Tō taiao – he aha ngā tino take? **Your environment Yhat matters?** 2022



Cover photo: Pauanui.

Waikato Regional Council Technical Report TR# 2022/48

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Date: October 2022	Date: October 2022

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## EXECUTIVE SUMMARY

Waikato Regional Council conducts the *Your Environment – What Matters?* survey to track Waikato residents' environmental awareness, attitudes, knowledge and behaviours. The survey measures levels of concern, perceptions of the state of the environment, environmental attitudes, knowledge and pro-environment actions. This year a total of n=1,026 responses were collected for this survey using a combination of online interviewing (n=792 responses) and telephone interviewing (n=234 responses).

In 2022, water quality was considered the most important environmental issue facing the Waikato region today (42%). This was followed by climate change (14%), waste (13%), urban and population growth (4%), and air quality (2%). Concerns over water quality, climate change, population and urban growth, and consequential pressures on infrastructure and air quality were identified as most important for the region in five years' time

Respondents' self-rated knowledge of environmental issues has declined slightly this year with a greater number of respondents rating their knowledge as poor (9% in 2019, now 14%). Despite this, indicators of environmental knowledge suggest that there has been a decline in the proportion of those rated low environmental knowledge and an increase in those rated moderate environmental knowledge.

This year there was an increase in the proportion of respondents rated mid-ecological with a decrease in those rated pro-ecological. There was also an increase in the proportion of those rated anti-ecological.

Fewer respondents perceived the state of their local environment as becoming worse over the past few years (42%) and there has been an increase in the proportion of respondents who were satisfied (59%) or very satisfied (21%) with their local environment.

Respondents' concern about various environmental attributes has remained high with nearly all measures registering concern over 70%. Areas where concern is slightly lower were loss of coastal areas (69%), general soil health (68%), the effects of sea level rise (66%), and urban soil health (59%).

Seventy five percent of respondents reported concern with the effects of climate change and 73% of respondents have undertaken activities to reduce greenhouse gas emissions, an increase of 7% since 2019 (66%). The primary actions people took to reduce emissions were adopting more eco-friendly travel methods (35%) or changing heating/electricity methods (10%).

Seventy seven percent of respondents agreed that their household does all they can to reduce waste, while 46% of respondents agreed that they would like to reduce their waste more but were unsure how. The majority of respondents agreed that individuals (89%), businesses (88%), and Waikato Regional Council (80%) were all responsible for waste reduction.

Eighty one percent of respondents agreed that a healthy environment was necessary for a healthy economy, while 72% agreed that environmental protection and economic development can go hand in hand. Both measures have slowly declined since 2016 when support for

## EXECUTIVE SUMMARY

these statements was 90% and 89% respectively. Eighty eight percent of respondents agreed that businesses should be obliged to treat the environment well and only 39% agreed that businesses took care to minimise the negative impacts on the environment.

A total of 93% of respondents undertook a personal action to protect the environment. Recycling (40%), planting trees (16%) and composting (14%) were the most common personal actions reported. These results are similar to those seen in 2019.

Compared to 2019, fewer respondents indicated they were involved in a public action with the aim of protecting the environment (15%). The main actions undertaken were signing a petition (34%), attending a meeting (10%), or taking an environmentally friendly action (10%).

Forty percent of respondents disagreed that the public has enough say in the way the environment has been managed and 53% of respondents felt there were insufficient opportunities for communities to be involved in activities to protect the environment. The most common suggestions for improving community involvement were more events (18%), improved awareness and education (16%), or community activities (11%).

With regards to land use and governance, 72% of respondents agreed that Waikato Regional Council should enforce its rules to ensure the environment is looked after and 47% of respondents felt that government restrictions on private property were necessary. Agreement with both of these measures has declined since 2016 when agreement with these statements was 91% and 73% respectively.

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# PROJECT OVERVIEW



## BACKGROUND & METHOD

### Background

Waikato Regional Council is the local authority responsible for environmental management across the Waikato region. Waikato Regional Council undertakes the *Your Environment – What Matters?* survey every three years because the council recognises the key role of residents in achieving sustainable resource management.

The survey is designed to measure Waikato residents' environmental awareness, attitudes, knowledge, and behaviour. The last survey was undertaken in 2019.

The *Your Environment – What Matters?* survey was commissioned again in 2022 and the information from this survey will be used to:

- Help the council to gain a better understanding of the views of residents regarding the environment.
- Understand residents' awareness of the impacts and effects of people on the natural environment.
- Gather public opinion on environmental issues that contribute to policy development.
- Evaluate current policies and programmes and anticipate public responses to new environmental policies and programmes.

### Method

A mixed-method approach to data collection, including both online and telephone interviewing, was used to ensure a representative sample.

- Online interviewing: The online data collection was completed through the use of a third-party panel provider. Waikato residents were invited to participate in a self-completed online questionnaire. This component of the data collection targeted younger and urban respondents and had a 24% response rate.
- Telephone interviewing: Waikato residents were called and invited to complete the survey over the telephone. This component of the data collection assisted in generating responses from rural residents and had a 21% response rate.

A breakdown of the responses collected by each method is outlined in the table below.

Method	Number Achieved
Online	n=792
Telephone	n=234
Total	n=1,026

The survey was designed by Waikato Regional Council, and was around 20–25 minutes in duration.

## SAMPLE

### Sample

The final sample size for this project is n=1,026. This yields a maximum margin of error of +/-3.06% at the 95% confidence interval. Responses were collected from each territorial authority and the sample size for each area is shown in the table below.

Territorial Authority	Number Achieved
Hamilton City	n=266
Waikato	n=92
Waipā	n=91
Waitomo	n=82
Ōtorohanga	n=81
Thames-Coromandel	n=80
Matamata Piako	n=80
Hauraki	n=79
South Waikato	n=79
Taupō	n=79
Rotorua	n=17

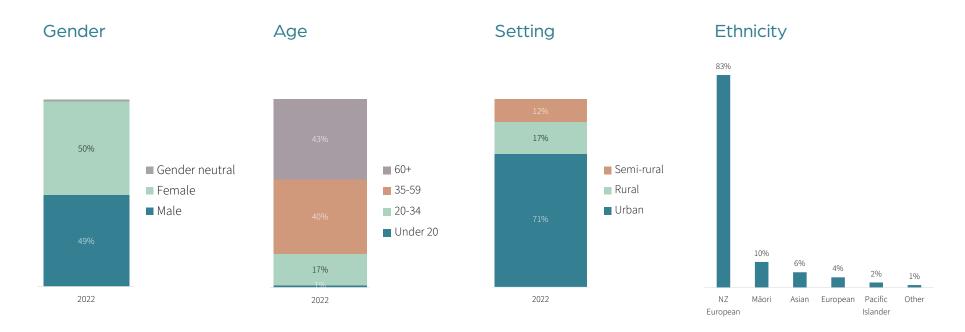
### Weighting

The representativeness of the sample is increased by weighting the age distributions in the survey to reflect the proportions found in the larger population. The weighting proportions outlined in the table below were taken from the 2018 Census data. These have been applied to the data set.

Age group	Proportion (%)
Under 35	29%
35–59	41%
60+	30%

## SAMPLE

The findings below show the unweighted demographic profile of the final sample. Fifty percent of respondents identified as female (compared to the 2018 Census proportion of 51%) while 49% identified as male (compared to the 2018 Census proportion of 49%). The greatest proportion of respondents were aged 60 years and older (43% compared to the 2018 Census proportion of 30%), while 83% of the sample identified as New Zealand European (compared to the 2018 Census proportion of 74%\*). Seventy one percent of respondents resided in an urban location.



\*74% is the proportion of people in the Waikato Region who identified as European as a single or combined ethnic group in the 2018 Census. Other ethnic group proportions were: Mãori 24%, Asian 9%, Pacific Islander 4%, and Other 1%. The categories from the 2018 Census are slightly different to those in the survey.

## SECTION 1: SETTING THE SCENE

This section outlines respondents' perceptions, knowledge, and attitudes towards the environment.

This section includes content relating to:

- Key environmental issues facing the region
- Respondents' self-rated knowledge of environmental issues
- Respondents' knowledge of environmental issues
- Respondents' environmental attitudes

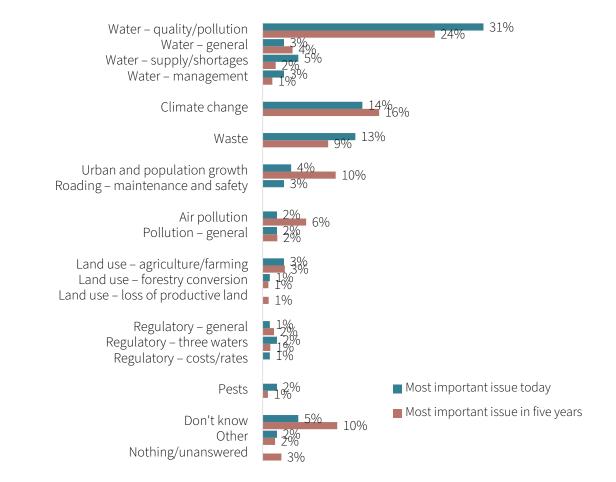
Respondents were asked to identify what they thought was the most important environmental issue facing the Waikato region today. These responses were collected verbatim and then post coded into key themes; these themes are displayed in the chart to the right.

Water remains the key issue both today (42%) and in five years' time (32%). There was an increase in the proportion of respondents who mentioned issues of urban and population growth in five years, while roading issues were not mentioned at all in the five year responses.

"Going forward the water is the one thing we really need and it is not improving like it should be." – Ōtorohanga resident

"There is so much previously productive farmland, in particular horticultural land, being sold to developers for new housing estates that we are in danger of running out of room to grow food." – South Waikato resident

### Most Important Environmental Issue Facing the Waikato Region Today and in Five Years' Time



Respondents were also asked why the environmental issue they identified was important. The following summary provides a representative sample of reasons respondents gave for why they considered the issue they identified to be the most important.

### Water

Water comprised 42% of all responses for the immediate issue and 31% of all the responses in five years' time, and many of these comments focused on the need to improve water quality. Water issues were of greatest concern amongst respondents aged 35–59 years (47%), those who were rated pro-ecological (47%), and respondents who identified as Māori (55%).

Water was considered the most important environmental issue due to the critical role it plays in people's lives and the wider ecosystem.

### "...Water of course is important to us all for many aspects of our lives, so anything that affects the quality and safety of our water is important for the Waikato and its people." – Hamilton resident

Respondents also noted that it was often an indicator for the greater health of the region, thus a deterioration in water quality signified wider environmental issues for the Waikato region.

"The river and its tributaries is the Waikato. If it is healthy then the rest of the Waikato environment will be healthy." – Taupō resident

Comments indicate that respondents perceive the current state of Waikato waterways to be poor with respondents using the terms 'sick' and 'polluted' to describe the current state of some water bodies.

### "The Waikato River is a prominent landmark throughout the Waikato, yet it is a dangerous, filthy and polluted environment that is more shameful to the Waikato than anything we can be proud of." – Waipā resident

In the long term, pressures on water quality and availability were regarded as most impacted by urban and population growth, agricultural intensification and the impacts of climate change on water supply.

### "The increasing population, also the division between agricultural and other entities. There is a lack of long-term planning for water." – Hamilton resident

Respondents also noted a lack of activity to date in addressing water quality issues is likely to lead to an increased need to prioritise water in the future.

### *"Because if we don't take drastic action it won't be fixed!" – Waikato resident*

### Climate Change

Climate change was considered the most important environmental issue facing the region today by 14% of respondents and 16% considered it the most important in five years' time

Climate change was considered most important because the impacts will affect everyone.

"Adverse changes in the climate will affect everyone by way of droughts, floods, more challenging growing conditions for food crops." – Waipā resident

"This is not only an important issue for the Waikato region but for the entire world. It means because of our years of neglect towards the environment, the weather patterns are changing, causing more damage to the environment now than we human beings have done in all these years." – Hamilton resident

Respondents noted the impacts of climate change are not limited to hazards and some environmental features but have far-reaching and significant cascading impacts on the environment as a whole.

"It is creating weather events that are causing coastal erosion, droughts which are affecting the native bush, rain events which cause slips and damage to the land, high wind events and a rising tide level." – Thames-Coromandel resident

Respondents also noted the effects of climate change will have a large

impact on how people live their lives and how they engage with the environment.

### "The biggest concern is we are losing a lot of land plus with this high-water level we are likely to be closed in, in our little district, the roads will go out first, they'll be flooded." – Waitomo resident

A number of respondents noted the urgent need to make necessary changes to reduce the impacts of climate change.

### "It's an urgent and critical issue that potentially threatens all life on earth and we have limited time to mitigate the impacts." – Hamilton resident

The need to act with urgency to address climate change was noted more frequently by those who felt climate change was the most important issue in five years' time. Many of these responses highlighted the impacts of climate change in their communities.

"Summers are getting harder (as an overall trend). Farming practices are having to be adjusted as the seasons seem to be harsher. It's also an issue for towns – Morrinsville always ends up on very strict water restrictions every summer, and I can only imagine it getting worse with Lockerbie being built, and who could forget that summer that the whole town had no water for days, and we had to go get water from tanker trucks parked in the streets." – Matamata Piako resident

It is interesting to note that, while not statistically significant, 20% of

respondents aged 60+ years mentioned climate change as the most important environmental issue while this was slightly lower amongst respondents under 35 years (13%) and 35–59 years (10%). Again, while not a statistically significant difference, of those who mentioned climate change, the highest proportion was amongst respondents from Thames-Coromandel (22%).

### Waste

Waste was mentioned by 13% of respondents as the most important environmental issue facing the region today and by 9% of respondents as the most important environmental issue in five years' time.

Those who felt waste was the most important issue frequently mentioned the extent of waste they observed in their area and the impacts on the environment including waterways and greenhouse gases.

### "There is always rubbish everywhere and it makes the area look disgusting, it's bad for the environment." – Taupō resident

Respondents also noted the lack of personal responsibility for waste, the need to reduce waste in the production of things people use and concerns over the unsustainability of landfills.

"Driving through the country, going to the river or nature walks there are always rubbish bags, household waste, tyres, mattresses dumped on the side of the road because it seems dumping it in nature is easier and cheaper than doing the right thing. It makes me

### angry. Dirty nappies tucked in the bush, dumped cars, it's like those that don't care for the future of the environment." – Waikato resident

A few respondents noted there was also a need for further education and/or innovation in this space to help people to change their waste practices in the future.

"We have separate bins for recycling but no education behind them. No one reads labels, we need short fun video clips to say stuff like no lids on the bottles etc, we need to make some sort of bag for the food bins as we don't use ours because it's just gross to clean. Big families' red bins are too small, we are a family of five and the red bin is just too small." – Hamilton resident

Some respondents were concerned about where increasing amounts of waste will go when the current facilities reach capacity, e.g. landfills. Others mentioned barriers to disposal including cost and lack of local facilities, all of which undermine capacity to manage the impacts of waste on the environment.

"The amount of rubbish from each household seems to be increasing. Larger amounts are too costly for some people to dispose of and so find other ways of disposing it i.e. dumping on roadsides. Landfills may soon be at capacity and do we actually want to bury our rubbish?" – Waitomo resident

Respondents also noted population growth had increased the volume of waste, increasing the pressure on waste services and the impacts of waste on the environment.

"As the population grows, we need to be stronger in reducing waste and pretty packaging and take ownership in keeping our environment clean." – Matamata Piako resident

Although not a statistically significant difference, female respondents (17%) and respondents under the age of 35 years (19%) were more likely to mention waste as an environmental issue for the region.

### Urban and Population Growth

Urban and population growth comprised 4% of responses for the most important environmental issue facing the Waikato region today, but comprised 10% of the issues facing the region in the next five years, suggesting respondents see this issue as increasing in significance over the next five years.

Respondents who considered urban and population growth most important often cited the increased pressure on infrastructure, which some noted was already reaching capacity limits. This appeared to be more commonly mentioned by respondents in smaller communities.

"We are under resourced as far as sewage and grey water treatment capacity and management. There is no monitoring or recording of, or treatment of, water going from our roads to the Waikato River." – Waitomo resident

Respondents mentioned that an increase in population also brings an increase in traffic volume and subsequent air pollution. The issue of increased traffic was also linked to a lack of sufficient public transport to accommodate a larger population.

"As well as the waste pollution caused by vehicles there is also noise and visual pollution of vehicles and roading. Disturbance of natural environs from motor vehicles and also cycleways displacing soil, plants, and fauna with gravel and waste. Vast improvements are required in the quality, availability and affordability of public transport and freight transportation." – Waipā resident

Respondents also noted population increases drive the need for more housing, particularly affordable housing, with some respondents stating that the current housing stock is of poor quality and/or expensive. However, increased housing also changes the character of an area and respondents noted it can herald the loss of natural areas and habitats.

### "Due to urban growth this is reducing the area in which native plants can be grown which in turn is decreasing the native animals." – Matamata Piako resident

Respondents who felt urban and population growth was the most important issue in five years' time referred to the negative impacts of pressures on resources, infrastructure and the environment.

### "Not always sure if the infrastructure as far as waterways and pipe laying is sufficient for the huge property development we are currently seeing" – Waipā resident

"The rate that we use water is increasing, and the infrastructure doesn't seem set up to curb usage or provide alternatives" – Hamilton resident

Other impacts of urban and population growth mentioned were increased waste and loss of land for food production.

#### "Too many people that create pollution that has an effect on the environment." – Hauraki resident

#### Roading

Respondents who considered roading to be an important environmental issue today (3%) expressed concern over the safety and poor condition of the region's roads. Although not statistically significant, the highest mentions were in Hauraki and Waipa districts. No respondents considered roading to be the most important issue in five year's time.

#### "The roads are in very poor condition and slowing the traffic down there by keeping all the cars and hundreds of trucks on the road longer." – Taupō resident

### Air Pollution and Pollution (General Mention)

Both air pollution and general mentions of pollution made up the 2% (each) of the environmental issues respondents felt were most important in the region today. Air pollution rose to 6% of responses for the most important issue in five years' time, while general mentions of pollution still comprised 2% of responses. Although not a statistically significant difference, air pollution had slightly higher mentions as a long-term issue for respondents under 35 years of age (9%) and Asian respondents (11%).

Many respondents commented that the increase in the number of heavy vehicles, factories, and/or cars in the area is causing increased air pollution and emissions.

### "Because New Zealand has too many cars. When we go for a walk the air is full of exhaust gases." – Hamilton resident

In the long-term respondents also focused on vehicle use and how this is likely to increase as the population increases, leading to greenhouse gas emissions.

### "As the region will grow more cars will be on the road so there will be more fumes." – Matamata Piako resident

### Land Use

Respondents who identified land use as the most important issue for today (4%) and in five years' time (5%) frequently mentioned agricultural land use and the negative impacts of fertiliser/effluent runoff.

### "Nutrient loss to groundwater and rivers and streams. Not just farming but supporting industry too, Fonterra wastewater irrigation for example." – Waipā resident

Some respondents noted this was a particularly relevant situation for the Waikato region given the topography and the number of dairy farms in the area.

"They [waterways] are very unique in the Waikato, and the farming is really intensive. There needs to be a clearer balance of priorities, especially in the Waihou Piako." – Hauraki resident

Loss of productive land was mentioned as a long-term consequence of urban and population growth and concerns relate to "running out" of land needed to produce food.

### "Urban spread reduces farming and market gardens and reduces the production of food." – Waipā resident

### *"If all these people are coming here they will take up farmland and there will be reduced land to grow food." – Hauraki resident*

A few respondents expressed opposition to conversion of farms to forestry due to loss of food producing capacity and loss of opportunity to invest in permanent native forest.

"Ruining our native bush, wilding pines growing in native bush reserves. The mess left behind with slash, then harvesting, nothing else grows there except gorse after pine. The crap and residue that then goes into our streams, waterways, the erosion once chopped down scarring our landscape, not to mention when there is a flood the damage that is wrought." – Waitomo resident

### Regulatory

Issues relating to regulation accounted for 4% of all mentions for the most important environmental issue facing the region today and was significantly more likely to be mentioned by rural respondents (9%) and respondents over the age of 60 years (8%). Regulatory issues accounted for 3% of the environmental issues facing the region in five years' time. A small number of these responses focused on the Three Waters Programme expressing uncertainty over the benefits of the programme with some objecting to the process/lack of consultation. Other respondents expressed concerns over the impact of the programme on communities, e.g. division between cities and towns or rural and urban areas.

"Sort it all out. I'm not hard against it, but ideally it could be sorted so everyone can be happy about it both local and New Zealand wide." – South Waikato resident

"The infrastructure that is needed to make it work is not there so all the money will be spent on the big cities and the small ones will miss out." – Hamilton resident

Some responses focused on the increase in rates in particular, ability to pay and perceptions that this cost was unjustified.

