



OUR REGION'S FUTURE

ISSUE 51 - JULY 2012

Tēnā koutou e hoa ma

Hello Pollution Busters! We hope you all had fun making lanterns for Earth Hour.

There were some great events held in the Bay of Plenty and lots of people went beyond the hour which was brilliant.

Thanks to everyone who entered our sustainable actions star chart competition. Check out the Club Corner on page 11 to see who won prizes.

In this issue we are going to look at what the Bay of Plenty Regional Council does and as always this issue is packed with activities and experiments to keep you busy.

We have a scrapbook page competition on page 11. You might like to use the activities in this issue for your page.

BuzzBOP loves getting your mail and emails about the things you are doing in the environment so please keep sending them in!

If there is anything you would really like to see featured in our newsletter let us know by emailing buzzbop@boprc.govt.nz or by sending him a letter.

We hope you have a wonderful holiday break and enjoy spending time with friends and family.

"Kia u, kia ngakaunui ki nga mahi pai" Be steadfast and conscientious in all your good work.

From BuzzBOP and the team at Bay of Plenty Regional Council.



Bay of Plenty Regional Council

- Who are we?

Bay of Plenty Regional Council is a caretaker of our land, air and water and checks the effects of human activities on our environment. We also promote the sustainable management of our natural and physical resources for present and future generations. We want to make sure our region grows and develops in a way that keeps it safe.

What do we do?

A big part of our work involves looking after the environment. Regional Council manages the effects of people's use of freshwater, land, air and coastal water. We also have a responsibility with others for the economic, social and cultural well-being of the community.

Some of our other work includes:

- Managing the risks from our major rivers like the region's major flood control schemes.
- Planning and prioritising the region's land transport needs, like major roading improvements.
- Organising passenger transport services like Tauranga's Bay Hopper, Rotorua's Cityride and Whakatane's Beach Runner.
- Navigation and safety on our harbours and lakes.
- Supporting sustainable economic development (like growing business opportunities and the infrastructure needed for it like rail, roads and ports so that we can have more people living and working in the Bay).
- Thinking about the big picture (strategic thinking) for our region's future.

SPOT THE DIFFERENCE

Which one is the correct one?
Can you spot the five differences?



Answers:
The top one is the correct image.
Differences:
1 - sun is orange
2 - sky has changed
3 - water is yellow
4 - white line missing
5 - the bottom one is taller

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

—Brundtland (1987)

What's the difference between Regional, City and District Councils?

The boundaries of the Regional Council are based on river catchments, while district and city council territories (areas) are based on population and communities.

Bay of Plenty Regional Council works region wide and has strong priorities on the natural environment - water, air, land, coast – they make sure these are used sustainably, and are just as good (if not better) in the future as they are today. The Regional Council is also responsible for working with others towards economic, social and cultural well-being of the region.

City and district councils concentrate on the 'built environment' and deliver services like drinking water, sewage disposal, rubbish disposal, swimming pools, libraries and parks to their local communities.

Even though the councils have different jobs, they often work together on lots of different projects to benefit the community.



What does Bay of Plenty Regional Council want to achieve?

Check out the outcomes wheel (right). These are the things that we (Regional Council) want to achieve as a regional leader!

The outcomes wheel maps out what we hope to achieve over the next ten years and how our work will make a difference. By working towards them we will promote environmental, social, cultural and economic well-being in the Bay! Well-being is all about quality of life and what we do plays a big part in helping the community achieve its goals.

So... why are the outcomes important? They:

- Help us to improve the well-being of communities in a sustainable way (like buses – good for the environment and everyone can get around, and the clean heat programme).
- Give a clear guide on how we contribute to the wellbeing of the Bay now and in the future.
- Help us decide and prioritise work and the demands on resources.
- Let us check what has been done and help us measure the progress we have made.



The Outcomes Wheel

The outcomes wheel has three sections:

- Environmental well-being by: Caring for our region's environment (green segments);
- Economic well-being by: Furthering the region's prosperity (blue segments); and
- Social and cultural well-being by: Working well with others (yellow segments).

