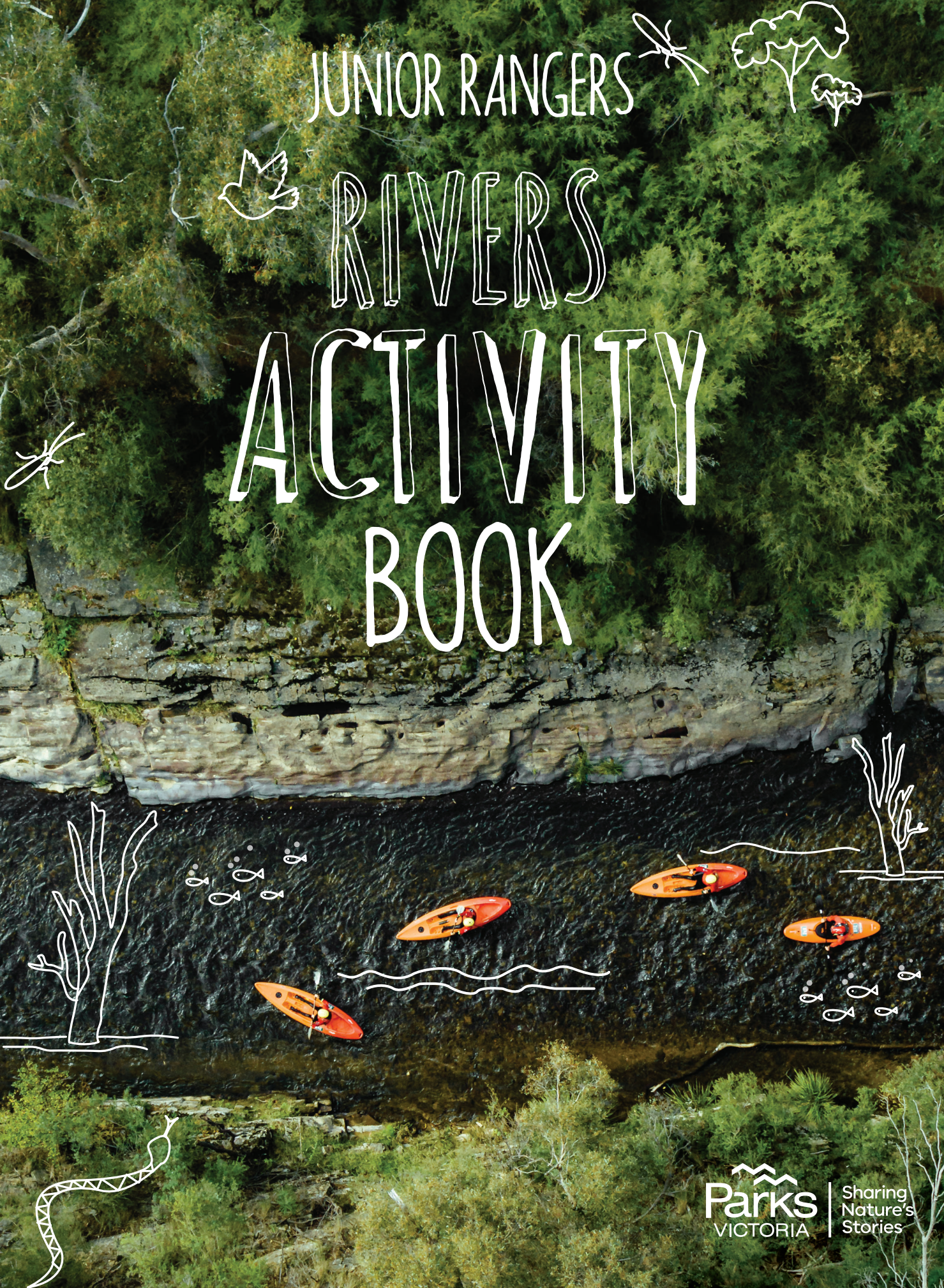


JUNIOR RANGERS RIVERS ACTIVITY BOOK



GO WITH THE FLOW

HOW RANGERS HELP KEEP RIVERS HEALTHY

Scan the QR code to hear about the work that rangers Damien, Darren and Julia are doing on River Red Gum Country along the Murray River.