### "The way the rates have gone up when people are at their most vulnerable and struggling due to the effects of the pandemic to our economy." – Hamilton resident

A number of responses indicated discontent over "lack of action".

### "Because authorities appear unwilling to do anything meaningful" – Hamilton resident

### Pests

Pest comments made up 2% of the most important environmental issues facing the region today, and 1% of the most important environmental issues facing the region in five years' time.

Comments about pests related to both plants and animals. Pests were perceived as an issue for the environment due to the damage they cause the environment and the negative impact they have on biodiversity.

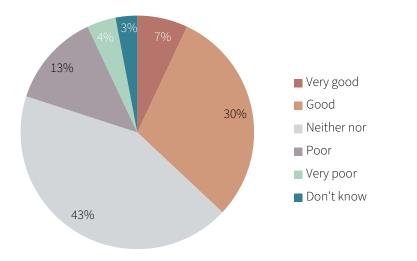
"The amount of rabbits and plants such as privet and Wandering Jew are increasing hugely and rapidly, causing huge issues for the wellbeing of humans, fauna and flora and soils and waterways." – Waipā resident

Some respondents also felt there were limited resources provided for pest eradication.

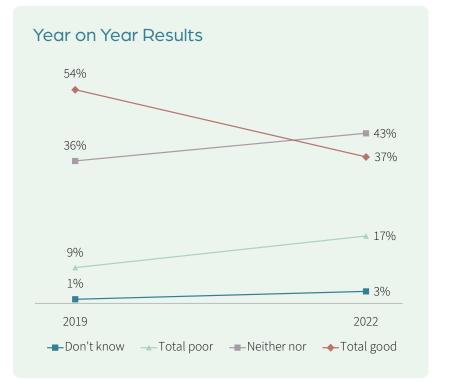
"There does not seem to be the resources from the government to control the increase." – South Waikato resident

## SELF-RATED KNOWLEDGE

Respondents were asked to rate their own knowledge of environmental issues on a scale of very good to very poor. Forty three percent of respondents rated their knowledge of environmental issues as neither good nor poor, followed by 37% who rated their knowledge as either good (30%) or very good (7%). Seventeen percent of respondents rated their knowledge as poor or very poor while 3% were unsure how to rate their knowledge. Year on year trends showed that fewer respondents perceived themselves to have good knowledge of environmental issues when compared to 2019 (54%), while a greater proportion of respondents perceived themselves to have poor knowledge (17% cf. 2019, 9%), or neither good nor poor knowledge (43% cf. 2019, 36%).



### Self-Rated Knowledge of Environmental Issues



## SELF-RATED KNOWLEDGE

The table below shows results for the self-rated knowledge measure for each district. An upwards arrow indicates the result was significantly higher than the total result, while a downwards arrow indicates a result was significantly lower than the total result.

	Total	Thames- Coromandel	Hauraki	Matamata Piako	South Waikato	Taupō	Waikato	Hamilton City	Waipā	Ōtorohanga	Waitomo
Very good/Good	37%	41%	48%	34%	37%	40%	31%	32%	20%↓	62% ↑	52% ↑
Neither nor	43%	41%	30%	48%	40%	36%	56%	48%	60% ↑	22% ↓	25% ↓
Poor/Very poor	17%	15%	21%	18%	21%	14%	11%	17%	17%	15%	18%
Don't know	3%	2%	0%	0%	2%	10% ↑	2%	2%	3%	1%	5%



In addition to understanding people's self-rated knowledge, this study also uses a set of knowledge statements as indicators of respondents' level of environmental knowledge.

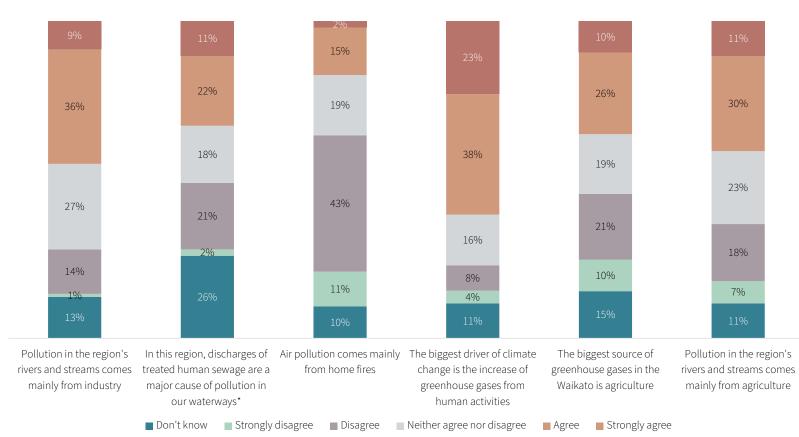
The following six statements are used to rate respondents' knowledge of regional environmental issues.

- 1. Pollution in the region's rivers and streams comes mainly from industry.
- 2. In this region, discharges of treated human sewage are a major cause of pollution in our waterways\*.
- 3. Air pollution comes mainly from home fires.
- 4. The biggest driver of climate change is the increase of greenhouse gases from human activities.
- 5. The biggest source of greenhouse gases in the Waikato is agriculture.
- 6. Pollution in the region's rivers and streams comes mainly from agriculture.

Responses to the statements are used as indicators of environmental knowledge. The categories are calculated as follows:

- The 'most knowledge' rating means the respondent has 5 or 6 responses correct (high knowledge).
- The 'medium knowledge' rating means the respondent has 3 or 4 responses correct (moderate knowledge).
- The 'least knowledge' rating means the respondent has 0, 1, or 2 responses correct (low knowledge).

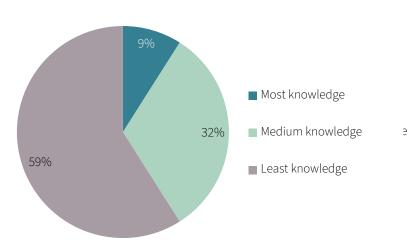
The results for the six knowledge statements are shown below. A number of respondents stated that they neither agreed nor disagreed with a statement or were unsure how to respond to a statement. While these responses are counted as incorrect in the knowledge rating it is possible that a proportion of the neither/nor or unsure responses reflect a correct interpretation of the statement.

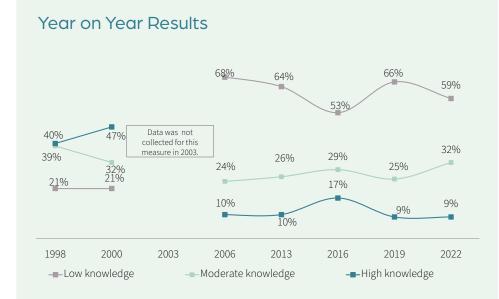


### Responses to Knowledge Questions

*Q: Do you agree with the statement...?* \*Disagreement with this statement is the correct response.

This year, 59% of respondents were categorised as having low knowledge, 32% were categorised as having moderate knowledge, and 9% of respondents were categorised as having high knowledge. Over time, the categories have moved slightly, however the proportion of respondents who have low knowledge has consistently been the highest figure since 2006, while the proportion of respondents who have high knowledge has consistently been the lowest figure since 2006. Respondents rated as having the most knowledge were more likely to rate their own knowledge as high (57% of those rated as having the most knowledge rated themselves as having good or very good environmental knowledge). In comparison, respondents who were rated as having the least knowledge were more likely to self rate as neither good nor poor (48%) and 33% of this group rated themselves as having good or very good environmental knowledge of environmental issues.





### Knowledge Groups

The table below shows the results for each of the knowledge groupings for each district. An upwards arrow indicates the result was significantly higher than the total result, while a downwards arrow indicates a result was significantly lower than the total result.

	Total	Thames- Coromandel	Hauraki	Matamata Piako	South Waikato	Taupō	Waikato	Hamilton City	Waipā	Ōtorohanga	Waitomo
High knowledge	9%	5%	14%	11%	17%	14%	5%	7%	5%	9%	11%
Moderate knowledge	32%	30%	32%	27%	39%	24%	25%	39%	28%	28%	28%
Low knowledge	59%	65%	54%	62%	44%	62%	70%	54%	67%	64%	61%

Basic ecological beliefs have a strong relationship to people's awareness of environmental problems, their support for efforts to solve them and their willingness to contribute to the solution. The survey measures the environmental attitudes of Waikato residents using the New Environmental Paradigm (NEP) scale. In general, scholars agree that the six item NEP rating scale used here measures ecological beliefs or worldview. Surveys using the NEP scale as a predictor of more specific environmental beliefs, attitudes, and behaviours became widespread in the 1990s and have increased substantially in recent years.

Those surveyed were given six base statements using an adapted version of the NEP scale. This scale distinguishes people's ecological worldviews or their basic beliefs about humans' relationship to the environment.

The six statements are:

- 1. The balance of nature is very delicate and easily upset (strongly agree is pro-ecological).
- 2. Modifying the environment for human use seldom causes serious problems (strongly disagree is pro-ecological).
- 3. Plants and animals exist primarily to be used by humans (strongly disagree is pro-ecological).
- 4. The earth is like a spaceship with only limited room and resources (strongly agree is pro-ecological).
- 5. There are limits to economic growth even for developed countries like ours (strongly agree is pro-ecological).
- 6. Humans are meant to rule over the rest of nature (strongly disagree is pro-ecological).

The NEP scale indicates the spread of basic ecological beliefs across three categories, pro-ecological, mid-ecological and anti-ecological Using the NEP scale, a score of 6–18 represents an anti-ecological attitude, 19–24 a mid-ecological attitude, and 25–30 represents a proecological attitude.

The results for the NEP questions are shown below. These results are combined to calculate the NEP scale.

#### 14% 17% 16% 15% 15% 18% 49% 50% 57% 41% 42% 43% 26% 14% 13% 27% 24% 20% 12% 10% 8% 3% 2% The balance of nature is very Modifying the environment Plants and animals exist Earth is like a spaceship with There are limits to economic Humans were meant to rule growth even for developed delicate and easily upset for human use seldom primarily to be used by only limited room and over the rest of nature

### Responses to NEP Scale Questions on Environmental Attitudes

Strongly disagree Disagree Unsure Agree Strongly agree

resources

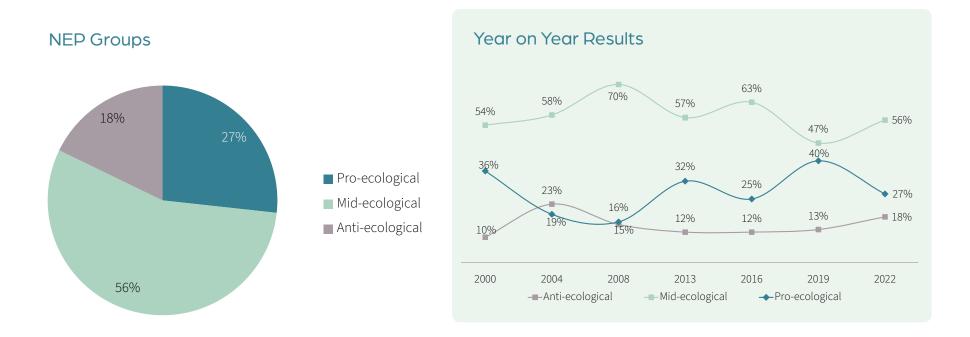
humans

*Q*: Here are some statements about the relationships between human beings and the environment. Even though the statements might sound a bit 'different', these are used worldwide as a measure of environmental concern. For each one please indicate whether you strongly agree, agree, are unsure, or disagree or strongly disagree with it?

causes serious problems

countries like ours

In 2022, 56% of respondents were rated mid-ecological, 27% were rated pro-ecological, and 18% were rated anti-ecological. These results have been tracked since 2000 and the year on year results show fluctuations across each category. This year there is an increase in the proportion of respondents rated mid-ecological (56% cf. 2019, 47%) and a decline in the proportion of respondents rated pro-ecological (27% cf. 2019, 40%). There has also been a small increase in the proportion of respondents rated anti-ecological (18% cf. 2019, 13%).



*Q*: Here are some statements about the relationships between human beings and the environment. Even though the statements might sound a bit 'different', these are used worldwide as a measure of environmental concern. For each one please indicate whether you strongly agree, agree, are unsure, or disagree or strongly disagree with it?

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The table below shows the results for each of the NEP groups for each district. An upwards arrow indicates the result was significantly higher than the total result, while a downwards arrow indicates a result was significantly lower than the total result.

	Total	Thames- Coromandel	Hauraki	Matamata Piako	South Waikato	Taupō	Waikato	Hamilton City	Waipā	Ōtorohanga	Waitomo
Pro-ecological	27%	24%	20%	24%	29%	33%	37%	26%	31%	23%	21%
Mid-ecological	56%	57%	62%	66%	58%	42%	51%	49%	62%	65%	61%
Anti-ecological	18%	19%	18%	10%	13%	25%	12%	25% ↑	7%	12%	19%

Base sizes: Thames-Coromandel n=80, Hauraki n=79, Matamata Piako n=80, South Waikato n=79, Taupō n=79, Waikato n=92, Hamilton City n=266, Waipā n=91, Ōtorohanga n=81, Waitomo n=82.

Testing applied to these results takes into account a subgroup's sample size and result and compares this to all those who are not in that subgroup. Subgroups with different sample sizes may achieve different statistical significance results.

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## NEP ANALYSIS -

The following summary outlines key differences in the way those rated pro, mid, or anti-ecological responded to the knowledge questions.\*

### Self-Rated Knowledge and Knowledge

Apart from those rated anti-ecological being more likely to be unsure how to rate their own environmental knowledge, there were minimal differences between NEP groups across the self-rated knowledge results. Respondents who were rated anti-ecological were more likely to select don't know when asked to rate their own environmental knowledge than those rated mid or pro-ecological. There were several differences when comparing the knowledge ratings of the different NEP groups. Respondents who were rated anti-ecological were more likely to be categorised as having low knowledge (71%) and less likely to be categorised as having moderate knowledge (20%). Respondents who were rated pro-ecological were more likely to be categorised as having moderate knowledge (42%) and were less likely to be categorised as having low knowledge (49%). There were no differences across the high knowledge category which was 9% for all NEP groups.

Self-Rated Knowledge of Environmental Issues	Anti-ecological	Mid-ecological	Pro-ecological
Very good/Good	39%	34%	43%
Neither good nor poor	37%	45%	44%
Very poor/Poor	15%	19%	13%
Don't know	8% ↑	2%	0% ↓

Knowledge of Environmental Issues	Anti-ecological	Mid-ecological	Pro-ecological
High knowledge	9%	9%	9%
Moderate knowledge	20% ↓	30%	42% ↑
Low knowledge	71% 个	61%	49%↓

## **KEY POINTS**

Water quality continues to be considered the most important environmental issue facing the region both today and in five years' time. Other issues considered most important are climate change and urban and population growth. Climate change and urban and population growth gain importance in the long term. Many respondents also see these issues as linked and express concern that climate change and urban and population growth are placing increasing pressure on water quality and supply.

## 2

their knowledge of environmental issues as good than in 2019 (37% cf. 2019, 54%). There was an increase in the proportion of respondents who rated their knowledge as neither good nor poor (43% cf. 2019, 36%). Year on year results for the knowledge questions suggest that proportions have remained relatively consistent since 2006. In the last decade, environmental issues have become more complex both in terms of their causes and solutions, and indicators of environmental knowledge should be interpreted within this evolving context.

This year fewer respondents rated

While there has been a decrease in the number of respondents rated pro-ecological there has been an increase in those rated midecological and a small increase in the proportion rated antiecological

## SECTION 2: ENVIRONMENT

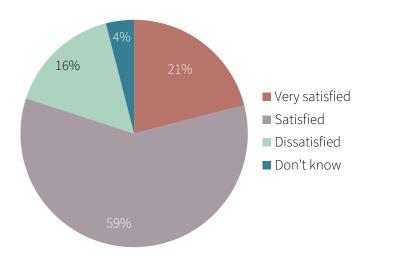
This section outlines respondents' perceptions and concerns about the state of the environment.

This section includes content relating to:

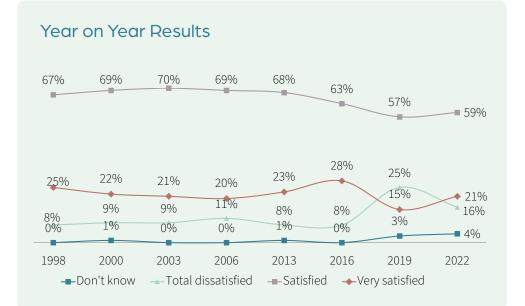
- Satisfaction with the local environment
- Perceptions of change in the environment
- Freshwater
- Air
- Biodiversity
- Land
- Coastal and marine

## ENVIRONMENT SATISFACTION

Respondents were asked to rate their satisfaction with their local environment on a scale of 1–10. These ratings were then grouped to create a dissatisfied (1–4), satisfied (5–7), and very satisfied (8–10) rating. Overall, 59% of respondents reported that they were satisfied with their local environment which was a similar result to 2019 (57%). Twenty one percent of respondents were very satisfied with their local environment (cf. 2019, 15%), and this result has returned to levels previously seen between 2000 and 2013 after a dip in 2019. The proportion of respondents who were dissatisfied with their local environment has decreased from 25% in 2019 to 16% this year. Although not significant, satisfaction increases with age and is slightly higher amongst those in smaller semi-rural districts.

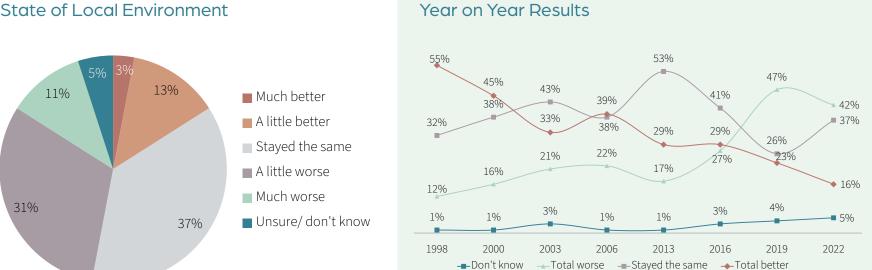


### Satisfaction With Local Environment



## ENVIRONMENT CHANGE

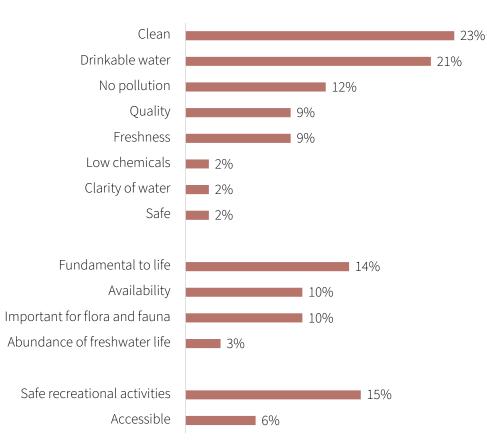
Respondents were asked whether their local environment had generally become better, worse or stayed the same in the past few years. Overall, 42% of respondents felt their environment had become worse over the past few years (cf. 2019, 47%). This figure has climbed steadily since it was first measured in 1998 (12%). This year, just 16% of respondents felt the state of the local environment had improved, and this measure has declined significantly from 55% in 1998. Thirty seven percent of respondents felt their environment had stayed the same over the past few years (cf. 1998, 32%).



### State of Local Environment

## FRESHWATER

### Importance of Freshwater\*



In a new question this year, respondents were asked to state what was important to them about freshwater.

Water quality was the largest theme comprising 64% of all responses and was expressed in terms of clean, clear, fresh, drinkable water and in terms of the absence of pollution and chemicals.

### "It would be good if it was clean enough for swimming, for people and animals, or for drinking if necessary." – Waipā resident

The second theme related to the life-giving properties of freshwater, and this theme accounted for 36% of all the responses.

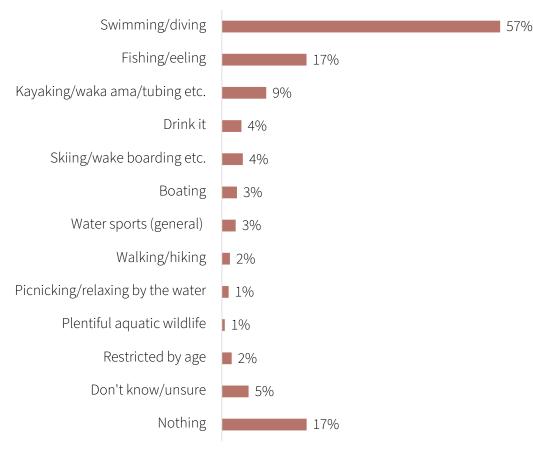
### "Fresh water is the healthiest drink to consume. Fresh water feeds our plants, trees, animals and I like to think helps create fresh air for us to breathe." – Waitomo resident

The final theme related to access and this comprised 21% of all the responses.

