

Seagrass: Global Conservation Challenges

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What are seagrasses?

a functional group of marine flowering plants

- are tidal or subtidal
- have light sensitive leaves
- have a true root system
- have an internal system of veins
- produce flowers, fruits and seeds
- have important ecological roles



photo courtesy Ria Tan



photo courtesy Ria Tan



photo courtesy Ria Tan

Provide many important services

nutrient filter



food for dugongs



nursery/habitat for fisheries



coastal protection



food for sea turtles



blue carbon



disease mitigation



Many challenges

Challenge 1.

local & regional recognition of seagrass importance

Challenge 2.

up-to-date information on status & condition

Challenge 3.

identifying threatening activities at local scales

Challenge 4.

balancing the needs of resources users with conservation, economic growth and food security

Challenge 5.

scientific research to support conservation actions

Challenge 1. Education & engagement

local communities



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Challenge 1. Education & engagement

local government & media



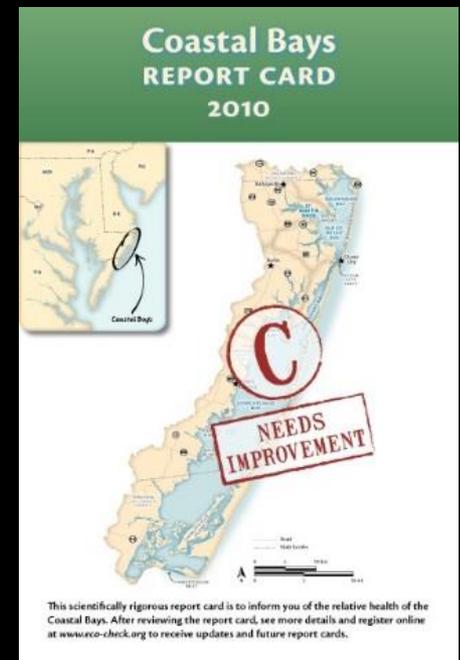
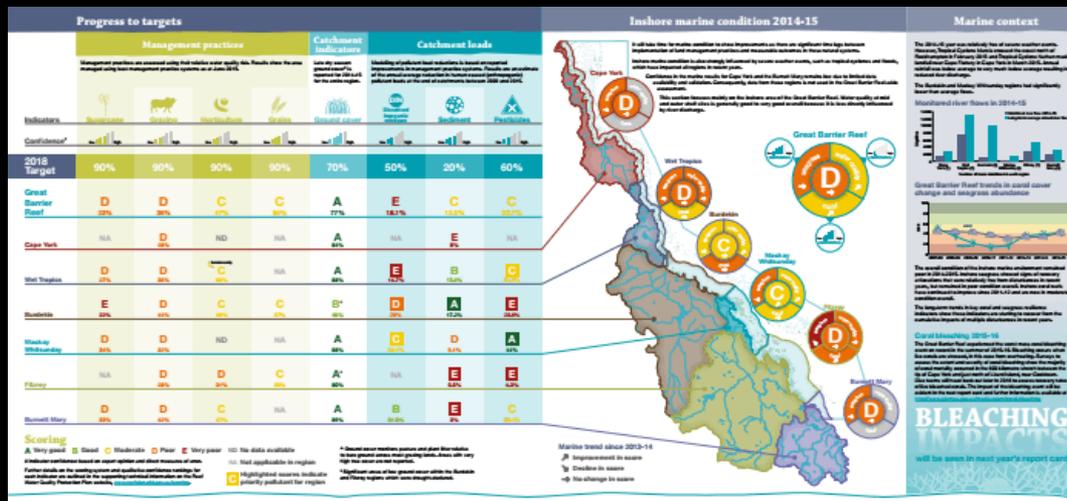
Ensure you communicate the findings to the appropriate people

Challenge 2

Need to understand the state of seagrass

What is the status and condition of the seagrass resource?

