

6 Knowledge of Environmental Issues

This section examines respondents' knowledge and understanding of a range of environmental issues currently affecting the region. Residents were asked to rate each statement using a five point scale, specifying whether they strongly agree, agree, disagree, strongly disagree or neither agree nor disagree with each statement.

Note: The rating scale used in 2006 for the questions in this section differs from the rating scale used in 2000. In particular, in the previous measure, a three point scale was used (agree, disagree, depends), whereas in 2006, a five point scale was used (strongly agree, agree, disagree, strongly disagree, neither agree nor disagree). It is difficult to determine what effect, if any, this difference in rating scale might have had on the results obtained. Therefore, comparisons over time should be interpreted with caution.

Key findings are:

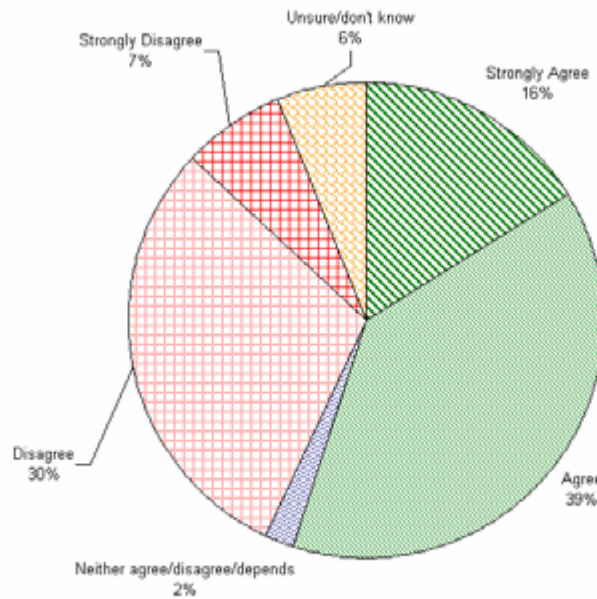
- Results suggest that some residents have a lack of understanding or hold misperceptions of the causes of some environmental problems in the region.
- Agreement that **water pollution in the region's rivers and streams comes mainly from farmland** has increased significantly since 2000 (total agree up from 35% to 55%). This shows an increased understanding of the main source of water pollution in the region.
- However, residents continue to hold a misperception about the source of oil in our lakes, rivers and harbours, with 66% of respondents agreeing with the statement **most oil in our lakes, rivers and harbours gets there from spillage from industry**. Levels of agreement with this statement have remained relatively stable since 2000. In fact, most oil in waterways gets there from non-point sources, for example stormwater.
- Again there appears to be a misperception of the sources of water pollution, with levels of agreement/disagreement particularly mixed for **the discharge of treated human sewage being a major cause of pollution in the region's waterways**, 48% agreeing with this statement, and 39% disagreeing. However, for Maori residents discharges of treated human sewage into waterways is culturally inappropriate and this is reflected in the demographic comparisons with 62% of Maori and 55% of those with Maori ancestry agreeing with this statement.
- There also appears to be a lack of knowledge about the main source of air pollution in the region, with 58% disagreeing that **most air pollution comes from people's home fires**.

6.1 Pollution in Rivers and Streams Mainly from Farmland

Residents were asked whether they agreed or disagreed with the statement that *pollution in the region's river and streams comes mainly from farmland*.

6.1.1 Overall Result

Over half (55%) of respondents agreed that pollution in the region's river and streams comes mainly from farmland, 16% *strongly agreeing* with the statement, and a further 39% *agreeing*. In contrast, just over a third of residents (37%) disagreed with this statement (30% *disagreeing*, 7% *strongly disagreeing*). Six per cent of residents reported being unsure as to whether pollution in the region's rivers and streams comes mainly from farmland.



Base: All respondents (n=1000)

Figure 6-1: Pollution in Rivers and Streams Coming Mainly From Farmland

6.1.2 Comparison with Previous Years

Agreement that water pollution in the region's rivers and streams comes mainly from farmland has increased significantly since 2000 (total agree up from 35% to 55%). The proportion of the region's residents who disagreed with this statement has declined significantly over the last six years (total disagree down from 49% on 2000 to 37% in 2006).

Table 6-1: Agreement with Pollution in Rivers and Streams Coming Mainly from Farmland 2000, 2006

	2000 %	2006 %	Change 00-06
Strongly agree	N/A	16	N/A
Agree	N/A	39	N/A
Total Agree	35	55	+20
Neither agree nor disagree/depends	8	2	-8
Disagree	N/A	30	N/A
Strongly disagree	N/A	7	N/A
Total Disagree	49	37	-12
Unsure/don't know	7	6	-1

Base (respondents)

1873

1000

N/A denotes code not used in previous years

6.1.3 Demographic Variation

Those significantly more likely (than the regional average) to **agree** that pollution in the region's rivers and streams comes mainly from farmland were:

- those involved in home responsibilities only (not in paid employment and not receiving government financial support) (70%)
- retired (65%)
- those with tertiary qualifications (59%)
- New Zealand European (57%) or with no Maori ancestry (57%).

Those more likely to **disagree** were those:

- working in farming occupations (55%)
- with a secondary school qualification (44%)
- aged 20 to 29 years (44%).

6.1.4 Geographic Variation

No particular territorial authority or urban/rural residents were identified as being significantly more likely to **agree** with the statement that pollution in the region's rivers and streams comes mainly from farmland.

Those who were more likely to **disagree** with the statement were:

- living in Rotorua (54%).



Figure 6-2: Agreement with Pollution in Rivers and Streams Coming Mainly from Farmland by Urban/Rural and Territorial Authority

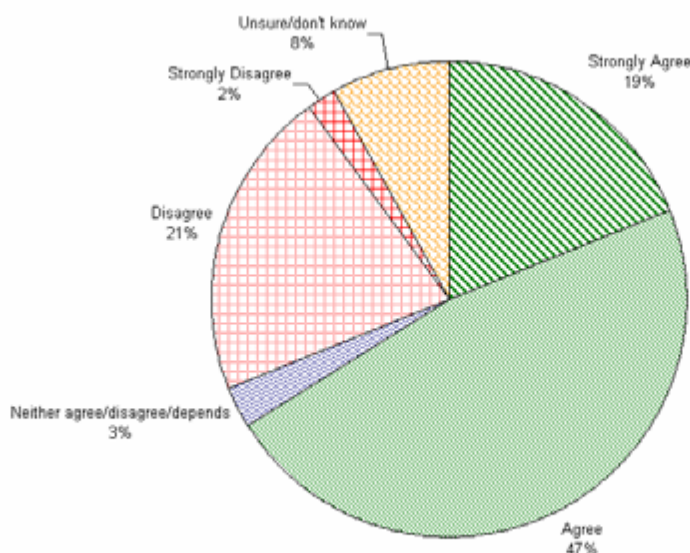
6.2 Oil in Waterways from Industries' Spillage

Residents were asked whether they agreed or disagreed with the statement that *most of the oil in our lakes, rivers and harbours gets there from spillage from industries*.

Note: This is a negatively framed question - that is, agreement with this statement is incorrect. Most oil in waterways in the Waikato region gets there from non-point sources such as stormwater, run-off from roads, etc.

6.2.1 Overall Result

The majority of Waikato region residents (66%) agreed that most of the oil in the region's lakes, rivers and harbours gets there from spillage from industries; 19% of residents *strongly agreeing* with this statement, and 47% *agreeing*. In contrast, just less than a quarter of residents believed that most of the oil originates from a source other than industry spillage (2% *strongly disagreeing*, 21% *disagreeing*). Eight per cent of residents reported that they did not know whether oil in lakes, rivers and harbours gets there predominantly from spillage from industries or not.



Base: All respondents (n=1000)

Figure 6-3: Oil in Waterways from Industries' Spillage

6.2.2 Comparison with Previous Years

Levels of agreement that most of the oil in our lakes, rivers and harbours gets there from spillage from industries have remained relatively unchanged from 2000 with around two-thirds of residents (65% in 2000, 66% in 2006) continuing to agree with this statement.

The proportion of residents disagreeing has increased over the last six years (total disagree up from 19% in 2000 to 23% in 2006).

Table 6-2: Agreement with Oil in Waterways from Industries' Spillage 2000, 2006

	2000 %	2006 %	Change 00-06
Strongly agree	N/A	19	N/A
Agree	N/A	47	N/A
Total Agree	65	66	+1
Neither agree nor disagree/depends	6	3	-3
Disagree	N/A	21	N/A
Strongly disagree	N/A	2	N/A
Total Disagree	19	23	+4
Unsure/don't know	9	8	-1

Base (respondents)

1873

1000

N/A denotes code not used in previous years

6.2.3 Demographic Variation

Those significantly more likely (than the regional average) to **agree** that most of the oil in our lakes, rivers and harbours gets there from spillage from industries were:

- Asian/Indian (91%)
- unemployed/beneficiaries (89%)
- those with no qualifications (86%)
- Maori (85%) or those with Maori ancestry (79%)
- aged 20 to 29 years (77%)
- female (69%).

Those more likely to **disagree** were:

- aged 50 to 59 years (30%)
- male (28%)
- working full-time (26%)
- New Zealand European(26%) or with no Maori ancestry (26%).

6.2.4 Geographic Variation

When considered by territorial authority and by urban and rural locations, those who were more likely to **agree** with the statement that most of the oil in the lakes, rivers and harbours gets there from spillage from industries were those:

- living in Hamilton (73%).

Those more likely to say **depends** were those:

- living in the districts (as opposed to Hamilton city) (4%).

No particular territorial authority or urban/rural residents were identified as being more likely to **disagree** with this statement.



Figure 6-4: Agreement with Oil in Waterways from Industries' Spillage by Urban/Rural and Territorial Authority

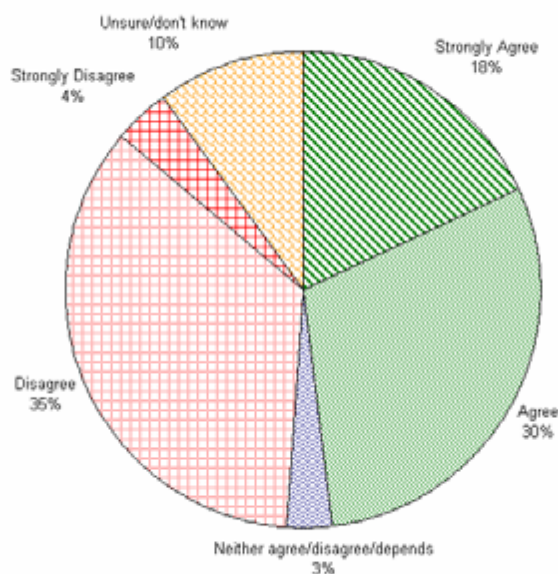
6.3 Treated Human Sewage a Major Cause of Waterway Pollution

Residents were asked whether they agreed or disagreed with the statement that *in this region, discharges of treated human sewage are a major cause of pollution in our waterways.*

Note: The major cause of pollution in the Waikato region's waterways is from run-off from agricultural land. However, for Maori residents discharges of treated human sewage into waterways is culturally inappropriate and this is reflected in the demographic comparisons, with 62% of Maori and 55% of those with Maori ancestry agreeing with this statement.

6.3.1 Overall Result

Opinions were mixed as to whether discharges of treated human sewage were a major cause of pollution in Waikato waterways. Just less than half of all residents (48%) agreed with this statement (18% *strongly agree*, 30% *agree*), while 39% felt that this statement is untrue (4% *strongly disagree*, 35% *disagree*). One in ten residents (10%) were not sure whether treated human sewage is a major cause of pollution in Waikato waterways or not.



Base: All respondents (n=1000)

Figure 6-5: Treated Human Sewage a Major Cause of Waterway Pollution

6.3.2 Comparison with Previous Years

This question was asked for the first time in 2006. Consequently no comparative results are available.

6.3.3 Demographic Variation

Those significantly more likely (than the regional average) to **agree** that discharges of treated human sewage are a major cause of pollution in the waterways were:

- Asian/Indian (78%)
- aged 18 to 19 years (73%) or 20 to 29 years (54%)
- unemployed/beneficiaries (69%)
- those involved in home responsibilities only (not in paid employment and not receiving government financial support) (64%)

- Maori (62%) or have Maori ancestry (55%)
- those with an annual household income of \$30,000 or less (54%).

Those more likely to **disagree** were those:

- with an annual household income of \$90,001 to \$150,000 (50%)
- who are retired (48%)/aged 60 years or over (48%)
- New Zealand European (44%) or with no Maori ancestry (41%)
- who are male (44%)
- in non-farming rural occupations (42%).

6.3.4 Geographic Variation

When considered by territorial authority and by urban and rural locations, those who were more likely to **agree** with the statement that in this region, discharges of treated human sewage are a major cause of pollution in our waterways were:

- living in Waikato (69%).

Those who were more likely to say **depends** were:

- those living in the districts (as opposed to Hamilton city) (4%).

Those who were more likely to **disagree** with this statement were:

- living in Taupo (55%).



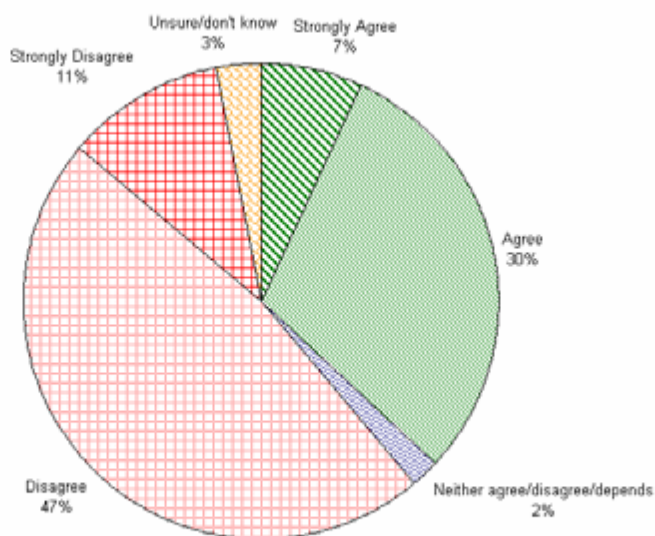
Figure 6-6: Agreement with Treated Human Sewage a Major Cause of Waterway Pollution by Urban/Rural and Territorial Authority

6.4 Air Pollution from Home Fires

Residents were asked whether they agreed or disagreed with the statement that *most air pollution comes from people's home fires*.

