

# CARE FOR OUR COAST COMMUNITY CLEAN UP KIT



# CARE FOR OUR COAST

## CLEAN UP OUR COAST KIT

**New Zealand is a nation of islands surrounded by the South Pacific Ocean on one side and the Tasman Sea on the other.**

**We have the eighth longest coastline in the world and by international standards it is relatively clean. However, we should not let that lull us into thinking we don't need to do something to clean-up our waters.**

Approximately 90% of New Zealanders live within 50km of the coastline and our marine environment is fourteen times larger than our land area. New Zealanders use the sea and coastline for many purposes, including transportation, energy, fisheries, recreation and tourism. It also has significant cultural and spiritual value. Healthy oceans deliver a range of environmental benefits that are vital to sustaining life on earth. These include the absorption and transfer of sediments and nutrients from land, heat transfer from the atmosphere and carbon absorption.

According to the 2007 State of the Environment report about 30 per cent of our marine environment is thought to experience some degree of disturbance from human activities. For example, it has been estimated that 390 million tonnes of run-off, containing many harmful chemicals, enters our oceans each year. Another major environmental

issue affecting our coastline is litter and debris. Every year approximately 7 billion tonnes of rubbish makes its way into the sea. This has significant impact on wildlife, as well as on human health and livelihoods.

The Sir Peter Blake Trust has created this resource to carry on Sir Peter Blake's vision – to save our seas. By participating in this programme, you will contribute to the conservation of one of our country's greatest natural assets – our seas, coasts and waterways. The animals and plants that live there need our help, thank you for doing your part.

This kit offers guidance and resource material for groups interested in undertaking a coastal clean-up. It provides ideas and suggestions and any person who wishes to become involved in a clean-up operation could easily adapt the ideas and methods to suit local conditions.

**Sir Peter Blake wrote in his last log  
on board the Seamaster:**

**“The hardest part of any big project is to begin.  
We have begun. We are under way. We have a passion.**

**We want to make a difference.  
We hope that you and as many of your  
friends as possible will join us.”**

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## **SAFETY BRIEFING**

By protecting our waterways and coastlines, you are protecting our children. According to Safekids New Zealand, approximately 556 children a year are injured severely enough from a cut or puncture wound to be admitted to hospital overnight or longer. For children aged 5 to 9 years, cutting injuries are the second leading cause of a hospitalisation for unintentional injury.

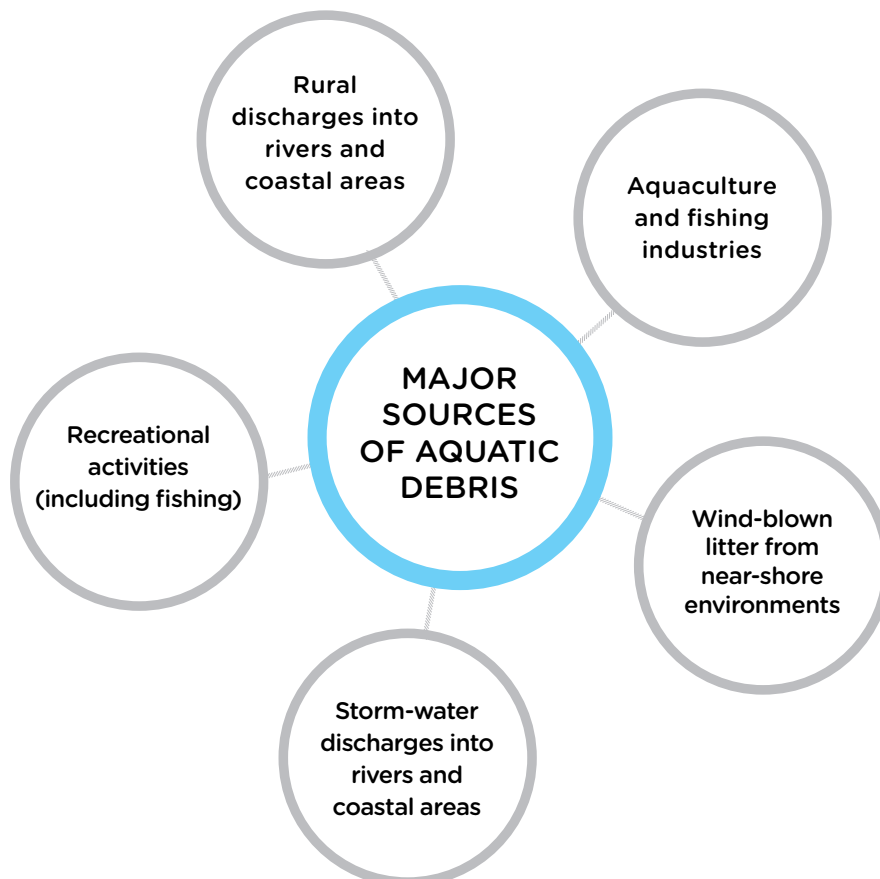
The majority of these injuries are a result of standing on something sharp—such as broken glass, metal, hard plastic, fish hooks, syringes and other sharp fragments.

