

# Life in Christchurch 2018

## Natural Environment

Produced by Monitoring and Research, August 2018



# Executive summary

The Life in Christchurch natural environment survey was undertaken between 11 May and 11 June 2018 and received 2350 responses. Respondents were asked to give feedback on a range of topics and issues, including: environmental and biodiversity issues; visits to natural environments; the importance and condition of the natural environment; Waterway quality and amenity; responsibility, volunteering and personal actions, observations of native birdlife; and climate change. It is intended that this survey will be repeated every two years to provide trend information for monitoring and policy development.

- More than half of respondents described their understanding of environmental issues in Christchurch and Banks Peninsula as good or very good. Slightly less (44 percent) described their understanding of biodiversity in the Christchurch and Banks Peninsula as good or very good.
- The most popular natural areas respondents said they visited were the city's beaches, the Port Hills, the Ōtākaro /Avon and Ōpāwaho/Heathcote rivers and Banks Peninsula Bays and Harbours. Between 60 and 80 per cent of respondents visited these areas in the past 12 months. Close to 3 per cent of respondents had not visited any of these areas in the past 12 months.
- The main reasons given for visiting natural environment areas were for recreational purposes, such as walking, biking etc. (85 per cent), and for the scenery and views (77 per cent).
- 97 per cent of respondents agree or strongly agree that the city's natural flora and fauna, and landscapes need to be protected for future generations, the majority of this (79 percent) strongly agree with this statement.
- 95 per cent of respondents agree or strongly agree that areas of native bush, tussock land and wetlands are an important part of the identity of Christchurch and Banks Peninsula.
- Surface water and the quality of river banks are the environments that the greatest number of respondents thought were in the poorest condition, with 76 and 57 per cent respectively.
- 29 per cent of respondents said they have carried out conservation volunteer work in the past 12 months. The main type of voluntary work was maintaining natural environments such as picking up rubbish and weeding, with 66 per cent of those who had volunteered doing this. Community planting activities was the second most popular with 57 per cent of volunteers.
- Respondents said they feel the responsibility for protecting and maintaining the environment in Christchurch and Banks Peninsula was the responsibility of Christchurch City Council, Environment Canterbury, Department Of Conservation, land owners and the community equally, although people noted that someone needs to take the lead.
- 68 per cent of respondents feel very concerned about climate change and feel it is a real threat. This compared with 49 per cent who felt the same way 11 years ago in the 2007 Christchurch City Council Natural Environment Strategies survey.
- When asked if the Council was doing enough to protect and encourage biodiversity, 19 per cent of respondents agree or strongly agree. Only 10 percent feel the Council is doing everything it could to address climate change.

# Introduction

First undertaken in 2016, the Life in Christchurch survey was a comprehensive survey of residents perceptions of various aspects of life in Christchurch. The survey covered a range of areas, including:

- Community and culture
- The central city and local neighbourhoods
- Moving around the city
- Leadership and decision making
- Our natural environment

From 2017 onward, the Life in Christchurch survey series includes a series of shorter targeted surveys. The topics covered will be reviewed each year. The 2018 survey topics are:

- The central city
- Transport
- The natural environment
- Art, culture and heritage

Life in Christchurch is a web-based survey that uses a snowball method to reach respondents, using a ‘word of mouth’ approach rather than a traditional random sample selection methodology. The advantages of this is that it enables targeting of specific groups of interest, such as people with disabilities, smaller ethnic groups or people who might not respond to traditional survey methods or forms of formal consultation—for example, young people. The disadvantage is that it does not provide results that are representative of the wider community; rather they are indicative. Because this approach is not limited to a particular size, this form of sampling could potentially result in much higher numbers of respondents participating in the survey.

The Life in Christchurch Natural Environment survey was undertaken between 11 May and 11 June 2018, and received around 2350 responses. Respondents were asked to give feedback on a range of topics and issues, including: environmental and biodiversity issues; visits to natural environments; the importance and condition of the natural environment; waterway quality and amenity; responsibility, volunteering and personal actions, observations of native birdlife; and climate change. It is intended that this survey will be repeated every two years to provide trend information for monitoring.

The results have been summarised into high level monitoring data broken down into key topic areas. These results will feed into the ongoing Community Outcomes monitoring programme and will be available to help inform Council decisions.

# Environmental issues and biodiversity

- 53 per cent of respondents feel they have good or very good knowledge of the **environmental issues** in Christchurch and Banks Peninsula.
- An additional 35 per cent stated they have neither good nor poor knowledge of **environmental issues** in the Christchurch and Banks Peninsula.
- These values are slightly higher than national ratings from the Lincoln University Perceptions of the State of New Zealand’s Environment 2016 with 44 per cent of people stating they had good or very good knowledge, while 48 percent stated they had adequate knowledge of environmental issues.
- Fewer respondents rated their understanding of **biodiversity** in Christchurch and Banks Peninsula as high, with 44 per cent considering they have good or very good knowledge of biodiversity, and 38 per cent stating they have neither good or poor knowledge of biodiversity in Christchurch and Banks Peninsula

## What people said...

“Don't really seek out the issues, but am aware of some (e.g. bore water contamination) through the media.”

“I am aware of issues due to my work and background. However, it is not because of what I read or what the Council circulate.”

“I had pretty good knowledge pre-earthquake's, but now I've lost my way a bit.”

“I live in Diamond Harbour among a very active group who take this topic seriously”

“Don't really know what's there or what's special about particular environments”

“I understand it fine, and the state of the biodiversity in Canterbury is depressing.”

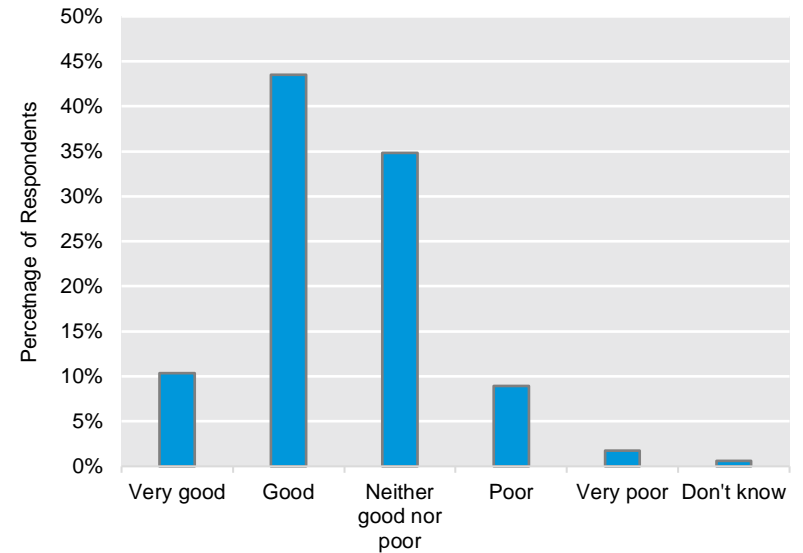


Figure 1: Overall, how would you rate your knowledge of environmental issues in Christchurch and Banks Peninsula?

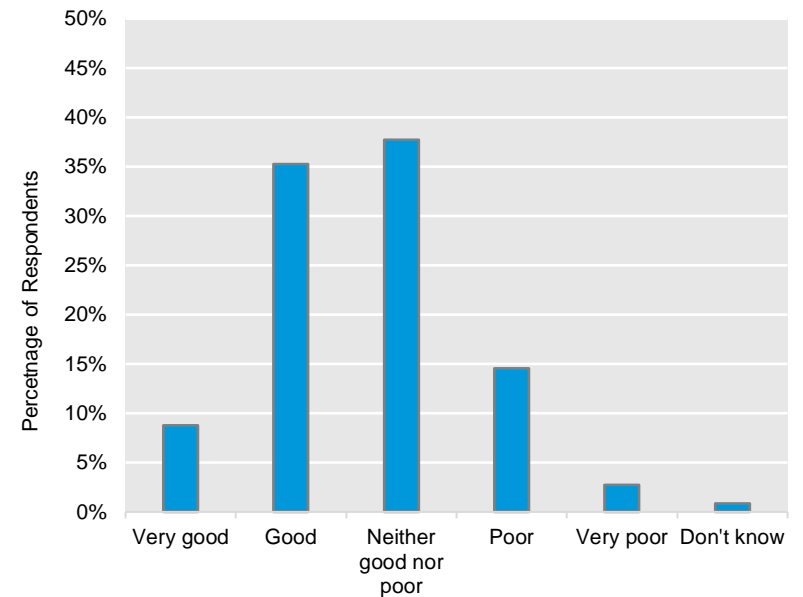


Figure 2: Overall, how would you rate your understanding of biodiversity in Christchurch and Banks Peninsula?

## Visits to natural areas

- The most popular natural areas that respondents visit are the city’s beaches, the Port Hills, the Ōtākaro/Avon and Ōpāwaho/Heathcote rivers and Banks Peninsula’s Bays and Harbours, with between 60 and 80 per cent of respondents visiting these areas in the past 12 months.
- 3 per cent of respondents had not visited any of these areas in the past 12 months.
- The main reasons given for going to these areas are for recreational purposes such as walking, biking etc 85 per cent, and the scenery and views with 77 per cent.
- Other reasons for going to these natural areas are variations of these two main responses such as family excursions and activities, and taking tourists or visitors sightseeing. In addition, people identified bird watching and recharging mentally as reasons for visiting.

### What people said...

“I am so grateful to have these places on our doorstep.”

