Dhyum the Dugong

By Mariana Fuentes
Illustrated by Fernando Pinillos

Fuentes, M. (2012) Dhyum the Dugong. Reef & Rainforest Research Centre Limited, Cairns, Australia (32pp.).

ISBN 978-1-921359-86-6 (pbk.)
ISBN 978-1-921359-88-0 (.pdf)

Published by the Reef & Rainforest Research Centre Ltd.
PO Box 1762, Cairns QLD 4870, Australia
http://www.rrrc.org.au/

The Reef & Rainforest Research Centre (RRRC) is a not-for-profit organisation working across Northern Australia, the Torres Strait, Papua New Guinea and the Pacific. The RRRC partners with governments, research institutions, donor agencies and NGOs to deliver environmental solutions for the tropics.

Illustrations by Fernando Pinillos,
http://www.drawingscience.com/

Design and layout by Shannon Hogan,
http://www.adelphapublishing.com/

Printed and bound in North Queensland by
Lotsa Print and Design, http://www.lotsa.com.au

Also by Mariana Fuentes:

Myrtle's battle against climate change
ISBN 978-1-921359-42-2 (pbk.)
ISBN 978-1-921359-43-9 (PDF)

http://www.marianafuentes.com/

Introduction

The main character of the book, 'Dhyum' is based on a real dugong that was satellite-tagged in 2010 at Mabuiag Island in Torres Strait. Dhyum was named by students from the local Tagai State College.

This book is dedicated to the children of the Torres Strait islands with the hope that they learn more about dugongs and the threats faced by the species, so they understand the importance of working to preserving them.

About the Author

Originally from Brazil, Mariana Fuentes moved to Australia a decade ago to become a marine biologist. She has been working on marine megafauna conservation and management programs for the last ten years.

Mariana's commitment to building the capacity of local communities to preserve marine megafauna, such as dugongs, led to the development of this book, which aims to educate Torres Strait children about the perils faced by dugongs and what these challenges mean to the Torres Strait communities.

Acknowledgements

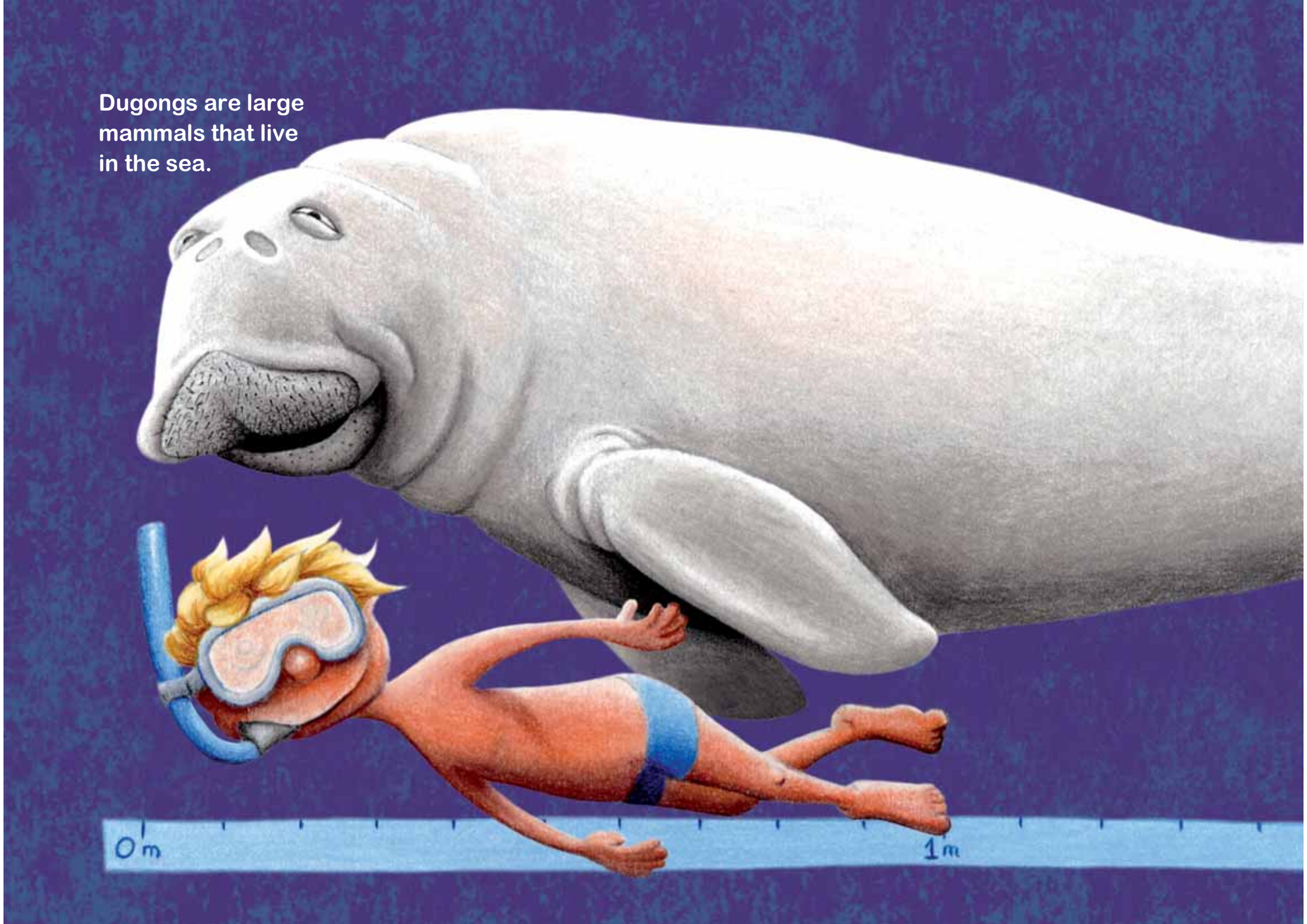
Funding to support book design and print production was provided by the Save Our Seas Foundation, the Torres Strait Regional Authority and the Australian Research Council (ARC) Centre of Excellence for Coral Reef Studies. The author is grateful for the editorial and technical help and support provided by Shannon Hogan, and for comments and suggestions from the Tropical and Marine Wildlife Group at James Cook University, especially Professor Helene Marsh. The author is particularly grateful for the comments provided by Nisha Rose Hamann.

Mariana Fuentes' research is supported by the ARC Centre of Excellence for Coral Reef Studies, the Save Our Seas Foundation and the Australian Research Council.

For more information about community based dugong conservation and management initiatives, contact the Torres Strait Regional Authority (http://www.tsra.gov.au/).

save our seas FOUNDATION
Australian Government
TSRA www.tsra.gov.au
ARC Centre of Excellence Coral Reef Studies
Reef & Rainforest RESEARCH CENTRE
JAMES COOK UNIVERSITY AUSTRALIA


Hi, I'm Dhyum!
I'm a dugong.
Today I will tell you a little bit about myself and my family.

