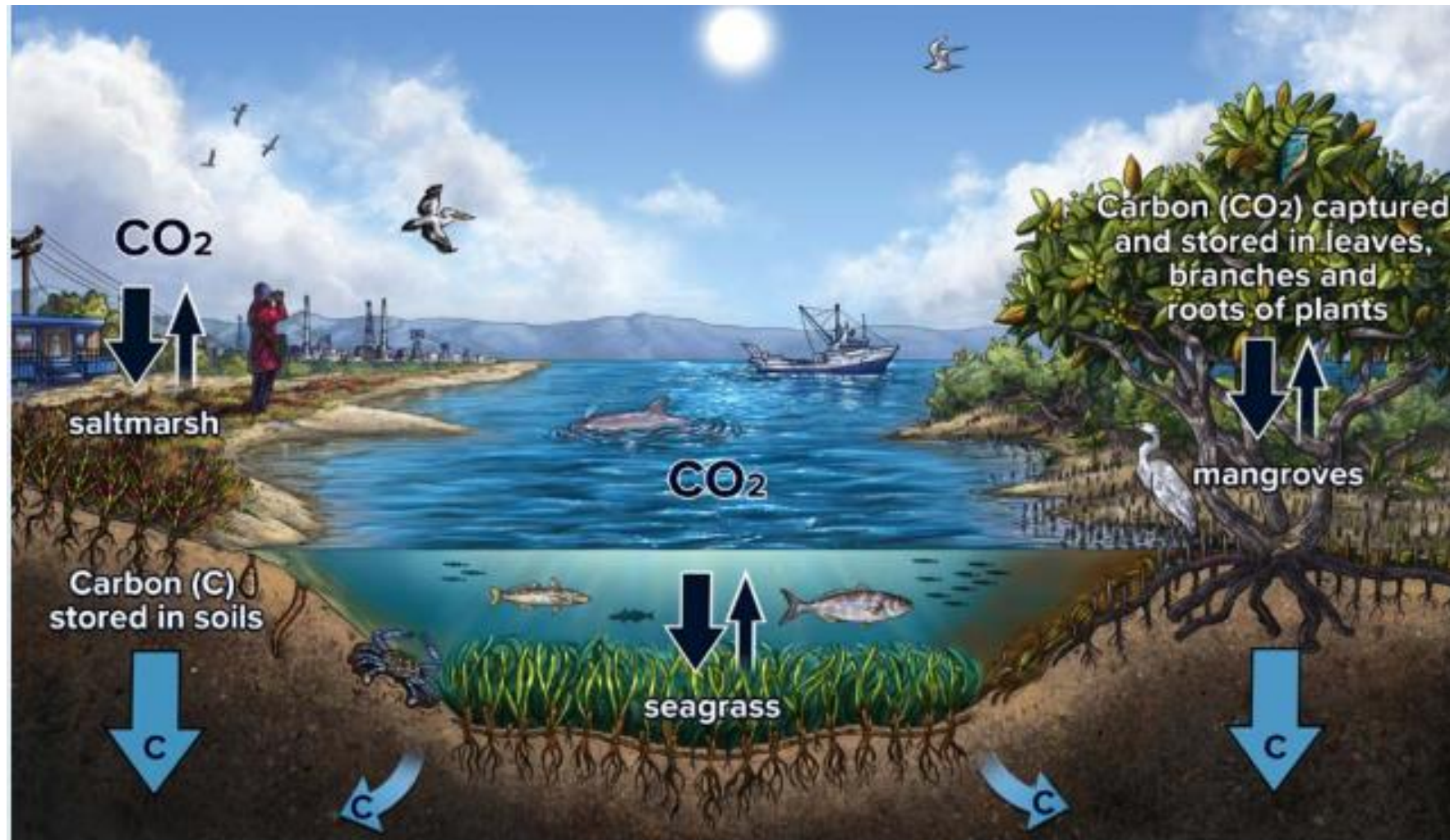
Seagrass

Blue carbon habitats

- Traditionally undervalued – often filled in and developed
- These habitats provide:
 - nursery habitat for valuable fisheries
 - critical habitat for threatened species
 - water purification service to the marine environment
 - coastal protection against extreme weather events
 - recreation and tourism opportunities
 - significant cultural values.