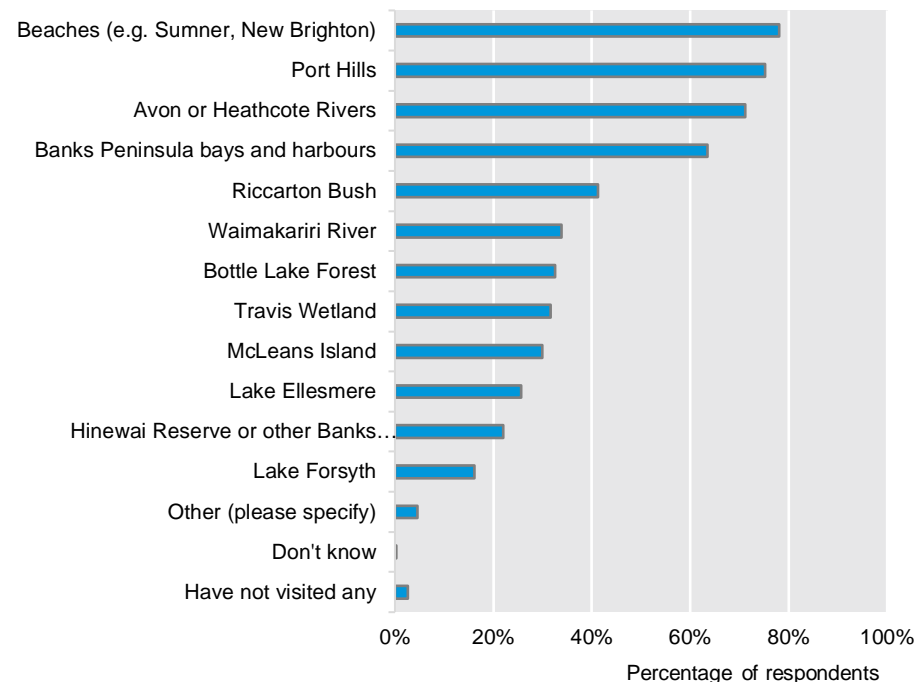
“Just "driving past" significant areas is an important part of the wellbeing of Christchurch people.”

“Natural recreation spaces are a treasure for the city and should be treated as such.”

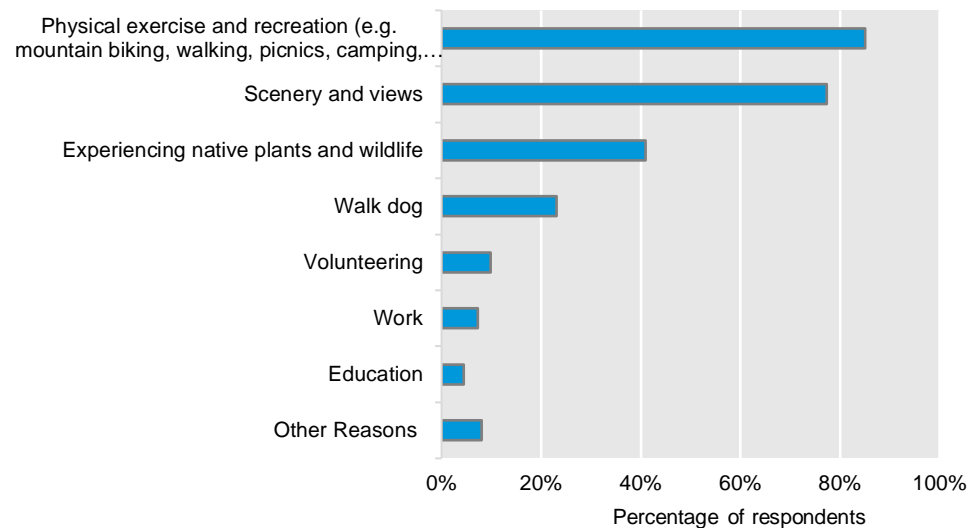
“Walking has become difficult and a walking frame is not well suited to beaches, or rough ground.”

“With a young family, I have found the Council website/facebook resources a great starting point to visit some of the reserves & parks around Christchurch we never knew existed.”

“Ensuring whanau & mokopuna know where they are from and the stories of their tipuna”



**Figure 3: In the past 12 months, have you visited any of these natural areas in Christchurch and Banks Peninsula?**



**Figure 4: What was your main reason/s for visiting the natural areas in the last 12 months?**

## What does this mean?

The value people place on unique landscapes and indigenous biodiversity in the city is largely dependent on people having an understanding, connection and relationship with these areas. The results show that around half of the respondents in the survey think they have a good or very good understanding of the environmental issues in the city and a slightly lower proportion rated their understanding of the city's biodiversity at this level.

This indicates that at least half of Christchurch's population have a poor understanding of environmental issues and biodiversity in the city and Banks Peninsula.

For people to be supportive of activities that protect or enhance the natural environment they need to have a reasonable understanding of the issues. While values are higher than recent national survey figures, it would still be beneficial to focus on increasing residents' understanding of environmental issues facing the city and Banks Peninsula and their understanding/knowledge of local biodiversity.

What we don't know is whether this is due to a lack of available information, or exposure to this information, or that it is not considered a priority for people to find out information about local environmental issues. People may be more aware of environmental issues at a regional, national or global level and be less aware of local issues, possibly due to higher exposure in the media.

The more often people get out and experience natural areas the more value they are likely to place on them and, subsequently, the more likely they are to look after them.

Recreation, and scenery and views are the most common reasons people visit natural areas, with more than three quarters of people answering these options. 40 per cent of people visited these areas to experience native plants and wildlife. In the other responses, people reported using these areas for social activities or visiting people. People also said they use these areas for their mental health, either alone or with others.

There are some comments about the issue of the balance between recreational and biodiversity values, with some people thinking the Council was more focused on recreational values than biodiversity.

***Strategic Priority:** Safe and sustainable water supply and improved waterways*

***Community Outcome:** Unique landscapes and indigenous biodiversity are valued*

## What the Council is doing to address this

The Council's 2008 Biodiversity Strategy's second and third goal was to "Raise awareness and understanding of indigenous biodiversity", and "Encourage widespread participation in support of indigenous biodiversity conservation". The Public Open Spaces Strategy 2010 strongly supported better public access to rural areas with high natural values (indigenous and exotic) and open space that promote local and district identity, including indigenous biodiversity and iconic landscapes. Implementation of these strategies was impacted by the Canterbury Earthquakes. However, the following has been achieved over the past 10 years:

- The Council contributed to the purchase of 190 hectares above Akaroa Township in the Grehan Stream catchment. The purchase protected a vital part of the water supply catchment, protected biodiversity and provided for public recreation. Management of the block is carried out by agreement with Hinewai Reserve.
- Continued annual planting of Port Hills gullies with native plants to encourage biodiversity, control erosion and enhance the indigenous landscape qualities of the Port Hills.
- Continued restoration planting within the Styx River catchment.
- Continued Council financial support for community organisations such as the Summit Road Society, Mt Vernon and Orton Bradley parks, to provide and manage natural recreation experiences for the community.

Ongoing work by the Council includes things like signage in some of the Council-managed natural environments, helping people to understand the natural environment by providing information such as pamphlets and brochures.

There's also a lot of valuable information available in planning and strategy documents, but many of these are difficult for people to find. An ongoing challenge for the Council is making information about the city's natural environment accessible and engaging for citizens.

Regional Park rangers provide a number of services that educate people about what is going on in the natural environment. The Council also has other activities to help educate and get people involved, such as its 'Learning Through Action' School programme.

The Council is currently rewriting the Open Space Strategy, which will combine the previous Biodiversity Strategy and Open Space Strategy.

## Protection and identity values

- 97 per cent of respondents agree or strongly agree that the city’s natural plant, birds, animals and landscapes need to be protected for **future generations**, the majority (79 per cent) strongly agree with this statement.
- 95 per cent of respondents agree or strongly agreed that areas of native bush, tussock land and wetlands are an important part of the **identity** of Christchurch and Banks Peninsula.
- Many of the open-end responses wanted to see native environments and species balanced with non-native or English garden aspects of the city’s identity.
- There were some who preferred exotic planting (but not the majority), much of this is within the urban area.

### What people said...

“The "Garden city" of my childhood lacked native bird life and ignored the beauty and richness of NZ plants.”

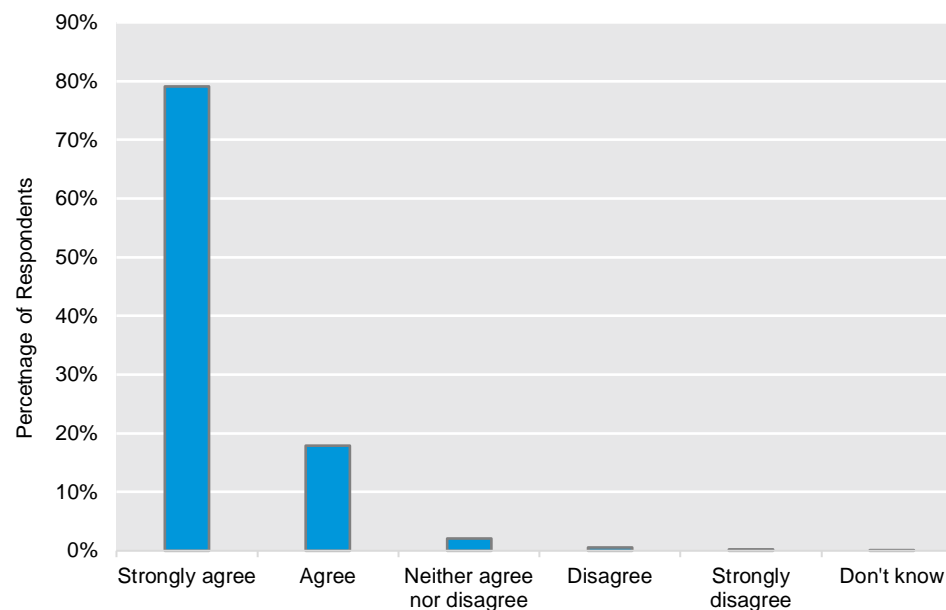
“Banks Peninsula is the precious gem in Christchurch's crown and needs treating with the utmost respect.”

“Areas of native where appropriate – not at the expense of established exotic (e.g. in Hagley Park).”