- inventory (species & extent)
- condition assessment



Seagrass extent poorly mapped in the Indo-Pacific

Globally mapped 177,000 km²

but estimated to be 300,000 – 600,000 km²

e.g. “Coral Triangle”

	<i>species</i>	<i>extent</i>
Philippines	13 (15?)	978 km ² (~22,000 km ²)
Malaysia (eastern)	6 (12?)	3.2 km ²
Indonesia (eastern)	13	~20,000 km ²
Timor Leste	5 (13?)	42 km ²
Papua New Guinea	13	118 km ²
Solomon Islands	10	80 km ²
TOTAL	13 (15)	21,200 to 42,230 km²

Huge task, so we all need to work together

Seagrass Spotter

citizen science



entry-level



novice



Spotted by E Mayhead on 17th January 2017 in Lajas, Puerto Rico
Sighting Information:

Thalassia testudinum
Observed: Snorkelling
Observed: Subtidal
Coverage: Large area of continuous seagrass (>50m²)
Flowers: None
Sediment: Pebbles
Algae Coverage: 0%

Available on the
App Store

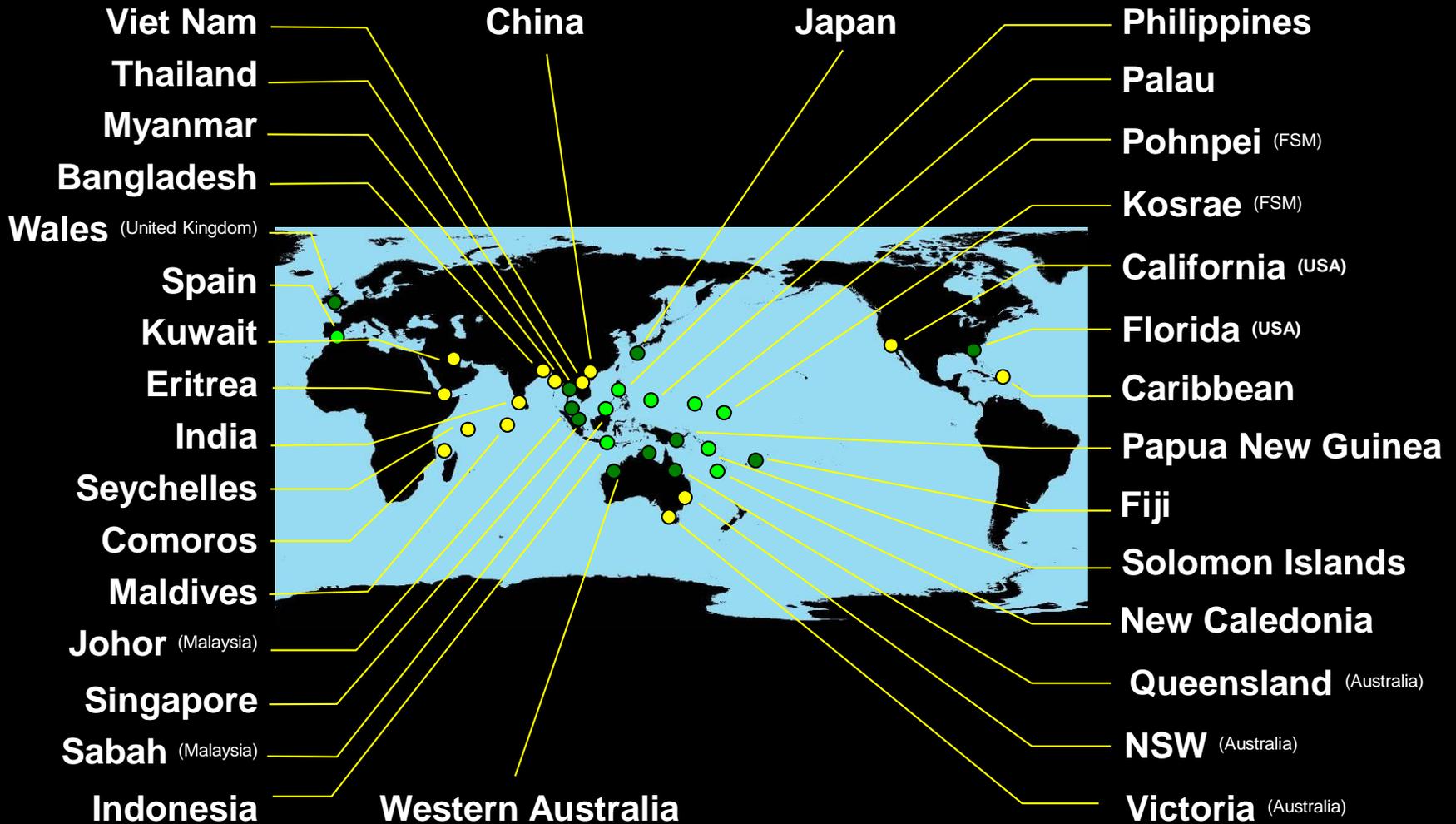
GET IT ON
Google play

Seagrass-Watch monitoring

scientists partnering with communities



- education only
- <3yrs monitoring
- >3yrs monitoring

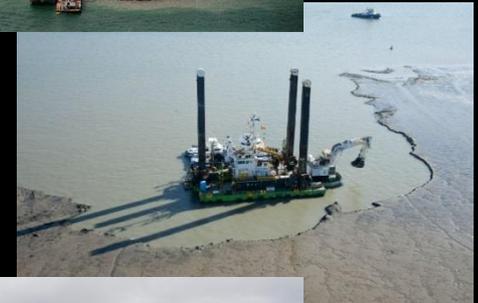


Challenge 3

Need to identify the threatening human activities at local scales

direct

- coastal development
- dredging
- netting



indirect

- agricultural runoff
- industrial/urban runoff
- overfishing



Challenge 4

balancing the needs of resources users with conservation,