6.4.1 Overall Result

Just less than three out of five residents (58%) disagreed that most air pollution comes from people's home fires (11% *strongly disagree*, 47% *disagree*). Conversely, just over a third of residents (37%) agreed with this statement (7% in *strong agreement*). Three per cent of respondents admit that they were unsure as to the major source of air pollution in the region. *Note: In fact, the main contributor to air pollution in the Waikato region is people's home fires.*



Base: All respondents (n=1000)

Figure 6-7: Air Pollution from Home Fires

6.4.2 Comparison with Previous Years

This question was asked for the first time in 2006. Consequently no comparative results are available.

6.4.3 Demographic Variation

Those significantly more likely (than the regional average) to **agree** that most air pollution comes from people's home fires were those:

- aged 30 to 39 years (43%).

Those more likely to **disagree** were those:

- who are students (74%).

6.4.4 Geographic Variation

When considered by territorial authority and by urban and rural locations, those who were more likely to **agree** with the statement that most air pollution comes from people's home fires were:

- living in South Waikato (51%), Waikato (49%) or living in the districts as opposed to Hamilton city (42%).

When considered by territorial authority and by urban and rural locations, those more likely to **disagree** with this statement were those:

- living in Franklin (71%) or Hamilton (69%).



Figure 6-8: Agreement with Air Pollution from Home Fires by Urban/Rural and Territorial Authority

7 Air Quality

This section considers respondents' perceptions of air quality in the Waikato region. Residents were asked whether, in their opinion, there were any activities taking place that were damaging the air quality in the region, and what these activities might be.

Key findings are:

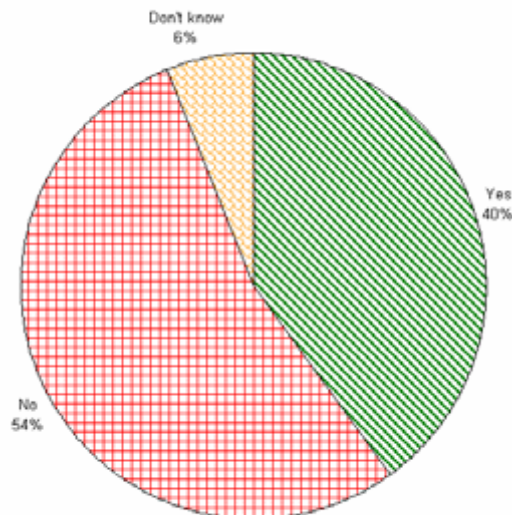
- Residents were divided on the issue of activities damaging air quality in the Waikato region, with half (54%) saying there were none (compared with 52% in 2003), while 40% believed there were activities threatening air quality (compared with 45% three years ago).
- Of those that say there were activities that damage air quality; as in 2000 and 2003, the top two activities identified as damaging to air quality in the region were **vehicle emissions** (52%) and **industrial emissions** (37%).
- **Industrial burning** is now the third most frequently cited activity perceived to be damaging air quality in the Waikato region (12%), this proportion having increased from 6% in 2003. Other air quality pollutants frequently identified by residents include **domestic fires for home heating** (9%) and **burning rubbish** (8%).
- Of note is the significant decline in the proportion of residents citing **sprays and spray drift/chemicals** (6%) as an activity affecting air quality; mention of this pollutant down from both 2003 (15%) and 2000 (17%).

7.1 Air Quality in the Waikato Region

Residents were asked whether they thought the air quality in the region was being damaged by activities.

7.1.1 Overall Result

Just over half of respondents (54%) believed there are no activities taking place in the Waikato region that would be damaging to air quality. In contrast, 40% believed there were.



Base: All respondents (n=1000)

Figure 7-1: Are There Activities Damaging the Air Quality?

7.1.2 Comparison with Previous Years

Results show a significant decline in the proportion of residents who believed that there were activities in the Waikato region that were damaging air quality – down from 46% in 2000 and 45% in 2003, to 40% in 2006. In terms of those unsure whether there were activities in the area that compromised air quality, the proportion of residents has also increased significantly since both 2000 and 2003 – up from 3% to 6%.

Table 7-1: Activities Damaging Air Quality

	2000 %	2003 %	2006 %	Change 00-06	Change 03-06
Yes	46	45	40	-6	-5
No	51	52	54	+3	+2
Don't know	3	3	6	+3	+3
<i>Base (respondents)</i>	1873	1822	1000		

7.1.3 Demographic Comparisons

Those significantly more likely (than the regional average) to believe that air quality in the region **is being damaged** were:

- students (68%)
- involved in home responsibilities only (not in paid employment and not receiving government financial support) (56%)
- Maori (51%)
- those with tertiary qualifications (45%).

Those significantly more likely to say it **is not being damaged** were those:

- working in farming occupations (70%)
- retired (61%)/ working full-time (57%)
- New Zealand European(56%).

7.1.4 Geographic Variation

When considered by territorial authority and by urban and rural locations, those more likely to consider that the air quality in the region **is being damaged** were:

- living in Hamilton (49%).

Those more likely to consider air quality in the region **is not being damaged** were:

- living in Taupo (75%)
- living in the districts (as opposed to Hamilton) (59%).

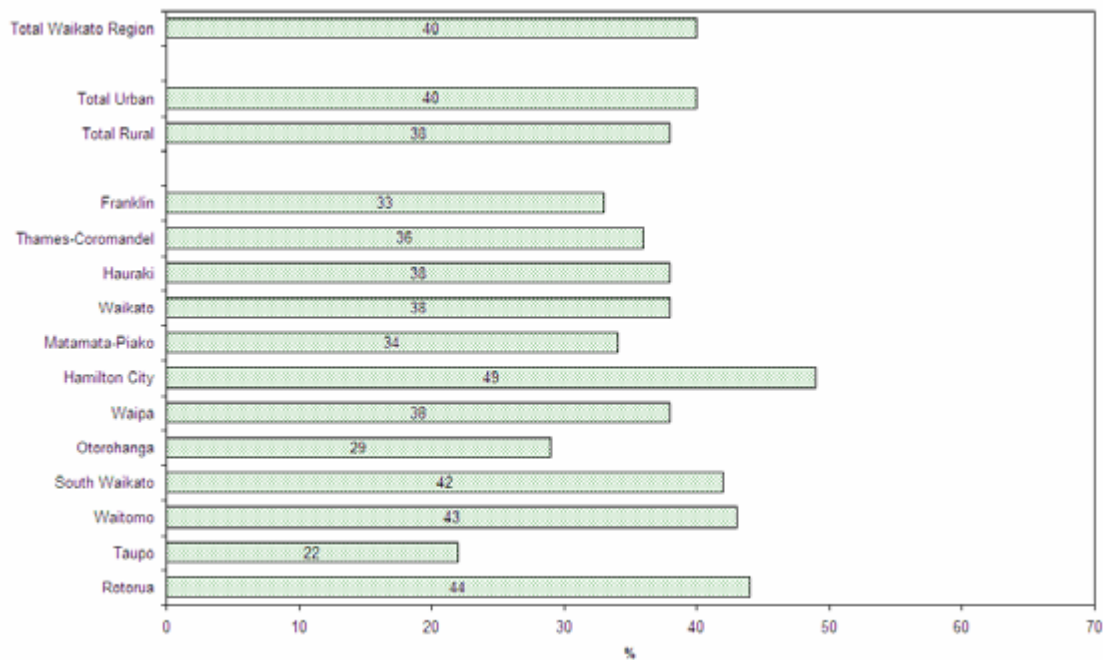


Figure 7-2: Activities Damaging the Air Quality by Urban/Rural and Territorial Authority

7.2 Activities Damaging Air Quality in the Waikato Region

The 40% of respondents who stated that they thought there were activities that were damaging the air quality in the Waikato region were asked to identify these.

7.2.1 Overall Result and Comparison with Previous Years

While **vehicle emissions** (52%) continue to be the activity most commonly identified as being responsible for damaging air quality in the region, the proportion citing this pollutant has declined significantly since 2003 (58%). In contrast, the proportion citing **industrial emissions** has increased significantly over the last three years – up from 30% in 2003 to 37% in 2006. **Industrial burning** is now the third most frequently cited activity perceived to be damaging air quality in the Waikato region (12%), this proportion having increased from 6% in 2003. Other air quality pollutants frequently identified by residents include **domestic fires for home heating** (9%) and **burning rubbish** (8%).

Of note is the significant decline in the proportion of residents citing **sprays/spray drift/chemicals** as an activity affecting air quality; mention of this pollutant down from 15% in 2003 (and 17% in 2000) to 6% in 2006.

Overall, 39 different activities were identified by respondents as damaging air quality in the region. These are summarised below in Table 7.2.

Table 7-2: Activities Damaging Air Quality, 2000, 2003 and 2006

Activity	2000 %	2003 %	2006 %
Vehicle emissions	47	58	52
Industrial emissions	38	30	37
Industrial burning	-	6	12
Domestic fires for home heating (<i>previously Domestic Fires</i>)	6	8	9
Burning rubbish	-	4	8
Backyard fires at houses	4	4	6
Sprays/spray drift/chemical use (<i>previously Sprays/chemicals</i>)	17	15	6
Methane – animal emissions, landfill	2	4	5
Smell/odour (geothermal areas, boiling down works)	-	< 0.5	4
Other dust	-	<0.5	2
Pollen	6	3	2
Other non-air quality - soil pollution, water pollution	1	2	2
Shrub/vegetation burn-offs/draining wetlands (<i>previously Burn offs</i>)	5	2	2
Dust on the road	-	< 0.5	2
Trees – cutting down, lack of	0	1	2
Traffic	-	1	2
Landfill emissions	-	-	2
Indoor farming (pigs, chickens)	2	1	1
Sewage disposal/wastewater	-	< 0.5	1
Rubbish disposal/littering	-	1	1
Noise	-	< 0.5	1
Mining/quarrying	-	2	1
Infrastructure (Telecom masts, electricity)	-	< 0.5	1
Farms (general)	-	1	1
Smoking	1	2	1
Population increase/urban sprawl	-	1	< 0.5
Overuse of lakes/waterways	-	1	< 0.5
Kinleith	1-	2	< 0.5
Ozone, CFCs	1	1	< 0.5
Geothermal gases/volcanic eruptions	-	< 0.5	-
Polluted waterways	-	1	-
Other	1	1	2
Don't know	2	0	2

Base (respondents stating that there are activities damaging air quality)

862

820

403

Note: Multiple responses to this question were permitted. Consequently the table may total more than 100%

The following activities were mentioned by less than 1% of respondents:

- Smoke, emissions in general
- Dump
- Climate change/weather/high winds
- Unsealed yards
- Road burning
- 1080 poison/poisons/pesticides.

7.2.2 Demographic Comparisons

Some respondents were significantly **more likely** to identify certain activities as damaging to the air quality in the Waikato region. These were for:

- *vehicle emissions* – those aged 20 to 29 years (63%) or tertiary-qualified residents (59%).
- *traffic* – those on an annual household income of \$90,001 to \$150,000 (8%) or aged 20 to 29 (6%).
- *industrial emissions* – those aged 40 to 49 years (48%) or those in non-farming rural occupations (41%).
- *burning rubbish* - males (11%).
- *backyard fires at houses* - those with secondary school qualifications (13%) or those working full-time (9%).
- *sprays/spray drift/chemical use* - Maori (14%), with Maori ancestry (11%) or those aged 30 to 39 years (11%).
- *mining/quarrying* – those aged 60 years or older (3%), with an annual household income of \$30,001 to \$60,000 (2%) or with secondary school qualifications (2%).
- *other dust* - those on an annual household income of \$30,001 to \$60,000 (6%).
- *shrub/vegetation burn-offs/draining wetlands* - those aged 50 to 59 years (6%) or those working full-time (4%).
- *cutting down or lack of trees* - those who attended secondary school (6%) or aged 20 to 29 (4%).
- *pollen* - retired residents (10%), with an annual household income of less than \$30,000 (8%) or aged 60 years and older (6%).
- *overuse of lakes/waterways* - people with an annual household income of less than \$30,000 (2%), working part-time (2%) or 60 years and older (1%).
- *farms (general)* - working part-time (3%) or with an annual household income of \$60,001 to \$90,000 (2%).
- *dumps* - aged 40 to 49 years (2%).
- *sewage disposal / waste water* - secondary school qualifications (8%), males (2%) or working full-time (2%).
- *smells/odours – geothermal areas, boiling down works, unspecified* - attended secondary school (10%) or working full-time (6%).
- *smoking* - aged 60 years or older (3%).
- *population increase/urban sprawl* - retired people (2%) or those with secondary school qualifications (2%).
- *noise* - those aged 20-29 years (4%) or on an annual household income of \$90,001 and \$150,000 (3%).
- *infrastructure – telecom masts, electricity* - those on an annual household income of \$90,001 to \$150,000 (3%).
- *climate change/weather/high winds* - aged 50 to 59 years (2%) or those on an annual household income of \$90,001 to \$150,000 (2%).
- *other non-air pollution – soil pollution, water pollution* - those working part-time (6%) or aged 60 years and over (5%).
- *do not know* - people working part-time (5%) or in non-farming rural occupations (3%).