Blue carbon habitats also sequester carbon from the atmosphere



Blue carbon ecosystems sequester carbon and provide other co-benefits such as biodiversity, water quality, shoreline protection and support coastal economies and livelihoods

Infographic: Rene Campbell.

Blue carbon ecosystems mitigate South Australia's carbon emissions



Carbon stored per hectare



Soil carbon stocks in SA



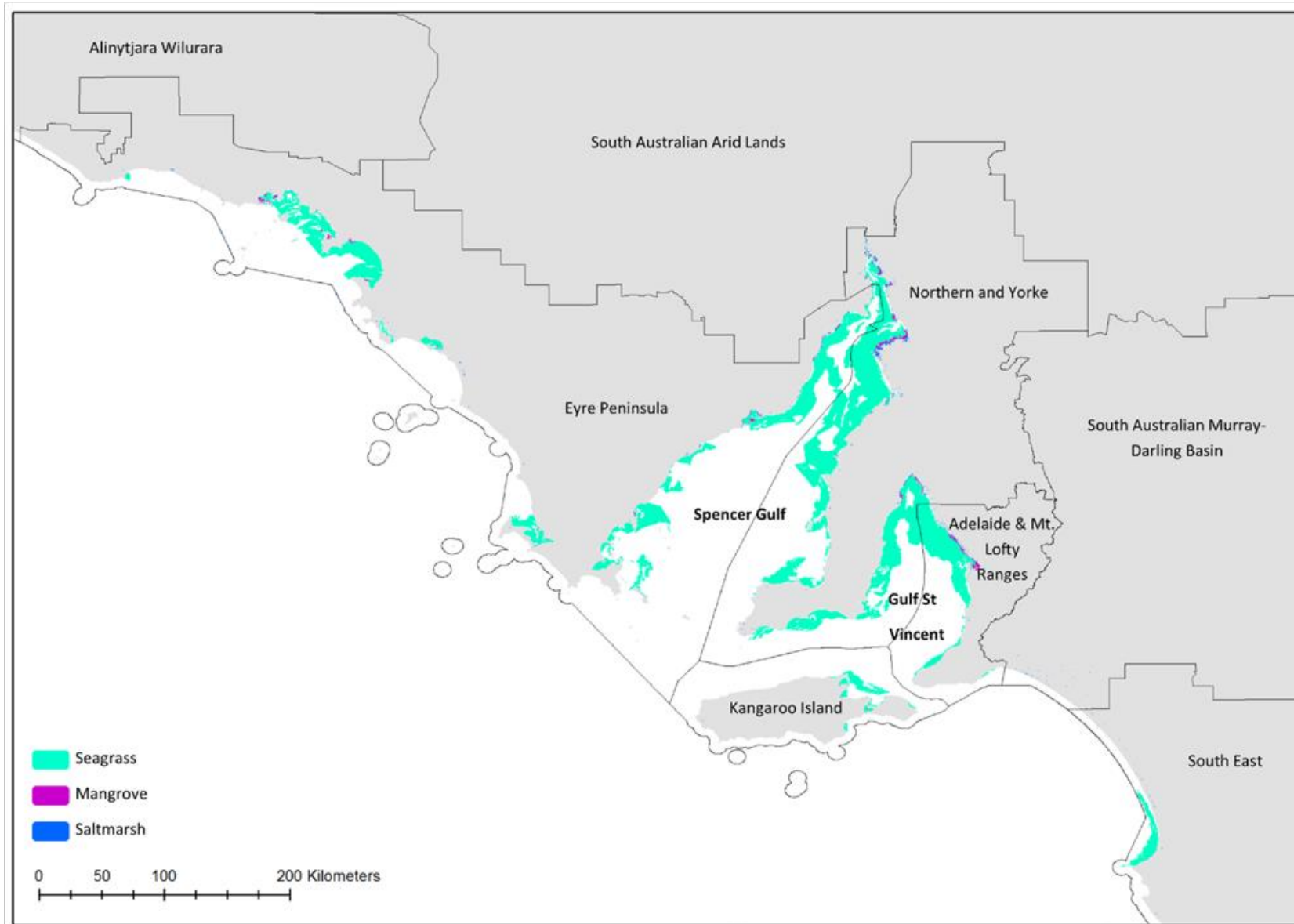
The combined area of all blue carbon ecosystems in SA is around a million hectares, equivalent to more than twice the area of Kangaroo Island.