On the following pages we will look closer at some of these outcomes and have fun with a few activities.

WORD FIND FUN!

AIR	LAND
CARETAKER	NATURAL
COASTAL	NAVIGATION
COMMUNITY	PLANNING
COUNCIL	PRIORITISING
CULTURAL	REGIONAL
DEVELOPMENT	RESOURCES
ECONOMIC	SAFETY
ENVIRONMENT	STRATEGIC
FRESHWATER	SUSTAINABLE
FUTURE	TRANSPORT

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



CARING FOR OUR REGION'S ENVIRONMENT



Environmental Protection

We protect our land, air and water from pollution.

E tiakina e tātau ō tātau whenua, te hau me te wai kei tūkinohia.

We work with the community and others to protect the region's natural resources (like lakes, streams, rivers, air) from pollution (and animal and plant pests) and to improve the environment.

'Protect' means to guard our region's natural resources from harm.

'Pollution' means discharging contaminants (allowing harmful materials to get into the water/air) that badly effect the environment like sediment, waste, wastewater, hazardous substances, vehicle emissions and hazardous air pollutants (we learnt all about these in Issue 46 – AIR).



Make every day Earth Day!
Reduce, Reuse, Recycle.
Use your Feet.
Be water wise.

ACTMITY EASY BIRD FEEDER

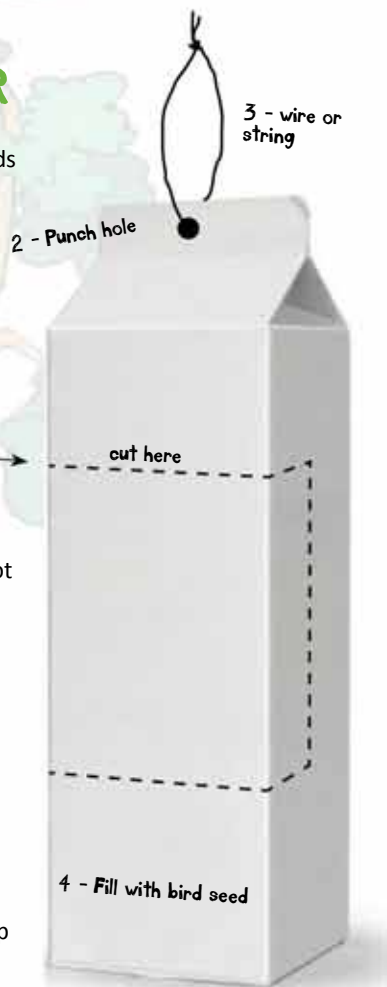
Recycle a milk carton and bring the birds into your garden!

You will need:

- Empty milk carton
- Scissors
- String or wire
- Hole punch
- Bird seed

What to do:

1. Cut a hole in the milk carton – it should be big enough so a bird could come and sit and eat, but not too big or the carton will bend.
2. Use a hole punch and make a hole at the top of the carton.
3. Put a string through the hole and tie a knot.
4. Fill the bottom of the carton with bird seed.
5. Hang it in a tree and watch the birds come to eat!
6. Check your bird feeder and fill it up with food when you need to.



Check out this cool website for heaps of games, crafts and activities.
<http://funschool.kaboose.com/globe-rider/earth-day/>

ACTIVITY

SCRAMBLED PESTS

Can you unscramble the pest plant or animal names and match them to the pictures?

RBITAB



LBUE INGORNM RYGLO



SMUPOS



SWAP



RFEAL TAC



RTA



SREGO





Water Quality

The water quality of our lakes, coastal environment and iconic water ways is maintained or improving.

E manaakitia, e whakapaitia rānei te kounga wai o ngā roto, te wāhi takutai me ngā ara wai.