From tiny creeks in the mountains to mighty rivers moving out to sea; waterways shape the landscape.

Rivers often begin high up in the mountains. Rain, snowmelt, or spring water trickles down in streams and creeks. Along the downhill journey, streams and creeks join to form larger rivers and waterways. Eventually, rivers make their way to the ocean or large inland lakes.

Moving water is powerful! It can carve a path through the earth

as it makes its way across the landscape. It moves loose soil, rock, plants and nutrients from one place to another.

Traditional Owners and river landscapes

Aboriginal cultural landscapes are the core of parks and reserves in Victoria. They show us how Aboriginal people engage with their surroundings and have practised their culture on Country for thousands of generations. You can find evidence of Aboriginal peoples' long connection with Country along many rivers in Victoria. Please respect these remarkable cultural features and leave them undisturbed.

Many rivers weave through the landscapes of Victoria. Can you find your closest river on the map? Scan the QR code to discover the Traditional Owners of each river on the map.



I live in:

My closest river is:

The Traditional Owners of my closest river are:

The traditional name of the river is:



RIVERS OF LIFE



DID YOU KNOW?

Many animals live along rivers – under the water, on the riverbank or up in the trees.

How many river critters can you find hiding in the grid?

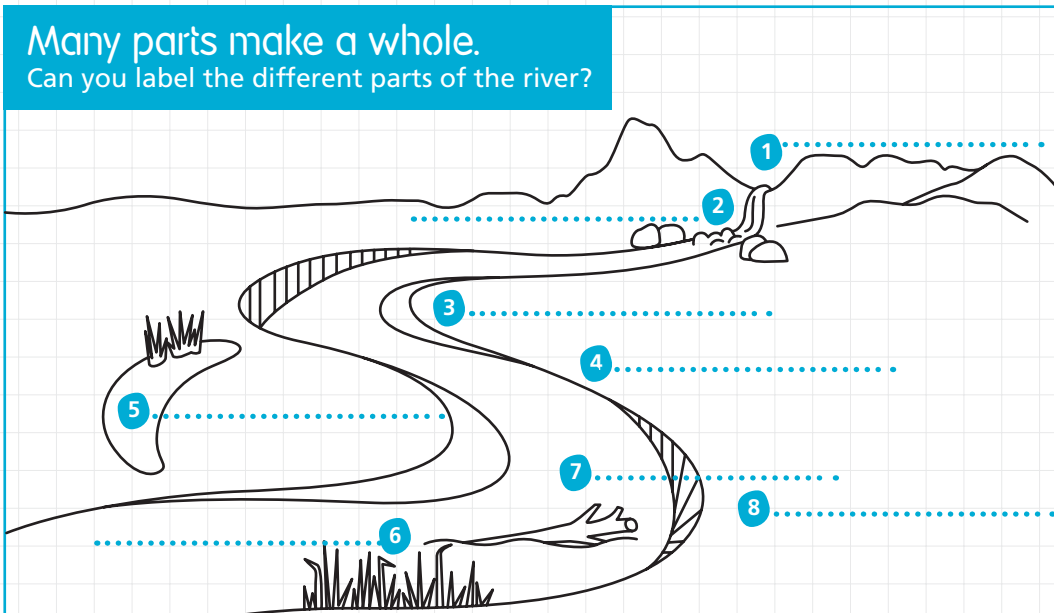
C O M M O N L O N G N E C K E D T U R T L E
 S O U T H E R N B R O W N T R E E F R O G X
 A R R R E L T R U T D E L L E H S D A O R B
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 L C Y C P H C R E P R E V L I S M B C N R P
 A R S D Y T Q Y U I O P L M J B G N C V R P
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 T S H D H J E R P Q A M B Z O W Q S A Z C N
 A U S T R A L I A N W A T E R D R A G O N W



