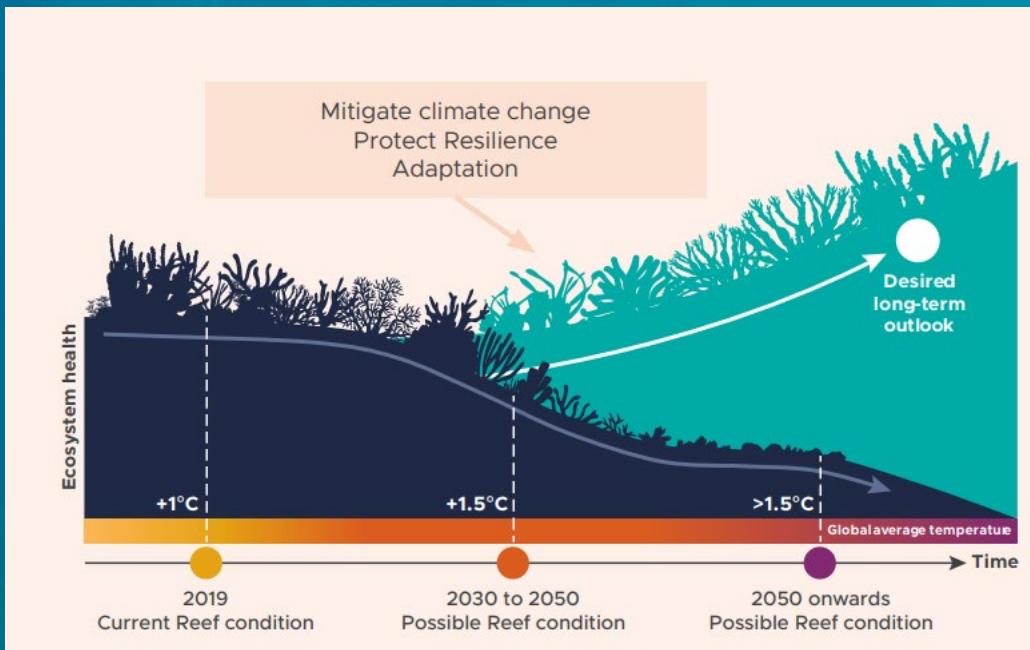


Scaling up seagrass restoration on the Great Barrier Reef

Will Hamill, Great Barrier Reef Foundation (GBRF)
IPBC Dialogue, October 2024





Coastal Wetland Restoration

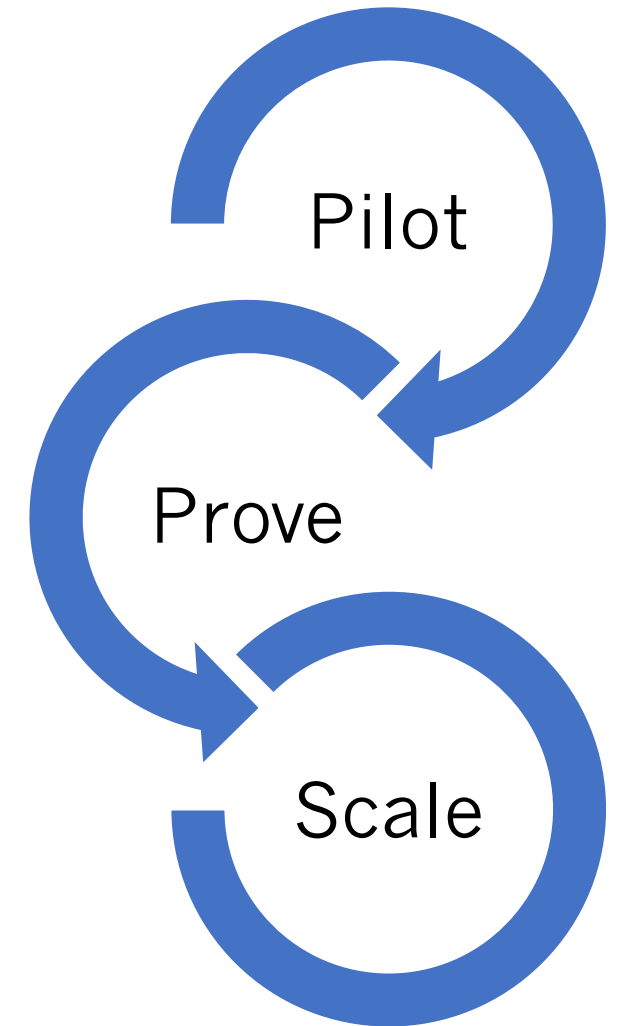
The Great Barrier Reef Foundation, in consultation with scientist, Traditional Owners, government, community groups, and Australia's environmental NGO community has created an ambitious plan to accelerate and scale coastal restoration opportunities on the Great Barrier Reef, and the Pacific.