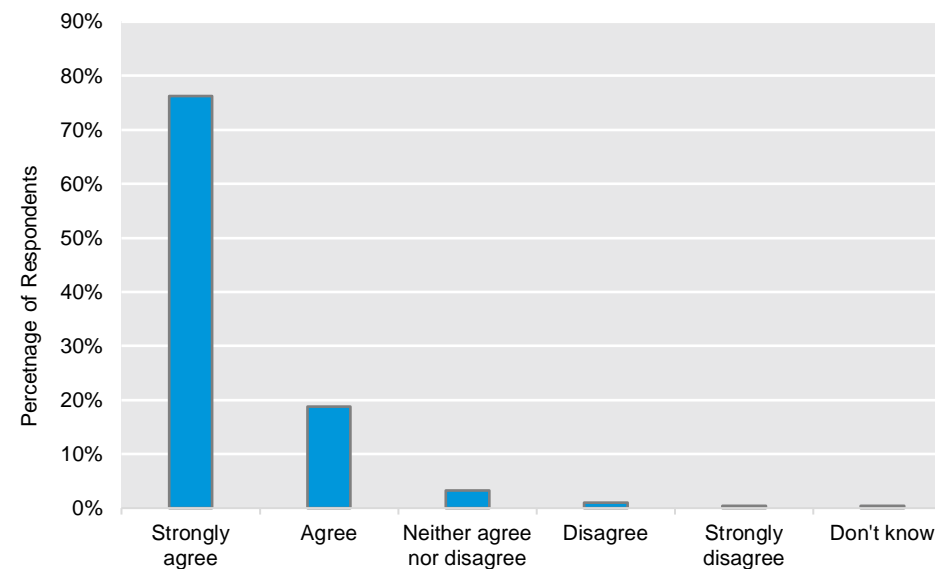
“These things need to be looked after only not just for human satisfaction, but for their own sake and for the health of the entire ecosystem.”

“Whether people understand it or not. These natural environments are one of the most special things about Christchurch. Interaction with nature is just out your front door. It is one of the most special cities in the world for this. Climb the hills, swim in the sea. Surf beach, quiet bay etc. it is what keeps it’s people mentally healthy and happy. The wildlife is essential to our happiness also. We must look after it and protect it.”

“It is New Zealand not any other country so bring back our natural fauna, animals and landscape.”



**Figure 5: Our native plants, birds, animals and landscapes need to be protected and enhanced for future generations**



**Figure 6: Having areas of native bush, tussock land and wetlands is an important part of the identity of Christchurch and Banks Peninsula**

## What does this mean?

It is important to understand people's views of Christchurch's natural landscapes and environments and how much support there is for protecting and enhancing these. In evaluating survey results on environments such as the Port Hills and Banks Peninsula, it's important to draw a distinction between protection of indigenous biodiversity and rural identity values. Virtually all 'natural' landscapes in Christchurch are culturally derived and made up of a diverse mix of indigenous and exotic flora. While these landscapes are often valued for their aesthetically pleasing character, they don't necessarily have high or diverse indigenous biodiversity qualities.

The results clearly show that respondents strongly feel that the Christchurch's natural environment should be preserved and protected for future generations, and natural areas and environments are key aspects of the city and Banks Peninsula's identity.

These results are very similar with the results from the 2007 Environmental Strategies survey. The 2007 survey found that 97 per cent of respondents felt native plants, birds, animals and landscapes need to be protected and enhanced for future generations and 94 per cent believed that native bush, tussock land and wetlands are an important part of the identity of the city and Banks Peninsula.

While there was high levels of agreement that the natural environment is an important aspect of Christchurch's identity there were a number of comments about the importance of the English gardens and parks also being an important part of the Christchurch's image. These elements are not exclusionary, and the 2016 Life in Christchurch survey found that the top four features respondents thought contributed to Christchurch being unique and distinctive were the Port Hills, Banks Peninsula, Hagley Park and the beaches. Hagley Park clearly reflecting the English garden park heritage of the city.

**Strategic Priority:** *Safe and sustainable water supply and improved waterways*

**Community Outcome:** *Unique landscapes and indigenous biodiversity are valued  
Healthy Waterways*

## What the Council is doing to address this

The 2008 Biodiversity Strategy's goal 1 is to conserve and restore Christchurch and Banks Peninsulas indigenous biodiversity and set out an action plan to make progress towards this goal. Currently, this strategy along with the Public Open Space Strategy and landscape policy is being reviewed and will be incorporated into a revised 'Natural Places Public Spaces' open place strategy. This strategy will look at protecting and enhancing the many cultural, historical and biophysical strands that make up the current landscape and setting potential recreation use and spatial integration targets.

The Christchurch District Plan provides a regulatory framework for the protection and enhancement of areas of indigenous vegetation and fauna, as well as the management of areas adjacent to natural open space, and waterways on private and public land. This framework identifies sites of ecological significance that have rules to protect them from deliberate or accidental loss. The Plan has identified the most important areas first, and staff are currently assessing the next level of sites to be included.

The Council's Integrated Water Strategy (in preparation) will also look at the protection and enhancement of the natural environments around and in the city's waterways.

The Council owns and manages large areas of open space in Christchurch which includes the coast as well as tussock and bush areas. The Council's regional park staff manage these areas for a number of values including biodiversity and recreation.

The Council is working closely with Environment Canterbury and Ngāi Tahu on a number of key partnerships and initiatives that focus on the management of particular areas for their biodiversity as well as historic, cultural and recreational values. These include:

- Whakaraupō/Lyttelton Harbour Catchment Management Plan.
- Banks Peninsula Zone Committee
- Christchurch – West Melton Zone Committee
- Selwyn-Waihora Zone Committee
- Te Waihora Co-Governance

In addition, the Council has a number of projects underway that will increase the amount and quality of biodiversity in Christchurch including the development of an urban forest in Woolston – te Oranga Waikura, and contributing to the Ōtākaro/Avon River Corridor Regeneration Plan that Regenerate Christchurch is leading.



# Condition of environment

- Respondents generally feel the following environments are in **good condition**:
  - Parks and reserves (49 per cent of respondents)
  - Native bush and forests (48 per cent of respondents)
  - Air quality (41 per cent of respondents)
- Respondents generally feel the following are in poor condition:
  - Surface water including streams, rivers and lakes (76 per cent of respondents)
  - River banks (57 per cent of respondents).
  - Groundwater (41 per cent of respondents)
- The city's coastal waters are thought to be in poor condition by 34 per cent of respondents, and in good condition by 33 per cent of respondents.
- 15 per cent of respondents stated that none of the listed environments were in good condition.

## What people said...

“Air tasted of coal in my youth so is now very good. I see great improvement in wetland, parks and reserves and bush areas, but hesitate to say 'good' as this implies enough has been done. Newer areas have trees planted but grass between them so are not yet a complete complex system. River banks are coming alive when not mowed.”

“The native ecosystems that we have left are highly modified and hardly "native" or the original cover. Ground and surface water issues are on-going and largely are addressed when the ambulance is at the bottom of the cliff.”

“Individual areas, locations, or parts of the aquifers or stretches of streams may be in 'good' condition, but across the board, none of these can be classed as such.”

“Everyone harps on about the air in Christchurch when, really, we need to spend more time and effort on our waterways”

“I am impressed, however, by efforts to encourage river bank regeneration along Ōtākaro and Ōpāwaho rivers”

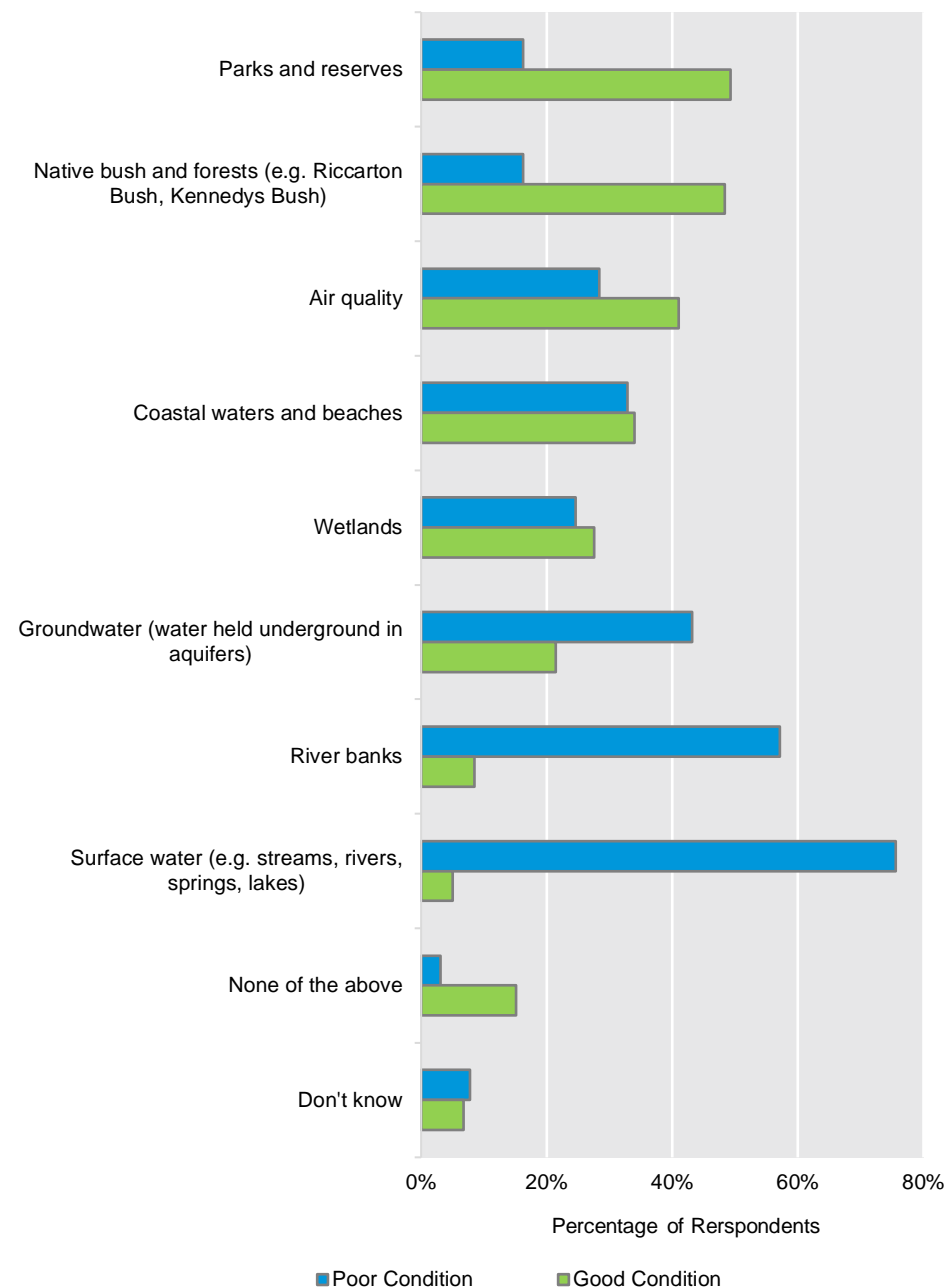


Figure 7: Condition of natural environments in Christchurch and Banks Peninsula

## What does this mean?

Surface water and the quality of river banks are the environments that the greatest number of respondents think are in the poorest condition, with 76 and 57 per cent respectively.