Every year SA's blue carbon ecosystems lock away the equivalent of up to 3.6% of the state's annual carbon emissions.



Distribution of blue carbon ecosystems in South Australia



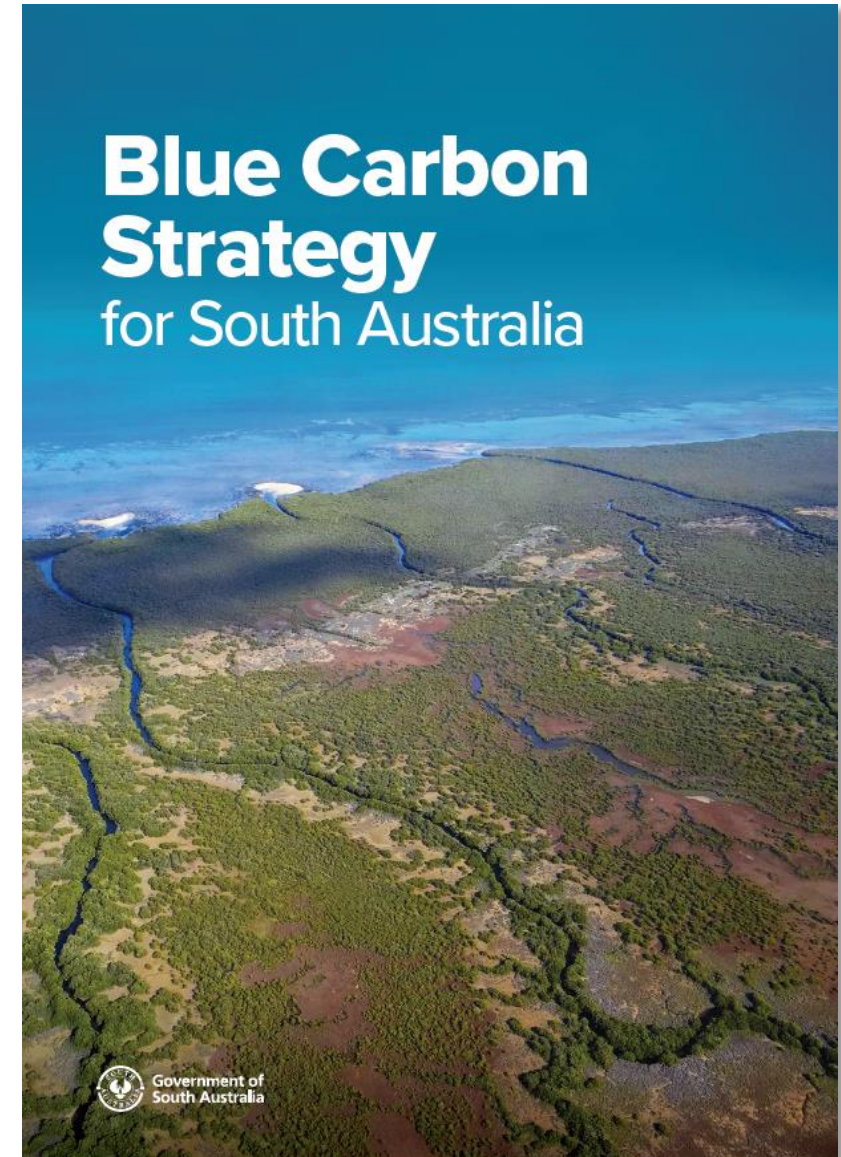
- Over 1 million hectares of highly diverse coastal vegetated ecosystems.
- Our biggest blue carbon asset are our extensive seagrass meadows.

Table 6. Area estimates for all blue carbon ecosystems (seagrass, mangrove and tidal saltmarsh) in each of the eight Natural Resource Management regions of South Australia. Estimates are based on the best-available spatial data in June 2019 (see details in Table 1 and discussion in Section 2 relating to potential omissions and uncertainty in the spatial data).