Over the next decade we aim to **pilot, prove and position to scale** high impact projects that benefit people and planet.

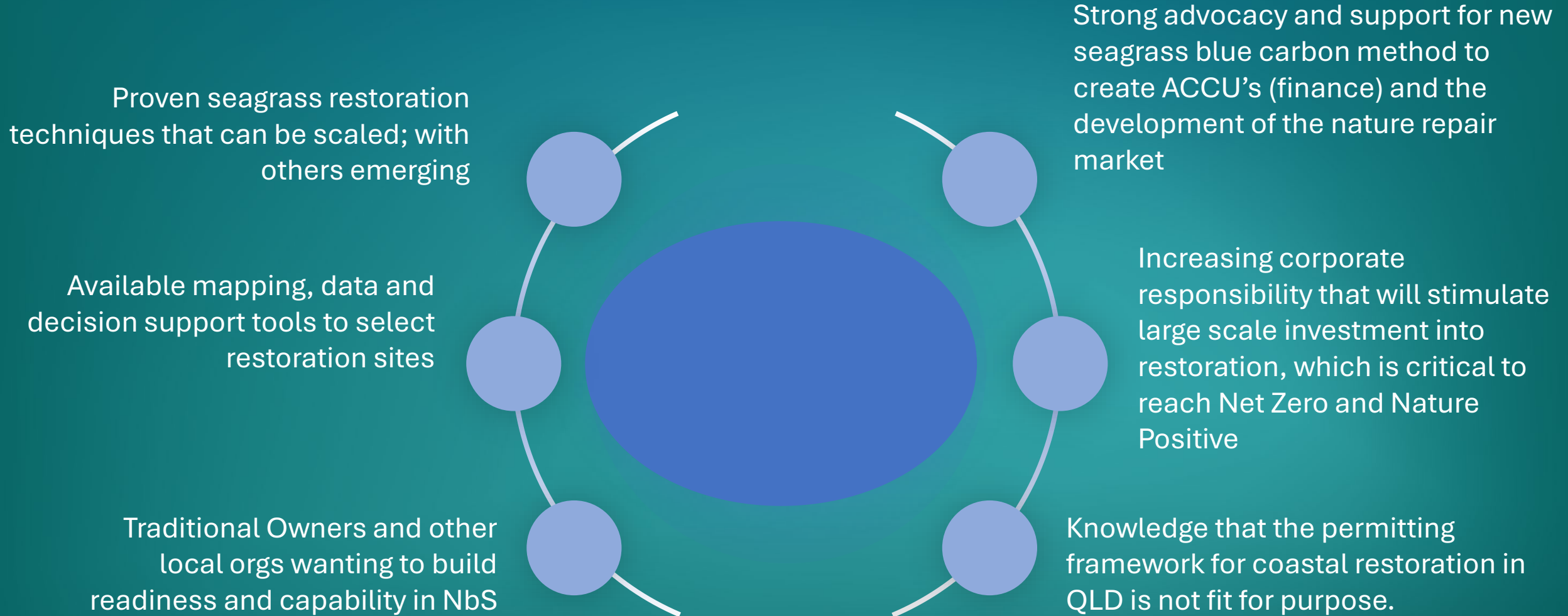
By proving new **restoration methods** in seagrass, mangroves and tidal marsh habitats we can accelerate Nature Repair Solutions and catalyse the creation of genuine low carbon economies led by farmers and Traditional Owners.

We aim break down the barriers that are preventing communities to accessing and mobilising finance to scale solutions and protect their livelihoods.

We must keep pace with the urgent need to scale solutions to meet the demands of the climate crisis, together.