"River and stream water should be extra safe for swimming and almost drinkable quality. Ground water should be free of pollutants including nitrates and be of drinking quality without treatment." – South Waikato resident

## FRESHWATER

## Freshwater Activities Respondents Would Undertake in the Region if the Water Quality was Better



Respondents were asked what activities they would like to do in the region if the water quality was better.

The majority of responses identified recreational opportunities they would enjoy if the water quality was better. Fifty seven percent indicated they would swim or dive.

"Swim. I would love it if there were more swimming holes in the area. Because of the quality of the Waikato River though, I choose not to swim in it for two reasons: a) It is dirty b) It is dangerous." – Waikato resident

The second most mentioned item was fishing/eeling (17%) followed by kayaking/waka ama (9%).

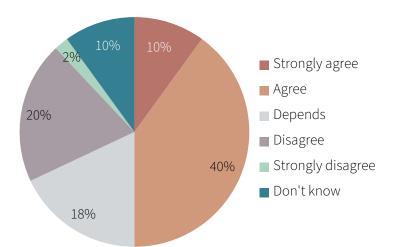
"Swimming and kayaking with my grandchildren. Some of our local peat lakes, such as Lake Ngaroto, are too poisonous for people to swim safely, let alone go boating." – Hamilton resident

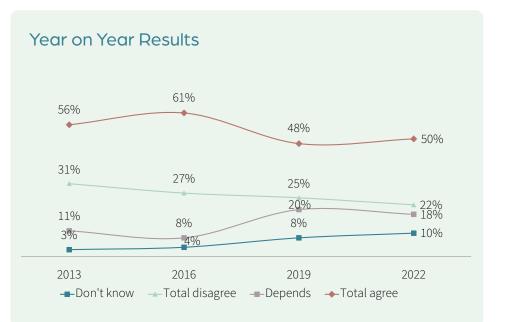
A small percentage of respondents mentioned activities at the water's edge such as walking/hiking (2%), picnicking (1%), and enjoying plentiful aquatic life (1%).

"Bush walks with clean water to drink if needed or swim. Spend the day at a lake with the kids and not worry what's in the water." – Waitomo resident

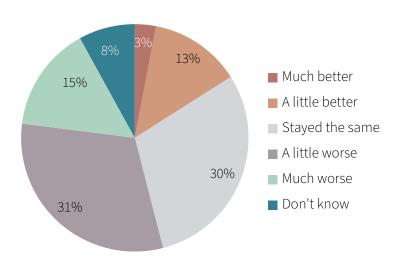
Fifty percent of respondents agreed that the public understood the importance of investing in water quality. Twenty two percent of respondents disagreed that the public understood the importance of investing in water quality (cf. 2019, 25%), while 18% said it depended (cf. 2019, 20%). Ten percent of respondents were unsure whether or not the public understood the importance of investing in water quality (cf. 2019, 8%). The results for this year were similar to those seen in 2019. Results indicate that the proportion of those who disagree that the public understands the importance of investing in water quality has decreased since 2013 while the proportion of those who are unsure has gradually increased (currently 10% cf. 2013, 3%).

#### The Public Understands the Importance of Investing in Water Quality





Forty six percent of respondents felt that water quality in local streams, rivers, and lakes had become worse in the past few years, while 30% felt it had stayed the same and 16% felt it had become better. These results were similar to those seen in 2019, with most results within 3% of the previous measures. However, since 1998 there has been a decrease in the proportion of respondents who stated that the water quality has stayed the same (30% cf. 1998, 43%), and a corresponding increase in the proportion of respondents who felt it has become worse (46% cf. 1998, 25%).

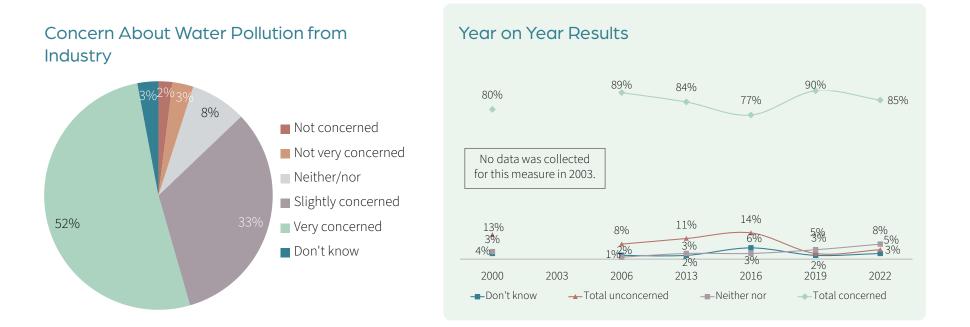


Water Quality in Local Streams, Rivers, and

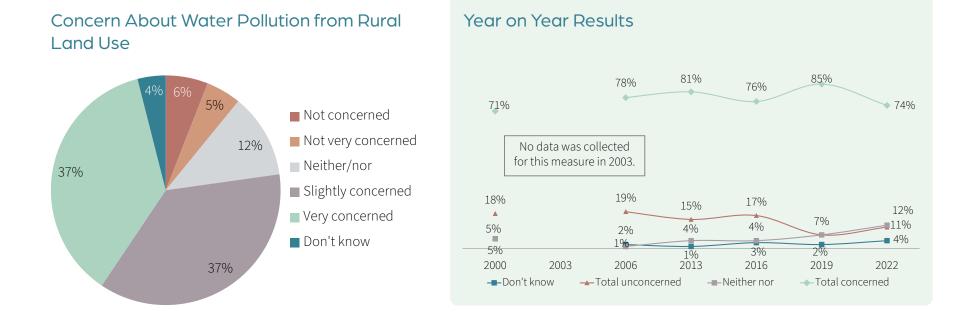
Lakes



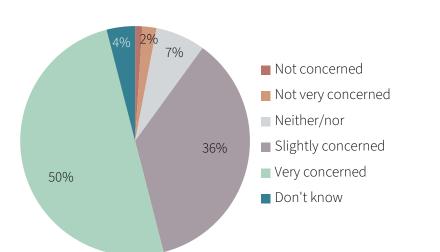
Eighty five percent of respondents were concerned with water pollution from industry (cf. 2019, 90%) while just 5% of respondents were not concerned. Eight percent of respondents were neither concerned nor unconcerned and 3% were unsure how to respond. These results were similar to those seen in 2019 and have remained relatively consistent over the long term.

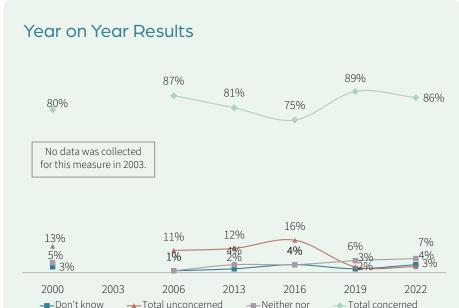


Respondents were asked how concerned they were about water pollution from rural land use. Seventy four percent of respondents were concerned with water pollution from rural land use (cf. 2019, 85%), while 12% were neither concerned nor unconcerned and 11% were not concerned at all (cf. 2019, 7%). Although there has been some small fluctuations in the results over time, these figures have remained relatively steady since 2006, with respondents consistently expressing high levels of concern.



Respondents were asked how concerned they were about water pollution from towns and city areas. Eighty six percent of respondents were concerned with water pollution from towns and city areas (cf. 2019, 89%). The proportion of respondents who were unconcerned remained similar to 2019 (3% cf. 2019, 2%), as did the proportion of respondents who provided a neither nor response (7% cf. 2019, 6%). Levels of concern about water pollution from towns and cities has remained consistently high since 2000.

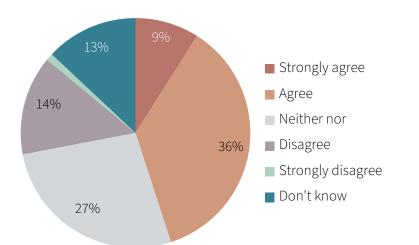


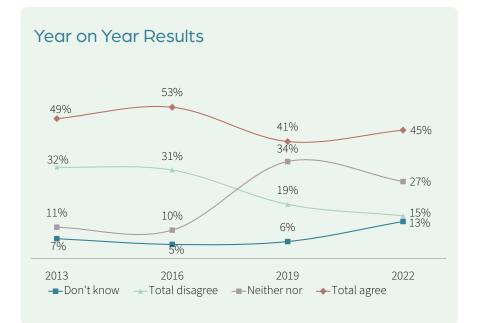


#### Concern About Water Pollution from Towns and City Areas

Forty five percent of respondents agreed with the statement 'pollution in the region's rivers and streams comes mainly from industry' (cf. 2019, 41%). This was followed by 27% of respondents who neither agreed nor disagreed (cf. 2019, 34%), and 15% of respondents who disagreed (cf. 2019, 19%). A further 13% of respondents were unsure whether pollution from the region's rivers and streams comes mainly from industry (cf. 2019, 6%). Agreement with this statement has been relatively steady over time while disagreement shows a steady decline from 32% in 2013 to 15% in 2022. Alongside this the proportions of those who are unsure, or who neither agree nor disagree, have both increased over time (7% and 11% respectively in 2013, cf. 13% and 27% respectively in 2022).

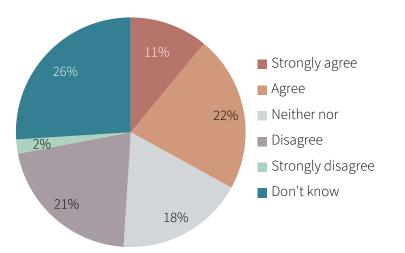
#### Pollution in the Region's Rivers and Streams Comes Mainly from Industry

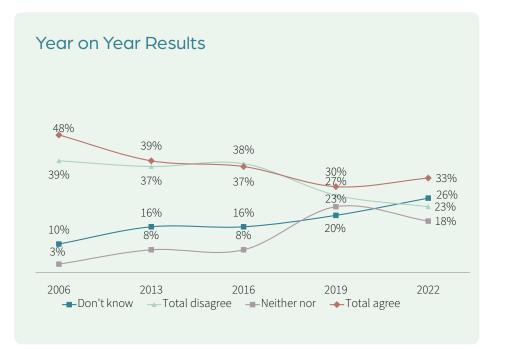




Thirty three percent of respondents agreed or strongly agreed with the statement 'In this region, discharges of treated human sewage are a major cause of waterway pollution'. Both total agreement (33% in 2022 cf. 48% in 2006) and total disagreement (23% in 2022 cf. 39% in 2006) with the statement have declined since 2006. The proportions of respondents who either don't know or who neither agree nor disagree with the statement have increased significantly over time.

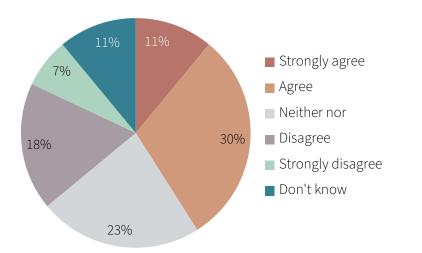
#### Discharges of Treated Human Sewage are a Major Cause of Waterway Pollution in this Region

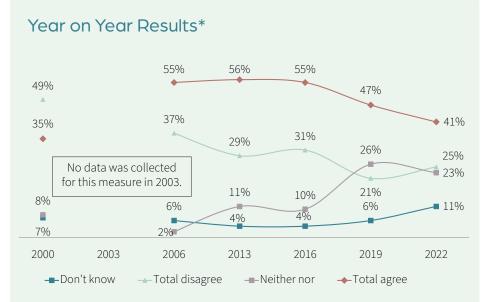




Forty one percent of respondents agreed with the statement 'pollution in the region's rivers and streams comes mainly from agriculture'. This was a 6% decline from 2019 (47%), and a 14% decline since 2006. This year 25% of respondents disagreed that pollution in the region's rivers and streams comes mainly from agriculture. Although this result was similar to that seen in 2019 (26%), this proportion has declined steadily since 2006 (37%). Twenty three percent of respondents neither agreed nor disagreed with this statement, and this proportion has grown consistently since 2006 (2%). Eleven percent of respondents were unsure how to respond to this statement. Please note there has been a slight change in the question's phrasing this year (refer note below).

#### Pollution in the Region's Rivers and Streams Comes Mainly from Agriculture





*Q*: Do you agree or disagree that pollution in the region's rivers and streams comes mainly from agriculture? \*Please note that the phrasing of this statement has changed in 2022. It was previously worded that 'pollution in the region's rivers and streams comes mainly from farmland'.

The table below shows the results for each of the freshwater measures for each district. An upwards arrow indicates the result was significantly higher than the total result, while a downwards arrow indicates a result was significantly lower than the total result.

	Total	Thames- Coromandel	Hauraki	Matamata Piako	South Waikato	Taupō	Waikato	Hamilton City	Waipā	Ōtorohanga	Waitomo
The public understands the importance of investing in water quality (agree/strongly agree)	50%	50%	60%	44%	55%	53%	42%	44% ↓	42%	71% ↑	62% ↑
The water quality of their local streams, rivers and lakes (a little worse/ much worse)	46%	44%	45%	42%	34%	43%	60%	54%	57%	28%↓	29%↓
Water pollution from industry (slightly concerned/very concerned)	85%	71%↓	81%	83%	84%	76%↓	87%	88% h	91%	86%	85%
Water pollution from rural land use (slightly concerned/very concerned)	74%	65%	80%	75%	73%	72%	67%	<b>78%</b> ↑	77%	67%	72%

Base sizes: Thames-Coromandel n=80, Hauraki n=79, Matamata Piako n=80, South Waikato n=79, Taupō n=79, Waikato n=92, Hamilton City n=266, Waipā n=91, Ōtorohanga n=81, Waitomo n=82.

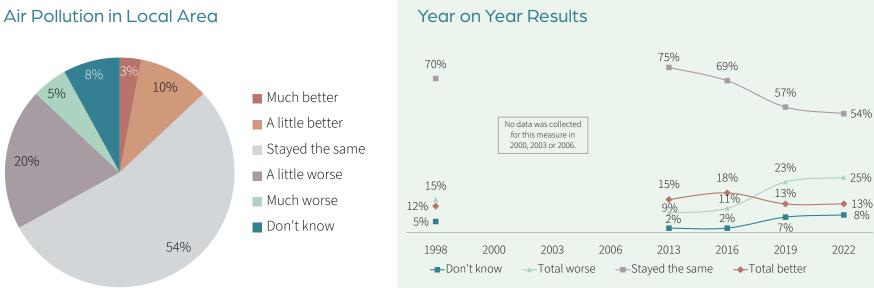
Testing applied to these results takes into account a subgroup's sample size and result and compares this to all those who are not in that subgroup. Subgroups with different sample sizes may achieve different statistical significance results.

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	Total	Thames- Coromandel	Hauraki	Matamata Piako	South Waikato	Taupō	Waikato	Hamilton City	Waipā	Ōtorohanga	Waitomo
Water pollution from towns and city areas (slightly concerned/very concerned)	86%	72%↓	81%	84%	91%	78%	93% ↑	85%	85%	92%	93% ↑
Pollution in the region's rivers and streams comes mainly from industry (agree/strongly agree)	45%	40%	37%	46%	49%	43%	41%	49%	41%	42%	51%
Discharges of treated human sewage are a major cause of waterway pollution (agree/ strongly agree)	33%	30%	34%	32%	31%	31%	33%	35%	30%	<b>45%</b> ↑	27%
Pollution in rivers and streams comes mainly from agriculture (agree/ strongly agree)	41%	37%	54% ↑	39%	52%	40%	31%	46%	39%	32%	35%

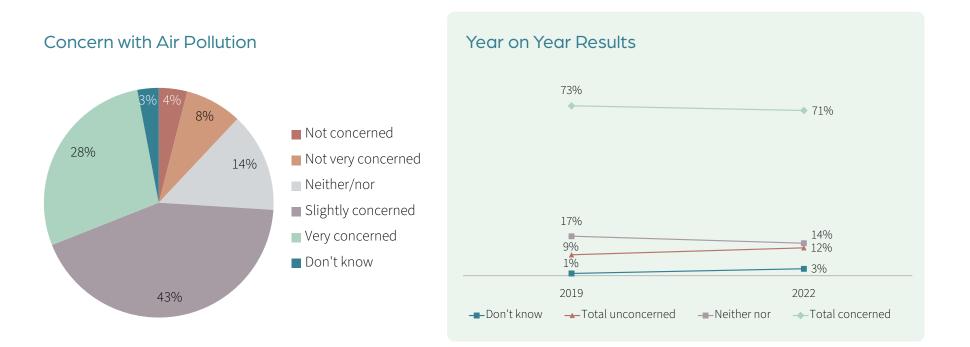
#### 

Fifty four percent of respondents felt that the air pollution in their local area had stayed the same over the past few years (cf. 2019, 57%). Twenty five percent of respondents felt the air pollution had become worse (cf. 2019, 23%) and 13% felt the air pollution in their local area had become better. While these results are similar to those seen in 2019, the long-term trend for this measure indicates that an increasing proportion of respondents feel the air pollution has worsened, while a decreasing proportion feel it has remained the same.



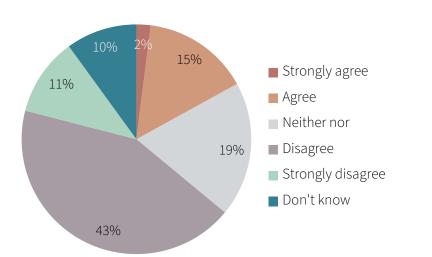
#### AIR

Seventy one percent of respondents were concerned about air pollution, 12% of respondents were unconcerned (cf. 2019, 9%), while 14% of respondents were neither concerned nor unconcerned. These findings are similar to those seen in 2019 when concern with air pollution was first measured.

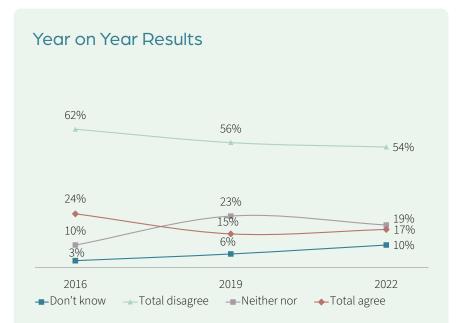


#### 

Fifty four percent of respondents either disagreed (43%) or strongly disagreed (11%) with the statement 'air pollution comes mainly from home fires'. This proportion has declined consistently since 2016 (62%). Seventeen percent of respondents agreed (15%) or strongly agreed (2%) with the statement, while 19% neither agreed nor disagreed. Ten percent of respondents were unsure how to answer this question, and this proportion has increased consistently from 3% in 2016.



#### Air Pollution Comes Mainly From Home Fires



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The table below shows the results for each of the air-related measures for each district. An upwards arrow indicates the result was significantly higher than the total result, while a downwards arrow indicates a result was significantly lower than the total result.

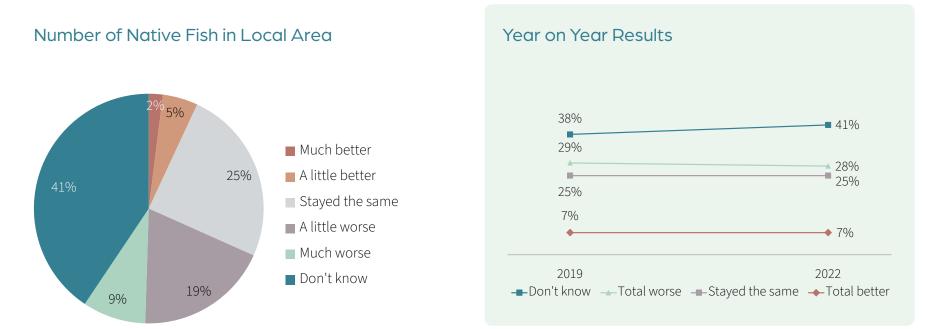
	Total	Thames- Coromandel	Hauraki	Matamata Piako	South Waikato	Taupō	Waikato	Hamilton City	Waipā	Ōtorohanga	Waitomo
Air pollution in local area (a little worse/much worse)	25%	14%	11%	29%	26%	18%	33%	35% ↑	31%	10%↓	10%↓
Concern with air pollution (slightly concerned/very concerned)	71%	61%↓	65%	69%	78%	62%	75%	76%	79%	65%	71%
Air pollution comes mainly from home fires (agree/ strongly agree)	17%	15%	25% ↑	16%	34% ↑	21%	12%	12%↓	10%	22%	27% ↑

Base sizes: Thames-Coromandel n=80, Hauraki n=79, Matamata Piako n=80, South Waikato n=79, Taupō n=79, Waikato n=92, Hamilton City n=266, Waipā n=91, Ōtorohanga n=81, Waitomo n=82.