7.2.3 Geographic Variation

When considered by territorial authority and by urban and rural locations, the following significant differences emerge:

- *Waikato* - dust on the road (7%).
- *Hamilton* - vehicle emissions (72%), industrial emissions (43%), traffic (4%), noise (2%) and smoking (2%).
- *Waipa* - indoor farming (pigs, chickens) (5%).
- *Living in the districts (as opposed to Hamilton city)* - industrial burning (18%), pollen (3%), landfill emissions (3%).
- *Urban areas* - vehicle emissions (55%).
- *Rural areas* - industrial burning (20%) and cutting down and lack of trees (4%).

The most commonly mentioned activities for each territorial authority can be found in the District Summaries section of this report.

8 Natural Hazards

This section is concerned with residents' awareness of potential natural hazards that might occur in the areas where they live. Information generated by respondents can then be compared with known or scientific information in this area to identify the region's residents' needs in terms of raising awareness and understanding of any potential hazards in the Waikato region.

Key findings are:

- Awareness of natural hazards has increased since 2003, with more residents able to identify three or more hazards (18%, compared with 10% in 2003), and fewer residents unable to identify any hazards (24%, compared with 32% in 2003).
- Those natural hazards identified most frequently in 2006 remain the same as in previous years, namely **earthquakes** (37%), **flooding** (31%) and **high winds/storms/cyclones** (24%).

8.1 Awareness of Natural Hazards

Residents were asked to identify any natural hazards that could cause damage to them or their property.

8.1.1 Overall Result and Comparison with Previous Years

In 2006, a total of 29 natural hazards were identified. Of these, earthquakes (37%) and flooding (31%) were most frequently mentioned. High winds, storms and cyclones (24%) were also frequently cited. However, a quarter of residents (24%) could not identify any natural hazards or did not know.

Awareness of most natural hazards has increased since 2003. The proportion of residents citing earthquakes (37%) has increased significantly since 2003 (28%) as has the proportion mentioning flooding (up from 27% to 31%) and high winds/storms/cyclones (up from 17% to 24%). Only awareness of land erosion/land slips has declined since 2003 (down from 8% in 2003 to 6% in 2006). The increasing awareness of residents is also reflected in the significant decline over the last three years (down from 32% in 2003 to 24% in 2006) in the proportion unable to cite any natural hazards.

Table 8.1 summarises those natural hazards identified:

Table 8-1: Awareness of Natural Hazards

	1998 %	2000 %	2003 %	2006 %
Earthquakes	11	35	28	37
Flooding	22	33	27	31
High winds/storms/cyclones	16	26	17	24
Volcanic or thermal eruption	8	10	7	11
Forest or bush fire	-	6	4	8
Land erosion/land slips	10	11	8	6
Tsunami	-	2	1	6
Trees falling	3	2	2	3
Pollution – air, water, soil, rubbish	-	0	1	2
Fire	2	0	1	2
Other non-natural – war, uneven paving stones	-	0	2	2
Coastal erosion	1	1	1	2
Lightning	-	0	1	1
Ozone layer damage	-	-	< 0.5	1
Rising sea levels	1	1	1	1
Animal pests	2	2	2	1
Subsidence	-	-	2	1
Rain/hail/snow	-	0	1	1
Tornado	-	0	1	1
Drought	-	3	1	1
Sun/global warming/climate change	-	-	< 0.5	1
Plant related – weeds, foreign, noxious, G.E	-	1	2	1
Meteorites	-	-	-	1
Roadways	-	-	< 0.5	1
Chemicals/sprays	-	1	2	< 0.5
Mining	1	0	1	< 0.5
None/Don't know	43	19	32	24
<i>Base (respondents)</i>	1037	1873	1822	1000

Note: Multiple responses to this question were permitted. Consequently the table may total more than 100%

The following natural hazards were identified by less than 1% of respondents in 2006:

- Weather generally/Damp homes
- Disease
- Industrial pollution

When grouped according to the number of natural hazards identified, the increase in awareness is further apparent, with the proportion of residents aware of three or more natural hazards (18%) having increased significantly since both the 1998 benchmark (7%) and 2003 (10%).

Table 8-2: Awareness of Natural Hazards (%)

	1998 %	2000 %	2003 %	2006 %	Change 98-06	Change 03-06
Not aware of any hazards	43	19	32	24	-19	-8
Aware of 1-2 hazards	50	67	59	58	+8	-1
Aware of 3+ hazards	7	14	10	18	+11	+8

Base (respondents) 1037 1873 1822 1000

8.1.2 Demographic Comparisons

Some respondents were significantly **more** likely to be aware of certain natural hazards. These were for:

- *earthquakes* - those on an annual household income of \$90,001 to \$150,000 (48%), aged 30 to 39 years (48%) or tertiary-qualified residents (45%).
- *flooding* - Maori (47%), aged 30 to 49 years (39%), tertiary qualified residents (37%), on an annual household income of \$30,001 to \$60,000 (37%) or who work full-time (35%).
- *high winds/storms/cyclones* – those with tertiary-qualifications (27%).
- *volcanic or thermal eruption* - those with a trade certificate (20%), on an annual household income of \$90,001 to \$150,000 (17%) or New Zealand European (12%).
- *land erosion/land slips* - those on an annual household income of \$90,001 to \$150,000 (12%) or who work full-time (8%).
- *Tsunamis* - retired residents (10%).
- *trees falling* - those aged 18 to 19 years (9%).
- *fire* - Asian/Indian residents (16%).
- *pollution* – those who are students (7%).
- *unaware of any natural hazards* - those aged 18 to 19 years (44%) or those with secondary school qualifications only (31%).

8.1.3 Geographic Variation

Residents living in some territorial authority areas were significantly **more likely** than others to identify certain natural hazards as possibly occurring in their area. There were no significant differences by rural/urban groupings.

- *Franklin* - tsunamis (13%) and lightning (5%).
- *Thames-Coromandel* - tsunamis (37%) and trees falling (7%), coastal erosion (6%) and rising sea levels (4%).
- *Hauraki* - mining (6%) and roadways (3%).
- *Waikato* - coastal erosion (6%).
- *Hamilton* - fire (5%), pollution - air, water, soil, rubbish (5%), other non-natural (5%), tornado (2%), rain/hail/snow (2%) and chemical/sprays (1%).
- *Matamata-Piako* - earthquakes (52%) and high winds/storms/cyclones (34%).
- *Waipa* - not aware of any natural hazards (36%).
- *South Waikato* - animal pests (3%) and weather generally/ damp homes (2%).
- *Otorohanga* - flooding (48%) and drought (4%).
- *Waitomo* - land erosion/land slips (19%).
- *Rotorua* - earthquakes (50%), volcanic or thermal eruptions (34%), and forest or bush fires (18%).
- *Taupo* - earthquakes (48%), volcanic or thermal eruptions (55%) and animal pests (3%).

The commonly mentioned hazards for each territorial authority can be found in the District Summaries section of this report.

9 Energy Generation and the Environment

Key findings are:

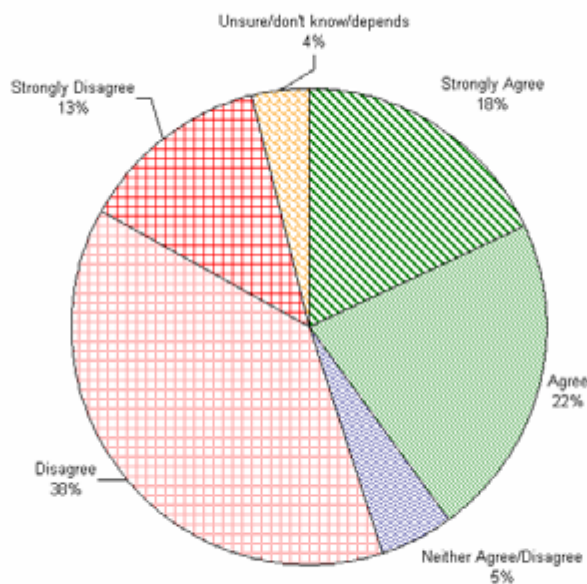
- Respondents' views were mixed on whether they would or would not object to a wind turbine in clear view of their property, with 51% of residents indicating that they would not object to a wind turbine being visible from their window while 40% would object.

9.1 Visual Amenity of Wind Turbines

Residents were asked whether they agreed or disagreed that they *would not like to see a wind turbine out my window.*

9.1.1 Overall Result

Half of all Waikato residents surveyed (51%) disagreed with the statement that they would not like to see a wind turbine out my window (13% *strongly disagreeing*, 38% *disagreeing*). In contrast, two in five respondents (40%) agreed that they would not like to see a wind turbine out their window (18% *strongly agreeing*, 22% *agreeing*).



Base: All respondents (n=1000)

Figure 9-1: Visual Amenity of Wind Turbines

9.1.2 Comparison with Previous Years

This question was asked for the first time in 2006. Consequently no comparative results are available.

9.1.3 Demographic Comparisons

Those significantly more likely (than the regional average) to **agree** that they would not like to see a wind turbine out their window were:

- involved in home responsibilities only (not in paid employment and not receiving government financial support) (54%)
- Maori (55%) or with Maori ancestry (49%)
- aged 20 to 29 years (48%).

Those significantly more likely to **disagree** with this statement were:

- aged 60 years or over (57%)
- with tertiary qualifications (56%)
- New Zealand European(53%).

9.1.4 Geographic Variation

No particular territorial authority or urban/rural residents were identified as being more likely to agree or disagree with the statement that they would not like to see a wind turbine out their window.

Those more likely to say it **depends** were:

- living in Thames-Coromandel (11%), rural residents (8%) or those living in the districts (as opposed to Hamilton city) (6%).



Figure 9-2: Agreement With Visual Amenity of Wind Turbines

10 Environmental Regulations and Controls

This section examines respondents' attitudes towards various environmental regulations and controls. Residents were asked to rate each statement using a five point scale, specifying whether they strongly agreed, agreed, disagreed, strongly disagreed or neither agreed nor disagreed with each statement.

Note: The rating scale used in 2003 and 2006 for the questions in this section differs from the rating scale used in 1998 and 2000. In particular, in previous measures a three-point scale was used (agree, disagree, depends), whereas in 2003 and 2006 a five-point scale was used (strongly agree, agree, disagree, strongly disagree, neither agree nor disagree). It is difficult to determine what effect, if any, this difference in rating scale might have had on the results obtained. Therefore, comparisons over time should be interpreted with caution.

Key findings are:

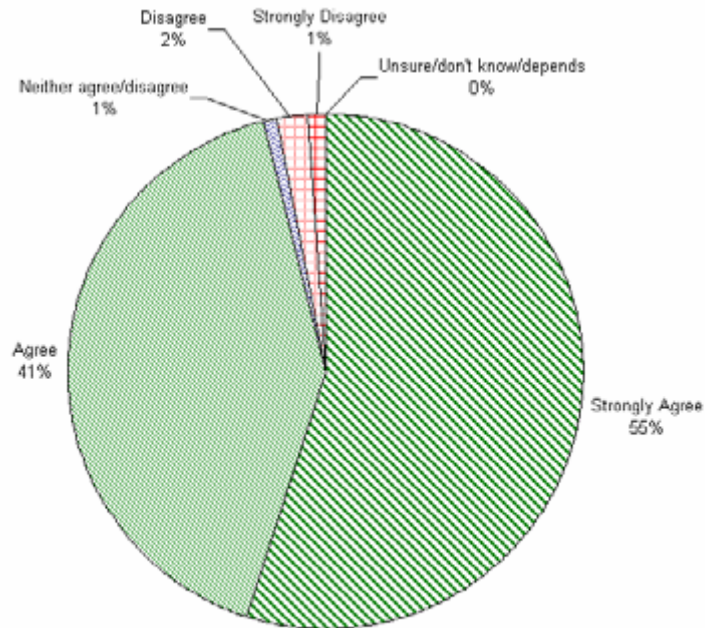
- Waikato region's residents appear to support environmental regulation, with almost all agreeing **council should enforce its rules and laws to make sure that the environment is well looked after** (96% agree – up from 88% in 2003).
- Additionally, a large proportion of surveyed residents believe that **government restrictions on the use of private property are necessary so that the environment will not be harmed** (76% agree – up slightly from 73% in 2003).
- Similarly, more than half of surveyed residents continue to disagree that **landowners should be allowed to do what they like on their own land** (53% disagreeing – up slightly from 50% in 2003).
- Residents desire regulations that minimise the impact of natural hazards, 88% agreeing that **council should tighten its provisions for the construction of homes and buildings in areas at risk from flooding and erosion**.
- The majority of residents are keen for regulations that minimise air pollution; three out of five residents (60%) disagreeing that **people should be allowed to burn garden waste in their backyard**.
- Residents continue to be clearly opposed to **livestock being allowed to enter streams and waterways on farms**, 75% disagreeing with the statement (compared with 79% in 2003).
- Three out of five residents (62%) agree that **there is enough protection given to local significant natural sites**. Levels of agreement with this aspect of environmental regulation have increased significantly since 2003 (49%).
- There continues to be concern among residents regarding urban growth with two-thirds (66% - up from 64% in 2003) agreeing that **urban sprawl and subdivisions threaten the natural environment**.
- However, with respect to current urban development, over half of respondents (57%) agree that **new developments and subdivisions are sustainably designed**.

10.1 Council Enforcement of Rules and Laws

Residents were asked whether they agreed or disagreed with the statement that *council should enforce its rules and laws to make sure that the environment is well looked after*.

10.1.1 Overall Result

Almost all residents (96%) agreed that council should enforce its rules and laws to ensure the environment is well looked after (55% *strongly agree*, 41% *agree*). Only a small proportion of residents (3%) disagreed with this statement (1% *strongly disagree*, 2% *disagree*).



Base: All respondents (n=1000)

Figure 10-1: Council Enforcement of Rules and Laws

10.1.2 Comparison with Previous Years

There has been a significant increase in the proportion of residents agreeing that council should enforce its rules and laws to make sure the environment is looked after (total agreeing up from 87% in 2000 and 88% in 2003 to 96% in 2006).

