# Christchurch City Council

Christchurch Waterways Survey Results

Report prepared by:

**Global Research** 

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## Introduction

This report presents the results of the Christchurch Waterway Survey, which Christchurch City Council commissioned Global Research to complete between mid-November to mid-December 2017.

#### About the survey and respondent sample

The survey aimed to gain a general understanding of Christchurch residents' attitudes to waterways; how they value them, assess their quality, treat them and what actions they are prepared to take to improve them.

Five thousand Christchurch city and Banks Peninsula (BP) residents entered on the New Zealand Electoral Roll were randomly selected and mailed a postcard invite, which provided them with details on how to complete the survey. Of those, 425 completed the survey. The survey was hosted on the Global Research website and each respondent was provided with a unique ID to complete the survey.

Ninety-three postcards were returned, due to not contacting the addressee for a variety of postal reasons (person moved, or address not located). The response rate of just over 10% was suitable for this type of survey and enables good confidence in the results. The overall sample error for the results was calculated as +/- 4.75%.

In any large population survey, the non-respondents should be considered. Specifically, what difference they would have had on results if they had completed the survey. It is not possible to provide an exact answer, but our assessment is that respondents are likely to have a greater interest in waterways in general and will potentially be more motivated to take action than the population that didn't complete the survey. This should be considered when interpreting the results.

It should be noted that respondents who weren't able to complete the survey online could call for assistance and complete the survey via phone. This occurred once.

The survey had a good completion rate, with more than 90% of people who started the survey completing it. This survey took a little over 10 minutes for most respondents to complete. The completion rate illustrates positive interest in the topic and a user-friendly survey.

The survey consisted of 51 questions. Most questions asked respondents to express their opinions via Likert scales, while others provided lists to select from such as water-related activities engaged in and understanding of the stormwater system. A few open-ended comments were asked for.

At the same time as the random sample postal survey was conducted, the survey was hosted on the Christchurch City Council website for anyone to access. The response number and results were similar, although could be summarised as being slightly more 'environmentally concerned'. The results of the self-select Christchurch City Council survey are not presented in this report as they less accurately reflect the opinions of the Christchurch population, but have been considered and have informed the wider project.

#### About the report

The report commences with an extensive Executive Summary of Results, which details the key findings in the research. The result topics in this section mirror the body of the report and cover: Attitudes to waterways; impacts on waterways; human activities that impact waterways; who should influence change; goals that can be strived for.

In each section a summary of results is followed by detailed results, including illustrative charts for each survey question. The results presented are for all respondents who completed the survey. Results were tested for differences in opinions based on ages. No significant differences were identified so these results have not been presented in this report. The sample broadly reflected the whole Christchurch population, with details of differences provided in the 'Respondents' section on page 8.



Decimal points are included in results to eliminate confusion when totals of whole numbers did not add to 100%.

Verbatim comments have been included in places throughout the report where written responses were asked from respondents.

#### Next stages of the waterways programme

Post the community survey, Council is to hold four behaviour change workshops, hosted by the Canterbury Water Management Strategy Zone Committees, with invited survey participants and community board members.

The aim of each workshop will be to assist Council with understanding how to translate people's awareness and appreciation into action.

Participants will be asked to contribute their thoughts and ideas on:

- Why do people litter, not pick up dog poop, and allow contaminants from their property to end up in the stormwater network.
- What might grab peoples' attention and influence them to adopt the behaviours we are wanting to promote?
- Identify possible quick easy actions that are creative, inexpensive, repeatable, even fun that Council could promote.

This information will be used to develop Council's behaviour change marketing programme to promote greater community responsibility to improve the state of our waterways. This programme will form part of the proposed LTP Community Water Partnership initiative.



# Executive summary of results

### Attitudes to waterways

- Waterways are considered a natural asset and taonga by a large proportion of the population. While still a majority, fewer consider them a tourism asset or iconic. The Avon River is the waterbody that Christchurch people are most affiliated with/attached to.
- When compared with other key social issues (health, housing, education and transport), waterways
  ranked second behind health in terms of importance and similarly to housing.
- Waterways are considered to be in a poor condition, with nearly 60% of people rating the quality of Christchurch waterways terrible or poor.
- Running or walking along waterways is the most popular activity participated in on or near waterways.
   While only a small proportion of people are actively involved in on water activities, such as rowing or kayaking (3%), a majority of people consider it important that waterways are safe for recreation use.

### Impacts on waterways

- Just over half of respondents selected that stormwater flows into waterways or wetlands. The remainder of respondents did not know or thought that stormwater flows to the wastewater treatment plant.
- Contaminated liquids and rubbish/litter are considered the biggest polluters of waterways.
   Rubbish/litter in waterways is frequently noticed by a high proportion of people.

### Human activities that impact waterways

- Potentially waterway impacting activities that are participated in most frequently, are cleaning vehicles and houses using water and chemicals.
- Most people are aware of places/options to clean vehicles in a more environmentally friendly manner, but a high proportion still clean vehicles on hard surfaces at their home.
- Nearly one third of people use chemicals to remove weeds/moss around their homes and over two thirds do not take any precautions to stop contaminated water running into drains.
- The effectiveness of chemicals is the biggest factor people consider, over impact on the environment (second), when purchasing chemicals.

### Who should influence change

- A large proportion of people believe they can influence change on the environment.
- People believe community environmental groups have the greatest positive impact on change, followed by ECan and Christchurch City council.
- More people feel private citizens have a negative impact than positive impact on waterways.

### Goals that can be strived for

- People believe these positive outcomes can be achieved within the next five years: rivers look clean; rivers are healthy for plants and wildlife; people can safely use waterways for recreation, without getting sick; people can safely swim in rivers. Goals that will take more than five years were identified as: People can safely drink from rivers and people can safely collect Mahinga Kai.
- To improve the quality of waterways, over three quarters of people are prepared to: use environmentally friendly chemicals around their property; reduce use of supermarket plastic bags; remove leaves from drains and gutters; dispose of litter found in public places; wash vehicles on grass and; not feed ducks around waterways. People are less prepared to do things that involve personal cost to them: pay more in rates or wash vehicles at a commercial car wash.
- Education and practical tips are the key things that people want included in an education campaign. They are less enthusiastic about creating plans, visions and reporting progress. While only a small proportion of people have been actively involved previously in environmental groups, over half stated they would volunteer to clean up waterways.



# All results

### Respondents

### Section summary

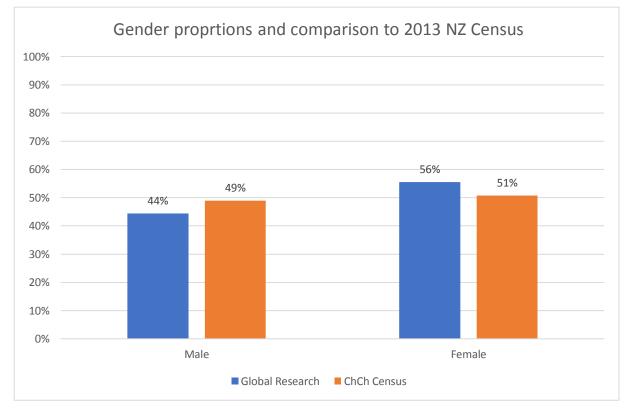
- The response sample was
  - Five percent over represented by female respondents.
  - Six percent under-represented by respondents aged 20 29 years of age.
  - Seven percent over-represented by respondents aged 50 59 years of age.

### Gender

Respondents were asked to state their gender:

- Females comprised 56% of respondents.
- Males comprised 44% of respondents.
- There were 5% more female and 5% less male respondents than made up the Christchurch population in the 2013 Census results.

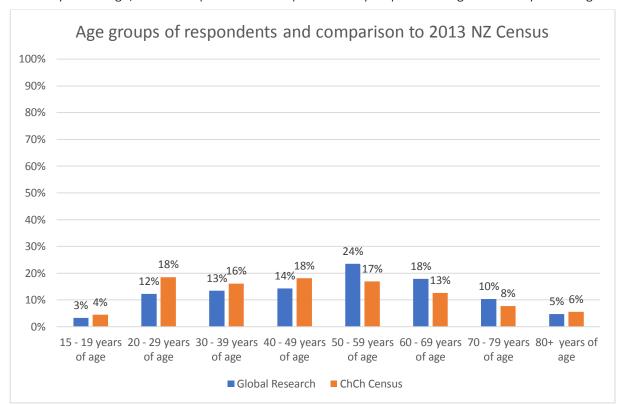
Note that two respondents selected 'other' (not included on chart).





### Age

Respondents were asked to state their age in ten-year age group bands. The major differences between the 2013 census age group proportions and the survey respondents were:



The respondent sample was six percent under-represented by respondents aged 20 – 29 years of age; and seven percent over-represented by respondents aged 50 – 59 years of age.



### Attitudes to waterways

#### Section summary

#### RIVER AFFILIATION/ATTACHMENT:

 Christchurch residents are most strongly attached to the Avon River, with 62% of respondents stating that they are 'affiliated' or 'attached' to it. Thirty-three percent of respondents are attached to the Heathcote river. Twenty-five percent of people state that they are affiliated with all rivers.

#### WATERWAY VALUES:

Christchurch residents most commonly consider Christchurch's waterways as 'natural assets' (88% strongly agreed); 'valuable recreation assets' (73%); 'a taonga' (73%).
 Although they are less likely to see them as a 'tourism/visitor asset' (57%) or as 'iconic' (53%).

#### IMPORTANCE OF WATERWAYS IN COMPARISON WITH OTHER KEY SOCIAL ISSUES:

 'Waterways' ranked second behind 'health care' as a key social issue and similarly to 'housing'. Waterways ranked higher than: 'education' and 'transport'; and significantly higher than 'internet' access.

#### WATER QUALITY ASSESSMENTS:

- *Fifty six percent* of respondents rated the quality of Christchurch waterways as *terrible* or *poor*.
- Twenty nine percent rated the quality of Banks Peninsula waterways as terrible or poor.
- Forty eight percent rated the quality of Christchurch waterways for 'recreation use' as terrible or poor.
- *Eighty seven percent* rated the quality of public open space along waterways as *OK* (48%); *very good* (33%) or; *excellent* (6%).

#### WATERWAY USE:

- *'Running or walking'* was participated in *often* or *frequently* by 47% of respondents and *'relaxing'* was participated in *often* or *frequently* by 36% of respondents.
- *'Rowing or kayaking'* was participated in *often* or *frequently* by only *3%* of respondents and *'fishing'* was participated in *often* or *frequently* by only 4% of respondents.
- *Waterways are safe for water based recreation'* was considered *extremely important* by 43% of respondents and *very important* by 36%.

#### Affiliation/Attachment to rivers

Respondents selected, on a Christchurch map containing the city's rivers, the river(s) that they are most affiliated with or attached to. They were able to select three places on the map.

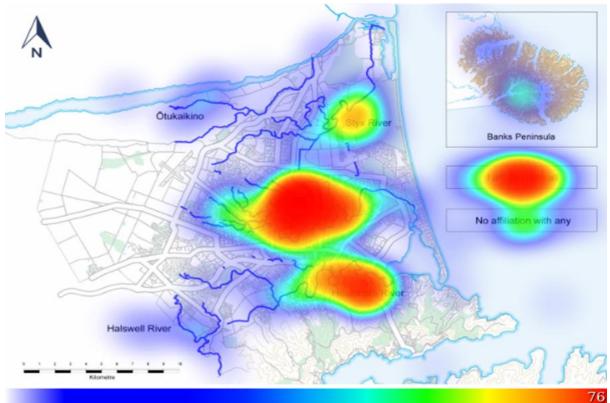
The question they were asked was: 'Click on the map to select the waterway that you feel most affiliated or attached to. (This could be because you regularly use it or feel association or attachment to it.)'