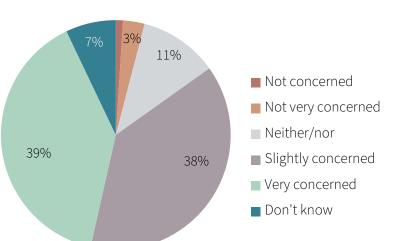
Testing applied to these results takes into account a subgroup's sample size and result and compares this to all those who are not in that subgroup. Subgroups with different sample sizes may achieve different statistical significance results.

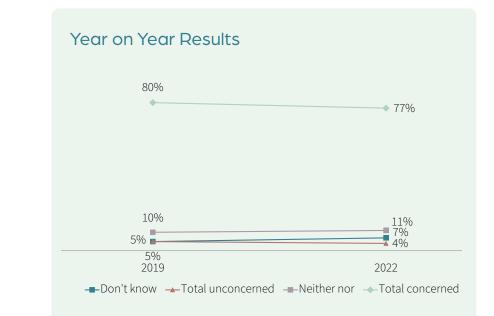
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Forty one percent of respondents said they were unsure whether the number of New Zealand native fish in their local area had become better or worse (cf. 2019, 38%), while 28% of respondents said the number of native fish in their local area had become worse. Twenty five percent of respondents said the number of native fish had remained the same, while 7% of respondents said the numbers had become better. Results are consistent with 2019 results when residents were first asked whether the number of New Zealand native fish numbers in their local area had become better, worse, or stayed the same.



Over three quarters (77%) of respondents were concerned with pest species damaging and reducing New Zealand native fish (cf. 2019, 80%). Eleven percent of respondents were neither concerned nor unconcerned (cf. 2019, 10%) and 7% were unsure how to respond. Just 4% of respondents said they were unconcerned with the damage of pest species on New Zealand native fish (cf. 2019, 5%). These results were similar to those seen in 2019 when this measure was introduced.





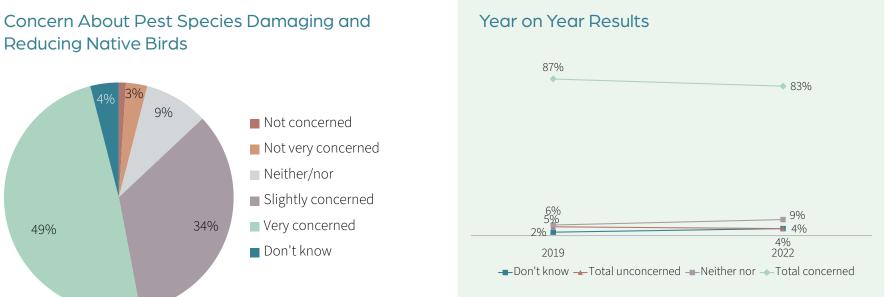
**Concern About Pest Species Damaging and** 

**Reducing Native Fish** 

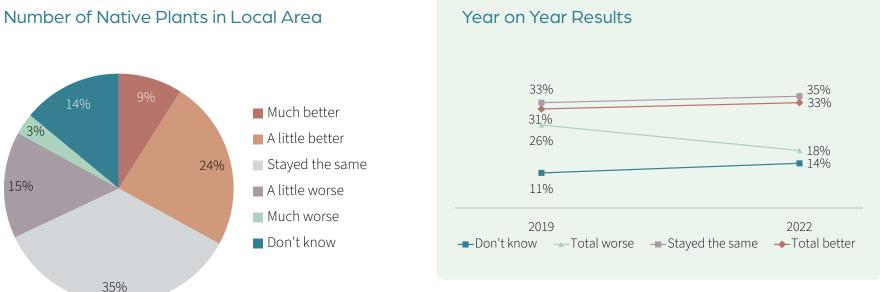
Thirty two percent of respondents said that the number of native birds in their local area had stayed the same (cf. 2019, 33%), while 30% of respondents said the number had become better (cf. 2019, 31%). A further 24% of respondents said the number of New Zealand native birds in their area had become worse (cf. 2019, 26%), while 14% of respondents were unsure (cf. 2019, 11%). These results were similar to those seen in 2019 when this measure was introduced.



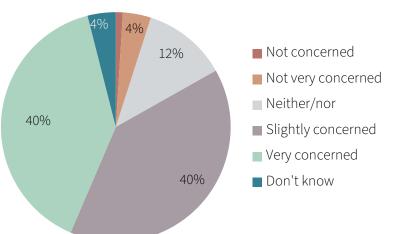
Respondents were asked how concerned they were with pest species damaging and reducing New Zealand native birds. Eighty three percent of respondents were concerned with pest species damaging and reducing native birds (cf. 2019, 87%), while just 4% of respondents were unconcerned (cf. 2019, 5%). Nine percent of respondents were neither concerned nor unconcerned (cf. 2019, 6%), while 4% were unsure how to rate their concern (cf. 2019, 2%). These results were similar to those seen in 2019 when this measure was first included.

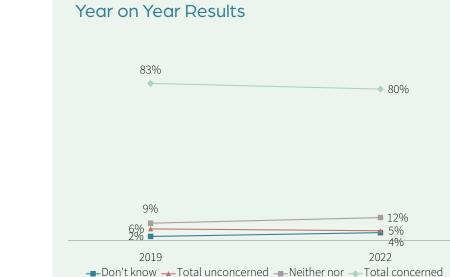


Respondents were asked about changes in the number of native plants in their local area. This year the number of people who said the number of native plants had become worse decreased from 31% to 18%. Thirty five percent said the number of native plants had remained the same (cf. 2019, 33%). Thirty three percent said the number of native plants had become better (cf. 31%, 2019). The number of respondents who were unsure increased slightly from 11% in 2019 to 14%.



Eighty percent of respondents were concerned with pest species damaging and reducing New Zealand native plants (cf. 2019, 83%), while 12% were neither concerned nor unconcerned (cf. 2019, 9%). Five percent of respondents were not concerned with pest species damaging and reducing New Zealand native plants (cf. 2019, 6%) while a further 4% were unsure. These results were similar to those seen in 2019 when views on this measure were first recorded.





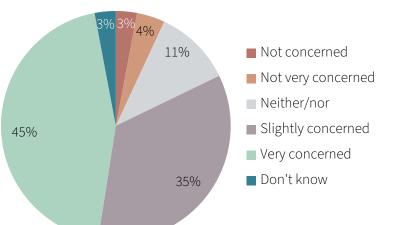
**Concern About Pest Species Damaging and** 

**Reducing Native Plants** 

Concern About Loss of Native Bush and

Wetlands

Respondents were asked how concerned they were about the loss of New Zealand native bush and wetlands. Overall, 80% were concerned with the loss of native bush and wetlands (cf. 2019, 86%). Eleven percent of respondents were neither concerned nor unconcerned (cf. 2019, 7%), while 7% were unconcerned (cf. 2019, 6%), and 3% were unsure how to rate their level of concern (cf. 2019, 2%). Although concern has decreased 6% since 2019, the level of concern remains very high, and the long-term trend shows that the proportion of concerned respondents has increased over time, while the proportion of unconcerned respondents has decreased (currently 7%, down from 33% in 2006).



#### Year on Year Results 86% ◆ 80% 62% 52% 50% 49% Data was not collected 34% 34% 33% for this measure in 28% 2003. 11% 10% 9% 7% 6% 11% 6% 7% 6% 2% 9% 6% 3% 2000 2003 2006 2013 2019 2022 2016 -Don't know - Total unconcerned - Neither nor - Total concerned

The table below shows the results for each of the biodiversity measures for each district. An upwards arrow indicates the result was significantly higher than the total result, while a downwards arrow indicates a result was significantly lower than the total result.

	Total	Thames- Coromandel	Hauraki	Matamata Piako	South Waikato	Taupō	Waikato	Hamilton City	Waipā	Ōtorohanga	Waitomo
Number of NZ native fish in local area (a little worse/much worse)	28%	32%	33%	35%	26%	26%	39%	27%	29%	16%	17%
Pest species damaging and reducing New Zealand native fish (slightly concerned/very concerned)	77%	68% ↓	77%	79%	80%	68%	86%	76%	85%	81%	74%
Number of NZ native birds in local area (a little worse/much worse)	24%	24%	20%	34%	26%	23%	34%	25%	25%	20%	14%
Pest species damaging and reducing New Zealand native birds (slightly concerned/very concerned)	83%	74%↓	83%	87%	87%	77%	83%	79%	85%	89%	93% ↑
Number of NZ native plants in local area (a little worse/much worse)	18%	18%	13%	29%	17%	7%	26%	18%	25%	6%	14%

Base sizes: Thames-Coromandel n=80, Hauraki n=79, Matamata Piako n=80, South Waikato n=79, Taupō n=79, Waikato

n=92, Hamilton City n=266, Waipā n=91, Ōtorohanga n=81, Waitomo n=82.

Testing applied to these results takes into account a subgroup's sample size and result and compares this to all those who are not in that subgroup. Subgroups with different sample sizes may achieve different statistical significance results.

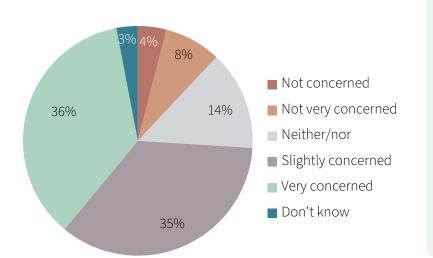
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	Total	Thames- Coromandel	Hauraki	Matamata Piako	South Waikato	Taupō	Waikato	Hamilton City	Waipā	Ōtorohanga	Waitomo
Pest species damaging and reducing New Zealand native plants (slightly concerned/very concerned)	80%	74%	80%	77%	83%	74%	78%	77%	86%	88% ↑	85%
The loss of New Zealand native bush and wetlands (slightly concerned/very concerned)	80%	70%↓	74%	79%	87%	78%	88%	80%	86%	75%	78%



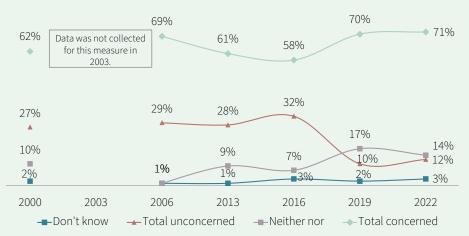
Across Rural Land

Respondents were asked to rate their level of concern over the spread of cities/towns across rural land. Seventy one percent of respondents were concerned with the spread of cities/towns across rural land (cf. 2019, 70%), while 12% of respondents were unconcerned (cf. 2019, 10%). Fourteen percent of respondents were neither concerned nor unconcerned (cf. 2019, 17%), while 3% of respondents were unsure how to rate their concern (cf. 2019, 2%). Concern over the spread of cities/towns into rural areas remains high at 71% while the number of unconcerned respondents has continued to decrease over time (12%, cf. 2006, 29%).

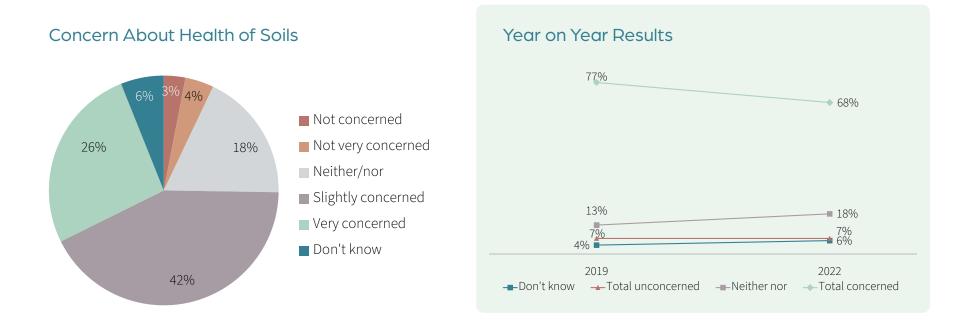


**Concern About Spread of Cities/Towns** 

#### Year on Year Results

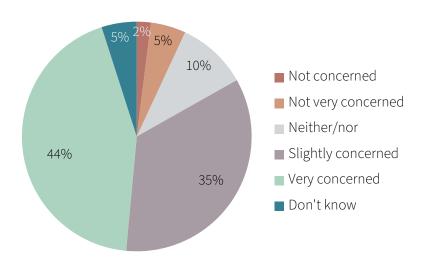


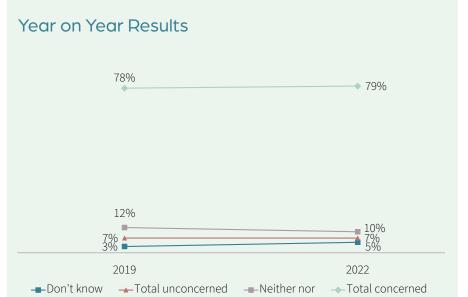
Respondents were asked to rate their level of concern over the health of soils. Over two thirds (68%) of respondents were concerned with the health of soils, which was a decrease from 77% in 2019. Eighteen percent of respondents were neither concerned nor unconcerned with the health of soils (cf. 2019, 13%), while the proportion of respondents who were unconcerned was 7%, which was the same in 2019. Six percent of respondents were unsure how to respond. The results for this year were similar to those seen in 2019 when this measure was first included.



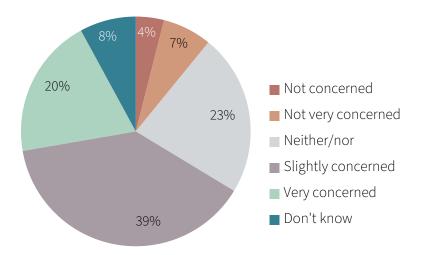
Respondents were asked about their concern regarding the loss of quality food producing rural soils to subdivision and development. Overall, 79% of respondents were concerned with the loss of rural soils (cf. 2019, 78%) while 7% were unconcerned (cf. 2019, 7%). Ten percent of respondents were neither concerned nor unconcerned (cf. 2019, 12%), and 5% were unsure (cf. 2019, 3%). These results have remained consistent since 2019 when this measure was introduced.

#### Concern About Loss of Quality Food Producing Soils to Subdivision and Development





#### Concern About Soil Health in Urban Areas



In a new measure this year, respondents were asked about their concern with soil health in urban areas.

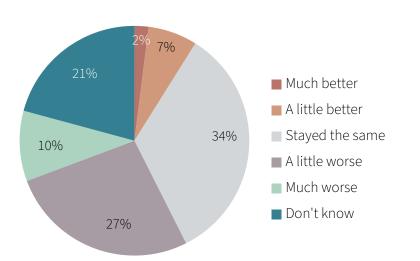
Overall, 59% of respondents were either very concerned (20%) or slightly concerned (39%) with the health of soils in urban areas. Twenty three percent of respondents were neither concerned nor unconcerned, while 11% of respondents were either not concerned (4%) or not very concerned (7%). Eight percent of respondents were unsure how to respond.

The table below shows the results for each of the land measures for each district. An upwards arrow indicates the result was significantly higher than the total result, while a downwards arrow indicates a result was significantly lower than the total result.

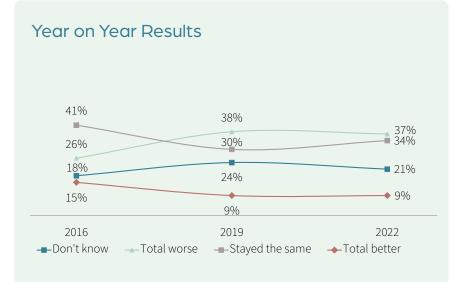
	Total	Thames- Coromandel	Hauraki	Matamata Piako	South Waikato	Taupō	Waikato	Hamilton City	Waipā	Ōtorohanga	Waitomo
The spread of cities/ towns across rural land (slightly concerned/very concerned)	71%	61%	76%	76%	61%	61%	70%	67%	80% ↑	82% ↑	81%↑
The health of soils (slightly concerned/very concerned)	68%	54%↓	76%	74%	77%	73%	74%	64% ↓	77%	69%	66%
The loss of quality food producing rural soils to subdivision and development (slightly concerned/very concerned)	79%	76%	79%	86%	72%	68% ↓	81%	75%	81%	89% ↑	90% ↑
Soil health in urban areas (slightly concerned/very concerned)	59%	48%	63%	67%	62%	53%	54%	63%	62%	52%	55%

Base sizes: Thames-Coromandel n=80, Hauraki n=79, Matamata Piako n=80, South Waikato n=79, Taupō n=79, Waikato n=92, Hamilton City n=266, Waipā n=91, Ōtorohanga n=81, Waitomo n=82.

Respondents were asked about changes in the water quality in local coastal waters. Overall, 37% of respondents felt the water quality in local coastal areas had become worse (cf. 2019, 38%). This was followed by 34% of respondents who said it had remained the same (cf. 2019, 30%), and 21% of respondents who were unsure (cf. 2019, 24%). Nine percent of respondents felt the water quality in local coastal areas had become better. These results were similar to those seen in 2019, and maintain the shifts seen in perceptions which occurred between 2016 and 2019.

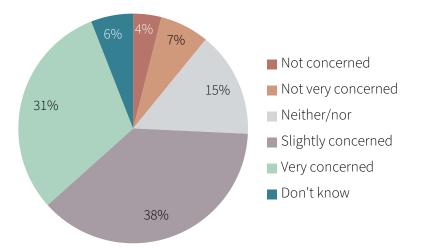


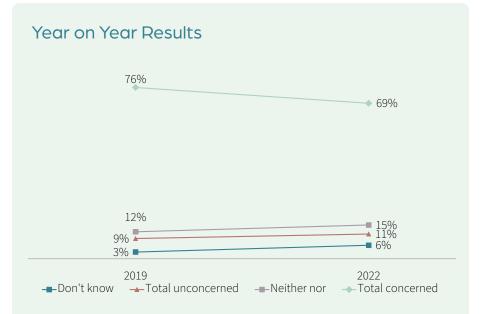
#### Water Quality in Local Coastal Waters



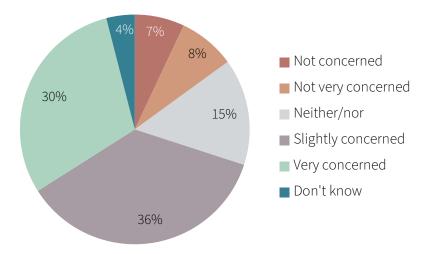
Sixty nine percent of respondents were concerned with the loss of natural character of the region's coastlines through development, which is a decline of 7% since concern was first measured in 2019 (76%). Fifteen percent of respondents were neither concerned nor unconcerned (cf. 2019, 12%), 11% were unconcerned (cf. 2019, 9%), and 6% were unsure how to respond (cf. 2019, 3%).

#### Concern About Loss of Natural Character in the Region's Coastlines through Development





#### Concern About Effects of Sea Level Rise



In a new measure this year, respondents were asked how concerned they were about the effects of sea level rise.

Sixty six percent of respondents indicated they were either slightly concerned (36%) or very concerned (30%) about the effects of sea level rise. This was followed by 15% of respondents who were neither concerned nor unconcerned, and 15% of respondents who were unconcerned. A further 4% of respondents were not sure how to rate their concern.

The table below shows the results for each of the coastal and marine measures for each district. An upwards arrow indicates the result was significantly higher than the total result, while a downwards arrow indicates a result was significantly lower than the total result.

	Total	Thames- Coromandel	Hauraki	Matamata Piako	South Waikato	Taupō	Waikato	Hamilton City	Waipā	Ōtorohanga	Waitomo
Water quality in local coastal waters (a little worse/much worse)	37%	39%	40%	36%	26%	40%	48%	39%	41%	18%↓	23%
Loss of the natural character of the region's coastlines through development (slightly concerned/very concerned)	69%	65%	64%	73%	66%	59%	79% ↑	65%	82% ↑	64%	72%
The effects of sea level rise (slightly concerned/ very concerned)	66%	64%	70%	61%	59%	58%	64%	71%↑	70%	68%	66%

Base sizes: Thames-Coromandel n=80, Hauraki n=79, Matamata Piako n=80, South Waikato n=79, Taupō n=79, Waikato n=92, Hamilton City n=266, Waipā n=91, Ōtorohanga n=81, Waitomo n=82.