Interestingly, this survey was in the field during the roll out of temporary water chlorination of the city's water supply. This is important to note as it may have influenced people's perception of the quality of groundwater in the city. The quality of groundwater is generally in very good condition (Environment Canterbury's – Christchurch Groundwater Quality Monitoring 2015 Report). The other issue that may have influenced perceptions is agriculture, especially dairying, on the groundwater in the wider Canterbury region, although this is less of an issue in Christchurch.

Many people commented that it is possible to have a range of conditions across environments. For example, Lake Ellesmere/ Te Waihora and Lake Forsyth/Te Roto o Wairewa are in poor condition while Ōtukaikino is in good condition. While it's not impossible in this survey to determine people's perceptions of individual rivers (or parts of rivers), it's clear that, overall, respondents thought that most of the city's freshwater bodies are generally not in good condition.

People also commented that although some of the city's bush and native forests are in good condition they are often in small fragmented pieces that are not big enough for maintaining and enhancing biodiversity. In addition, people noted the loss of native bush as a result of the Port Hills fires.

Across all environments specified in this survey, although some were perceived to be in good condition, there is still improvements that could be made.

**Strategic Priority:** *Safe and sustainable water supply and improved waterways*

**Community Outcome:** *Unique landscapes and indigenous biodiversity are valued*  
*Healthy Waterways*

## What the Council is doing to address this

We are working on initiatives to support landowners to protect and enhance biodiversity on private land. The Christchurch City Council Biodiversity Fund is designed to support and encourage initiatives that protect and enhance Sites of Ecological Significance (SES) on the Christchurch Plains, Port Hills and Banks Peninsula.

To qualify, the SES must meet the criteria within the Christchurch District Plan, have an agreed site of ecological significance statement, and have a management plan in place.

We also have an environmental programme which helps to protect Council-owned land and promotes revegetation efforts.

We have an on-going programme to monitor drinking water quality for biological and chemical contaminants to ensure the supply of safe drinking water to residents.

There are a number of programmes of work underway that will benefit the condition of surface water assets – these are discussed in the next section on waterway quality.

One of the biggest opportunities likely to have significant impact on the natural environment of the city are the regeneration plan for the Ōtākaro / Avon River corridor that is being led by Regenerate Christchurch and has an objective of creating a restored native habitat with good water quality so there is an abundant source of mahinga kai, birdlife and native species.

# Perceptions of water quality and litter

- 63 per cent of respondents think water quality in Christchurch’s waterways is either poor or very poor.
- 9.5 per cent of respondents think the water quality in the Christchurch waterways is good or very good, while 24 per cent think they are neither good nor poor.
- Water quality of Banks Peninsula waterways is perceived to be better (results only include Banks Peninsula residents (n = 176) as many respondents said they did not know about water quality on the Peninsula) than in the water quality of city waterways, with around 30 per cent saying it is poor or neither good nor poor.
- 25 per cent of Banks Peninsula respondents thought water quality was good or very good.
- 80 per cent of respondents said they see rubbish or litter in Christchurch’s waterways often, most of the time or always. 17 per cent of these respondents said they always see rubbish or litter in Christchurch’s waterways.
- 53 per cent of Banks Peninsula respondents said they see rubbish or litter in Banks Peninsula waterways at least often while 41 percent rarely or never.

## What people said...

“fix our waterways, if Dunedin can so can we. I want to swim in our rivers again!”

“I look for eels and trout as an indicator of water condition. They are getting harder to find!”

“Depends if you live in Fendalton Merivale where they are pristine”

“Very poor considering that we used to drink from them as children.”

“Lake Forsyth is the gateway to BP – so it's hard to give anything above Very Poor to BP waterways overall with Wairewa in such a bad state... In Chch there are some nice little streams that counter the poor state of the 2 main rivers.”

“Every time we have a hard rain, signs go up along the Heathcote River saying do not go in the water”

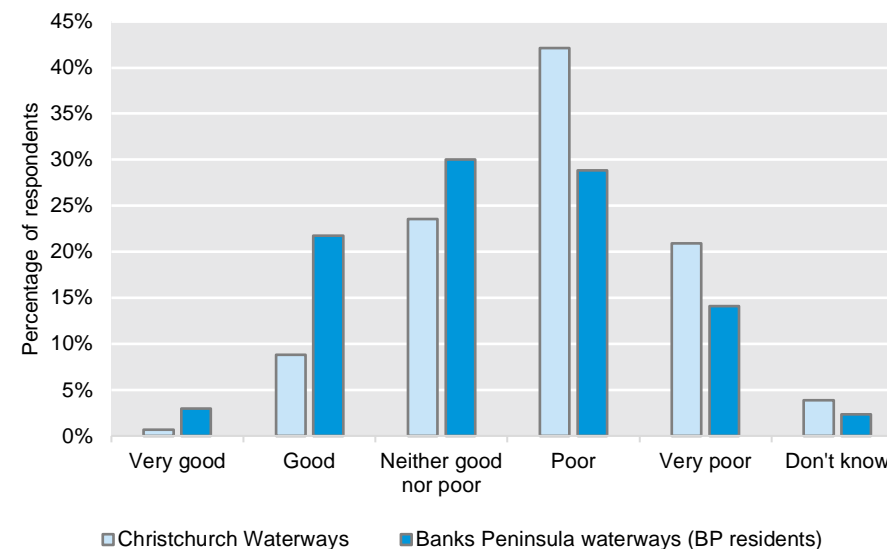


Figure 8: Overall, how would you rate the water quality of waterways?

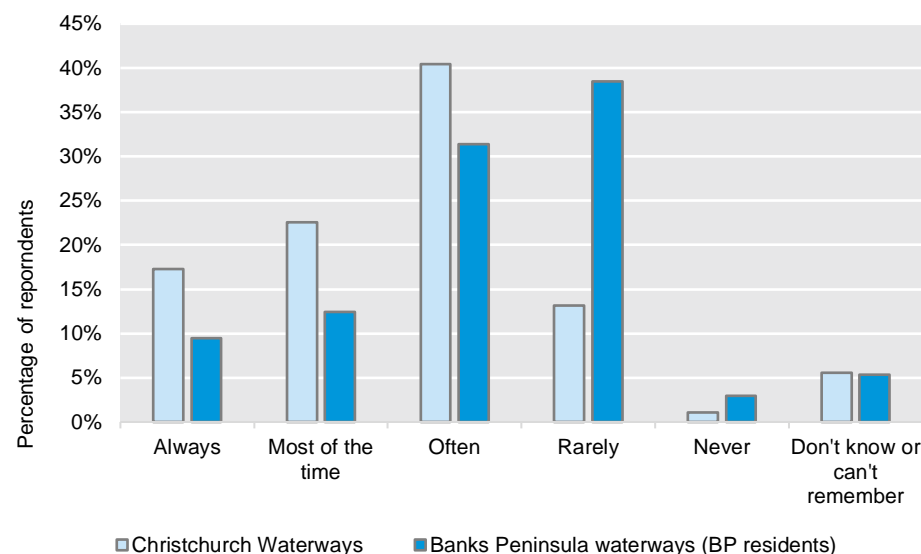


Figure 9: In the last 12 months, how often have you noticed rubbish or litter in waterways?

## What does this mean?

While people's perceptions of water quality is not necessarily the same as the actual biochemical and microbiological water quality, it provides an understanding of how people value these environments and how their perceptions can differ from reality. People's behaviours are likely to be influenced by how they perceive the quality of an environment.

Two additional questions focusing on waterway quality were added in the survey to give a baseline and enable changes to be tracked over time.

The two waterway condition questions were originally asked in the [2018 Christchurch Waterway survey](#).

As with the previous section on natural environments in good or poor condition, in general respondents consider the water quality in Christchurch waterways to be poor. However, waterways in Banks Peninsula are considered to have better water quality (although people did comment that Lake Forsyth / Te Roto o Wairewa and Lake Ellesmere / Te Waihora are in very poor condition).

Litter and rubbish in waterways impact on how they look and function and are also a potential risk to wildlife inhabiting a waterway, especially as litter often is plastic. 41 per cent of Banks Peninsula respondents said they rarely or never see litter in Banks Peninsula waterways. However, 14 per cent of respondents said this about Christchurch waterways.

Both water quality and litter are worse in urban waterways than rural waterways, reflecting a larger source of contaminants and rubbish there. Adding to the issue is large proportion of hard surfaces like roads and large car parks meaning contaminants are not absorbed by soil or vegetation and end up in urban waterways.

**Strategic Priority:** Safe and sustainable water supply and improved waterways

**Community Outcome:** Healthy waterways

## What the Council is doing to address this

Our stormwater system empties into rivers and streams. Stormwater runoff is the main driver of water quality in urban areas. The Council is committed to improving its practices and leading by example to reduce pollutants getting into our waterways. A number of stormwater management plans seek to manage surface water and drainage issues.

Education campaigns are planned to show how the community can work together to improve our waterways.

Included in the Land Drainage Recovery Programme is the repair of damaged waterways and land drainage infrastructure, thus reducing the risk of flooding and improving the values of our waterways through sensitive design and remediation works.

Waterways throughout Christchurch are naturalised and enhanced by many people, including the Council, community groups and landowners. Their efforts help to:

- Protect natural areas
- Restore native freshwater and riparian habitat
- Enhance habitat for birds, fish, lizards and insects
- Create green linkages/corridors
- Restore people's wellbeing and sense of community connection.

To support waterways restoration, the Council has helpful resources on its website: Streamside Planting Guide; Wetland, Waterways and Drainage Guide and the Fish Salvage Guidance for Works in Waterways.