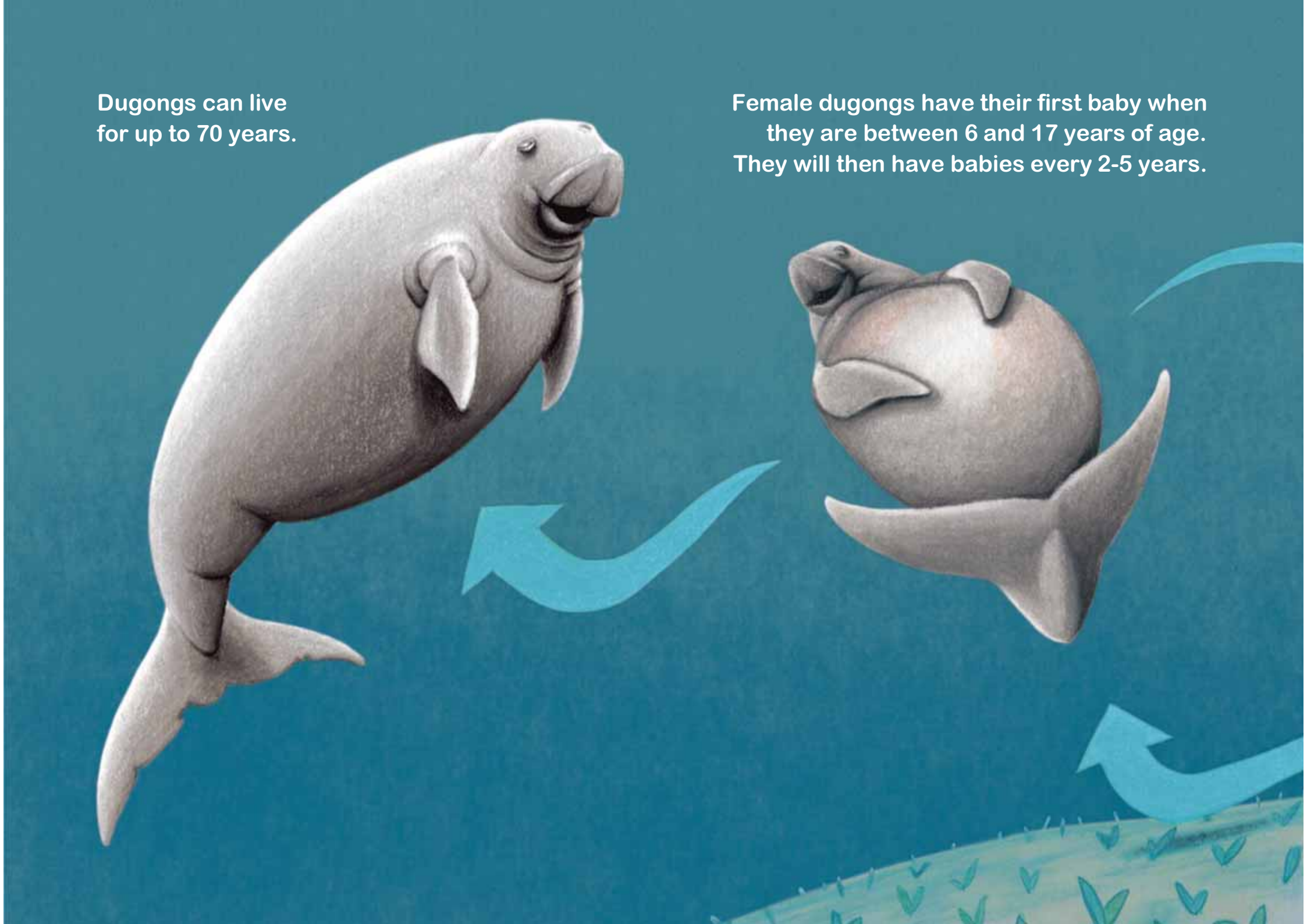

Dugongs are large mammals that live in the sea.
0m
1m

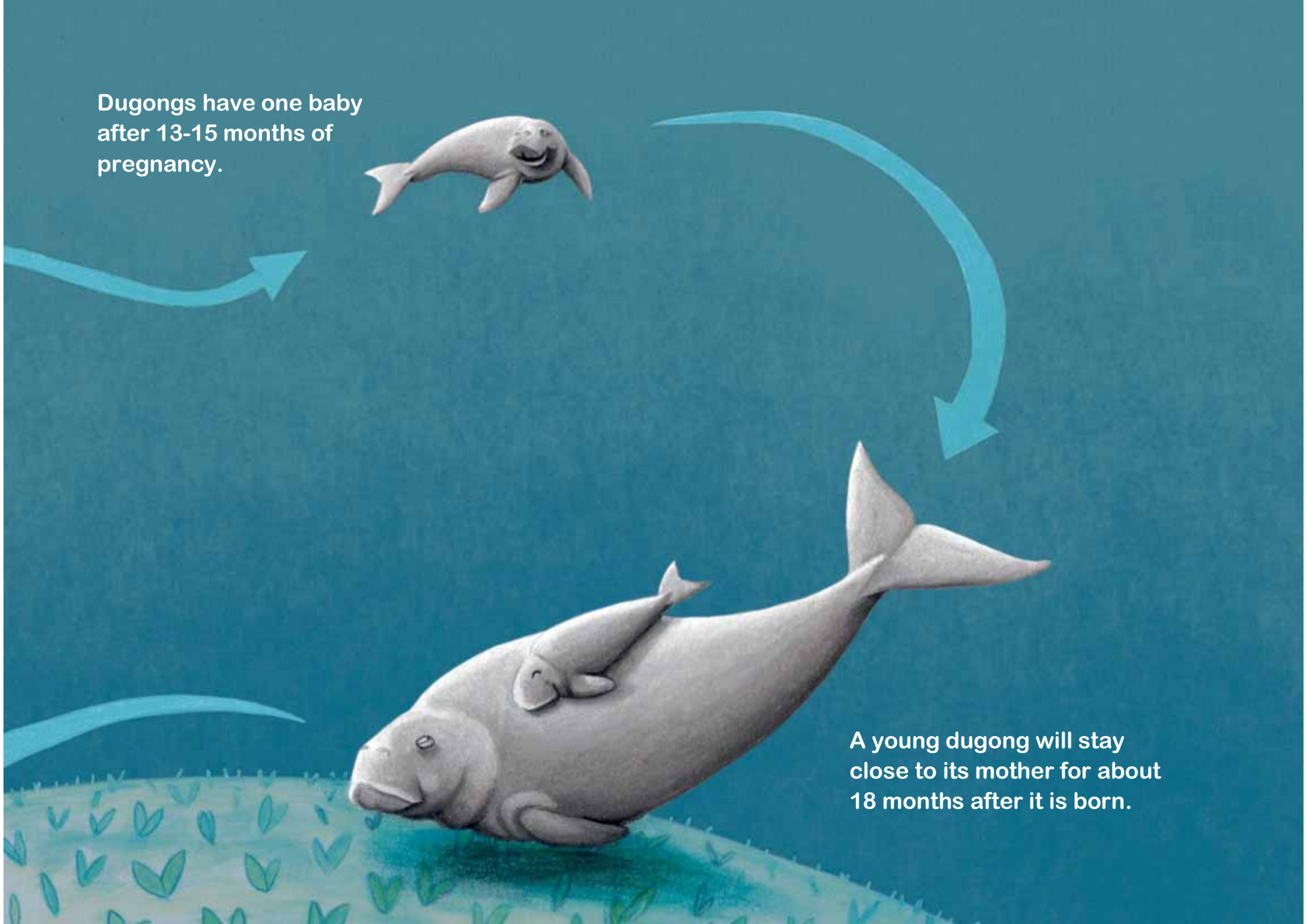
Mammals are animals that have hair, lungs to breathe air and produce milk for their babies. Humans are mammals too.

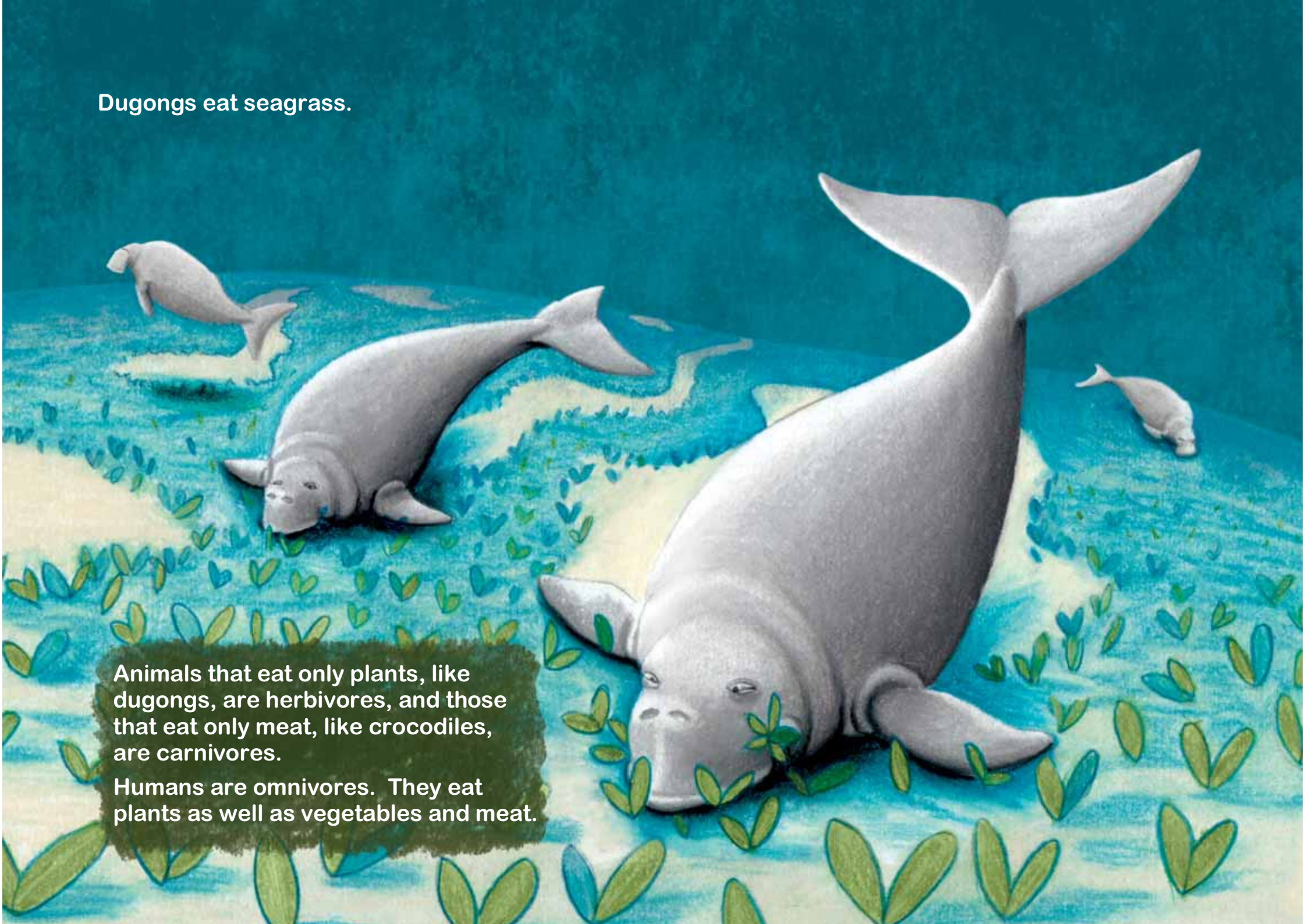
Dugongs can grow up to three metres in length, and weigh up to 500 kilograms.

