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Environment Bay of Plenty
REGIONAL COUNCIL

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Survey 2003

Attitudes and Perceptions towards the Environment and Environment Bay of Plenty

Working with our communities for a better environment

Environment Bay of Plenty
P O Box 364
Whakatane
New Zealand
December 2003

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Survey 2003

Attitudes and Perceptions towards the Environment and Environment Bay of Plenty

Prepared by
APR Consultants

Environment Bay of Plenty
Bay of Plenty Regional Council
December 2003

Executive Summary

Survey 2003 is a survey of attitudes and perceptions of the people of the Bay of Plenty Region towards the environment, and towards Environment Bay of Plenty as an organisation.

During August and September 2003, APR Consultants conducted telephone interviews with 1,025 residents throughout the Bay of Plenty Region. The key findings are summarised in this section and detailed in the report that follows.

Environment Bay of Plenty Image and Communication

The majority of respondents (88.5%) had heard of Environment Bay of Plenty prior to the interview. This was an increase of four percent (+3.5%) when compared with the research in Survey 2000.

One-quarter (24.3%) of respondents who had previously heard of Environment Bay of Plenty had dealt with the organisation.

More than two-thirds (69.2%) of respondents gave specific descriptions about the role of Environment Bay of Plenty, the most common of which were general management of natural resources (23.7%) and water and land management (22.3%). Almost one-fifth (17.8%) gave vague environmental answers, while thirteen percent (13.0%) did not know. While a direct comparison of these results with Survey 2000 cannot be undertaken due to a change in the nature of the question, at a general level there was a considerable increase in the number of respondents identifying the management of natural resources as a role (+30%), and a decrease in those who gave a vague environmental answer (-10%).

Respondents were asked whether they recalled seeing or hearing anything about Environment Bay of Plenty in each of the five media used by the organisation. The most popularly recalled media were the 'Regional Guardian' (50.9%) and the pamphlet distributed with the rates notice (42.9%). These proportions had both decreased slightly from the previous survey.

When asked to state who they would contact about three different environmental concerns, Environment Bay of Plenty and a district council were the two most commonly nominated for pest plant problems (38.3% and 38.2% respectively). Only twenty-eight percent (27.7%) of respondents said they would contact Environment Bay of Plenty about pest animals, with significantly more (37.7%) selecting a district council. More than forty percent (43.2%) said they would contact Environment Bay of Plenty if they noticed pollution, which was slightly less (-2.5%) than those that nominated a district council.

A comparison of Survey 2000 and Survey 2003 results showed a decrease in the proportion of respondents who would contact Environment Bay of Plenty for pest plant problems (-1.7%) and for pollution concerns (-1.8%), with a subsequent increase in the proportion who would contact a district council. The proportions of respondents who would contact Environment Bay of Plenty and a district council regarding pest animal problems remained unchanged.

Over one-fifth (22.6%) of respondents were aware of Environment Bay of Plenty's 'Pollution Hotline' service. This continued a downward trend in awareness levels from previous years.

Three-fifths (62.0%) were aware that Environment Bay of Plenty was funded by rates and almost two-fifths (37.1%) felt that funding came from central government or taxes. Only five percent (5.0%) mentioned investments such as the Port of Tauranga shares. The level of awareness about sources of funding was generally consistent with the results of Survey 2000.

Environmental Issues

A list of sixteen environmental issues identified by Environment Bay of Plenty was read to survey respondents. They were asked to rate each issue as being a big problem, some problem or no problem in the Bay of Plenty Region.

The issues that were considered by more than three-quarters of respondents to be a problem (ie, big problem or some problem) were:

- Roadside rubbish dumping (88.3%).
- Pest plants (85.6%).
- Pest animals (83.6%).
- Water pollution from industry (80.5%).
- Air quality problems from trucks (79.1%).
- Water pollution from farming (78.6%).
- Air quality problems from pollen (77.1%).

The comparison of these results with those of Survey 2000 showed a rise in the proportion of respondents that rated the following issues as a problem:

- Water pollution from farming (+14%).
- Pest animals (+8%).
- Pest plants (+8%).
- Air quality problems from industrial emissions (+7%).
- Air quality problems from trucks (+4%).

Perceived State of the Environment

Nearly two-thirds (62.1%) of respondents rated the state of the region's natural environment positively, with fourteen percent (13.7%) rating 'very good' and around half (48.4%) rating the environment as 'good'. One third (30.0%) of respondents rated the state of the environment as average, and a small proportion felt it was 'poor' (5.0%) or 'very poor' (2.0%). One percent (1.0%) was unsure.

When asked whether they felt that the environment was becoming better, becoming worse or staying the same, the most common answer was 'staying the same' (35.1%). Similar proportions felt that it was becoming better (31.2%) and becoming worse (27.1%). Six percent (6.5%) were unsure.

A comparison of the results with previous research showed a rise in the proportion of respondents who rated the environment as 'very good' (+3%) or 'good' (+6%) from Survey 2000, which was offset by a decrease in the proportion that rated the environment as average (-9%).

Survey 2003 also showed an increase from 2000 in the proportion of respondents who felt that the environment was improving (+3.2%), with a corresponding decrease in the proportion who felt it was staying the same (-3.0).

Perceived Specific Environmental Damage

Respondents were asked whether they had noticed any activities causing six types of environmental damage in the region.

More than two-thirds (68.3%) of respondents felt that there was a river or lake that was polluted in the Bay of Plenty. Three-fifths (59.6%) had noticed plant pest problems.

Half of respondents had noticed other types of damaging activities:

- Pest animal problems (52.3%).
- Activities damaging air quality (52.4%).
- Activities damaging the sea, coastline, beach or harbour (49.6%).
- Activities damaging the land (47.1%).

Specific Issues

Respondents were asked which natural hazard they saw as being most likely to endanger themselves or their property. The most popular responses were earthquakes (43.1%), floods (11.5%), storms or high winds (9.3%), volcanic eruptions (7.9%) and tidal waves or tsunami (6.4%).

This showed that earthquakes remain the natural hazard from which respondents perceive the most danger, while the proportion of respondents who identified volcanic eruptions dropped between 2000 and 2003 (-5.1%).

Respondents were asked how they would dispose of five types of waste and whether they had done so during the past year:

- The most common response for used engine oil was specialist disposal (65.4%), followed by burying (5.1%) then landfill (4.1%). One-quarter (24.4%) of respondents had disposed of used engine oil in the past year.

- The most common response for leftover farm and garden chemicals was specialist disposal (42.3%), followed by landfill (8.5%) and burying (5.4%). A small proportion (5.4%) of respondents had disposed of farm or garden chemicals in the past year.

- The most common response for solvents like paint thinner, petrol and diesel was specialist disposal (42.2%), followed by landfill (10.3%) and burying (5.3%). Over one-tenth (12.0%) of respondents had disposed of solvents in the past year.

- The most common response for car batteries was specialist disposal (78.8%), followed by landfill (8.0%). One-third of respondents (32.4%) had disposed of car batteries in the past year.

- The most common response for other batteries such as standard batteries, cell phone batteries and hearing aid batteries was landfill (80.2%), followed by specialist disposal (14.5%). Three-quarters (77.5%) of respondents had disposed of other batteries in the past year.

A comparison with the results of Survey 2000 showed an increase in the proportion who would use specialist disposal for used engine oil (+11.4%), a decrease in those who would use specialist disposal for farm or garden chemicals (-3.7%) and no change in the proportion who would use specialist disposal of solvents.

Eight percent (8.0%) of respondents had used a public bus in the last four weeks, while more than ninety percent (92.0%) had not. The most common purpose for using a public bus was shopping or paying bills (36.7%), followed by work (21.5%), and social/recreational purposes (17.7%). The most common reason for not using a public bus was too lazy/prefer private or work vehicle (70.8%), followed by unavailability of service (19.6%).

Respondents were asked to rate the importance of the natural environment in their reasons for living in the Bay of Plenty Region. Over two-thirds (67.6%) rated the natural environment as very important and one-quarter (23.6%) rated it as important. Five percent (5.4%) said it was neither important nor unimportant and a small proportion said it was not very (2.2%) or not at all (0.8%) important.

Survey 2003 results showed an increase in the proportion of respondents who rated the natural environment as very important (+5.6%), with a corresponding decrease in the proportion rating important (-2.4%) and neither important nor unimportant (-2.6%).

Survey respondents were asked where they would go or look if they wanted to find out information about the environment in the region. The most commonly nominated methods were a local Environment Bay of Plenty office (35.8%) and a district council (33.3%). Fourteen percent (14.4%) of respondents said they would look in the telephone book/local directory, eleven percent (11.3%) indicated that they would look on the internet and a similar proportion mentioned a local public library (8.5%).

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Chapter 1: Introduction

This document presents the results of Survey 2003: a survey of attitudes and perceptions of the people of the Bay of Plenty Region towards the environment, and towards Environment Bay of Plenty as an organisation.

Environment Bay of Plenty has an obligation to monitor the effect of the implementation of its plans, policy statements, the exercise of resource consents it grants, and other functions it carries out under the Resource Management Act 1991 and the Local Government Act 2002. As part of this monitoring process, Survey 2003 updates and extends information gathered in the previous attitude and perception surveys undertaken in 1992, 1997 and 2000.

Over the period August to September 2003, APR Consultants conducted telephone interviews with 1,025 residents throughout the Bay of Plenty Region. This report presents the results and findings of this research and makes comparisons with information gathered in the previous attitude and perception surveys.

The report is structured as follows. The methodology for Survey 2003 is outlined in Chapter 2, with results and comparisons contained in Chapters 3 through 7. The demographics of the respondents in the survey sample are described in Chapter 8. Appendix 2 contains the Survey 2003 summary tables of results, including comparisons with previous surveys. Following this, Appendix 3 gives the breakdowns of 'other' categories for relevant questions.

Chapter 2: Methodology

The purpose of the telephone survey was to provide statistically valid and reliable measures of attitudes and perceptions in accordance with Survey 2003 objectives.

2.1 Survey objectives

The objectives of the research were:

- To determine how people perceive the state or quality of the environment.
- To find out what people see as the 'big' environmental issues in the Bay of Plenty Region.
- To determine whether people perceive the state of the environment as improving or worsening.
- To find out whether the perceived environmental issues are different or the same in different parts of the region.
- To determine what people know and how well they understand environmental issues.
- To determine whether people know what Environment Bay of Plenty is and what its roles and responsibilities are.
- To find out whether people are aware of what Environment Bay of Plenty is doing in the region.
- To determine whether people understand why Environment Bay of Plenty does what it does, and why it has plans and policies.
- To repeat, then compare, the results of key questions from previous surveys (1992, 1997 and 2000).

2.2 Data collection and sampling method

Telephone interviewing was the chosen method of data collection for several reasons, which are as follows:

- Greater cost efficiency than face-to-face interviews.
- Telephone surveys generate a higher response rate than self-return written surveys.

- In comparison to written surveys, telephone surveys can gather more detailed information from probing into ideas/opinions and interviewers can ask for clarification if required.

- Greater time efficiency as the respondent does not have to document their answers.

- Respondents are more inclined to follow through and fully complete a survey over the phone.

- Eliminates the respondent's ability to 'screen' the questionnaire before deciding whether to participate.

The following table shows the proportion of households within each geographic area that have access to a telephone, based on Census 2001. This indicates that ten percent of households in Eastern Bay of Plenty did not have the opportunity to be sampled in Survey 2003, along with six percent (6.0%) in Rotorua and three percent (3.0%) in Western Bay of Plenty.

Area	Household Access to a Telephone Census 2001	
	Yes	No
Western Bay of Plenty	96.9%	3.1%
Eastern Bay of Plenty	90.2%	9.8%
Rotorua	94.0%	6.0%
Total	100.0%	100.0%

As there is a high correlation between household income and access to a telephone, it can be assumed that the survey sample is biased away from lower socio-economic households toward those with higher socio-economic status. Generally, higher socio-economic households would have a higher awareness about environmental issues; therefore the results of Survey 2003 may potentially overstate environmental awareness.

The telephone survey comprises 1,025 telephone interviews from the population of the Bay of Plenty Region aged 18 years and over. Stratified sampling was used so that each geographic unit is represented in the sample by the same proportion that it is represented in the total population of the Bay of Plenty, based on the 2001 Census. The geographic sub-groups of the region are:

- Western Bay of Plenty (Tauranga District and Western Bay of Plenty District).

- Eastern Bay of Plenty (Whakatane District, Opotiki District and Kawerau District).

- Rotorua (Rotorua District and Taupo District).

In addition to a quota system for geographic units, a quota for ethnicity was applied to the sample, based on the proportion of Maori and non-Maori in the Bay of Plenty from the 2001 Census.

2.3 Source of and selection method for telephone numbers

A random sample of residential telephone numbers was generated using the Bay of Plenty Telecom White Pages, excluding numbers outside of the region based on local calling area digits.

2.4 Levels of confidence

The telephone survey of 1,025 results in the following sample sizes and margins of error (at the 95% confidence level) for each geographic unit:

Area	% Population	Sample	Margin Error
Western Bay of Plenty	53.9%	539	4.2%
Eastern Bay of Plenty	20.5%	205	6.9%
Rotorua	25.6%	281	5.9%
Total	100.0%	1,025	3.1%

This means that if we were to replicate the survey we would be 95% confident that the level of sample error should not exceed 3.1% for the total sample, and between 4.2% and 6.9% for the geographical segments in the region covered by the survey.

2.5 Questionnaire development and pilot survey

The questionnaire for the telephone survey was developed in association with the Environment Bay of Plenty Survey 2003 Project Team. The questionnaire implemented was largely the same as that used in Survey 2000 to enable accurate comparisons to be made.

The questionnaire was trialled by APR's professional staff undertaking a pilot survey of 30 participants. On the basis of the pilot survey results, some minor adjustments were made to the questionnaire after discussion and agreement with the Project Team.

A copy of the questionnaire is attached as Appendix 1 of this report.

2.6 Telephone survey procedures

A team of experienced telephone interviewers were briefed and trained to a high standard regarding the survey form and the survey's objectives.

Interviewers made three calling attempts to each contact in order to mitigate the non-response bias. An audit of five percent of respondents was undertaken to monitor the performance of each interviewer.

2.7 Results and analysis

The response rate for this survey was twenty-seven percent (26.5%).

All responses were analysed by computer. An accuracy audit of the data entry process was undertaken on five percent of data.

The data was analysed using the following demographic categories:

Factor	Label	Demographic Composition
Area	Western Bay of Plenty	Tauranga and Western Bay of Plenty districts
	Eastern Bay of Plenty	Whakatane, Opotiki and Kawerau districts
	Rotorua	Parts of Rotorua and Taupo districts in the BOP
Age	Younger	18 to 29 years
	Middle	30 to 59 years
	Older	60 years and older
Gender	Male	All males
	Female	All females
Locality	Urban	Defined by participant
	Rural	Defined by participant
Ethnicity	Maori	New Zealanders of Maori ethnicity/descent
	Non-Maori	New Zealanders and all others of no Maori ethnicity/descent
Length of residency	Recent	Lived in the Bay of Plenty less than 2 years
	Medium	Lived in the Bay of Plenty 2 to 5 years
	Long-term	Lived in the Bay of Plenty for more than 5 years

It should be noted that all percentages in this report have been rounded to one decimal place.

Categories in this report have sometimes been combined for the purposes of analysis. For example, 'big problem' and 'some problem' may be combined to form a new category of 'problem'.

Comparisons have been made with results of the surveys conducted in 2000, 1997 and 1992. It should be noted that the study referred to in text and tables as the 1992 study was conducted in 1992 and published in 1993.

Chapter 3: Environment Bay of Plenty Image and Communication

3.1 Name recognition

The majority of respondents (88.5%) had heard of Environment Bay of Plenty prior to the interview, while 11.5% had not.

When the results were analysed demographically, it was found that awareness of Environment Bay of Plenty:

- Varied slightly by area (Western Bay of Plenty 91.4%, Eastern Bay of Plenty 90.7%, Rotorua 81.5%).
- Was significantly higher in the middle (91.9%) and older (90.1%) than younger (67.5%) age categories.
- Was similar for females (88.8%) and males (88.3%).
- Was higher for rural (90.4%) than urban (87.9%) respondents.
- Was significantly higher for non-Maori (92.5%) than Maori (76.9%) respondents.
- Varied slightly between long-term (89.3%), medium-term (88.4%) and recent (81.8%) residency categories.

3.1.1 Trends in name recognition

When the results of Survey 2003 are compared with the research in 2000 (Figure 1) there was an increase in the proportion of respondents who had heard of Environment Bay of Plenty (+3.5%).

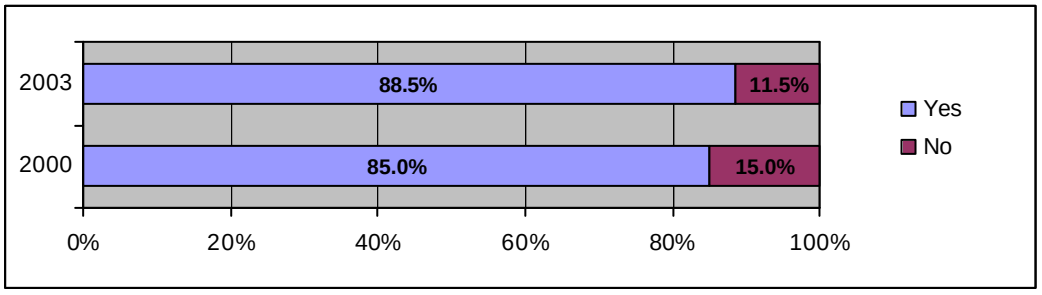

Figure 1 Awareness of Environment Bay of Plenty, 2000 and 2003

Comparing results across geographic areas shows an increase in awareness in Western Bay of Plenty (+8.4%) and Eastern Bay of Plenty (+4.7%) between 2000 and 2003, with a decrease in Rotorua (-3.5%) (Figure 2).