Achieving good water quality means that our harbours, foreshore, lakes, rivers and streams are clean and healthy. This means people can use and enjoy our waterways, and that the aquatic habitats of our native plants and animals are healthy and can sustain life.

The Māori word for water is wai.

In Māori culture, water is the life-giver, it represents the blood of Papatūānuku, the Earth Mother, and the tears of Ranginui, the Sky Father.

very famous or popular

ACTIVITY

FILTER THE WATER

This is an easy activity to see how rocks and earth filter water!

You will need:

- Small plastic plant pot
- Paper towel or sponge
- Gravel
- Soil
- Water
- Bottle and funnel (optional)
- Tray

What to do:

1. Take your plant pot and put the paper towel/sponge in the bottom of it.
2. Put a layer of gravel in it (about 4cm), now put twice as much soil. Leave some room at the top for the water to pool.
This is your filter!
3. Now mix some soil and water in a bottle until it is all brown and murky. Pour this through the filter.
4. When all the water has drained through, tip it out of the tray and back into the bottle (if you have a funnel it will be easier) and pour it through again - keep doing this until the water starts to become clearer.
5. You have now filtered water! *(But don't drink it! - it may still have harmful bacteria in it that you can't see).*



To learn more about water and water quality go to www.bopre.govt.nz and check out Pollution Busters Issue 49 - Water



Regional Planning

We have established the region's environmental priorities and strategic direction.

Kua tau i a mātau ngā whakaarotau me te aronga rautaki o te taiao o te rohe.



Environmental Knowledge

We understand more about our environment, how to care for it and how to adapt to change.

E whānui ake te mārama ki tō tātau taiao, te manaaki me te urutau ki ngā rerekētanga.

Understanding and knowing how to care for our environment means we can manage our resources taking environmental, economic, social and cultural well-being into account when making decisions.



TEST YOUR KNOWLEDGE

1 What do you call the rain that contains chemical waste and causes damage to plants and animals?

- A Smog
- B Acid rain
- C Rain

2 What is the term used to describe a substance that can be broken down and eaten up by microorganisms like bacteria?

- A Environment friendly
- B Biodegradable
- C Recycled

3 What is the natural environment of a living organism called?

- A Habitat
- B Surroundings
- C Environment

4 Sometimes when ships get damaged oil leaks into the sea (like CV Rena). What is an accidental spill of oil into water called?

- A Water pollution
- B Oil spill
- C Oil leak

5 What is the process of collecting, processing and reusing waste materials called?

- A Recycling
- B Reworking
- C Reusing

6 What is the name of the annual event where hundreds of millions of people all around the world save energy to help protect the planet?