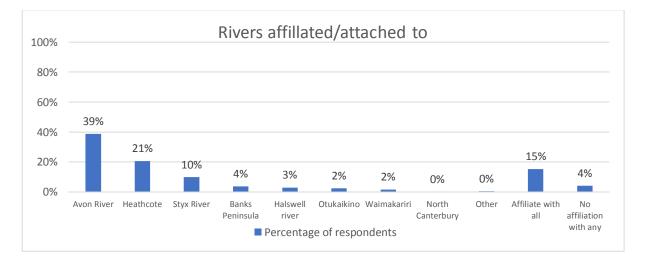
The map below visually represents the locations on the map that respondents most commonly selected. The chart below the map presents the count of how often each river was selected. Respondents were also able to select 'other' or 'no affiliation with any':

- The Avon was the most commonly selected river, by 62% of respondents.
- The Heathcote (33%) and Styx (16%) rivers were the next most commonly selected rivers.
- Fifteen percent of respondents selected 'affiliated with all rivers'.



#### **River affiliation/attachment**





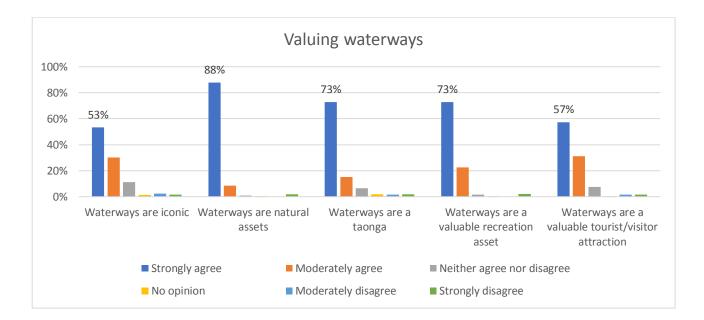
#### Waterway values

Respondents were asked *How do you value waterways?* and were provided with options: 'waterways are iconic'; 'waterways are natural assets'; 'waterways are a taonga'; 'waterways are a valuable recreation asset' and; 'waterways are a valuable tourist/visitor attraction'.

For each statement they were asked to respond by selecting if they 'strongly agree' to 'strongly disagree' (five-point scale). Respondents could also state 'no opinion':

- Waterways are a natural asset was 'strongly agreed' with by 88% of respondents.
- Waterways are a valuable recreation asset and waterways are a taonga were both 'strongly agreed' with by 73% of respondents.
- Waterways are a valuable tourist/visitor attraction was 'strongly agreed' with by 57% of respondents.
- Waterways are iconic was 'strongly agreed' with by 53% of respondents.







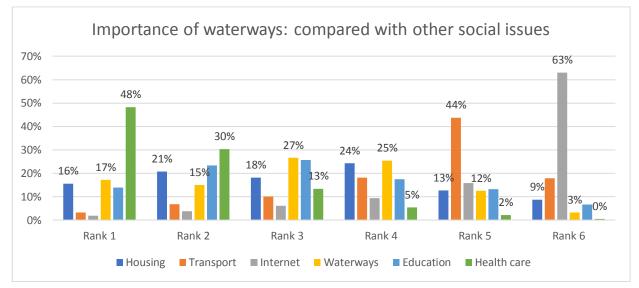
### Importance of waterways

Respondents were asked *How important are these issues in your life*? and were provided with options: 'Housing: affordable'; 'Transport: efficient'; 'Internet: fast and uninterrupted'; 'Waterways: healthy natural environment'; 'Education: available, quality provision' and; 'Health care: affordable and available'.

They were asked to rank the options from one to six:

- Health care was ranked 1 by 48% of respondents.
- Waterways was ranked 1 by 17% of respondents.
- Housing was ranked 1 by 16% of respondents.

When rankings one and two were combined: *health c*are scored 77%; *housing* 36% and; *waterways* 32%.





### Water quality assessment

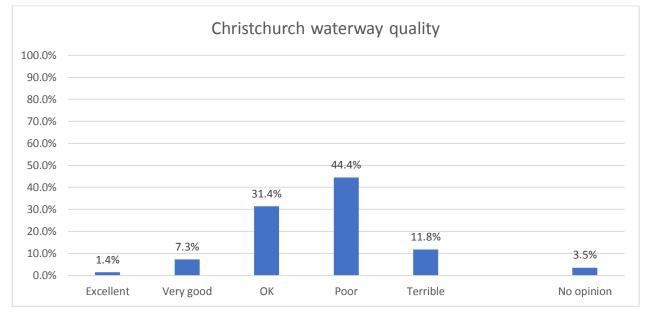
Respondents were asked *How do you rate the quality of city/Banks Peninsula waterways?* (two separate questions). and were provided with options: 'terrible'; 'poor'; 'OK'; 'very good' and; 'excellent'

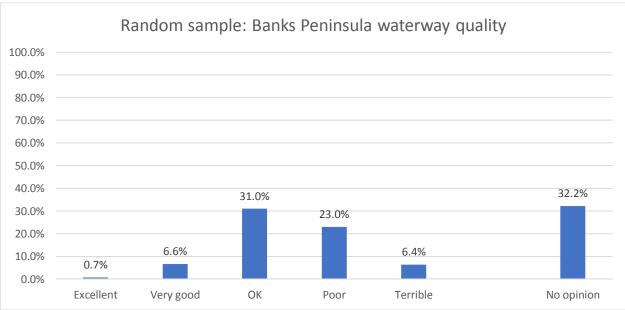
For Christchurch waterways:

- **Poor** was the rating given by 44.4% of respondents.
- **OK** was the rating given by 31.4% of respondents.
- **Poor** or **terrible** was the rating given by 56.2% of respondents.

For Banks Peninsula waterways:

- **Poor** was the rating given by 23.0% of respondents.
- **OK** was the rating given by 31.0% of respondents.
- **Poor** or **terrible** was the rating given by 29.4% of respondents.





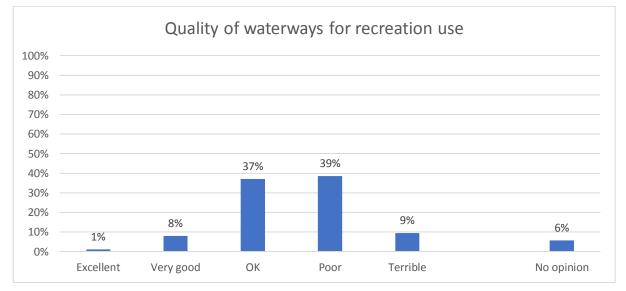


### Quality of waterways for recreation use

Respondents were asked *How do you rate the quality of waterways for recreation use?* and were provided with options: 'terrible'; 'poor'; 'OK'; 'very good' and; 'excellent'

The ratings were:

- **Poor** was the rating given by 39% of respondents.
- **OK** was the rating given by 37% of respondents.
- Poor or terrible was the rating given by 48% of respondents.

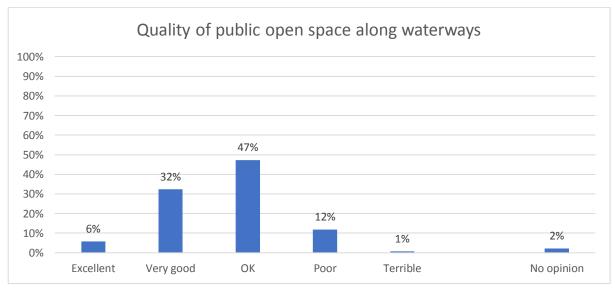


#### Quality of public open space along waterways

Respondents were asked *How do you rate the quality of public open space along waterways*? and were provided with options: 'terrible'; 'poor'; 'OK'; 'very good' and; 'excellent'

The ratings were:

- OK was the rating given by 47% of respondents.
- Very good was the rating given by 32% of respondents.
- **Poor** was the rating given by 12% of respondents.



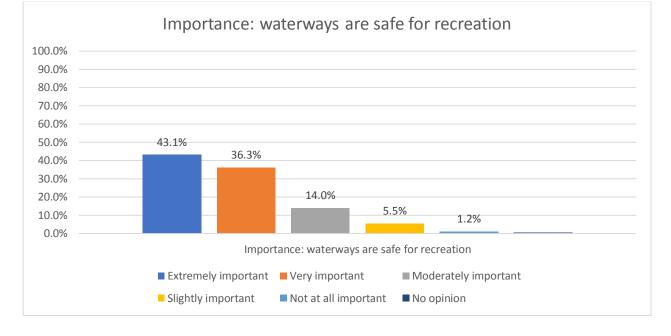


### Importance of waterways for safe recreation

Respondents were asked *How important is it that waterways are safe for water based recreation?* and were provided with options: 'extremely important; 'very important; 'moderately important'; 'slightly important' and; 'not at all important'

The ratings were:

- Extremely important was the rating given by 43.1% of respondents.
- Very important was the rating given by 36.3% of respondents.
- Moderately important was the rating given by 14.0% of respondents.







### Frequency of river activities

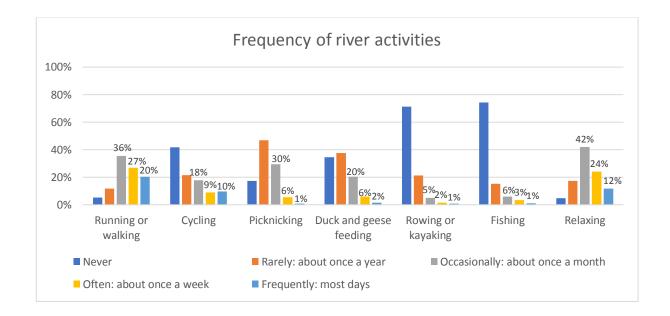
Respondents were asked How often do you use waterways and adjoining areas in these ways? and were provided with options: 'never'; 'rarely: about once a year'; 'occasionally: about once a month'; 'often: about once a week' and; 'frequently: most days'.

Most commonly participated in activities:

- Running or walking was participated in often or frequently by 47% of respondents. \_
- \_ **Relaxing** was participated in often or frequently by 36% of respondents.

Least commonly participated in activities:

- Rowing or kayaking was participated in often or frequently by 3% of respondents. \_
- Fishing was participated in often or frequently by 4% of respondents. \_





### Impacts on waterways

#### Section summary

#### UNDERSTANDING OF WHERE STORMWATER FLOWS TO:

 Fifty five percent of respondents selected that stormwater flows into waterways or wetlands; 42% of respondents did not know or thought that stormwater flows to the wastewater treatment plant.

#### IMPACTS ON WATERWAYS:

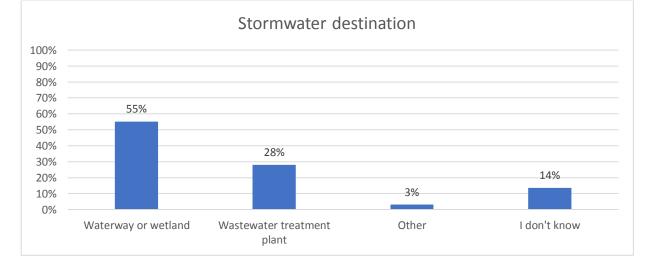
- <u>Across the city</u>, 'Contaminated stormwater coming from industrial sites' (75% a great deal or a lot); 'rubbish or litter' (74%) and 'residential building sites' (56%) were considered to have the greatest impact on waterways.
- <u>Across the city</u>, 'Garden rubbish' (e.g. leaf blowing, grass clippings) (40% a little or not at all); 'dog poop' (43%) and; 'Car and house washing' (29%) were considered to have the least impact on waterways.
- <u>In respondents' neighbourhoods</u>, '*Rubbish/litter*' (42% a great deal or a lot); '*industrial pollution*' (35%); '*sewerage overflows*' (30%) were considered to have the greatest impact on waterways.
- <u>In respondents' neighbourhoods</u>. '*Leaf blowing*' (69% a little or not at all); 'house washing'
   (66%) were considered to have the least impact on waterways.
- *'Rubbish/litter <u>in waterways'</u>* was noticed 'always', 'most of the time' or 'often' by 77% of respondents.
- *'Rubbish/litter <u>in local neighbourhoods</u>'* was noticed 'always', 'most of the time' or 'often' by 56% of respondents.

#### Destination of stormwater that flows into drains

Respondents were asked *When water flows into a drain from a driveway or road where do you think it goes?* and were provided with options: 'Wastewater Treatment Plant; 'Waterway or wetland'; 'I don't know'; and; 'other (please state)'.