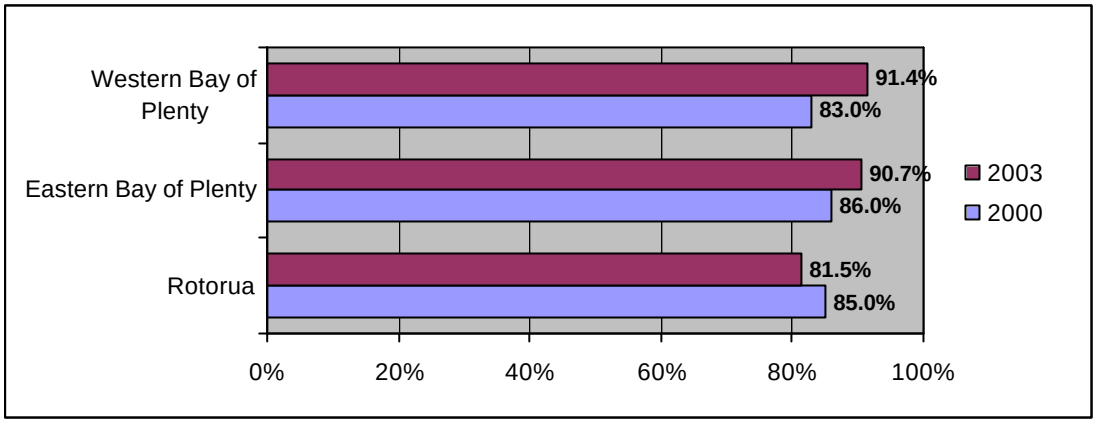

Figure 2 *Positive awareness of Environment Bay of Plenty by area, 2000 and 2003*

3.2 Dealings with Environment Bay of Plenty

Those respondents who were aware of Environment Bay of Plenty were asked to indicate whether they had ever dealt directly with Environment Bay of Plenty. Only one-quarter (24.3%) of those who had heard of Environment Bay of Plenty had dealt with the organisation.

When the results were analysed demographically, it was found that the proportion of respondents who had dealt previously with Environment Bay of Plenty:

- Varied slightly by area (Western Bay of Plenty 25.3%, Rotorua 23.6%, Eastern Bay of Plenty 22.6%).
- Was significantly higher in the middle (27.4%) and older (21.8%) than younger (8.8%) age categories.
- Was slightly higher for males (25.9%) than females (22.8%).
- Was higher for rural (35.2%) than urban (20.4%) respondents.
- Was higher for non-Maori (25.9%) than Maori (18.4%) respondents.
- Varied slightly between long-term (24.9%), medium-term (21.1%) and recent (18.6%) residency categories.

3.3 Descriptions of Environment Bay of Plenty's role

Respondents were asked to describe Environment Bay of Plenty's role (Figure 3). Multiple answers were allowed and encouraged. Note that in Figure 3 and Figure 4, 'vague environmental answer' and 'no idea' have been presented for only those respondents who did not give more specific responses.

More than two-thirds (69.2%) of respondents gave specific answers about what Environment Bay of Plenty does. Eighteen percent (17.8%) gave a vague environmental answer, while thirteen percent (13.0%) did not know.

General management of natural resources was most common of the more specific responses (23.7%), followed by water and land management[1] (22.3%), lakes management and plans (16.5%), river scheme management and flooding (15.9%), coast and harbour management (15.0%), state of the environment monitoring (13.8%) and regulatory/watchdog[2] (13.2%).

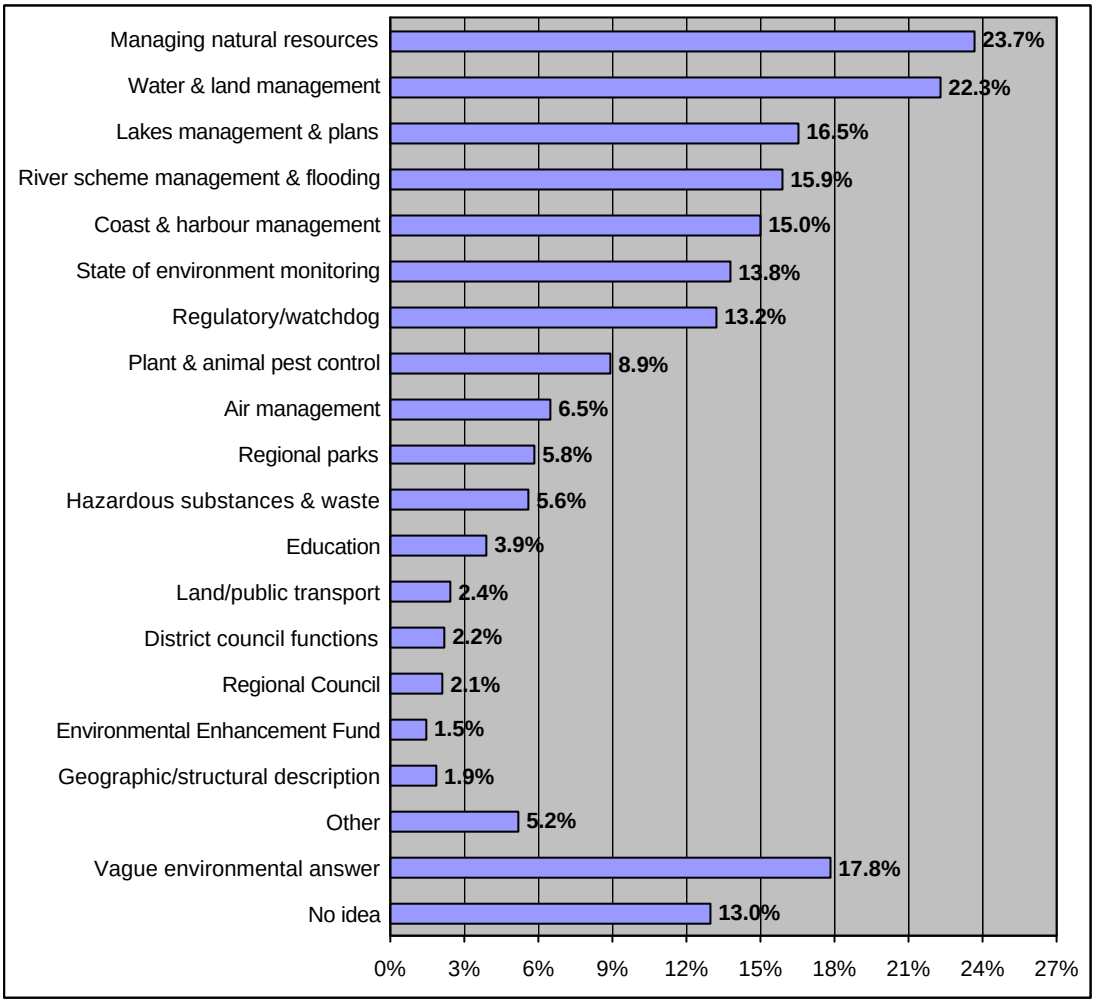

Figure 3 The perceived role of Environment Bay of Plenty (n=1025)

A more detailed analysis revealed that 47.2% of the total sample (484 respondents) mentioned at least one of the top three roles (managing natural resources, water and land management and lakes management and plans).

The results for respondents who had dealt previously with Environment Bay of Plenty (24.3% of the total sample) were examined separately (Figure 4). The specific roles that were most commonly identified by these respondents were:

- water and land management (30.3%);
- general management of natural resources (28.4%);
- river scheme management and plans (23.9%);
- regulatory/watchdog (23.9%); and

[1] Includes soil conservation, landcare and streamcare.
[2] Includes resource consents, compliance monitoring and administering the Resource Management Act.

- lakes management and plans (20.2%).

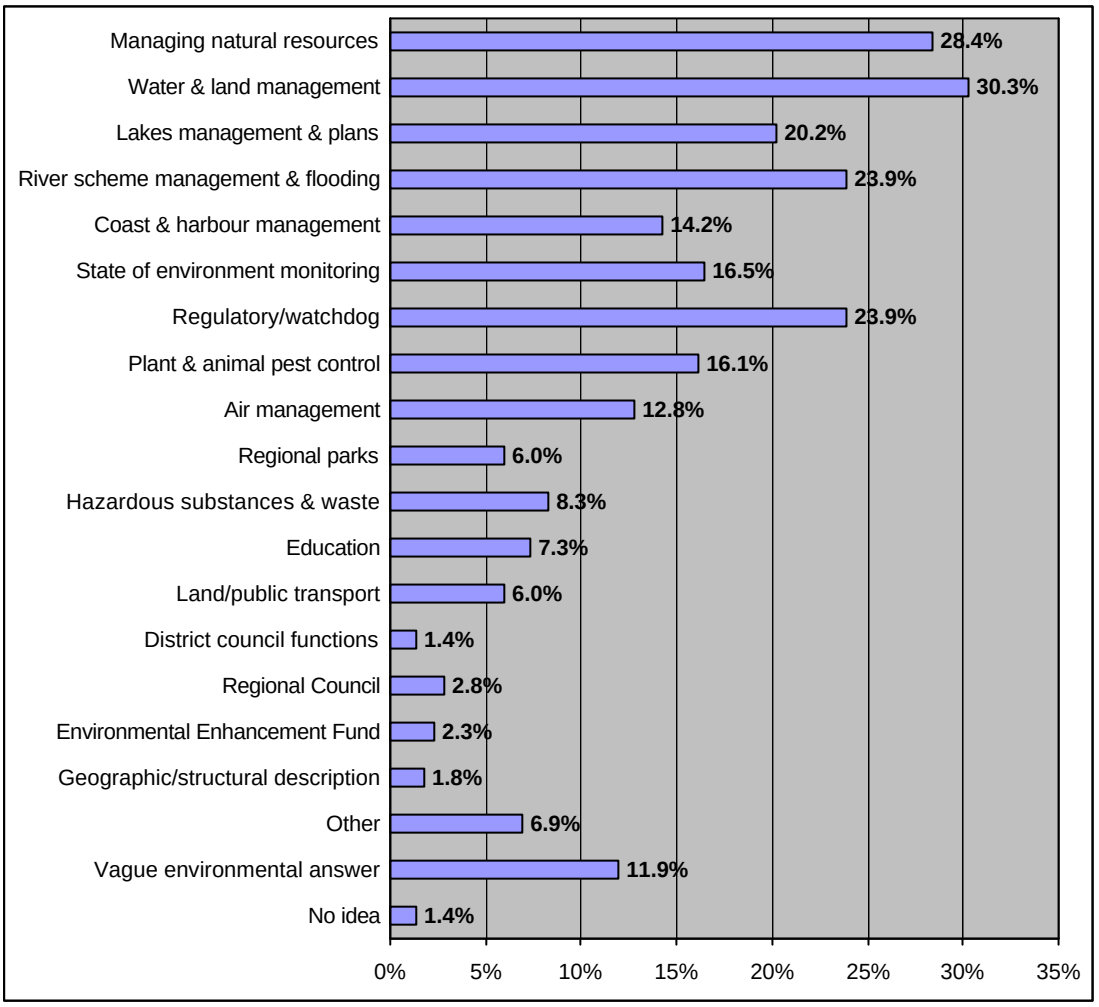

Figure 4 Perceived role of Environment Bay of Plenty by those respondents who have dealt with the organisation (n=218)

3.3.1 Trends in description of role

A direct comparison of these results with Survey 2000 cannot be undertaken due to a change in the nature of the question about the role of the organisation. However, generally there was a considerable increase in the number of respondents identifying the management of natural resources (including water and land management, lakes management and plans and river scheme management) as a role (+30%). There was a corresponding decrease in the proportion of respondents who gave a vague environmental answer (-10%).

3.4 Recall of communication

3.4.1 Overview

Respondents were asked on a prompted and unprompted basis whether they recalled seeing or hearing anything about Environment Bay of Plenty in each of the five media used by the organisation (Figure 5).

The most popularly recalled media overall were the 'Regional Guardian' (50.9%) and the pamphlet distributed with the rates notice (42.9%). Also commonly recalled were advertisements and articles in other newspapers (34.9% and 31.4%

respectively). One-quarter of respondents (24.0%) recalled radio advertisements for Environment Bay of Plenty.

One-sixth (14.8%) of respondents recalled seeing or hearing about Environment Bay of Plenty through other media including flyers/pamphlets (4.1%) and television (1.8%).

Eighteen percent (18.2%) of respondents did not recall seeing or hearing any information or advertising material about Environment Bay of Plenty.

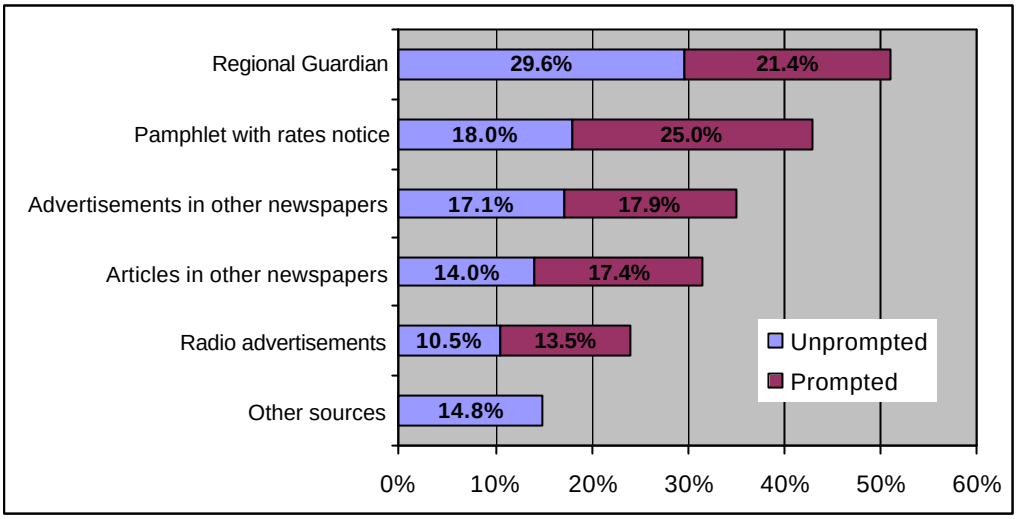

Figure 5 Communications recall on an unprompted and prompted basis

3.4.2 The 'Regional Guardian'

Overall, half (50.9%) of respondents recalled seeing Environment Bay of Plenty's newspaper, the 'Regional Guardian'. On an unprompted basis, 29.6% of respondents recalled this newspaper.

When the results were analysed demographically, it was found that the proportion who recalled the Regional Guardian (both unprompted and prompted):

- Was higher in the Western Bay of Plenty (54.9%) than Rotorua (49.8%) or Eastern Bay of Plenty (42.0%).
- Was highest in the older (55.5%), next highest in the middle (54.3%) and lowest in the younger (22.5%) age categories.
- Was higher for females (54.3%) than males (47.4%).
- Was higher for urban (52.0%) than rural (47.4%).
- Was significantly higher for non-Maori (55.5%) than Maori (37.4%) respondents.
- Was higher in the long-term (52.6%) than medium-term (47.1%) and recent (38.6%) residency categories.

3.4.3 Pamphlet distributed with the rates notice

Almost forty three percent (42.9%) of respondents recalled seeing Environment Bay of Plenty's pamphlet that was distributed with the rates notice. On an unprompted basis, 18.0% of respondents recalled this pamphlet.

When the results were analysed demographically, it was found that the proportion that recalled the pamphlet distributed with the rates notice (both unprompted and prompted):

- Was higher in the Eastern Bay of Plenty (49.3%) than Western Bay of Plenty (44.3%) and Rotorua (35.6%).
- Was significantly higher in the older (52.3%) and middle (45.6%) than in the younger (7.5%) age categories.
- Was similar for females (43.6%) and males (42.2%).
- Was higher for rural (46.6%) than urban (41.8%).
- Was significantly higher for non-Maori (47.1%) than Maori (30.3%) respondents.
- Was higher in the long-term (44.9%) than medium-term (35.6%) and recent (31.8%) residency categories.

3.4.4 Advertisements in other newspapers

Almost thirty five percent (34.9%) of respondents recalled seeing Environment Bay of Plenty advertisements in other newspapers. On an unprompted basis, 17.1% of respondents recalled these advertisements.

When the results were analysed demographically, it was found that the proportion that recalled advertisements in other newspapers (both unprompted and prompted):

- Was significantly higher in the Eastern Bay of Plenty (42.0%) than Western Bay of Plenty (33.8%) or Rotorua (32.0%).
- Was higher in the middle (39.3%) than older (32.2%) and younger (19.2%) age categories.
- Was similar for females (35.6%) and males (34.2%).
- Was higher for rural (38.3%) than urban (33.9%).
- Was higher for non-Maori (36.7%) than Maori (30.3%) respondents.
- Was similar in the recent (36.4%), long-term (34.9%) and medium-term (34.5%) residency categories.

3.4.5 Articles in other newspapers

Almost a third (31.4%) of respondents recalled seeing articles about Environment Bay of Plenty in other newspapers. On an unprompted basis, 14.0% of respondents recalled these articles.

When the results were analysed demographically, it was found that the proportion that recalled articles in other newspapers (both unprompted and prompted):

- Was significantly higher in the Eastern Bay of Plenty (39.5%) than Rotorua (29.9%) or Western Bay of Plenty (29.1%).
- Was higher in the middle (35.4%) than older (27.9%) and younger (19.2%) age categories.
- Was similar for males (32.2%) and females (30.7%).
- Was similar for rural (33.6%) and urban (30.6%).
- Was higher for non-Maori (32.1%) than Maori (29.9%) respondents.
- Was higher in the recent (31.8%) and long-term (31.8%) than medium-term (27.6%) residency categories.

3.4.6 Radio advertisements

Radio advertisements for Environment Bay of Plenty were recalled by 24.0% of respondents. A total of 10.5% of those respondents recalled the radio advertisements on an unprompted basis.

When the results were analysed demographically, it was found that the proportion that recalled radio advertisements (both unprompted and prompted):

- Was higher in the Eastern Bay of Plenty (37.1%) than Rotorua (22.4%) or Western Bay of Plenty (19.9%).
- Was higher in the middle (28.0%) than younger (20.8%) and older (16.6%) age categories.
- Was higher for males (27.2%) than females (21.0%).
- Was higher for rural (29.2%) than urban (22.3%).
- Was similar for Maori (25.2%) and non-Maori (23.8%) respondents.
- Was similar in the medium-term (25.3%), long-term (24.1%) and recent (21.6%) residency categories.