2m

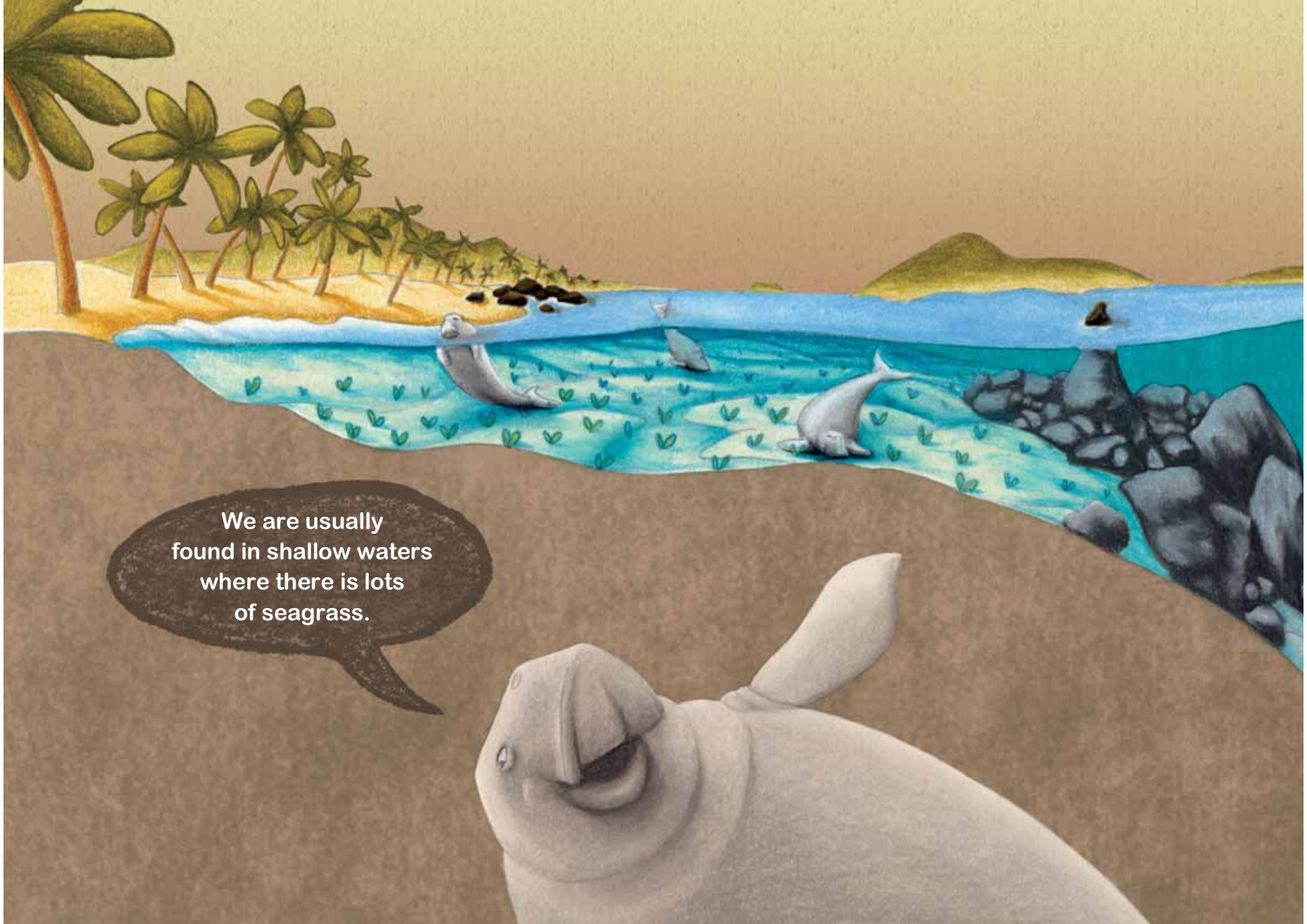
3m

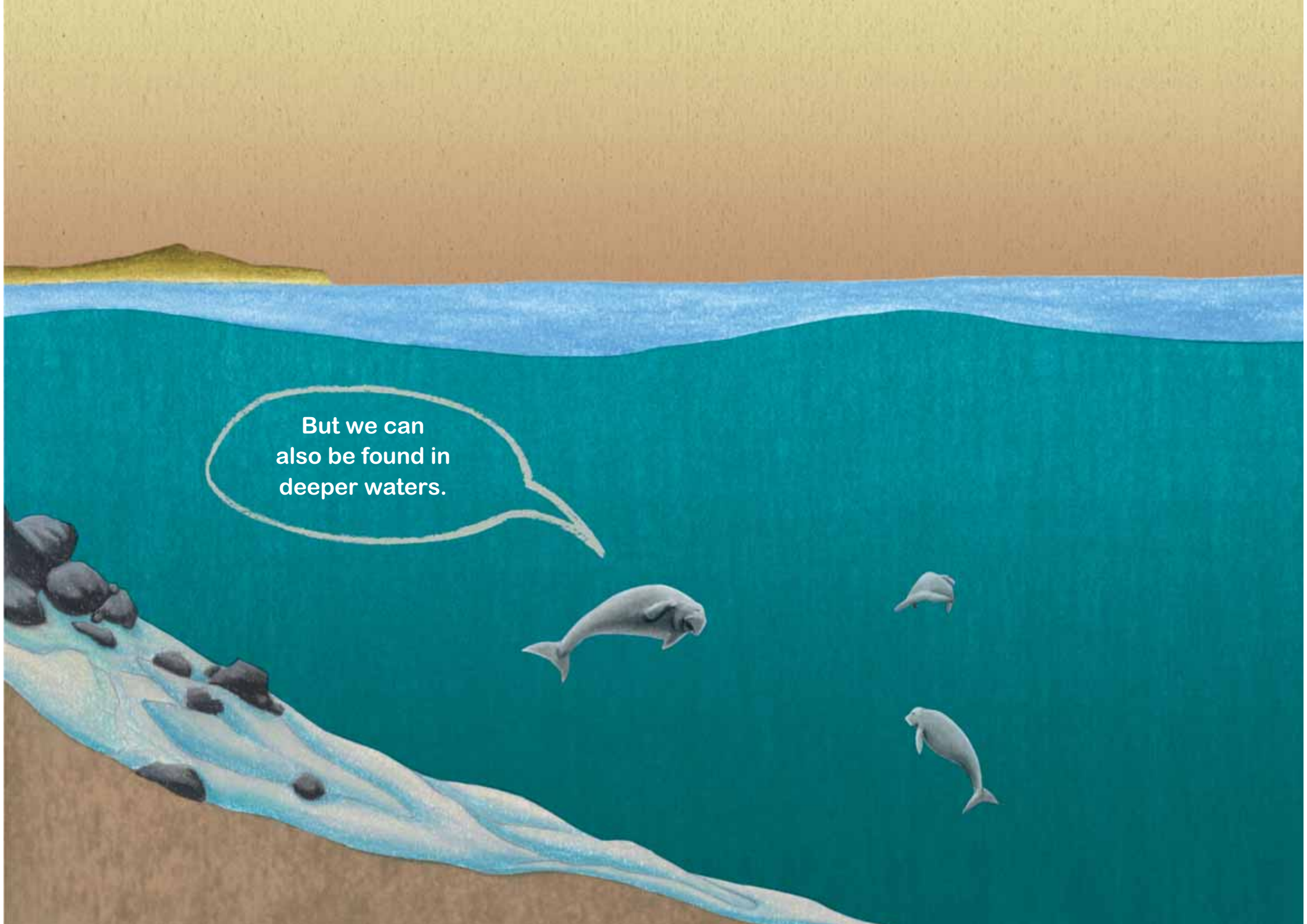

Dugongs can live for up to 70 years.
Female dugongs have their first baby when they are between 6 and 17 years of age. They will then have babies every 2-5 years.


Dugongs have one baby after 13-15 months of pregnancy.
A young dugong will stay close to its mother for about 18 months after it is born.

