



ISSUE 77 SUMMER 2018/2019



Marine and Coastal

77

BEACH ACCESS





Kia ora Pollution Busters

Summer is here! We love this time of year!

The Bay of Plenty is blessed with one of New Zealand's most beautiful marine and coastal environments (sea, harbours, estuaries and beaches).

During the summer holidays many people come to the Bay of Plenty to enjoy the sparkling waters and sandy beaches. They love to fish, swim, sail, surf, dive and do lots of other activities in and around the marine environment.

In this issue we are looking at how to look after our coastal and marine environments and keep safe in, on and around the water.

We had some great entries to the design a helmet competition; check them out below.

BuzzBOP loves reading the mail so keep sending in your photos, artwork, letters and stories as we would love to put them in our newsletter. This is your newsletter Pollution Busters, so let us know what you want to see.

Tiakina tona a Ranginui rāua ko Papatūānuku – keep protecting our sky father and earth mother.

Ngā mihi o te Kirihimete me te Tau Hou – Season's greetings for Christmas and the New Year.

See you all in 2019!

From BuzzBOP and the Pollution Busters team at Bay of Plenty Regional Council



BuzzBOP's mail

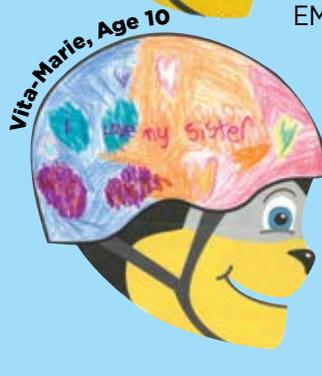
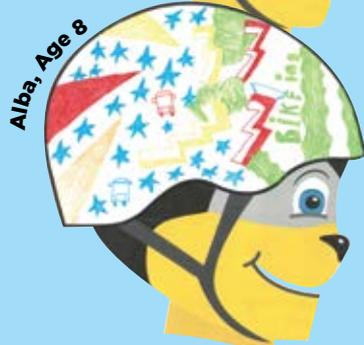
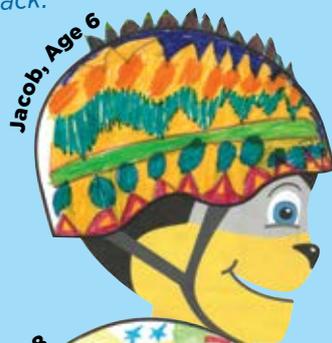
Send BuzzBOP your photos, stories, and art!
Remember to include your name, age and address
on the back.



Send your drawings, photos, letters and competition entries to:

POST: Bay of Plenty Regional Council
Pollution Busters Club
Freepost 122076
PO Box 364
Whakatāne 3158

EMAIL: buzzbop@boprc.govt.nz



Thanks Michael!

Hi: BuzzBOP
Thanks for the newsletter
I love looking through
and colouring it in
Have a good day
Michael Howard

The Bay of Plenty

Te Moana a Toi – The sea of Toi

The coastal and marine environment in the Bay of Plenty is made up of sandy beaches and bays, rocky shores, sheltered estuaries and harbours, cliffs, dunes and the sea.

The coast is the area where the whenua (land) and moana (sea) meet.

The Bay of Plenty has... (Match the bold words in the circles to their meaning)

3 large **harbours**

5 major **estuaries**

Lots of beautiful beaches by the **sea**

wide part of a river where the salt and freshwater mix

the water that covers most of the earth

safe sheltered place for boats to stop

Did you know?
More than a third of the Bay of Plenty is coastal!