3.4.7 Other media

Other media for Environment Bay of Plenty was recalled by 14.8% of respondents. These included:

- Flyers/pamphlets/mailouts/brochures, 42 (4.1%).
- Television, 18 (1.8%).
- Through family/whanau/work/word of mouth 14, (1.4%).
- Billboards/signs, 12 (1.2%).
- Through children/school/kids club, 9 (0.9%).

- Newsletters, 6 (0.6%).
- Phonebook/local directory, 5 (0.5%).

For full details of other media refer to Appendix 3.

When the results were analysed demographically, it was found that the proportion that recalled other media:

- Was higher in the Western Bay of Plenty (19.3%) than Rotorua (10.7%) or Eastern Bay of Plenty (8.8%).
- Was similar in the middle (16.3%), older (13.1%) and younger (11.7%) age categories.
- Was similar for females (16.0%) and males (13.6%).
- Was similar for urban (15.0%) and rural (14.2%).
- Was higher for non-Maori (16.2%) than Maori (11.0%) respondents.
- Was higher in the medium-term (17.2%) than long-term (14.8%) and recent (13.6%) residency categories.

3.4.8 Trends in communication recall

As Figure 6 illustrates, the level of recall about Environment Bay of Plenty has decreased between 2000 and 2003 in each of the five media used by the organisation. In contrast, the proportion of respondents who recalled seeing or hearing about Environment Bay of Plenty from other sources increased.

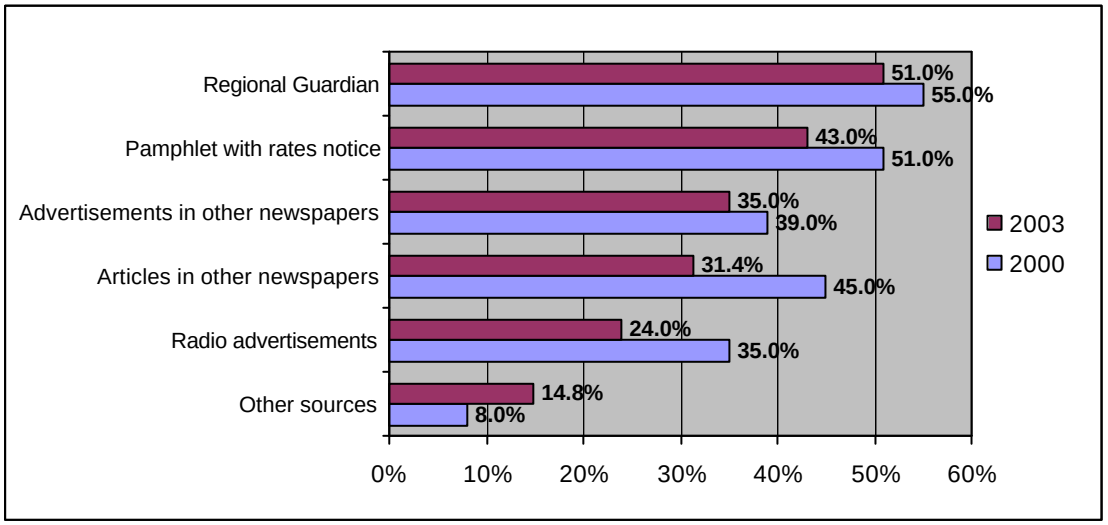

Figure 6 Communication recall, 2000 and 2003

3.5 Contact point

Respondents were asked to state who they would contact about three different environmental concerns (Figure 7).

Environment Bay of Plenty and a district council were the two most commonly nominated agencies that respondents would call if they noticed a problem with pest plants (38.3% and 38.2% respectively).

Only twenty-eight percent (27.7%) of respondents indicated they would contact Environment Bay of Plenty about pest animal problems, while a significantly larger proportion (37.7%) indicated a district council.

While more than forty percent (43.2%) of respondents nominated Environment Bay of Plenty as their contact if they noticed pollution occurring, this was two percent (-2.5%) less than the proportion that nominated a district council as their contact.

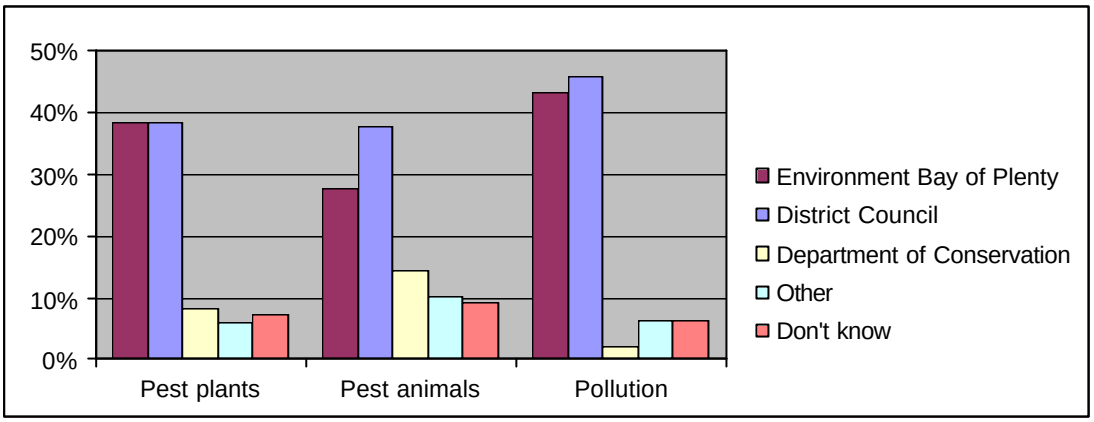

Figure 7 Contact point for pest plants, pest animals and pollution, 2003

3.5.1 Pest plant problems

Environment Bay of Plenty and a district council were most commonly nominated as the agencies that respondents would call if they noticed a problem with pest plants (38.3% and 38.2% respectively). The Department of Conservation was also nominated by eight percent (8.4%) of respondents, while about seven percent (7.2%) did not know which agency to contact.

It should be noted that respondents who initially answered "no-one" or "the landowner" were encouraged to say who they would contact if the problem was not resolved. Those respondents who offered another answer at this point were coded to their second answer.

When the results were analysed demographically, it was found that the proportion of respondents who would contact Environment Bay of Plenty:

- Was higher in the Western Bay of Plenty (41.9%) and Eastern Bay of Plenty (39.4%) than in Rotorua (30.8%).
- Was highest in the middle (42.0%), next highest in the older (34.2%) and lowest in the younger (28.6%) age categories.
- Was similar for females (38.9%) and males (37.8%).
- Was similar for urban (38.5%) and rural (38.0%).
- Was significantly higher for non-Maori (43.1%) than Maori (24.1%) respondents.
- Was higher in the recent (45.5%) than long-term (38.5%) and medium-term (29.9%) residency categories.

When the results were analysed demographically, it was found that the proportion of respondents who would contact a district council:

- Was higher in the Western Bay of Plenty (39.1%) than in Rotorua (38.4%) or Eastern Bay of Plenty (35.5%).
- Was highest in the older (45.2%), next highest in the middle (36.9%) and lowest in the younger (28.6%) age categories.
- Was similar for females (38.9%) and males (37.4%).
- Was similar for urban (38.4%) and rural (37.2%).
- Was higher for Maori (39.5%) than non-Maori (37.6%) respondents.
- Was higher in the medium-term (48.3%) than recent (39.8%) and long-term (37.1%) residency categories.

3.5.2 Pest animal problems

When asked whom they would contact if they noticed a problem with pest animals, almost two-fifths (37.7%) of respondents said a district council, while just over one-quarter (27.7%) said Environment Bay of Plenty. A further 14.3% said they would contact the Department of Conservation, and one-tenth (9.3%) of respondents were unsure.

It should be noted that respondents who initially answered “no-one” or “the landowner” were encouraged to say who they would contact if the problem was not resolved. Those respondents who did so were coded to their second answer.

When the results were analysed demographically, it was found that the proportion of respondents who would contact Environment Bay of Plenty:

- Was higher in the Eastern Bay of Plenty (29.9%) and Western Bay of Plenty (29.8%) than Rotorua (22.1%).
- Was highest in the middle (31.0%), next highest in the older (23.3%) and lowest in the younger (20.2%) age categories.
- Was higher for males (28.3%) than females (27.1%).
- Was similar for rural (28.2%) and urban (27.6%).
- Was higher for non-Maori (31.0%) than Maori (17.8%) respondents.
- Was higher in the recent (34.1%) than long-term (27.5%) and medium-term (23.0%) residency categories.

When the results were analysed demographically, it was found that the proportion of respondents who would contact a district council:

- Was higher in the Western Bay of Plenty (41.9%) and Rotorua (37.4%) than in Eastern Bay of Plenty (27.0%).
- Was highest in the older (45.6%), next highest in the middle (36.7%) and lowest in the younger (24.4%) age categories.

- Was higher for females (41.4%) than males (33.7%).
- Was higher for urban (40.2%) than rural (30.2%).
- Was higher for non-Maori (39.7%) than Maori (31.2%) respondents.
- Was higher in the medium-term (44.8%) than long-term (37.2%) and recent (36.4%) residency categories.

3.5.3 Pollution

Contact point

When asked whom, if anyone, they would contact if they noticed pollution occurring, forty-six percent (45.7%) of respondents said a district council. Almost as many (43.2%) said they would call Environment Bay of Plenty. A further six percent (6.2%) did not know whom they would contact about pollution problems.

It should be noted that respondents who initially answered "no-one" or "the polluter" were encouraged to say who they would contact if the problem was not resolved. Those who did so were coded to their second answer.

When the results were analysed demographically, it was found that the proportion of respondents who said they would contact Environment Bay of Plenty:

- Was higher in the Eastern Bay of Plenty (53.2%) than in the Western Bay of Plenty (46.2%) or Rotorua (30.2%).
- Was highest in the middle (48.7%), next highest in the older (35.2%) and lowest in the younger (33.3%) age categories.
- Was higher for males (45.3%) than females (41.3%).
- Was higher for rural (49.8%) than urban (41.0%).
- Was significantly higher for non-Maori (47.5%) than Maori (30.6%) respondents.
- Was highest in the long-term (44.2%) next highest in the medium-term (40.2%) and lowest in the recent (36.4%) residency categories.

When the results were analysed demographically, it was found that the proportion of respondents who said they would contact a district council:

- Was higher in Rotorua (62.6%) than in the Western Bay of Plenty (42.3%) or Eastern Bay of Plenty (31.2%).
- Was highest in the older (50.4%), next highest in the younger (47.5%) and lowest in the middle (43.2%) age categories.
- Was higher for females (47.5%) than males (43.7%).
- Was higher for urban (48.1%) than rural (37.9%).
- Was significantly higher for Maori (53.7%) than non-Maori (42.8%) respondents.

- Was slightly higher in the medium-term (48.3%) than recent (46.6%) and long-term (45.3%) residency categories.

Awareness of 'Pollution Hotline'

Over one-fifth (22.6%) of respondents were aware of Environment Bay of Plenty's 'Pollution Hotline' service. The remainder (77.4%) had not heard of the service.

When the results were analysed demographically, it was found that the proportion of respondents who were aware of the 'Pollution Hotline':

- Was higher in the Eastern Bay of Plenty (26.1%) than the Western Bay of Plenty (22.7%) or Rotorua (19.9%).
- Was highest in the middle (26.1%), next highest in the older (18.1%) and lowest in the younger (15.0%) age categories.
- Was higher for males (26.3%) than females (19.1%).
- Was higher for rural (28.6%) than urban (20.7%).
- Was higher for non-Maori (24.1%) than Maori (18.1%) respondents.
- Was higher in the long-term (23.7%) than medium-term (17.2%) and recent (15.9%) residency categories.

Awareness of the 'Pollution Hotline' has decreased since both the 1997 and 2000 surveys, as illustrated in Figure 8.

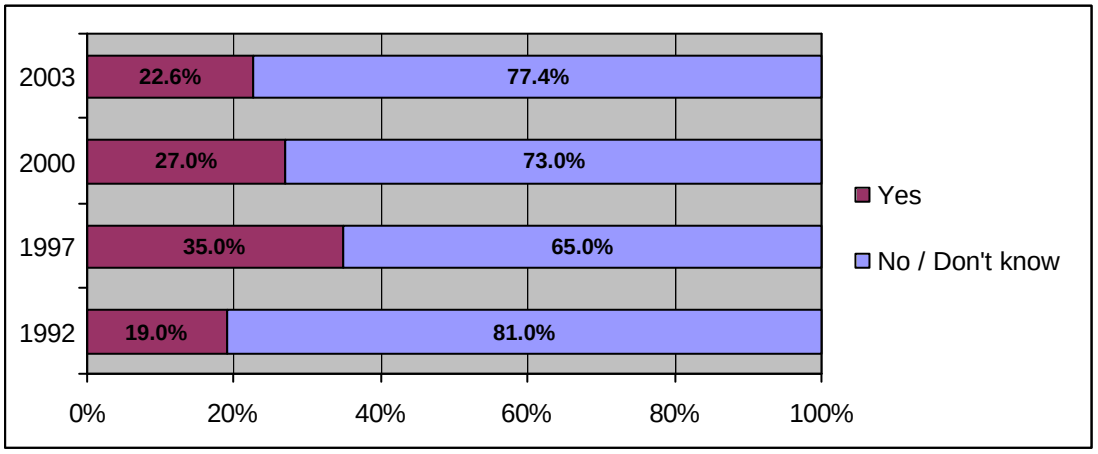

Figure 8 Awareness of 'Pollution Hotline'

It should be noted that there were minor changes to the pollution hotline questions between 1992 and later surveys, as shown in Table 1. These are not considered significant enough to affect the research outcomes.

Table 1 'Pollution Hotline' question

Year	Question
1992	The Bay of Plenty Regional Council has a service called 'The Pollution Hotline'. Before today, were you aware of that service?
1997	Environment Bay of Plenty has a service called the 'Pollution Hotline'. Before today, have you heard about this service?
2000	
2003	

3.5.4 Trends in contact agencies

The two most commonly nominated agencies for pest plant, pest animal and pollution problems were compared between Survey 2000 and Survey 2003 (Figure 9, Figure 10 and Figure 11).

These showed a decrease in the proportion who would contact Environment Bay of Plenty for pest plant problems (-1.7%) and for pollution concerns (-1.8%), with a subsequent increase in the proportion who would contact a district council.

Both the proportions of respondents who would contact Environment Bay of Plenty and a district council regarding pest animal problems remained relatively unchanged.

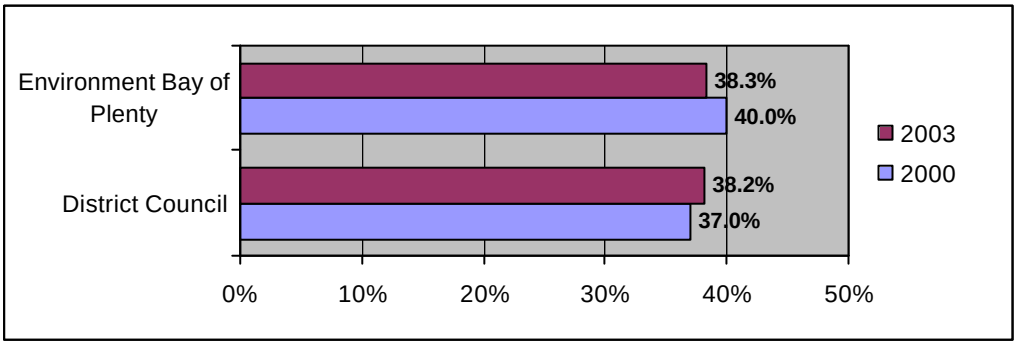

Figure 9 Top two contacts for pest plants, 2000 and 2003

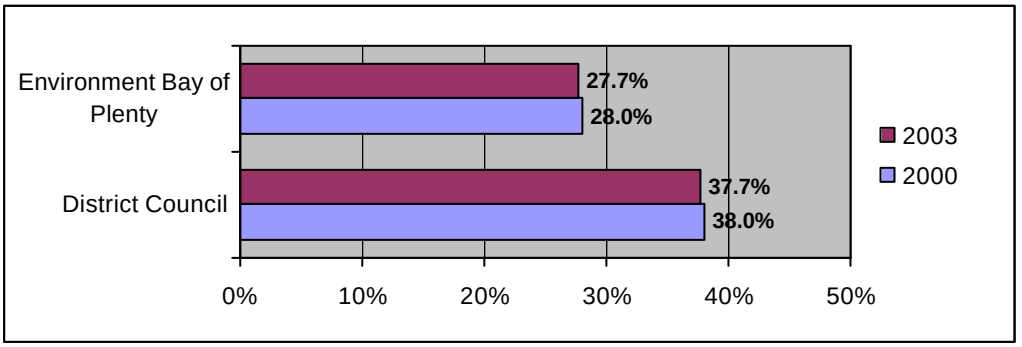

Figure 10 Top two contacts for pest animals, 2000 and 2003

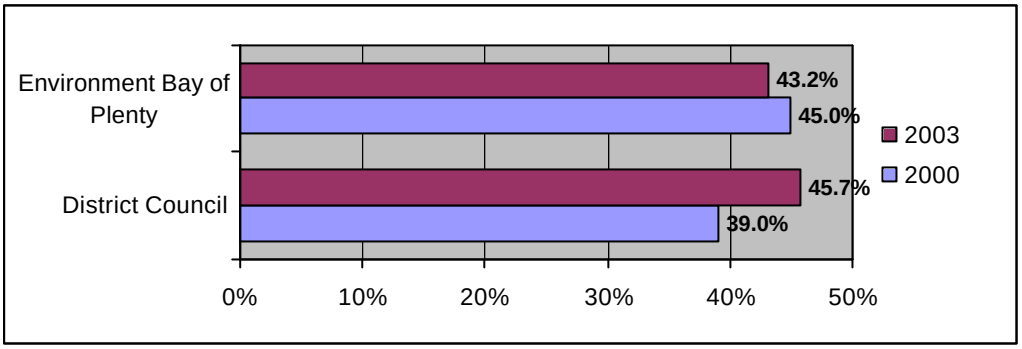

Figure 11 Top two contacts for pollution, 2000 and 2003

3.6 Perceptions of funding

Respondents were asked to identify how Environment Bay of Plenty operations were funded. Multiple answers were allowed.