As well as an increase in overall levels of agreement since 2003, residents' views on this issue have also become significantly stronger, the proportion of residents who *strongly agree* with council enforcements of environmental rules and laws having increased from 36% in 2003, to 55% in 2006.

Table 10-1: Agreement with Council Enforcement of Rules and Laws, 2000, 2003, 2006

	2000 %	2003 %	2006 %	Change 00-06	Change 03-06
Strongly Agree	N/A	36	55	N/A	+19
Agree	N/A	52	41	N/A	-11
Total Agree	87	88	96	+9	+8
Neither agree nor disagree/depends	9	7	1	-8	-6
Disagree	N/A	3	2	N/A	-1
Strongly Disagree	N/A	1	1	N/A	0
Total Disagree	3	4	3	-	-1
Unsure/don't know	1	1	0	-1	-1

Base (respondents) 1873 1822 1000
 N/A denotes code not used in previous years

This trend is shown below in Figure 10.2.

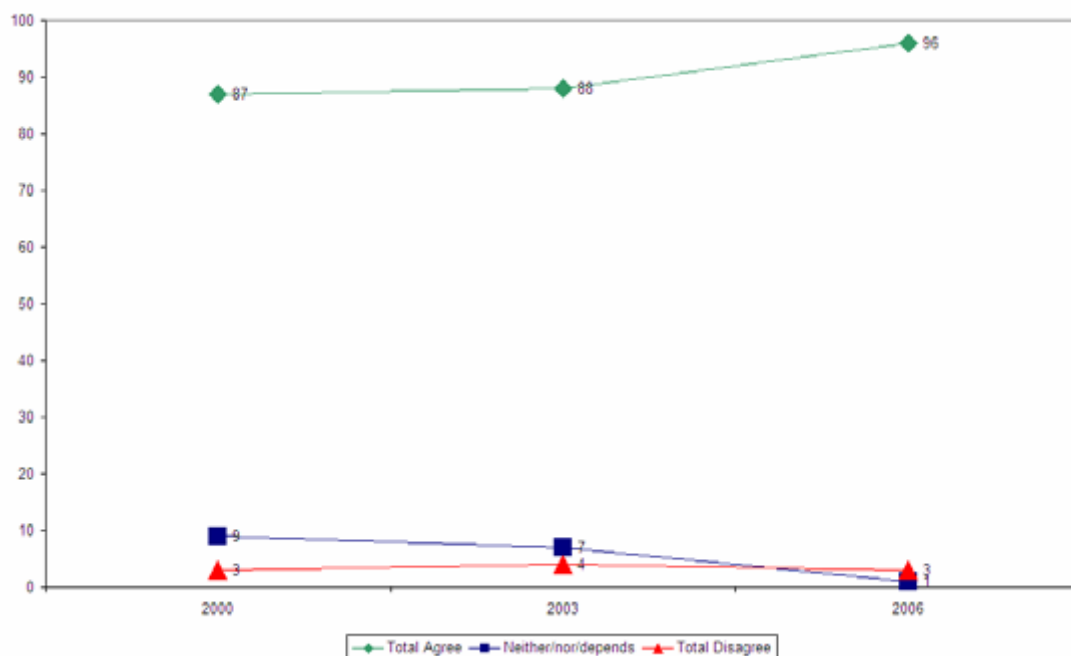


Figure 10-2: Agreement with Council Enforcement of Rules and Laws, 2000, 2003, 2006

10.1.3 Demographic Variation

Those significantly more likely (than the regional average) to **agree** that the council should enforce its rules and laws to make sure that the environment is well looked after were:

- aged 20 to 29 years (99%) or 30 to 39 years (98%)
- in non-farming rural occupations (97%).

Those significantly more likely to **disagree** with this statement were:

- aged 50 to 59 years (8%).

10.1.4 Geographic Variation

When considered by territorial authority and by urban and rural locations, those who were significantly more likely to **agree** that the council should enforce its rules and laws to make sure that the environment is well looked after were:

- living in Hamilton (98%).

Those more likely to say **depends** on this statement were:

- living in Thames-Coromandel (3%) and Waitomo (3%)
- living in the districts (4%).

Those more likely to **disagree** with this statement were:

- living in Thames-Coromandel (8%).

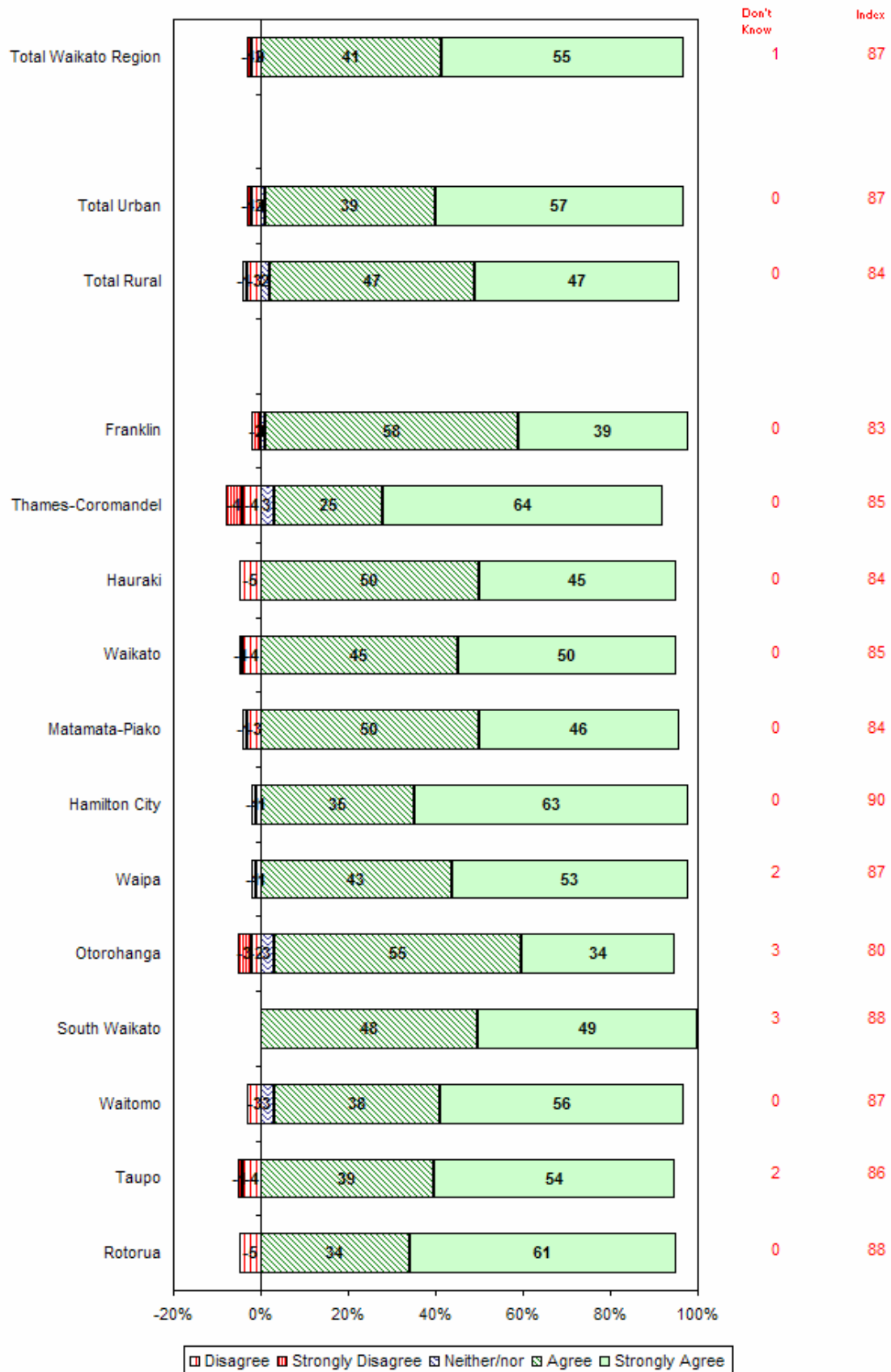


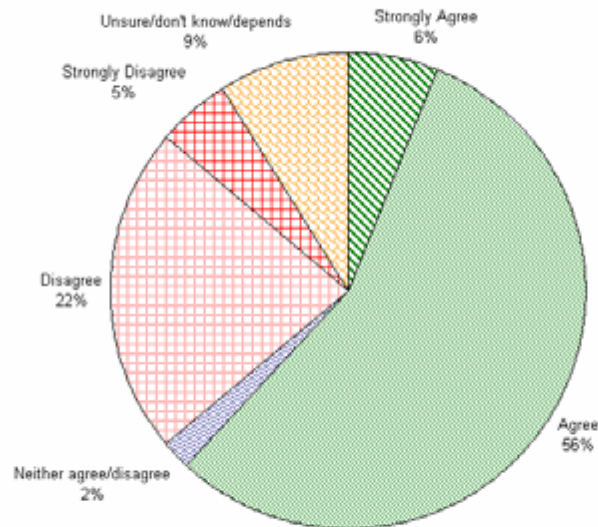
Figure 10-3: Agreement with Council Enforcement of Rules and Laws by Urban/Rural and Territorial Authority

10.2 Protection of Significant Natural Sites

Residents were asked whether they agreed or disagreed with the statement that *there is enough protection given to local significant natural sites*.

10.2.1 Overall Result

Approximately three out of every five residents (62%) thought there is enough protection given to local significant natural sites (6% *strongly agree*, 56% *agree*). However, more than a quarter (27%) of residents disagreed that the current level of protection for significant natural sites is enough (5% *strongly disagree*, 22% *disagree*).



Base: All respondents (n=1000)

Figure 10-4: Protection of Significant Natural Sites

10.2.2 Comparison with Previous Years

The proportion of residents agreeing that there is enough protection given to local significant natural sites has increased significantly since 2003 (total agree up from 49% to 62%). As well as an increase in overall levels of agreement since 2003, residents' views on this issue have also become stronger, the proportion of residents who *strongly agree* there is enough protection of local significant natural sites having increased significantly from 2% in 2003 to 6% in 2006.

Table 10-2: Agreement with the Protection of Significant Natural Sites, 2003, 2006

	2003 %	2006 %	Change 03-06
Strongly Agree	2	6	+4
Agree	47	56	+9
Total Agree	49	62	+13
Neither agree nor disagree/depends	10	2	-8
Disagree	28	22	-6
Strongly Disagree	3	5	+2
Total Disagree	31	27	+4
Unsure/don't know	10	9	-1
<i>Base (respondents)</i>	1822	1000	

The trend is shown in Figure 10.5.

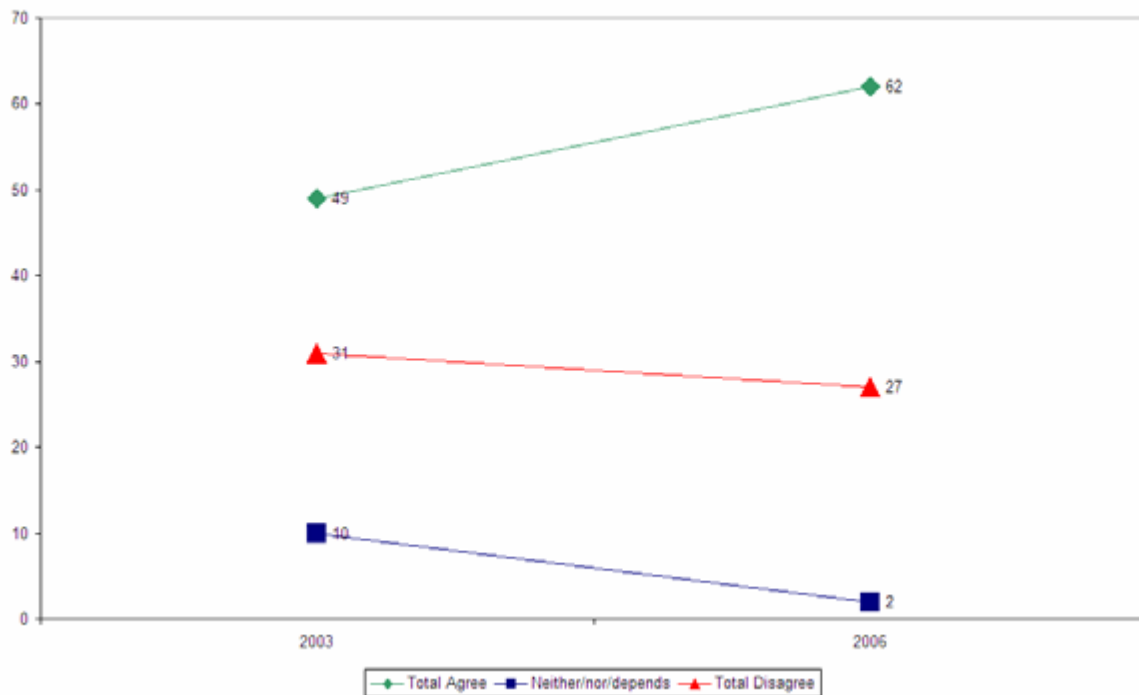


Figure 10-5: Agreement with the Protection of Significant Natural Sites, 2003, 2006

10.2.3 Demographic Variation

Those significantly more likely (than the regional average) to **agree** that there is enough protection given to local significant natural sites were:

- Asian/Indian (82%), New Zealand European(65%), no Maori ancestry (65%)
- retired (71%)/aged 60 years or over (70%)
- male (66%).

Those significantly more likely to **disagree** were:

- aged 18 to 19 years (41%)
- students (40%)
- Maori (35%), those who have Maori ancestry (35%).

10.2.4 Geographic Variation

No particular territorial authority or urban/rural residents were identified as being significantly more likely to agree or disagree with the statement that there is enough protection given to local significant natural sites.