NRM REGION	SEAGRASS AREA (HA)	TIDAL SALTMARSH AREA (HA)	MANGROVE AREA (HA)	TOTAL (HA)	PERCENTAGE OF TOTAL AREA
South Australian Arid Lands	1.0	19.5	0	21	0.002
Alinytjara Wilurara	0	22.5	0.2	23	0.002
South Australian Murray-Darling Basin	0	630	0.38	631	0.06
Northern & Yorke	506501	10530	7793	524824	47
Eyre Peninsula	402972	5476	5288	413736	37
Kangaroo Island	26014	470	93	26578	2.4
Adelaide & Mt Lofty Ranges	116172	2013	3229	121414	11
South East	29077	594	17	29689	3
TOTAL	1080738	19756	16420	1116914	100

Blue Carbon Strategy for SA

Objective 1	Connect blue carbon ecosystem restoration to carbon markets and other finance mechanisms
Objective 2	Deliver research to quantify blue carbon and co-benefits
Objective 3	Identify and implement blue carbon demonstration projects
Objective 4	Integrate blue carbon into coastal policy, planning and management strategies



Existing partnerships

SA is taking the lead on blue carbon through various partnerships:

- Commonwealth government – CSIRO, Clean Energy Regulator
- other state government agencies – SARDI, EPA, SA Water
- Landscape Boards – Green Adelaide, Northern and Yorke, Eyre Peninsula
- Universities – Flinders University, University of Adelaide, University of South Australia, Deakin University
- Goyder Institute, The Nature Conservancy.



Potential types of blue carbon projects

- Restoring tidal flow (ACCU Scheme accredited method)
- access management – people and animals
- land use planning – enabling coastal retreat
- water quality improvement
- active seagrass restoration.



Australia's carbon market: Australian Carbon Credit Unit (ACCU) Scheme

- Voluntary scheme established under the *Carbon Credits (Carbon Farming Initiative) Act 2011*
- previously called the Emissions Reduction Fund
- Scheme supports investment in projects that reduce emissions
- projects are credited with one ACCU/tCO₂-e stored or avoided.



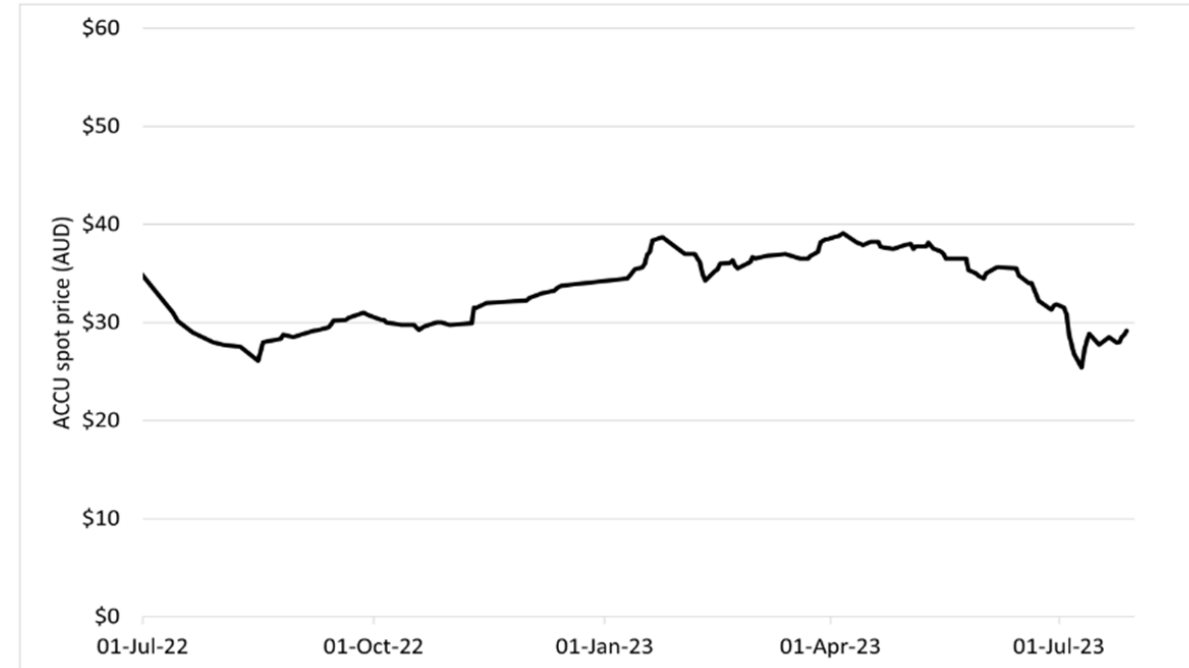
ACCU Scheme continued

- ACCUs can be traded or sold on the national environmental commodity market
- ACCUs can also be surrendered as a carbon offset to contribute to business baseline emission targets or net zero ambitions
- On 24 November 2023 the ACCU spot price was listed at \$30.90*.