Three-fifths (62.0%) were aware that Environment Bay of Plenty was funded by rates (Figure 12). This was consistent with the results of Survey 2000. Two-fifths (37.1%) felt that funding came from central government/taxes, while only five percent (5.0%) mentioned investments such as the Port of Tauranga shares. A small proportion (2.9%) considered that Environment Bay of Plenty was funded by donations.

Other sources of funds that respondents mentioned included:

- Councils, 59 (5.8%).
- Charges for permits/fees for fishing licences/fines, 9 (0.9%).
- Lotteries/grants/sponsors/charities, 7 (0.7%).
- Industries/businesses, 3 (0.3%).

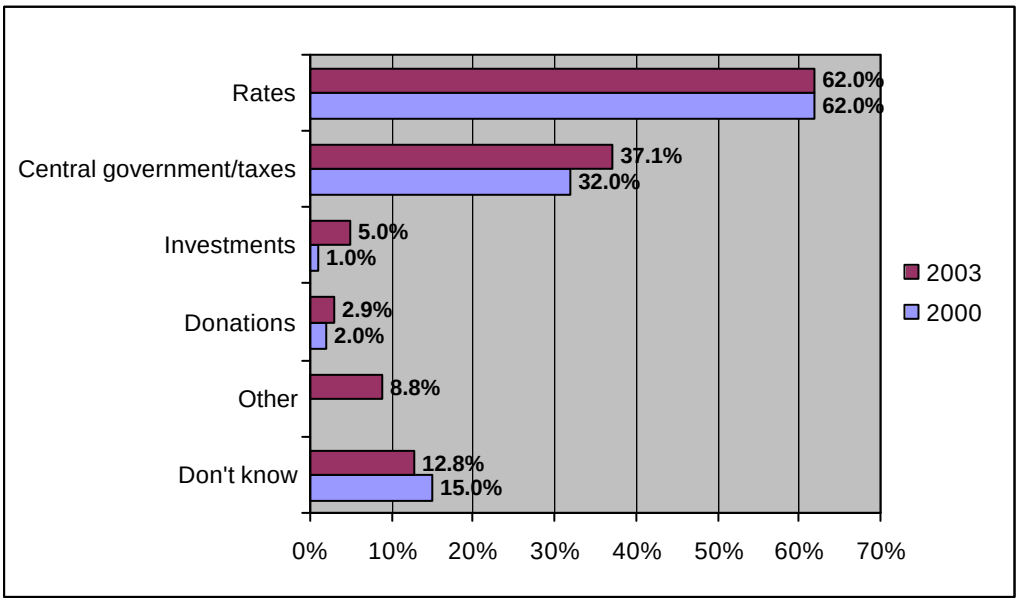

Figure 12 Perceived sources of funds, 2000 and 2003

When the results were analysed demographically it was found that the proportion of respondents who included rates in their answers:

- Was higher in the Western Bay of Plenty (69.2%) than the Eastern Bay of Plenty (55.6%) or Rotorua (52.7%).
- Was higher in the older (69.0%) and middle (64.4%) than the younger (32.5%) age categories.
- Was higher for males (63.9%) than females (60.1%).
- Was similar for urban (62.5%) and rural (60.5%).
- Was significantly higher for non-Maori (67.8%) than Maori (44.3%) respondents.
- Was higher in the long-term (63.2%) than medium-term (56.3%) and recent (55.7%) residency categories.

Chapter 4: Environmental Issues

4.1 Overview

A list of sixteen environmental issues identified by Environment Bay of Plenty was read to survey respondents. Respondents were asked to rate each issue as being either a big problem, some problem or no problem in the Bay of Plenty Region (Figure 13).

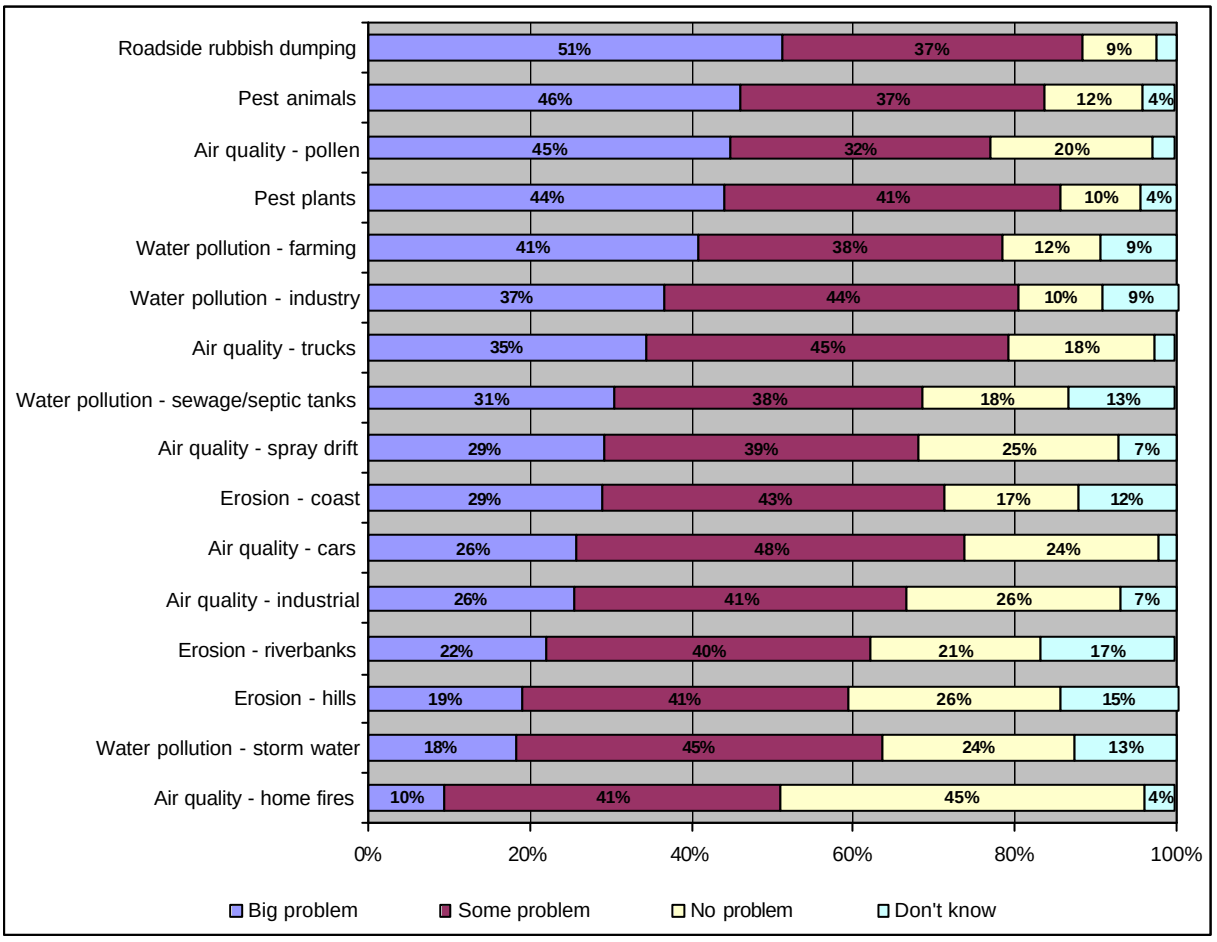

Figure 13 Perceived level of environmental problems in the region

For ease of analysis, 'big problem' and 'some problem' were grouped to form a 'problem' category.

The issues that were considered by more than three-quarters of respondents to be a problem in the Bay of Plenty Region were:

- Roadside rubbish dumping (88.3%).
- Pest plants (85.6%).
- Pest animals (83.6%).
- Water pollution from industry (80.5%).
- Air quality problems from trucks (79.1%).
- Water pollution from farming (78.6%).
- Air quality problems from pollen (77.1%).

The issue that was least commonly considered to be a problem was air quality problems from home fires, with one-tenth (9.6%) of respondents considering this to be a big problem, and two-fifths (41.3%) considering it to be some problem.

When given the opportunity to raise other environmental issues, respondents most commonly mentioned sea lettuce/seaweed (1.9%), lake water quality/lake weed/algae (0.9%), noise pollution (eg, from cars and trucks) (0.9%), mangroves (0.7%), lack of opportunity, awareness and encouragement for recycling (0.6%), and dumping of car bodies (0.5%).

4.2 Roadside rubbish dumping

More than half (51.1%) of respondents felt that roadside rubbish dumping was a big problem in the Bay of Plenty Region and one-third (37.2%) felt that it was some problem. One-tenth (9.2%) felt it was not a problem, while a small proportion (2.5%) did not know.

When the results were analysed demographically, it was found that roadside rubbish dumping was considered a problem by:

- Similar proportions of respondents from each area (Rotorua 91.5%, Eastern Bay of Plenty 88.3%, Western Bay of Plenty 86.6%).
- More of those in the middle (90.3%) and younger (89.1%) than older (83.6%) age categories.
- The same proportions of males (88.5%) and females (88.2%).
- Similar proportions from each locality (rural 89.2%, urban 88.0%).
- Similar proportions of non-Maori (88.4%) and Maori (87.8%) respondents.
- More of those in the long-term (89.7%) and medium-term (87.9%) than recent (74.7%) residency categories.

4.3 Pest plants

More than two-fifths (44.2%) of respondents felt that pest plants were a big problem in the region and a further two-fifths (41.4%) felt they were some problem. One-tenth (10.0%) felt that pest plants were not a problem, while a small proportion (4.4%) did not know.

When the results were analysed demographically, it was found that pest plants were considered a problem by:

- More of those respondents from Eastern Bay of Plenty (91.3%) than those from Western Bay of Plenty (84.3%) and Rotorua (83.9%).
- Similar proportions of those in the middle (88.0%), younger (83.3%) and older (81.2%) age categories.
- Similar for females (85.7%) and males (85.6%).
- Similar proportions for each locality (rural 88.9%, urban 84.6%).
- Similar proportions of non-Maori (85.7%) and Maori (85.1%) respondents.
- More respondents in long-term (86.5%) and medium-term (83.7%) than recent (79.5%) residency categories.

4.4 Pest animals

Almost half (46.2%) of respondents felt that pest animals were a big problem in the region and one-third (37.4%) felt they were some problem. One-tenth (12.4%) felt they were no problem, while a small proportion (3.9%) was unsure.

When the results were analysed demographically, it was found that pest animals were considered a problem by:

- More of those respondents from Rotorua (86.9%) than from Eastern Bay of Plenty (84.9%) and Western Bay of Plenty (81.6%).
- More of those in the middle (86.1%), than younger (80.0%) and older (79.8%) age categories.
- More males (86.5%) than females (81.0%).
- More of those from rural (90.9%) than urban (81.3%) localities.
- Similar proportions of Maori (85.1%) and non-Maori (83.2%) respondents.
- More of those in the medium-term (90.7%), than long-term (83.8%) and recent (76.1%) residency categories.

4.5 Water pollution from industry

Over one-third (36.7%) of respondents felt that water pollution from industry was a big problem in the Bay of Plenty Region, while more than two-fifths (43.8%) felt that it was some problem. One-tenth (10.4%) felt it was no problem, while a further one-tenth (9.2%) did not know.

When the results were analysed demographically, it was found that water pollution from industry was considered a problem by:

- More of those respondents from Rotorua (88.6%) than from Eastern Bay of Plenty (79.5%) and Western Bay of Plenty (76.6%).
- Similar proportions of those in the middle (83.6%), younger (80.8%) and older (73.5%) age categories.
- More males (84.4%) than females (76.8%).
- Similar proportions from each locality (rural 81.0%, urban 80.3%).
- Significantly higher proportions of Maori (86.2%) than non-Maori (78.5%) respondents.
- Significantly higher proportions of respondents in the medium (83.9%) and long-term (81.0%) than in the recent (70.5%) residency categories.

4.6 Air quality problems from trucks

One-third (34.5%) of respondents felt that air quality problems from trucks were a big problem in the region, while more than two-fifths (44.6%) felt there was some problem. Almost one-fifth (18.2%) felt there was no problem, while a small proportion (2.6%) was unsure.

When the results were analysed demographically, it was found that air quality problems from trucks were considered a problem by:

- Similar proportions of respondents from each area (Western Bay of Plenty 81.0%, Eastern Bay of Plenty 77.6% and Rotorua 76.8%).
- A similar proportion of those in the younger (80.9%), middle (79.1%), and older (78.5%) age categories.
- More females (81.7%) than males (76.5%).
- Higher amongst urban (80.3%) than rural (75.3%) respondents.
- More Maori (83.9%) than non-Maori (77.5%) respondents.
- A similar proportion of respondents in medium-term (80.5%), recent (79.6%) and long-term (78.9%) residency categories.

4.7 Water pollution from farming

Two-fifths (40.9%) of respondents felt that water pollution from farming was a big problem in the Bay of Plenty Region and one-third (37.7%) felt that it was some problem. One-tenth (12.1%) felt it was no problem, while one-tenth (9.3%) did not know.

When the results were analysed demographically, it was found that water pollution from farming was considered a problem by:

- More of those respondents from Rotorua (84.0%) than from Western Bay of Plenty (77.3%) and Eastern Bay of Plenty (74.6%).

- A higher proportion of those in the middle (82.1%), and older (77.0%) than younger (64.1%) age categories.
- More males (81.4%) than females (76.1%).
- Higher amongst rural (82.2%) than urban (77.5%) respondents.
- More Maori (80.4%) than non-Maori (78.0%) respondents.
- Significantly more respondents in medium-term (85.0%) and long-term (79.3%) than recent (64.8%) residency categories.

4.8 Air quality problems from pollen

More than two-fifths (45.0%) of respondents felt that air quality problems from pollen were a big problem in the Bay of Plenty Region and one-third (32.1%) felt they were some problem. One-fifth (20.0%) felt they were no problem, while a small proportion (2.8%) did not know.

When the results were analysed demographically, it was found that air quality problems from pollen were considered a problem by:

- Similar proportions of respondents from each area (Eastern Bay of Plenty 80.4%, Rotorua 77.9%, and Western Bay of Plenty 75.4%).
- Significantly more of those in the middle (80.4%) and older (74.9%) than younger (64.7%) age categories.
- More females (83.7%) than males (70.1%).
- Similar proportions from urban (78.7%) and rural (72.1%) localities.
- Similar proportions of Maori (77.5%) and non-Maori (76.8%) respondents.
- More respondents in long-term (77.7%) and medium-term (76.7%) than recent (70.1%) residency categories.

4.9 Water pollution from sewage/septic tanks

Almost one-third (30.5%) of respondents felt that water pollution from sewage/septic tanks was a big problem in the Bay of Plenty and two-fifths (38.2%) felt that it was some problem. A further one-fifth (18.1%) felt it was not a problem, while more than one-tenth (13.1%) did not know.

When the results were analysed demographically, it was found that water pollution from sewage and septic tanks was considered a problem by:

- More of those respondents from Rotorua (76.8%) than from Western Bay of Plenty (67.3%) and Eastern Bay of Plenty (61.5%).
- More respondents in the younger (75.8%), than in middle (68.2%) and older (66.7%) age categories.
- More females (72.2%) than males (65.5%).
- Significantly higher amongst rural (74.4%) than urban (67.0%) respondents.

- A significantly higher proportion of Maori (74.8%) than non-Maori (66.5%) respondents.

- A higher proportion of respondents in medium-term (71.2%) and long-term (69.3%) than recent (60.2%) residency categories.

4.10 Air quality problems from spray drift

Just under one-third (29.2%) of respondents felt that air quality problems from spray drift were a big problem in the region and two-fifths (38.8%) felt there was some problem. One-quarter (24.8%) felt there was no problem, while a few (7.2%) did not know.

When the results were analysed demographically, it was found that air quality problems from spray drift were considered a problem by:

- More of those respondents from Western Bay of Plenty (77.4%) and Eastern Bay of Plenty (69.6%) than from Rotorua (48.8%).

- Similar proportions of respondents in the middle (69.0%), older (68.3%) and younger (61.3%) age categories.

- A similar proportion of males (68.5%) and females (67.4%).

- More rural (70.8%) than urban (67.2%) respondents.

- A significantly higher proportion of non-Maori (71.9%) than Maori (56.1%) respondents.

- More respondents in medium-term (71.3%) than in long-term (68.0%) and recent (64.4%) residency categories.

4.11 Erosion of the coast

Less than one-third (28.9%) of respondents felt that erosion of the coast was a big problem in the Bay of Plenty, while two-fifths (42.5%) felt it was some problem. Almost one-sixth (16.6%) felt it was not a problem, and one-tenth (12.0%) did not know.

When the results were analysed demographically, it was found that erosion of the coast was considered a problem by:

- A higher proportion of respondents from Eastern Bay of Plenty (78.4%) and Western Bay of Plenty (75.6%) than from Rotorua (58.4%).

- A higher proportion of respondents in the middle (74.1%) and older (71.0%) than younger (59.7%) age categories.

- A similar proportion of females (71.9%) and males (71.0%).

- More urban (72.0%) than rural (69.7%) respondents.

- A higher proportion of non-Maori (72.6%) than Maori (67.9%) respondents.

- A higher proportion of respondents in long-term (72.2%) and medium-term (71.2%), than recent (65.5%) residency categories.

4.12 Air quality problems from cars

A quarter (25.9%) of respondents felt that air quality problems from cars were a big problem in the region and nearly half (47.9%) felt there was some problem. A further one-quarter (24.1%) felt there was no problem, while a small proportion (2.1%) was unsure.

When the results were analysed demographically, it was found that air quality problems from cars were considered a problem by:

- More respondents from Western Bay of Plenty (81.4%) than from Eastern Bay of Plenty (68.1%) and Rotorua (63.3%).
- More respondents in older (76.3%) and middle (74.5%) than younger (64.2%) age categories.
- A significantly higher proportion of females (78.6%) than males (68.7%).
- More urban (75.4%) than rural (68.9%) respondents.
- A significantly higher proportion of non-Maori (76.2%) than Maori (66.1%) respondents.
- A similar proportion of respondents in each residency category (medium-term 78.1%, recent 75.0%, long-term 73.2%).