37%

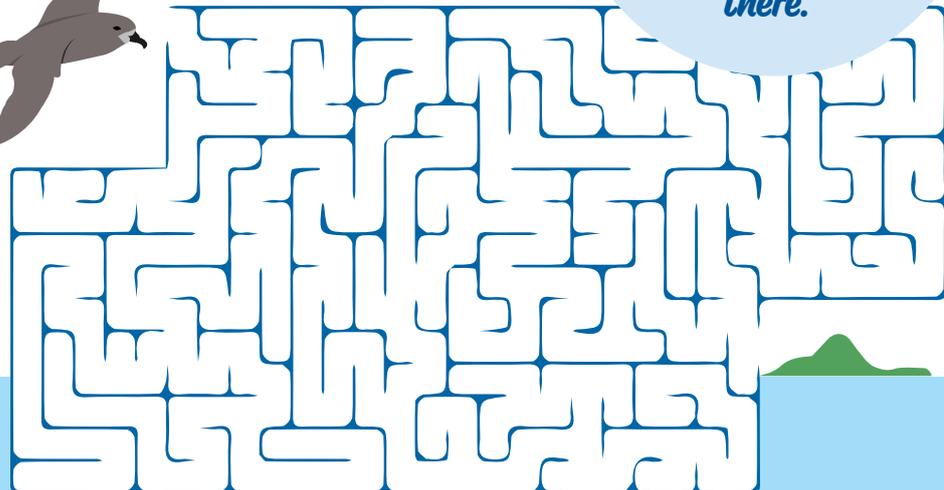
The coastal and marine environment is full of kaimoana (food from the sea), for all that live there.

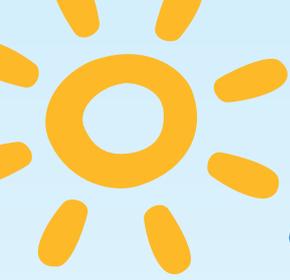
Help the manu swoop and dive to find its way back to its burrow on Moutohorā

Hi! I'm a grey-faced petrel (also known as ōi, tītī, kuia or Northern Muttonbird), I'm an oceanic seabird. During the breeding season we live in colonies (groups) and have burrows in the ground.

In the Bay of Plenty there are colonies on Moutohorā, Mauao and some headlands, where sometimes at dusk you will hear us call as we return to land to our burrows.

*We get our food from the sea
- so keep our oceans pollution free!*





Let's go to the beach!

Sandy beaches are great places to have fun, and the dunes are precious bands of sand that are nature's protection of the land from the sea.

Can you unscramble the sentences to reveal the things that you can do to help look after them so we can keep our fantastic beaches for years to come?

fences the Respect

dunes vehicles off Keep the

waves not the Surf the dunes

Fences protect dune plants. Keep to your side of the fence to let plants grow.

Important plants and birds live in the dunes. Vehicles destroy them.

Sandboarding on the dunes destroys plants, loosens the sand which falls and gets washed away.

the signs for Look

the plants after and dunes Look

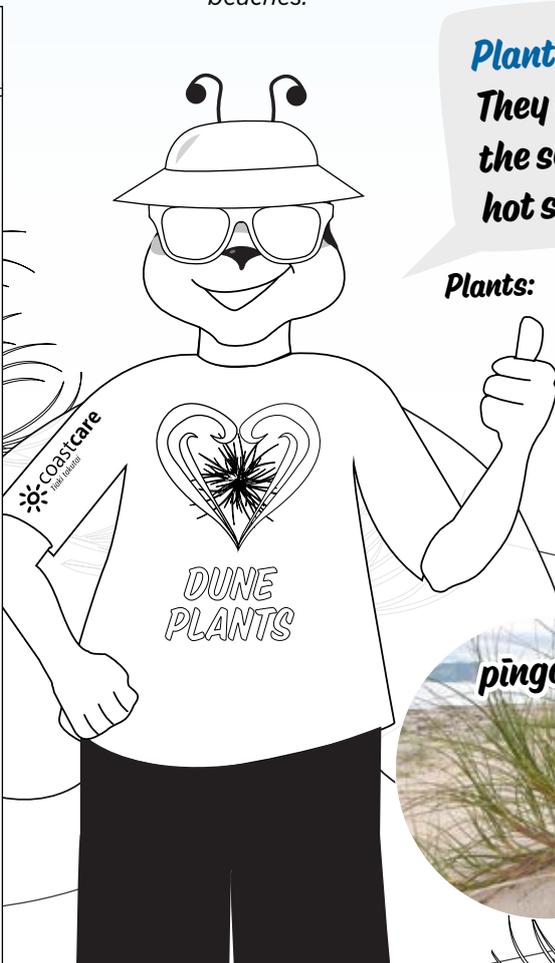
Taihoa koa, ka ora ai nga taipu, ka ora ai hoki tatau katoa

Signs show you the best and fastest way to the beach.