Testing applied to these results takes into account a subgroup's sample size and result and compares this to all those who are not in that subgroup. Subgroups with different sample sizes may achieve different statistical significance results.

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#### NEP ANALYSIS -

The following summary outlines key differences in the way those rated pro, mid, or antiecological responded to state of the environment questions.\*

#### Environmental Satisfaction and the Overall State of the Environment

Respondents who were rated pro-ecological were more likely to say that the overall state of the local environment had become worse (52%), however there were minimal differences between the views of respondents who were rated anti-ecological (37%) or mid-ecological (40%). Those rated midecological were more likely to be satisfied with their local environment (84%), while those rated anti-ecological were less likely to be satisfied (71%). Although not shown in the table below, 11% of those rated anti-ecological were unsure how satisfied they were with their local environment, while only 2% (each) of those rated pro-ecological and mid-ecological were unsure.

	Anti-ecological	Mid-ecological	Pro-ecological
State of local environment (little/much worse)	37%	40%	52% ↑
Satisfaction with local environment overall (satisfied/very satisfied)	71%↓	84%↑	79%

#### State of the Environment (little worse/much worse)

Those rated pro-ecological were more likely to think the state of various environmental attributes had worsened. Conversely, those rated anti-ecological held an opposing view, with fewer respondents stating that specific environmental attributes had become worse in the past few years. The exception to this pattern was perceptions relating to changes in air pollution and the number of native plants, where there were no significant differences between those rated anti-ecological or pro-ecological.

	Anti-ecological	Mid-ecological	Pro-ecological
Water quality in local streams, rivers, and lakes	31% ↓	47%	55% ↑
Air pollution in local area	23%	24%	28%
Number of NZ native fish in local area	19% ↓	27%	35% ↑
Number of NZ native birds in local area	15% ↓	26%	28%
Number of NZ native plants in local area	11%	17%	23%
Water quality in local coastal waters	25% ↓	34%	49% 个

\*An upwards arrow indicates the result was significantly higher than the total result, while a downwards arrow indicates a result was significantly lower than the total result.

NEPANALYSIS - The following summary outlines key differences in the way those rated pro, mid, or anti-ecological responded to state of the environment questions.\*ecological responded to state of the environment questions.\*

#### State of the Environment (slightly/very concerned)

Respondents were asked how concerned they were about a range of environmental issues. While concern for environmental issues was generally high across all NEP groups, those rated pro-ecological expressed greater concern for all environmental issues, while those rated anti-ecological expressed less concern.

	Anti-ecological	Mid-ecological	Pro-ecological
Water pollution from industry	64% ↓	87%	93% ↑
Water pollution from rural land use	52% ↓	76%	82% ↑
Water pollution from towns and city areas	65% ↓	87%	95% 个
Air pollution	57% ↓	73%	78% 个
The loss of New Zealand native bush and wetlands	54% ↓	82%	93% ↑
Pest species damaging and reducing New Zealand native fish	54% ↓	80%	88% ↑
Pest species damaging and reducing New Zealand native birds	60% ↓	85%	93% ↑
Pest species damaging and reducing New Zealand native plants	58%↓	81%	90% ↑
The spread of cities/towns across rural land	50% ↓	71%	82% ↑
The health of soils	48%↓	71%	77% 个
The loss of quality food producing rural soils to subdivision and development	58% ↓	81%	87% 个
Soil health in urban areas	42%↓	59%	69% 个
Loss of the natural character of the region's coastlines through development	43% ↓	69%	82% ↑
The effects of sea level rise	40% ↓	67%	80% ↑

\*An upwards arrow indicates the result was significantly higher than the total result, while a downwards arrow indicates a result was significantly lower than the total result.

# DEMOGRAPHIC ANALYSIS

Demographic data shows very few differences between respondents' satisfaction with the environment or their perceptions of the state of the environment.

With regards to freshwater, there were some differences regarding the activities respondents would undertake if the water quality was better. In particular, male respondents would undertake more fishing or eeling (22% cf. the total, 17%) while female respondents would be more likely to swim in the water (61% cf. the total, 57%) or go kayaking (12% cf. the total, 9%).

Although not a significant difference, respondents who identified as Māori or Pasifika also indicated they would be more likely to undertake fishing/eeling (28% and 39% respectively cf. the total, 17%). Respondents who identified as Māori were also more likely to state they felt the number of native fish in their local area and the water quality in local coastal waters had declined in the past few years (44% and 47% respectively stating these attributes had become worse cf. total, 28% and 37% respectively).

Older respondents were more likely to agree the public understands the importance of investing in water quality (59% cf. the total, 50%) and also felt that the water quality in local streams, rivers, and lakes had improved in the past few years (22% cf. the total, 16%). However, older respondents also noted the number of native birds in their area had improved in the past few years (45% noted that this was better or much better cf. the total, 30%), but were more concerned about pest species damaging native plants (85% cf. the total, 80%) and the loss of food producing soils due to development (85% cf. the total, 79%).

Rural residents were less concerned about water pollution from industry (79% cf. the total, 85%) and from rural land use (62% cf. the total, 74%), and were more likely to disagree that pollution in the region's rivers and streams came mainly from agriculture (35% cf. the total, 25%).

#### KEY POINTS

Respondents' overall levels of satisfaction with their local environment remained consistent with the 2019 result (59% cf. 2019, 57%), however the long-term trend is one of decline, with satisfaction levels dropping from 67% in 1998. The proportion of respondents who feel their local environment has improved has decreased substantially since 1998 (currently 16% cf. 1998, 55%).

Respondents' level of concern for the state of the environment was high across all environmental issues. When asked to rate their perceptions of change respondent's perceived a range of indicators of environmental health to be in decline. Some areas had a higher proportion of respondents who stated they don't know, in particular, changes in the number of native fish (41%), changes in the quality of local coastal waters (21%), and changes in local native plant and bird populations (14% each).

Across all indicators of environmental knowledge there was an increase in the proportion of don't know or neither agree or disagree responses. Neither agree nor disagree responses may include those who have a greater awareness of issue complexity and thus indicate higher levels of knowledge

#### SECTION 3: CLIMATE CHANGE

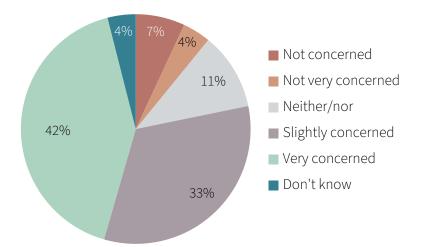
This section outlines respondents' views about climate change.

This section includes content relating to:

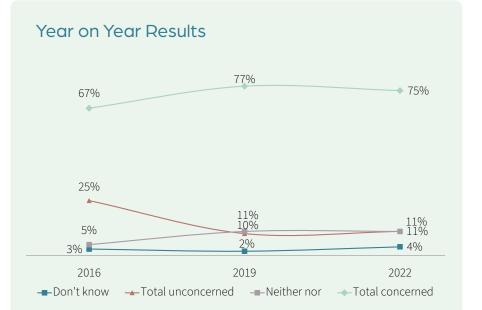
- Concerns about climate change
- Causes of climate change
- Personal actions taken to reduce greenhouse gas emissions

# CONCERN ABOUT CLIMATE CHANGE

Respondents were asked how concerned they were with the effects of climate change. Seventy five percent of respondents were concerned with the effects of climate change, compared with 11% who were unconcerned. Eleven percent of respondents were neither concerned nor unconcerned, while 4% were unsure how to rate their level of concern. Levels of concern remain consistent with 2019 results.



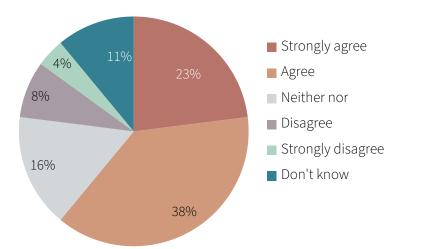
#### Concern About Effects of Climate Change

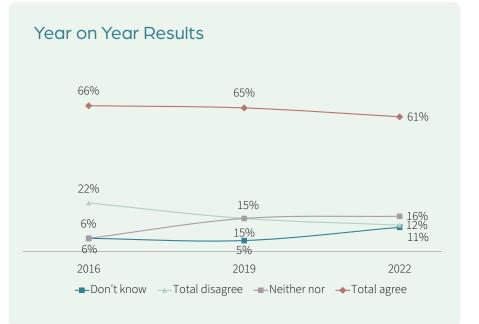


# CLIMATE CHANGE

Sixty one percent of respondents agreed or strongly agreed with the statement 'the biggest driver of climate change is the increase of greenhouse gases from human activities'. This was a slight decrease of 4% compared to 2019 (65%). The proportion of respondents who disagreed with this statement was similar to 2019 (12% cf. 2019, 15%), as was the proportion of respondents who neither agreed nor disagreed (16% cf. 2019, 15%). There was a small increase in the proportion of respondents who were unsure how to respond to this statement (11% cf. 2019, 5%).

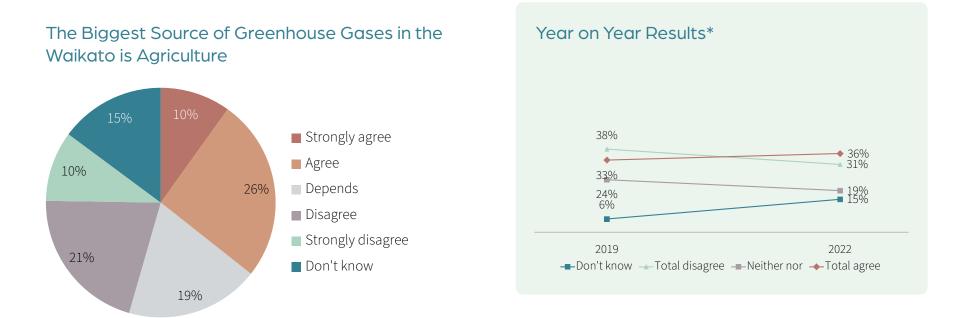
The Biggest Driver of Climate Change is the Increase of Greenhouse Gases from Human Activities





#### CLIMATE CHANGE

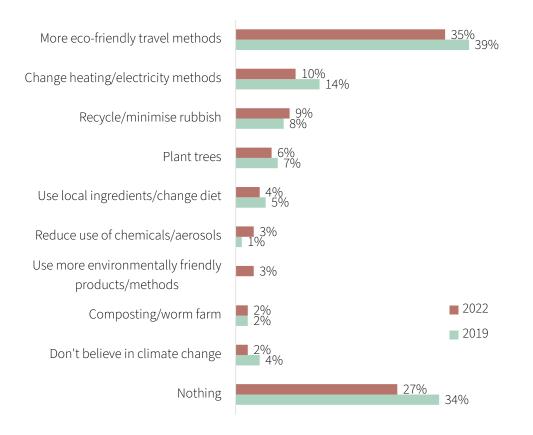
Respondents were asked if they agreed with the statement that 'the biggest source of greenhouse gases in the Waikato is agriculture'. This year, 36% of respondents agreed with the statement, while 31% disagreed. Nineteen percent of respondents neither agreed nor disagreed with the statement and 15% of respondents were unsure how to respond. The 2022 results saw a 9% increase in the proportion of respondents who were unsure how to respondents who disagreed with the statement. There has been a slight change in the phrasing of this question (refer note below).



*Q*: Do you agree or disagree that the biggest source of greenhouse gases in the Waikato is agriculture? \*Please note that the phrasing of this statement has changed in 2022. It was previously worded as 'the biggest sources of greenhouse gases in the Waikato is from farming activities'.

# PERSONAL ACTIONS

#### Activities Individuals have Engaged in to Reduce Greenhouse Gas Emissions



Respondents were asked what activities they had engaged in to reduce greenhouse gas emissions in the past 12 months.

As was the case in 2019, the greatest proportion of respondents had switched to more eco-friendly travel methods (35% cf. 2019, 39%), while 10% of respondents had changed their heating and/or electricity method (cf. 2019, 14%).

#### "Drive a lot less, encourage car pooling when traveling between cities, walk anywhere that's close by." – Hamilton resident

Nine percent of respondents indicated they had done more to recycle and/or minimise their rubbish (cf. 2019, 8%) and 6% had planted trees (cf. 2019, 7%).

#### "If gardens are composted on a regular cycle it helps water retention and aids plant growth. Healthy plant growth helps remove green house gases." – Matamata Piako resident

Twenty seven percent of respondents had not undertaken any activities to reduce their greenhouse gas emissions in the past 12 months, which is a decline of 7% from 2019 (34%).

# CLIMATE CHANGE

The table below shows results for each of the climate change measures for each district. An upwards arrow indicates the result was significantly higher than the total result, while a downwards arrow indicates a result was significantly lower than the total result.

	Total	Thames- Coromandel	Hauraki	Matamata Piako	South Waikato	Taupō	Waikato	Hamilton City	Waipā	Ōtorohanga	Waitomo
Effects of climate change (slightly concerned/very concerned)	75%	70%	70%	72%	75%	71%	78%	79%	80%	72%	70%
Biggest driver of climate change is the increase in greenhouse gases from human activities (agree/ strongly agree)	61%	66%	58%	57%	65%	58%	61%	62%	66%	61%	59%
Biggest source of greenhouse gases in the Waikato is agriculture (agree/ strongly agree)	36%	38%	40%	38%	41%	35%	30%	44% ↑	23%↓	29%	23%↓

#### NEP ANALYSIS -

The following summary outlines key differences in the way those rated pro, mid, or anti-ecological responded to climate change questions.\*

#### **Climate Change Concern and Actions**

Respondents rated pro-ecological were more likely to be concerned about the effects of climate change (90%) while those rated anti-ecological were less concerned (45%). Although not shown in the table below, those rated anti-ecological were more likely say that they were unsure how to rate their level of concern (10% compared to 3% for respondents rated mid-ecological and 1% for those rated pro-ecological).

Those rated pro-ecological were more likely to have undertaken activities to reduce their greenhouse gas emissions (71%) while those rated antiecological were less likely to have done so (47%). Fifty one percent of those rated anti-ecological had not undertaken any activities to reduce greenhouse gas emissions and 4% of those rated anti-ecological stated they did not believe in climate change.

Key activities undertaken by those who were pro or mid-ecological focused largely around transport, and included reducing their car use (25% and 19% respectively) and/or car pooling and using public transport (17% and 8% respectively). The main activities undertaken by those rated anti-ecological included reducing their car use (11%) and/or carpooling and using public transport (6%).

	Anti-ecological	Mid-ecological	Pro-ecological
Concern about the effects of climate change (slightly/very concerned)	45% ↓	77%	90% ↑
Have undertaken activities to reduce greenhouse gases (yes)	47% ↓	58%	71% ↑

#### Drivers of Climate Change (agree/strongly agree)

Respondents rated pro-ecological were more likely to agree that the biggest driver of climate change was the increase of greenhouse gases from human activity (78%) and that the biggest source of greenhouse gases in the Waikato was agriculture (45%). Those rated anti-ecological were less likely to agree with both of these statements. Although not shown below, those rated anti-ecological were also more likely to state they were unsure if the biggest driver of climate change was the increase of greenhouse gases from human activity (21% compared to 9% for respondents rated mid-ecological and 8% for those rated pro-ecological).

	Anti-ecological	Mid-ecological	Pro-ecological
The biggest driver of climate change is the increase of greenhouse gases from human activities	39% ↓	61%	78% ↑
The biggest source of greenhouse gases in the Waikato is agriculture	26% ↓	34%	45% ↑

## DEMOGRAPHIC ANALYSIS

Demographic data shows that women were slightly more concerned with the effects of climate change (79% cf. the total, 75%). Older respondents were more likely to disagree that the biggest driver of climate change was the increase in greenhouse gases from human activities (20% cf. the total, 12%) and that the biggest source of greenhouse gases in the Waikato is agriculture (40% cf. the total, 31%).

Rural residents were also more likely to disagree that the biggest source of greenhouse gases in the Waikato is agriculture (40% cf. the total, 31%), while urban residents were more likely to agree with this (41% cf. the total, 36%).

#### KEY POINTS

The proportion of respondents who are concerned about climate change has increased 8% since 2016 (now 75%), while the proportion of respondents who are unconcerned about the effects of climate change has declined 14% since 2016 (now 11%).

Levels of concern about the effects of climate change and perceptions of the key drivers of climate change have not changed significantly since 2019. There has been an increase in those who selected don't know when asked if they agreed that the biggest source of greenhouse gases in the region is agriculture (6% in 2019, now 15%) and/or if they agreed that the biggest driver of climate change is greenhouse gases from human activities (5% in 2019, now 11%).

Seventy three percent undertook activities to reduce greenhouse gas emissions, of which eco-friendly travel methods was the main action taken (35%). Since 2019 there has been a decrease in the proportion of those who stated they do 'nothing' to reduce greenhouse gas emissions (27% may indicate a growing awareness of activities that can contribute to reducing emissions.

#### SECTION 4: WASTE

This section outlines respondents' views about waste in the region.

This section includes content relating to:

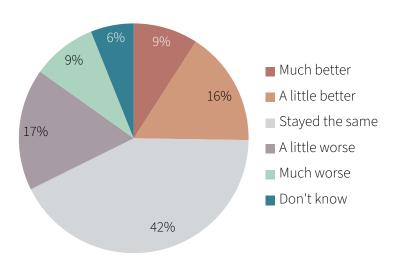
- The availability of waste services
- Household actions undertaken to reduce waste
- The responsibility of different parties for waste reduction



#### AVAILABILITY OF WASTE SERVICES

Respondents were asked about changes in the availability of waste services and facilities in the past few years. Forty two percent of respondents felt these services and facilities had remained the same, while 26% of respondents felt the services and facilities had become worse overall (cf. 2019, 30%), and 25% felt these had improved. Six percent of respondents were unsure how to rate this measure (cf. 2019, 4%). The proportion of those who thought waste services had improved declined between 2003 and 2006 and again between 2016 and 2019. Please note that the wording of this question changed slightly in 2022 (refer footnote below).

#### Availability of Waste Services and Facilities\*



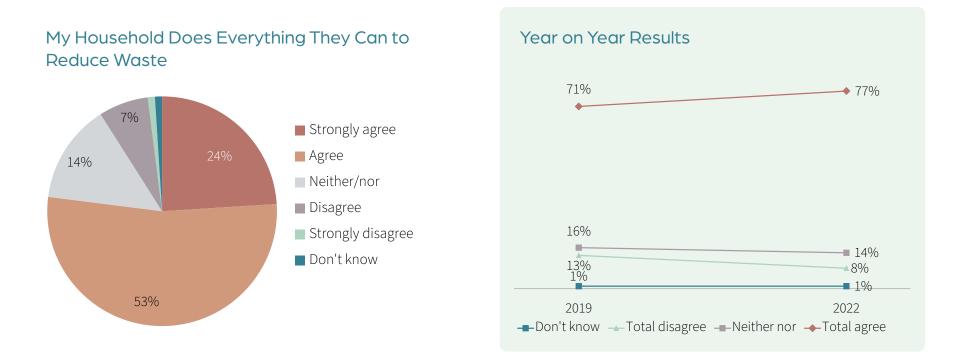


*Q*: Has the availability of waste services and facilities become better, become worse, or stayed the same in the last few years?

\*Please note that this question previously read: Has the availability of waste and recycling services become better, become worse, or stayed the same in the last few years?

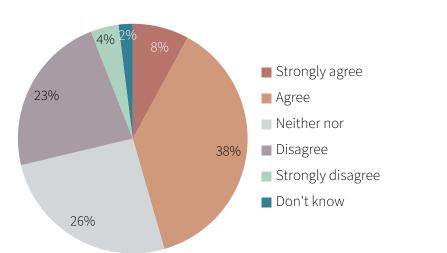
# HOUSEHOLD ACTIONS

Respondents were asked about actions their household undertook to reduce waste. Over three quarters (77%) of respondents agreed their household did everything they could to reduce waste, which was an increase of 6% compared to 2019 (71%). Disagreement with this statement decreased slightly to 8% (cf. 2019, 13%) while 14% of respondents neither agreed nor disagreed with this statement (cf. 2019, 16%).

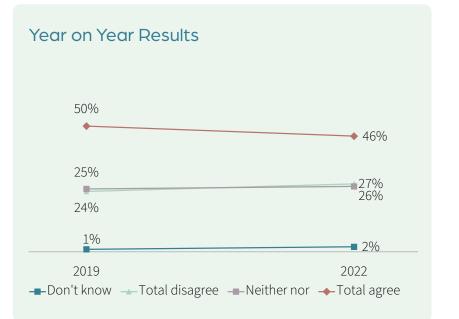


# HOUSEHOLD ACTIONS

Respondents were asked how much they agreed or disagreed with the statement 'I would like to reduce my household's waste more, but I am not sure how'. Overall, 46% of respondents agreed with this statement (cf. 2019, 50%), while 27% disagreed with this statement (cf. 2019, 24%). Twenty six percent of respondents neither agreed nor disagreed with this statement, while a further 2% of respondents were unsure how to respond. These results remain relatively consistent to those seen in 2019.