- Southern Brown Tree Frog
- Spotted Marsh Frog
- Water Boatman
- Australian Water Dragon
- Common Long-necked Turtle
- Murray River Turtle
- Black Swan
- Silver Perch
- Short-finned Eel
- Broad-shelled Turtle
- Rakali
- Brolga
- Murray Spiny Crayfish
- Platypus
- Laughing Kookaburra
- Murray Cod
- Koala
- Lace Monitor
- Mosquito
- Red-bellied Black Snake

Many parts make a whole.

Can you label the different parts of the river?



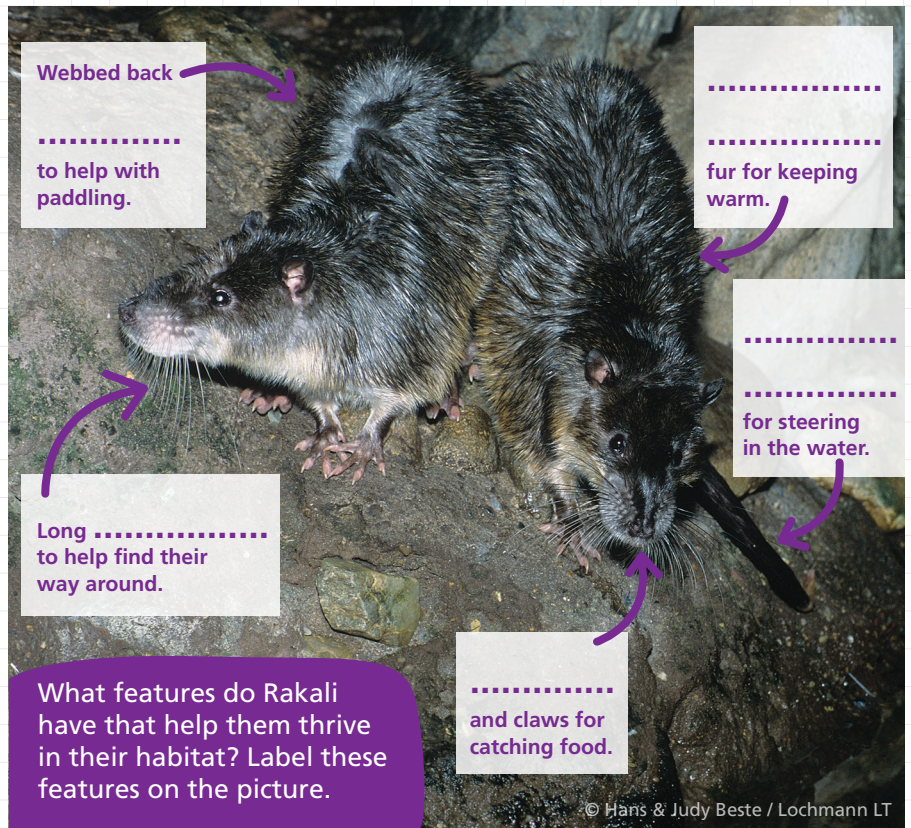
- 1 Waterfall
- 2 Rapids
- 3 Bend
- 4 Bank
- 5 Oxbow lake
- 6 Reeds
- 7 Snag
- 8 Floodplain

FINE DINING ON THE RIVER FRONT

Rakali are one of Australia's largest rodents. These native water rats are known for their messy table manners.

Rakali are clever and adaptable predators. The shape of their body helps them move quietly and quickly through the water. They have thick, water-repellent fur, and a furry, white-tipped tail about 35cm long – that's almost as long as their body!

Rakali live alone in riverbank burrows. Their favourite snacks are fish, mini-beasts, mussels, snails, frogs, spiders, aquatic insects, eggs, fungi and even water birds. After hunting, they return to their dining table to eat – this might be a log, a rock or the muddy riverbank. Once they have finished eating, Rakali will scatter the remains of their meal around their picnic spot for everyone to see.