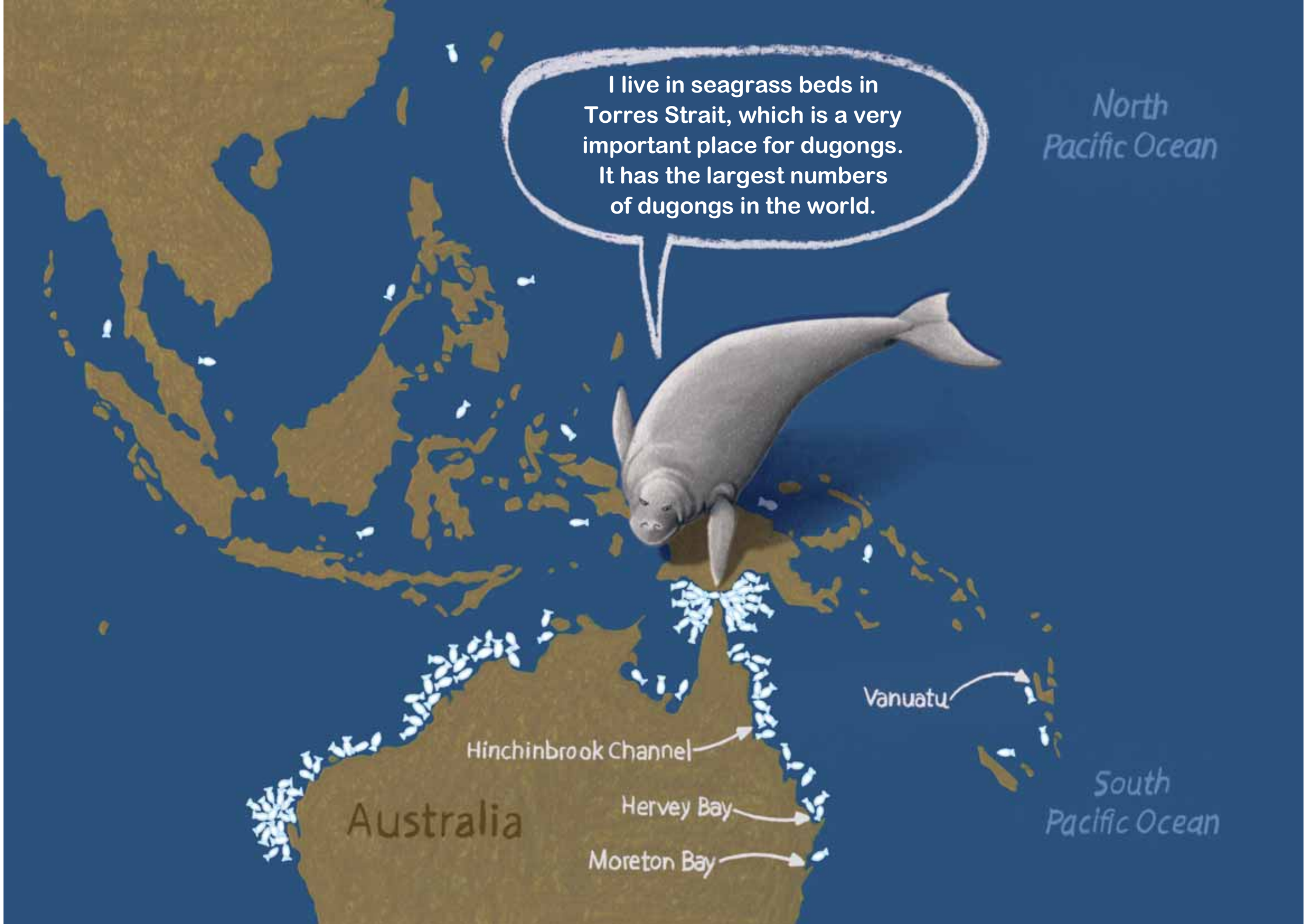

Dugongs eat seagrass.
Animals that eat only plants, like dugongs, are herbivores, and those that eat only meat, like crocodiles, are carnivores.
Humans are omnivores. They eat plants as well as vegetables and meat.


An adult dugong like me will eat up to 30 kilograms of seagrass each day!
30 Kg = 2 kids
Seagrasses are flowering plants found in shallow areas.

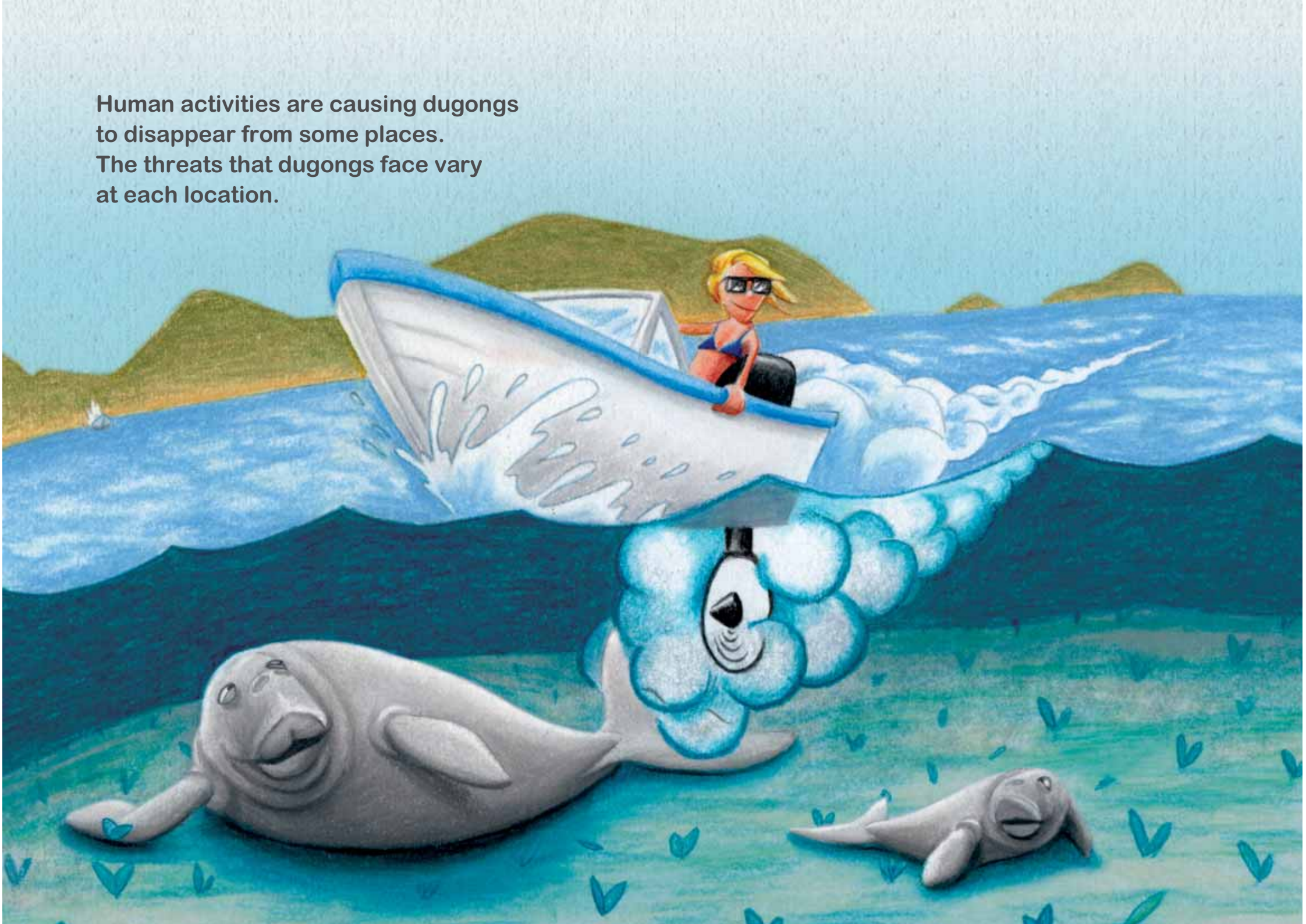

We are usually found in shallow waters where there is lots of seagrass.


But we can
also be found in
deeper waters.

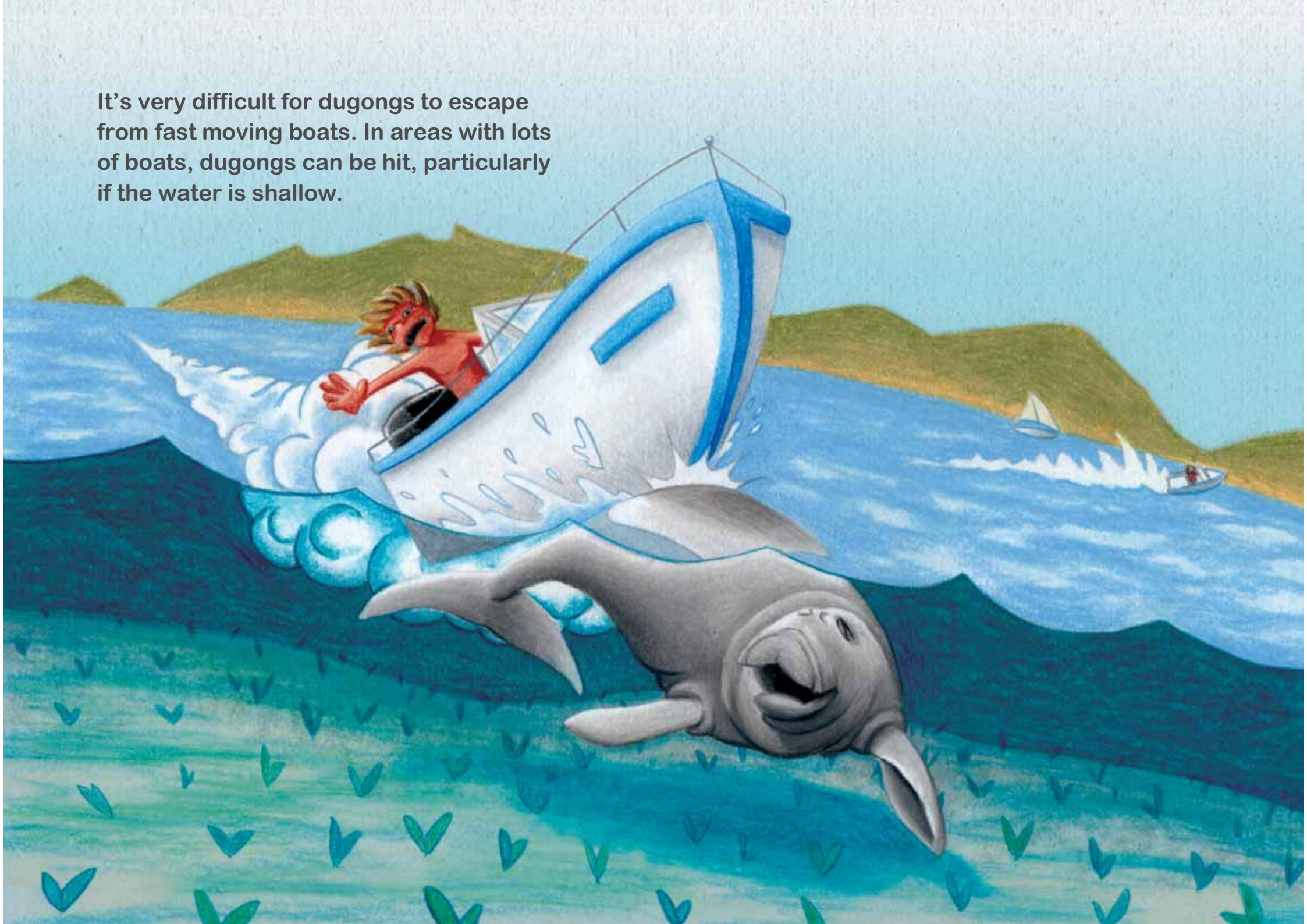

Dugongs can be found in at least 37 countries, from Madagascar to Vanuatu.
India
Africa
Indian Ocean
South Atlantic Ocean
Madagascar