The Council is working on ways to improve the quality of the wastewater network to reduce overflows getting into the stormwater network during rain events. This work will also result in improved water quality. The Council has a programme to monitor waterway health and reports are published on the Council's waterways web pages, visit this [link](#)

The Council is currently developing the integrated water strategy (water supply, surface water and wastewater) to provide, in the short-term, guidance for fixing and adapting our infrastructure. The water strategy will then inform the longer term plans, infrastructure strategies and asset management for many years to come.

Changes in central government regulations have the potential to bring about a significant reduction in contaminants getting into our urban waterways, for example a regulation that prohibits the use of copper in vehicle brake pads. The Council is also working with architects, developers and builders to optimise stormwater treatment and discharge and incorporate innovative outcomes.

# Volunteering and individual actions

## Volunteering

- 29 per cent of respondents have carried out conservation volunteer work in the past 12 months.
- The main type of voluntary work has been maintaining natural environments such as picking up rubbish and weeding, with 66 per cent of those who had volunteered doing this.
- Community planting activities are the second most popular type of volunteering, with 57 per cent of volunteers.

## Individual actions

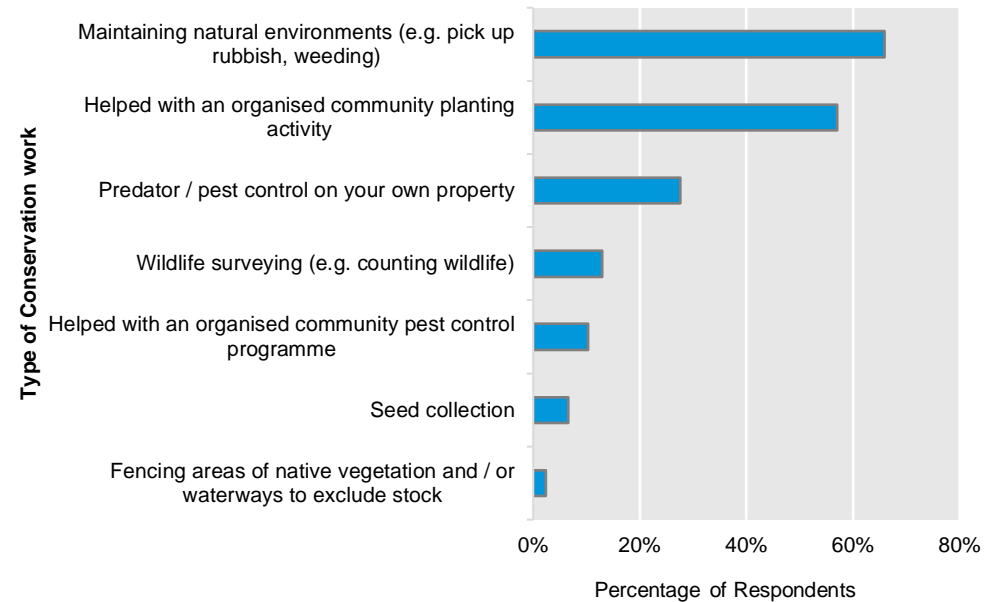
- The most common individual action respondents carried out to improve the environment was living sustainably (89 per cent) followed by:
  - Picked up rubbish left by others (68 per cent)
  - Ensured only clean water entered stormwater drains (68 per cent).
  - Planted species to provide food for native birds and insects (55 per cent)
  - Planted native species (50 per cent)
  - Donated money to organisations working to protect native plants and or animals (31 per cent).

### What people said...

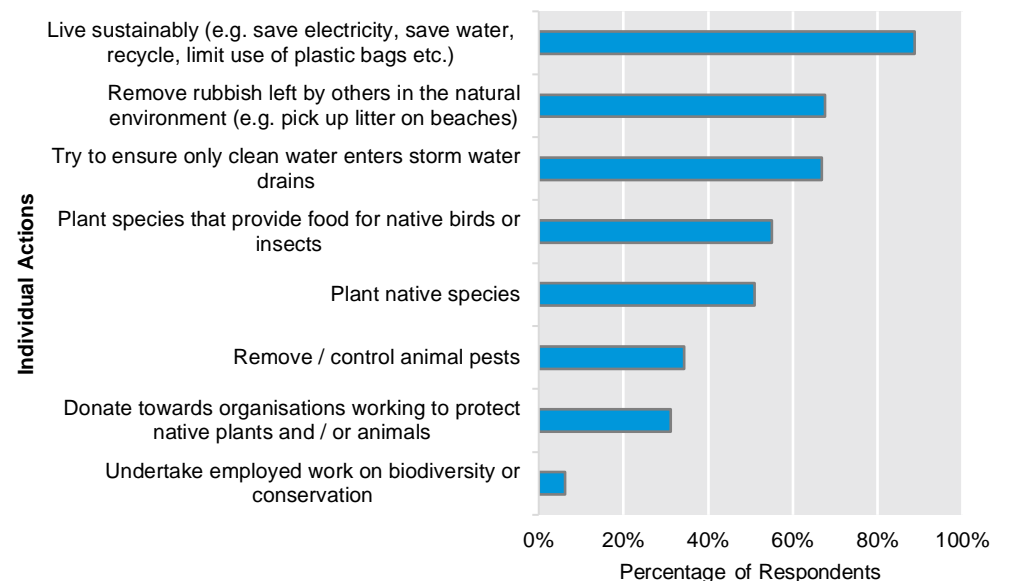
“I feel ChCh is so far behind other cities, for example Wellington has Zealandia and council/community-wide initiatives to trap pests and then Dunedin with Orokanui,... we really need to do better as a city.”

“Please support the very dedicated Port Hills Rangers by giving them more staff as they do an amazing amount of work but are very under resourced to maintain and improve such a huge area that is so important to many Cantabrians (and which tourists enjoy also)”

“I would like to volunteer to plant but I am not sure when this happens or how to join”



**Figure 10: Type of conservation work done in the past 12 months in Christchurch and Banks Peninsula (of the 29 per cent who volunteered)**



**Figure 11: Type of individual action done in the past twelve months to improve the environment**

# Volunteering and individual actions (Continued)

## Sustainability Actions

- More than 90 per cent of respondents recycle and have made their homes energy efficient (98 and 90 per cent respectively). This is comparable with the recent Colmar Brunton – Better Futures Survey 2017 (also shown in the graph). The next most frequent sustainability actions are:
  - Trying to limit their use of plastic shopping bags (84 per cent)
  - Using reusable bottles or coffee cups (71 per cent)
  - composting food and organic waste (67 per cent),
  - Buying locally made products (67 per cent)
  - Growing their own fruit and/or vegetables (59 per cent)
- In most cases many of the Christchurch responses are in line with the national ratings from the Colmar Brunton report. However, there are some where Christchurch people are considerably lower than the national results including: using reusable bottles or coffee cups; buying locally made products or food; buying eco-friendly cleaning products; use of active transport; eating vegetarian/vegan meals; buying ethically sources clothing or products; buying organic food and beverages; and using public transport.

### What people said...

“This is a good checklist that everyone should have access to... although they are small steps, it would help instil the importance of this mindset into the public consciousness.”

“We don't have kids. Harsh to say, but population growth renders the whole idea of sustainability moot. Any gains are offset. Also, we go all crazy trying to reduce plastic bags but we don't reduce our consumption of cars, clothing, gadgets, phones and all that stuff that requires extraction and/or plastic to manufacture and resources to distribute”

“I'm a beneficiary on a limited income, which limits my choices at best.”

“Would love to use more public transport, but the service is not great.”

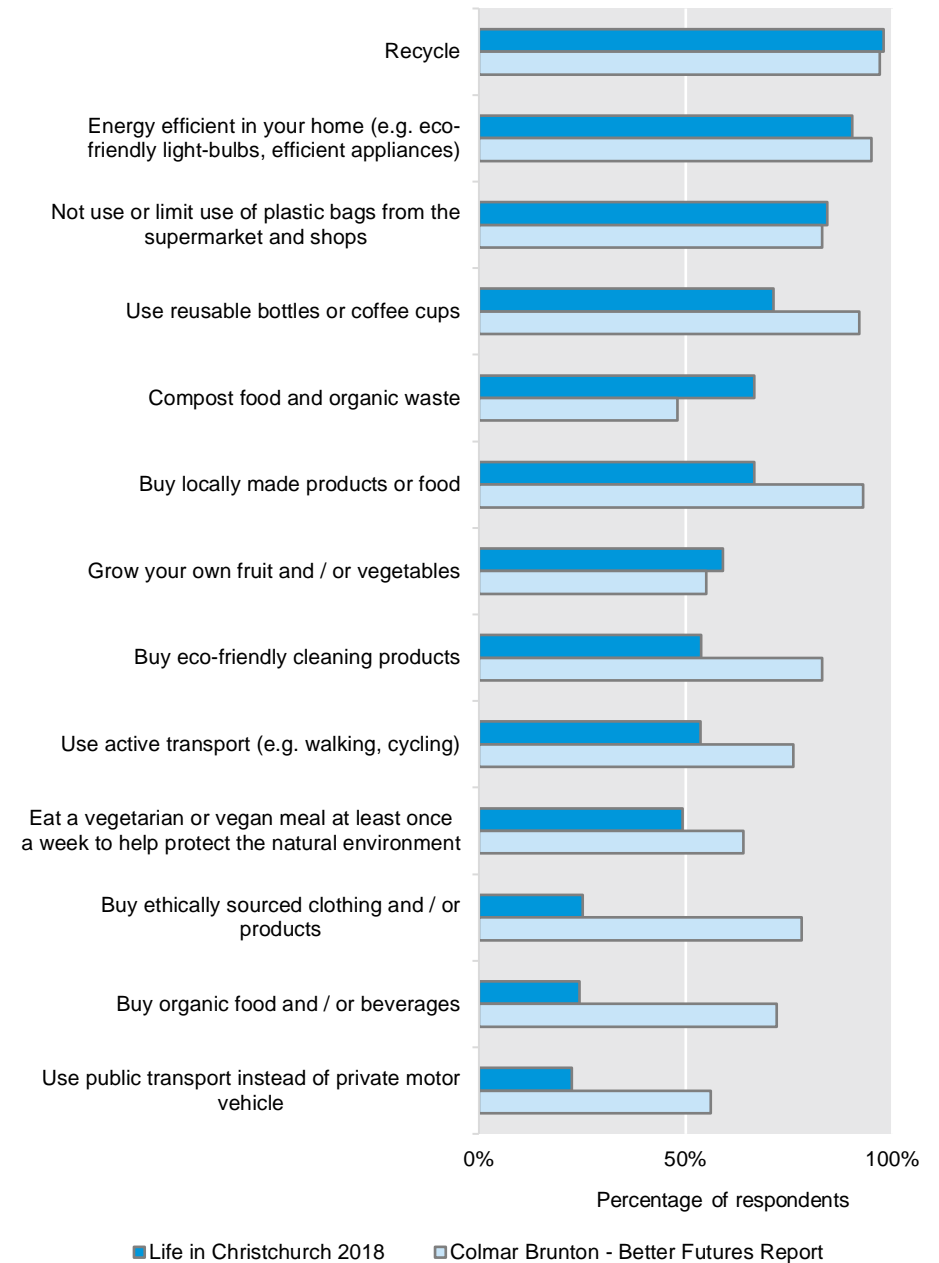


Figure 12: Type of day to day decisions respondents are making to reduce their impact on the environment