# RESPONSIBILITY

Eighty nine percent of respondents agreed or strongly agreed that individuals have a responsibility for waste reduction in their district (cf. 2019, 91%). Seven percent of respondents neither agreed nor disagreed with this, while just 2% of respondents disagreed. These results are similar to those from 2019 when this measure was first included.



#### Individuals Have a Responsibility for Waste **Reduction in Their District**

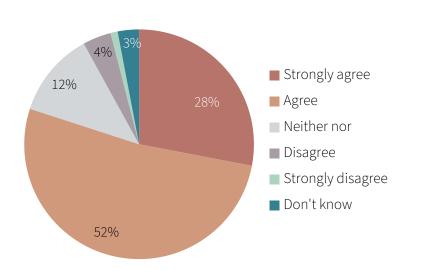
# RESPONSIBILITY

Eighty eight percent of respondents agreed that businesses have a responsibility for waste reduction in their district (cf. 2019, 91%), while 2% disagreed with this. A further 8% of respondents said they neither agreed nor disagreed with this statement (cf. 2019, 5%), while 2% were not sure how to respond. These results are similar to those from 2019 when this measure was first included.



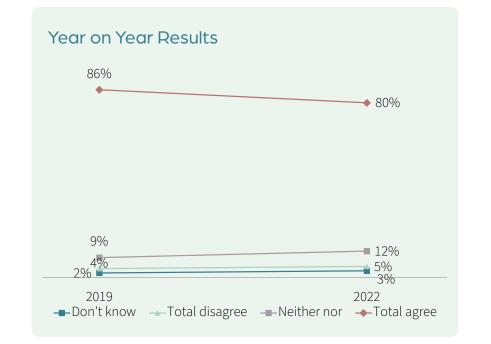
# RESPONSIBILITY

Respondents were asked how much they agreed or disagreed that Waikato Regional Council had a responsibility for waste reduction in the region. Overall, eighty percent of respondents agreed with this statement (cf. 2019, 86%) while only 5% disagreed with this statement. Twelve percent of respondents neither agreed nor disagreed, and 3% were unsure how to respond to the statement. These results are largely similar to those seen in 2019 when this measure was first included.



Waikato Regional Council has a Responsibility

for Waste Reduction in the Region



WASTE

#### WASTE

The table below shows the results for each of the waste measures for each district. An upwards arrow indicates the result was significantly higher than the total result, while a downwards arrow indicates a result was significantly lower than the total result.

	Total	Thames- Coromandel	Hauraki	Matamata Piako	South Waikato	Taupō	Waikato	Hamilton City	Waipā	Ōtorohanga	Waitomo
Availability of waste services and facilities (a little better/ much better)	25%	20%	20%	10%↓	37% ↑	25%	12%↓	36% ↑	21%	16%	18%
Household does everything they can to reduce waste (agree/strongly agree)	77%	77%	90% ↑	76%	84%	69%	69%	76%	74%	87%	78%
Would like to reduce household waste more, but unsure how (agree/ strongly agree)	46%	38%	43%	54%	37%	43%	50%	44%	46%	60% ↑	49%
Individuals have a responsibility for waste reduction in their district (agree/strongly agree)	89%	87%	96% ↑	82%	91%	83%	90%	88%	86%	95%	93%
Businesses have a responsibility for waste reduction in their district (agree/strongly agree)	88%	86%	96% ↑	87%	90%	84%	84%	84%	90%	95% ↑	89%
Waikato Regional Council has a responsibility for waste reduction in the region (agree/strongly agree)	80%	80%	84%	77%	83%	74%	80%	79%	86%	83%	77%

#### NEP ANALYSIS -

The following summary outlines key differences in the way those rated pro, mid, or anti-ecological responded to waste questions.\*

#### Waste Actions

Respondents were asked about the availability of waste services and efforts to reduce household waste. There were no significant differences between those rated pro, mid or anti-ecological in the responses given to these questions.

	Anti-ecological	Mid-ecological	Pro-ecological
Availability of waste services and facilities (better/much better)	19%	25%	30%
My household does everything they can to reduce our waste (agree/strongly agree)	70%	79%	76%
I would like to reduce my household's waste more, but I am not sure how (agree/strongly agree)	37%	47%	48%

#### Responsibility for Waste Reduction (agree/strongly agree)

Respondents were asked their views regarding the responsibility for waste reduction of individuals, businesses, and Waikato Regional Council. Across the NEP groups, those rated anti-ecological were less likely to agree that these parties had a responsibility for waste reduction, while respondents who were rated pro-ecological were more likely to agree that individuals, businesses, and the Waikato Regional Council have a responsibility. Although not shown here, those rated anti-ecological were more likely to say they neither agree nor disagree with the statements below (typically between 19%–25% of responses for this group for these statements), or they were unsure how to respond to the statements (typically between 5%–6% of responses for this group). Those rated mid-ecological were more likely to agree the individuals and businesses have a responsibility, but showed no significant difference from the total response for the role of Waikato Regional Council for waste reduction.

	Anti-ecological	Mid-ecological	Pro-ecological
Individuals have a responsibility for waste reduction in their district	74% ↓	91% ^	94% ↑
Businesses have a responsibility for waste reduction in their district	68% ↓	90% ↑	95% 个
Waikato Regional Council has a responsibility for waste reduction in the region	61%↓	81%	90% 个

# DEMOGRAPHIC ANALYSIS

Although there were no significant differences across age, gender, ethnicity, and urban/rural categories some demographic differences were noted for household actions and availability of services.

Older residents were less likely to think that the availability of waste services and facilities had improved over the past few years (20% cf. the total, 25%), and were more likely to agree that they do everything they can to reduce their household's waste (90% cf. the total, 77%).

Respondents under the age of 35 years were less likely to agree that their household does everything it can to reduce its waste (65% cf. the total, 77%), and were more likely to agree they would like to reduce their household's waste but are not sure how (58% cf. the total, 46%).

#### KEY POINTS

Respondents who live in Hamilton City or South Waikato are more likely to think the availability of waste services has improved compared to those who live in Waikato or Matamata Piako District who are less likely to think waste services have improved.

2

While there is a high proportion of respondents who consider they are doing all they can to reduce their household waste (77%), nearly half want to reduce their household's waste further but are unsure how (46%). In general there is a high degree of support for broad and shared responsibility for waste reduction, with high levels of agreement that individuals, businesses, and Waikato Regional Council are all responsible for waste reduction.

## SECTION 5: ECONOMY

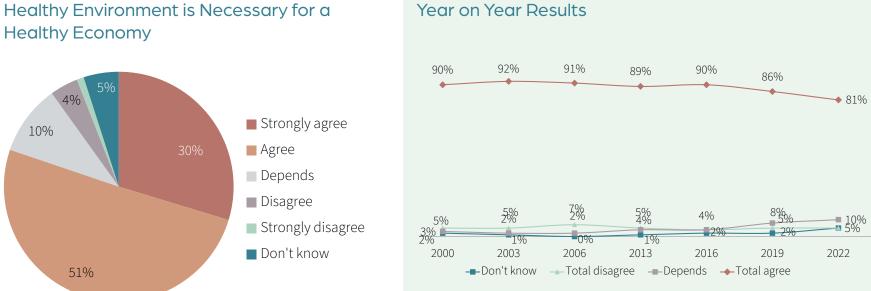
This section outlines respondents' views about the relationship between the environment and the economy.

This section includes content relating to:

- Balancing the economy and the environment
- Business practices related to the environment

# ECONOMY & ENVIRONMENT

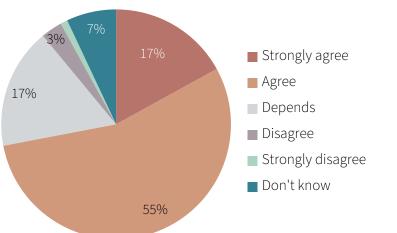
Eighty one percent of respondents agreed or strongly agreed that a healthy environment was necessary for a healthy economy (cf. 2019, 86%), while 5% of respondents disagreed with this. A further 10% of respondents neither agreed nor disagreed with this statement (cf. 2019, 8%), and 5% of respondents were unsure how to rate their agreement (cf. 2019, 2%). Overall agreement with this statement has remained high over the monitoring period, however there has been a gradual decline in agreement since 2016, and a slow increase in the proportion of respondents who selected depends.



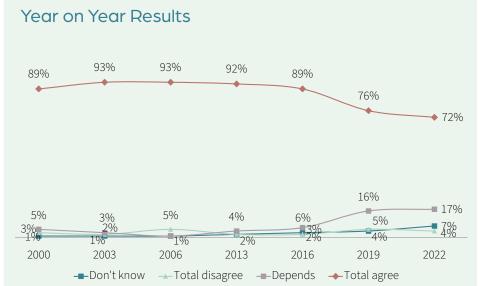
#### Healthy Environment is Necessary for a

# ECONOMY & ENVIRONMENT

Seventy two percent of respondents agreed that environmental protection and economic development can go hand in hand (cf. 2019, 76%), while 4% of respondents disagreed (cf. 2019, 5%). Seventeen percent of respondents selected depends (cf. 2019, 16%) and 7% were unsure how to respond. Although agreement with this statement remains high, year on year results indicate a 20% decline in the proportion of respondents who agree with this statement since 2013 and an increase in the proportion of those who select depends (currently 17% compared to 4% in 2013).

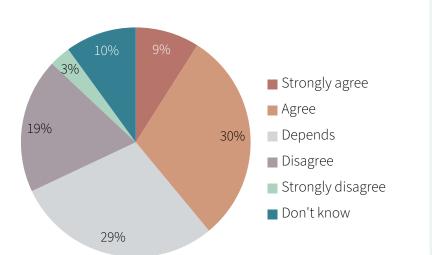


#### **Environmental Protection and Economic** Development can go Hand in Hand



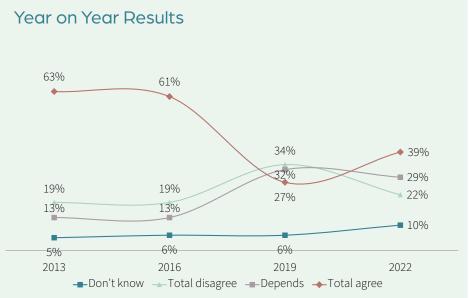
# **BUSINESS PRACTICES**

Thirty nine percent of respondents agreed (30%) or strongly agreed (9%) that businesses take care to minimise negative impacts on the environment. This has increased from 27% in 2019. Twenty two percent of respondents disagreed with this statement (cf. 2019, 34%), while 29% of respondents selected depends (cf. 2019, 32%). Ten percent of respondents were unsure how to respond to this statement. Although overall agreement has increased this year, these results are considerably lower than those seen in 2013 and 2016. The proportions of respondents who disagree or who selected depends have both increased since 2016.



Businesses Take Care to Minimise Negative

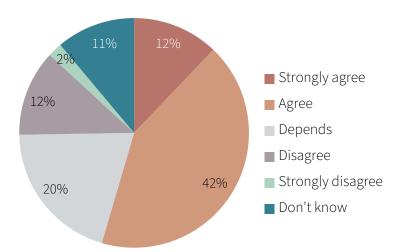
Impacts on the Environment

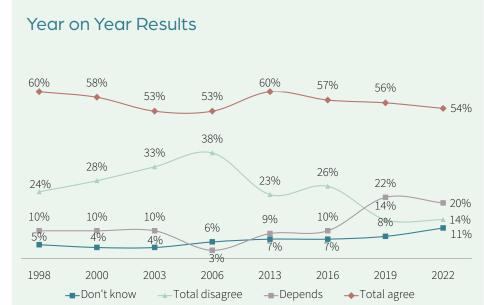


# **BUSINESS PRACTICES**

Fifty four percent of respondents agreed that businesses usually found it too expensive to be more environmentally friendly, while a further 20% of respondents selected depends (cf. 2019, 22%). Fourteen percent of respondents disagreed with this statement, while 11% of respondents were unsure (cf. 2019, 8%). These results are all largely similar to those seen in 2019. The proportion of respondents who disagreed peaked in 2006 (38%) and has declined since then.

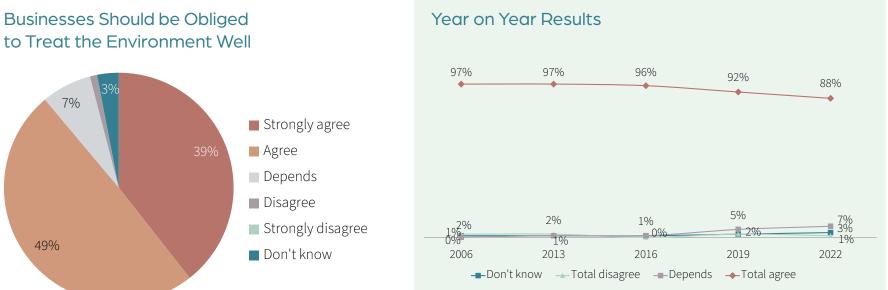
#### Businesses Usually Find it too Expensive to be More Environmentally Friendly





# **BUSINESS PRACTICES**

Eighty eight percent of respondents agreed that businesses should be obliged to treat the environment well (cf. 2019, 92%). Just 1% of respondents disagreed with this statement (cf. 2019, 2%), while 7% of respondents selected depends (cf. 2019, 5%), and 3% of respondents said they were unsure (cf. 2019, 2%). While agreement with this statement decreased slightly this year, it has remained consistently high since 2006.



**Businesses Should be Obliged** to Treat the Environment Well

# ECONOMY & ENVIRONMENT

The table below shows the results for each of the economy and environment measures for each district. An upwards arrow indicates the result was significantly higher than the total result, while a downwards arrow indicates a result was significantly lower than the total result.

	Total	Thames- Coromandel	Hauraki	Matamata Piako	South Waikato	Taupō	Waikato	Hamilton City	Waipā	Ōtorohanga	Waitomo
A healthy environment is necessary for a healthy economy (agree/strongly agree)	81%	68%↓	81%	82%	78%	83%	83%	80%	85%	85%	91% ↑
Environmental protection and economic development can go hand in hand (agree/strongly agree)	72%	61%↓	82%	57% ↓	79%	78%	69%	70%	74%	83% ↑	80%
Businesses take care to minimise negative impacts on the environment (agree/ strongly agree)	39%	41%	57% ↑	27%↓	42%	36%	26%↓	38%	32%	57% 个	48%
Businesses usually find it too expensive to be more environmentally friendly (agree/strongly agree)	54%	50%	46%	55%	56%	55%	60%	52%	64%	51%	58%
Businesses should be obliged to treat the environment well (agree/ strongly agree)	88%	82%	95%	89%	90%	88%	92%	81%↓	94%	94%	88%

Base sizes: Thames-Coromandel n=80, Hauraki n=79, Matamata Piako n=80, South Waikato n=79, Taupō n=79, Waikato n=92, Hamilton City n=266, Waipā n=91, Ōtorohanga n=81, Waitomo n=82.

NEPANALYSIS — The following summary outlines key differences in the way those rated pro, mid. or anti-ecological responded to environment and economy questions.\* mid, or anti-ecological responded to environment and economy questions.\*

#### The Environment and the Economy (agree/strongly agree)

Respondents who were rated pro-ecological were more likely to agree that a healthy environment is necessary for a healthy economy (89%), and that businesses should be obliged to treat the environment well (95%). In comparison respondents who were rated anti-ecological were less likely to agree with both of these statements and were more likely to select depends (15% and 14% respectively) or to select don't know (13% and 12% respectively). Those rated pro-ecological were also less likely to agree that businesses take care to minimise negative impacts on the environment (24%), however those rated mid or anti-ecological were more likely to agree with this statement (47% and 44% respectively). There were no significant differences between NEP groups agreement with the statement: Businesses usually find it too expensive to be more environmentally friendly.

	Anti-ecological	Mid-ecological	Pro-ecological
A healthy environment is necessary for a healthy economy	64% ↓	83%	89% ↑
Environmental protection and economic development can go hand in hand	56% ↓	75%	78%
Businesses take care to minimise negative impacts on the environment	47% 个	44% 1	24% ↓
Businesses usually find it is too expensive to be more environmentally friendly	46%	56%	57%
Businesses should be obliged to treat the environment well	69% ↓	91% ↑	95% 个

# DEMOGRAPHIC ANALYSIS

Respondents from all demographic groups agreed that a healthy environment is necessary for a healthy economy. Younger respondents were less likely to agree that environmental protection and economic development can go hand in hand (66% cf. the total, 72%) and were also more likely to agree that businesses usually find it too expensive to be environmentally friendly (65% cf. the total, 54%). In comparison respondents over the age of 65+ years were more likely to agree that environmental protection and economic development can go hand in hand (79% cf. the total, 72%) and were less likely to agree that businesses usually find it too expensive to be more environmentally friendly (46% cf. the total, 54%).

Although not statistically significant, Māori respondents strongly agreed that businesses should be obliged to treat the environment well (92% cf. the total, 88%) and were less likely to agree that businesses took care to minimise negative impacts on the environment (33% cf. the total, 39%).

#### **KEY POINTS**

There has been declining agreement that environmental protection and economic development can go hand in hand (89% in 2000, now 72%) and that a healthy environment is necessary for a healthy economy (was 90% in 2000, now 81%). This may indicate increasing awareness of the tension between economic development and environmental health.

Support for the idea that businesses should be obliged to treat the environment well has been consistently high over time with a slight increase in the proportion who select depends since 2016. Since 2013, agreement that businesses usually find it too expensive to be environmentally friendly has declined (60% in 2013, now 54%) while those who select depends has increased (9% in 2013, now 20%).

There has been a significant decline in general agreement that businesses take care to minimise negative impacts on the environment (currently 39%, down from 63% in 2013)

#### SECTION 6: PUBLIC PARTICIPATION

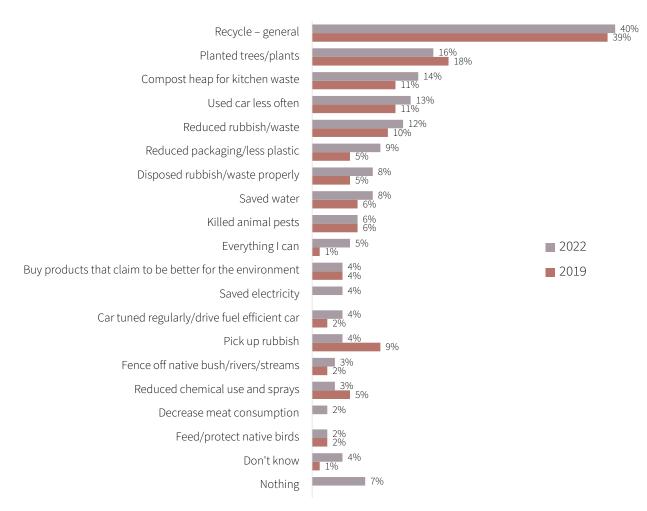
This section outlines respondents' views about public participation in environmental management and protection.

This section includes content relating to:

- Personal actions undertaken to protect the environment
- Public actions undertaken to protect the environment
- Public involvement in environmental management and protection

### PERSONAL ACTIONS

#### Personal Actions Taken to Protect the Environment



Respondents were asked what personal actions they had undertaken in the past 12 months to help protect the environment.

The most common action that people undertook was recycling (40%), this was followed by planting trees (16%), composting (14%), using the car less often (13%), and reducing rubbish or waste (12%).

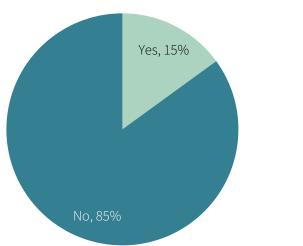
#### "Reduced consumption, recycling, reusing, planting own garden." – Taupō resident

The actions that have been undertaken this year are very similar to those recorded in 2019, with respondents having a strong focus on waste reduction.

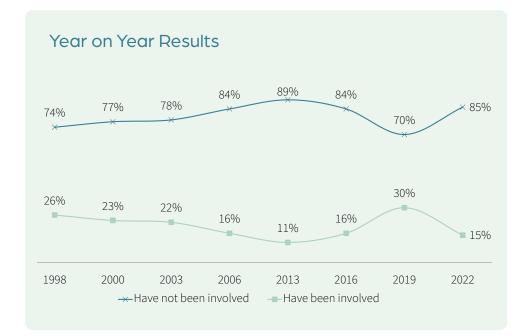
"Ensure I follow recycling guidelines to (hopefully) prevent recyclables becoming landfill. Reduced plastic consumption via Glad wrap/plastic bags etc." – Waikato resident

A total of 7% of respondents indicated that they had not undertaken any form of personal action, meaning that 93% of respondents undertook some form of action.