- A Planet hour
- B Earth hour
- C Planet earth hour

7 What is a substance that dirties the air, water or ground and harms the living organisms called?

- A Pesticides
- B Non-biodegradable
- C Pollutant

8 Which layer of the earth's atmosphere helps protect the earth from the rays of the sun?

- A Stratos layer
- B Ozone Layer
- C Cake layer

9 What is water made up of?

- A Nitrogen
- B Carbon Monoxide
- C Oxygen and Hydrogen

Answers: 1B, 2B, 3A, 4B, 5A, 6B, 7C, 8B, 9C

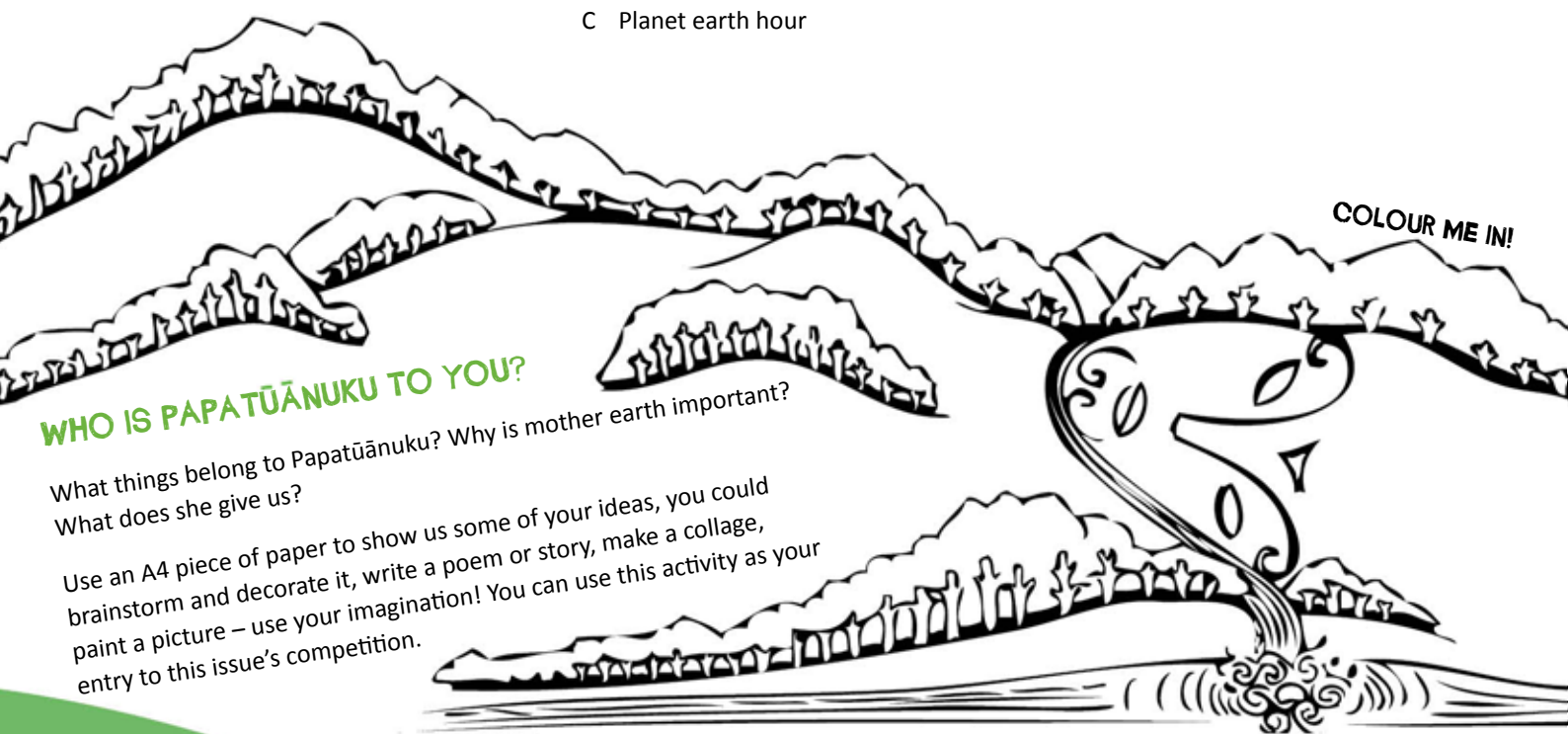


Image courtesy of the EnviroSchools Foundation www.enviroschools.org.nz

CARING FOR OUR REGION'S ENVIRONMENT AND FURTHERING THE REGION'S PROSPERITY



Resilience and Safety

We are resilient to flooding and natural disaster events and our water ways are safe for a wide variety of users.

E manahau ana mātau ki ngā waipuke me ngā whakawhiu o te ao tūroa, ā, e haumarua ana ngā ara wai mō te hunga whakauru mai.

Resilience and safety is about helping the Bay of Plenty community to:

- reduce the impact of (to lessen how harmful it is to us and the environment);
- prepare for (to be ready and have an emergency plan and kit);
- respond to (how we help the people, animals and the environment after disaster event); and
- recover from large scale flooding and natural disaster events (helping everything get back to normal again - back to school and work).

This is done by putting the Regional Civil Defence Emergency Management Group Plan into action, and by maintaining flood protection schemes for our rivers and floodplains across the region.