Respondents selected:

- Waterway or wetland was selected by 55% of respondents.
- Wastewater treatment plant was selected by 28% of respondents.
- I don't know was selected by 14% of respondents.
- Other was selected by 3% of respondents.





#### Verbatim 'other comments'

These were the comments made by respondents who selected 'other' and were asked to comment:

- Sea/ocean [x10 responses]
- Sea outlet
- The beach
- Stormwater and out to sea
- Stormwater straight into our waterways
- Directly to the nearest stream in the stormwater system
- Stormwater drain x2
- Straight into the nearest stream
- River
- Sometimes drains to waterway
- My driveway & road drain naturally through paddocks, eventually into Okuti River
- Off the road over our rural property as a result of the rural road network
- Both
- It depends
- Stormwater treatment plant
- would like to think it went to a wastewater treatment plant, however I don't know how much of the water actually makes it there as when lots of rainfall occurs you often see pipes gushing dirty looking water into the river



### What impacts waterways

Respondents were asked *In your opinion, how much do these items and activities degrade or pollute waterways?* and were provided with options: 'Rubbish/litter'; 'Stormwater from driveways, roofs and roads'; 'Car and house washing'; 'Residential building sites (e.g. wet concrete, water and other run-off)'; 'Sediment (e.g. blown and eroding dirt)'; 'Dog poop'; 'Duck/geese poop'; 'Garden rubbish (e.g. leaf blowing, grass clippings)' and; 'Contaminated stormwater coming from industrial sites'.

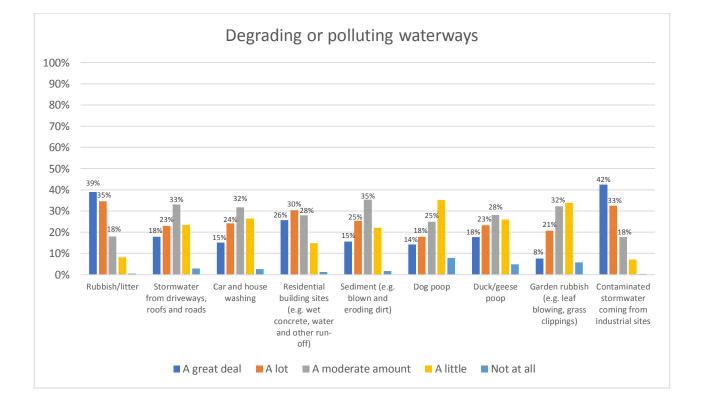
They were provided with the assessment options: 'a great deal'; 'a lot'; 'a moderate amount'; 'a little' and; 'not at all'.

Respondents identified these factors as degrading or polluting waterways the most:

- **Contaminated stormwater coming from industrial sites** was considered to degrade/pollute waterways 'a great deal' or 'a lot' by 75% of respondents.
- Rubbish/litter was considered to degrade/pollute waterways 'a great deal' or 'a lot' by 74% of respondents.
- Residential building sites (e.g. wet concrete, water and other run-off) was considered to degrade/pollute waterways 'a great deal' or 'a lot' by 56% of respondents.

Respondents identified these factors as degrading or polluting waterways the least:

- Garden rubbish (e.g. leaf blowing, grass clippings) was considered to degrade/pollute waterways 'a great deal' or 'a lot' by 28% of respondents.
- Dog poop was considered to degrade/pollute waterways 'a great deal' or 'a lot' by 32% of respondents.
- Car and house washing was considered to degrade/pollute waterways 'a great deal' or 'a lot' by 39% of respondents.



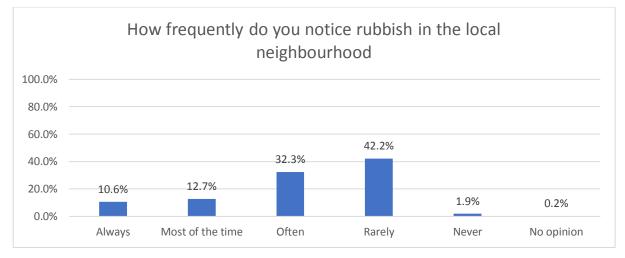


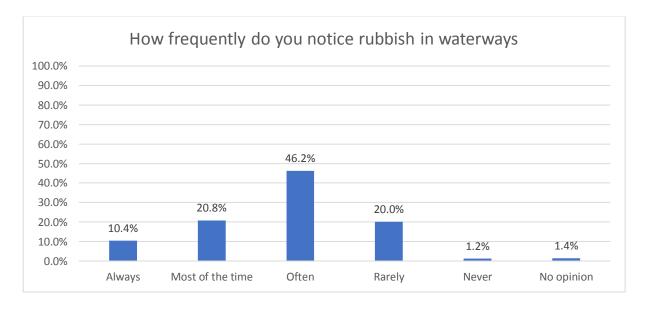
### How frequently do people notice rubbish and litter

Respondents were asked *How frequently do you notice rubbish and litter in your street/waterways?* (two questions) and were provided with options: 'always'; 'most of the time'; 'often'; 'rarely'; never' and; 'no opinion'.

Respondents noticed rubbish to this degree:

- Rubbish/litter in local neighbourhoods was noticed 'always', 'most of the time' or 'often' by 55.6% of respondents.
- Rubbish/litter in waterways was noticed 'always', 'most of the time' or 'often' by 77.4% of respondents.







### Impacts in local neighbourhood

Respondents were asked *In your opinion, how much do these items and activities, occurring in <u>your neighbourhood</u>, degrade or pollute waterways?: They were asked to assess: Stormwater run-off from driveways, roofs and roads; Car washing; House washing; Residential building sites (e.g. concrete water and other run-off); Industrial pollution; Dog poop; Duck and geese poop; Sediment (blowing/eroding dirt); Leaf blowing; Rubbish and litter; and, Sewerage overflows.* 

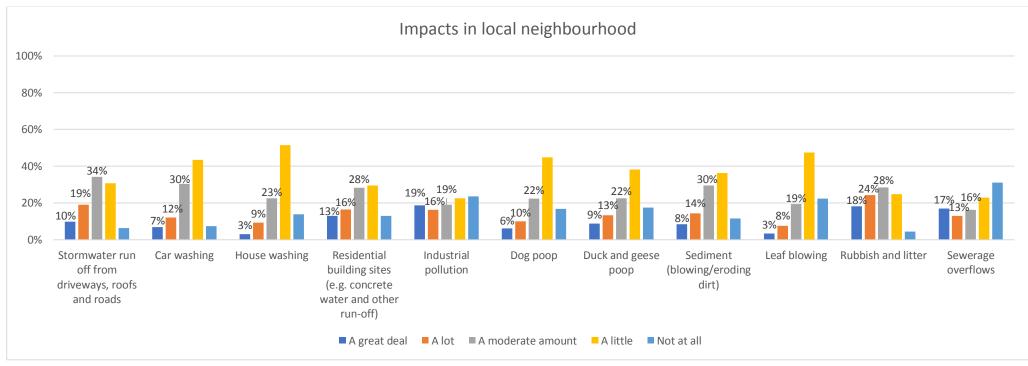
The assessment criteria were: 'A great deal'; 'A lot'; 'A moderate amount'; 'A little'; 'Not at all'.

The largest impacts were considered to be:

- Rubbish/litter: 42% stated it impacted 'a great deal' or 'a lot'.
- Industrial pollution 35% stated it impacted 'a great deal' or 'a lot'.
- Sewerage overflows 30% stated it impacted 'a great deal' or 'a lot'.

The lowest impacts were considered to be:

- Leaf blowing: 11% stated it impacted 'a great deal' or 'a lot'.
- House washing: 12% stated it impacted 'a great deal' or 'a lot'.



### Human activities that impact waterways

#### Section summary

#### WATERWAY IMPACTING ACTIVITY PARTICIPATION:

- The most commonly participated in activities in the previous 12 months were: 'Cleaned a vehicle' (74%) and 'cleaned the outside of a house' (58%).
- The least commonly participated in activities in the previous 12 months were: *Fed ducks/geese (31%); owned or walked a dog (30%); used a leaf blower (15%)* and; *moved into a newly built house (4%.)*

#### CAR CLEANING

- The majority of people clean cars 'at home on a sealed driveway or path' (68%).
- Forty nine percent also clean cars in more environmentally friendly places: *commercial facility (22%); at home on grass (16%)* and; *at home on an unsealed driveway (11%)*.

(For the results above, respondents could select multiple options)

- Most people clean their vehicle less frequently than once a month (77%).
- Most people believe that cleaning vehicles on grass/lawn (63%) has the least impact on the environment.

#### HOUSE CLEANING AND WEEDING/MOSS REMOVAL

- <u>House cleaning</u> is most commonly completed using *water (66%),* while 20% stated they used *chemicals* in combination with other things, such as water or water blasting.
- <u>Removing weeds and moss</u> involved using *herbicides/chemicals* for thirty six percent of respondents.
- Over two thirds of people <u>don't use</u> any precautions to minimise water or chemicals (detergents or others) running into drains, or down drive when using outside chemicals (68%).
- *Effectiveness* (31%) and then *environmental impacts* (28%) are the biggest factors considered when people <u>purchase outdoor chemicals</u> for house cleaning or weed moss removal.

#### DUCK/GEESE FEEDING

- Those who <u>feed ducks/geese</u> do this most commonly *less frequently than once a month* (77%); between once a month and once a week (21%) and; more than once a week (2%).

#### Dogs

- Those who walk dogs do this most commonly 'more than once a week' (76%).
- People state they pick up dog poop in most places over 85% of the time (footpath, grass verge, beach). People are less likely to pick up dog poop in forests natural areas 65% of the time.
- The "look and smell' of dog poop is the <u>biggest impact</u>. The majority of people (57%) rated this as a 'major impact'. It was rated a 'major impact' in polluting waterways by 20% of respondents.

#### LEAF BLOWING

- Those who <u>use a leaf blower</u> do this most commonly '*less frequently than once a month'* (45%). '*Between once a month and once a week*' was the frequency stated by 44% of respondents.
- Most leaves end up 'collected and disposed of in a bin or mulched/composted' (73%) or 'in the garden' (24%).

#### SOIL MANAGEMENT AT NEW HOMES

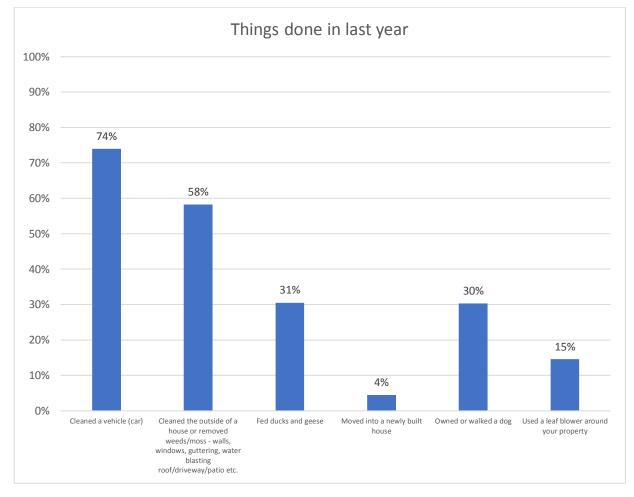
- Only three respondents stated that they have had '*dirt/soil that blows or washes off their property*'.

### Things done in the last year

Respondents were asked Which of these things have you done in the last year? and were provided with options: 'Cleaned a vehicle (car)'; 'Cleaned the outside of a house or removed weeds/moss - walls, windows, guttering, water blasting roof/driveway/patio etc.'; 'Fed ducks and geese'; 'Moved into a newly built house'; 'Owned or walked a dog'; 'Used a leaf blower around your property'.

These proportions of respondents have done these things in the last year:

- Cleaned a vehicle 74% (315).
- Cleaned the outside of a house... 58% (248).
- Fed ducks/geese 31% (130).
- **Owned or walked a dog** 30% (129).
- Used a leaf blower -15% (62).
- Moved into a newly built house -4% (19).