Feet can kill plants. Sandy beaches are great places to have fun. Look after the dunes so that we can keep our fantastic beaches.

Hold on, if the dunes are healthy, then so are we all!

Colour in



Plants on the sand dunes are super cool!
They can survive storms, salt spray from the sea, having little water and living in hot sand!

Plants: Pīngao and spinifex are 'sandbinders' and build dunes because they hold the sand together and stop the dunes from disappearing.

They do this by trapping the wind blown sand with their leaves and roots.

They are also home to lots of creatures that live there. Dunes protect our land and houses during storms.



pingao



spinifex

- Look after the plants and dunes
 - Look for the signs
 - Surf the waves not the dunes
 - Keep vehicles off the dunes
 - Respect the fences
- ANSWERS:

Cut out the pictures and fill the gaps to tell the story of pīngao



The story of pīngao

At the beginning of there was a big argument between Tāne, the god of the and his brother Tangaroa, the god of the sea. Tangaroa was with Tāne because he used his great strength to separate Ranginui, the sky father from Papatūānuku the mother. Tāne wanted to end the argument with Tangaroa, and as a sign of peace he plucked out his and gave them to Tangaroa. But Tangaroa was too angry with Tāne to forgive him and he threw the eyebrows from the . They landed on the and they can be found today as , in the band of sand between the land and the sea.



earth



angry



sea



forest



beach



eyebrows



pīngao



time



tukutuku panels
in the marae near Ōpape.

The coast is very important to Māori – spiritually and as a source of kai (like fish and shellfish), carving and weaving materials.

Weaving materials like pīngao grow on coastal dunes and are used in tukutuku panels and for making kete.

*Atawhaia ngā taipū,
he oranga nui*

*Nurture our dunes for
our vital livelihood.*

Let's go swimming!

Wait! Is the water safe for swimming?

Bay of Plenty Regional Council checks the water quality at 70 coastal and freshwater swimming spots through the summer, so

check out the latest results at lawa.org.nz/swim before you swim, and follow the swim smart checklist below.

Water quality

- Check the **water quality info** for where you are
- **Don't swim near things that might make the water bad**, like storm or waste water outlets, or flocks of birds.

Clean and clear

- **Don't swim for 2-3 days after heavy rain**, or if it has rained for a long time.
- If you can't see your toes in calf deep water, it's best to wait until the water clears before taking a dip.

Environmental Hazards

- **Stay safe, look out for things that could harm you** like strong currents, tidal rips and underwater objects.
- **Don't dive until you know what is there!** There can be hidden dangers under the water (like rocks and tree branches), always have an adult check it out and enter shallow or unknown water feet first.
- **If there are warning signs... follow them.**

Our lakes are beautiful, but when there is too much algae the water is not safe to swim in...

If it's milky and green, it's best to stay dry and clean! If in doubt – stay out!

Is this a good spot for BuzzBOP to dive in? Why?

Wai = Water

Waikino = Water that can cause harm. It is also used for water that hides danger, like rivers that often flood and produce white water.

Why are fish so smart?
They swim in schools!