The good news is cutting and piercing injuries are preventable. By caring for your coast and keeping our waterways and coastlines free from aquatic debris, you can help prevent children from cutting and piercing injuries.

### **1. WHAT IS AQUATIC DEBRIS?**

While cleaning up your coast you are going to find aquatic debris of all kinds. Aquatic debris is any human-made item that has been lost, discarded or deposited into the fresh-water or marine environment. Most aquatic debris will not biodegrade. That means it will stay in the environment for hundreds of years, if not forever.

#### **DIAGRAM WEB OF MAJOR SOURCES OF AQUATIC DEBRIS**



## 2. WHY DO WE NEED TO BE CONCERNED ABOUT AQUATIC DEBRIS?

There is an increasing quantity of debris entering our waterways and coastlines every year.

This debris is not only the rubbish that is left behind on beaches and on river-banks but is frequently material that has entered our stormwater system, rivers and streams and is then transported to the coast.

- \* Eighty percent of marine debris comes from land.
- \* This debris as well as being unsightly can be very dangerous to many forms of marine life.
- \* Birds swallow the bits of plastic, it clogs their stomachs and then they die of starvation.
- \* Turtles mistake floating plastic bags for jellyfish and eat them, choke and die.
- \* Dolphins and whales become entangled with fishing lines.
- \* Litter that sinks to the bottom damages the seabed.

### MARINE DEBRIS STAYS IN THE ENVIRONMENT FOR A VERY LONG TIME

Orange peel	2 years
Cigarette butts	1-5 years
Plastic bags	20-50 years
Tin cans	50 years
Aluminium cans	80-100 years
Glass	1 million years
Plastic bottles	250 years

### OTHER DETRIMENTAL EFFECTS INCLUDE

- \* Six pack rings cause strangulation to birds and marine animals.
- \* Fishing lines can increase drag, slowing marine animals down.
- \* Fishing lines cause lacerations to marine animals' skins.
- \* Birds, mammals and fish can suffer infection and loss of limbs from lines.
- \* Birds, turtles, mammals and fish eat the marine debris and it clogs their insides.
- \* The plastic that marine animals ingest, stays in their stomach and attracts other toxins.
- \* Plastic acts as rafts for small creatures, allowing them to travel long distances to areas where they are not native.
- \* Abandoned fishing gear continues to trap and catch fish.
- \* Plastic breaks down into smaller fragments and is mistaken for prey and eaten.

### 3. WHAT CAN WE DO ABOUT IT?

We can reduce the amount of litter we produce by trying to create zero waste. We can do this by using textile shopping bags instead of accepting plastic bags for our purchases.

You could also buy food from markets or shops that do not pre-package hence cutting down on packaging materials that are typically plastic and Styrofoam.

We can be careful and considerate with our own litter and ensure that it is properly and safely disposed of in rubbish bins or take it home.

We can ensure that 'outside drains only drain rain' and ensure that litter and other harmful substances such as paint, oil and detergent do not enter the storm water drainage system.

We can organise a coastal clean-up (for a beach, river, stream or lake front). We can expand this clean-up to 'adopt' the coastal area and clean that particular area every few months.

### 4. PREPARING FOR A CLEAN-UP OPERATION

#### PEOPLE

- \* Which clean-up method would suit the people who have volunteered?
- \* People working individually, in pairs or larger groups?
- \* If there are young children involved in the cleanup, is there adequate supervision for them around the water?

#### EQUIPMENT

- \* Gloves, hats, boots or closed shoes and sunscreen
- \* Rubbish bags for collection and disposal
- \* Survey sheet, pen/pencil, tape measure and a knife

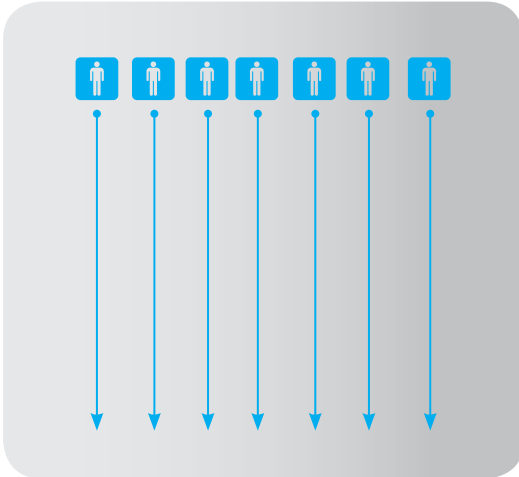
#### LOCAL AUTHORITY

- \* Inform and seek permission if necessary
- \* Method for disposal of bags of collected debris

## 5. DIFFERENT CLEAN-UP METHODS

### SWEEP

Collectors move in a line across the clean-up area and pick up litter as they move.