In Māori mythology earthquakes are caused by the god Rūaumoko - ancestor of the earth's underground movements.

MAKE A VOLCANO!

You will need:

- Play dough (There are lots of play dough recipes online if you don't have any)
- Empty small container (like an old film canister if you can find one!)
- Tablespoon of baking soda
- Tablespoon of vinegar
- Food colouring

What to do:

1. Make the play dough the shape of a volcano.
2. Make a hole in the top of the volcano so the small container can fit into it.
3. Put the container in the hole.
4. Add the ingredients to make the flowing lava (an adult may need to help you with this).
5. First add a tablespoon of baking soda, then the food colouring. Now add the vinegar.
6. Step back and watch your volcano come to life!



FURTHERING THE REGION'S PROSPERITY



Resource Development

We harness our region's natural resources with care so they benefit us.

E whakamahi tika ana mātau i ngā rawa tūturu o te rohe kia whiwhi painga ai tātau.



Transport Network

The regional transport network is more efficient.

E tōtika ake te kōtuinga ikiiki o te rohe.

An efficient regional transport network reliably and safely moves people and goods to, from and around the region.

ON THE BUS - MAZE



Get on the bus and see how many children you pick up on the way to school.

START



SCHOOL

Answer: This bus picks up five children

You can learn more about transport at www.boprc.govt.nz in Issue 48 - Love NZ or check out this cool website with loads of learning, games and transport related activities!
<http://tmrkids.qld.gov.au>

TRANSPORT AUDIT

After the holidays when you are back at school you could ask all the other students in your class how they travelled to school, they may have travelled in a car, or in a van, walked, cycled, scooted or on a bus. See the example below how you could record your results. You could also ask them if they are pollution busters, Buzz is always looking to get more friends!

MY TRANSPORT AUDIT					
					OTHER
###	### 		### ###		
5	7	3	10	3	1



Economic Development

We facilitate projects that boost our economic performance.

E takawaenga ana mātau i ngā kaupapa hāpai ake i tō tātau ōhanga.

The economic development outcome is about facilitating projects (helping out, sharing knowledge). It's also about supporting projects that will improve the economic performance of the Bay of Plenty region (bring people, jobs and money). We need to think about where people live, how they get around, how a business will get goods in and out of the region, what the future holds (like climate change). There is a lot to think about when we try to do the best for the growth of the Bay without harming the environment or it's people and culture.



Regional Initiatives

We lead collaborative initiatives that have a regional sustainable development scope.

E ārahi ana mātau i ngā kaupapa mahi tahi ko tōna aranga he rohe whakawhanake ukiuki.

WORKING WELL WITH OTHERS



Community Involvement

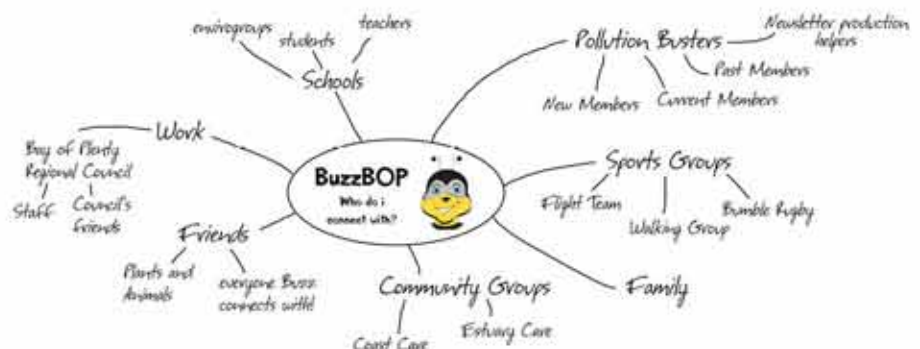
We support the community to be involved in our work and care for our natural environment.

E tautoko ana mātau i te hāpori kia whai wāhi mai ki a mātau mahi me te tiaki i te taiao tūturu.