economic growth and food security



Challenge 5

scientific research to support conservation actions

Poorly enforced MPA



Small MPA with some poaching



Unmanaged highly exploited seagrass



Pristine healthy seagrass (Chagos)



Some optimism in the face of such enormous challenges

#oceanoptimism

*“The evidence suggests that if we do not **balance** the bad news with good, and the problems with solutions, we will not **motivate** people to act” (OceanOptimism.org)*



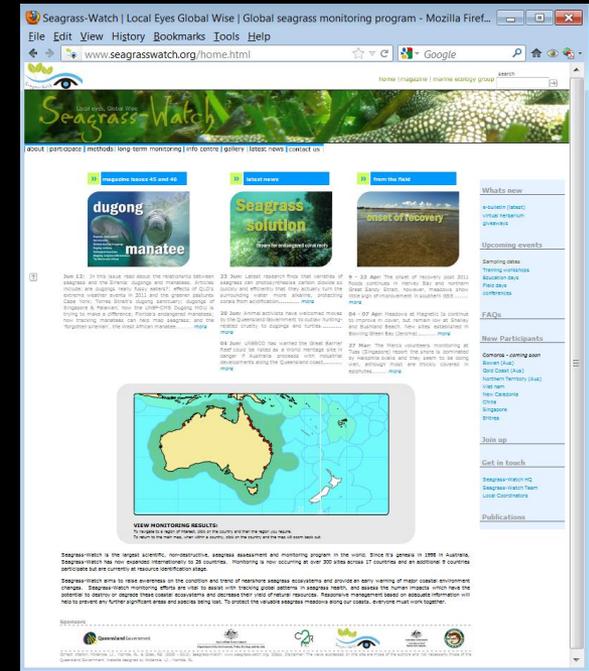
PROJECTSEAGRASS.ORG

For more information, please visit

www.seagrasswatch.org
www.projectseagrass.org

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PROJECT SEAGRASS NEWS ABOUT OUR WORK WHY SEAGRASS? GET INVOLVED CONTACT

SEAGRASS SPOTTER
Help us conserve seagrass by reporting your sightings to Seagrass Spotter. The tool and only observation tool for mapping seagrass distribution globally.

Seagrass is being lost globally at a rate of 1.5% per year. That amounts to about 2 football fields each hour...
...yet seagrass receives no attention and we're here to change that!

Project Seagrass is committed to the conservation of seagrass ecosystems and ensuring that the benefits they provide communities are sustained now and for the future.

Through education, influence, research and action, we can save seagrass!