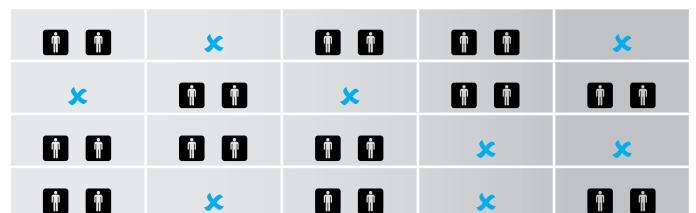
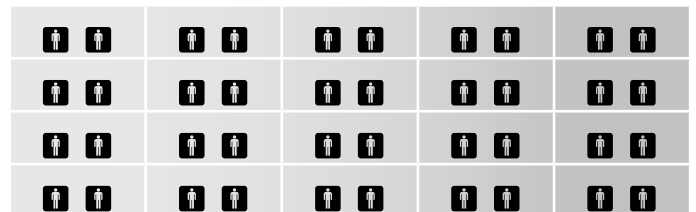


### GRIDS AND QUADRATS

Divide the clean-up area into similar sized rectangular / square areas. One or two people are assigned to each area and they are responsible for cleaning up that one area.

#### OR

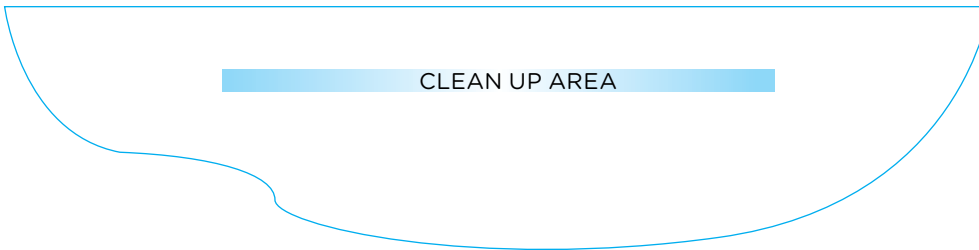
If the area is very large, then randomly select a suitable number of similar sized rectangular / square areas for cleaning. One or two people are assigned to each selected area and they are responsible for cleaning up that one area.



✗ represents non-selected areas

### TRANSECT LINE

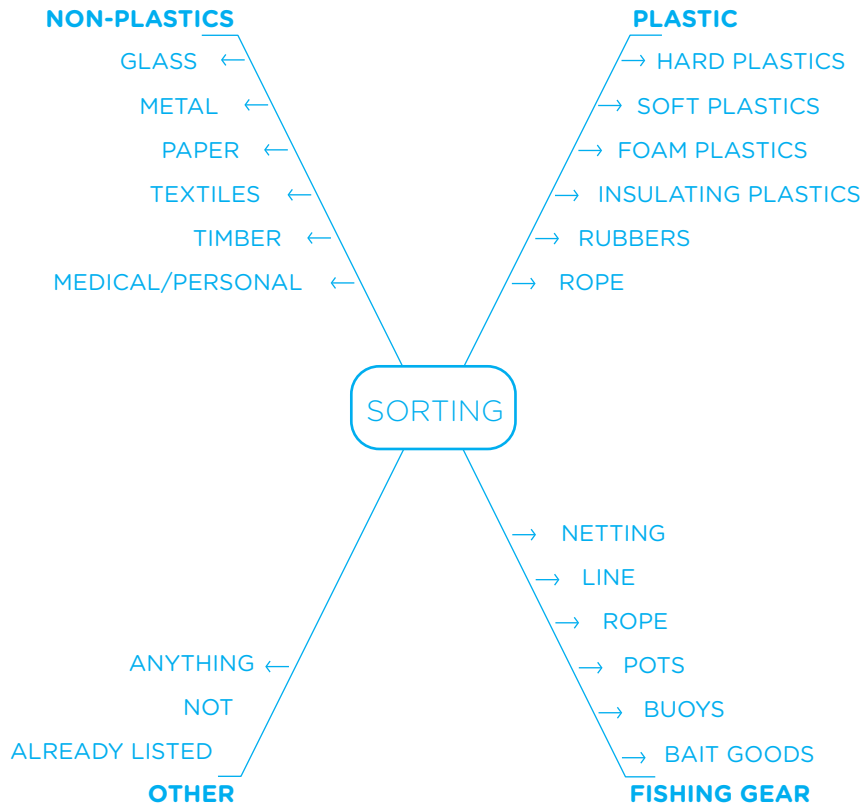
If the clean-up area is very large you can create a 'line' along the coastal area and pick up litter within 2 or 3 metres of that line. This means that you pick up litter within a band in that coastal area.