I live in seagrass beds in Torres Strait, which is a very important place for dugongs. It has the largest numbers of dugongs in the world.
North Pacific Ocean
Vanuatu
Hinchinbrook Channel
Australia
Hervey Bay
Moreton Bay
South Pacific Ocean

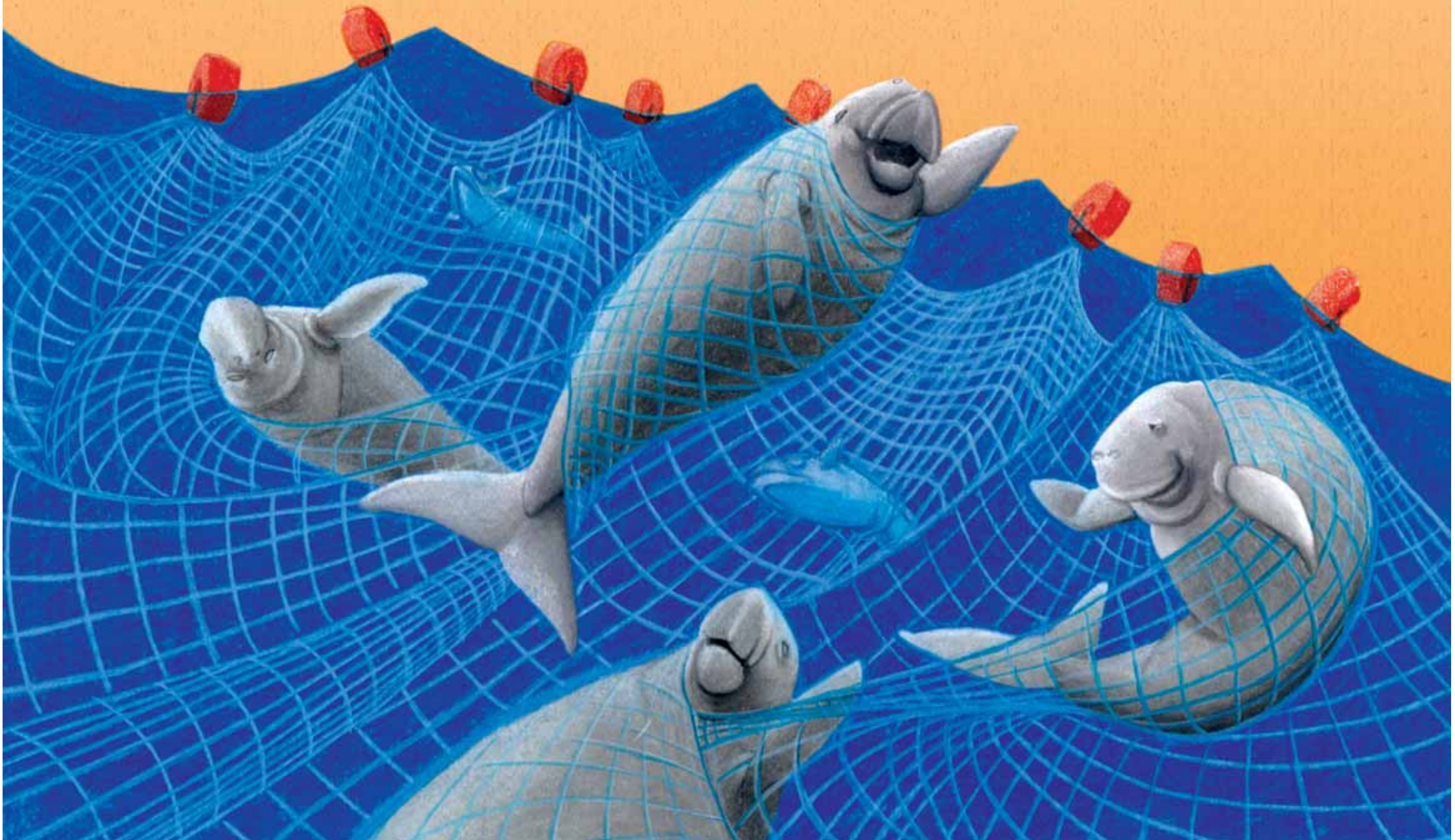
Human activities are causing dugongs to disappear from some places. The threats that dugongs face vary at each location.



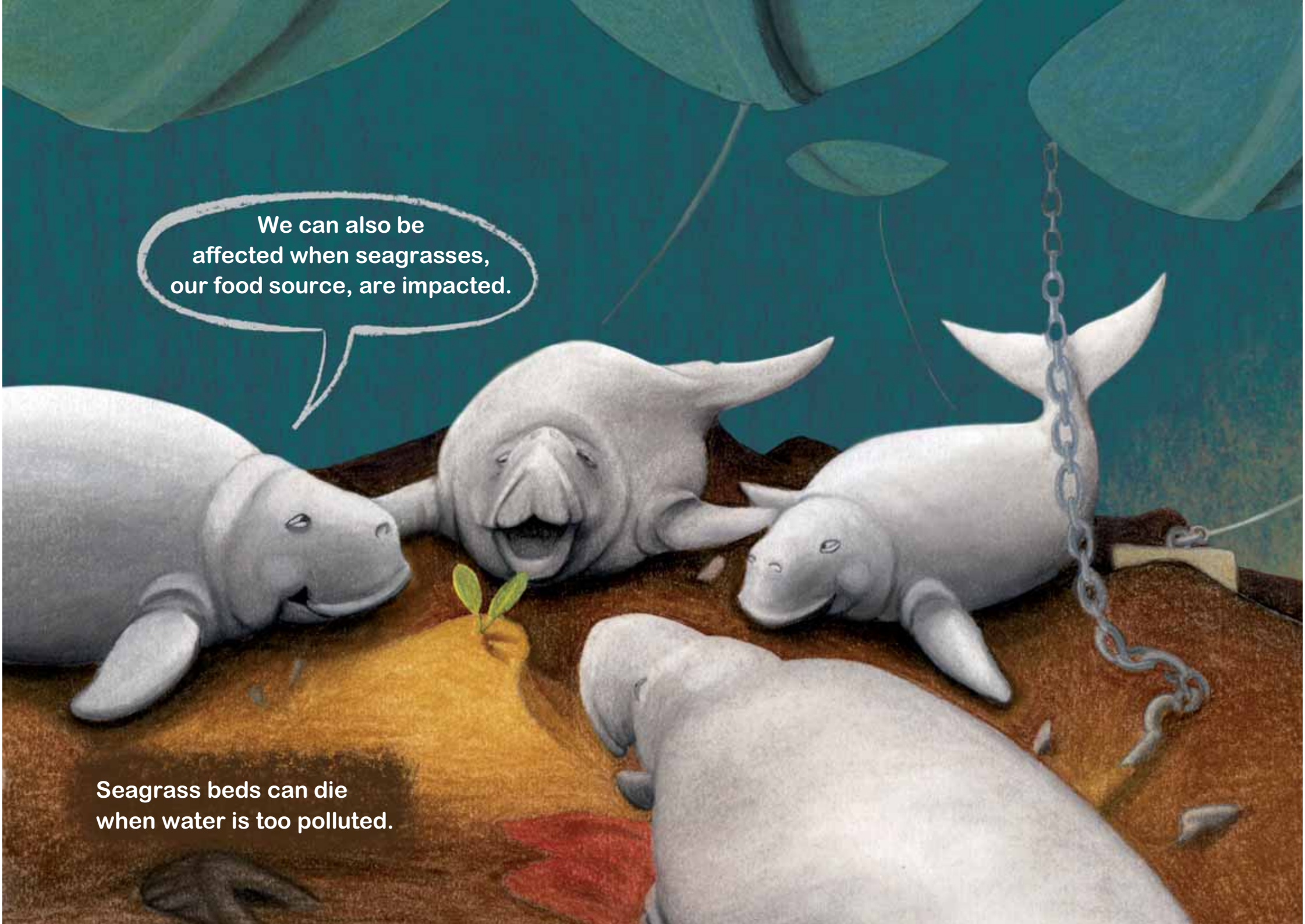
It's very difficult for dugongs to escape from fast moving boats. In areas with lots of boats, dugongs can be hit, particularly if the water is shallow.