This outcome means that the community is involved in caring for the Bay of Plenty's environment, and knows about environmental issues, and have the power to make positive contributions in the region by joining Care Groups (like Coast Care and Estuary Care), being Pollution Busters or getting Environmental Enhancement Funding to make an area close to them better!

WHO DO YOU CONNECT WITH?

Can you brainstorm who you connect with? Get an A4 piece of paper and see who you connect with! See BuzzBOP's sample on the right.



Social Contribution

We better understand our contribution to social wellbeing.

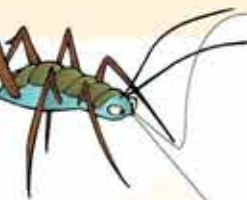
E mārama ake mātau ki tā mātau whai wāhitanga ki te oranga pāpori.



Regional Collaboration

We pool our resources and work with others to save money and make our work easier.

E tōpū ana mātau i a mātau rawa, mahi hoki me ētahi atu hei penapena pūtea me te whakamāmā i ā mātau mahi.



REMEMBER:

MĀORI LANGUAGE WEEK

Te Wiki o te Reo Māori

23 July - 29th July



Māori Participation

We recognise and value engagement and partnerships with Māori.

E whakamana, e uara hoki mātau i ngā mahi whakawhitiwhiti, pātui hoki me te Māori.

Māori participation means that we work alongside and form partnerships with Māori and value their knowledge and input (like working together on the Rotorua Te Arawa Lakes Strategy Group, and partnerships for Ōhiwa Harbour, Tauranga Harbour and SmartGrowth) .



**Tānemahuta -
Father of forests and
all that inhabits them**

Image credit: EnviroSchools

TAPAHI HARAKEKE - CUTTING HARAKEKE

There are tikanga (correct ways) of behaving when working with flax.

We should:

- Thank Tānemahuta for the harakeke
- Ask that no harm come to the plant or those working with it
- Cut harakeke during the daytime
- Cut in fine weather
- Trim it in the special way (see below)

How to trim harakeke:

- The middle three leaves (1-2) are never cut. These are called the rito (1 - middle baby leaf) and the awhi rito (2 - the parents on either side).
- Cut on an angle at the base of the clump (4 - on right side). This allows the water to run to the roots and not rot the rito.
- Trim the complete bush when gathering for use (leaves - 3) or pruning (old leaves - 4).
- Cut out all dead leaves and remove from the area.
- Never cut leaves with kōrari (flower stalks) are growing.
- Harakeke is never cut in the rain.
- Do not eat and work with flax at the same time.
- Make sure that you wash your hands well before eating.
- Stay off any harakeke being worked (woven etc).
- Give the first flax thing you make away to someone else.



MAKE A HARAKEKE IKA



This is a fun and easy way to make angel fish, if it's a wet day and you don't have any flax you can use paper! They look really neat when made into a mobile.

You will need:

Two strips of flax about 2cm wide and 40cm long.

What to do:

Make a loop in one piece of flax (see fig 1)

Place the second strip through the loop as shown in fig 2 strip is then taken behind the work, as shown by the brought to the position shown in fig 3.

The same strip is then carried over one strip and then original loop, see arrow in fig 3, to end in the position 4, The knot is tightened by pulling on the ends of all (see arrows of fig 4) It should then look like fig 5.

Turn it over and fold strip 1 in the direction of the in fig 6 to lie in the position of fig 7.

Fold strip 2 in fig 7 forward on itself and under strip 3. You will need to pull strip 1 to the side. Tighten all strips and your work should look like fig 8!