This year there has been a decrease in public actions with only 15% of respondents reporting they have been involved in public actions with the aim of protecting the environment compared to 30% in 2019. Eighty five percent had not been involved in public actions, compared to 70% in 2019.

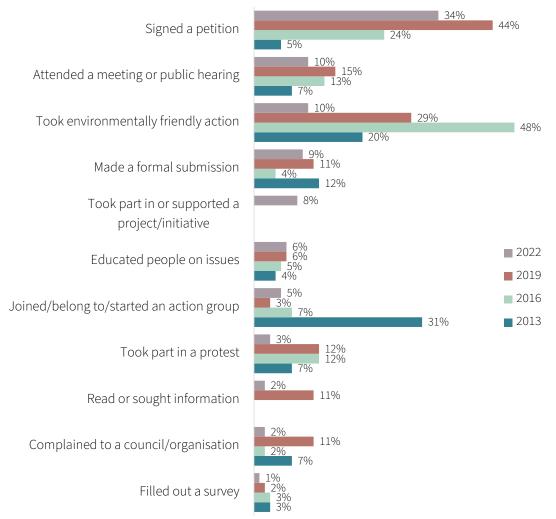


Involvement in Public Action With Aim to



Protect the Environment

#### Public Actions Taken to Protect the Environment



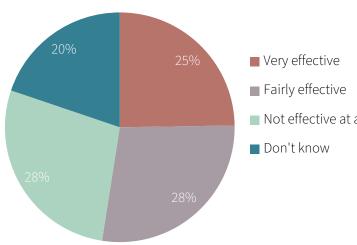
Respondents who indicated they had taken a public action to protect the environment were asked what types of actions they were involved in.

The most common public action respondents had undertaken was signing a petition (34%). This was followed by attending a meeting or public hearing (10%), taking an environmentally friendly action (10%), and making a formal submission (9%). In a new response this year, 8% of respondents took part in, or supported, a project/initiative.

#### "Helped with the Pokaiwhenua Stream Restoration Project." – Waipā resident

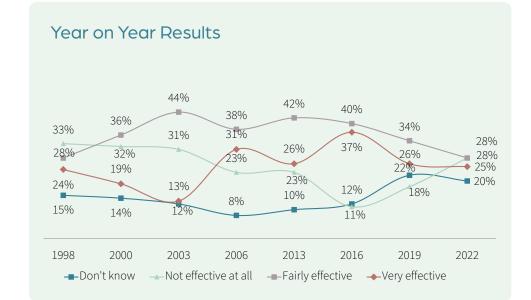
Since 2016, signing a petition has remained one of the primary actions respondents have undertaken to protect the environment (34% cf. 2016, 24%). Similar proportions of respondents have continued to attend public meetings or hearings and/or make formal submissions. There has been a decline in the proportion of respondents who took an environmentally friendly action over the same period (10% cf. 2016, 48%) and for the first time 8% took part in or supported a project/ initiative.

Respondents who have been involved in a public action to protect the environment were asked to rate how effective they thought their actions were. Twenty eight percent (each) of respondents felt their actions were either not effective at all (cf. 2019, 18%) or were fairly effective (cf. 2019, 34%), while 25% of respondents said their actions were very effective (cf. 2019, 26%). Twenty percent of respondents were unsure.



#### **Effectiveness of Actions**

Not effective at all



The table below shows the perceived effectiveness of different public actions respondents have taken, i.e., 9% of respondents who signed a petition felt this action was very effective, while 36% of respondents who signed a petition were unsure how effective this action was.

Respondents who educated people on environmental issues perceived their actions to be very effective (87%), as did those who took part in, or supported, a project or an initiative (54%), suggesting that actions that include interpersonal engagement were perceived to be the most effective. Please note that due to small sample sizes only actions which were undertaken by at least 3% of respondents are shown in the table below.

	Signed a petition	Attended a meeting or public hearing	Took environmentally friendly action	Made a formal submission	Took part in or sup- ported a project/ initiative	Educated people on issues	Joined/belong to/ started an action group
Very effective	9%	29%	35%	9%	54%	87%	50%
Fairly effective	24%	46%	65%	19%	11%	13%	0%
Not at all effective	31%	14%	0%	56%	29%	0%	30%
Don't know	36%	11%	0%	16%	7%	0%	20%

#### Effectiveness of Actions

Q: Now thinking about your own personal actions regarding the environment, what actions have you undertaken in the past 12 months to protect the environment? Q: If yes, what did you do and how effective do you feel the actions were?

40%

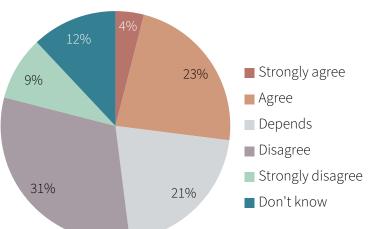
27%

21%

12%

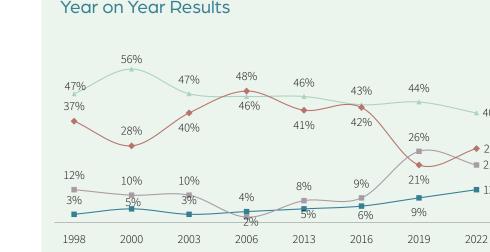
# PUBLIC INVOLVEMENT

Respondents were asked about whether the public has enough say in the way the environment is managed. The highest proportion of respondents disagreed that the public had enough say (40% cf. 2019, 44%), while 27% of respondents agreed (cf. 2019, 21%). Twenty one percent of respondents selected depends, and 12% of respondents were unsure how to respond. Over time there has been a gradual decline in the proportion of respondents who either agree (40% cf. 1998, 47%) or disagree (27%, cf. 1998, 37%) with this statement, and an increase in the proportion of those who selected depends (21% cf. 1998, 12%) or were unsure how to respond (12% cf. 1998, 3%).



The Public Has Enough Say in the Way the

**Environment is Managed** 



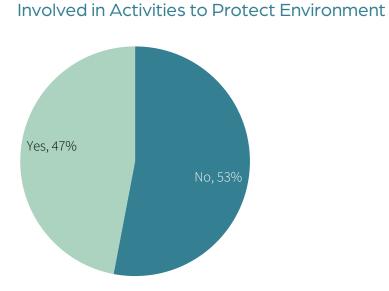
---Don't know ---Total disagree ---Depends ---Total agree

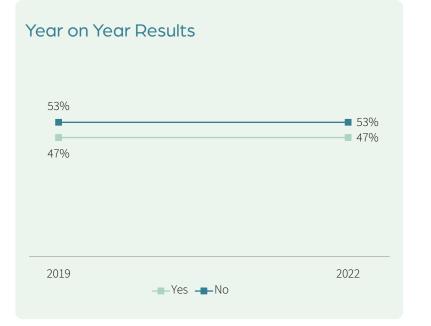
Year on Year Results

# PUBLIC INVOLVEMENT

There are Sufficient Opportunities for Community to be

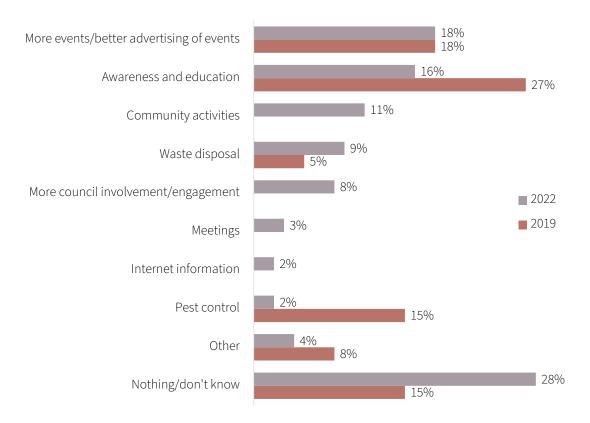
This year 53% of respondents felt there were not sufficient opportunities to be involved in activities to protect the environment, while 47% of respondents felt there were sufficient opportunities. This result is the same as 2019 when the measure was first included.





# PUBLIC INVOLVEMENT

### Ways the Community Could be More Involved in Environmental Protection



Consistent with 2019, 18% of respondents indicated the community could be more involved in environmental protection through events. Sixteen percent of respondents said the community could be more involved through awareness and education (cf. 2019, 27%).

New responses this year saw 11% of respondents stating that the community could be further involved in environmental protection through community activities, 8% noted greater council involvement, 3% stated meetings, and 2% noted Internet information.

"I think if there were like rubbish picking up days or like community tree planting days that could be really cool, I mean there might be but I've not heard of them so if there are they aren't well advertised." – Hamilton resident

It should be noted that 28% of respondents were unsure how the community could be more involved, or stated that there was nothing further they could think of (cf. 2019, 15%).

"Hard to know. I think most communities are apathetic unless it is something that affects them personally." – Thames-Coromandel resident

# PUBLIC PARTICIPATION

The table below shows the results for each of the public participation measures for each district. An upwards arrow indicates the result was significantly higher than the total result, while a downwards arrow indicates a result was significantly lower than the total result.

	Total	Thames- Coromandel	Hauraki	Matamata Piako	South Waikato	Taupō	Waikato	Hamilton City	Waipā	Ōtorohanga	Waitomo
Involvement in public action with aim to protect the environment (yes)	15%	26% ↑	17%	17%	16%	14%	13%	13%	10%	15%	24% ↑
Effectiveness of actions (fairly effective/very effective)	53%	37%	58%	44%	83% ↑	33%	19% ↓	59%	18%	52%	75%
The public has enough say in the way the environment is managed (agree/ strongly agree)	27%	19%	28%	24%	33%	27%	19%	28%	26%	36%	27%
Sufficient opportunities for community to be involved in activities to protect environment (yes)	47%	42%	68% ↑	38%	54%	58%	42%	43%	34% ↓	56%	62% ↑

Base sizes: Thames-Coromandel n=80, Hauraki n=79, Matamata Piako n=80, South Waikato n=79, Taupō n=79, Waikato n=92, Hamilton City n=266, Waipā n=91, Ōtorohanga n=81, Waitomo n=82.

NEPANALYSIS — The following summary outlines key differences in the way those rated pro, mid. or anti-ecological responded to public participation questions.\* mid, or anti-ecological responded to public participation questions.\*

### Actions Undertaken to Protect the Environment

While those rated pro-ecological were more likely to take both personal and public actions to protect the environment, the difference between those rated pro, mid and anti-ecological was not significant. Respondents rated pro-ecological were more likely to recycle (46% compared to 38% for those rated mid-ecological and 28% for those rated anti-ecological), compost (20% compared to 12% for those rated mid-ecological and 10% for those rated anti-ecological), drive fuel efficient cars (7% compared to 3% each for those rated mid-ecological and those anti-ecological), or state they do everything they can (9% compared to 3% each for those rated mid-ecological and those rated anti-ecological) suggesting they may undertake a wider range of personal actions.

	Anti-ecological	Mid-ecological	Pro-ecological
Have undertaken a personal action to protect the environment	88%	93%	96%
Have undertaken a public action to protect the environment	11%	14%	22% ↑

Pro-ecological respondents were more likely to undertake a range of public actions. A summary of the main public actions the different groups have taken is shown in the table below.

	Anti-ecological	Mid-ecological	Pro-ecological
Signed a petition	3%	35%	43%
Attended a meeting or public hearing	13%	13%	5%
Took environmentally friendly action	14%	11%	8%
Made a formal submission	0%	7%	14%
Took part in or supported a project/initiative	10%	8%	9%
Educated people on issues	10%	8%	1%
Joined/belong to/started an action group	12%	5%	2%
Took part in a protest	3%	2%	5%
Read or sought information	0%	2%	3%
Complained to a council/organisation	8%	0%	3%

\*An upwards arrow indicates the result was significantly higher than the total result, while a downwards arrow indicates a result was significantly lower than the total result. Testing applied to these results takes into account a subgroup's sample size and result and compares this to all those who are not in that subgroup. Subgroups with different sample

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sizes may achieve different statistical significance results.

### NEP ANALYSIS -

The following summary outlines key differences in the way those rated pro, mid, or anti-ecological responded to public participation questions.\*

When asked to rate the effectiveness of their public actions, 80% of those rated anti-ecological felt that their actions were effective. Although not a significant difference due to the small sample sizes, this is a higher rating of effectiveness than those rated mid-ecological (54%) or pro-ecological (37%).

### **Perceptions of Public Participation**

The proportions of those who agreed with the statement that the public have enough say in the way the environment is managed were roughly similar for those rated pro, mid, or anti-ecological. However, those rated pro-ecological were less likely to agree there are sufficient opportunities for community involvement in environmental protection (40%). Although not shown below, those rated pro-ecological noted there could be a greater number of community activities (15% compared to 9% each for those rated mid-ecological and those rated anti-ecological), greater opportunities for waste disposal (13% compared to 8% for those rated mid-ecological and 4% for those rated anti-ecological), and greater involvement from local councils (11% compared to 7% for those rated mid-ecological and 4% for those rated anti-ecological). A higher proportion of those rated mid-ecological and those rated pro-ecological said there could be greater focus on weekend events and the advertising of these events (19% and 20% respectively compared to 9% for those rated anti-ecological) and there needed to be greater awareness and education about the environment (19% and 17% respectively compared to 8% for those rated anti-ecological).

	Anti-ecological	Mid-ecological	Pro-ecological
The public has enough say in the way the environment is managed (agree/strongly agree)	30%	28%	21%
Sufficient opportunities for community involvement in environmental protection (yes)	53%	49%	40% ↓

### NEP ANALYSIS -

The following summary outlines key differences in the way those rated pro, mid, or anti-ecological responded to public participation questions.\*

### Perceptions of Public Participation

The proportions of those who agreed with the statement that the public have enough say in the way the environment is managed were roughly similar for those rated pro, mid, or anti-ecological. However, those rated pro-ecological were less likely to agree there are sufficient opportunities for community involvement in environmental protection (40%). Although not shown below, those rated pro-ecological noted there could be a greater number of community activities (15% compared to 9% each for those rated mid-ecological and those rated anti-ecological), greater opportunities for waste disposal (13% compared to 8% for those rated mid-ecological and 4% for those rated anti-ecological), and greater involvement from local councils (11% compared to 7% for those rated mid-ecological and 4% for those rated anti-ecological). A higher proportion of those rated mid-ecological and those rated pro-ecological said there could be greater focus on weekend events and the advertising of these events (19% and 20% respectively compared to 9% for those rated anti-ecological) and there needed to be greater awareness and education towards the environment (19% and 17% respectively compared to 8% for those rated anti-ecological).

	Anti-ecological	Mid-ecological	Pro-ecological
The public has enough say in the way the environment is managed (agree/strongly agree)	30%	28%	21%
Sufficient opportunities for community involvement in environmental protection (yes)	53%	49%	40% ↓

# DEMOGRAPHIC ANALYSIS

With regards to personal actions taken to protect the environment, female respondents undertook a greater range of activities and were significantly more likely to have recycled (48% cf. the total, 40%), composted kitchen waste (17% cf. the total, 14%), and to have reduced the packaging they purchased (13% cf. the total, 9%).

Female respondents were less likely to agree the public has enough say in the way the environment was managed (only 21% agree with this cf. the total, 27%) and there are sufficient opportunities for the community to be involved in activities to protect the environment (59% disagree with this cf. the total, 53%).

Although not significant, female respondents were more likely to want to see an increase in education and awareness about the environment (21% cf. the total, 16%) and greater advertising of community activities (21% cf. the total, 11%).

### KEY POINTS

Over time the survey shows a decrease in public participation in actions to protect the environment now (15%) compared to 1998 (26%). Actions respondents have taken, and their perception of the effectiveness of those actions, have fluctuated over time which likely reflects the changing context of personal and public environmental actions e.g. online petitions have increasingly become an important part of citizens' engagement in politics.

It is likely that the Covid-19 pandemic impacted people's capacity to participate in public actions to protect the environment and results show an increase in those who reported they had not participated in any activities. Taking a prospective view, respondents would like to see more community activities and greater council involvement, and results indicate those activities that have a social component and/or include involvement in direct action were considered most effective.

decline over time in the proportion of respondents who agree the public has enough say in the way the environment is managed; agreement with this statement is currently only 27%.

# SECTION 7: ENVIRONMENTAL GOVERNANCE

This section outlines respondents' views on environmental regulation.

This section includes content relating to:

- The role of Waikato Regional Council
- The protection and use of land

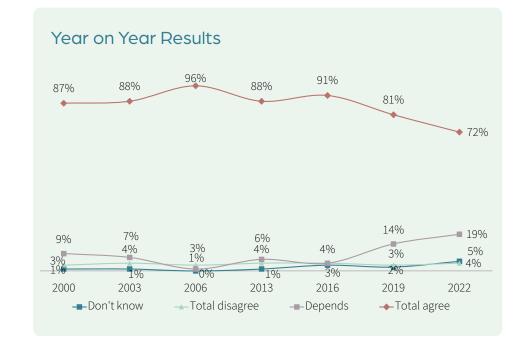
## WAIKATO REGIONAL COUNCIL

Seventy two percent of respondents agreed that Waikato Regional Council should enforce its rules to ensure the environment is well looked after, while 19% of respondents selected depends (cf. 2019, 14%). Just 4% of respondents disagreed with this statement (cf. 2019, 3%), while 5% of respondents were unsure (cf. 2019, 2%). Agreement with this statement remained relatively stable until 2016. Since then, there has been a decline in the proportion of respondents who agree with this statement (91% in 2016, 81% in 2019, and 72% in 2022), and a corresponding increase in the proportion of respondents who select depends (4% in 2016, 14% in 2019, and 19% in 2022).

# 3% 5% 4% Strongly agree Agree Depends Disagree Strongly disagree Don't know

WRC Should Enforce its Rules to Ensure the

**Environment is Well Looked After** 

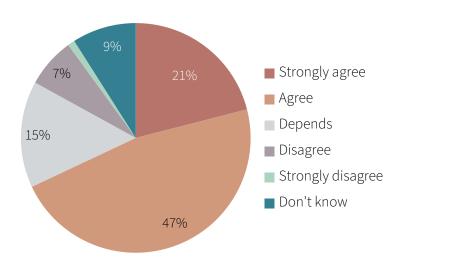


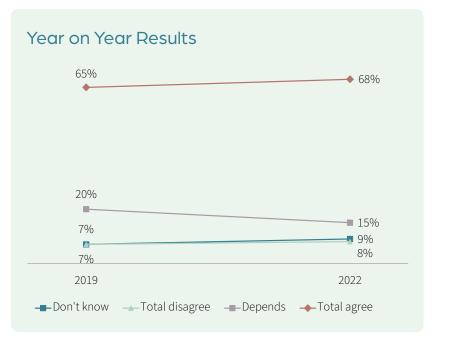
*Q:* Do you generally agree or disagree that Waikato Regional Council should enforce its rules to make sure that the environment is well looked after?

# WAIKATO REGIONAL COUNCIL

Sixty eight percent of respondents agreed that Waikato Regional Council should be doing more to protect native birds and plants from introduced pests (cf. 2019, 65%), while 8% of respondents disagreed (cf. 2019, 7%). A further 9% were unsure how to rate their agreement with this statement (cf. 2019, 7%), while 15% of respondents selected depends (cf. 2019, 20%). These results are similar to those from 2019 when this measure was first included.

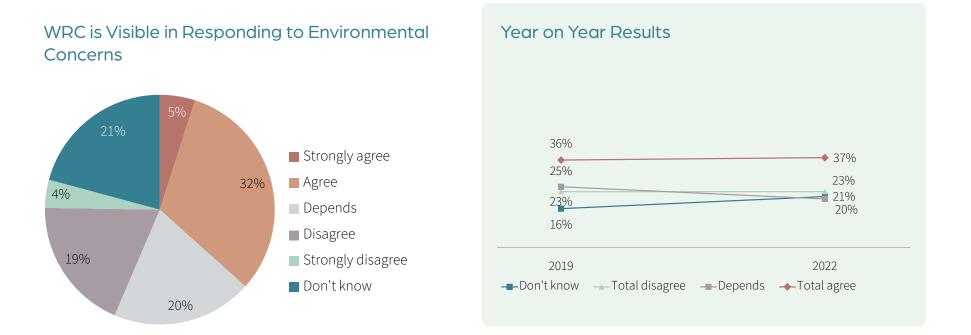
### WRC Should be Doing More to Protect Native Birds and Plants





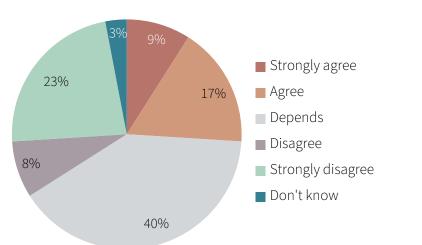
## WAIKATO REGIONAL COUNCIL

Thirty seven percent of respondents agreed that Waikato Regional Council was visible in responding to environmental concerns (cf. 2019, 36%), while 23% of respondents disagreed. Twenty one percent of respondents were unsure how to rate their agreement with this (cf. 2019, 16%), while a further 20% of respondents selected depends (cf. 2019, 25%). These results are similar to those from 2019 when this measure was first included.