### Car cleaning

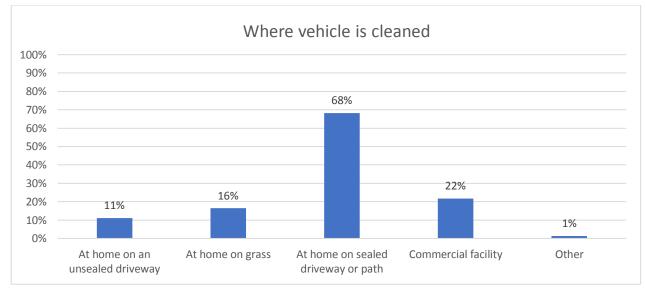
#### Where people clean vehicle

Respondents who cleaned a vehicle in the last 12 months (315) were asked *Where do you normally clean your vehicle*? and were provided with options: '*at home on an unsealed driveway*'; '*at home on grass*'; '*at home on a sealed driveway or path*'; '*commercial facility*' or; '*other*'. Respondents could select more than one option.

Respondents could choose more than one option.

The most common place to clean a vehicle was:

- At home on sealed driveway or path 68% selected this option.
- Commercial facility (22%); at home on grass (16%) and; at home on an unsealed driveway (11%) Forty nine percent selected these options.



#### Verbatim 'other comments'

These were the comments made by respondents who selected 'other' and were asked to comment:

- At work in a wash bay
- Steam clean area at work
- work
- washing bay
- It is a sealed driveway but it drains to the grass.
- at home on permeable area
- At home grass with a bucket of water
- non water cleaning
- At home, with run off to our garden
- I clean my car with hot water only (no soap)
- I use a bucket of water & an ENJO cloth, so virtually no run-off
- I always clean the car using a bucket and cloths rather than a hose, this on a sealed driveway.
   There is minimal runoff this way.
- at home on earthquake affected area of drive so water goes to gardens not drain

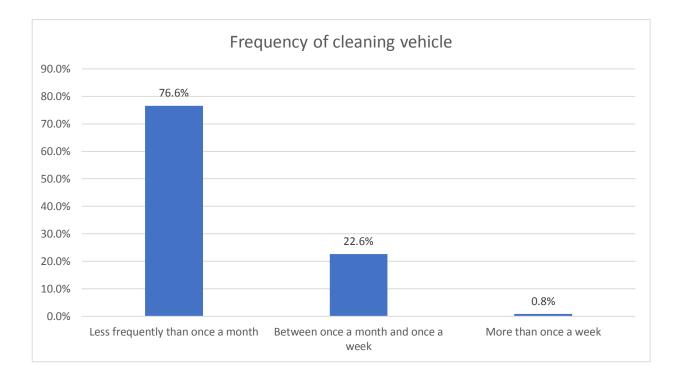


#### How often vehicles are cleaned

These respondents were also asked *How often do you normally clean your vehicle*? and were provided with options: *'less frequently than once a month'; 'between once a month and once a week'* and *'more than once a week'*.

The most common frequency for cleaning a vehicle was:

- Less frequently than once a month – 76.6% selected this option.



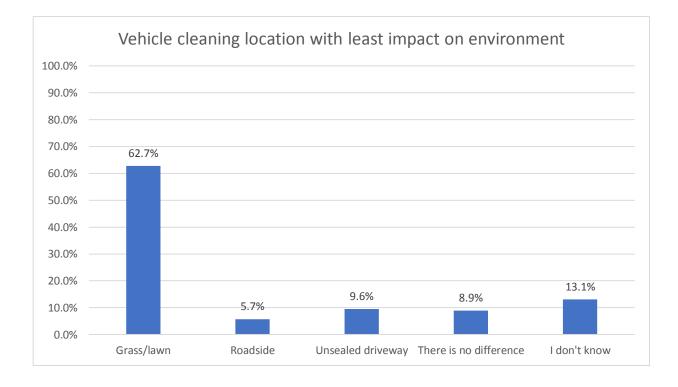


#### Understanding of what has least impact when cleaning a vehicle

Respondents were then asked Which of these home car cleaning locations do you think has the least impact on the environment? and were provided with options: 'grass/lawn'; roadside'; 'unsealed driveway'; 'there is no difference' and 'I don't know'.

The location most frequently chosen to have the least impact was:

- Grass/lawn – 62.7% selected this option.





### House cleaning

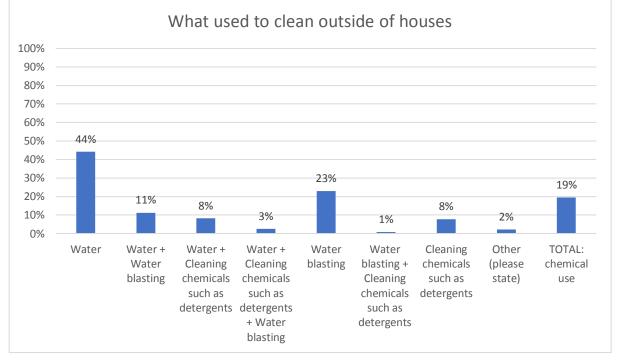
#### What is used to clean houses

Respondents who cleaned the outside of a house in the last 12 months (248) were asked *What do you use when cleaning the outside areas of your house*? The options they were given were: *'water'; 'water blasting'; 'cleaning chemicals';* and *'other'*.

Respondents could choose more than one option.

The most commonly used options were:

- Water 44% used this alone and 66% used it in combination with other options.
- Water blasting 23% used this alone and 38% used it in combination with other options.
- Cleaning chemicals 8% used this alone and 20% in combination with another option.



#### Verbatim 'other comments'

These were the comments made by respondents who selected 'other' and were asked to comment:

- Sometimes just water, and I use sugar soap if necessary
- broom,duster, mop
- Hose
- Remove weeds and leaves from guttering, also use vinegar and lemon juice to clean windows.
- Eco store dishwashing liquid
- Eco chemicals
- I mostly only clean windows. Use winow cleaner very occasionally. Mostly water and window cloth
- In 10 years the house has only been cleaned once by EQC. I don't know what they used for that...
- bleach
- water plus natural detergents
- Resene product
- Eco-friendly dish soap
- mixture of meths & detergent
- hand wash



- Don't clean normally, had bricks remortered
- brush and rags
- Clean windows with water and vinegar

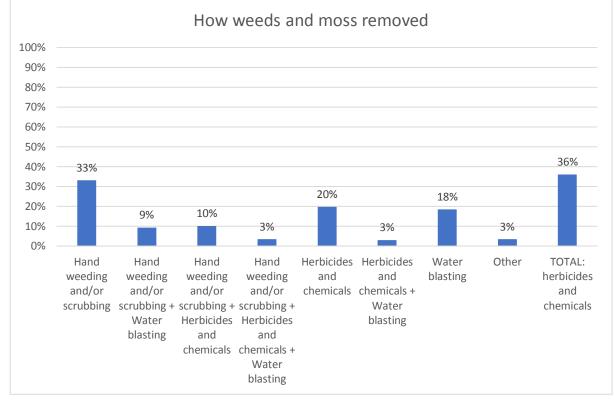
#### How weeds and moss removed

These respondents were also asked *How do you remove moss or weeds from your house, paths, pavers and driveway*? The options they were given were: *'hand weeding and/or scrubbing; herbicides and chemicals; and water blasting.* 

Respondents could choose more than one option

The most commonly used option were:

- Hand weeding and/or scrubbing 33% used this alone and 55% used it in combination with other options.
- Herbicides and chemicals 20% used this along and 36% used it in combination with other options.



- Water blasting – 18% used this along and 34% used it in combination with other options.

#### Verbatim 'other comments'

These were the comments made by respondents who selected 'other' and were asked to comment:

- boiling water x2
- Natural products
- Pay a Professional roof moss remover
- Organic pine oil weed killer spray
- I dig them up and then put boiling water through the cracks. Boiling water kills almost everything you don't want to have growing on/in your driveway
- hand tools, pulling
- eco-friendly dish soap and scrub brush
- I use pine oil herbicides, not glyphosate

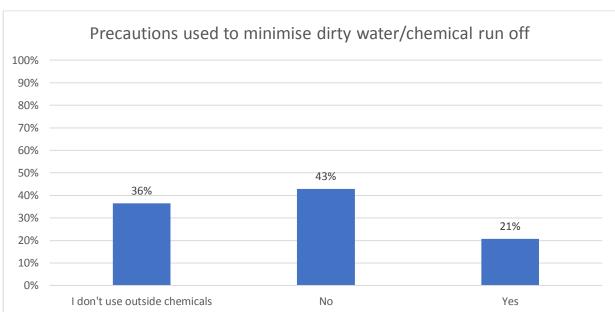


#### Precautions used to stop dirty water/chemicals running into drains

Those who clean the outside of houses were then asked *Do you take any precautions to minimise* water or chemicals (detergents or others) running into drains, or down your drive when using outside chemicals?

The options they were given were: 'I don't use outside chemicals'; 'no'; 'yes'.

The most commonly used option was:



 No – 43% stated they didn't take precautions to minimise water or chemicals running onto drains.

#### Verbatim comments

These were the comments made by respondents explaining what precautions they use to reduce run off:

#### Chemical management

- Don't use detergents
- Use environmentally safe detergent
- i try to use less or no chemicals if I can
- We would spray with chemicals to treat plants and won't use water until the next day so it is not contaminating the water or reacting with the water and running off into the drive/drains.
- use as little as possible, dispose of as instructed, if washing out containers watering down the residue and disposing of it in an unsealed driveway or on an area of garden
- I don't use them in outdoor situations
- minimise use
- I use a spray that stays on and does not need washing away
- Careful application, low rates of use, careful selection of product
- minimal use
- I only They are diluted in water
- use safe organic cleaning products that are environmentally friendly
- I don't use enough that It goes down a drive into the waterways and have a sock blanket
- Use green solutions
- I use minimal detergents and only plant based detergents where possible
- Use minimum amount possible, and don't let it 'run'
- I use an eco-friendly car wash
- organic



- Spot spray weeds when the weather is dry
- Always use all of the chemical
- Use less, use unless needed.
- I use a fine spray and keep it close to the weeds I am targeting

#### Containment

- use soak holes
- when clean my roof, the water runs down the gutter into the drains
- Perimeter of house is unsealed
- The seal drains to the garden
- I always hose it into the garden or lawn
- Water doesn't go down the drains. When cleaning gutters I don't use any detergents, just a scrubbing brush and hose water
- all ours water goes onto the lawn or shingle drive
- I turn the hose off in between scrubbing. I have stones around my house that intercept run
  off before it gets to the driveway
- water and cleaning chemicals (if used) leach into the ground
- We use them very rarely but if we do, it's on our gravel driveway and low application, no run off; if around the house any run off goes into gardens or native planted areas and soaks away
- I only use them where I need to.
- filter cloth
- Use grass areas when possible to avoid run off
- Avoid hard areas, spray on fine days
- Use bucket rather than hose
- take stuff to the special area at the dump for disposal of

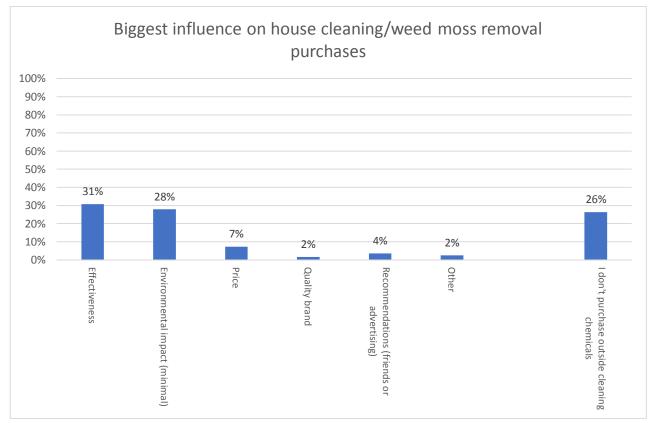


#### Biggest influence on chemical purchase decision

Those who clean the outside of houses were then asked: When you are purchasing chemical products for house cleaning or weed/moss removal, what is the biggest influence on your purchase decision? The options they were given were: effectiveness; environmental impact (minimal); price; quality brand; recommendations (friends or advertising); other.