What features do Rakali have that help them thrive in their habitat? Label these features on the picture.

Raquel the Rakali had a feast on the riverbank last night. Look at the clues to figure out what was on the menu.



DON'T WASTE OUR RIVERS

Read the story of a river and then get ready to make your own. You will see how almost everything that goes into the river can impact wildlife as it makes its way out to sea. Little actions can have big impacts on rivers.

This is the story of a river. It travels from high in the mountains of Victoria, across the land and towards the ocean. First, the river flows through the **forest** of a national park. The rain washes leaves and debris into the river.

The river flows through **farms**. One farmer lets their animals disturb soil on the riverbank. Another farmer adds more fertiliser than their crops can use. The rain carries soil and fertiliser into the river.

On the weekend, people from the town use the local park where the river flows. Someone goes **fishing** and leaves their line behind. Another group enjoys a **picnic** in the park. Wind blows their rubbish into the river before they can collect it to take it home.

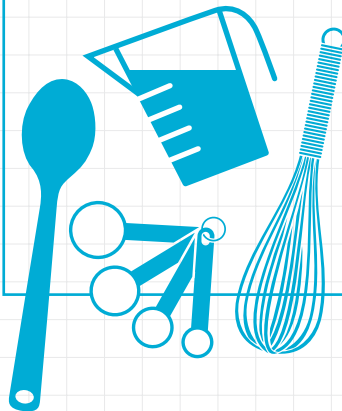
When it rains in the town, oil and rubbish on the **roads** wash into stormwater drains. These drains flow into the river.

The **industry** buildings at the edge of town use soap to keep their equipment clean. Sometimes the dirty water is washed into the gutter, which flows into stormwater drains and into the river.

The river passes through the river mouth, called an estuary, before flowing out to sea where it ends its journey. What do you think about all the things the river brings into marine habitats?





MAKE A RIVER

Remember to ask an adult to help you. Place your clear container full of water on the floor or the table. Measure out each of the items from the list. When a **bold** word is mentioned in the story, add its matching item to your container of water. You might like to label each item with its bold word so that you don't forget when to add it.



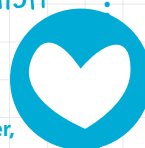
ITEM

HOW MUCH

A clear container filled with water	3-5L water 
Forest Tea and mulch	1 tbsp tea leaves, 1 tsp mulch
Farms Soil and baking powder	1 tsp of each 
Fishing Fishing line or string 	1 piece of line or string
Picnic Small pieces of plastic	A handful of pieces 
Roads Coffee grounds and cooking oil	½ tsp of each
Industry Soap	A few drops shaken up in ½ cup of water

REMEMBER TO CARE FOR YOUR LOCAL WATERWAYS WHEN YOU FINISH THE ACTIVITY.

Remove any plastic items from your river, and pour the water into a section of the garden where the other ingredients can break down.



HOW I CAN HELP KEEP RIVERS HEALTHY

- Follow the Junior Ranger Way and take my rubbish home
- Take my fishing line and hooks home
- Conserve water at home
- Pick up my dog's poo
- Join a tree planting day in my local park

DO I BELONG?

Some plants and animals naturally belong in waterways, we call them native species.

Others have been introduced by humans. They can cause problems by competing with native species for food and homes, or by eating them! When native or introduced species cause problems, we call them pests.

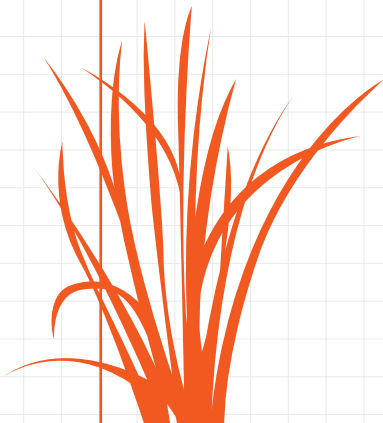
Identify which species are native to river habitats and which ones are introduced pests. Write an **N** for native or **I** for introduced in the bubble next to each picture.