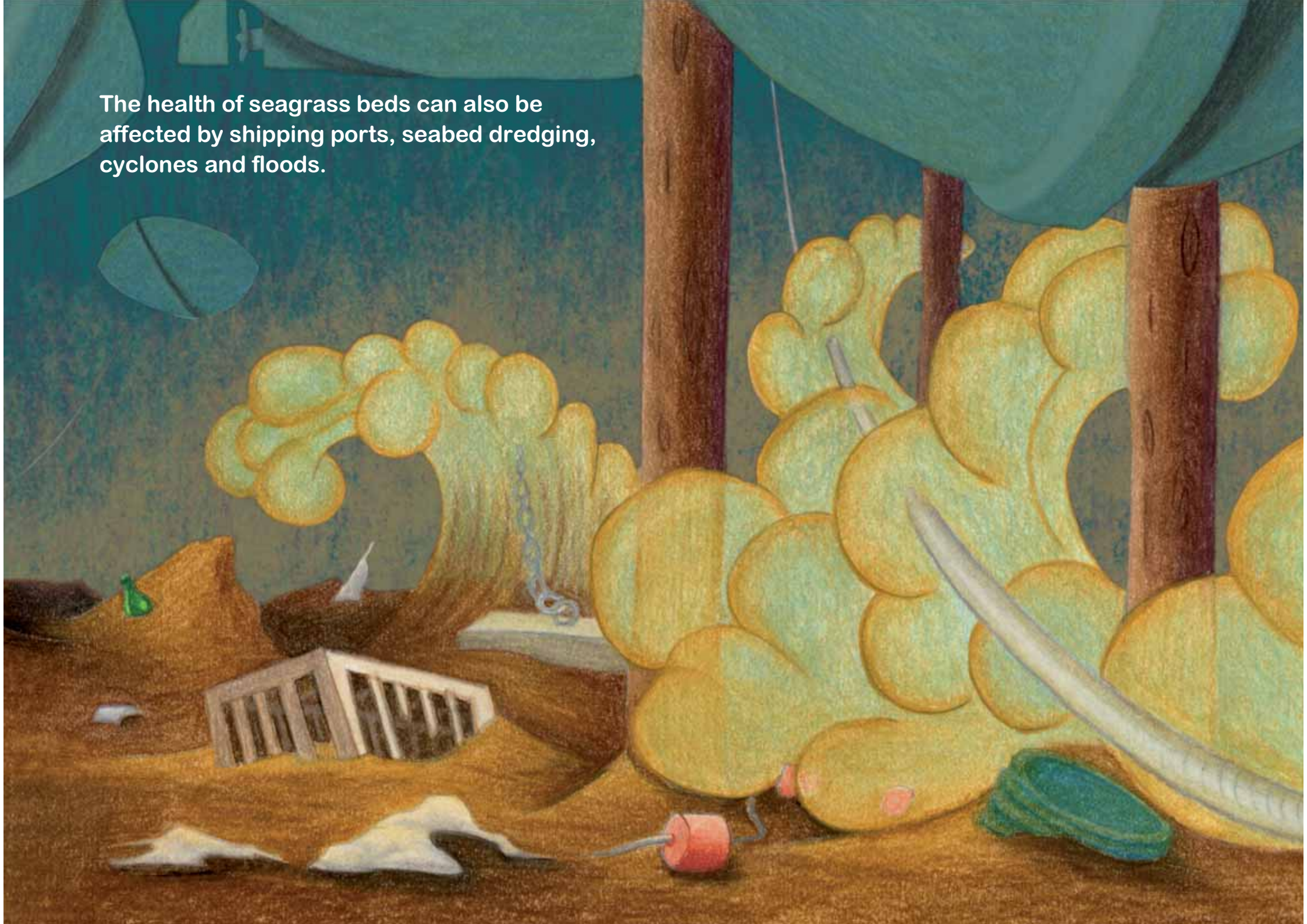


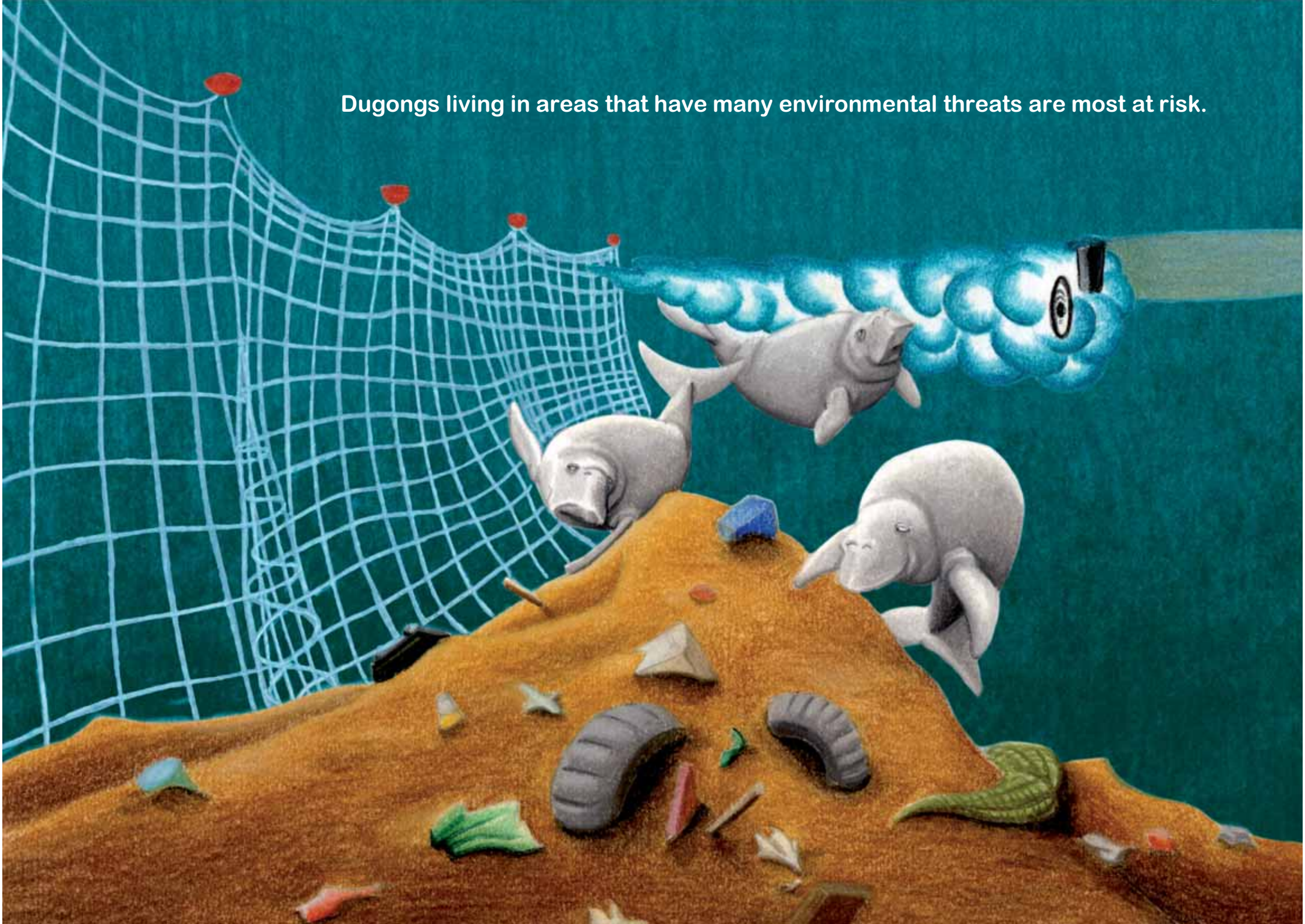
Dugongs can only hold their breath for a short time.
If they become trapped in fishing nets they can drown.