# Responsibility for protecting and maintaining natural environment areas

- Respondents feel the responsibility for protecting and maintaining the environment in Christchurch and Banks Peninsula fell on all the groups and organisations listed, with between 86 and 92 per cent of respondents each.
- Many of the other responses (approximately 5 per cent) included “all of us” statements, but also identified local Māori / Ngāi tahu, iwi and runanga as groups that should also be included as well as other government departments responsible for protecting and maintaining the environment in addition to the Department of Conservation.
- When asked if the Council was doing enough to protect and enhance biodiversity in the city, 19 per cent of respondents agree, 38 per cent were neutral and 33 per cent disagree or strongly disagree.

## What people said...

“We are all responsible but ECan, DOC and CCC need to work collaboratively rather than disjointed even though they are all working for the same end goal. The perception is that they are not working together.”

“It is everyone's responsibility but we do need a lead organisation”

“I love any new native plantings in the city. All new plantings should be native only”

“Funding is always an issue when it comes to conservation. But our native biodiversity is priceless.”

“I don't hear about anything that goes on... more details on social media!”

“Doing best with available resources. I've met some CCC Rangers. Good people doing a great job”

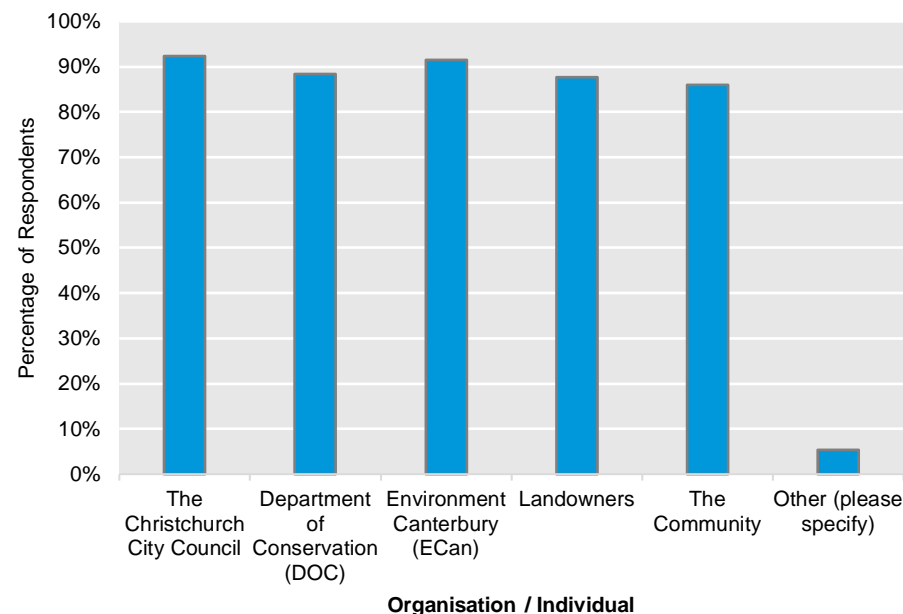


Figure 13: Who is responsible for protecting and maintaining natural environment areas in Christchurch and Banks Peninsula?

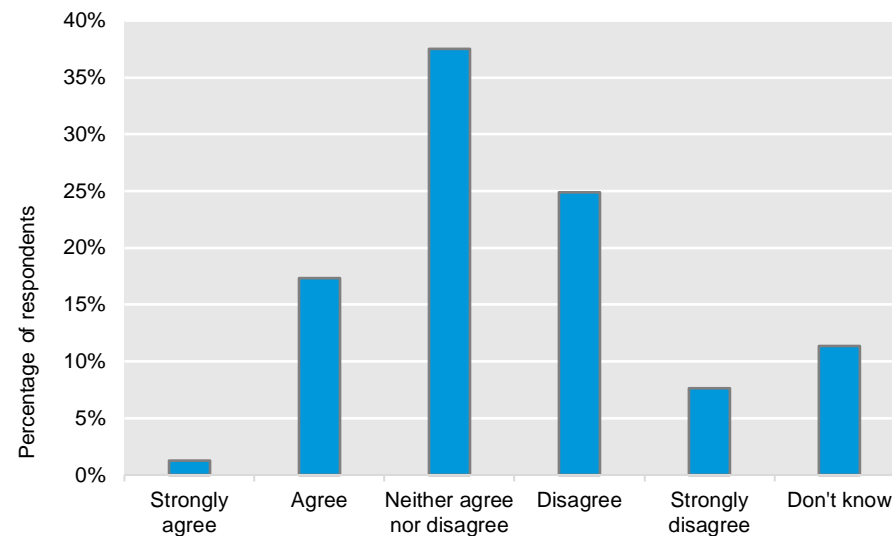


Figure 14: Is Christchurch City Council is doing enough to protect and encourage biodiversity?

## What does this mean?

The level of volunteering is a good indicator of people's commitment to caring for the environment –that they are able to and willing to spend some of their own time to make a difference.

Almost a third of survey respondents had done some voluntary work for a conservation or environmental cause in the past 12 months. The majority were either doing maintenance of the natural environment such as weeding, rubbish collection or helping on community planting days.

Areas where fewer people are actively involved in are pest control, buying ethically sourced clothing or organic food, and using public transport. This result is also lower compared with national results.

Generally, people thought the responsibility for protecting the environment rested equally with everyone, including central and local government, land owners and the community (including individuals). People also thought Ngāi Tahu should also be included in the list for the survey question. Comments were also made that organisations should be working together towards a common goal.

A third of people thought the Council should be doing more to protect and enhance the environment. Another third were neutral to this question (i.e. neither agree or disagree), which may reflect a lack of awareness of what the Council is doing. If this is combined with the 12 per cent that don't know, it could indicate that 50 per cent of respondents are not aware of the risks to the native environment or aware of what the Council is doing.

**Strategic Priority:** *Enabling active citizenship and connected communities*  
*Safe and sustainable water supply and improved waterways*

**Community Outcome:** *Active participation in civic life*  
*Healthy waterways*  
*Unique landscapes and indigenous biodiversity are valued*

## What the Council is doing to address this

We are working on initiatives to support landowners protect and enhance biodiversity on private land, this includes a biodiversity contestable fund of \$200,000 to support custodians of biodiversity within Christchurch City.

There is also information on the Council's website about getting involved or other funding options:

- Non-Council funding options
- Groups involved in biodiversity actions
- Council-based opportunities for volunteering e.g. planting days, river clean ups
- Information on what people can do in their own properties
- Information on how to live more sustainably, including energy efficiency, growing your own food, conserving water and more
- Involvement in citizen science and individual action, such as the back yard mistletoe project.

We also have an environmental programme which helps to protect Council-owned land and promotes re-vegetation efforts.

Our Waste Management and Minimisation Plan outlines our approach to waste minimisation, and encourages all organisations and individuals to take responsibility for reducing the amount of waste going to landfill.

The Council's website provides information on how people can be more resource efficient and reduce their impact on the environment. This information is targeted at individuals, renovations or new home design and business activities through target sustainability.



# Views on climate change

- 68 per cent of respondents feel very concerned about climate change and feel it is a real threat. This compared with 49 per cent who felt the same way 10 years ago in the 2007 CCC Natural Environment Strategies survey.
- The 2017 Colmar Brunton – Better Futures report also reported 68 per cent of New Zealanders’ felt climate change was the biggest problem the world is facing.
- 12 per cent of respondents are also concerned about climate change, but thought other issues are more important. This is a similar result to 10 years ago (14 per cent).
- Confusion about climate change due to conflicting views decreased by half from 21 to 10 per cent over the 10 years.
- The proportion of people who do not believe in climate change has also declined from 12 to 2 per cent.
- Only 10 per cent of respondents feel the Council is doing everything it can to address climate change, while 13 per cent feel Central Government was. However, more respondents feel Central Government (50 per cent) wasn’t doing enough to address climate change than the Council (39 per cent).

## What people said...

“This is the overwhelming issue of our time and I fear for my grandchildren.”

“I feel somehow helpless, and think my little attempts are a drop on a hot stone... a bleak outlook really!”

“Climate change, poverty and homelessness are three very important issues.”

“As much as I hate to say it but the city needs to be rectified first”

“We are a coastal town at near sea level and with a high water table. We can’t afford to ignore climate change”

“It’s a load of garbage pushed by academics with an agenda. Only an idiot believes it.”