Enabling conditions – seagrass restoration



ENABLING SEAGRASS
RESTORATION AND
PROTECTION – OUR PROJECTS

PARTNERS

James Cook University, Central Queensland University, Reef Catchments, BMRG, Wuthathi, Giringun, Woppaburra, Mandubarra, Goondoi, GMYPBC, YBM, Jabalbina, Junjuwarra - Aboriginal Corporation's.



DRONE TRAINING FOR SEAGRASS TRANSECT MAPPING



Wuthathi Aboriginal Corporation engage in seagrass monitoring drone training, Cape York Peninsula.



REEF CATCHMENTS SEAGRASS NURSERY

Seagrass Nursery Project managed by Reef Catchments and Central Queensland University, Airlie Beach, Whitsundays.



Seagrass Restoration Roadmap - GBR

SEAGRASS RESTORATION ROADMAP FOR THE GREAT BARRIER REEF

COASTAL MARINE ECOSYSTEMS RESEARCH CENTRE



Emma L. Jackson¹, Alex Carter², Catherine Collier², Manuja Lekammudiyanse¹, Len McKenzie², Andria Ostrowski¹

¹ Coastal Marine Ecosystems Research Centre, CQUniversity.

² TropWater, James Cook University

88,331 km² of potential seagrass habitat in the GBR

Multiple stressors, but a primary driver is increased frequency of storms and flooding events.

Ambitious global targets for restoration require efforts to be effectively upscaled.