 Little Corella © Museums Victoria	 Common Bluetail Damselfly	 Black Swan and cygnets	 Short-necked Turtle	 Eastern Grey Kangaroo
 Water Dragon	 River Red Gum	 Murray River Crayfish	 Rabbit	 Redfin
 Platypus	 Water Boatman	 White-faced Heron	 © Australian Museum Murray Cod	 Pobblebonk Frog
 Cabomba (Fanwort)	 European Carp	 Lace Monitor	 © Macleay Grass Man Moira Grass	 Mosquito Fish

DRAW A HEALTHY RIVER HABITAT

What native animals will you include in your picture? What homes do they need?

REMEMBER!
A Junior Ranger is always learning about the environment. Use other activities in this book to help you create a river habitat.



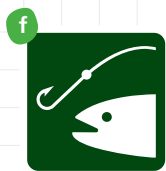
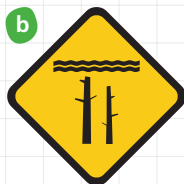
STAYING SAFE WHILE HAVING FUN

Waterways are fun places to cool off and relax. It is important to stay safe and learn how to tread lightly when in river habitats.

Parks Victoria uses signs to help you find the best places to enjoy activities. Signs let you know if something is dangerous or not allowed. This protects the river habitat.



Match the signs to their meanings. Draw a line to the matching sign next to the correct meaning.



3 WARNING: STRONG CURRENTS

2 SWIMMING IS ALLOWED

4 WARNING: BRANCHES MAY FALL TAKE CARE

1 NO SWIMMING

7 WARNING: SUBMERGED OBSTACLES

8 NO DIVING

6 WARNING: DEEP WATER

5 FISHING IS ALLOWED

9 WARNING: FLASH FLOODING

10 NO FISHING

SHAPES AND COLOURS

Green squares with white symbols tell us:



Yellow and black diamonds tell us:



Red circles with black symbols and a cross through them tell us:




Park signs are like traffic lights. See if you can find the pattern in the signs on this page. Write what you think the shape and colour of signs tell us.

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CODE FOR CARING

 Victoria's networks of parks and reserves form the core of Aboriginal cultural landscapes. Parks Victoria acknowledges the continuing connection that Traditional Owners have to these landscapes and recognises their ongoing role in caring for Country on which we learn, play and live.

Camping can be a lot of fun. Next time you go, help Parks Victoria rangers care for rivers by being a responsible camper.

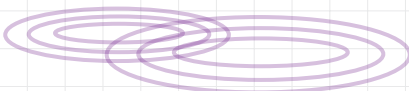
Read the Junior Ranger top tips for being a responsible camper. Are the people in the picture following these tips? Circle parts of the picture where you can see the tips are not being followed. Don't forget to colour the picture when you are finished.



JUNIOR RANGER TOP TIPS

- 1 Fallen logs and branches are important habitat for animals. Bring firewood with you when camping.
- 2 Light a fire in the fireplace provided at the campsite. This reduces the risk of fires getting out of control.
- 3 Camp more than 20 metres from the riverbank. Be careful to check for branches above you to stay safe.
- 4 Keep wildlife wild by only sharing your food with other humans.
- 5 Leave only footprints – keep your campsite clean and take your rubbish home with you.
- 6 Keep the river healthy by disposing of any dirty water away from the banks.
- 7 Think about your campsite neighbours – keep the noise down and make sure your dog stays on a leash.
- 8 Relax and enjoy the river! Just make sure an adult is watching if you want to go in the water.

Scan the QR codes to learn about actions you can take at watery wonderlands.



AT HOME

Create a rain garden to help protect creeks from stormwater runoff.



AT A RIVER

Become a citizen scientist by recording observations of local waterways.



AT THE BEACH

Join a beach clean to stop pollution entering the ocean.