The most common reasons given were:

- Effectiveness 31% stated this as the biggest influence.
- Environmental impact (minimal) 28% stated this as the biggest influence.
- **Price** 7% stated this as the biggest influence.



#### Verbatim comments

These were the comments made by respondents who selected other:

- Both price and impact, but more of the later
- Environmental as well as safety for our animals
- Health impact
- I use dishwashing liquid
- If it is pet friendly, so buying chemical products is very rare
- They are all important.

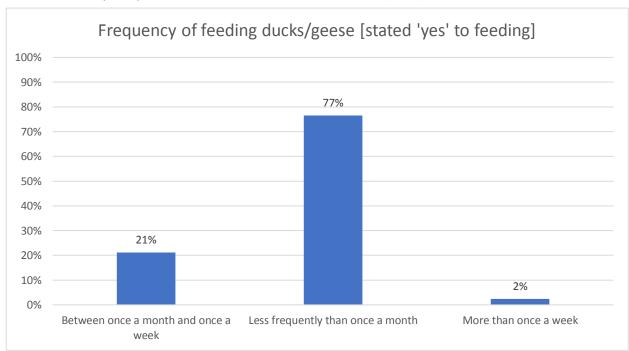


### Duck/geese feeding

Respondents who fed ducks/geese in the last 12 months (130) were asked *roughly, how often do you normally feed ducks or geese?* 

The options were: 'Between once a month and once a week'; 'less frequently than once a month' and; 'more than once a week'.

The most common frequency for duck/geese feeding was:



- Less frequently than once a month – 77% stated this frequency.

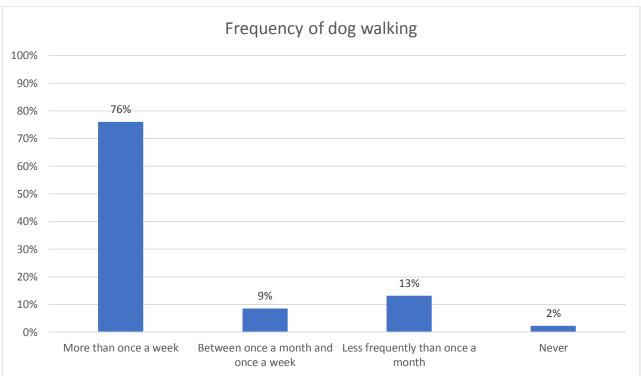


### Dog poop

#### How often walk a dog

Respondents who walked a dog in the last 12 months (129) were asked *Roughly, how often do you normally walk a dog?* and were provided with options: '*more than once a week*'; between once a month and once a week'; 'less frequently than once a month' and 'never'.

The most common frequency for walking a dog was:



More than once a week – 76% selected this option.

#### How likely to pick up dog poop

These respondents were also asked *If your dog poops in a public place, how likely are you to pick it up in these situations?* 

The options they could choose from were: 'always'; 'sometimes'; 'never'

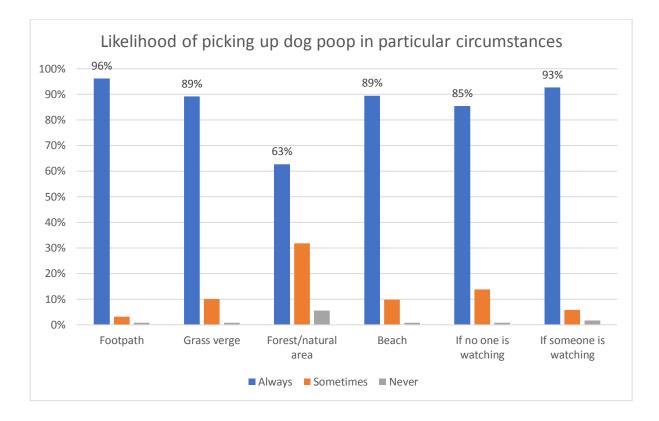
The most common places that respondents will pick dog poop up were:

- Footpath 96% stated they would 'always' pick up dog poop.
- If someone is watching 93% stated they always would
- Grass verge 89% stated they 'always' would.
- **Beach** 89% stated they would 'always' pick up dog poop.

The least most common places that respondents will pick dog poop up was:

- Forest/natural area – 63% stated they always would.







#### Biggest dog-poop impacts

Respondents were then asked *How do you rate these impacts of dog poop on people or the environment?* The impacts they were asked to assess were: 'look and smell; 'health (people get sick); 'pollutes the ground' and; 'pollutes waterways'.

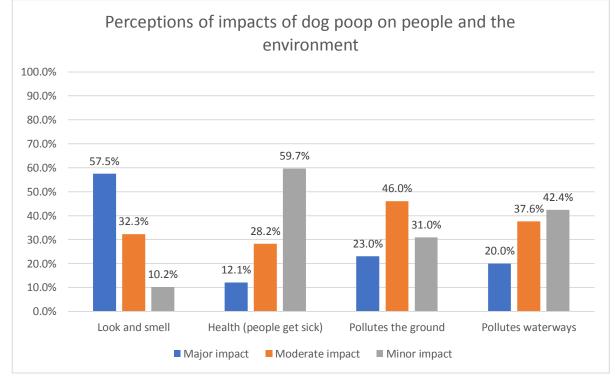
The assessment options were: 'major impact'; 'moderate impact' and; 'minor impact'.

The biggest impact was considered to be:

- Look and smell – 57.5% stated this was a 'major impact'.

The least impacts were considered to be:

- Health (people get sick) 12.1% stated this was a 'major impact'.
- Pollutes waterways 20.0% stated this was a 'major impact'.



### Leaf blowing

#### Frequency of use

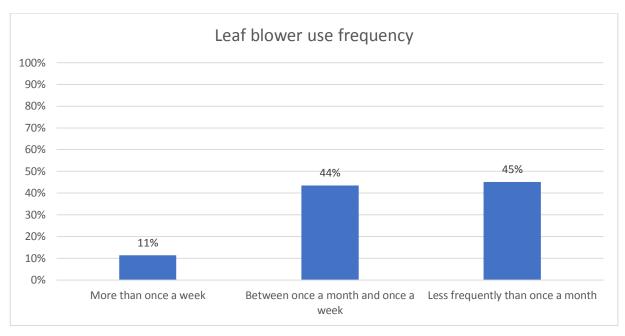
Respondents who use a leaf blower (62) were asked At times of the year when required, roughly how often do you use a leaf blower?

The response options were: *More than once a week; between once a month and once a week; less frequently than once a month.* 

The most common responses were:

- Less frequently than once a month 45% stated this frequency.
- Between once a month and once a week 44% stated this frequency.
- More than once a week 11% stated this frequency.





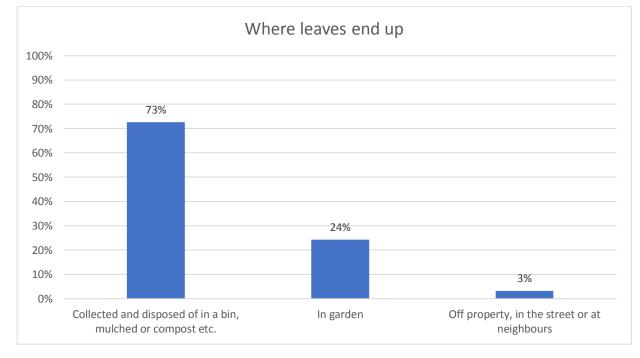
#### Where leaves end up

Leaf blower respondents were then asked Where do the leaves you blow end up?

The response options were: Collected and disposed of in a bin, mulched or compost etc.; in garden; off property, in the street or at neighbours.

The most commonly responses were:

- Collected and disposed of in a bin, mulched or compost etc 73% stated this location.
- In the garden 24% stated this location.
- Off property, in the street or neighbours 3% stated this frequency.





# New home

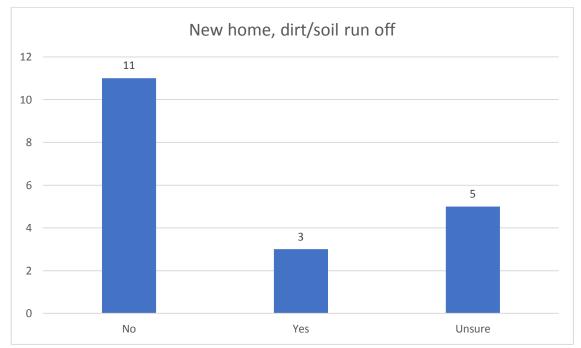
# Had dirt/soil run off

New home owners (19) were asked *Have you had, or do you have, dirt/soil which blows or washes off your new property?* 

The response options were: No; yes; unsure.

The most common response was:

- No - 11 stated they did not have, dirt/soil which blows or washes off your new property.



### Verbatim comments

These were the comments made by respondents who selected other:

- Barriers
- Its council land. They have not
- Sweep it back on to garden



# Who should influence change

## Section summary

### PERSONAL IMPACT ON CHANGE:

- A large proportion of respondents strongly agreed or agreed with these statements:
  - It is important to reduce my impact on the environment 92%.
  - I have control over my own impact on the environment 90%.
  - I am personally responsible for contributing to the environment's problems 72%.

### INDIVIDUALS/ORGANISATIONS CONSIDERED TO HAVE THE GREATEST IMPACT ON CHANGE:

- The groups with the most positive impacts on change (extremely positive) were considered to be: Community environmental groups (43%); ECan (31%) and ; Christchurch City Council (26%).
- The groups with the most negative impacts on change (extremely negative) were considered to be: *Farming and horticulture* (46%) and *Business and industry (27%)*.
- <u>Private citizens</u> 42% believed they have a '*slightly negative*' impact and 30% stated they have a '*slightly positive*' impact.

# Who should take action

# Individual impacts/control

All respondents were asked How much do you agree or disagree with the following?

The probe questions were: I have control over my own impact on the environment; It is important to reduce my impact on the environment; I am personally responsible for contributing to the environment's problems and; My efforts to protect the environment are insignificant as long as others refuse to act.

The response options were: Strongly agree; agree; neither agree nor disagree; disagree; strongly disagree

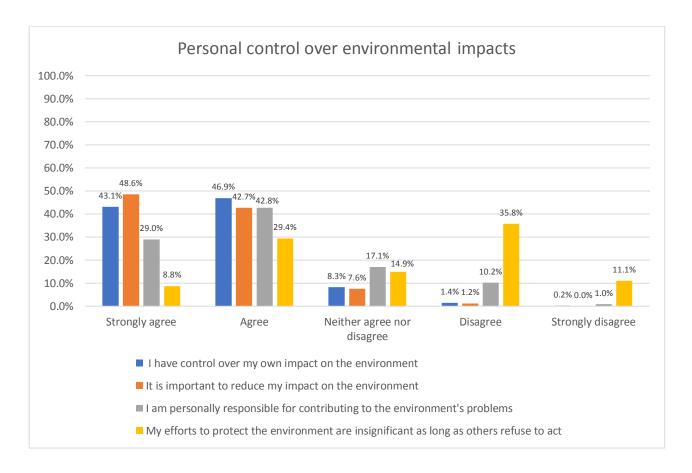
There was strong agreement with three of the four statements:

- It is important to reduce my impact on the environment 91.3% strongly agreed or agreed with this statement.
- I have control over my own impact on the environment 90% strongly agreed or agreed with this statement.
- I am personally responsible for contributing to the environment's problems 71.8% strongly agreed or agreed with this statement.

There was weak agreement with one of the four statements:

 My efforts to protect the environment are insignificant as long as others refuse to act – 38.2% strongly agreed or agreed with this statement.







# Impacts of individuals and organisations on change

Respondents were asked: How significant is the impact of actions by these groups on the state of waterways?

The selection options were: Christchurch City Council; Ecan; Central Govt agencies; Business and industry; Private citizens; Community environmental groups; Farming and horticulture and; Forestry.