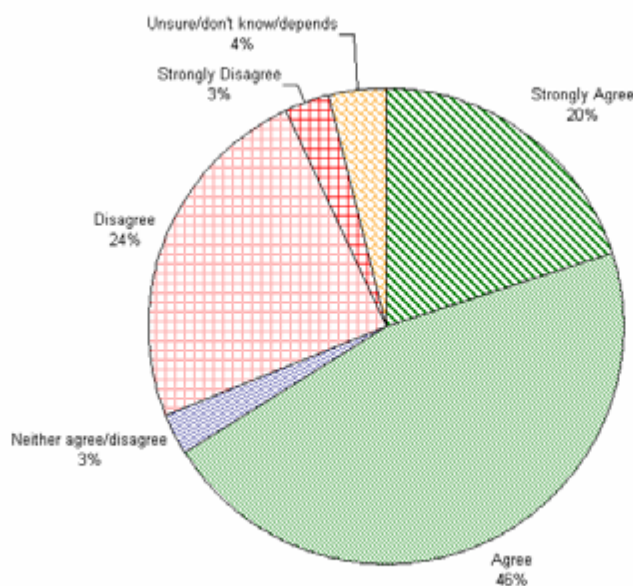
Figure 10-6: Agreement with Protection of Significant Natural Sites by Urban/Rural and Territorial Authority

10.3 Threat of Urban Sprawl and Subdivisions to Natural Environment

Residents were asked whether they agreed or disagreed with the statement that *urban sprawl and subdivisions threaten the natural environment*.

10.3.1 Overall Result

Two-thirds of Waikato region residents (66%) agreed that urban sprawl and subdivisions threaten the natural environment (20% *strongly agree*, 46% *agree*). In contrast, just over a quarter (27%) disagreed that the natural environment is threatened by urban sprawl and subdivisions (3% *strongly disagree*, 24% *disagree*).



Base: All respondents (n=1000)

Figure 10-7: Threat of Urban Sprawl and Subdivisions to Natural Environment

10.3.2 Comparison with Previous Years

A comparison of results from 2003 shows a slightly greater polarisation of views among residents. The proportion of respondents agreeing that urban sprawl and subdivisions threaten the natural environment has increased from 64% in 2003 to 66% in 2006. The strength of agreement has also increased significantly, with those *strongly agreeing* increasing from 12% in 2003, to 20% in 2006. However, this increase in levels of agreement has also been accompanied by a significantly greater proportion of respondents stating that they disagreed that urban sprawl and subdivisions threaten the natural environment (27%, up from 23% in 2003).

Note that, prior to 2003, the wording of this question was different. Consequently results for 2006 are not directly comparable with those prior to 2003.

Table 10-3: Agreement with Threat of Urban Sprawl and Subdivisions to Natural Environment - 2003, 2006

	2003 %	2006 %	Change 03-06
Strongly Agree	12	20	+8
Agree	52	46	-6
Total Agree	64	66	+2
Neither agree nor disagree/depends	10	3	-7
Disagree	22	24	+2
Strongly Disagree	1	3	+2
Total Disagree	23	27	+4
Unsure/don't know	3	4	+1
<i>Base (respondents)</i>	1822	1000	

The trend is shown in Figure 10.8.

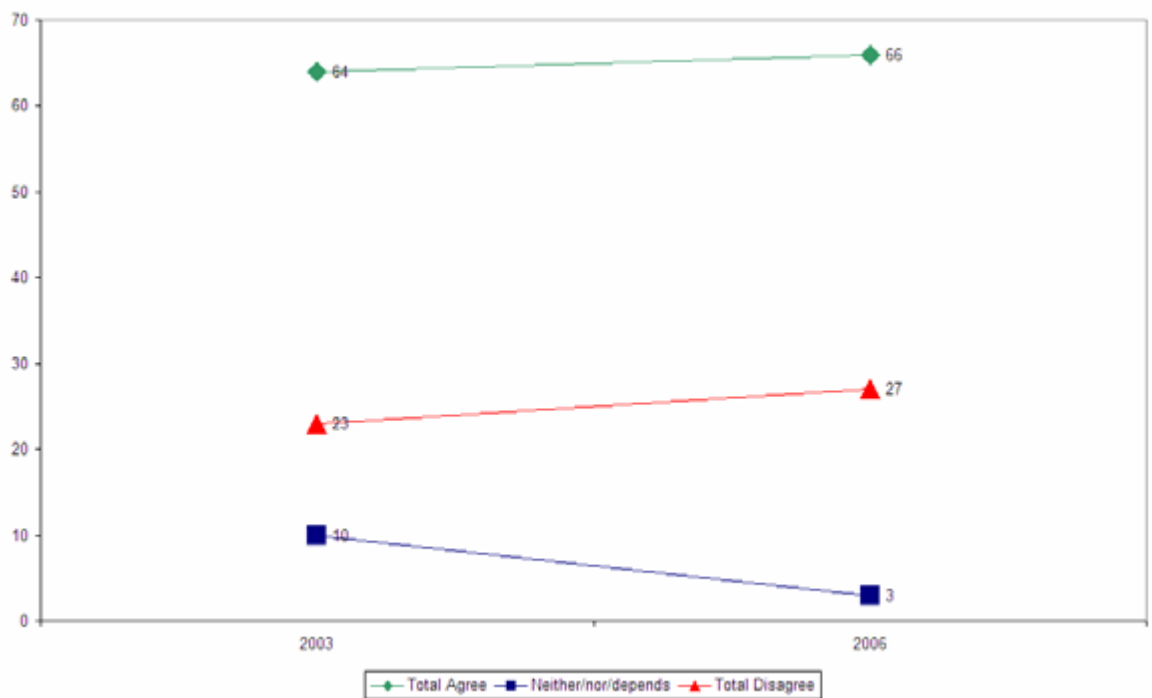


Figure 10-8: Agreement with Threat of Urban Sprawl and Subdivisions to Natural Environment - 2003, 2006

10.3.3 Demographic Variation

Those significantly more likely (than the regional average) to **agree** that urban sprawl and subdivisions threaten the natural environment were:

- students (82%)
- with tertiary qualifications (71%).

No particular demographic group was identified as being more likely to disagree that urban sprawl and subdivisions threaten the natural environment.

10.3.4 Geographic Variation

When considered by territorial authority and by urban and rural locations, those significantly more likely to **agree** this statement were:

- living in Hamilton (72%).

Those more likely to say it **depends** on this statement were:

- living in rural areas (5%).

No particular territorial authority or urban/rural residents were identified as being more likely to **disagree** with this statement.



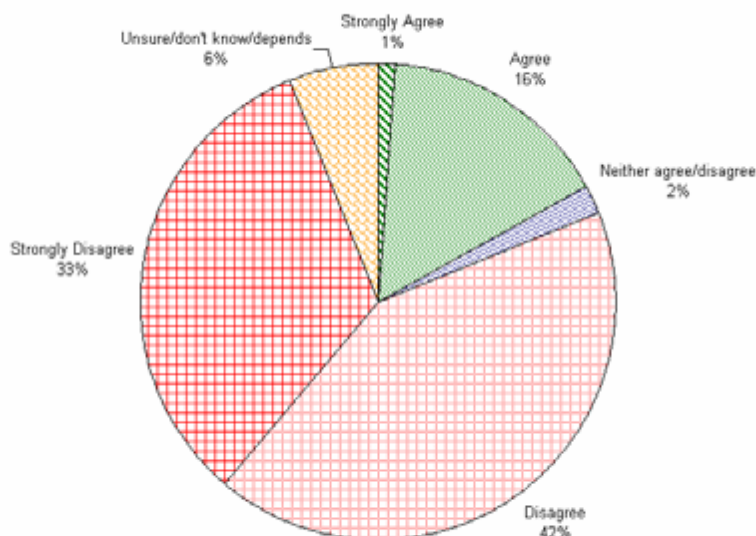
Figure 10-9: Agreement with Threat of Urban Sprawl and Subdivisions to Natural Environment by Urban/Rural and Territorial Authority

10.4 Livestock in Streams and Waterways

Residents were asked whether they agreed or disagreed with the statement that *livestock should be allowed to enter streams and waterways on farms*.

10.4.1 Overall Result

Three-quarters (75%) of Waikato region residents disagreed that livestock should be allowed to enter streams and waterways on farms (33% *strongly disagree*, 42% *disagree*). In contrast, approximately one out of six residents agreed that it is acceptable for livestock to enter streams and waterways on farms (1% *strongly agree*, 16% *agree*).



Base: All respondents (n=1000)

Figure 10-10: Livestock Being Allowed to Enter Streams and Waterways

10.4.2 Comparison with Previous Years

Since 2003, there has been a significant increase in the proportion of respondents who agree that livestock should be allowed to enter streams and waterways on farms (total agreement up from 12% to 17%). As a result, the proportion disagreeing with the above statement has decreased significantly (from 79% in 2003 to 75% in 2006). However, of note is the significant increase in the proportion of respondents *strongly disagreeing* that livestock should be allowed in streams and waterways on farms, increasing from 29% in 2003, to 33% in 2006.

Table 10-4: Agreement with Livestock Being Allowed to Enter Streams and Waterways on Farms, 2003, 2006

	2003	2006	Change 03-06
Strongly Agree	1	1	-
Agree	11	16	+5
Total Agree	12	17	+5
Neither agree nor disagree/depends	8	2	-6
Disagree	50	42	-8
Strongly Disagree	29	33	+4
Total Disagree	79	75	-4
Unsure/don't know	1	6	+5
<i>Base (respondents)</i>	1822	1000	

The trend is shown in Figure 10.11 below.

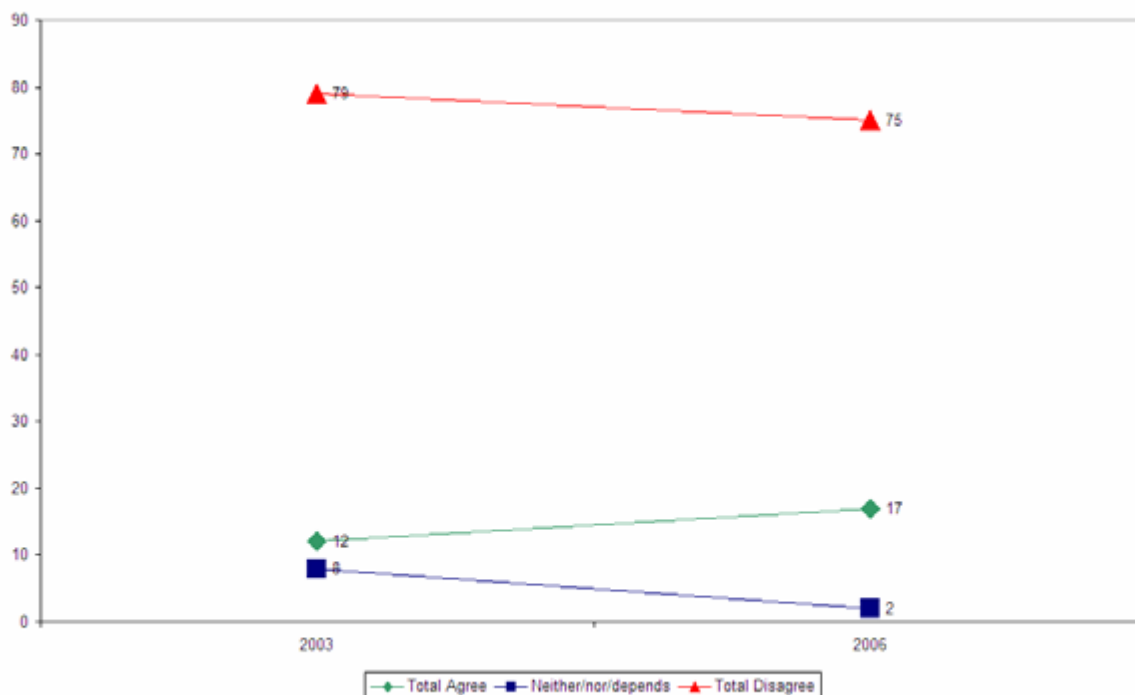


Figure 10-11: Agreement with Livestock Being Allowed to Enter Streams and Waterways on Farms, 2003, 2006

10.4.3 Demographic Variation

Those significantly more likely (than the regional average) to **agree** that livestock should be allowed to enter streams and waterways on farms were:

- aged 18 to 19 years (28%) or 20 to 29 years (25%).

Those significantly more likely to **disagree** with this statement were those:

- with no qualifications (92%)
- aged 50 to 59 years (85%).

10.4.4 Geographic Variation

When considered by territorial authority and by urban and rural locations, those who were significantly more likely to **agree** that livestock should be allowed to enter streams and waterways on farms were:

- living in Waitomo (28%).

Those more likely to **disagree** with this statement were:

- living in Matamata-Piako (86%).