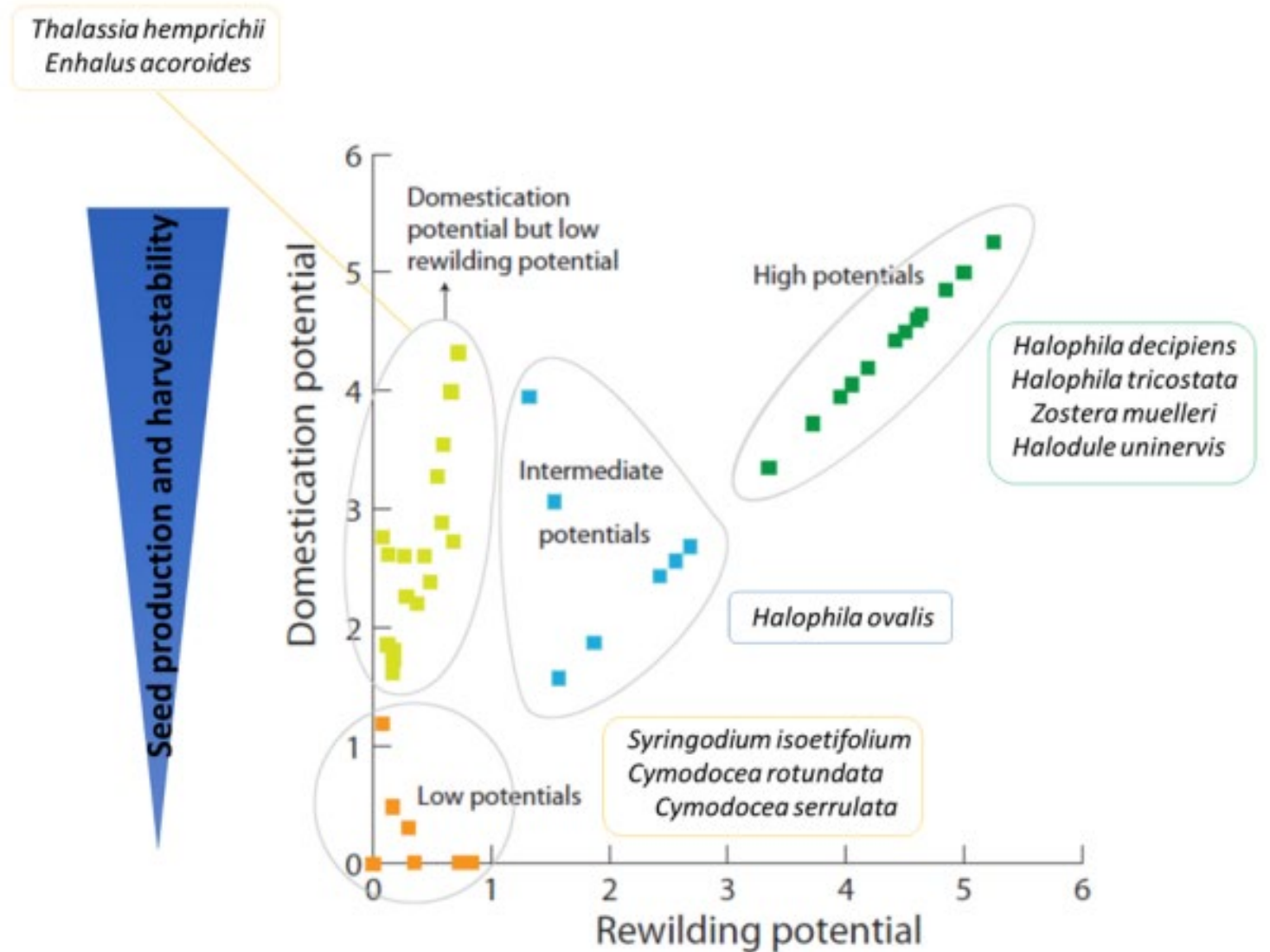


RESEARCH WITH IMPACT



Research:

Broaden research beyond *Zostera* to include other high potential species such as *Halodule* and *Thalassia*.



Domestication and rewilding potential modified from Van Katwijk et al 2021.



Restoration trails and locations:

Target restoration in locations with:

- a) declining trends, based on high temporal resolution data for intervention.
- b) high habitat suitability but no data and high risk, for the establishment of mapping, monitoring and restoration trials.

Table. Snip of MCA analysis for sites with data.

NRM	Site	Seagrass status	Seagrass trends	Number years sampled	First year sampled	Last year sampled	Seagrass resilience index	Connectivity	Exogenic pressures	Endogenic pressures	Knowledge base for restoration of the species	Species traits	Meadow type	Knowledge base for restoration at that site	End users and funders	Ecosystem services	Accessibility	Delivery partners	Training partners	Research partners	Infrastructure base	Distance to healthy donor meadows
Cape York	Piper Reef	4	5	4	3	5	3	2	5	5	4	5	4	4	4	5	0	4	3	3	1	3
Wet Tropics	Lugger Bay	4	5	4	3	5	5	2	5	3	4	3	4	4	2	3	3	4	4	3	4	3
Wet Tropics	Mourilyan Harbour	5	5	5	5	5	5	3	5	5	4	1	2	5	4	5	1	5	4	5	4	3
Burdekin	Cockle Bay	4	5	4	3	5	5	2	3	5	4	1	2	4	2	5	2	2	5	5	4	5



Finance:



SDVM002

NATURE FRAMEWORK

DRAFT

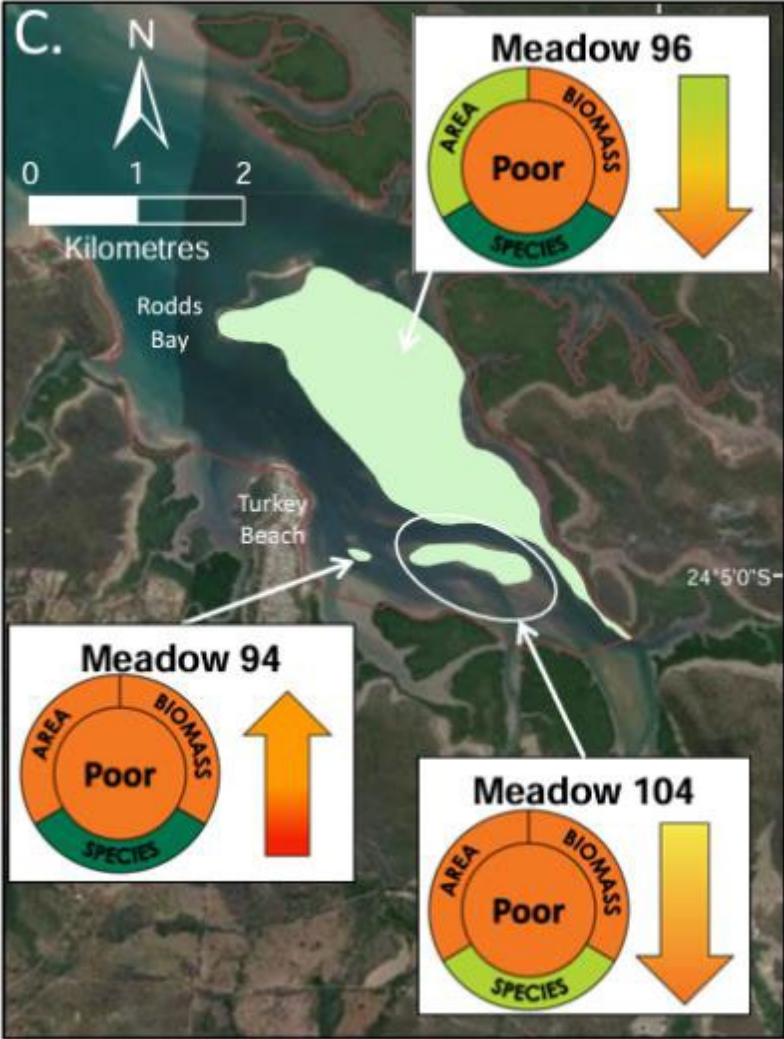
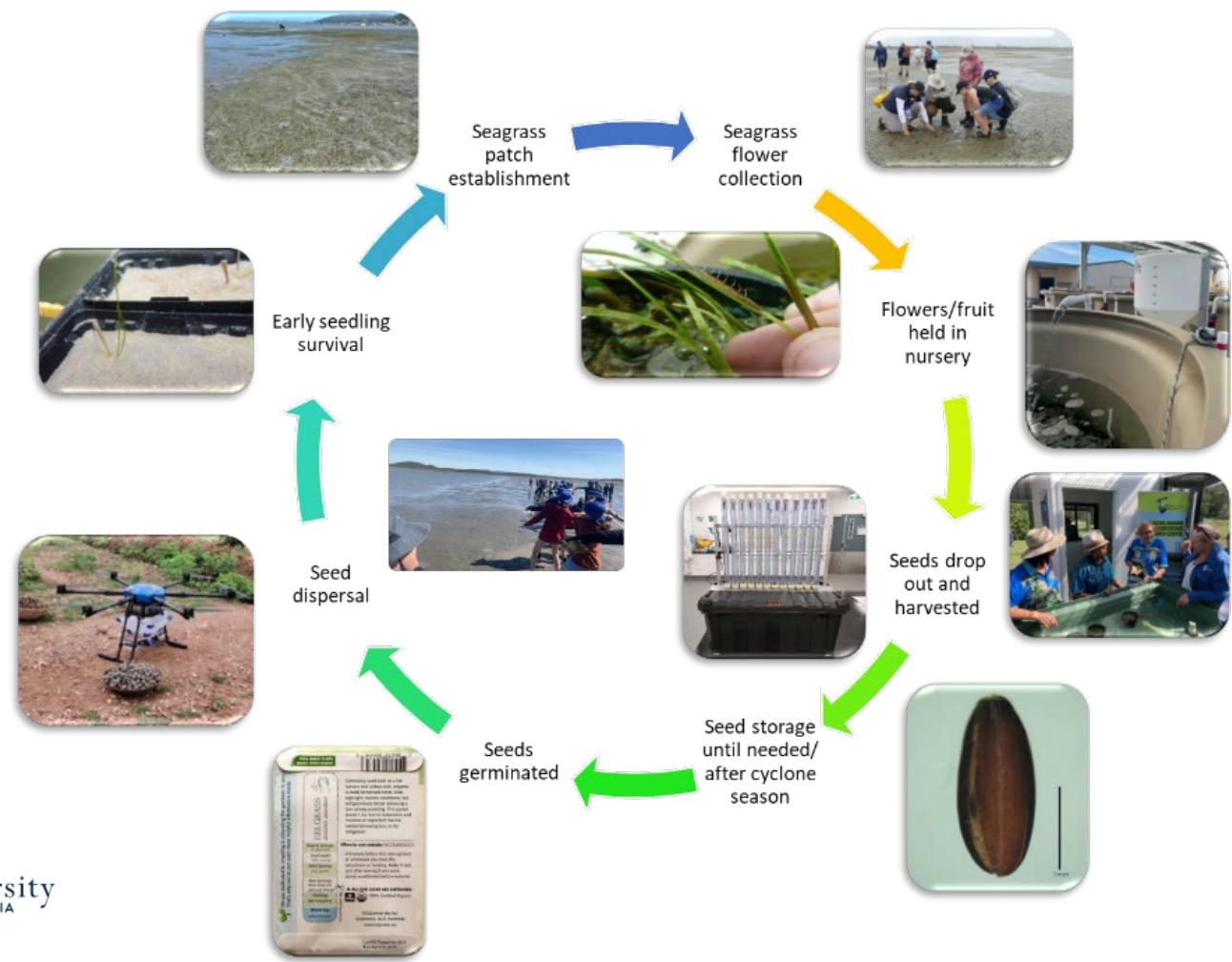