4.13 Air quality problems from industrial emissions

A quarter (25.5%) of respondents felt that air quality problems from industrial emissions were a big problem in the Bay of Plenty Region and two-fifths (41.3%) felt there was some problem. One-quarter (26.1%) felt there was no problem, while a few (7.1%) did not know.

When the results were analysed demographically, it was found that air quality problems from industrial emissions were considered a problem by:

- More of those respondents from Eastern Bay of Plenty (72.4%) and Rotorua (70.5%) than from Western Bay of Plenty (62.8%).
- A significantly higher proportion of respondents in the younger (75.0%) and middle (71.2%) than older (53.8%) age categories.
- More female (69.2%) than male (64.3%) respondents.
- A higher proportion of urban (68.9%) than rural (60.4%) respondents.
- A significantly higher proportion of Maori (74.8%) than non-Maori (64.1%) respondents.
- A similar proportion of respondents in each residency category (medium-term 67.8%, long-term 67.0%, recent 62.8%).

4.14 Erosion of the riverbanks

One-fifth (21.9%) of respondents felt that erosion of the riverbanks was a big problem in the region and two-fifths (40.4%) felt it was some problem. One-fifth (20.7%) felt it was not a problem, while a similar proportion (16.9%) was unsure.

When the results were analysed demographically, it was found that erosion of the riverbanks was considered a problem by:

- More of those respondents from Eastern Bay of Plenty (77.5%) than from Western Bay of Plenty (60.6%) and Rotorua (54.7%).
- A higher proportion of respondents in middle (65.7%) than older (58.3%) and younger (54.1%) age categories.
- The same proportion of males (62.5%) and females (62.2%).
- More rural (68.1%) than urban (60.4%) respondents.
- The same proportion of Maori (62.4%) and non-Maori (62.4%) respondents.
- More respondents in medium-term (64.4%) and long-term (63.3%) than recent (51.1%) residency categories.

4.15 Erosion of the hills

Almost one-fifth (19.1%) of respondents felt that erosion of the hills was a big problem in the Bay of Plenty and two-fifths (40.5%) felt it was some problem. One-quarter (26.0%) felt it was not a problem, while almost one-sixth (14.5%) did not know.

When the results were analysed demographically, it was found that erosion of the hills was considered a problem by:

- More of those respondents from Eastern Bay of Plenty (65.7%) and Western Bay of Plenty (61.2%) than from Rotorua (51.8%).
- More respondents in middle (61.8%) and older (58.3%) than younger (50.4%) age categories.
- A similar proportion of males (60.7%) and females (58.5%).
- A very similar proportion of urban (59.6%) and rural (59.2%) respondents.
- More Maori (62.1%) than non-Maori (58.7%) respondents.
- More respondents in medium-term (63.2%) and long-term (60.0%) than recent (52.3%) residency categories.

4.16 Water pollution from storm water

Nearly one-fifth (18.3%) of respondents felt that water pollution from storm water was a big problem in the region and almost half (45.3%) felt it was some problem. One-fifth (23.7%) felt it was not a problem, while more than one-tenth (12.7%) did not know.

When the results were analysed demographically, it was found that water pollution from storm water was considered a problem by:

- More of those respondents from Rotorua (65.5%) and Western Bay of Plenty (64.4%) than Eastern Bay of Plenty (59.0%).
- A higher proportion of respondents in the middle (66.5%), than older (60.1%) and younger (56.7%) age categories.
- More male (65.7%) than female (61.7%) respondents.
- A similar proportion of respondents in rural (64.5%) and urban (63.4%) locations.
- A similar proportion of Maori (66.3%) and non-Maori (62.6%) respondents.
- More respondents in medium-term (65.5%) and long-term (64.4%) than recent (53.4%) residency categories.

4.17 Air quality problems from home fires

One-tenth (9.6%) of respondents felt that air quality problems from home fires were a big problem in the region and two-fifths (41.3%) felt it was some problem. More than two-fifths (45.2%) felt there was no problem, while a small proportion (3.8%) did not know.

When the results were analysed demographically, it was found that air quality problems from home fires were considered a problem by:

- More of those respondents from Rotorua (64.3%) than from Eastern Bay of Plenty (49.0%) and Western Bay of Plenty (44.6%).
- A significantly higher proportion of respondents in younger (57.5%) and middle (55.7%) than in older (37.3%) age categories.
- More female (55.5%) than male (46.2%) respondents.
- More respondents in urban (52.5%) than rural (46.3%) locations.
- A greater proportion of Maori (55.5%) than non-Maori (49.4%) respondents.
- More respondents in long-term (51.2%) and medium-term (50.0%) than recent (48.9%) residency categories.

4.18 Other environmental issues

A number of respondents raised other issues they felt were environmental problems in the Bay of Bay of Plenty Region. These included:

- Sea lettuce/seaweed, 19 (1.9%).
- Lake water quality/lake weed/algae, 9 (0.9%).
- Noise pollution (eg, from cars and trucks), 9 (0.9%).
- Mangroves, 7 (0.7%).

- Lack of opportunity, awareness and encouragement for recycling, 6 (0.6%).
- Dumping of car bodies, 5 (0.5%).
- Chemical residue, chemical dumping/burning and toxic waste, 4 (0.4%).
- General litter, 4 (0.4%).
- New subdivisions and urban growth, 4 (0.4%).
- Traffic congestion/density, 4 (0.4%).
- Biosecurity, 3 (0.3%).
- Animal waste on reserves/domestic dogs, 2 (0.2%).
- Landfill and sewage treatment (smells/noise), 2 (0.2%).
- Ships in the harbour, 2 (0.2%).
- Sulphur, 2 (0.2%).
- Trains/monorail, 2 (0.2%).

For a full list of 'other' environmental issues raised, refer to Appendix 3.

4.19 Trends in environmental issues

Figure 14 compares the proportion of respondents who identified each environmental issue as being a problem in Survey 2000 and Survey 2003.

The issues that were rated as a problem by a larger proportion of respondents in Survey 2003 compared with 2000 were:

- Water pollution from farming (+14%).
- Pest animals (+8%).
- Pest plants (+8%).
- Air quality problems from industrial emissions (+7%).
- Air quality problems from trucks (+4%).

The issues that remained relatively unchanged (within the margin of error) were:

- Water pollution from sewage/septic tanks (+3%).
- Water pollution from storm water (+3%).
- Water pollution from industry (+2%).
- Erosion of the riverbanks (+2%).
- Roadside rubbish dumping (+1%).

- Air quality problems from home fires (+1%).
- Air quality problems from spray drift (0%).
- Air quality problems from pollen (-1%).
- Air quality problems from cars (-2%).
- Erosion of the hills (-3%).
- Erosion of the coast (-3%).

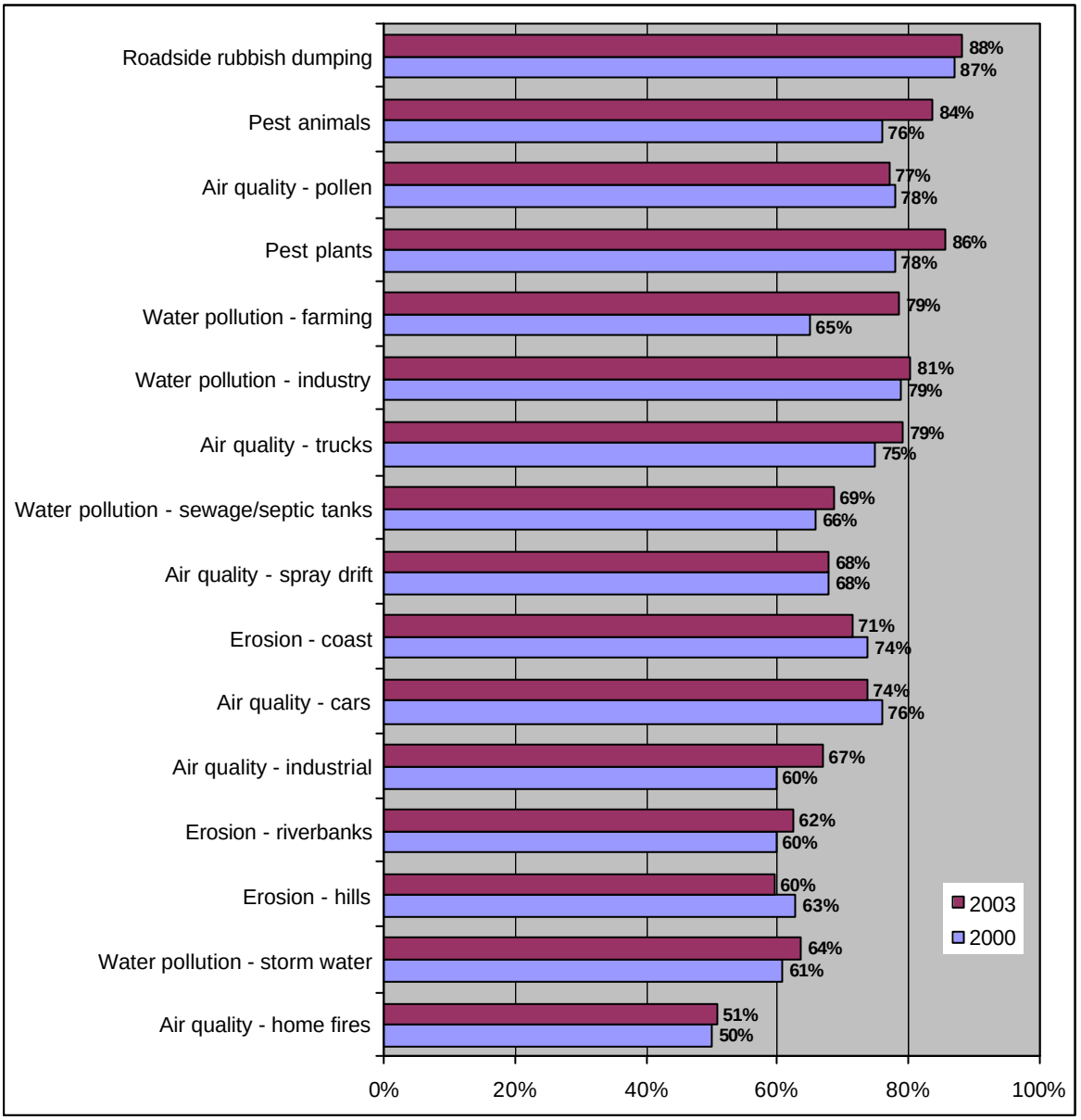

Figure 14 Perceived environmental problems in the region, 2000 and 2003

Chapter 5: Perceived State of the Environment

5.1 Overall state of the environment

Survey respondents were asked to rate the overall state of the natural environment in the Bay of Plenty Region. They were informed that the environment included the land, water, air and coast, as well as the plant and wildlife in the region.

Nearly two-thirds (62.1%) of respondents rated the state of the environment positively, with fourteen percent (13.7%) rating 'very good' and around half (48.4%) rating the environment as 'good' (Figure 15).

One third (30.0%) of respondents rated the state of the environment as 'average', and a small proportion felt it was 'poor' (5.0%) or 'very poor' (2.0%). One percent (1.0%) was unsure.

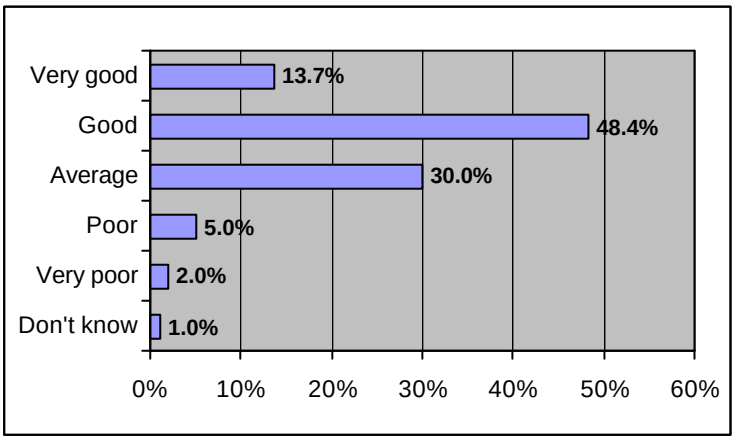

Figure 15 Overall state of the natural environment in the region, 2003

When the results were analysed demographically, it was found that the proportion of respondents who rated the natural environment as 'very good' or 'good':

- Was similar in all three areas (Western Bay of Plenty 64.2%, Eastern Bay of Plenty 61.9% and Rotorua 58.0%).
- Was similar in the older (63.1%), younger (62.5%) and middle (61.4%) age categories.
- Was slightly higher for males (64.3%) than females (60.0%).
- Was higher for urban (63.8%) than rural (56.7%) respondents.

- Was higher for non-Maori (64.5%) than Maori (54.9%) respondents.
- Was higher for recent (71.6%) and medium-term (67.8%) than long-term (60.4%) residency categories.

5.2 Perceived change in state of environment

Respondents were asked to say whether they felt that the environment of the Bay of Plenty Region was becoming better, becoming worse or staying the same (Figure 16).

The most common answer from respondents was 'staying the same' (35.1%), while similar proportions felt that it was becoming better (31.2%) and becoming worse (27.1%). Six percent (6.5%) did not know.

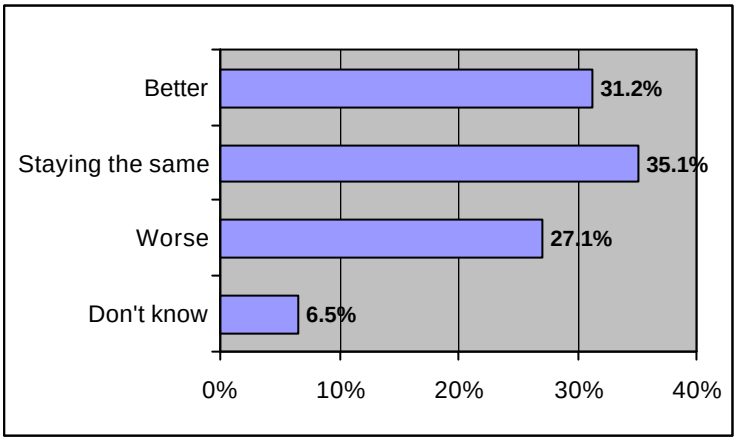

Figure 16 Perceived environmental change in the region, 2003

When the results were analysed demographically, it was found that:

- The proportion of respondents who felt the environment was improving was higher in the Western Bay of Plenty (33.8%) than in Eastern Bay of Plenty (30.2%) and Rotorua (27.0%), while the proportion that felt it was becoming worse was higher in Rotorua (31.7%) than in the Western Bay of Plenty (26.9%) and Eastern Bay of Plenty (21.5%).
- The share of respondents who felt the environment was staying the same was higher in the Eastern Bay of Plenty (44.4%) than in Rotorua (36.7%) and Western Bay of Plenty (30.8%).
- The proportion that felt the environment was getting better was higher in the older (34.2%) than younger (31.7%) and middle (29.8%) age categories.
- More females (32.5%) felt the environment was getting better over time than males (29.9%).
- A higher proportion of urban (32.9%) respondents felt the environment was getting better over time than rural (25.7%) respondents.
- A higher proportion of non-Maori (32.9%) respondents felt the environment was getting better over time than Maori (26.7%) respondents.

- The proportion that felt the environment was getting better over time, was higher in long-term (32.2%) than medium-term (27.6%) and recent (25.0%) residency categories.

5.3 Trends in perceived state of the environment

The results of Survey 2003 were compared with previous research (Figure 17), by excluding respondents who did not answer.

Survey 2003 shows an increase in the proportion of respondents who rated the region's natural environment as 'very good' (+3%) or 'good' (+6%) when compared to Survey 2000. This was offset by a decrease in the proportion that rated the environment as average (-9%). The proportion of respondents who rated 'poor' and 'very poor' did not change when compared to Survey 2000.

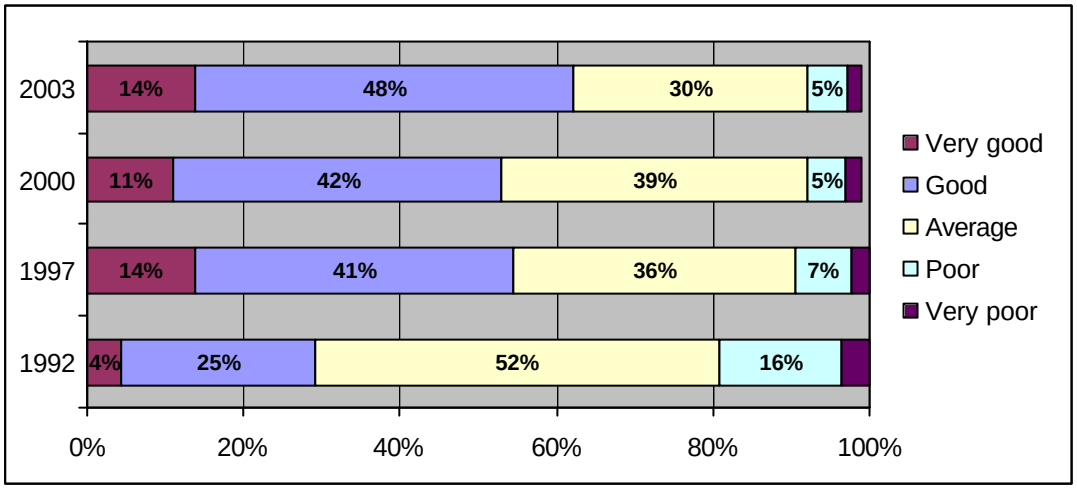

Figure 17 Overall state of the natural environment in the region, 1992, 1997, 2000 and 2003

Table 2 shows that there were minor changes to the overall 'state of the environment' questions between three surveys, with the later surveys specifying the 'natural' environment.