Check out what is below the surface! Make an underwater scope

You will need

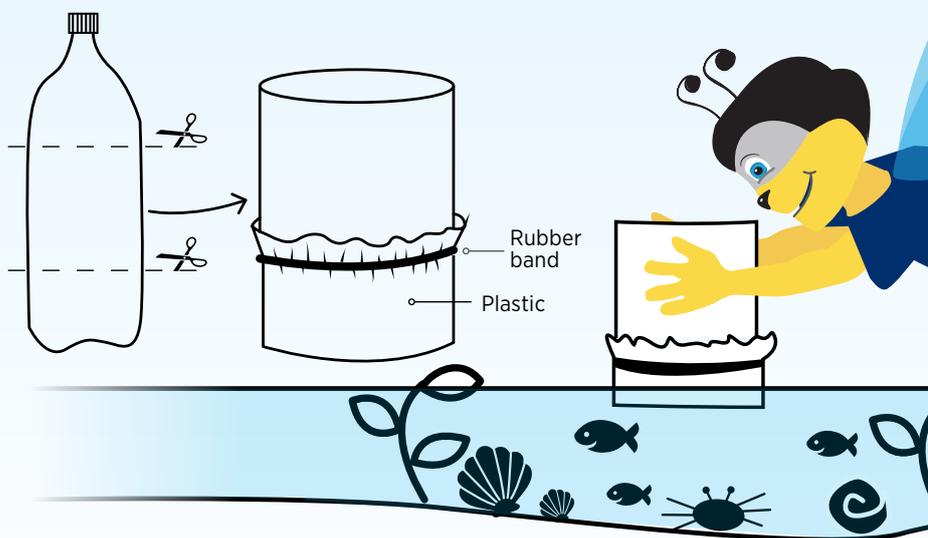
- Clear plastic bottle
- Rubber band
- Thick clear plastic (or cling wrap)

What to do

1. Cut the top and bottom off the bottle
2. Stretch a piece of plastic over one end and secure it with a rubber band

How to use it

Push the bottle through the surface of the water and you will have a clear view of anything that is on the sand below.



When you are out and about this summer be a pollution buster and always put rubbish in a bin or take it home with you.

Clean streams help to keep the sea clean.



BuzzBOP's Friend



Josie Crawshaw
Environmental Scientist

What do you do in your job?

My role is a coastal scientist. I design and carry out scientific investigations (find out what's happening) in estuaries and coastal areas to measure and protect the health of the environment.

What is the best part of your job?

Getting outside in the water! Day to day I might be knee deep in mud in the estuary, in a wetsuit collecting shellfish, or writing a report on the environment in the office. The variety of work is awesome.

What path led you to this role?

I grew up by the beach and estuary and always wanted to work in an environmental setting. I studied Ecology, marine science and then nutrient cycling in estuaries. I worked as a summer student at the Regional Council while I was studying. I have worked in a range of jobs including an estuary laboratory technician, aquarist (carer of marine life in aquariums) and marine science educator before joining the council this year.

What is your message to pollution busters?

Take the time to slow down and look closer! The most exciting things in estuaries can be the smallest. Try the underwater scope activity!

Let's go boating in the Bay!

The Bay of Plenty is a boaties' paradise and it's always fun getting out on the water, whether it's to explore an island, dive, catch a fish, go for a ride on a jet ski, ski, kayak or paddleboard – the most important thing is to stay safe.

Essential equipment

Before you go boating you need to get ready. Find all the items that will help make sure you get home safely in the wordfind.

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

Get your whānau a FREE copy of Boating in the Bay

– it has an introduction to boating in the Bay of Plenty, what the rules are, and it includes maps with basic information on popular boating spots too.

Boating in the Bay booklets can be picked up from any BOPRC office, or if you see a Maritime Patrol out and about this summer, they have them too.



ANCHOR
 FIRE EXTINGUISHER
 KNIFE
 NAVIGATION EQUIPMENT
 SPARE FUEL
 TORCH

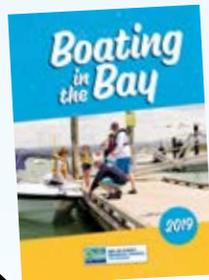
BAILER
 FIRST AID KIT
 LIFE JACKETS
 PROTECTIVE CLOTHING
 THROWLINE
 TWO TYPES COMMUNICATION



If you go to a lake, or are out on the harbour keep a look out for BuzzBOP's friends from the Maritime team.