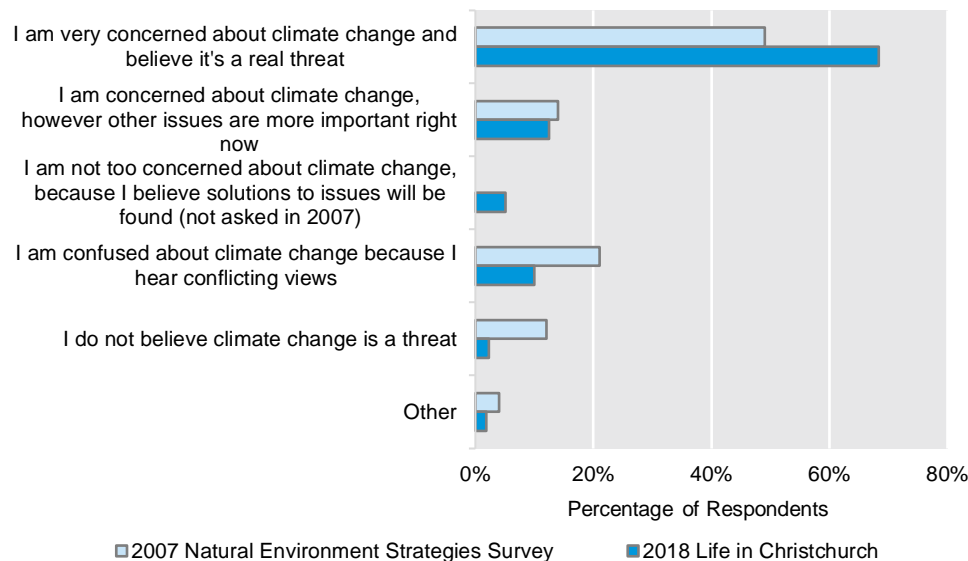


Figure 15: Which of these do you feel most closely describes your feelings about climate change?

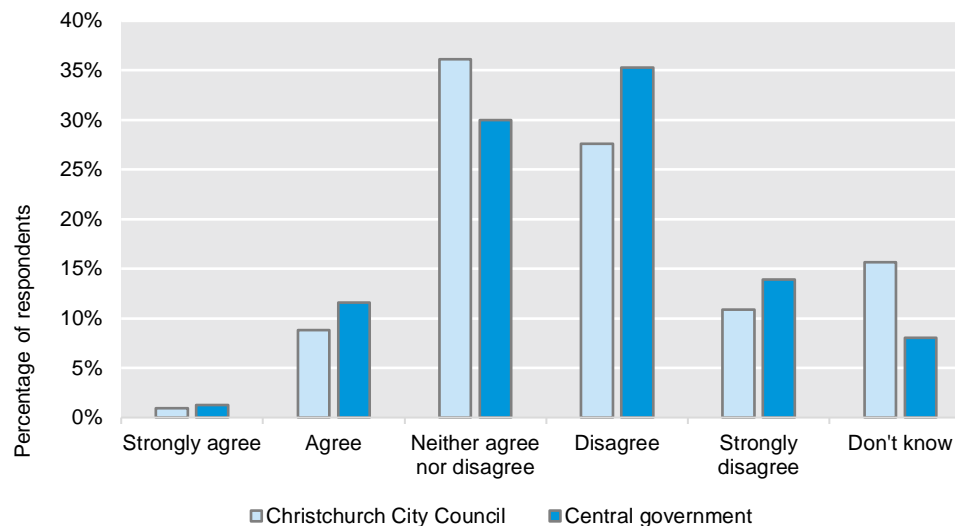


Figure 16: Do you believe the Council and Central Government are doing everything they can to address climate change?

# Impacts of climate change

- The top three challenges respondents think would result from climate change in Christchurch are:
  - Sea level rise (66 per cent)
  - Increased extreme weather events (65 per cent)
  - Increased natural disasters such as floods, wild fires and drought (44 per cent).
- The values on the graph with the asterisks (\*) are those impacts mentioned on the MFE climate change projections for the Canterbury region.
- While increased extreme weather events is not mentioned on the MFE website, the number of days with high temperatures is predicted to increase, and while the number of extremely rainy days is not predicted to change, the winter rainfall is likely to decrease in Christchurch.
- Sea level rise and coastal erosion are strongly linked, also in Christchurch sea level rise is likely to also result in more frequent flooding.

## What people said...

“Very hard to choose only 3!!”

“What really concerns me is not the effect on Christchurch as much as the effect on the places I love to go on the weekends: the rivers, the ski-fields, the amazing West Coast...”

“Better to plan for sea level rise than wait for it to happen,”

“Other threat: Ignorance, anti-science movement.”

“I live at Redcliffs and am personally very aware of issues.... but dumbfounded at lack of knowledge or willingness to act (naïve) of fellow citizens.”

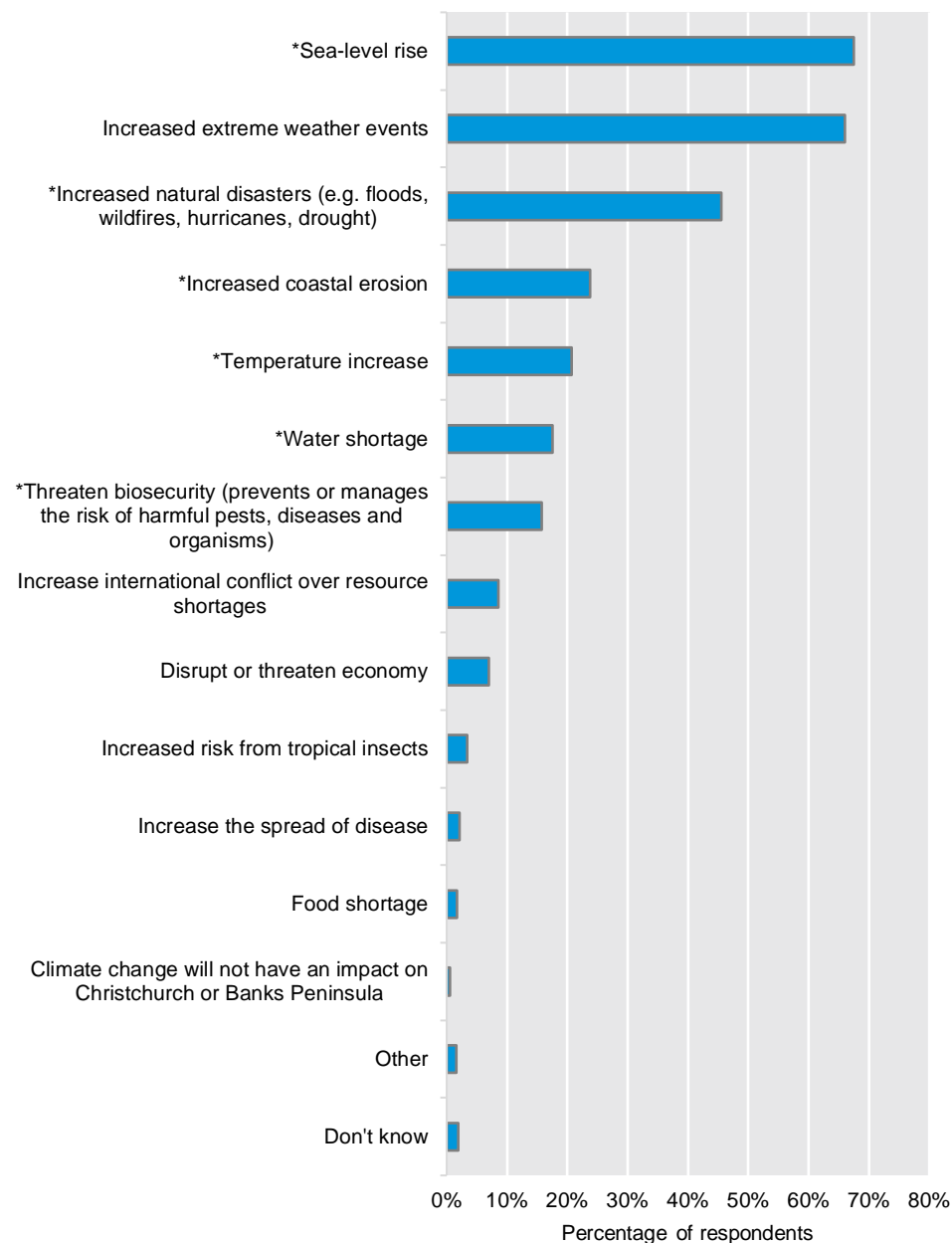


Figure 17: Main challenges of climate change on Christchurch and Banks Peninsula (three top impacts)

## What does this mean?

Christchurch is a low lying coastal city that is vulnerable to the predicted impacts of climate change over the next century. The Council has a strategic priority of providing leadership on climate change issues. The purpose of the climate change questions in this survey are to determine the level of concern and understanding of respondents of climate change. This information will be useful for developing policies and plans to address the effects and maintaining community support for any actions.

Results from the survey are very similar to national results from the 2017 Colmar Brunton – Better Futures report. Two thirds of respondents are very concerned about climate change and believe it is a real threat. This result is an increase from 49 per cent when this question was asked 11 years ago in the 2007 Christchurch City Council Natural Environment Strategies survey.

People are much less likely to be confused or not think climate change is a threat compared with 11 years ago, with both of these areas declining by 50 and 75 per cent respectively. This shows that people’s understanding of the issue of climate change has improved over the past 10 years.

The proportion of people who are concerned about climate change, but think there are more important issues right now, has remained about the same with 12 per cent.

We asked people to identify and prioritise the top three most significant impacts that climate change would have on Christchurch and Banks Peninsula. Many people commented they would have liked to pick more than three. This shows that people are aware of the possible impacts, but haven’t thought about the significance of each of those impacts. The question also included identifying challenges, some of the impacts of climate change may have potential benefits as well as negative consequences.

Sea level rise and increased extreme weather events came up as the highest impacts.

Generally, people think more could be done to address the impacts of climate change. Half of the respondents feel Central Government was not doing enough to address the impacts of climate change, whereas 39 per cent of respondents felt the City Council could be doing more to address the risk of climate change.

**Strategic Priority:** *Climate change leadership*

**Community Outcome:** *Safe and healthy communities*

*Sustainable use of resources*

## What the Council is doing to address this

The Council is committed to reducing greenhouse gas (GHG) emissions and has demonstrated this as a priority through having:

- Adopted a Climate Change Leadership Strategic Priority in 2017.
- Signed-up to the Global Covenant of Mayors for Climate and Energy in December 2017.
- Set a target in December 2017 to be net carbon neutral by 2030 for Council’s activities.
- Implemented a Resource Efficiency and GHG Emission Programme in 2017 for Council’s activities.