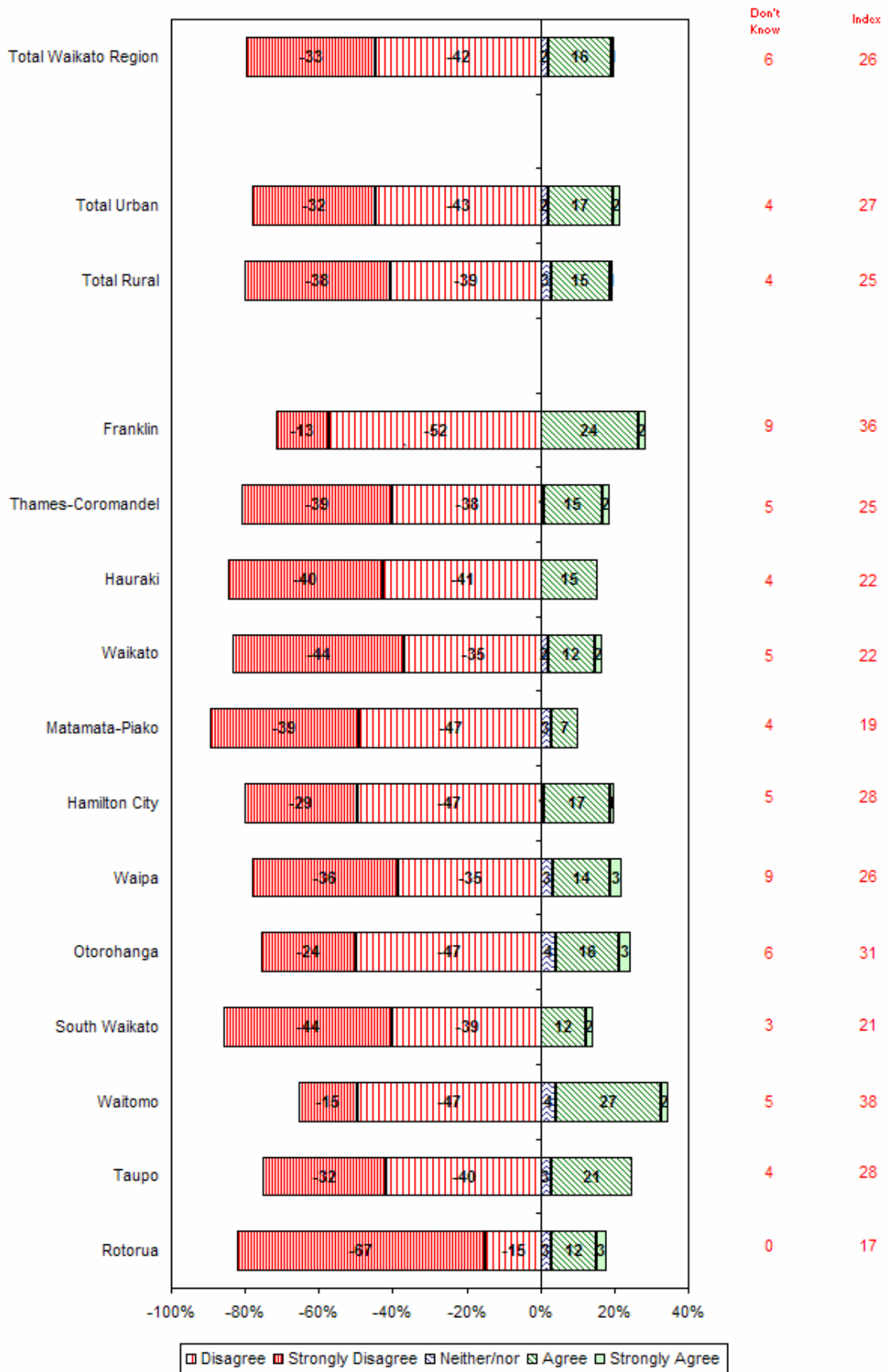


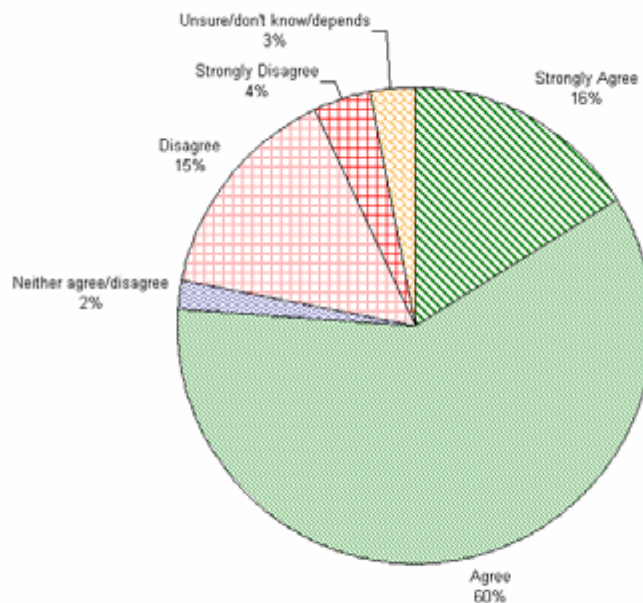
Figure 10-12: Agreement with Livestock Allowed to Enter Streams and Waterways by Urban/Rural and Territorial Authority

10.5 Government Restrictions on Private Property Use

Residents were asked whether they agreed or disagreed with the statement that *government restrictions on the use of private property are necessary so that the environment will not be harmed*.

10.5.1 Overall Result

Three-quarters (76%) of Waikato region residents agreed that it is necessary for the government to place restrictions on the use of private property to ensure that the environment is not harmed (16% *strongly agree*, 60% *agree*). Nearly a fifth (19%) disagreed that government restrictions on the uses of private property are necessary to protect the environment (4% *strongly disagree*, 15% *disagree*).



Base: All respondents (n=1000)

Figure 10-13: Government Restrictions on Private Property Use

10.5.2 Comparison with Previous Years

Perceptions of government restrictions on private property use have become more polarised over the last three years. Waikato region residents are slightly more likely to agree in 2006 that the government should place restrictions on private property use in order to protect the environment (total agree up from 67% in 2000 and 73% in 2003, to 76% in 2006). Also of note is the significant increase in the proportion *strongly agreeing* with this statement between 2003 and 2006 (from 9% to 16%). However, there has also been a significant increase in the proportion *disagreeing/strongly disagreeing* (up from 15% in 2003 to 19% in 2006).

Table 10-5: Agreement with Government Restrictions on Private Property Use, 2000, 2003, 2006

	2000	2003	2006	Change 00-06	Change 03-06
Strongly Agree	N/A	9	16	N/A	+7
Agree	N/A	64	60	N/A	-4
Total Agree	67	73	76	+9	+3
Neither agree nor disagree/depends	9	11	2	-7	-9
Disagree	N/A	13	15	N/A	+2
Strongly Disagree	N/A	2	4	N/A	+2
Total Disagree	20	15	19	-1	+4
Unsure/don't know	3	1	3	-	+2

Base (respondents)

N/A denotes code not used in previous years

1873

1822

1000

This trend is shown in Figure 10.14 below.

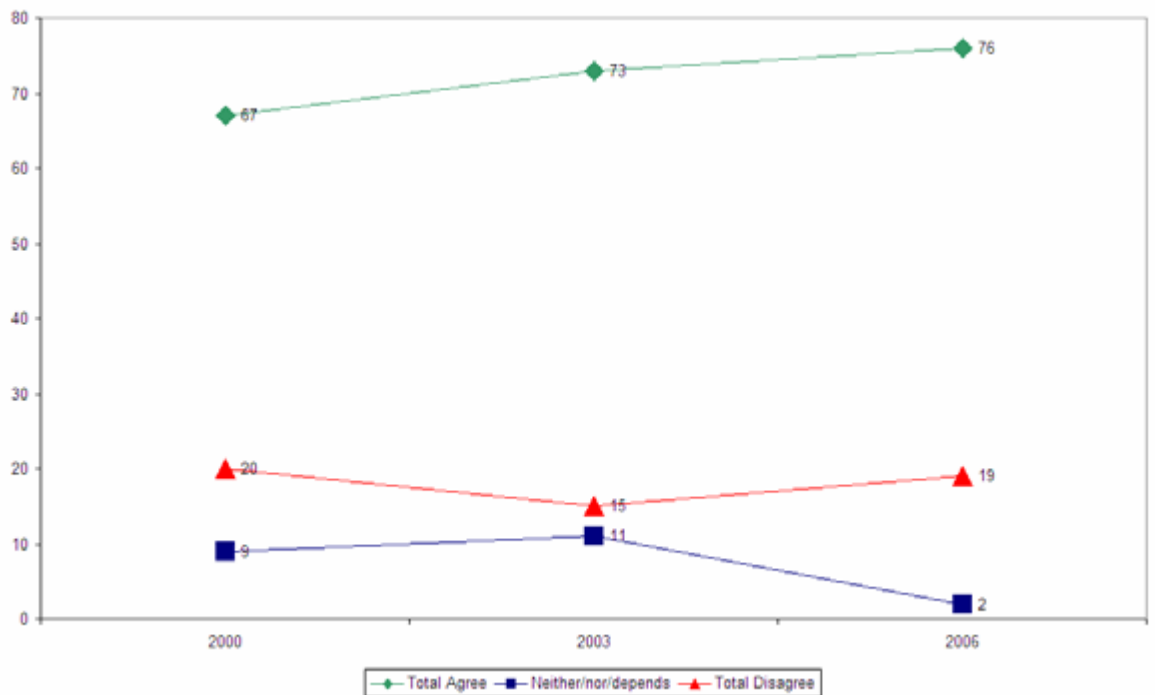


Figure 10-14: Agreement with Government Restrictions on Private Property Use, 2000, 2003, 2006

10.5.3 Demographic Variation

Those significantly more likely (than the regional average) to **agree** with the statement that government restrictions on the use of private property are necessary so that the environment will not be harmed were:

- aged 20 to 29 years (87%).

Those significantly more likely to **disagree** with this statement were:

- aged 18 to 19 years (35%) or 50-59 years (27%) or 60 years and over (24%)
- working in farming occupations(28%).

10.5.4 Geographic Variation

When considered by territorial authority and by urban and rural locations, those more likely to **agree** that government restrictions on the use of private property are necessary so that the environment will not be harmed were:

- living in Hamilton (82%)
- urban (79%).

When considered by territorial authority and by urban and rural locations, those more likely to **disagree** with this statement were:

- living in Waitomo (34%) or Hauraki (33%)
- living in the districts as opposed to Hamilton city (21%).



Figure 10-15: Agreement with Government Restrictions on Private Property Use by Urban/Rural and Territorial Authority

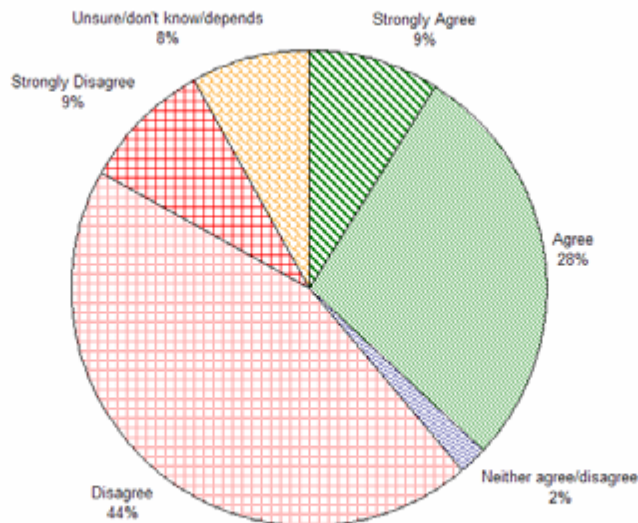
10.6 Landowners and Their Own Land

Residents were asked whether they agreed or disagreed with the statement that *landowners should be allowed to do what they like on their own land*.

Note: In 2006, this question was appended with the phrase 'within the law'. In the questionnaire, this phrase was provided in brackets, denoting to the interviewer that it could be read out if the respondent requested clarification, particularly of the phrase 'do what they like'. Supervisors reported that many respondents asked for clarification, and consequently were given the qualifier of 'within the law'. The results obtained suggested that the inclusion of this qualifier changed the tone of the question and may have contributed to a significant increase in levels of agreement with the statement. Consequently, n=200 respondents were re-contacted and asked this question again, this time with the qualifier 'within the law' omitted. The results from these 200 respondents are presented in this section.

10.6.1 Overall Result

Just over a third of those surveyed (37%) agreed that landowners should be allowed to do what they like on their own land (9% *strongly agree*, 28% *agree*). Conversely, just over half of respondents (53%) disagreed with this statement (9% *strongly disagree*, 44% *disagree*).



Base: Random selection of re-contacted respondents (n=200)

Figure 10-16: Landowners and Their Own Land

10.6.2 Comparison with Previous Years

Following the trend evident in 2003, the proportion of Waikato region residents who agreed that landowners should be allowed to do what they like on their own land has increased slightly since the last measure (*total agree* up from 34% in 2003 to 37% in 2006). However, this increase has been accompanied by a slight increase in the proportion of residents disagreeing with the statement (*total disagree* up from 50% in 2003 to 53% in 2006). Results for 2006 also suggest that most residents now hold an attitude on the rights of landowners. The proportion undecided on whether landowners should be allowed to do what they like on their own land (*neither agree nor disagree*) has declined significantly since 2003 – down from 17% in 2003 to 2% in 2006. In comparison to the previous surveys, when no

one was recorded as saying they did not know or were unsure, eight per cent of the respondents in 2006 said this.

Table 10-6: Agreement with Landowners and Their Own Land, 1998, 2000, 2003, 2006

	1998 %	2000 %	2003 %	2006 %	Change 98-06	Change 03-06
Strongly Agree	N/A	N/A	10	9	N/A	-1
Agree	N/A	N/A	24	28	N/A	+4
Total Agree	21	14	34	37	+16	+3
Neither agree nor disagree/depends	31	35	17	2	-29	-15
Disagree	N/A	N/A	37	44	N/A	+7
Strongly Disagree	N/A	N/A	12	9	N/A	-3
Total Disagree	48	51	50	53	+5	+3
Unsure/don't know	0	0	0	8	+8	+8

Base (respondents)

1037

1873

1822

200

N/A denotes code not used in previous years

These trends are shown below in Figure 10.17.