They look after the a big area of water from Waihi beach to Lottin Point, as well as the region's lakes harbours, estuaries and rivers.

One of their jobs this summer is to make sure that people know and follow the rules when using the waterways so we can all have fun using them safely.



Remember the rules! Speed:



5 knots/9km per hour is similar to a fast walking pace.

A boat must not go faster than 5 knots within:

- 200m of the shore, a structure or dive flag
- 50m of another boat, raft or person in the water.

If you can't be heard, you can't be helped

- Always carry TWO ways to call for help that work when wet.
- Always tell someone where you're going and when you'll be back.

Remember VHF radio is the most reliable way to call people already on the water for help.



Protect your phone with a dry pouch like this!



If in doubt, don't go out!

- Always check the conditions before heading out.
- Weather can change in a moment.
- Be prepared to change plans.

Life Jackets only work when worn properly

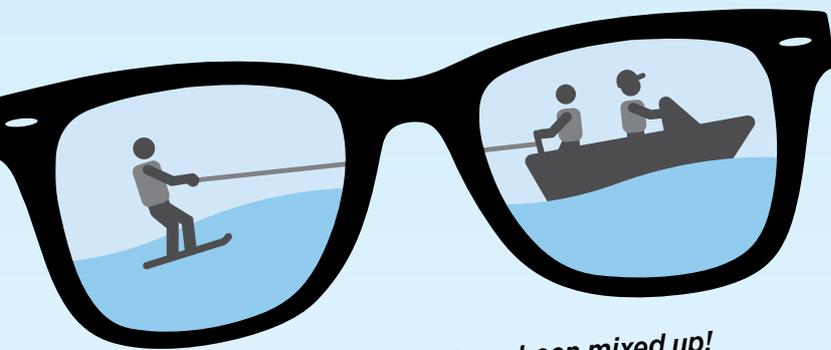
A life jacket should feel snug but not too tight. Straps should be firmly fastened and when you lift your arms the jacket should not rise above your chin.

Life Jackets save lives!

You wouldn't go in a car without a seatbelt; so why would you go in a boat without a life jacket? If you want to stay alive you need to float not sink!

Cut out the pieces and complete the puzzle (TIP: do the activity on the next page before cutting out the puzzle, or if you don't want to cut up this newsletter you can also print this page from www.bopec.govt.nz > residents > kids > newsletters)





Oh no! Some of the letters have been mixed up!

It tekas
theer ot isk!

Can you solve the letter puzzle?

_____ !

When skiing, biscuiting, skurfing and wakeboarding you must have an observer on board who's over the age of 10.

Every baby needs a name!

This year any boats over 4 meters long with motors must have a name or number. **Can you help BuzzBOP name his new boat?** Do you have a boat at your place? Does it have a name?

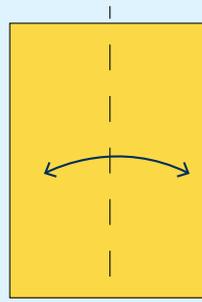
Make your own origami boat and name it. (instructions right)



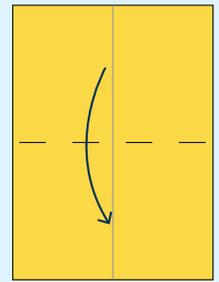
BuzzBOP's waka:

Make a waka!

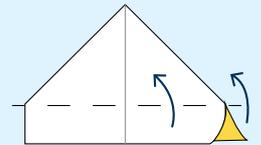
You will need a piece of paper, A4 or a rectangle of any size.