Table 2 Overall 'state of the environment' question

Year	Question
1992	How would you rate the general environmental state of the Bay of Plenty area? Would you say it was…?
1997	How would you rate the overall state of the natural environment of the Bay of Plenty region...?
2000	How would you rate the overall state of the natural environment of the Bay of Plenty Region? By environment we mean the land, water, air and coast, and the plant and wildlife of the region.
2003	

When compared with Survey 2000, Survey 2003 showed an increase in the proportion of respondents who felt that the environment was improving (+3.2%), with a corresponding decrease in the proportion who felt it was staying the same (-3.0) (Figure 18). The share of respondents who perceived the environment was becoming worse was constant between surveys (+1.5%).

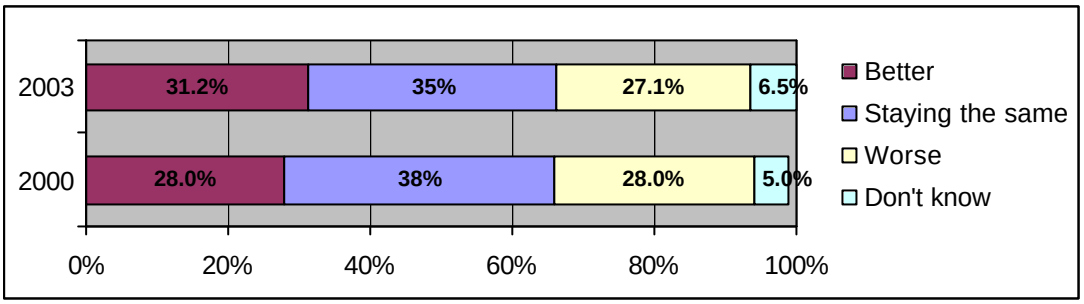

Figure 18 Perceived environmental change in region, 2000 and 2003

Chapter 6: Perceived Specific Environmental Damage

6.1 Overview

Survey respondents were asked whether they perceived any activities to be causing six types of environmental damage in the Bay of Plenty Region. Figure 19 shows the positive responses in each category of environmental damage.

More than two-thirds (68.3%) of respondents felt that there was a river or lake that was polluted in the Bay of Plenty. In addition, three-fifths (59.6%) had noticed plant pest problems in the region.

Half of respondents indicated they had noticed other types of damaging activities, which were:

- Pest animal problems (52.3%).
- Activities damaging air quality (52.4%).
- Activities damaging the sea, coastline, beach or harbour (49.6%).
- Activities damaging the land (47.1%).

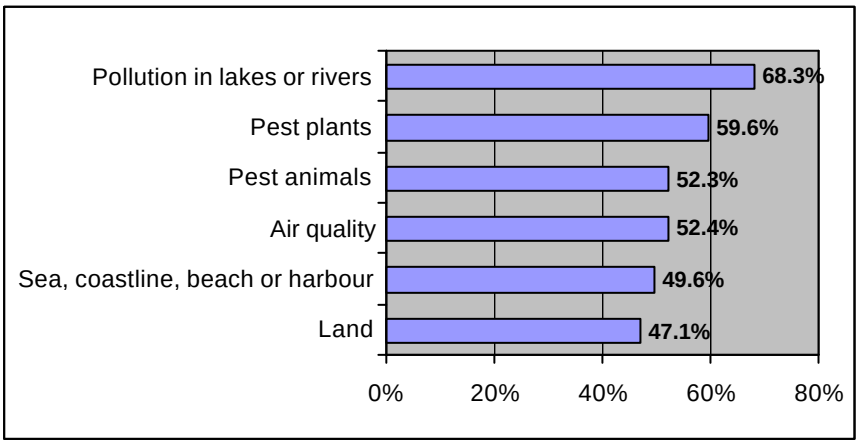

Figure 19 Activities damaging or problems with...

6.2 Rivers and lakes

6.2.1 Perceived damage

More than two-thirds (68.3%) of survey respondents felt that there was at least one river or lake in the Bay of Plenty Region that was polluted. Eighteen percent (18.0%) felt there was none, and fourteen percent (13.8%) were unsure.

The proportion that considered a waterway polluted was:

- Markedly higher in Rotorua (82.9%) than Eastern Bay of Plenty (63.9%) and Western Bay of Plenty (62.3%).
- Highest in the middle (72.9%), next highest in the older (63.4%), and lowest in the younger (55.8%) age categories.
- Similar among males (69.9%) and females (66.7%).
- Higher among rural (71.9%) than urban (67.1%) respondents.
- Higher for Maori (73.3%) than non-Maori (66.7%) respondents.
- Significantly higher in medium-term (71.3%) and long-term (70.4%) than recent (45.5%) residency categories.

Nearly half (48.9%) of those who felt that there was a polluted river or lake specified Lake Rotoiti, and almost one-quarter (23.8%) specified Lake Rotorua. Seven percent (7.4%) specified the Tarawera River. Small numbers specified other rivers or lakes as can be seen in Appendix 2.

6.2.2 Trends in waterways perceived as most damaged

The results were compared with previous surveys by taking the three most common responses in 2003 and tracking those responses back to 1992 (Figure 20). Survey 2003 showed a decrease in the proportion of respondents who identified Lake Rotorua (-12.2%), emergence of a new waterway perceived to be damaged: Lake Rotoiti (+46.9%), and a subsequent decrease in the proportion that identified the Tarawera River (-18.6%).

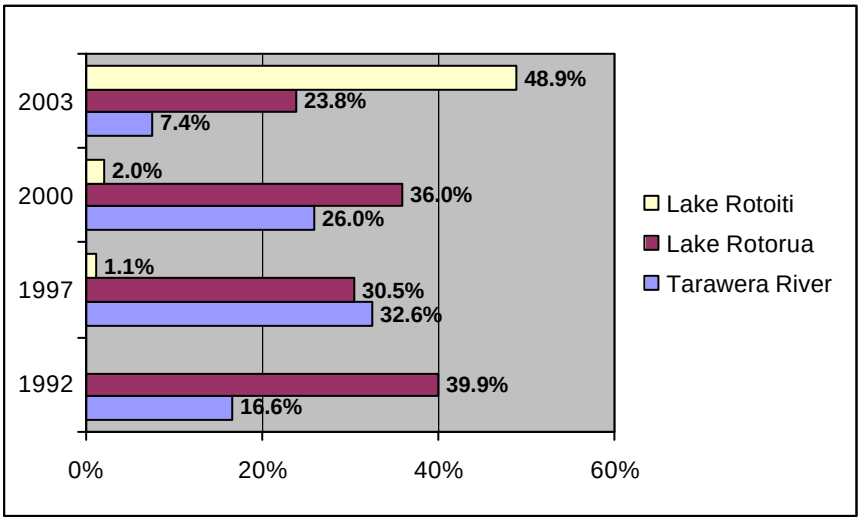

Figure 20 Top three waterways perceived most damaged, 1992, 1997, 2000 and 2003

While the questions were almost identical in all four surveys, it should be noted that multiple responses were allowed in 1992, as outlined in Table 3.

Table 3 Polluted river or lake question

Year	Question
1992	Are there any particular areas of lake or river which you consider to be polluted?
1997	Is there any particular lake or river which you consider is polluted?
2000	Is there any lake or river that you consider to be polluted? Which lake or river are you thinking of?
2003	

6.2.3 Perceived cause of damage

All waterways perceived cause of damage

Respondents were asked to name the activities that they felt were causing the pollution in the river or lake that they considered to be most polluted.

The most commonly identified sources or causes of pollution were farming practices (40.9%), sewage/septic tanks (24.1%), run-off from hills (17.6%) and general human irresponsibility (16.3%).

One-tenth (10.1%) were unsure about the source or cause of pollution. Other responses are outlined in Appendix 2.

Lake Rotoiti perceived cause of damage

Approximately half (49.0%) of respondents that felt Lake Rotoiti was polluted included farming practices as a source of pollution.

One-quarter (26.8%) of respondents included sewage or septic tanks.

Other responses included run-off from hills (21.5%), general human irresponsibility (15.6%), unspecified effluent (8.6%), chemicals (6.5%), over flow from Lake Rotorua (5.6%), and industrial waste (4.4%).

Small numbers of respondents mentioned other sources of pollution as can be seen in Appendix 2.

Lake Rotorua perceived cause of damage

Almost two-fifths (38.8%) of respondents that felt Lake Rotorua was polluted included farming practices as a source of pollution.

About one-third (35.2%) of respondents mentioned sewage or septic tanks.

Other responses included general human irresponsibility (20.6%), run-off from hills (17.0%), birdlife (12.1%), unspecified effluent (10.9%), boats (9.1%), chemicals (9.1%) and industrial waste (8.5%).

Small numbers of respondents mentioned other sources of pollution as can be seen in Appendix 2.

6.3 Pest plants

6.3.1 Perceived problems

Three-fifths (59.6%) of respondents had noticed pest plant problems in the Bay of Plenty Region, while one-third (37.6%) had not. A further three percent (2.7%) were unsure.

The proportion of respondents who had noticed pest plant problems was:

- Markedly higher in Eastern Bay of Plenty (77.6%) than Western Bay of Plenty (61.1%) and Rotorua (43.8%).
- Highest in the middle (64.5%), next highest in the older (56.3%), and lowest in the younger (42.0%) age categories.
- Similar among males (60.3%) and females (59.0%).
- Significantly higher among rural (75.9%) than urban (54.2%) respondents.
- Higher for non-Maori (63.0%) than Maori (50.0%) respondents.
- Higher in long-term (60.7%) and medium-term (57.5%) than recent (51.1%) residency categories.

6.3.2 Trends in pest plant problems

The results of Survey 2003 were compared with Survey 2000 (Figure 21). These show little change in the proportion of respondents who considered there to be pest plant problems in the region.

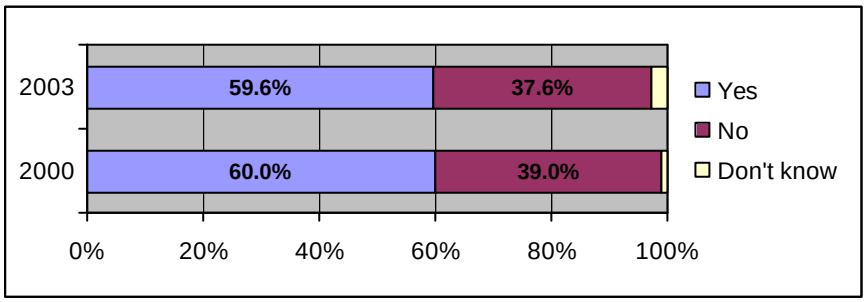

Figure 21 Are there any pest plant problems in the region? 2000 and 2003

Comparing surveys on an area basis (Figure 22), showed an increase (+17.6%) in the proportion of respondents in Eastern Bay of Plenty who identified plant pest problems, little change in Western Bay of Plenty (+1.1%) and a decrease in Rotorua (-15.2%) between 2000 and 2003.

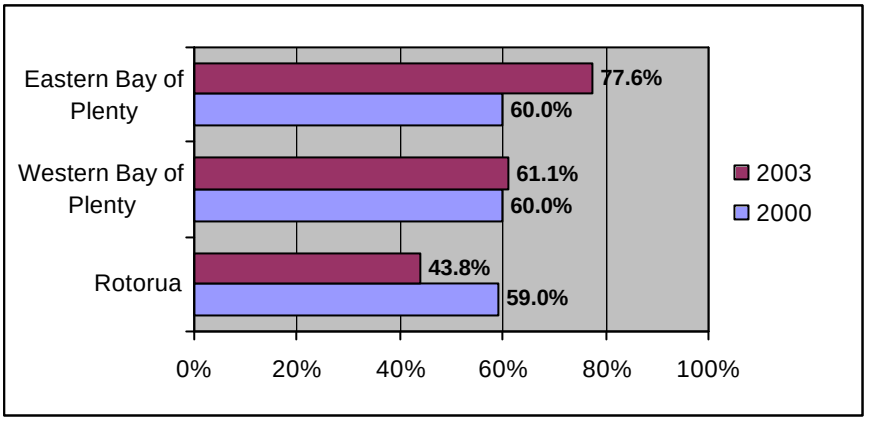

Figure 22 Pest plant problems in the region by geographic area, 2000 and 2003

It should be noted that the question relating to pest plants was altered slightly in Survey 2003 to reflect the current terminology used to describe plants that are not native to New Zealand but which have become established here and threaten our health, native plants or animals, heritage or economy (Table 4).

Table 4 Pest plant question

Year	Question
2000	Have you noticed noxious plant problems anywhere in the Bay of Plenty region?
2003	Have you noticed pest plant problems anywhere in the Bay of Plenty Region? By pest plants we mean exotic plants that are not native to New Zealand but which have become established here and threaten our health, native plants or animals, heritage or economy.

6.3.3 Perceived cause of problems

Almost two-thirds (64.3%) of respondents that had noticed pest plant problems in the region identified gorse in their response.

Other commonly reported pest plants included privet (25.4%), ragwort (24.8%), woolly nightshade (17.0%), wild ginger (12.0%), old man's beard (9.0%), blackberry (7.4%), kiwifruit (5.9%) and wandering willie (5.2%).

Small numbers of respondents mentioned other pest plants as can be seen in Appendix 2.

The 'other' category included a wide range of plants, a full list of which is included in Appendix 3.

6.4 Pest animals

6.4.1 Perceived problems

Over half (52.3%) of respondents had noticed pest animal problems in the Bay of Plenty Region, while just under half (46.8%) had not. A further one percent (0.9%) were unsure.

The proportion of respondents who had noticed pest animal problems was:

- Markedly higher in Eastern Bay of Plenty (72.5%) than in Western Bay of Plenty (48.1%) and Rotorua (45.6%).
- Highest in the middle (55.7%), next highest in the older (50.0%), and lowest in the younger (39.5%) age categories.
- Higher among males (55.9%) than females (48.9%).
- Significantly higher among rural (67.6%) than urban (47.2%) respondents.
- Similar for non-Maori (53.1%) and Maori (49.4%) respondents.
- Significantly higher in medium-term (59.8%) than long-term (52.5%) and recent (42.0%) residency categories.

6.4.2 Trends in pest animal problems

When the results of Survey 2003 were compared with Survey 2000 (Figure 23), these showed very little change in the proportion of respondents who considered there to be pest animal problems in the region.

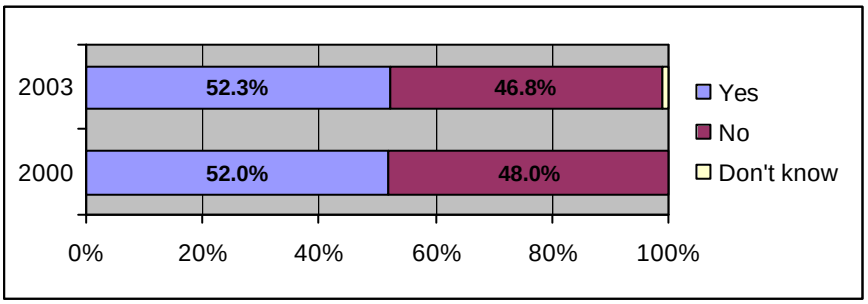

Figure 23 Are there any pest animal problems in the region?

When the proportion of respondents who considered there to be pest animal problems was examined on a geographic basis across surveys (Figure 24), there was a significant increase in Eastern Bay of Plenty (+18.5%), a slight increase in Western Bay of Plenty (+2.1%) and a marked decrease in Rotorua (-15.4%).

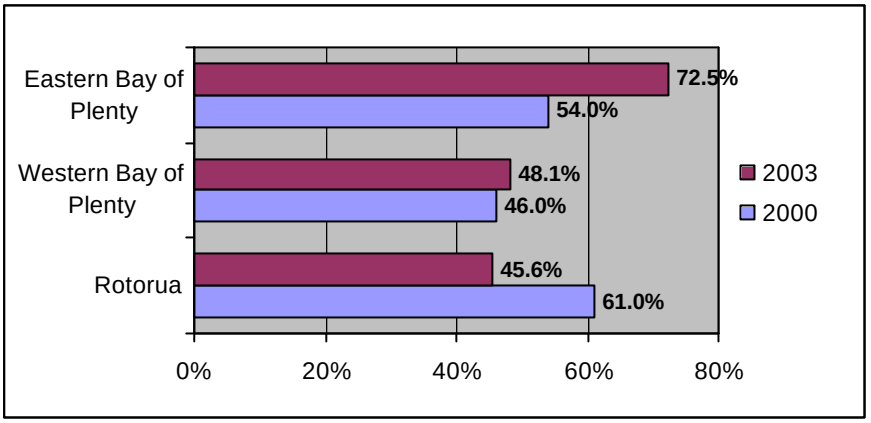

Figure 24 Pest animal problems in the region by geographic area, 2000 and 2003

It should be noted that the question relating to pest animals was altered slightly in Survey 2003 to reflect the current terminology used to describe animals that are not native to New Zealand but which have become established here and threaten our health, native plants or animals, heritage or economy (Table 5).

Table 5 Pest animal question

Year	Question
2000	Have you noticed animal pest problems anywhere in the Bay of Plenty Region?
2003	Have you noticed pest animal problems anywhere in the Bay of Plenty Region? By pest animals we mean exotic animals that are not native to New Zealand but which have become established here and threaten our health, native plants or animals, heritage or economy.

6.4.3 Perceived cause of problems

Three-fifths (63.0%) of respondents that had noticed pest animal problems in the region identified possums in their response, while two-fifths (45.6%) identified rabbits.

Other commonly reported pest animals included rats (10.5%), dogs/feral dogs (10.5%), mustelids (ferrets, stoats, weasels) (9.3%), feral cats (8.8%) and wallabies (5.2%).

Small numbers of respondents mentioned other pest animals as can be seen in Appendix 2.

The 'other' category included a range of pest animals, a full list of which is included in Appendix 3.

6.5 Air quality

6.5.1 Perceived damage

Half (52.4%) of respondents felt that there were activities damaging the air quality in the region, while two-fifths (42.0%) did not. Six percent (5.6%) were unsure.