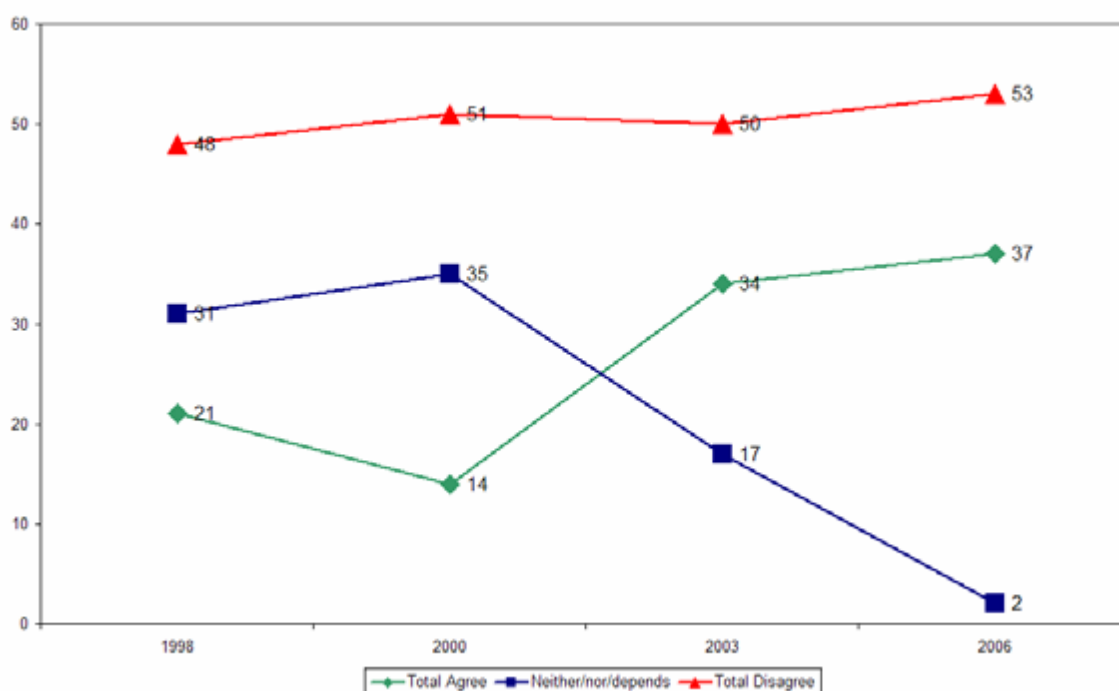


Figure 10-17: Agreement with Landowners and Their Own Land 1998, 2000, 2003, 2006

10.6.3 Demographic Variation

Those significantly more likely (than the regional average) to **agree** that landowners should be allowed to do what they like on their own land were:

- Maori (58%) or with Maori ancestry (53%) or with secondary school qualifications (48%).

Those significantly more likely to **disagree** with this statement were those:

- with tertiary qualifications (66%), working part-time (66%) or with an annual household income of between \$60,001 and \$90,000 (65%).

10.6.4 Geographic Variation

No particular territorial authority or urban/rural residents were identified as being more likely to agree or disagree with the statement that landowners should be allowed to do what they like on their own land. *Note, however, that because of the small sample size of 200 for this question, the result for each territorial authority has a very high margin of error.*



Figure 10-18: Agreement with Landowners and Their Own Land by Urban/Rural and Territorial Authority

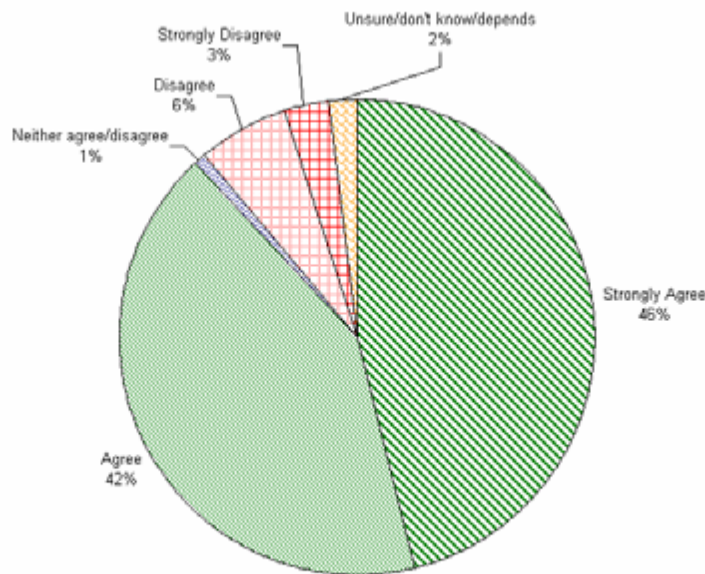
Note: Sample sizes for each territorial authority are small. Consequently, results should be interpreted with caution.

10.7 Council Provisions for Construction in At-Risk Areas

Residents were asked whether they agreed or disagreed with the statement that *council should tighten its provision for the construction of homes and buildings in areas at risk from flooding and erosion.*

10.7.1 Overall Result

The majority of those surveyed (88%) agreed that council should tighten its provisions for the construction of homes and buildings in areas at risk from flooding and erosion (46% *strongly agree*, 42% *agree*). In contrast, only 9% of residents disagreed with the above statement (3% *strongly disagree*, 6% *disagree*).



Base: All respondents (n=1000)

Figure 10-19: Council Provisions for Construction in At-Risk Areas

10.7.2 Comparison with Previous Years

This question was asked for the first time in 2006. Consequently, no comparative results are available.

10.7.3 Demographic Variation

Those significantly more likely to **agree** (than the regional average) that council should tighten its provision for the construction of homes and buildings in areas at risk from flooding and erosion were:

- aged 50 to 59 years (94%)
- female (92%).

Those significantly more likely to **disagree** with this statement were:

- male (12%).

10.7.4 Geographic Variation

No particular territorial authority or urban/rural residents were identified as being more likely to agree or disagree with this statement. Those significantly more likely to say it **depends** on this statement were:

- living in rural areas (2%).

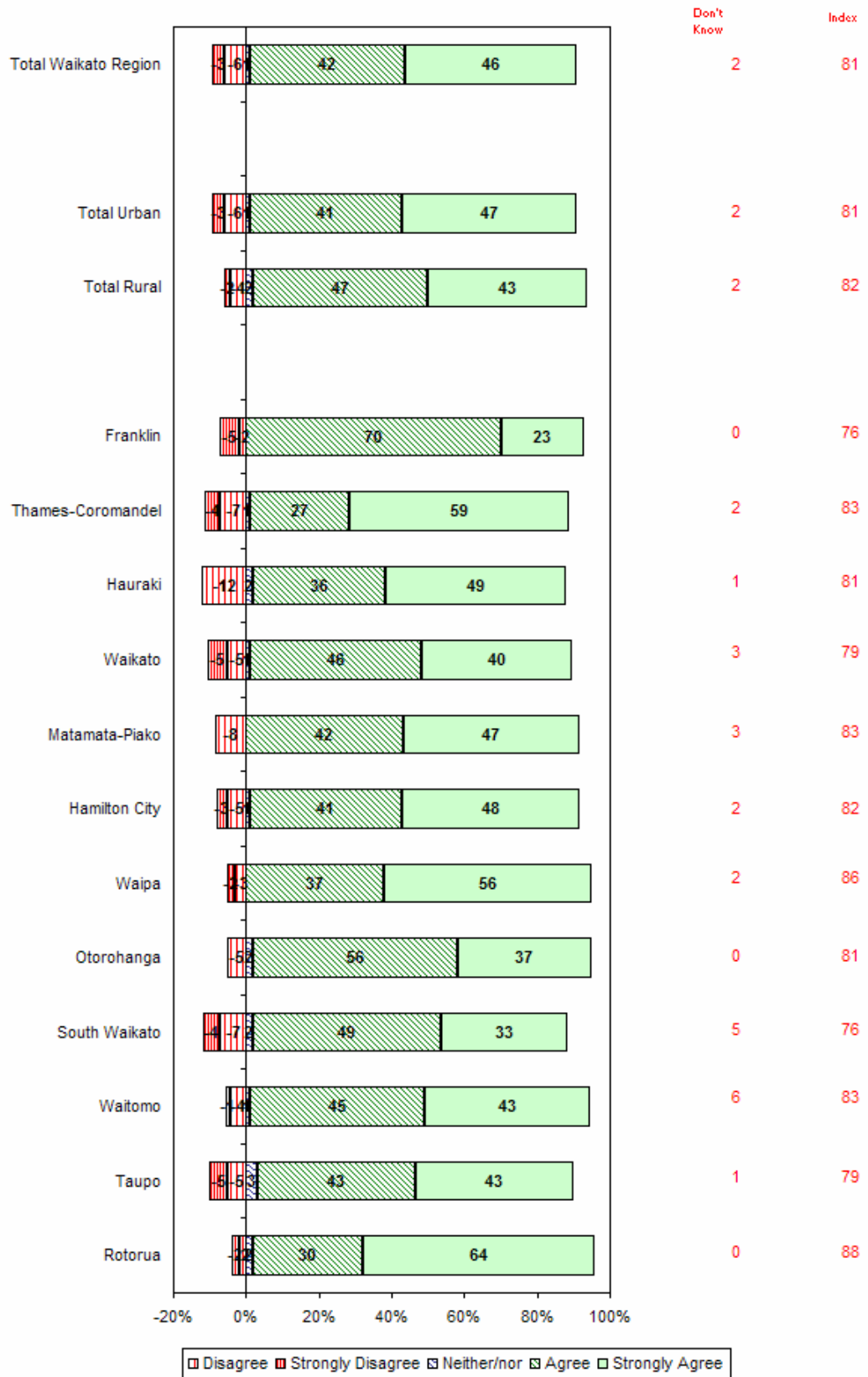


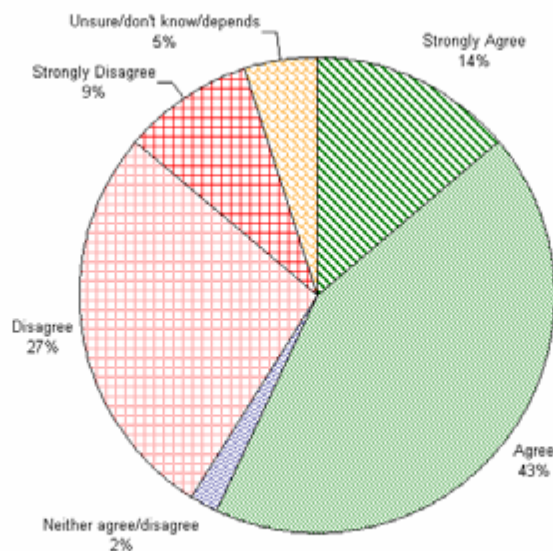
Figure 10-20: Agreement with Council Provisions for Construction in At-Risk Areas by Urban/Rural and Territorial Authority

10.8 Sustainable Design of New Developments

Residents were asked whether they agreed or disagreed with the statement that *new developments and subdivisions are designed so that they blend into the area and take account of the environment and people's needs.*

10.8.1 Overall Result

Over half of Waikato residents surveyed (57%) agreed that new developments and subdivisions are sustainably designed (14% *strongly agree*, 43% *agree*). In contrast, more than a third of respondents (36%) either *strongly disagreed* (9%) or *disagreed* (27%) with this statement.



Base: All respondents (n=1000)

Figure 10-21: Sustainable Design of New Developments

10.8.2 Comparison with Previous Years

This question was asked for the first time in 2006. Consequently, no comparative results are available.

10.8.3 Demographic Variation

Those significantly more likely (than the regional average) to **agree** that new developments and subdivisions are sustainably designed were those:

- with no formal qualifications (73%)
- who are retired (65%)/aged 60 years and over (63%)
- with an annual household income of \$30,001 to \$60,000 (62%)
- who are male (60%).

No particular demographic groups were significantly more likely to disagree.

10.8.4 Geographic Variation

When considered by territorial authority and by urban and rural locations, those who were significantly more likely to **agree** with the statement that new developments and subdivisions are sustainably designed were:

- living in Taupo (73%) or living in the districts (as opposed to Hamilton city) (65%).

Those more likely to **disagree** with this statement were: living in Hamilton (48%).



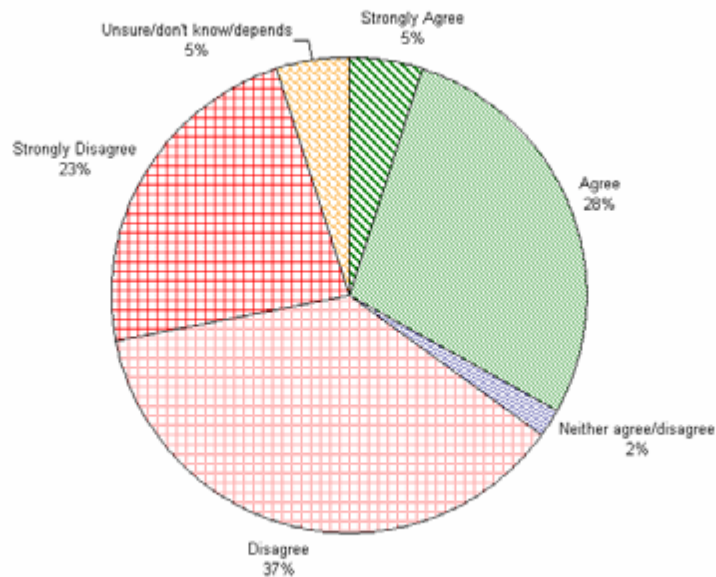
Figure 10-22: Agreement with Sustainable Design of New Developments by Urban/Rural and Territorial Authority

10.9 Permission to Burn Garden Waste

Residents were asked whether they agreed or disagreed with the statement that *people should be allowed to burn garden waste in their backyard*.

10.9.1 Overall Result

Three out of five residents surveyed (60%) did not agree that people should be allowed to burn garden waste in their backyard (23% *strongly disagree*, 37% *disagree*). Conversely, a third of respondents (33%) felt that people should be allowed to burn garden waste in their backyard (5% *strongly agree*, 28% *agree*).



Base: All respondents (n=1000)

Figure 10-23: Permission to Burn Garden Waste

10.9.2 Comparison with Previous Years

This question was asked for the first time this year. Consequently, no comparative results are available.

10.9.3 Demographic Variation

Those significantly more likely (than the regional average) to **agree** that people should be allowed to burn garden waste in their backyard were:

- working in farming occupations (47%)
- male (39%)
- aged 30 to 39 years (38%).

Those significantly more likely to **disagree** with this statement were:

- female (66%).