Generic Australian carbon credit unit (ACCU) spot price

July 2022 to July 2023

Note: This figure is not interactive.



About Figure 1.2

This graph shows the volume weighted average of ACCU generic spot price. The generic spot price refers to the price of ACCU spot trades with an unspecified method.



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*Spot price as per <https://www.ecovantage.com.au/australian-carbon-credit-units/>

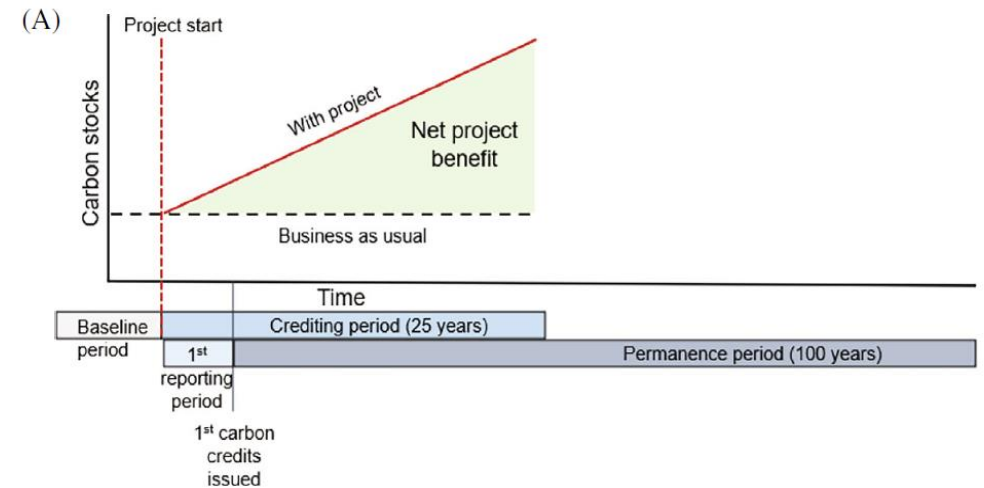
ACCU Scheme

- ACCU Scheme methods set out rules for project activities and how abatement is calculated.
- There are currently 32 active methods
- The blue carbon method introduced in 2021 creates opportunities to register projects that store carbon through the reintroduction of tidal flows.
- There is currently only two blue carbon projects that have submitted projects under the ACCU Scheme.
 - Blue Heart Project – Sunshine Coast
 - SA Blue Carbon Restoration Project - Webb Beach/AIBS
 - Both projects received a grant from DCCEEW.



Blue carbon method – tidal reintroduction

- Project must:
 - comply with the *Carbon Credits (Carbon Farming Initiative) Act 2011* and approved method
 - have legal rights to the land for permanence period – 25 or 100 years
 - ensure you meet the eligibility and newness requirements
 - remove/modify a tidal obstruction that was installed legally
 - result in a real and measurable net carbon benefit.



Things to consider

- Cost – significant upfront costs
- Complexity – relationships, registration and on-ground works
- Time – significant lead in time, time taken for sequestration/storage to be realised, 25 or 100 year permanency
- Likelihood of success – more of an issue for marine based projects.

XB8A Trial – proof of concept



2017



2022

Have no fear...
the **Nature Repair Market**
is near!



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Summary

- Blue carbon habitats store up to four times the carbon than terrestrial ecosystems
- There ARE opportunities to deliver blue carbon projects across South Australia
- Blue carbon projects require significant up-front investment and you must be committed for the long term.
- The Nature Repair Market has the potential to increase the financial gain realised by restoring blue carbon habitats.



Blue carbon habitats are awesome and deserve investment!



Photo: Sophie Russell



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