The proportion of respondents who felt that there were activities damaging the air quality was:

- Higher in Eastern Bay of Plenty (68.6%) than in Western Bay of Plenty (52.5%) and Rotorua (40.1%).
- Higher in the middle (55.2%) than younger (50.0%) and older (47.0%) age categories.
- Similar among females (52.6%) and males (52.1%).
- Higher among rural (56.8%) than urban (51.0%) respondents.
- Higher for non-Maori (53.1%) than Maori (49.8%) respondents.
- Significantly higher in medium-term (66.7%) than long-term (51.5%) and recent (46.6%) residency categories.

6.5.2 Trends in perceived air quality damage

The results of Survey 2003 were compared with Survey 2000 (Figure 25). These showed a decrease in the proportion of respondents who considered there to be activities damaging air quality in the region (-9.6%). There was a corresponding increase in the proportion of respondents who felt that no activities were damaging air quality in the region (+7.0%).

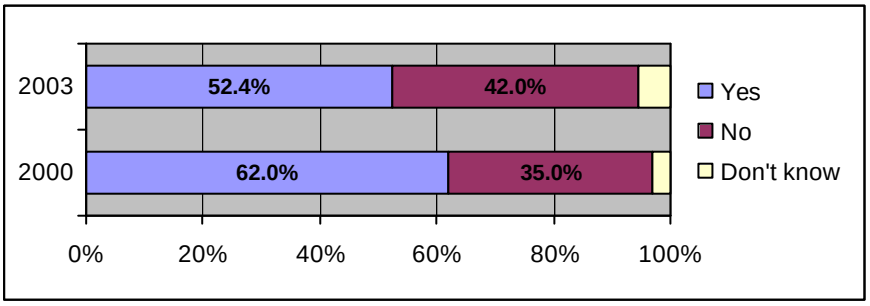

Figure 25 Are there any activities damaging air quality in the region?

On a geographic basis, Survey 2003 showed an increase in the proportion of respondents in Eastern Bay of Plenty who perceived that there were activities damaging the air quality in the region (+4.6%). Conversely, the proportion of respondents in Western Bay of Plenty and Rotorua decreased (-12.5% and -16.9% respectively) (Figure 26).

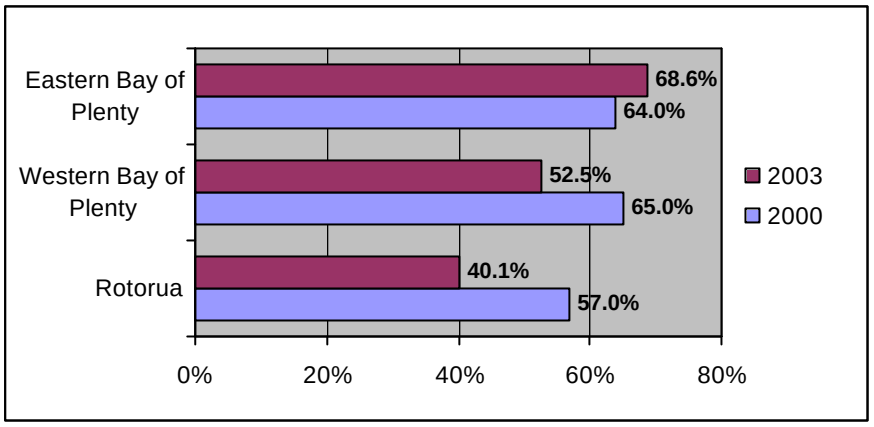

Figure 26 Air quality damage by geographic area, 2000 and 2003

6.5.3 Perceived cause of damage

Two-fifths (44.3%) of respondents who felt that there were activities damaging the air quality identified vehicle emissions in their answer.

Other commonly identified activities or sources of damage included industrial emissions (30.9%), sprays (25.5%), the Kawerau mills (22.1%) and pollen (19.8%). Burn-offs (9.8%) and domestic fires (9.8%) were also commonly mentioned.

Small numbers of respondents mentioned other sources or causes of damage as can be seen in Appendix 2.

The 'other' category included a range of air damaging activities, a full list of which is included in Appendix 3.

6.6 Sea, coastline, beach and harbour

6.6.1 Perceived damage

Half (49.6%) of respondents felt that there were activities damaging the sea, coastline, beach or harbour in the Bay of Plenty. Almost two-fifths (38.5%) felt there were not, while twelve percent (11.9%) were unsure.

The proportion of respondents who felt there were activities damaging the sea, coastline, beach or harbour was:

- Higher in Eastern Bay of Plenty (62.0%) than in Western Bay of Plenty (51.5%) and Rotorua (36.8%).
- Highest in the middle (50.8%), next highest in the older (49.6%), and lowest in the younger (43.3%) age categories.
- Similar among males (49.8%) and females (49.3%).
- Significantly higher among rural (58.1%) than urban (46.7%) respondents.
- Similar for non-Maori (50.1%) and Maori (48.2%) respondents.
- Significantly higher in medium-term (59.3%) than long-term (49.9%) and recent (37.5%) residency categories.

6.6.2 Trends in sea and coastal damage

The results of Survey 2003 were compared with previous surveys, by excluding respondents who did not answer (Figure 27). The 2003 results show an increase in the proportion of respondents who considered there to be activities damaging the sea and coast (+4.3%) when compared with the 2000 study. This reverses the decreasing trend seen in previous years.

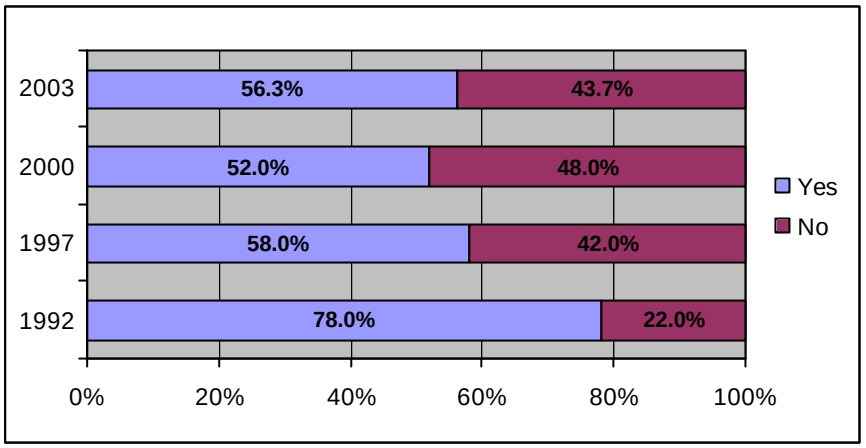

Figure 27 Are there any activities damaging the coast in the region?

Figure 28 compares the positive responses to activities damaging the sea and coastline between 2000 and 2003. There was an increase in the proportion of respondents identifying damage from Eastern Bay of Plenty (+7.0%) and a slight decrease from Western Bay of Plenty (-1.5%) and Rotorua (-2.2%).

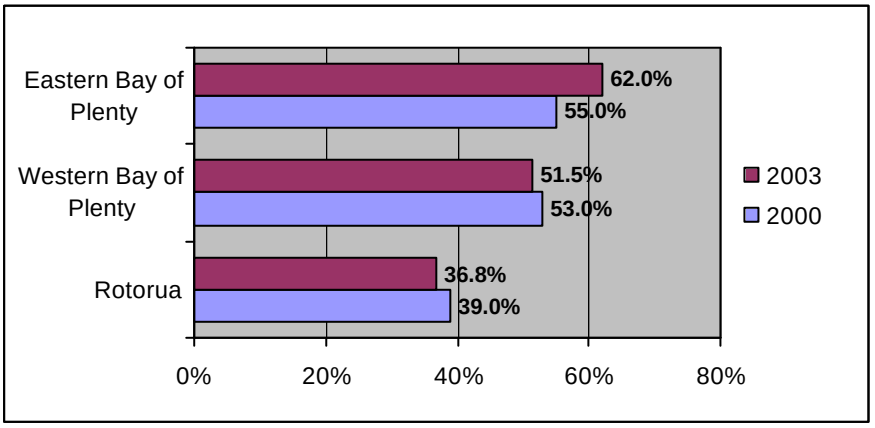

Figure 28 Sea and coastal damage by geographic area, 2000 and 2003

6.6.3 Perceived cause of damage

A quarter (24.9%) of respondents who felt that there were activities damaging the sea or coastline included boats, ships or barges in their response.

Dumping of rubbish or car bodies was identified by one-fifth (18.7%) and seventeen percent (17.6%) included general pollution.

Other commonly reported activities or sources of damage were overfishing or commercial fishing (16.0%), fertiliser run-off or misuse (14.0%), sewage/septic tank

leakage (14.0%), building too close to beaches (12.2%), polluted water/storm water (11.4%), vehicles/motorbikes on beaches (10.1%) and shellfish depletion (8.5%).

Small numbers of respondents mentioned other sources or causes of damage as can be seen in Appendix 2.

The 'other' category included a range of sea/coastline damaging activities, a full list of which is included in Appendix 3.

6.7 Land

6.7.1 Perceived damage

Almost half (47.1%) of respondents felt that there were activities damaging the land in the region, while two-fifths (42.5%) felt there were not. One-tenth (10.4%) of respondents were unsure.

The proportion of respondents who felt that there were activities damaging the land was:

- Higher in Eastern Bay of Plenty (66.3%) than in Rotorua (45.2%) and Western Bay of Plenty (40.8%).
- Highest in the middle (51.9%), next highest in the younger (40.0%), and lowest in the older (39.4%) age categories.
- Higher among males (49.4%) than females (45.0%).
- Higher among rural (56.9%) than urban (43.8%) respondents.
- Significantly higher for Maori (54.5%) than non-Maori (44.6%) respondents.
- Higher in medium-term (56.3%) and long-term (47.2%) than recent (36.4%) residency categories.

6.7.2 Trends in perceived land damage

The results of Survey 2003 were compared with previous surveys, by excluding respondents who did not answer (Figure 29). The 2003 results show no change in the proportion of respondents who considered there to be activities damaging the land when compared with the 2000 and 1992 studies, and a slight reduction when compared to the 1997 results.

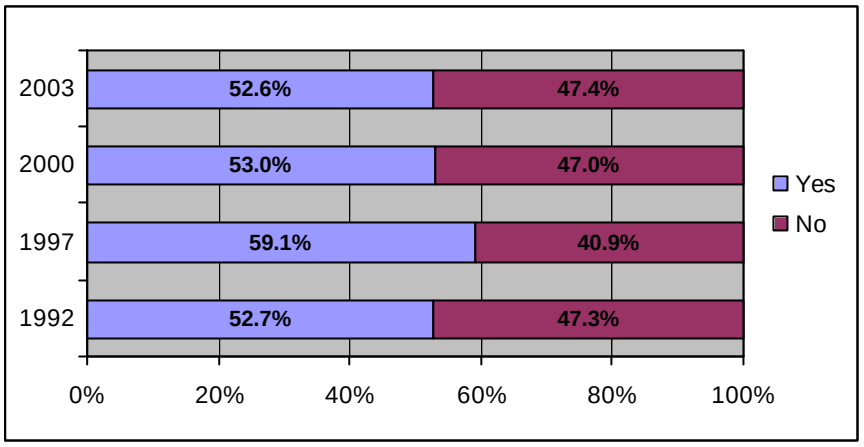

Figure 29 Are there any activities damaging the land in the region? 1992, 1997, 2000 and 2003

Comparison of the surveys in 2000 and 2003 on a geographic basis (Figure 30) showed that there was a significant increase in the proportion of respondents from Eastern Bay of Plenty who perceived there were activities damaging the land (+17.3%). There was a slight decrease in the proportion from Rotorua (-0.8%) and a substantial decrease in the proportion in Western Bay of Plenty (-13.2%).

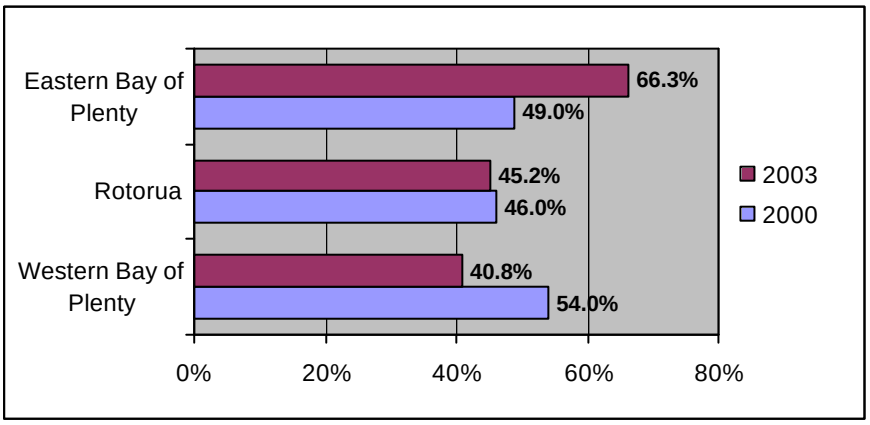

Figure 30 Land damage by geographic area, 2000 and 2003

Table 6 shows how the question used to assess land damage has evolved over the four surveys.

Table 6 Land damage question

Year	Question
1992	Are there any activities occurring in your area, which you feel are damaging or destructive to the land from the viewpoint of leaving it healthy and intact for future generations?
1997	Are there any activities, which in your opinion are damaging the land for future generations?
2000	Are there any activities that in your opinion are damaging the land in the region?
2003	

6.7.3 **Perceived cause of damage**

Two-fifths (22.4%) of respondents who felt there were activities damaging the land included dumping of rubbish or car bodies in their response. Similar proportions identified urban development/subdivisions (21.6%) and farming practices (18.7%).

Other commonly reported activities or sources of damage were clearing land/logging (16.8%), erosion (12.2%), spraying/chemicals (12.2%), motorbikes or vehicles on sand dunes/beaches (10.0%), timber mills/forest processing industry (9.5%), and pollution/industrial pollution (9.3%).

Small numbers of respondents mentioned other sources or causes of damage as can be seen in Appendix 2.

The 'other' category included a range of land damaging activities, a full list of which is included in Appendix 3.

Chapter 7: Specific Issues

7.1 Natural hazards

Survey respondents were asked to say which natural hazard they saw as being most likely to endanger themselves or their property.

The most popular responses were earthquakes (43.1%), floods (11.5%), storms or high winds (9.3%), volcanic eruptions (7.9%) and tidal waves or tsunami (6.4%).

A variety of other responses were given including geothermal activity (3.1%), fire/forest fire (3.0%) and landslides (2.6%).

Seven percent (6.8%) said that they did not see any, and five percent (5.2%) felt unable to answer.

The proportion that perceived earthquakes to be most likely to endanger themselves or their property was:

- Higher in Eastern Bay of Plenty (48.8%) and Rotorua (45.8%) than Western Bay of Plenty (39.4%).
- Higher in the middle (46.1%), than in the younger (39.0%) and older (38.2%) age categories.
- Similar among females (44.6%) and males (41.5%).
- Higher among urban (43.9%) than rural (40.5%) respondents.
- Similar for non-Maori (43.3%) and Maori (42.9%) respondents.
- Higher in long-term (45.2%) than medium-term (36.0%) and recent (29.5%) residency categories.

7.1.1 Trends in perceived danger from natural hazards

The results were compared with previous surveys by collapsing the additional 2000 coding categories into 'other'.

Survey 2003 showed that earthquakes remain the natural hazard from which respondents perceive the most danger (Figure 31). The proportion of respondents who identified volcanic eruptions dropped between 2000 and 2003 (-5.1%).

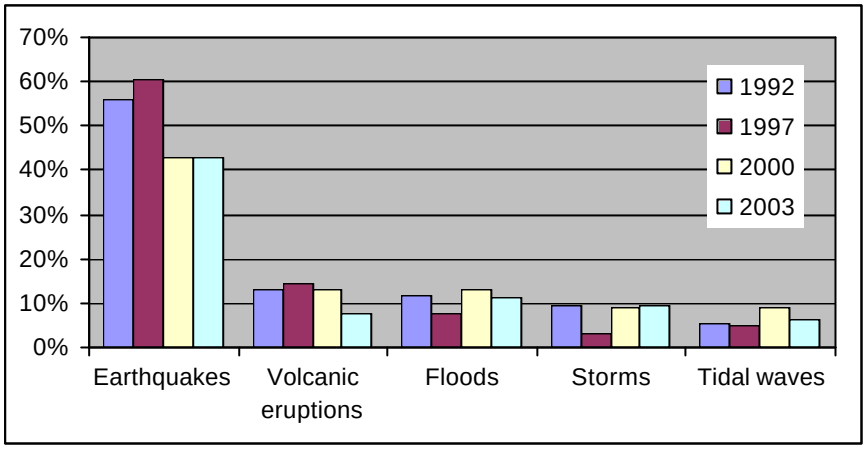

Figure 31 Most likely natural hazards, 1992, 1997, 2000 and 2003

While the questions were almost identical in all four studies, more pre-coded response options were added each year (Table 7).

Table 7 Natural hazard question

Year	Question	Notes
1992	What natural hazards do you see as ones most likely to endanger you or your property?	Read all: By natural hazards we mean earthquakes, storms, volcanic eruptions and floods. (Up to three answers allowed. Fire, geothermal activity and landslides were not offered as coding categories).
1997	What natural hazards do you see as most likely to endanger you or your property?	If required read: By natural hazards we mean earthquakes, storms, volcanic eruptions and floods. (Don't know responses were removed).
2000	What natural hazards do you see as being MOST likely to endanger you or your property?	If necessary read: By natural hazards we mean earthquakes, storms, volcanic eruptions, floods and the like (ONE answer ONLY).
2003		

7.2 Waste

Respondents were read a definition of waste then asked how they would dispose of five types of waste and whether they had done so during the past year. Coding categories are outlined in Table 8.

Table 8 Coding categories for waste disposal

Code	Includes
Landfill	Take to tip/dump/refuse transfer station (unless given to attendant). Put out with rubbish for collection (eg, in green bins, etc.). Code as this if the end result is that it ends up in a landfill.
Specialist disposal	Disposal by specialist contractor. Given to attendant at tip/dump/refuse transfer station. Reuse or give to someone else to reuse. Recycle (eg, gate collection or recycling depot). Return to place of purchase. Take to service station drop-off point (oil only). Call Council, etc. for advice.