The Council is also developing a:

- Climate Change Mitigation Strategy and Action Plan.
- Climate Change Adaptation Strategy and Action Plan.

How we will do it:

- Add our voice to international collective action and set targets for reducing GHG emissions.
- Roll out the electric vehicle outreach programme.
- Engage with the business community to encourage action to reduce GHG emissions.
- Raise awareness with the public of individual and household actions that make a difference.
- Embed climate change in Council decision-making, revising key templates and operating procedures.
- Pilot innovative solutions to reduce emissions from Council operations and apply the best of these at a city level.

The Christchurch Transport Plan and An Accessible City programme are to encourage active modes of travel and increased use of public transport and shared vehicles, one of the benefits of this is reducing GHG emissions from the transport fleet.

Adaptation to the impacts of sea level rise and flooding are included in the natural hazard section of the District Plan and is being considered in the plans for the Ōtākaro Avon River Corridor Regeneration Area.

The Council is also investigating the different effects of climate change and is using the results in the Land Drainage Recovery Programme. The Council is part of a multi-agency project engaging with Southshore and South New Brighton communities on how to best adapt to the effects of climate change including sea level rise, through a regeneration strategy. The Council is also improving the network of shallow groundwater monitoring in part to determine how groundwater changes with climate, which can affect hazards such as flooding and liquefaction.

# Native birds in local neighbourhoods

- Native bush birds are more likely to be observed in people’s local neighbourhoods if you live on Banks Peninsula than in Christchurch.
- **Fantails/Piwakawaka:**
  - 86 per cent of respondents on Banks Peninsula reported observing them at least once a week compared with 36 per cent in Christchurch.
- **Silvereys/Tahou**
  - 80 per cent of Banks Peninsula respondent reported observing them in their neighbourhoods at least once a week compared with 42 per cent of Christchurch respondents.
- **Bellbird/Korimako**
  - 76 per cent of Banks Peninsula respondents reported observing them at least once a week – with 51 per cent observing them five days a week or more. This compares with 19 per cent in Christchurch observing them at least once a week.
- 30 **Tui** were rereleased on Bank Peninsula (9 April 2009 at Hinewai Reserve).
  - 16 per cent of respondents on Banks Peninsula had seen Tui at least once a week.
  - 82 per cent of respondents in Christchurch had never observed or didn’t know if they had observed Tui. 65 per cent of Banks Peninsula respondents had never observed Tui in their local neighbourhoods.

## What people said...

“We've had Kereru in our back garden this year in the city which I've never noticed before”

“We are definitely seeing and hearing Bellbirds more frequently than we did 25 years ago. We currently seem to have a resident pair of Fantails”

“Piwakawaka tend to only be present in the colder months.”

“Our native bird is shocking compared to other major cities. The Council needs to do more to help with native forest/wetland regeneration to bring birds back into the city. I'd especially like to see the red zone turned into a predator proof sanctuary. There's no reason we couldn't have tui, kereru, kakariki, and even kaka in and around or city if we make enough habitat to support them”

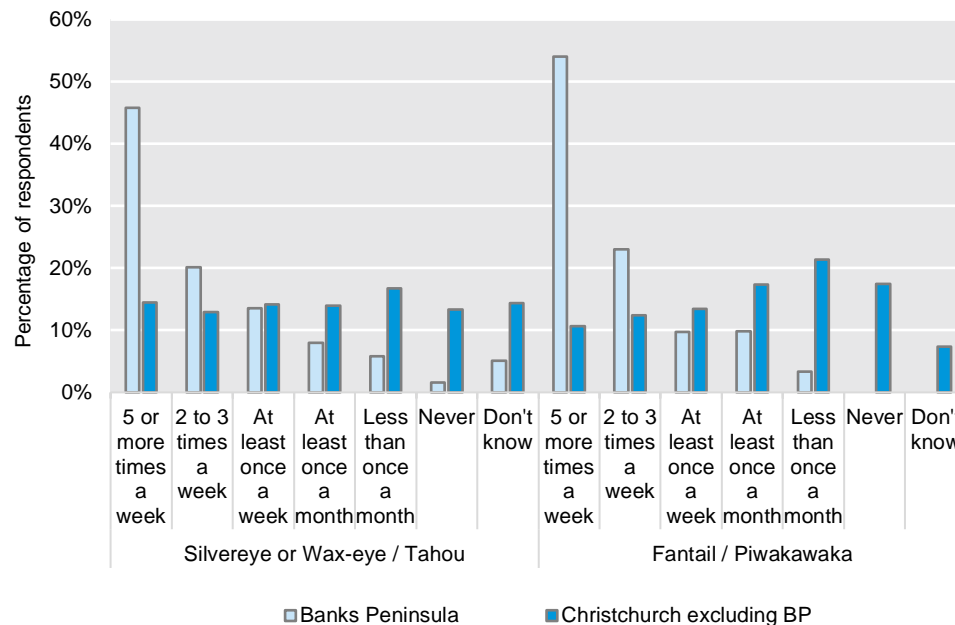


Figure 18: Frequency of observations of Silvereys/Tahou and Fantail / Piwakawaka in local neighbourhoods

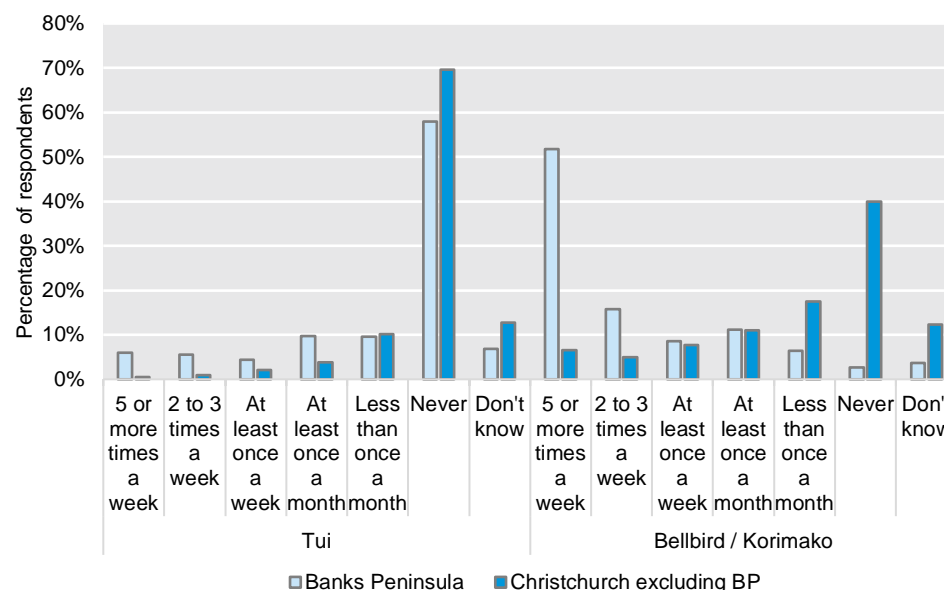


Figure 19: Frequency of observations of Tui and Bellbird/Korimako in local neighbourhoods

## What does this mean?

Bush birds provide a useful indicator of the state of the natural environment as they rely on healthy habitats and ecosystems that provide them with a consistent source of food, shelter and ability to evade pests. Many native bush birds have adapted to urban areas as sources of food, and for many this has become a supplement to natural areas. However, urban areas also provide additional risks in the form of pets and stationary and moving objects such as windows and motor vehicles which birds need to avoid.

Unsurprisingly, prevalence of native bush birds is lower in urban areas than in rural/non-urban areas such as Banks Peninsula. However, sightings of small bush birds such as Silvereyes/Tahou and Fantail/Piwakawaka are only slightly lower in the urban area than on Banks Peninsula.

Larger bush birds are much less prevalent in the city, with Bellbirds/Korimako being observed by 20 per cent of the respondents at least once a week. Even though Tui were rereleased on Banks Peninsula almost 10 years ago they have not become a common sight there, with two thirds of Banks Peninsula respondents saying they never observe them (see or hear) in their local neighbourhood.

Generally, people are positive about having native birds in their local neighbourhoods and were encouraged by what had happened in Wellington and Dunedin around increasing numbers of birdlife in those cities.

The survey also asked what measures people were taking to encourage native birds in their gardens, with 61 per cent of respondents planting species that provide fruit and nectar, and 41 per cent planting species that provide shelter, nesting spots and a source of insects.

Almost half of respondents said they provided food for birds. A third of respondents did some form of pest control for rats, possums, stoats or hedgehogs. Pests were more likely to be reported by Banks Peninsula respondents.

Respondents living on Banks Peninsula (80 per cent) are more likely to have taken action to reduce pests compared with just under a half in Christchurch.

**Strategic Priority:** *Enabling active citizenship and connected communities*

**Community Outcome:** *Strong sense of community*

*Unique landscapes and indigenous biodiversity are valued*

## What the Council is doing to address this

Many of the activities to protect and enhance the natural environment mentioned in earlier sections will contribute to improving the quality and size of ecosystems and habitats for native birdlife.

Ongoing pest management and partnering with community initiatives such as Summit Road Society's Predator Free Port Hills and the Banks Peninsula Conservation Trusts goal of predator free on Banks Peninsula by 2050, will contribute to providing safe healthy habitats for these birds.

The Council has information on its web site to help residents with planting and landscape decisions in their own properties if they are interested in encouraging birdlife.

Other surveys mentioned in this report:

**Lincoln University Public Perceptions of the Environment Survey 2016/17**

[http://www.lincoln.ac.nz/Documents/LEaP/perceptions2016\\_feb17\\_LowRes.pdf](http://www.lincoln.ac.nz/Documents/LEaP/perceptions2016_feb17_LowRes.pdf)

**CCC Waterway survey 2018**

<https://www.ccc.govt.nz/assets/Documents/Environment/Water/2018-Christchurch-Waterways-Survey-Final-report.pdf>

**Colmar Brunton – Better futures 2017 report**

<https://www.colmarbrunton.co.nz/category/better-futures/>

**CCC 2007 Natural Environment Strategies Survey**

<https://www.ccc.govt.nz/assets/Documents/Environment/Water/2018-Christchurch-Waterways-Survey-Final-report.pdf>