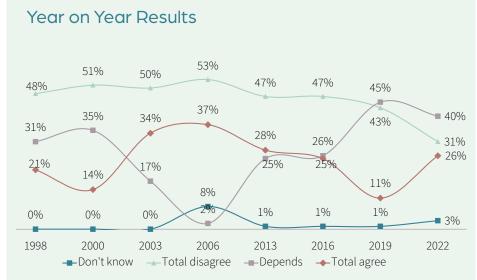


### Q: Do you generally agree or disagree that Waikato Regional Council is visible in responding to environmental concerns?

Respondents were asked if they agreed or disagreed that landowners should be allowed to do what they like on their own land. Forty percent selected depends (cf. 2019, 45%) and 31% of respondents disagreed (cf. 2019, 43%) while 26% agreed (cf. 2019, 11%). Since 2006, the proportion of respondents who have either disagreed (53% in 2006, cf. 2022, 31%) or agreed (37% in 2006 cf. 2022, 26%) have both decreased, while the proportion of respondents who select depends has increased over the same period (2% in 2006 cf. 2022, 40%).

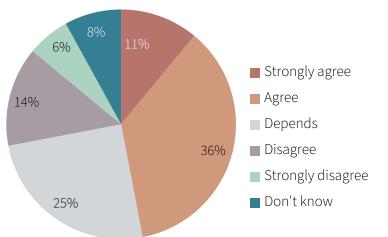


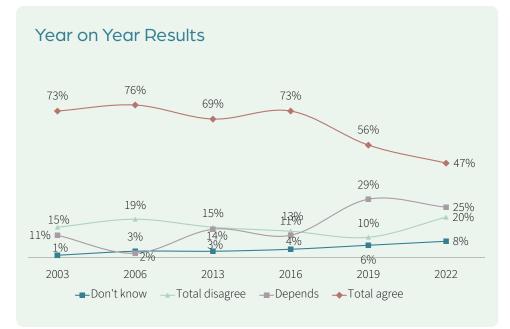
### Landowners Should be Allowed to do What They Like on Their Own Land



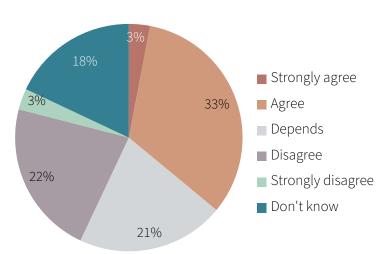
Forty seven percent of respondents agreed that government restrictions on the use of private property were necessary so that the environment will not be harmed (cf. 2019, 56%), while 25% of respondents selected depends (cf. 2019, 29%). Twenty percent of respondents disagreed with this statement (cf. 2019, 10%) and 8% were unsure how to respond. Over time there has been a decline in the proportion of respondents who agree with this statement (73% in 2003 cf. 2022, 47%) and an increase in the proportion of respondents who select depends (11% in 2003 cf. 2022, 25%) or select don't know (1% in 2003 cf. 2022, 8%).

### Government Restrictions on the Use of Private Property are Necessary so that the Environment will not be Harmed

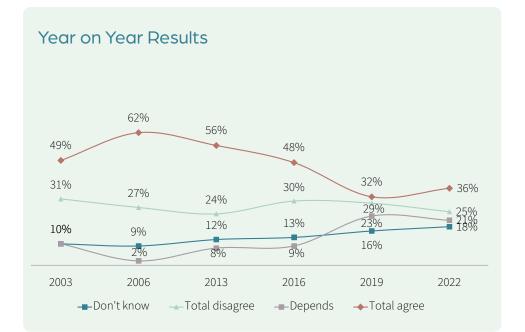




Thirty six percent of respondents agreed that there was enough protection given to local significant natural sites (cf. 2019, 32%), while 25% of respondents disagreed (cf. 2019, 29%). Twenty one percent of respondents selected depends (cf. 2019, 23%) and 18% were unsure how to respond to this question (cf. 2019, 16%). These results are relatively similar to those seen in 2019, however over time there has been a decrease in the proportions of respondents who either agree (49% in 2003 cf. 2022, 36%) or disagree (31% in 2003 cf. 2022, 25%) with this statement, and an increase in the proportions of respondents who selected depends (10% in 2003 cf. 2022, 21%) or selected don't know (10% in 2003 cf. 2022, 18%).



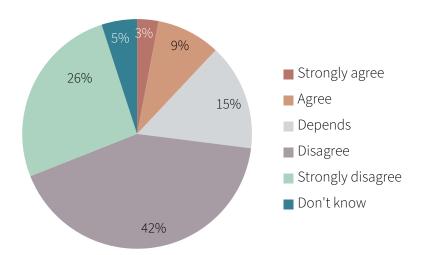


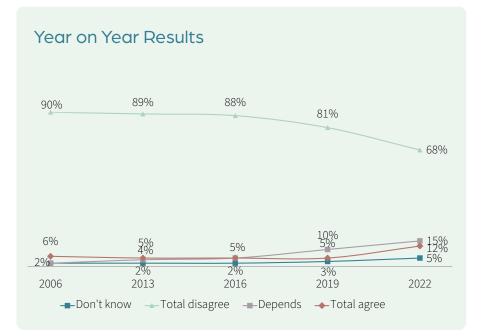


*Q*: Do you generally agree or disagree that there is enough protection given to local significant natural sites?

Sixty eight percent of respondents disagreed that farming land at maximum productivity was acceptable even if it results in polluted waterways. This has decreased from 81% in 2019. Agreement with this statement was 12% (cf. 2019, 5%), while 15% of respondents selected depends (cf. 2019, 10%). While the proportion of respondents who disagreed with this statement remains high, this proportion has declined steadily since 2006. Since then, there have been increases in the proportions of respondents who agreed with this statement (6% in 2016, now 12% in 2022) or who selected depends (2% in 2006, now 15% in 2022).

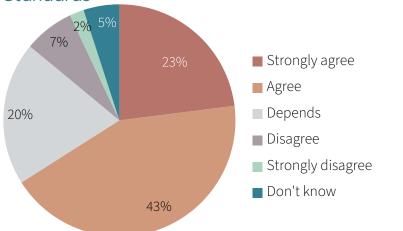
### Farming at Maximum Productivity is Acceptable Even if it Results in Polluted Waterways

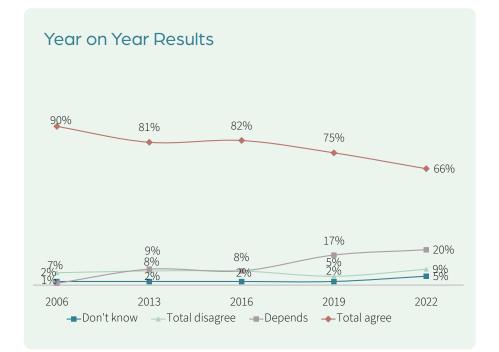




Sixty six percent of respondents agreed that the water quality in streams and rivers should be protected, even if businesses have to bear the expense to meet environmental standards (cf. 2019, 75%). At the same time, 20% of respondents selected depends (cf. 2019, 17%), and 9% of respondents disagreed (cf. 2019, 5%). Since 2006, the proportion of respondents who agree with this statement has declined by 24%, while the proportion of respondents who selected depends has increased (20%).

Water Quality in Streams and Rivers Should be Protected Even if That Means Businesses Have to Bear the Expense of Meeting Environmental Standards





*Q*: Do you generally agree or disagree that water quality in streams and rivers should be protected even if that means businesses have to bear the expense of meeting environmental standards?

# ENVIRONMENTAL GOVERNANCE

The table below shows the results for each of the environmental governance measures for each district. An upwards arrow indicates the result was significantly higher than the total result, while a downwards arrow indicates a result was significantly lower than the total result.

	Total	Thames- Coromandel	Hauraki	Matamata Piako	South Waikato	Taupō	Waikato	Hamilton City	Waipā	Ōtorohanga	Waitomo
Waikato Regional Council should enforce its rules to ensure the environment is well looked after (agree/ strongly agree)	72%	55% ↓	77%	76%	68%	73%	71%	75%	79%	68%	68%
Waikato Regional Council should be doing more to protect native birds and plants from introduced pests (agree/strongly agree)	68%	65%	57% ↓	72%	66%	63%	68%	68%	72%	69%	76%
Waikato Regional Council is visible in responding to environmental concerns (agree/strongly agree)	37%	35%	39%	25% ↓	35%	43%	24%↓	38%	36%	40%	46%
Landowners should be allowed to do what they like on their own land (agree/strongly agree)	26%	31%	28%	17%	23%	27%	31%	23%	24%	34%	30%
Government restrictions on the use of private property are necessary so that the environment will not be harmed (agree/ strongly agree)	47%	33% ↓	43%	39%	46%	43%	41%	53% ↑	47%	47%	62% ↑

Base sizes: Thames-Coromandel n=80, Hauraki n=79, Matamata Piako n=80, South Waikato n=79, Taupō n=79, Waikato n=92, Hamilton City n=266, Waipā n=91, Ōtorohanga n=81, Waitomo n=82.

# ENVIRONMENTAL GOVERNANCE

	Total	Thames- Coromandel	Hauraki	Matamata Piako	South Waikato	Taupō	Waikato	Hamilton City	Waipā	Ōtorohanga	Waitomo
There is enough protection given to local significant natural sites (agree/strongly agree)	36%	34%	41%	34%	35%	37%	29%	31%↓	35%	53% ↑	49% ↑
Farming at maximum productivity is acceptable to me even if it results in polluted waterways (agree/strongly agree)	12%	8%	16%	10%	15%	6%	12%	15%	16%	7%	7%
Water quality in streams and rivers should be protected even if businesses have to bear the expense of meeting environmental standards (agree/strongly agree)	66%	61%	72%	73%	70%	68%	67%	64%	64%	67%	72%

Base sizes: Thames-Coromandel n=80, Hauraki n=79, Matamata Piako n=80, South Waikato n=79, Taupō n=79, Waikato n=92, Hamilton City n=266, Waipā n=91, Ōtorohanga n=81, Waitomo n=82.

Testing applied to these results takes into account a subgroup's sample size and result and compares this to all those who are not in that subgroup. Subgroups with different sample sizes may achieve different statistical significance results.

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### NEP ANALYSIS -

The following summary outlines key differences in the way those rated pro, mid, or anti-ecological responded to environmental governance questions.\*

### Perceptions of Environmental Governance (agree/strongly agree)

Those rated pro-ecological were more likely to agree that water quality in streams and rivers should be protected even if businesses have to bear the expense (85%), that the Waikato Regional Council should enforce its rules to protect the environment (82%), and that government restrictions were necessary for environmental protection (59%). They were less likely to agree that there was enough protection for significant natural sites (26%), that landowners should be allowed to do what they like on their land (13%), and that farming land at maximum productivity was acceptable (4%). Those rated anti-ecological demonstrated lower levels of agreement with measures that support restrictions, enforcement, and protection. The proportions of those rated pro, mid, and anti-ecological who agreed that Waikato Regional Council is visible in responding to environmental concerns were very similar.

	Anti-ecological	Mid-ecological	Pro-ecological
Waikato Regional Council should enforce its rules to make sure that the environment is well looked after	50% ↓	74%	82% ↑
Landowners should be allowed to do what they like on their own land	45% 个	26%	13% ↓
Waikato Regional Council should be doing more to protect New Zealand native birds and plants from introduced pests	52% ↓	71%	73%
Government restrictions on the use of private property are necessary so that the environment will not be harmed	30% ↓	46%	59% ↑
Waikato Regional Council is visible in responding to environmental concerns	32%	38%	36%
There is enough protection given to local significant natural sites	46% 1	38%	26% ↓
Farming agricultural land at maximum productivity is acceptable to me even if it results in polluted waterways	22% ↑	13%	4% ↓
Water quality in streams and rivers should be protected even if that means businesses have to bear the expense of meeting environmental standards	44% ↓	65%	85% ↑

# DEMOGRAPHIC ANALYSIS

Differences between urban and rural respondents were observed on some environmental governance indicators and not others. There are no significant differences between urban and rural respondents' views on landowners' right to do what they like on their own land; Waikato Regional Council's responsibility to protect native birds and plants from pests; the level of protection given to significant natural sites; and the trade off between farming at maximum productivity and water quality.

However, urban respondents were more likely to agree Waikato Regional Council should enforce its rules to make sure the environment is well looked after (75%, cf. the total, 72%), while rural residents were much less likely to agree with this statement (64%, cf. the total, 72%). A similar pattern was observed in relation to government restrictions on the use of private property whereby 51% of urban residents agreed such restrictions were necessary so the environment will not be harmed, while only 35% of rural respondents agreed with this (cf. the total, 47%).

Rural respondents were also less likely to agree that the water quality in streams and rivers should be protected even if that means business bear the expense of meeting environmental standards (58% cf. the total, 66%) while 70% of urban residents agreed with this.

# KEY POINTS

Year on year results indicate recent shifts in perceptions of regulation to protect the environment. In particular, this is reflected in the rise in the proportions of those who indicate that it depends. These results are difficult to interpret. Possibilities include but are not limited to; perception that government regulation is not achieving the desired outcomes; that trade-offs between economic activities and the environment are no longer sustainable or are out of balance; uncertainty about the implications of proposed regulatory changes such as the resource management system reforms and the Three Waters programme.

This year there was an increase in those who agree that farming at maximum productivity is acceptable to me even if it results in polluted waterways (12% cf. 2019, 5%) and an increase in those who selected depends (15% cf. 2019, 10%). While the proportion of respondents who agree or select depends has increased, improving water quality is considered by the largest proportion of respondents to be the most important issue facing the region today (31%) and in five years' time (24%).

# DISCUSSION OF FINDINGS

### CONCLUDING COMMENTS

Water continues to be the environmental issue that respondents felt was most important for the Waikato region both now and in five years' time. Water quality is the primary concern because of its contribution to other values including life itself. This year water shortages were mentioned by a number of respondents and their comments indicate a recognition of a range of sources of pressure on water availability including population growth, and climate change in particular, higher temperatures and drought. Water was prioritised in the region because water quality and availability is considered fundamental to the social, economic, and environmental health of the region.

### "I think that the Waikato River is a very important part of our environment and in some places looks very polluted." – Waipā resident

The verbatim responses to questions about freshwater suggest that issues of water quality are keenly felt throughout the region.

### "It affects a lot of things, including waterways and things like that. The Waikato River is part of the Waikato region and that is massively impacted by pollution." – Ōtorohanga resident

Over time perceptions of poor water quality in local streams, rivers and lakes in the region has increased. This year 46% of respondents stated the water quality had become worse in the past few years, while in 1998 only 25% of respondents thought this. There have been continued high levels of concern about water pollution caused by urban areas (85%), industry (86%), and rural land use (74%). Many respondents expressed distress over the condition of the region's waterways and expressed frustration with lack of action to improve water quality in the region.

This year a greater proportion of respondents have undertaken activities to reduce greenhouse gas emissions. Concern with climate change has remained at high levels with 75% of respondents concerned with the effects of climate change. This group is also more likely to be female and older. Respondents expressed concern about a range of climate change impacts including reduced water quality and availability, extreme weather, flooding, and sea level rise. Comments reflected recognition that the changes needed to address climate change are far reaching, and not progressing fast enough.

### "Changes in climate and temperature affect everything." – Taupō resident

"The problem is long term and cannot be resolved by a single issue quick fix." – Hamilton resident

### "Because it is continuing and not enough is being done to contain it." - Hamilton resident

Some increases in the proportion of don't know responses to climate change questions may reflect the amount and complexity of information about climate change, alongside high stakes debates about the types and extent of changes needed to reduce emissions and adapt to climate change impacts.

High levels of concern about urban growth have been observed for a number of years. This year 71% of respondents were concerned about the spread of cities and towns across rural land, and 79% of respondents were concerned about the loss of productive land. Those who were

# CONCLUDING COMMENTS

concerned about urban and population growth mentioned pressures on water and roading infrastructure, the availability and quality of freshwater and the environmental impacts of increased volumes of waste and greenhouse gas emissions.

"Too much property development and housing and spread of towns/ cities...it will impact the environment in multiple ways e.g. water, waste management, greenhouse gases etc." – Hamilton resident

"More and more farms are being sold up to developers for housing close to the city boundaries and this will impact more and more on the environment, more transport, trucks, people, waste, need to retain the green belt areas close to towns and cities." – Waipā resident

Some respondents felt levels of waste were a top priority for the region, with 13% stating waste is a key environmental issue for the region now and 9% in five years' time. Younger respondents were proportionally more likely to be interested in finding ways to reduce their waste further.

### *"We cannot keep creating more rubbish to go into landfills." – Waikato resident*

While 77% of respondents indicate their household does everything they can to reduce waste, 46% would like to reduce their waste further but are unsure how. These results may indicate a growing recognition of the need for further investment in waste reduction in the region. Respondents continue to show a high level of support for shared responsibility for waste reduction.

### *"If waste and manufacturing waste was reduced other issues would be reduced, i.e. pollution, greenhouse gases." – Hamilton resident*

Air pollution is an environmental issue that respondents expect will become more important over the longer term and is one of the top five most important environmental issues for the region in the next five years.

Monitoring data reinforces this, as 71% of respondents are concerned about air pollution and 25% perceive air pollution has become worse in the past few years. Verbatim comments suggest that respondents view air pollution to be the result of population growth and the increasing emissions from vehicles. A number of responses suggested investment in public transport was needed to reduce air pollution/greenhouse gas emissions in the future.

### "Reliance on motor vehicles for transport...pollution caused by motor vehicles affecting climate change. Insufficient use of the rail network." – Waipā resident

New biodiversity measures introduced in 2019 show a high level of concern about biodiversity loss and the harm caused by pest plants and animals. Verbatim responses from those who identify pest plants and animals as an important environmental issue for the region suggest that concerns reflect recognition of the significant harm caused by pest incursions that can lead to permanent loss of biodiversity.

While respondents observe a decline in the native fish, bird, and plant populations, these measures also have relatively high proportions of

# CONCLUDING COMMENTS

'don't know' responses (ranging from 14% for native local bird and plant decline, to 41% for native local fish decline) which may indicate less widespread awareness of the state of the regions' native birds, fish, and plants.

Results for environmental governance measures indicate some shifts in public perceptions. While a clear majority support the statement that Waikato Regional Council should enforce its rules to ensure the environment is well looked after, there has been a shift since 2016 away from straight support for this statement and an increase in those who select depends (72% currently agree compared to 91% in 2016). Disagreement with this statement was higher among rural respondents.

There has been a significant increase over time in those who select depends when asked if landowners should be allowed to do what they like on their land (currently 40% compared to 2% in 2006) and when asked whether government restrictions on the use of private property are necessary to protect the environment from harm (currently 25% compared to 2% in 2006).

In 2006 90% disagreed with the statement that farming land at maximum capacity is acceptable even if it results in polluted waterways. In 2022 68% disagree and 15% selected depends. In 2006 90% agreed that water quality in rivers and streams should be protected even if that means businesses have to bear the expense of meeting environmental standards. In 2022 66% agree and 20% selected it depends.

In the current context, in particular the scale and scope of the recent Government-led resource management system reform, the increase in *depends* answers to the environmental governance questions likely reflects a mix of perspectives. Amongst other things, this may include frustration with the ineffectiveness of current forms of environmental governance and the uncertainty about the impacts of system reform.

In sum, verbatim responses expressed frustration over lack of action to address water quality and climate change, considered the most pressing environmental issues facing the region. Respondents also expressed multiple concerns about the impacts of urban and population growth on the environment including the loss of productive land and natural areas, water supply and quality, waste reduction, and greenhouse gas emissions.

# He taiao maurioraHealthy environmentHe ōhanga pakariStrong economyHe hapori hihiriVibrant communities

Technical Report 2022/48 ISSN 2230-4339 (Print) ISSN 2230-4347 (Online) Printed January 2023 #7310

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