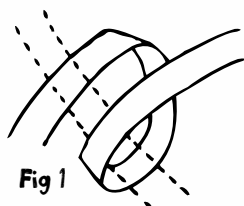


Fig 1

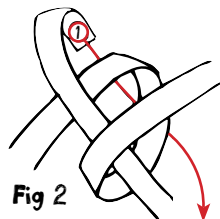


Fig 2

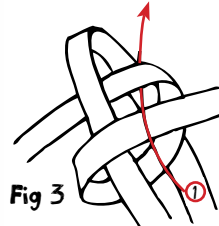


Fig 3

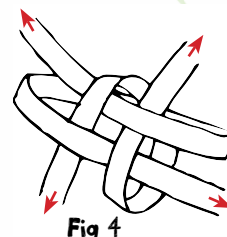


Fig 4

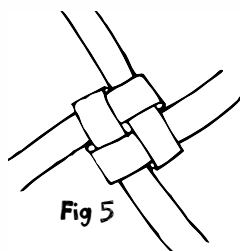


Fig 5

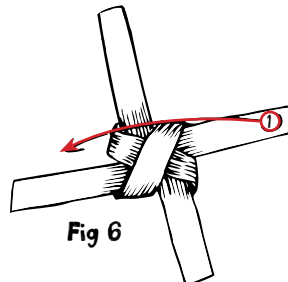


Fig 6

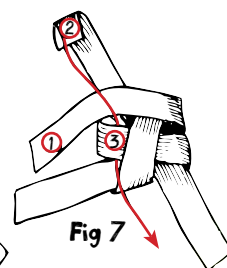


Fig 7

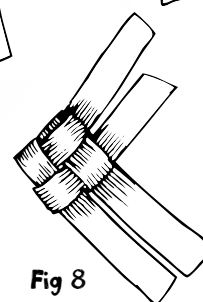


Fig 8

Adapted from: *Fun with Flax - 50 Projects for Beginners*, Mike Pendergrast

CLUB CORNER

Congratulations to those of you who sent in the sustainable actions star charts from our last issue! Well done to those of you listed below who won prizes;

Claytin Thompson, Reece Thompson, Rawinia Manuel, Bianca Bell, Michael Howard, Adam Kwiecien, Shakaya Gosling, Lily Kwiecien and Emily McCarthy.

COMPETITION

Make a scrapbook page!

You will need: A4 paper and your imagination!

Now that you know what the Regional Council's outcomes are (what they want to achieve) you could make a scrapbook page about them, or what you would like to achieve. Here are some more ideas for your scrapbook page:

- one or all of the activities you completed in this issue!
- a sustainable activity that you are involved in
- start with the brainstorm on who you connect with and decorate it
- your page on Papatūānuku

Anything goes and we would love to see all your creative ideas. Please remember to put your name, age and address on the back of your work.

To BuzzBop I Was Very
Excited to make the lantern
When I turned out the light
it shimmered it's beautiful
colours everywhere. it was a
great way to save energy

From Kayleigh Anne Garner



What it looks like

Kayleigh Anne Garner



Bianca Bell

BuzzBOP's Friends

Past Pollution Busters members continue their passion and share ideas about a sustainable future!

Lots of our past Pollution Buster members were part of this year's Youth Jam event at Pāpāmoa organised by BuzzBOP's friends Stephanie Macdonald, Kerry Gosling and Sally-Anne Daniell at Bay of Plenty Regional Council.

They had the opportunity to contribute their ideas to the Bay of Plenty Regional Council about some of the issues currently facing our region. Students from Kawerau, Edgumbe, Tauranga Girls', Pāpāmoa, Katikati Colleges, Western Heights and Whakatāne High Schools attended the two day event.

It was lots of fun and a great way to get to know others who are passionate about the Bay of Plenty Region.

We can all make a difference!



Some of the activity ideas were adapted from: www.pitara.com, www.kaboose.com

Pollution Busters join up or change of address here...

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 I have changed my address

Name _____

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

Address _____

BuzzBOP and Team
Bay of Plenty Regional Council
Freepost 122076
PO Box 364
Whakatāne 3158

buzzbop@boprc.govt.nz

Write your name, age and address on your letters and on the back of your artwork.

Have you moved and changed address?

If you have moved and changed address, please write or email us so we can make sure you get your newsletter.