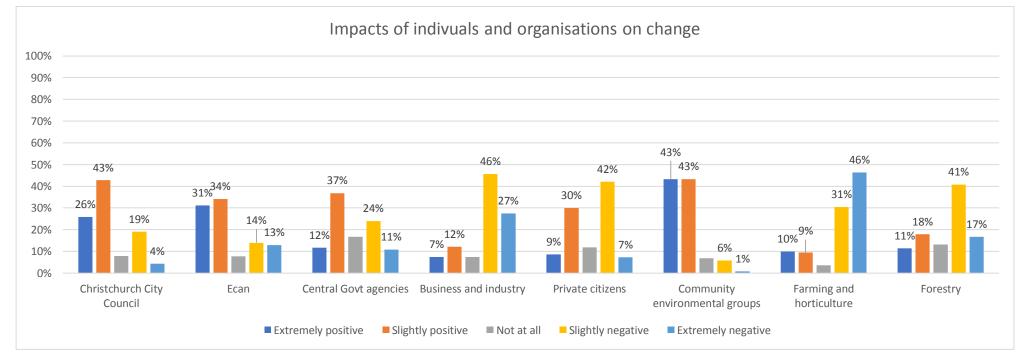
The response options were: Extremely positive; slightly positive; not at all; slightly negative; extremely negative.

The organisations/groups most positively appraised were:

- Community environmental groups 43% selected extremely positive and 43% selected slightly positive.
- ECan 31% selected extremely positive and 34% selected slightly positive.
- Christchurch City Council 26% selected extremely positive and 43% selected slightly positive.

The organisations/groups most negatively appraised were:

- Farming and horticulture 46% selected extremely negative and 31% selected slightly negative.
- Business and industry 27% selected extremely negative and 46% selected slightly negative.



# Goals that can be strived for

# Section summary

### WHAT SHOULD BE STRIVED FOR:

- A large majority of respondents agreed that proposed goals should be strived for:
  - Rivers are healthy for plants and wildlife (98% Christchurch, 97% BP).
  - *People can safely use waterways for recreation, without getting sick* (97% Christchurch, 97% BP).
  - *Rivers look clean* (94% Christchurch, 93% BP).
  - People can safely swim in rivers (92% Christchurch, 94% BP).
  - People can safely collect Mahinga Kai (87% Christchurch, 87% BP).
  - While still a majority, the least agreed with goal was:
    - *People can safely drink from rivers* (56% Christchurch, 60% BP).

### WHAT GOALS CAN BE ACHIEVED:

- The goals the majority assessed can be achieved <u>within the next five</u> years were:
  - Rivers look clean (78% Christchurch, 69% BP).
  - Rivers are healthy for plants and wildlife (70% Christchurch, 65% BP).
  - People can safely use waterways for recreation, without getting sick (66% Christchurch, 63% BP).
  - People can safely swim in rivers (56% Christchurch, 58% BP).
- The goals the majority assessed can be achieved in <u>more than</u> five years were:
  - People can safely drink from rivers (60% Christchurch, 55% BP).
  - People can safely collect Mahinga Kai (51% Christchurch, 44% BP).

### WHAT PEOPLE ARE PREPARED TO DO:

- These are the things that people stated they are most prepared to do:
  - Use environmentally friendly chemicals around your property 88%.
  - Reduce use of supermarket plastic bags 88%.
  - Remove leaves from drains and gutters 85%.
  - Dispose of litter found in public places 79%.
  - Wash vehicles on grass– 75%.
  - Not feed ducks around waterways 75%.
- These are the things that people stated they are <u>least prepared</u> to do:
  - Pay more in rates to improve waterways 38% stated 'no'.
  - Wash vehicles at a commercial car wash 23% stated 'no.

### THINGS TO INCLUDE IN A WATERWAY IMPROVEMENT CAMPAIGN:

- These are the things that are considered '*extremely important*' to <u>include in a campaign</u>:
  - Education 61%.
  - Practical tips 60%.
  - Create a vision 40%.
  - Update on progress 40%.
  - Create a community plan 44%.

### CURRENT/PREVIOUS ACTIVE PARTICIPATION IN AN ENVIRONMENTAL GROUP:

- Only 13% of people have current/previous active participation in an environmental group.
- Majority of people stated that they <u>would volunteer</u> to *'clean up local waterways'* (56%).
- Majority of people would <u>like more information</u> on *'the quality of waterways and how they can be improved* (64%).
- Nearly half stated <u>they would like to be involved</u> 'if Christchurch City Council ran future activities' (48%).

# What we should strive for in Christchurch

Respondents were asked: *Do you agree or disagree that we should strive to achieve these goals?* [Christchurch waterways]

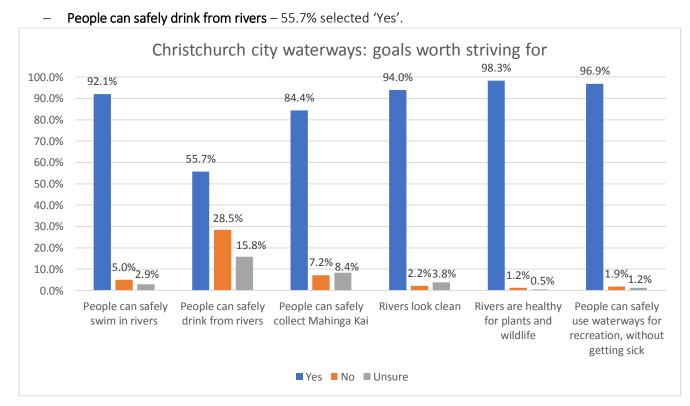
The goals were: 'People can safely swim in rivers'; 'people can safely drink from rivers'; 'people can safely collect Mahinga Kai (food and resource gathering) from waterways'; 'rivers look clean'; 'rivers are healthy for plants and wildlife' and; 'people can safely use waterways for recreation, without getting sick'.

The response options were: 'Yes'; 'no' and; 'unsure.

The goals most assessed to strive for were:

- Rivers are healthy for plants and wildlife 98.3% selected 'Yes'.
- People can safely use waterways for recreation, without getting sick 96.9% selected 'Yes'.
- Rivers look clean 94.0% selected 'Yes'.
- People can safely swim in rivers 92.1% selected 'Yes'.
- People can safely collect Mahinga Kai 84.4% selected 'Yes'.

The goal least assessed to strive for was:





# When change is possible in Christchurch

For the goals that each respondent stated should be achieved, they were asked: *Tell us when you think the goals below can be achieved.* 

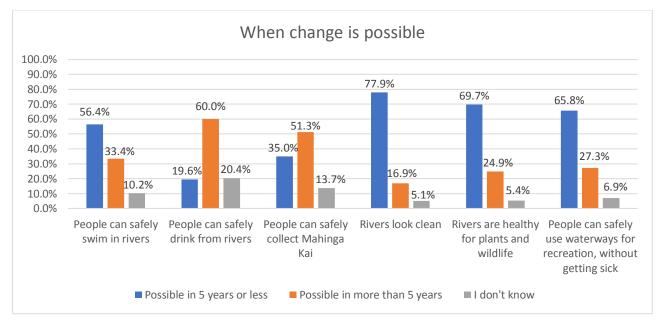
The periods were: 'Possible in 5 years or less'; 'possible in more than 5 years' and; 'I don't know'.

The goals the majority assessed can be achieved in the next five years were:

- Rivers look clean 77.9% selected 'less than five years'.
- Rivers are healthy for plants and wildlife 69.7% selected 'less than five years'.
- People can safely use waterways for recreation, without getting sick 65.8% selected 'less than five years'.
- People can safely swim in rivers 56.4% selected 'less than five years'.

The goals the majority assessed can be achieved in more than five years were:

- People can safely drink from rivers 60.0% selected 'more than five years'.
- People can safely collect Mahinga Kai 51.3% selected 'more than five years'.



### When goals can be achieved verbatim comments

Nearly 200 respondents provided comments in response to the question: *Tell us when you think the goals below can be achieved* ~ *Please make a comment to explain your answers?*. The comments are discussed in the topics below. Many comments covered more than one topic, so the number of comments is greater than the initial number of responses provided.

### Community action is needed

### 40 comments

There were very consistent messages within these comments. A large number of people stated that people, groups and organisations need to work together to improve the state of Christchurch's waterways. It was felt that if everyone works together, significant progress can be made. This was one comment stating a regularly expressed opinion.

There is a growing movement towards a healthy environment that is led by all areas ie: individuals, companies/farmers, local Council and Government and when all work together, these are achievable

It was also stated that people collectively need to change their behaviour to reverse the impacts on waterways.



### I hope that this can really be achieved within 5 years, it'd be fantastic to see clean looking rivers. We need to work together and take responsibility, think about what we're doing

### Identification of the need for action

There was a consistent message in these comments. There is a need for action to be taken as waterways continue to degrade and there is a desire for them to be improved.

> I think it is very important to have an expectation that we can do this and that we need to be aggressive about the timeframe: leaving it to get continually worse is not an option that we ought to accept.

### Specific goal discussions:

Safe for recreation

These comments stated that it will be more difficult to achieve swimmable/safe paddling rivers than rivers looking clean.

### Drinkable water

Drinkable water was considered the biggest challenge and a number stated that this would take a long time to achieve, if at all possible.

> I think it will take longer to be sure that we can actually drink from the rivers, and to collect Mahinga Kai - there are greater risks with these activities and I feel that we need a higher degree of safety than with less direct activities such as recreation.

### Able to collect Mahinga Kai/ food

Being able to collect food, like having drinkable water, was also considered a large challenge. This is a representative quote, explaining the challenge of collecting food.

I think that the ultimate goal is to be able to drink the water and be able eat fish from the rivers but am aware that this would be a more challenging goal than for rivers to look clean and be safe to play in.

### Will take longer than five years

These comments stated that it is going to take longer than five years to clean up waterways and provided reasons why. The main argument was a lot of damage has been done over a long period of time and it will take a long time to rectify. The point was made that water requires a long-term process to improve. These people, however, were all in favour of action being taken. Below are a couple of representative quotes from respondents:

> This is a long term goal. It has taken a generation to pollute our rivers and with concerted effort I hope that my great grandchildren will have fun in Canterbury's rivers just as my children did.

We must aim to improve the health of our rivers, however this will involve incremental changes over a long period of time.

### Council action needed

A number of topics were covered by those who discussed the Council's involvement in the improvement of waterways. The point most frequently made was that waterways need to be made a priority by the Council and action needs to be taken for them to be improved.

### 25 comments

8 comments

### 23 comments

### **Global Research**

30 comments

30 comments 12 comments

# *Cleaning up of all our waterways must be top priority for all national & local authorities. I applaud the new government giving this top billing - long overdue.*

Others stated there needs to be monetary investment in improving waterways.

Depends how much money and effort is put in! Anything is possible

A number of comments stated there is a need for stricter enforcement penalties for polluters if progress is to be made. This comment covered several topics.

Stricter enforcement of relevant regulations, extensive riparian planting and management. Better control of chemicals available.

### Can be achieved in five years

These comments were from people stating that cleaning Christchurch's waterways and achieving the stated goals is possible within five years. Most of these comments expressed the general sentiment that if positive change is implemented significant change will occur. This was one representative comment.

### With increased awareness a target of five years must be realistic.

### Lack sufficient knowledge

These comments were from people that stated they don't have enough knowledge of the current damage to Christchurch waterways or what it will take to achieve the waterway goals to make an accurate assessment. This was one of the comments.

Haven't enough knowledge about the current condition of the waterways or what would be involved in their remediation to able to answer how it would take

### Complex multi-faceted challenge

These comments discussed and acknowledge the complexity of the challenge. Some focused on the multi-faceted issues that need to be faced and others on the fact that there are multiple rivers to be consider which are in a variety of different states. This was one comment which covered a few points.

Clean and healthy waterways is a very complex task, for example road run off after rain contains probably every pollutant known to man including vehicle effluent, just try getting vehicle owners sorted out for a start! All mechanical transport contributes pollutants, there's no comparison of water pollution problems with air pollution you just can't legislate against vehicles like you can log fires.

### Criticism of Councils and governments

# By enforcing better rules it is easily achievable to fulfil these goals

Three areas were focused on in comments that criticised the Councils and government. One was the

need for stricter enforcement of current regulations, described in this type of comment.

The second was the elimination of Council pollution of waterways:

City Council must stop discharging raw sewage and stormwater into both the Avon and Heathcote Rivers, particularly the latter. ECan must discontinue their continued rubber-stamping of this disgusting practice by CCC.