In partnership with

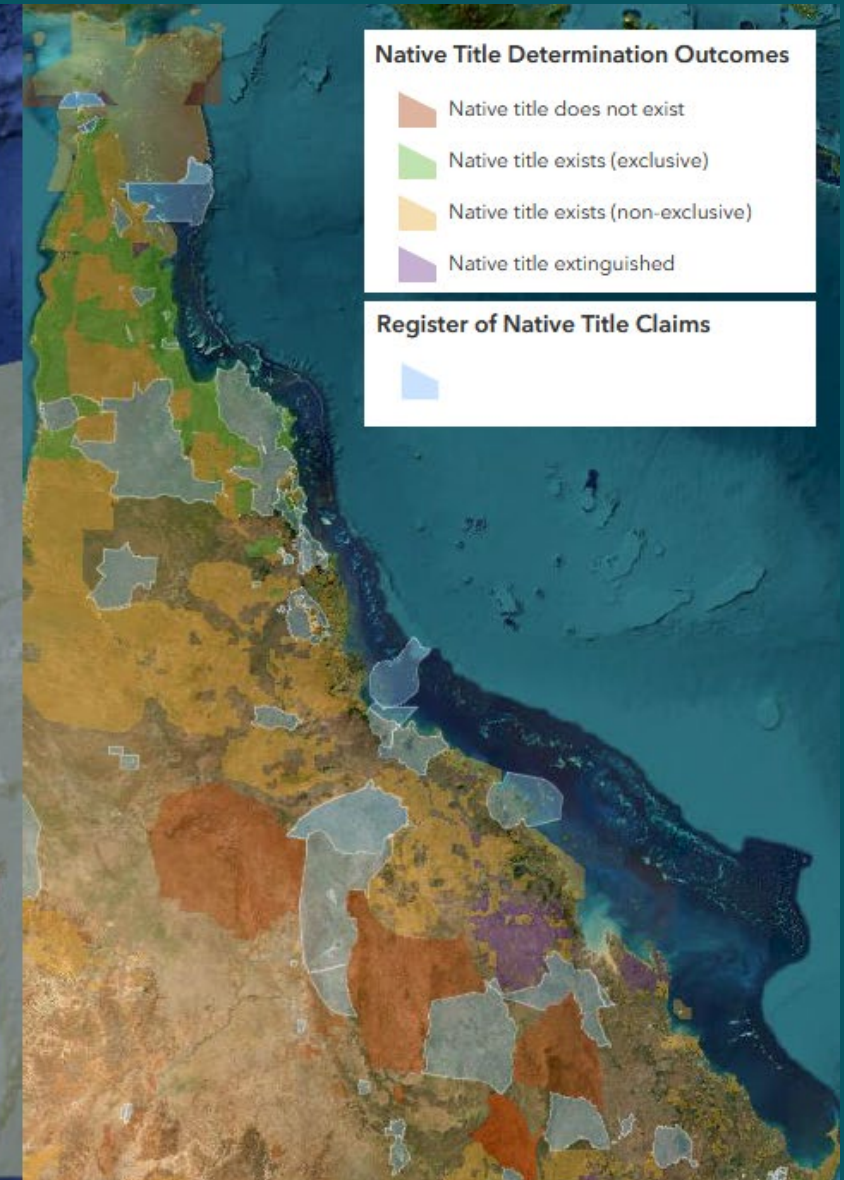