### STRAND LINE

Similar to the transect line method but use the high-tide line as the baseline. Pick up litter within 2 or 3 metres of the high tide mark.

## 6. SUGGESTIONS FOR SORTING COLLECTED MATERIAL



## 7. CHECK-LIST

		DONE
1	To publicise your event, contact your local paper and ask that they do a story on it.	
2	Write up a risk management profile, considering health and safety issues.	
3	Consider how you will dispose of the bags of rubbish collected.	
4	Organise transport to the beach or waterway.	
5	Organise your group of volunteers to help on the day.	
6	Remind participants to bring gloves, hats, boots or closed shoes, sunscreen, snacks and a drink bottle.	
7	Check with the local council if they can supply large rubbish bags for the end of the collection, and advise participants to recycle shopping bags for the collecting.	
8	Print off a survey sheet to take with you, also pens/pencil and tape measure.	
9	The co-ordinator will need to decide which clean-up method would suit the people who have volunteered.	
10	Organise participants into groups or pairs.	
11	Clean-up Day - using a clean-up method, collect rubbish using gloves and recycled bags, sort rubbish and record results on the Survey Sheet.	
12	Co-ordinator fills in the Survey Sheet for recording information, which can then be used to analyse the data.	
13	Log on to <a href="http://www.sirpeterblaketrust.org">www.sirpeterblaketrust.org</a> to ENTER YOUR OWN RESULTS and receive graphs of the data collected.	
14	Send in data sheet to the Sir Peter Blake Trust for data validation.	
15	Use your data set and graphs for community awareness.	



ITEMS RECORDED		Number	
<b>GLASS</b>		<b>FOAM PLASTICS</b>	
Bottles		e.g. cups, packaging, insulation	
Other - e.g. light bulbs			
Fragments (please estimate)		<b>HARD PLASTIC</b>	
		Bottles	
<b>ALUMINIUM, STEEL, TIN</b>		Drinking straws	
Cans		Eating utensils	
Bottle tops / caps		Packaging bands	
Other - e.g. foil, drums		Cartons / buckets	
		Plastic bottle tops	
<b>PAPER, BOARD, TIMBER</b>		Lolly pop sticks	
Paper cups, plates, bowls		Other - e.g. toys, pens	
Cardboard cartons		Fragments (Please estimate)	
Paper bags			
Paper sheets		<b>PLASTIC SHEET AND FIBRE</b>	
Timber (not driftwood)		Plastic bags	
Other - e.g. ice block sticks		Food wrappers	
		Cigarette butts	
<b>TEXTILES AND FABRIC</b>		Other - e.g. mesh	
Shoes		Fragments (Please estimate)	
Clothing items			
Pieces of textile, fabric, towel		<b>FISHING GEAR</b>	
		Netting	
<b>MEDICAL AND PERSONAL</b>		Fishing line	
Disposable nappies		Twine	
Syringes		Hooks and other tackle	
Sanitary items		Pots and traps	
Condoms		Bait goods - e.g. bags, strapping	
Other - e.g. plasters, bandages		Buoys or floats	
		Other	
<b>RUBBER</b>			
e.g. balloons, tyres, jandals		<b>ROPE AND CORD</b>	

OTHER ITEMS (NOT LISTED ABOVE)	Number

Please note any interesting items found and any data relating to the source of any item(s) found - e.g. a particular store, supermarket or fast food outlet.

COMMENTS (PLEASE TELL US ABOUT YOUR CLEAN UP)

Don't forget to send us a photo - info@sirpeterblaketrust.org

## 10. INTERPRETING THE DATA

Visit [www.sirpeterblaketrust.org](http://www.sirpeterblaketrust.org) and go through the environment link to the Care for our Coast section.

- \* On the Care for our Coast homepage, click on the 'Results + Data Entry' and 'Enter Your Own Results'.
- \* A spreadsheet will open up in a similar format as your clean up form. You simply enter your findings in the form and click 'Submit'.
- \* You will then receive your summarised results in the form of pie graphs and bar graphs. This will enable you to see how your results compare with the nationwide clean-up data. Don't forget to bookmark the web-page onto your own computer to refer to later.
- \* Please also remember to post, fax or email your completed survey to the Sir Peter Blake Trust, who will validate your data to be included as part of the nationwide clean-ups.

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**WE ARE ALSO INTERESTED IN ANY PHOTOS  
FROM THE CLEAN UP DAY AND YOUR  
RECOMMENDATIONS TO IMPROVE THIS  
SURVEY!**