



Choose Survey Area

Your Sustainable Coastlines rep will work with you to choose the best beach area for long-term monitoring. This is your Survey Area.

During your training workshop, Sustainable Coastlines will also help you complete the necessary Health & Safety Plan for working safely at your site.

This methodology is a localised adaptation of the United Nations Environment Program / Intergovernmental Oceanographic Commission Guidelines on Survey and Monitoring of Marine Litter.

Note: This is a methodology overview intended for Citizen Scientists. It does not replace official training, which covers important Health and Safety, logistics and planning considerations.



Set up Survey Area

Complete a site risk assessment before each 'Litter Survey'.

Choose the area with the most litter – usually this spans the back of the beach and the high-tide line. Place a stake to mark the top corner, measure 10 metres down to mark the start point, then another 10 metres to mark the bottom corner.¹

At the start point take 3 photos:

(1) Out to sea (2) To back of beach (3) Along survey area. Also record your visual assessment grade (A-D) for the beach.

Then, measure 100 metres along the beach to your end point, and set up stakes here.² This 100 by 20 metre space is your 'Survey Area'. Citizen Scientists only need to remove litter from this area.

1. If you cannot survey the full 20m width, record the width of beach that you can safely access and set up your Survey Area accordingly.
2. If your survey will take over two hours to complete, reduce length to 50 or 20 metres, whichever is the greatest you can achieve in that time limit.



Complete Litter Survey

Where possible, complete your survey at low tide. **Brief 'Citizen Scientists' on Health & Safety** and how to do the survey. Provide clean-up/survey equipment. Survey should take 30 minutes to 2 hours.

Collect all visible litter from the beach by walking the entire survey area at least two times. While you can collect items under 5mm, these are not included in the audit.

Found fewer than 10 items?

Extend the survey length to a total length of 300 metres and continue to survey (if safe to do so).

Leave behind all dangerous, large or immovable, and organic litter.



Complete Litter Audit

While you can do this on site, it can be easier in a sheltered location like a garage or surf club. Some items can be dangerous, so follow safety instructions.

Sort all litter from the survey area into the categories provided. **Use the sieve to separate any items under 5mm**, so that they aren't counted or weighed.

Group items from each category in one of your sorting bins. Record the item count and total weight (in grams) of the items in each category. Also record confidence level (High or Low) for weight.

Record your visual assessment grade (A-D) for plastic resin pellets.

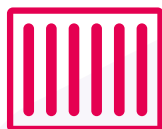


Repeat Four Times A Year

To get long-term data and insights on our litter problem, surveys need to be **repeated every 3 months**.

This is a great chance to get back together with your friends, whanau and/or colleagues to look after the places you love.

Make sure you follow steps 1 to 3 each time, and complete the survey in exactly the same place each time so we can compare data!



Choose Survey Area

This methodology is for monitoring catchpits using a gross pollutant trap such as a LittaTrap™.

Sites should be chosen with safety in mind first. Optimal locations include parking lots or a cul-de-sac. Sites must be adjacent to a foot path and not on a bend in the road which could obscure visibility of passing cars.

This methodology is a localised adaptation of the United Nations Environment Program / Intergovernmental Oceanographic Commission Guidelines on Survey and Monitoring of Marine Litter and Mountains to Sea Wellington's Drains to Harbour programme.

Note: This is a methodology overview intended for Citizen Scientists. It does not replace official training, which covers important Health and Safety, logistics and planning considerations.



Set-up Survey Area

The catchpit trap must be installed prior to monitoring with permission from your local council or property manager/landowner. Record the installation date.

Complete a site risk assessment before each 'Litter Survey'.

You may also have a Traffic Management Plan to follow which will be provided by the council. Set up road cones around the catchpit to alert traffic.

At the catchpit take 2 photos:

- (1) Facing the catchpit from above
- (2) Of the roadway. Also record your visual assessment grade (A-D) for the site immediately surrounding the catchpit.



Complete Litter Survey

Brief 'Citizen Scientists' on Health & Safety. Provide clean-up/survey equipment (gloves and high-vis vests).

Sweep any debris around the edges of the trap into the trap.

Remove the trap, carry it away from the road and empty it into a bin on the footpath or grass berm. The drain must be closed after removing the trap. Return the trap to the catchpit.



Complete Litter Audit

While you can do this on site, it can be easier in a sheltered location like a garage or a school. Some items can be dangerous, so follow health and safety instructions.