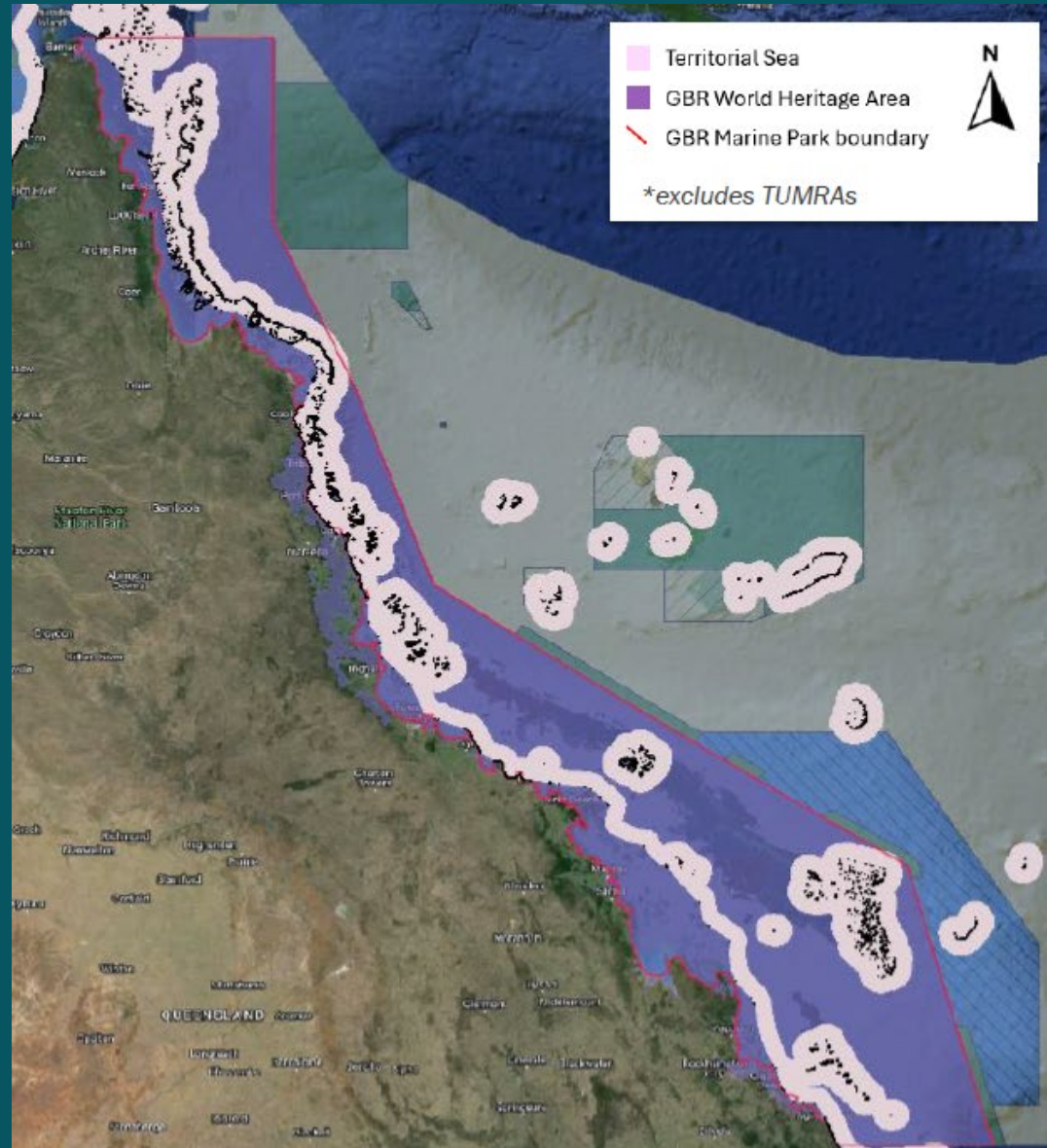