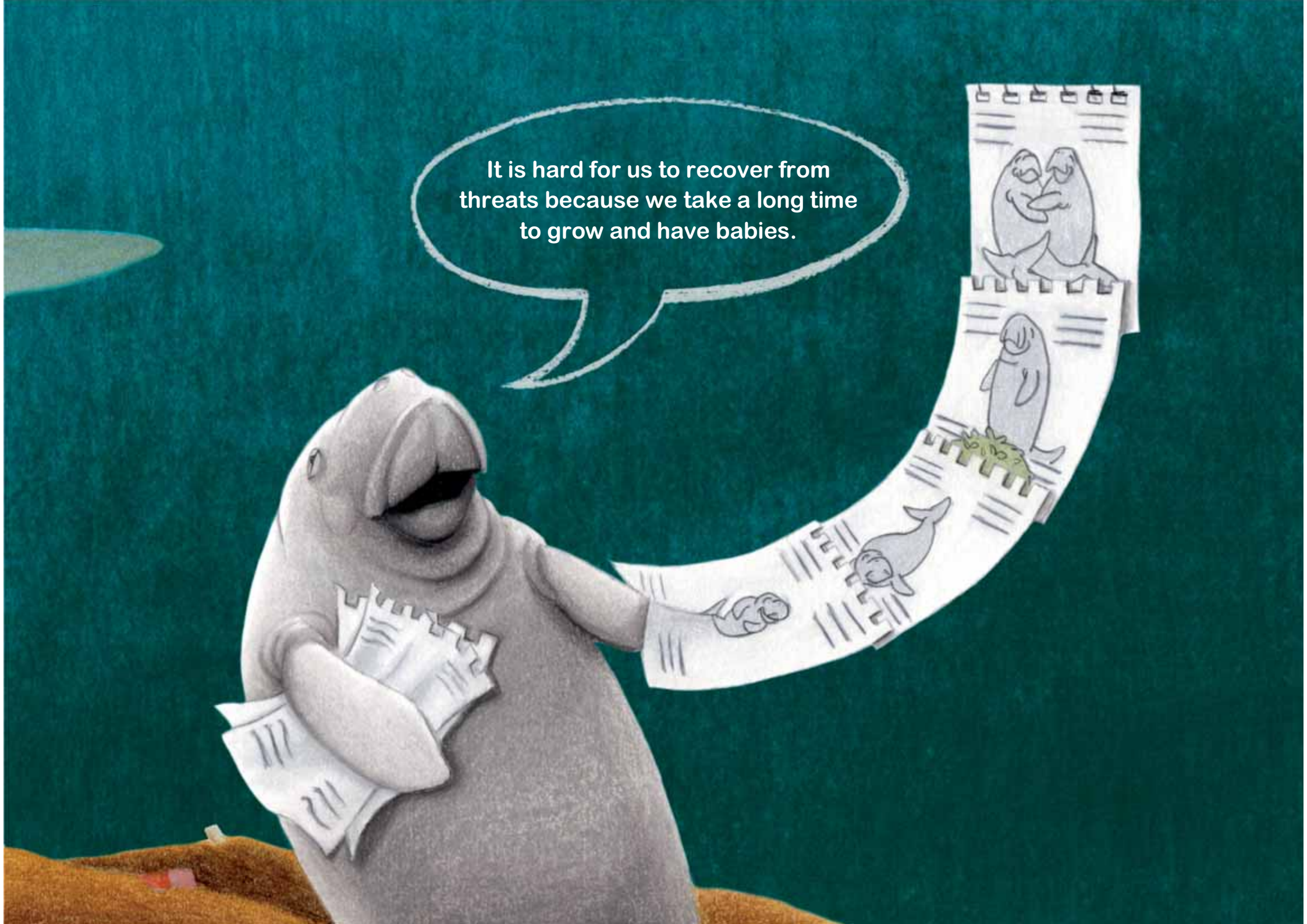


In more remote places where local communities rely on dugongs for food too much hunting can also be an issue.


We can also be affected when seagrasses, our food source, are impacted.
Seagrass beds can die when water is too polluted.


The health of seagrass beds can also be affected by shipping ports, seabed dredging, cyclones and floods.


Dugongs living in areas that have many environmental threats are most at risk.


It is hard for us to recover from threats because we take a long time to grow and have babies.


A reduction in dugong numbers can be a problem to Indigenous communities because dugongs are part of Island culture.
It can also be a problem for the environment, because dugongs have important roles in marine ecosystems.
Where are the dugongs?
They used to be here!
What are we going to do now?

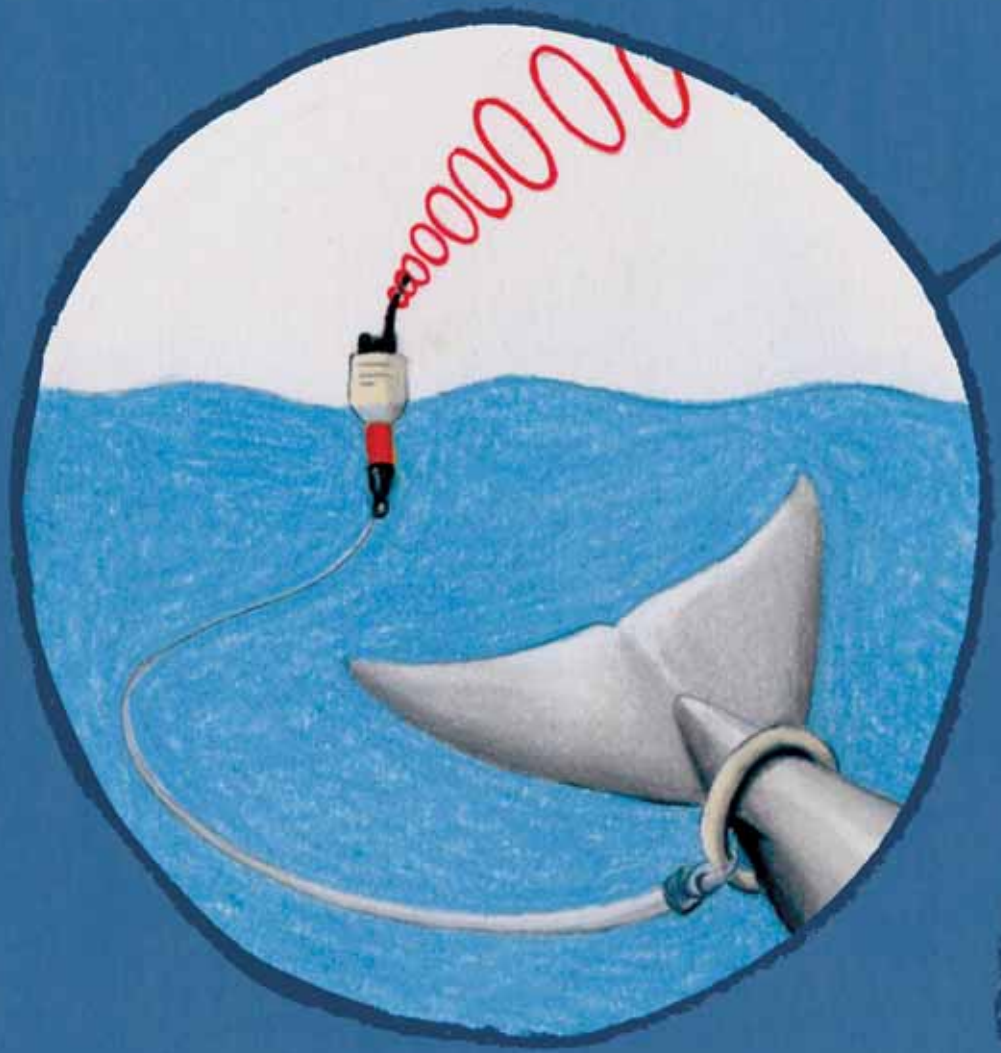

Several things can be done to reduce threats to dugongs.
When boating in shallow waters be on the lookout for dugongs to avoid hitting them.


Keep seagrass beds healthy
by keeping the ocean clean.

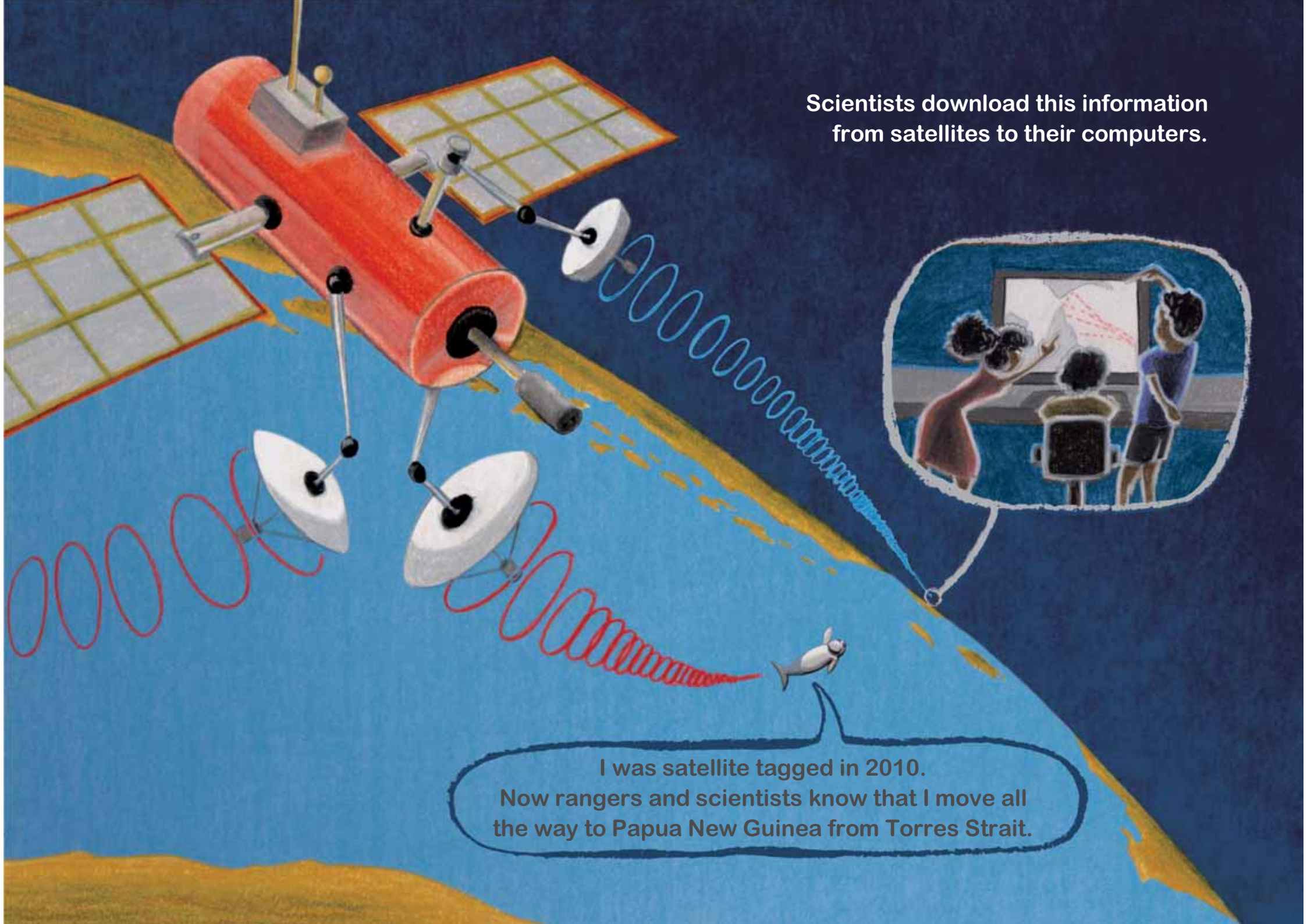
Learn about dugongs so you can help to look after them.
Find out where they live, how they move between places, how big their families are and how their numbers change over time.