Sort all litter from the survey area into the categories provided. **Use the sieve to separate any items under 5mm**, so that they aren't counted or weighed.

Group items from each category in one of your sorting bins. Record the item count and total weight (in grams) of the items in each category. Also record confidence level (High or Low) for weight.

Record your visual assessment grade (A-D) for plastic resin pellets.



Repeat Regularly

To get long-term data and insights on our litter problem, surveys should be **repeated regularly, at least every 3 months but preferably monthly.**

Catchpit monitoring differs from beach and stream litter surveys in that the trap may overflow with litter or leaves at particular sites¹. You may need to repeat your litter survey more often at certain sites or during certain times (more frequently in the autumn due to leaves or during the winter due to rain)².

This is a great chance to get back together with your friends, whanau and/or colleagues to look after the places you love.

- 1. If your trap is overflowing to the point that litter could not properly enter the trap, make a note in the comment section that the sample is compromised.
- 2. If you are unable to keep an eye on your trap for an extended period of time (e.g., over summer) you can remove the trap from the catchpit and replace it when you return. Enter the date of reinstallation of the trap in the 'Date Last Emptied' field.



Choose Survey Area

This methodology is for wadeable streams. If safe to do so, you will be sampling the stream itself and the stream banks. It can be modified for use on non-wadeable streams and rivers by restricting your litter survey to the waterway banks. Choose a site on a stream where you can safely access. The stream site should be a continuous space that is not broken up by tributaries or large gaps that are not going to be surveyed.

This methodology is a localised adaptation of the United Nations Environment Program / Intergovernmental Oceanographic Commission Guidelines on Survey and Monitoring of Marine Litter and the Surface Water Ambient Monitoring Program's Rapid Trash Assessment Protocol.

Note: This is a methodology overview intended for Citizen Scientists. It does not replace official training, which covers important Health and Safety, logistics and planning considerations.



Set-up Survey Area

Complete a site risk assessment before each 'Litter Survey'.

Measure a 30 metre length of stream¹ and mark either end with stakes or flagging tape.

Then, measure the width of your site and set up stakes or tape here. Your total site width includes the stream itself² and the active floodplain on both stream banks where litter would be deposited during high flow events. Site widths vary among streams. This is your 'Survey Area'. Citizen Scientists only collect litter from this area.

At the downstream end of your site take 3 photos: (1) Facing upstream (2) Left bank (3) Right bank. Also record your visual assessment grade (A-D) for the site.

1. In heavily littered streams, you may reduce the length of stream sampled to 10 meters. You should aim to sample a minimum area of 100 m².
2. If it is not safe to enter the stream (e.g., too deep, can't see the bottom) you can sample the stream banks only. Report your site width as the sum of the width of the left and right bank. Similarly, if it is not safe to sample one of the stream banks, you can restrict your sampling to one bank only.



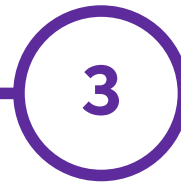
Complete Litter Survey

Brief 'Citizen Scientists' on Health & Safety and how to do the survey. Provide clean-up/survey equipment. Survey should take 30 mins - 2 hours.

Collect all visible litter from the stream and the stream banks by walking the entire survey area (starting at the downstream end) at least two times and looking under vegetation. While you can collect items under 5mm, these are not included in the audit.

Found less than 10 items? Extend the survey length up to a total length of 100 metres and continue to survey (if safe to do so).

Leave behind all dangerous, large or immovable, and organic litter.



Complete Litter Audit

While you can do this on site, it can be easier in a sheltered location like a garage or a school. Some items can be dangerous, so follow safety instructions.

Sort all litter from the survey area into the categories provided. **Use the sieve to separate any items under 5mm**, so that they aren't counted or weighed.

Group items from each category in one of your sorting bins. Record the item count and total weight (in grams) of the items in each category. Also record confidence level (High or Low) for weight.

Record your visual assessment grade (A-D) for plastic resin pellets.



Repeat Four Times A Year

To get long-term data and insights on our litter problem, surveys should ideally be **repeated at least every 3 months**.

This is a great chance to get back together with your friends, whanau and/or colleagues to look after the places you love.

Make sure you follow steps 1 to 3 each time, and complete the survey in exactly the same place each time so we can compare data!