The third point was Councils and Government can slow progress through unnecessary bureaucracy which needs to be eliminated.

### 16 comments

22 comments





# *If 'red tape' was eliminated and we stopped being 'politically correct' achieving a goal of '5 years or less' can be done. It takes strong Leadership to do this.*

### Central Government involvement

A few comments were made that stated there is need for government involvement in initiating and funding change. Some comments specifically referred to the new government and held out hope that their enthusiasm would be transferred into action.

*Cleaning up of all our waterways must be top priority for all national & local authorities. I applaud the new government giving this top billing - long overdue.* 

### Rubbish and littering

4 comments

11 comments

Litter and rubbish were considered significant challenges to clean waterways. Some made the point that it will be difficult to change some people's littering behaviour.

Really disappointed with people not using rubbish tins and the waste going straight into the Avon



# What we should strive for in Banks Peninsula

Respondents were asked: *Do you agree or disagree that we should strive to achieve these goals?* [Banks Peninsula waterways]

The goals were: 'People can safely swim in rivers'; 'people can safely drink from rivers'; 'people can safely collect Mahinga Kai (food and resource gathering) from waterways'; 'rivers look clean'; 'rivers are healthy for plants and wildlife' and; 'people can safely use waterways for recreation, without getting sick'.

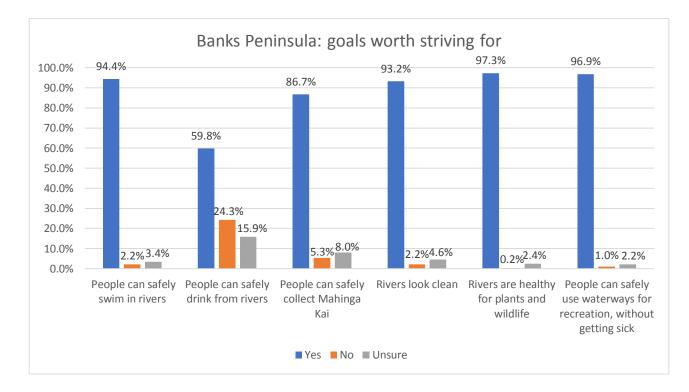
The response options were: 'Yes'; 'no' and; 'unsure.

The goals most assessed to strive for were:

- Rivers are healthy for plants and wildlife 97.3% selected 'Yes'.
- People can safely use waterways for recreation, without getting sick 96.9% selected 'Yes'.
- People can safely swim in rivers 94.4% selected 'Yes'.
- Rivers look clean 93.2% selected 'Yes'.
- People can safely collect Mahinga Kai 86.7% selected 'Yes'.

The goal least assessed to strive for was:

- People can safely drink from rivers – 59.8% selected 'Yes'.





# When change is possible in Banks Peninsula

For the goals that each respondent stated should be achieved, they were asked: *Tell us when you think the goals below can be achieved*.

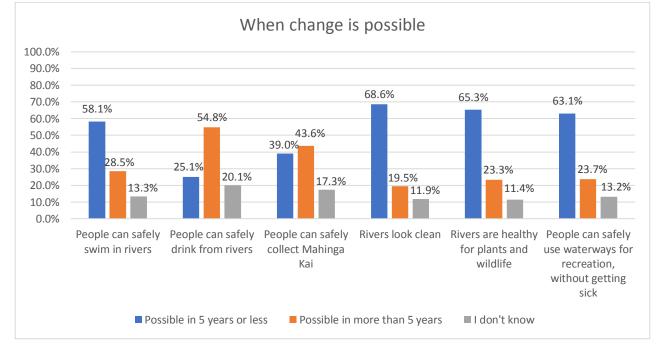
The periods were: 'Possible in 5 years or less'; 'possible in more than 5 years' and; 'I don't know'.

The goals the majority assessed can be achieved in the next five years were:

- Rivers look clean 68.6% selected 'less than five years'.
- Rivers are healthy for plants and wildlife 65.3% selected 'less than five years'.
- People can safely use waterways for recreation, without getting sick 63.1% selected 'less than five years'.
- People can safely swim in rivers 58.1% selected 'less than five years'.

The goals the majority assessed can be achieved in more than five years were:

- People can safely drink from rivers 54.8% selected 'more than five years'.
- People can safely collect Mahinga Kai 43.6% selected 'more than five years'.



### When goals can be achieved verbatim comments

Just over 160 respondents provided comments in response to the question: *Tell us when you think the goals below can be achieved* ~ *Please make a comment to explain your answers*? The comments are discussed in the topics below. Many comments covered more than one topic, so the number of comments is greater than the initial number of responses.

### Lack sufficient knowledge

### 27 comments

In all of these comments, the respondents stated that they lack the knowledge required to make an accurate assessment. Many of these made reference to Banks Peninsula being an area they are not familiar with. This was one typical comment.

### I'm unfamiliar with the state of the rivers on Banks Peninsula

### Will take longer than five years

### 25 comments

These comments stated that it will take longer than five years to achieve the goals. The most common argument, like in the city, was damage has occurred over many years and it will take a long time to reverse. There was also specific mention of Lakes Forsyth and Ellesmere and the Selwyn River taking a long time to repair. This was one typical comment.



# Lake Forsyth and Lake Ellesmere will take 20 or so years to be fixed before any of the above can be a reality.

### Community/joint action needed

These comments stated that for success to be achieved many organisations, groups and individuals will need to work together. This includes taking responsibility to change so that impacts are reduced and also working together to fix the damage. These are two typical comments

There is a growing movement towards a healthy environment that is led by all areas ie: individuals, companies/farmers, local Council and Government and when all work together, these are achievable

Everybody needs to be on the same page to achieve this

### Five years ok

These comments stated success will be possible within the next five years. Some of the arguments given were specific to Banks Peninsula. They discussed how the rivers are less damaged than in the city so will take a shorter time to repair and there is less industry and population to damage the rivers. This was one comment, which also included a proviso.

Smaller rivers, smaller population pressures should mean quicker resolution of issues. Unless agriculture is the issue

### Action is needed

Specific goal discussions:

There was agreement within these comments that action is needed to improve the state of waterways. A number of comments also specifically related to the goals that were presented in the survey. This was one comment.

### These goals should be a priority

### Safe for recreation 6 comments These comments were cautious about people being able to swim or recreate in rivers without taking precautions.

Drinkable water Drinkable water was identified as a difficult challenge in these comments.

As with previous answer - there is a longer horizon for drinking and food gathering.

Able to collect Mahinga Kai/ food Food gathering was also seen as a long-term challenge.

### Complex/multiple challenges

These comments stated the problem is large and often complex. A number referred to specific difficulties caused by the farming sector. This was one comment.

It is possible, but the farming and dairy sector will have to be substantially reined in for there to be any meaningful improvement in the BP waterways

There was also specific mention of the Banks Peninsula Lakes and the difficulty in cleaning them.

On the whole I would think fewer pollutants on Banks Peninsula but I am not very knowledgeable about this. Obviously Lakes Forsythe and Ellesmere are in terrible condition.



3 comments

17 comments

13 comments

4 comments

21 comments

22 comments

### Council action needed

These comments spoke directly of the need for Councils to stimulate action, or implied Council action is required, stating money needs to be invested for change to occur. These were a couple of comments.

# ECAN and CCC need to act immediately to ensure these rivers do not become as polluted as the Avon and Heathcote Rivers.

It will take money, education and public awareness of the extent of the problem.

## Criticism of Councils and government

These comments were mainly critical of the time it will take for actions to be taken.

The rate at which government (local and national) operates means it will be a long time before any difference is obvious.

## Reduce stock impacts

These were specific comments related to managing farming stock to reduce damage to waterways. This was one comment.

> Ned to get stock out of even small creeks eg the one flowing into Waipapa at Diamond Harbour

## Rubbish and litter

These comments stated that people need to stop littering.

People need to take their rubbish away with them and again,keep the cattle and sheep well away from waterways

## Central government role

These comments stated that central government need to have input. There was hope that the new government will make a positive difference to waterways.

4 comments

5 comments



5 comments



# What are people prepared to do

### Things people prepared to do

All respondents were asked: What would you be prepared to do to improve the state of waterways?

The actions stated were: 'Dispose of litter found in public places; 'pick up dog poop in public places'; 'reduce soil eroding into waterways'; 'wash vehicles on grass'; 'wash vehicles at a commercial car wash'; 'use environmentally friendly chemicals around your property'; 'not use any outdoor chemicals'; 'reduce use of supermarket plastic bags'; 'not feed ducks around waterways'; 'remove leaves from drains and gutters'; 'pay more in rates to improve waterways' and; 'other'.

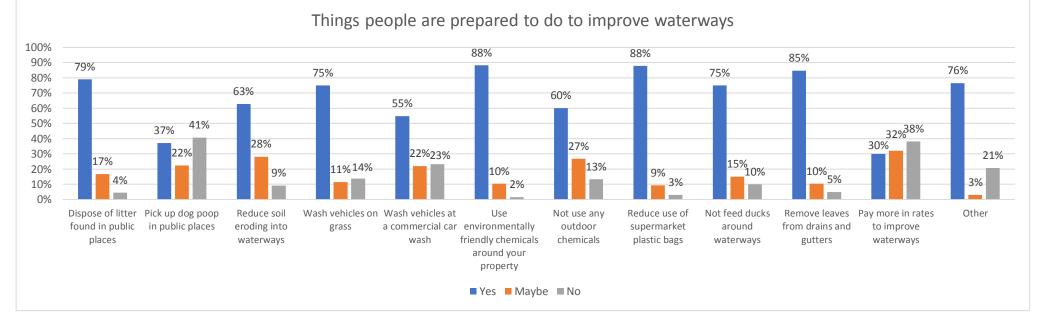
The response options were: 'Yes'; 'maybe'; 'no' and; 'not applicable'.

The actions respondents stated they were most prepared to do were:

- Use environmentally friendly chemicals around your property 88% stated 'yes'
- Reduce use of supermarket plastic bags 88% stated 'yes'.
- Remove leaves from drains and gutters 85% stated 'yes'.
- Dispose of litter found in public places 79% stated 'yes'.
- Wash vehicles on grass-75% stated 'yes'.
- Not feed ducks around waterways 75% stated 'yes'.

The actions respondents stated they were less prepared to do were:

- Pay more in rates to improve waterways 38% stated 'no'.
- Wash vehicles at a commercial car wash 23% stated 'no'.