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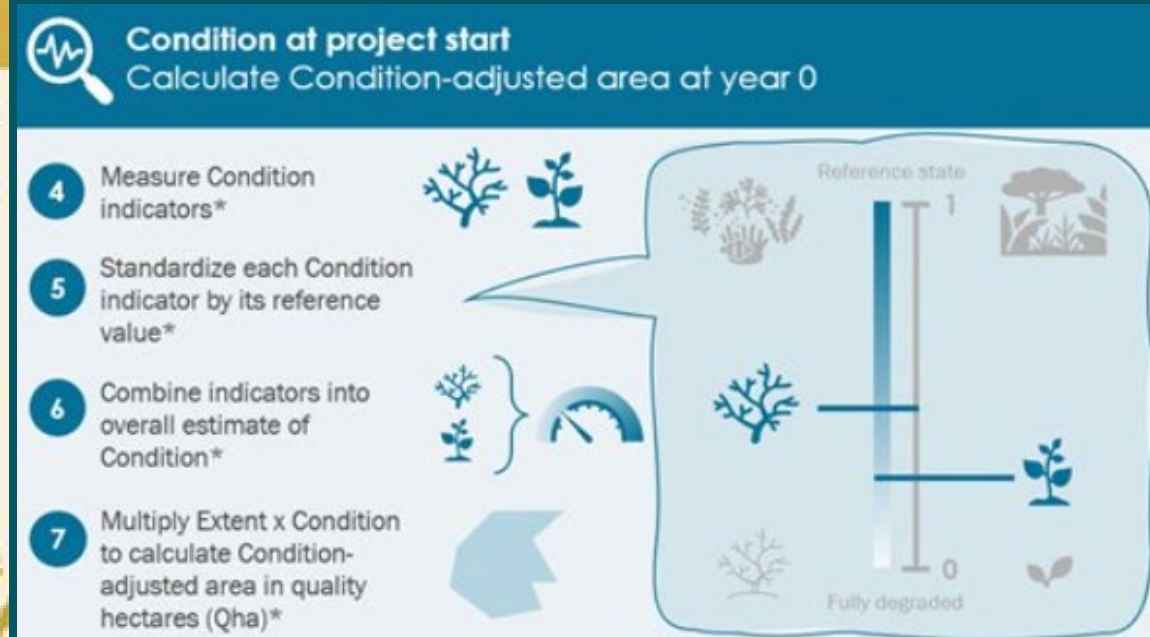
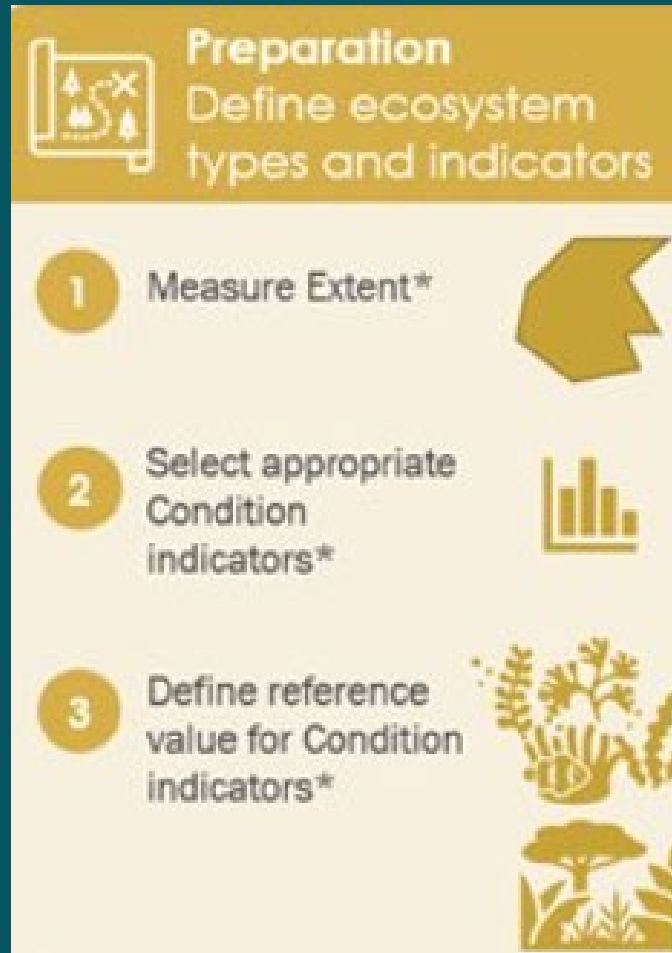
Gladstone Restoration:



Safeguards:
How does
the
government
assign the
legal right,
and to
whom?



Quantification: How to select indicators to measure state of seagrass?



Qha Year 0 (Extent*Condition of the 632 meadow) = Combination range from 79.14-246 Qha at Year 0.



What is next?

- Sourcing funding to implement Roadmap recommendations for scaling seagrass restoration on the GBR
- Investing in an Accounting for Nature environmental account to standardise measures for extent and condition for credits
- Exploring both carbon and nature finance for existing restoration pilot projects.





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Reef Foundation

Thank you