By surveying dugong populations by plane, scientists can collect information on dugong distribution and see where most dugongs are.
From the air we can see dugongs better.

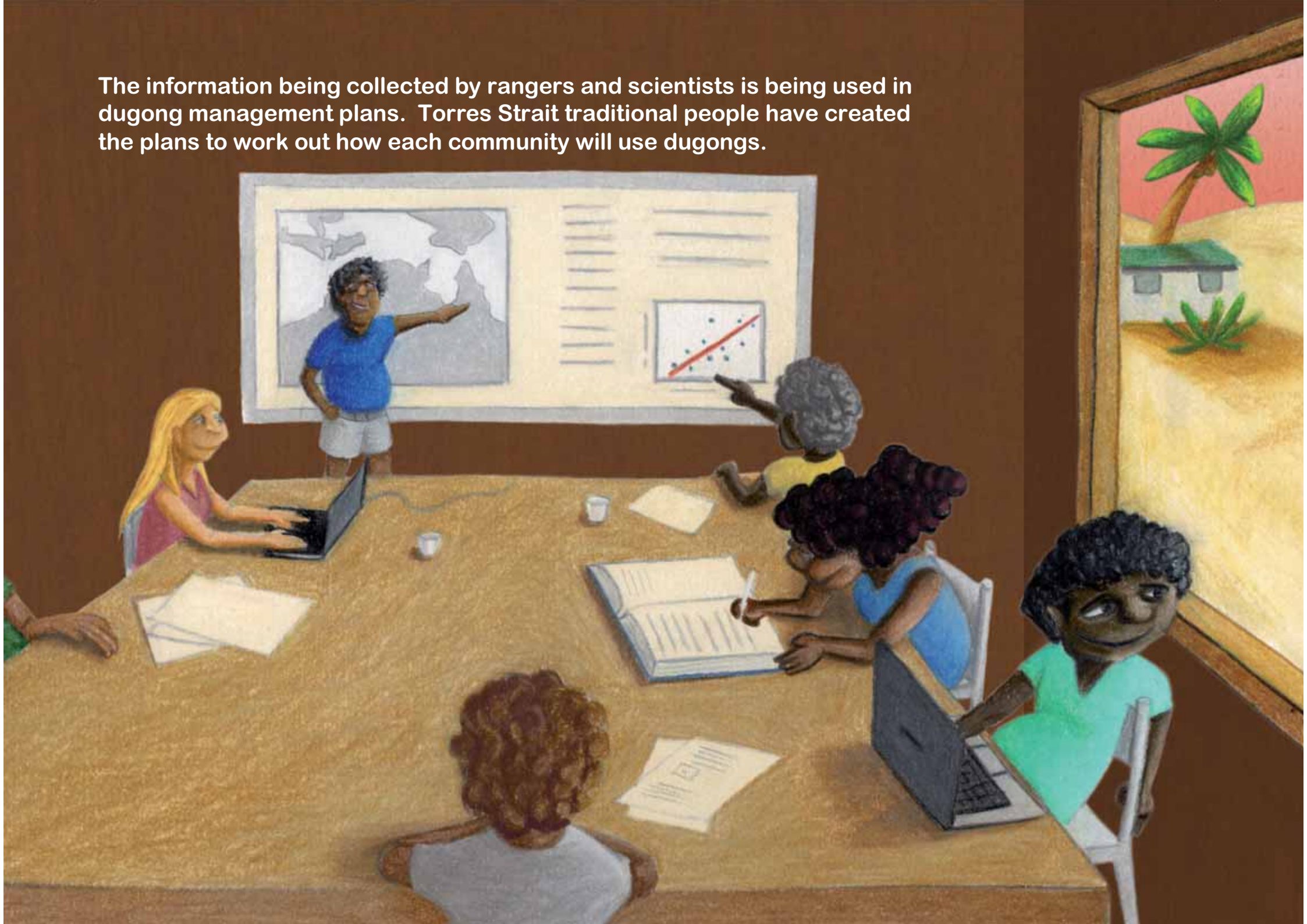
Scientists also use satellite tags attached to our tails so they can monitor where we go and how we move.

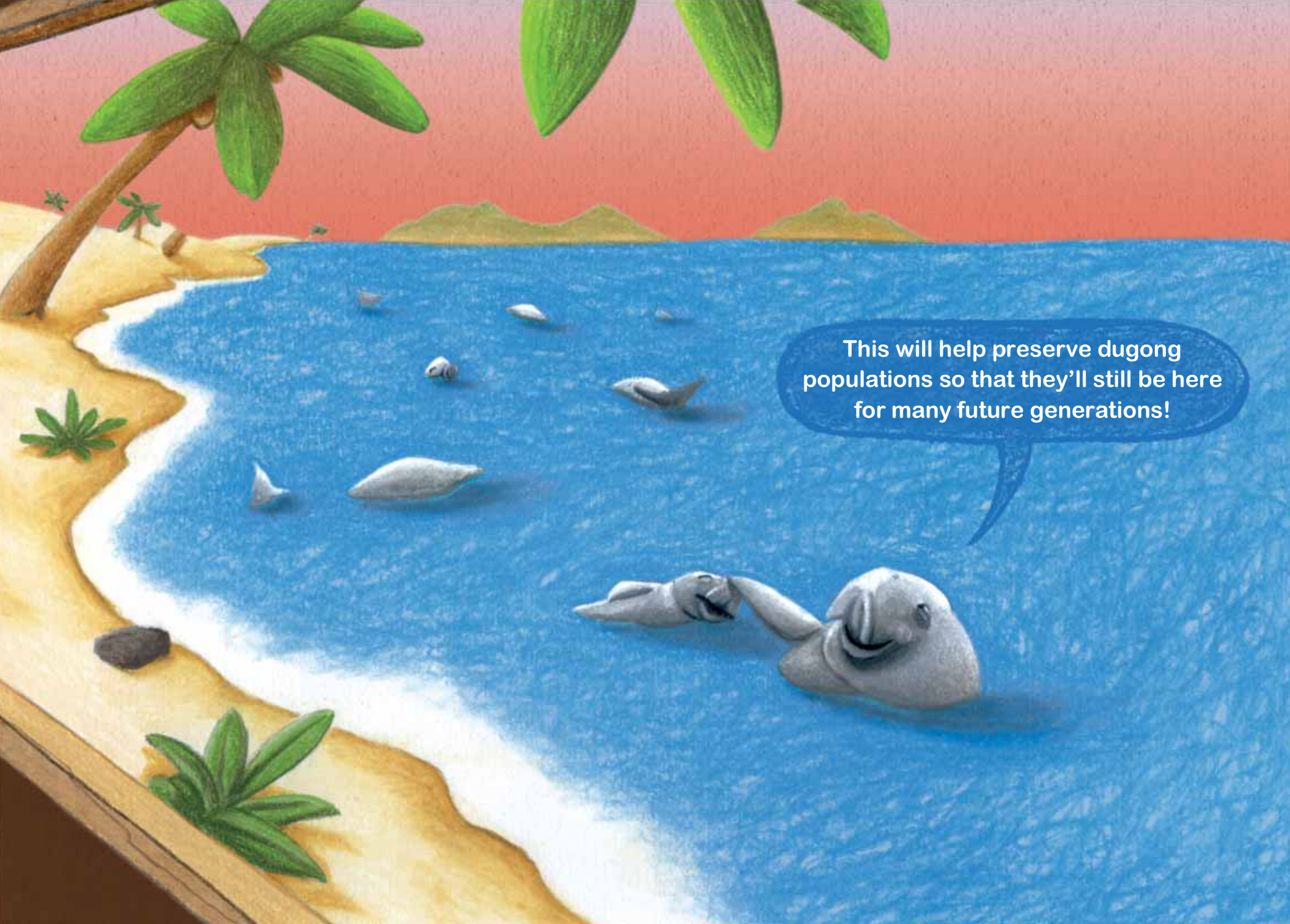


The tags send signals to satellites in space.


Scientists download this information from satellites to their computers.
I was satellite tagged in 2010.
Now rangers and scientists know that I move all the way to Papua New Guinea from Torres Strait.

The information being collected by rangers and scientists is being used in dugong management plans. Torres Strait traditional people have created the plans to work out how each community will use dugongs.




This will help preserve dugong populations so that they'll still be here for many future generations!