### Verbatim comments

These were the comments made by respondents who selected other:

- Already paying Rates, it should be properly directed
- CCC should dredge the rivers
- Communicate needs
- Community action groups organised by council to help in specific areas
- Complain/fill in surveys. Tell other people to stop washing their car in the driveway
- Council to enforce existing by-laws for littering and pollution
- Demand accountability of ECan and Govt.
- discuss with family
- dog poo is dog owners responsibility prosecute
- Educate, communicate, society has become insular, neighbourhoods need to be so!
- Even better don't use chemicals to clean your home you can clean without using harsh chemicals. People need to take more personal responsibility!!
- Farming and gravel extraction be monitored strictly
- GET RID OF CARS
- Get some community involvement
- go dairy free
- go to clean up days at water ways
- Help plant out river banks including on farms
- I am too old.
- I pick up other people's rubbish every day that blows up our driveway. There should be more education. I will not pick up other people's dog poo, they should
- I'm prepared to eat vegan. Are you? There is little to do with animal agriculture in this survey, which to me shows that there is a lack of knowledge at best, or an agenda at worst.
- littering penalties
- Lower rates
- Make rubbish droppers clean up their mess
- Me and my kids often pick up rubbish when out walking the dog it not hard thing to do and we feel it a small way to help
- Pay money to CCC rather than Environment Canterbury (still only partial representation) for years it's been like the days before the American Revolution: "No taxation without representation"
- People need to attend to own dogs.
- potentially donate more money in general
- Practice regenerative horticulture such as permaculture design
- promote appropriate behaviour to others, take part in group clean-up activities
- Put pressure on Council and ECan to do their job and stop talking about improvements
- Rates are already too high it's almost like paying rent
- Rates need to be allocated to cover such things instead of spending thousands of our dollars on art works and similar!
- Replant/introduce more native species/replace introduced plant species i.e. willow
- Stop freedom campers unless have a built in toilet. Some walks are disgusting with toilet paper etc. left.
- Support better runoff rules around property developments
- The city could make greater efforts to promote good use of natural water resources.
- The real problem with plastic bags is not the takeaway bag it is all the plastic packaging
- user pays in terms of scaling costs accountability

- Using supermarket plastic bags has less impact than paper or (unrecyclable) trendy bags.
   Sequesters carbon otherwise flared off the atmosphere from gas at oil production sites.
- We own a km of Opuaho and are planting and retiring riverbank and fencing off at full speed we can manage.
- would like to see Canadian geese numbers reduced I can't remember them from my childhood but they are everywhere



# Change campaign

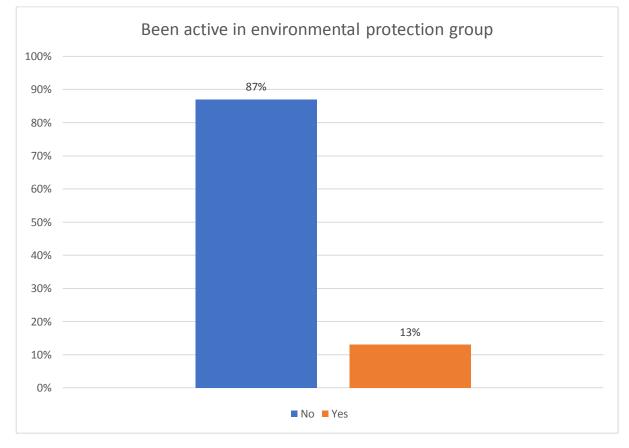
### Been or currently active in an environmental group

All respondents were asked: Have you been, or are you, active in an environmental protection group?

The response options were: 'yes' or 'no'.

Most people were not actively involved in an environmental protection group:

- No 87% selected this option.
- Yes 13% stated they have or are involved in an environmental protection group.





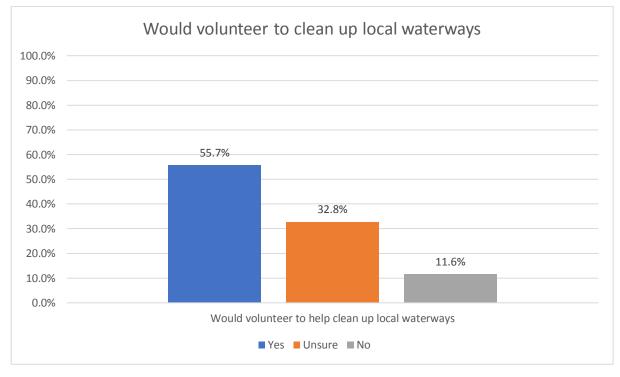
# Would volunteer to clean up waterways

All respondents were asked: If the circumstances suited you, would you volunteer to help clean up local waterways?

The response options were: 'yes'; 'unsure' or 'no'.

Most people stated they would volunteer:

- Yes 55.7% stated they would volunteer to help clean up local waterways.
- Unsure 32.8% stated they were unsure.
- No 11.6% stated no.





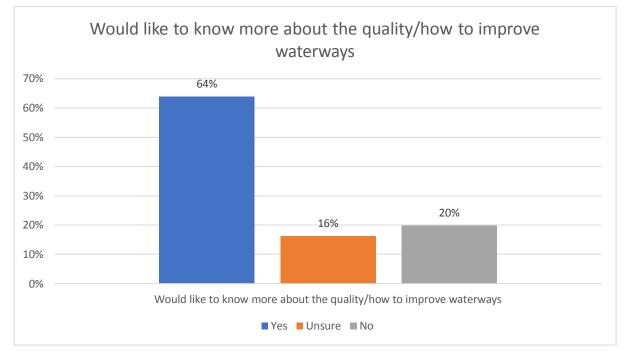
# Would like to know more

All respondents were asked: Considering the topics covered in this survey, would you like to know more about the quality of waterways and how they can be improved?

The response options were: 'yes'; 'unsure' or 'no'.

Most people stated they would like more information:

- Yes 64% selected.
- Unsure 16% selected.
- No 20% selected.





# Important to include in a campaign

All respondents were asked: If a campaign was to be run to improve the quality of waterways, what is important to include?

The things to include were: *Education'; 'practical tips'; 'create a vision'; 'create a community plan'; 'update on progress'.* 

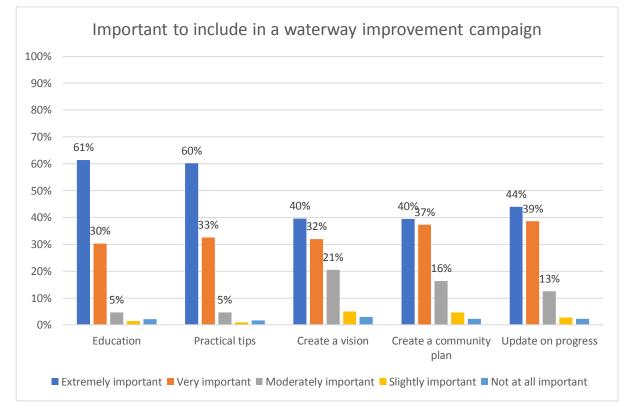
The response options were: 'Extremely important'; 'very important'; 'moderately important'; 'slightly important' and; 'not at all important.

The things considered most important were:

- Education 61% stated 'extremely important' and 30% stated 'very important'.
- Practical tips 60% stated 'extremely important' and 33% stated 'very important'.

The things considered less important were:

- Create a vision 40% stated 'extremely important' and 32% stated 'very important'.
- Update on progress 40% stated 'extremely important' and 37% stated 'very important'.
- Create a community plan 44% stated 'extremely important' and 39% stated 'very important'.





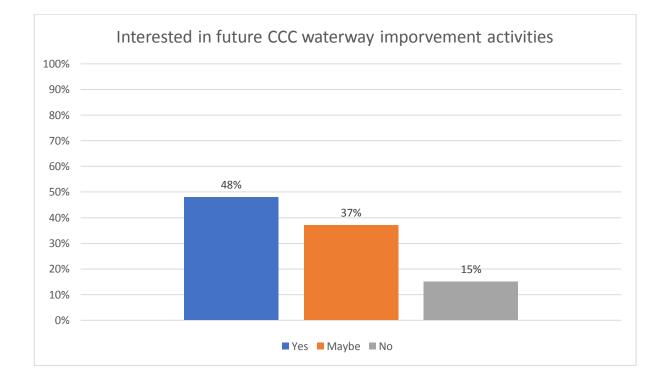
# Future activities involvement (for this initiative)

All respondents were asked: If Christchurch City Council was to run any future activities, to learn more from Christchurch people about waterways, would you be interested in being involved?

The response options were: 'yes'; 'maybe' or 'no'.

Nearly half of people stated they would like to be involved if Christchurch City Council ran future activities about waterways:

- Yes 48% stated they would be interested.
- Maybe 37% stated maybe.
- No 15% stated no.





# Respondents written comments

Around 160 comments were provided by respondents at the end of the survey in response to the question: *Do you have any further comments to make about the topics covered in this.* These covered a variety of topics.

### Action is needed and support for cleaning waterways initiative

### 25 comments

The largest number of comments were from people expressing their concern for waterways and being supportive of the initiative that the survey is part of. The strongest sentiments were that rivers are a big concern and they are appreciative that something is going to be done to improve them.

This was one representative comment:

Very pleased to hear action is being taken to clean our waterways. The water quality is so poor - I remember it being so much better when I was a kid and would love it if my kids could enjoy the water ways as I did when I was a child.

### Suggestions for improving waterways

### 21 comments

Some specific suggestions for a waterways improvement campaign were made. In nearly every instance, these were suggestions for practical campaigns involving education, practical tips and action. One specific suggestion was for campaigns to be high impact/low cost. People were also keen for the community to work together and for the Council to invest in the community. Some made the point that there is a need to balance creating a vision (or similar) and taking practical action. Below are a couple of comments that expressed these sentiments:

Educate everyone to understand that the Environment is theirs and they need to look after it at all levels. We need to take ownership and accept /personal responsibility to improve our environment.

Christchurch is pretty balanced politically, so I think that having a balance of vision, pragmatism, and action will get people of all stripes on board. If people think you are wasting time or money, particularly theirs, they'll lose motivation and interest. Get involved with UC, make the most of the creative visionaries, and bring on board those highly conscientious individuals who will follow through and make good ideas work well. Maybe you're already onto it, but that'd be my advice, whatever that's worth.

### Specific actions that can be taken

### 20 comments

Some specific actions were suggested by respondents. The most common concern was the amount of rubbish that ends up in waterways. This included general rubbish in large quantities, road cones and plastic in general. Other comments were in opposition to supermarket bags, improve car washing practices, reduce sediment, dredge rivers, be able to report people who don't pick up dog poop, have refunds for bottles and limit spray and walk away cleaning/weeding products. This was one comment:

As stated previously I always pick up other people's rubbish that blows up our drive. It is just lazy to dump it on the street/footpath and think it will disappear. More education would help, maybe or fine people for dumping litter.

### Concerns with Council actions

### 13 comments

A number of comments focused on the actions of Christchurch City Council and ECan with regard to improving waterways. A few comments were made that the councils have contributed to the damage of waterways by consenting to damaging activities, particularly dairy farming on the planes and also directly through discharging into rivers.



Others suggested that there are already actions that can be taken, such as enforcing fines on people who damage waterways. Other practical suggestions were made, such as reinstating rubbish bins in public places, fixing broken pipes, dredge the Heathcote River and consistently maintain grass verges. It was stated that this should be achieved without increasing rates.

### Concerns with Council actions

A group of comments made the point that community members are significant contributors to waterway pollution and their behaviour needs to change. They are the ones that need to take action to clean things up. This was one comment.

> Most people value waterways and most people would probably contribute something to see them cleaned up. The Avon and Heathcote rivers are a marker that show how the people of Christchurch do or do not value their environment.

### Farming a key issue

Agriculture/farming and associated impacts was the individual activity that received the most discussion in comments. Respondents made the point that they feel that farming is the biggest contributor to impacts and a significant number noted these issues were not covered in the survey. This was one comment.

> You seemed to explore dog poop, duck poop, litter, car and house wash. I clearly need to be educated on this because I would have weighted nitrates and fertilisers, farming runoff, herbicides, silting, waterway boundary plantings, all more destructive, of life and vitality of waterways.

### Positive about the survey

A significant number of comments were positive about the surveying being completed and the initiative taken by the Council. A number were positive about the content of the survey and the ease of completion.

### Fines and rate increases

Nearly all of these comments stated that Councils should enforce fines that are available to them already on people who pollute waterways. A couple of people made the point that rates shouldn't be increased to fund improvements to waterways, instead money should come from existing budgets. One person stated the Council should charge for excess water use based on the water metres that were introduced a few years ago.

### Difficult/large job

A number of people discussed that this is a difficult or large job, with some stating that damage has occurred over a number of years and it is going to take a long time to rectify.

> *I really hope we can improve our water quality. Although Christchurch is a 'dry'* city in terms of rainfall, we are a watery city with our rivers, lakes and wetlands and we need to take pride in these features. We have made some substantial progress over the last decade or so (e.g. daylighting streams, the great work at the Styx) but there is so much more that could be done.

The point was also made that this is a multi-faceted issue with many factors to consider and mitigate.

Many of the sources of pollution mentioned in the survey can be tacked by community action (litter, dog poo etc.). My opinion is that run-off from roads (car oil, coolant, brake pads, tyre wear, etc.) is a major source of pollution in our rivers, I am unsure how this can be improved upon short of treating stormwater. I am not sure if this is practical.

10 comments

10 comments



12 comments

13 comments

### Other comments

### 21 comments

Some specific one-off comments were made, which were: rivers are not a priority; the Heathcote River has been forgotten; rain will help rivers; earthquakes have taken priority over rivers; removal of weed in the Avon to satisfy sports groups contributes to pollution; Richmond walking tracks should be improved. Additionally, a few specific comments were made about survey questions.