10.9.4 Geographic Variation

When considered by territorial authority and by urban and rural locations, those who were significantly more likely to **agree** with this statement were:

- living in Franklin (49%) or living in a rural area (46%).

When considered by territorial authority and by urban and rural locations, those more likely to **disagree** with this statement were:

- living in Hamilton (67%) or living in an urban area (66%).



Figure 10-24: Agreement with Permission to Burn Garden Waste by Urban/Rural and Territorial Authority

10.10 Index of Attitudes Towards Environmental Regulations

In order to calculate an overall measure of people's attitudes towards environmental regulations, an Index was created. The Index of Attitudes Towards Environmental Regulations was calculated by totalling the scores for three key indicator questions in this section:

- *Council should enforce its rules and laws to make sure that the environment is well looked after.*
- *Landowners should be allowed to do what they like on their own land.*
- *Government restrictions on the use of private property are necessary so that the environment will not be harmed.*

For consistency with the 2000 survey, the five-point scale used for each question this year (and in 2003) was reduced to a three-point scale. The question regarding landowners and their own land (an environmentally negative question) was re-coded to be compatible with the two environmentally positive questions. Non-responses were treated as environmentally neutral responses.

Note: In 2006, the question "Landowners should be allowed to do what they like on their own land" was appended with the phrase 'within the law'. In the questionnaire, this phrase was provided in brackets, denoting to the interviewer that it could be read out if the respondent requested clarification, particularly of the phrase 'do what they like'. Supervisors reported that many respondents asked for clarification, and consequently were given the qualifier of 'within the law'. The results obtained suggested that the inclusion of this qualifier changed the tone of the question and may have contributed to a significant increase in levels of agreement with the statement. Consequently, n=200 respondents were re-contacted and asked these questions again, this time with the qualifier 'within the law' omitted from the landowner question. The results from these 200 respondents have been used to calculate this index.

10.10.1 Overall Results

This year, the scores achieved ranged from 3 (the minimum achievable score) to 9 (the maximum achievable), with the mean being 7.68, the median being 8 and the mode being 9.

The respondents were divided into three groups to facilitate further in-depth analysis. Consistent with 2003, those with total scores of 6 and less (15% of those surveyed) were defined as the "low" group. In the context of this Index, "low" implies these respondents were against government control over land and landowners. Those with scores of 7 or 8 (41%) formed the "medium", or neutral group. Those with scores of 9 (44%) comprised the "high" group and were clearly in favour of government control over land and did not believe landowners should be able to do as they wish on their own land.

10.10.2 Comparison with Previous Years

The Index of Attitudes Towards Environmental Regulations (7.68) has increased from 2003 (7.45), as has the median score (up from 7 in 2003 to 8 in 2006). These results imply a slight shift in residents' opinion towards a desire for government control over land and landowners. However, the Index still remains lower than that calculated in 2000 (7.80).

10.10.3 Demographic Variation

Those significantly more likely to give a "high" index score (that is, a score of 9, indicating they are in favour of government control) were those:

- with an annual household income of \$60,001 to \$90,000 (59%)

- working part-time (58%)
- with tertiary qualifications (54%).

Those significantly more likely to give a “medium” index score were:

- Maori (58%).

No demographic groups were significantly more likely to give a “low” score (that is, a score of less than 7, indicating they are not in favour of government control).

10.10.4 Geographic Variation

No particular territorial authority or rural/urban residents were significantly more likely to give “high”, “medium” or “low” index scores. *Note, however, that because of the small sample size of 200 for the “Landowner” question, the result for each territorial authority has a very high margin of error.*

11 Economy, Business and the Environment

This section explores residents' attitudes regarding the relationship between the economy, business, and the environment. Residents were asked to rate each statement using a five-point scale, specifying whether they strongly agreed, agreed, disagreed, strongly disagreed or neither agreed nor disagreed with each statement.

Note: The rating scale used in 2003 and 2006 for the questions in this section differs to the rating scale used in 1998 and 2000. In particular, in previous measures a three-point scale was used (agree, disagree, depends), whereas in 2003 and 2006 a five-point scale was used (strongly agree, agree, disagree, strongly disagree, neither agree nor disagree). It is difficult to determine what effect, if any, this difference in rating scale might have had on the results obtained. Therefore, comparisons over time should be interpreted with caution.

Key findings are:

- Waikato region residents appear to be passionate about their environment, with a high proportion (83%) disagreeing that **it is okay to sacrifice environmental quality for economic growth**. This desire to maintain environmental quality has increased significantly since 2003 (78%).
- Surveyed residents continue to believe that environmental and economic goals can be satisfied concurrently, with a clear majority (93%) agreeing that **environmental protection and economic development can go hand in hand**, and furthermore that **a healthy environment is necessary for a healthy economy** (91% agree) (both figures are similar to those reported in 2003).
- There is widespread disagreement (94%) that **the most important objective of any business should be to maximize profit, even if it means damaging the environment** and almost all respondents (97%) agree that **businesses should be obliged to treat the environment well**. At the same time, however, a large proportion (53%) agrees that **businesses usually find it too expensive to be environmentally friendly**.
- In contrast to residents' perspectives on businesses' role in protecting the environment, when it came to having to make a trade-off between letting the Waikato farming economy decline in order to achieve a better **environment**, support dropped for protecting the environment. Just over half of residents (56%) disagreed that, **it is acceptable to let the Waikato farming economy decline in order to achieve a better environment**. In contrast, a third of respondents agreed with this statement.

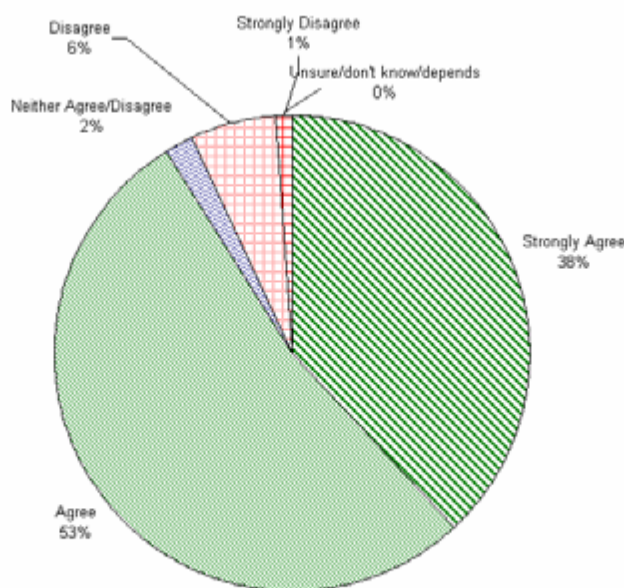
- The importance residents place on minimising water pollution in the region (see Section 3) is further illustrated by the fact that nine out of ten respondents (90%) agreed that the **water quality in streams and rivers should be protected even if it means businesses have to bear the expense of meeting environmental standards**. Nine out of ten respondents (90%) disagreed that **farming agricultural land at maximum productivity is acceptable even if it results in polluted waterways**.

11.1 Healthy Environment, Healthy Economy

Residents were asked whether they agreed or disagreed with the statement that a *healthy environment is necessary for a healthy economy*.

11.1.1 Overall Result

Almost all residents (91%) agreed that a healthy environment is necessary for a healthy economy (38% *strongly agree*, 53% *agree*). Only a very small proportion of surveyed residents disagreed with this statement (7%).



Base: All respondents (n=1000)

Figure 11-1: Healthy Environment, Healthy Economy

11.1.2 Comparison with Previous Years

While levels of agreement with this statement have remained relatively unchanged over time, since the 2003 survey, there has been a significant increase in the proportion of residents *strongly agreeing* that a healthy environment is necessary for a healthy economy (up from 28% in 2003 to 38% in 2006).

However, since the previous measure, the proportion of residents disagreeing with this statement has also increased (from 5% in 2003 to 7% in 2006).

Table 11-1: Agreement with Healthy Environment, Healthy Economy, 2000, 2003, 2006

	2000	2003	2006	Change 00-06	Change 03-06
Strongly Agree	N/A	28	38	N/A	+10
Agree	N/A	64	53	N/A	-11
Total Agree	90	92	91	+1	-1
Neither agree nor disagree/depends	3	2	2	-1	0
Disagree	N/A	4	6	N/A	+2
Strongly Disagree	N/A	1	1	N/A	0
Total Disagree	5	5	7	+2	+2
Unsure/don't know	2	1	0	-2	-1

Base (respondents)

1873

1822

1000

N/A denotes code not used in previous years

This trend is shown in Figure 11.2.

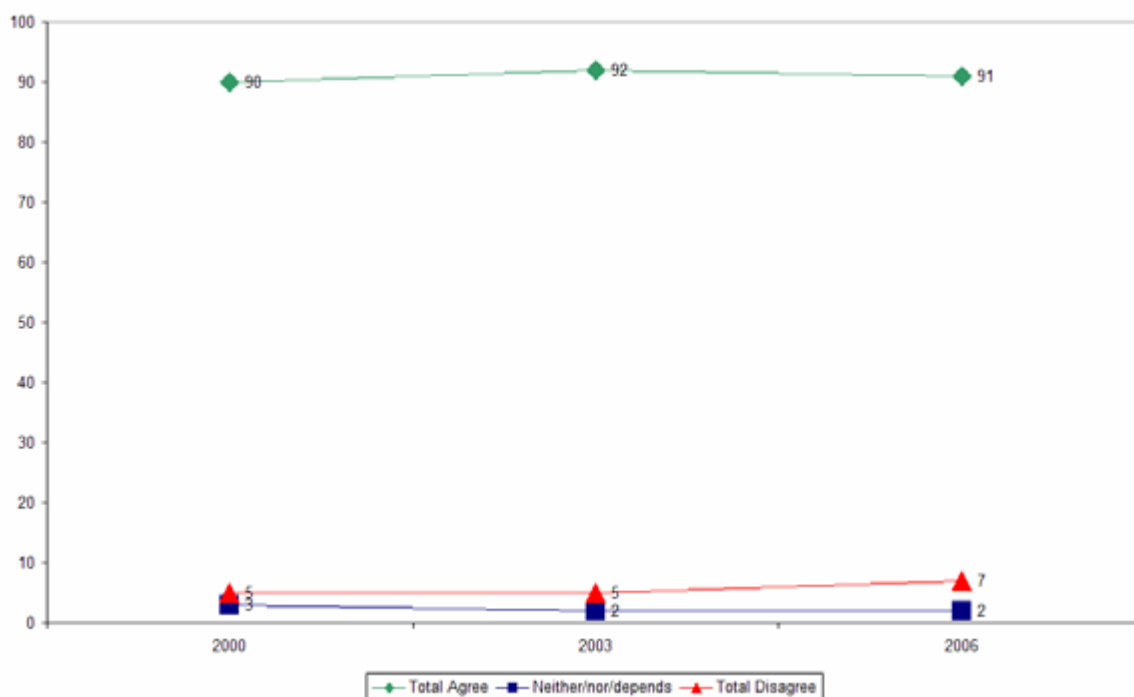


Figure 11-2: Agreement with Healthy Environment, Healthy Economy, 2000, 2003, 2006

11.1.3 Demographic Variation

Those significantly more likely (than the regional average) to **agree** that a healthy environment is necessary for a healthy economy were:

- Maori (98%) or with Maori ancestry (95%)
- aged 20 to 29 years (96%)
- female (93%).

Those more likely to **disagree** with this statement were:

- male (8%)
- New Zealand European(7%).

11.1.4 Geographic Variation

No particular territorial authority or urban/rural residents were identified as being more likely to agree or disagree with the statement that a healthy environment is necessary for a healthy economy. Those living in Taupo (5%) were more likely to say it **depends** to this statement.



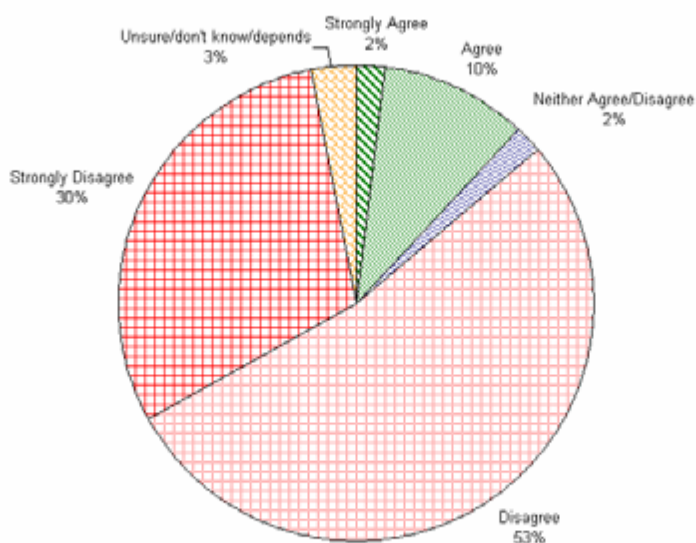
Figure 11-3: Agreement with Healthy Environment, Healthy Economy by Urban/Rural and Territorial Authority

11.2 Sacrificing Environmental Quality for Economic Growth

Residents were asked whether they agreed or disagreed with the statement that *it is okay to sacrifice environmental quality for economic growth*.

11.2.1 Overall Result

More than four out of five residents (83%) disagreed that it is okay to sacrifice environmental quality for economic growth (30% *strongly disagree*, 53% *disagree*). In contrast, twelve per cent of residents deemed it acceptable to prioritise economic growth over environmental quality (2% *strongly agree*, 10% *agree*).



Base: All respondents (n=1000)

Figure 11-4: Sacrificing Environmental Quality for Economic Growth

11.2.2 Comparison with Previous Years

In 2006, there has been a significant increase in the proportion of residents opposed to sacrificing the environmental quality of the Waikato region (total disagree increasing from 78% in 2003 to 83% in 2006). The strength of disagreement has also increased significantly, with the proportion *strongly disagreeing* increasing from 22% in 2003 to 30% in 2006.