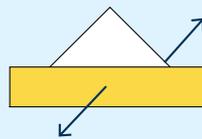
1. Fold in half, open, and fold in half the other way



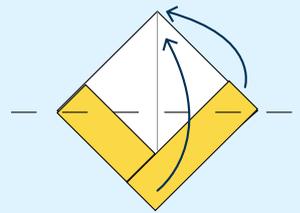
2. Fold corners to the centre



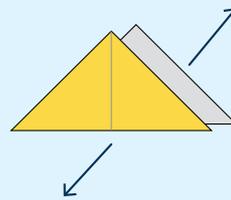
3. Fold up the bottom on both sides



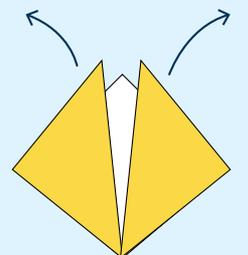
4. Pull the sides out and flatten



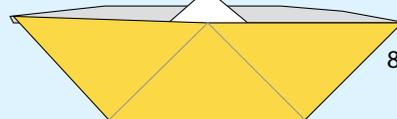
5. Fold front and back layers up



6. Pull sides apart and flatten



7. Pull top flaps out



8. Squash up the bottom and pull the sides up

Another idea! You could also make a waka from harakeke (flax), and have boat races in a stream! *Have an adult help you find instructions on the internet, or visit a library and see if they have the book 'Fun with flax' which has instructions.*

Crossword competition

Tip: All the answers can be found in this newsletter



ACROSS

2. 5 knots is about the same speed as what pace?
6. Always carry ____ ways to call for help that work when wet.
7. Who is the god of the sea?
8. Water that can cause harm.
12. What did Tangaroa throw from the sea?
13. How many people does it take to ski?
14. How many sites does the Regional Council monitor for water quality?

DOWN

1. Sandbinding plant.
3. What will keep you afloat?
4. Clean _____ help to keep the sea clean.
5. If in doubt, don't go _____!
9. What is the Māori name for food from the sea?
10. Keep ____ off the dunes.
11. Who is BuzzBOP's friend in this issue?

Name: _____

Address: _____

Age: _____

Send your entry to:

POST: Bay of Plenty Regional Council,
Pollution Busters Club,
Freepost 122076,
PO Box 364, Whakatāne 3158

EMAIL: buzzbop@boprc.govt.nz

COMPETITION CLOSURES: 15 February 2019

Tsunami and climate change (causing sea level rise, more rain, flooding and more intense storms) can have this impact:

HAVE TO EVACUATE

In an emergency, some houses, streets and neighbourhoods may not be safe to stay in and you may have to leave home in a hurry.

WHAT ACTIONS SHOULD YOU TAKE?

If your street was evacuated where would you go? What would you take? What about pets? Do you have neighbours who might need your help?

GET READY!



PACK A GETAWAY BAG

Have a getaway bag ready for everyone in your family with warm clothes, a bottle of water, snacks. Remember any medications you might need and keep your first aid kit, torch, radio and batteries somewhere you can grab them in a hurry.



DECIDE WHERE TO GO

Decide where you will go (and make sure everyone in your family knows, in case you're not all together). Your evacuation place will probably be with friends or family, so make sure they know your plans.



CHECK YOUR ZONE

If you live in a tsunami zone, make sure your evacuation place is outside of the zone (check with your council for zone maps).

For more Emergency preparedness tips visit www.whatstheplanstan.govt.nz

Information in this newsletter was sourced and adapted from: boprc.govt.nz, lawa.org.nz, whatstheplanstan.govt.nz

Join up or change of address:



Are you (or your friends or family) 3-15 years old and live in the Bay of Plenty?

Are you interested in learning about the environment and sustainability?

Join Pollution Busters!

Please have an adult check that the details are correct before you send this.

- I am a new Pollution Buster
- I am already a Pollution Buster but my address has changed

Name _____

School _____ Birthday ____ / ____ / ____ day / month / year

Address _____



POST THIS TO: Bay of Plenty Regional Council, Pollution Busters Club, Freepost 122076, PO Box 364, Whakatāne 3158
OR EMAIL: buzzbop@boprc.govt.nz