Down drain	Tip down drain. Pour onto road. Tip into waterway (eg, river, lake, sea). Code as this if the end result is that it ends up in a waterway.
Bury	Bury or otherwise dispose of on own land. Pour onto weeds. Code as this if the end result is that it ends up on private land.
Burn	Do not include leaving it to evaporate in this coding category. Only use this code if they specify that they would burn it.
No idea	Use this code if they do not know what they would do. If they have said something like "I've never had to do this before" ask what they would do if the situation arose before coding as 'no idea'.
Other	Carefully check all the above categories before using this code.

7.2.1 Engine oil

Disposal method

The most commonly reported disposal method for used engine oil was specialist disposal (65.4%). Small proportions said they would bury waste oil (5.1%), use a landfill (4.1%), burn it (1.5%) or dispose of it down the drain (1.1%).

One-fifth (21.4%) had no idea how they would dispose of used engine oil.

The proportion of respondents who chose specialist disposal for their preferred method of disposal was:

- Higher in the Eastern Bay of Plenty (70.0%) than in Western Bay of Plenty (66.7%) and Rotorua (59.8%).
- Highest in the middle (70.7%), next highest in the older (59.4%), and lowest in the younger (52.9%) age categories.
- Significantly higher among males (74.2%) than females (57.2%).
- Similar for rural (66.3%) and urban (65.1%) respondents.
- Higher for non-Maori (67.2%) than Maori (60.6%) respondents.
- Higher in recent (69.3%) than medium-term (65.5%) and long-term (65.1%) residency categories.

Disposal in the past year

One-quarter (24.4%) of respondents had disposed of used engine oil in the past year.

The proportion that had disposed of used engine oil was:

- Higher in the Eastern Bay of Plenty (47.5%) and Rotorua (24.5%) than in Western Bay of Plenty (15.4%).
- Higher in the middle (29.9%) than younger (22.0%) and older (13.2%) age categories.
- Higher among males (29.6%) than females (19.3%).

- Higher for rural (31.5%) than urban (21.9%) respondents.
- Higher for Maori (29.4%) than non-Maori (22.8%) respondents.
- Higher in long-term (26.8%) than medium-term (13.8%) and recent (11.5%) residency categories.

7.2.2 Farm and garden chemicals

Disposal method

Respondents were asked to say how they would dispose of leftover farm or garden chemicals. The most common response was specialist disposal (42.3%), followed by landfill (8.5%) and burying (5.4%). A small proportion said they would dispose of the chemicals down the drain (1.6%) or burn them (1.0%).

One-third (34.8%) had no idea how they would dispose of leftover farm or garden chemicals.

The proportion of respondents who chose specialist disposal as their preferred method of disposal was:

- Higher in the Western Bay of Plenty (44.2%) and Rotorua (40.9%) than Eastern Bay of Plenty (39.3%).
- Higher in the older (45.2%) and middle (44.1%) than younger (27.2%) age categories.
- Higher among males (45.0%) than females (39.8%).
- Similar for rural (48.2%) and urban (40.5%) respondents.
- Higher for non-Maori (44.7%) than Maori (34.9%) respondents.
- Higher in recent (51.8%) than long-term (41.7%) and medium-term (39.0%) residency categories.

Disposal in the past year

A small proportion (5.4%) of respondents had disposed of farm or garden chemicals in the past year.

The proportion that had disposed of farm and garden chemicals was:

- Higher in Rotorua (9.1%) than Eastern Bay of Plenty (6.4%) and Western Bay of Plenty (3.2%).
- Higher in the middle (7.0%) than older (3.2%) and younger (2.5%) age categories.
- Similar among males (5.7%) and females (5.2%).
- Higher for rural (8.4%) than urban (4.5%) respondents.
- Higher for Maori (7.5%) than non-Maori (4.7%) respondents.
- Higher in recent (5.7%) and long-term (5.6%) than medium-term (2.3%) residency categories.

7.2.3 Solvents

Disposal method

Respondents were asked to say how they would dispose of solvents, like paint thinners, petrol and diesel. The most common response was specialist disposal (42.2%), followed by landfill (10.3%). A small proportion said they would bury solvents (5.3%), dispose of them down the drain (3.4%) or burn them (2.8%).

More than one-quarter (29.2%) had no idea how they would dispose of solvents.

The proportion of respondents who chose specialist disposal as their preferred method of disposal was:

- Higher in the Western Bay of Plenty (46.1%) than in Rotorua (41.4%) and Eastern Bay of Plenty (32.0%).
- Higher in the middle (44.8%) and older (42.1%) than younger (29.8%) age categories.
- Higher among males (46.2%) than females (38.4%).
- Similar for rural (44.1%) and urban (41.7%) respondents.
- Higher for non-Maori (44.9%) than Maori (34.0%) respondents.
- Higher in recent (54.2%) and medium-term (48.1%) than long-term (40.4%) residency categories.

Disposal in the past year

Over one-tenth (12.0%) of respondents had disposed of solvents in the past year.

The proportion that had disposed of solvents was:

- Higher in Rotorua (17.5%) than Eastern Bay of Plenty (13.7%) and Western Bay of Plenty (8.5%).
- Higher in the middle (15.6%) than younger (9.4%) and older (5.3%) age categories.
- Higher among males (14.3%) than females (9.7%).
- Similar for rural (14.3%) and urban (11.2%) respondents.
- Similar for Maori (14.1%) and non-Maori (11.3%) respondents.
- Higher in medium-term (16.1%) than long-term (11.9%) and recent (8.0%) residency categories.

7.2.4 Car batteries

Disposal method

The most commonly reported disposal method for car batteries was specialist disposal (78.8%). A small proportion (8.0%) said they would use landfill disposal, while less than one percent said they would bury them (0.6%) or burn them (0.3%).

One-tenth (11.0%) had no idea how they would dispose of car batteries.

The proportion of respondents who chose specialist disposal for their preferred method of disposal was:

- Higher in the Western Bay of Plenty (83.5%) than in Eastern Bay of Plenty (74.9%) and Rotorua (73.0%).
- Higher in the middle (82.2%) and older (80.2%) than younger (59.2%) age categories.
- Higher among males (83.9%) than females (74.0%).
- Similar for rural (80.5%) and urban (78.3%) respondents.
- Higher for non-Maori (81.6%) than Maori (71.1%) respondents.
- Higher in medium-term (81.4%) than long-term (79.1%) and recent (75.6%) residency categories.

Disposal in the past year

One-third of respondents (32.4%) had disposed of car batteries in the past year.

The proportion that had disposed of car batteries was:

- Higher in the Eastern Bay of Plenty (42.4%) than Rotorua (37.1%) and Western Bay of Plenty (26.1%).
- Higher in the middle (36.6%) and younger (34.2%) than older (22.4%) age categories.
- Higher among males (37.6%) than females (27.4%).
- Higher for rural (39.2%) than urban (30.1%) respondents.
- Higher for Maori (38.0%) than non-Maori (30.5%) respondents.
- Higher in long-term (34.0%) than medium-term (25.3%) and recent (24.1%) residency categories.

7.2.5 Other batteries

Disposal method

Respondents were asked to say how they would dispose of other batteries, such as standard batteries, cell phone batteries, and hearing aid batteries. The most common response was landfill disposal (80.2%), followed by specialist disposal (14.5%). One percent (0.7%) said they would bury other batteries, while 0.4% said they would burn them.

Four percent (4.0%) had no idea how they would dispose of other batteries.

The proportion of respondents who chose landfill disposal as their preferred method of disposal:

- Was higher in the Western Bay of Plenty (86.1%) and Rotorua (82.6%) than Eastern Bay of Plenty (61.0%).

- Higher in the younger (86.3%) than in the older (79.6%) and middle (79.3%) age categories.
- Higher among females (81.7%) than males (78.6%).
- Higher for urban (83.4%) than rural (70.7%) respondents.
- Higher for non-Maori (84.2%) than Maori (68.8%) respondents.
- Higher in recent (87.2%) than medium-term (81.4%) and long-term (79.4%) residency categories.

Disposal in the past year

Three-quarters (77.5%) of respondents had disposed of other batteries in the past year.

The proportion that had disposed of other batteries was:

- Higher in the Eastern Bay of Plenty (82.2%), than Rotorua (79.1%) and Western Bay of Plenty (74.9%).
- Higher in the middle (80.2%) than older (74.1%) and younger (71.2%) age categories.
- Similar among females (78.0%) and males (77.0%).
- Similar for urban (77.8%) and rural (76.4%) respondents.
- Higher for non-Maori (78.3%) than Maori (75.6%) respondents.
- Higher in long-term (78.3%) and medium-term (78.2%) than recent (69.0%) residency categories.

7.2.6 Comparisons for specialist disposal

Figure 32 compares the proportion of respondents from Survey 2003 and 2000 who indicated they would use specialist disposal methods to dispose of engine oil, farm or garden chemicals and solvents. Note that questions about car batteries and other batteries were not included in Survey 2000 and therefore cannot be compared.

The proportion of respondents using specialist disposal for used engine oil increased (+11.4%) in 2003, while specialist disposal of farm or garden chemicals decreased (-3.7%) and specialist disposal of solvents remained almost unchanged.

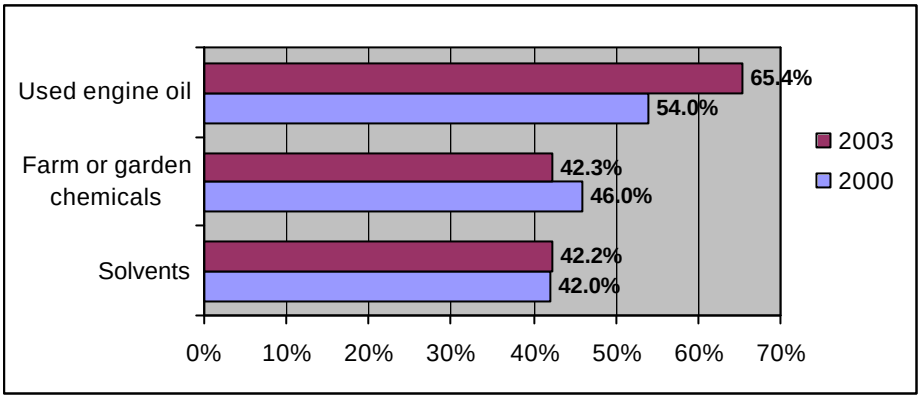

Figure 32 Respondents who would use specialist disposal, 2000 and 2003

7.3 Public buses

Survey respondents were asked whether they had used a public bus for transport in the last four weeks (Figure 33). Eight percent (8.0%) of respondents had, while more than ninety percent (92.0%) had not.

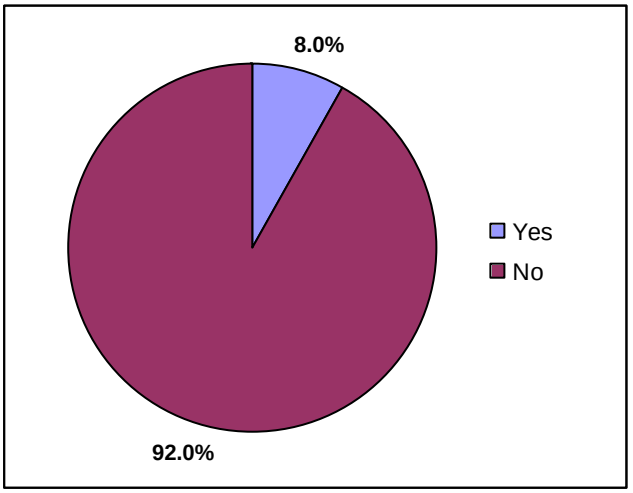

Figure 33 Have you used a public bus in the last four weeks?

When the results were analysed demographically, it was found that public buses had been used by:

- A larger proportion in Western Bay of Plenty (10.2%) and Rotorua (7.5%) than in Eastern Bay of Plenty (2.9%).
- A higher proportion in the younger (20.0%) than in the older (9.9%) and middle (4.8%) age categories.
- A similar proportion of females (8.6%) and males (7.4%).
- A higher proportion of urban (9.6%) than rural (3.2%) respondents.
- A higher proportion of Maori (9.8%) than non-Maori (7.4%) respondents.
- A higher proportion of respondents in medium-term (12.6%) than recent (9.1%) and long-term (7.3%) residency categories.

7.3.1 Primary purpose

Those respondents who had used a public bus for transport in the last four weeks were asked what their primary purpose was for using it (Figure 34).

The most commonly identified purpose was shopping or paying bills (36.7%), followed by work (21.5%), and social/recreational purposes (17.7%). Small proportions of respondents stated hospital/health/doctors (7.6%) and education/polytechnic/university (5.1%) as their reasons for using a public bus.

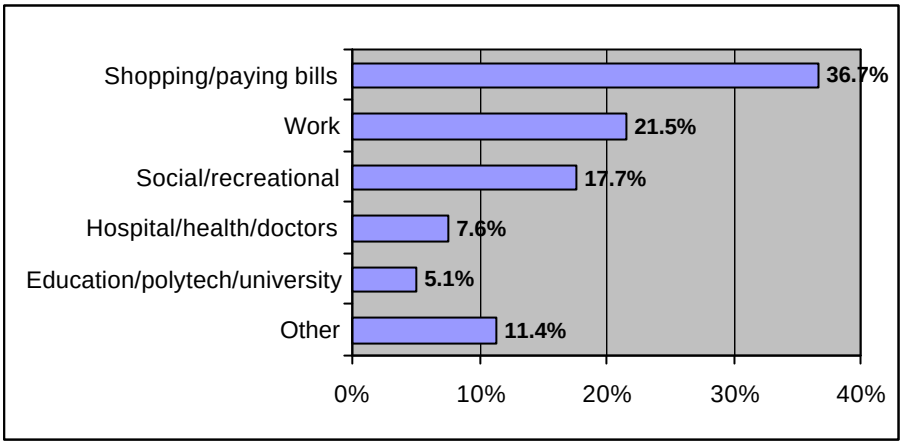

Figure 34 Primary purpose for using a public bus

When the results were analysed demographically, it was found that public buses had been used for shopping or paying bills by:

- A significantly higher proportion in Rotorua (52.4%) than the Western Bay of Plenty (32.7%) and Eastern Bay of Plenty (16.7%).
- A significantly higher proportion in the older (50.0%) than in the middle (33.3%) and younger (23.8%) age categories.
- A higher proportion of females (44.2%) than males (27.8%).
- A similar proportion of rural (37.5%) and urban (36.6%) respondents.
- A higher proportion of non-Maori (40.0%) than Maori (29.2%) respondents.
- A significantly higher proportion of respondents in recent (62.5%) than long-term (36.7%) and medium-term (10.0%) residency categories.

7.3.2 Reasons for not using public buses

Those respondents who had not used a public bus in the past four weeks were asked the reasons why they had not done so (Figure 35).

Seventy percent (70.8%) could not be bothered using a public bus and/or preferred to use a private or work vehicle. Almost one-fifth (19.6%) said that there was no service available. Additional reasons given were that the hours of operation were not suitable (8.3%), that routes were not suitable (7.4%), that buses were not accessible (1.3%) and that bus fares were too high (1.2%).

Some other reasons mentioned by respondents who had not used a public bus in the past four weeks included prefer to walk (4.6%), bus not convenient (2.3%), have no need to use a bus (2.2%) and not aware of bus routes/timetable/service (1.0%). For a full list of other reasons mentioned, refer to Appendix 3.

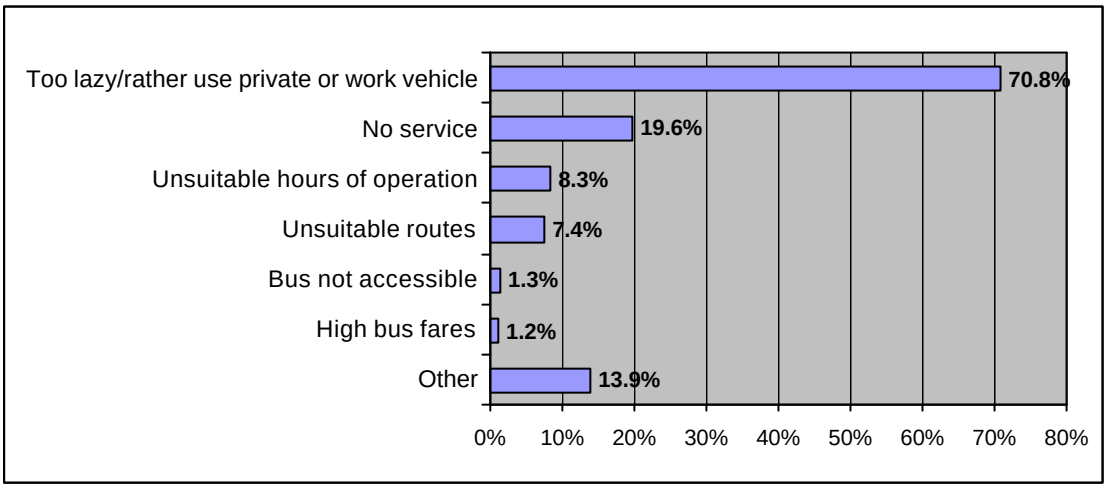

Figure 35 Reasons for not using public buses

When the results were analysed demographically, it was found that the proportion of those respondents who did not use public buses as they could not bothered and/or preferred to use a private or work vehicle was:

- Higher in the Western Bay of Plenty (73.8%) than Eastern Bay of Plenty (68.8%) and Rotorua (66.9%).
- Similar for middle (72.0%), younger (70.8%) and older (68.4%) age categories.
- Similar for females (71.3%) and males (70.3%).
- Significantly higher for urban (76.3%) than rural (55.1%) respondents.
- Higher for non-Maori (72.8%) than Maori (64.8%) respondents.
- Significantly higher for respondents in recent (77.5%) and medium-term (76.3%) than in long-term (69.7%) residency categories.

7.4 Importance of the natural environment

Survey respondents were asked to rate the importance of the natural environment in their reasons for living in the Bay of Plenty Region.

Over two-thirds (67.6%) rated the natural environment as very important and one-quarter (23.6%) rated it as important.

Five percent (5.4%) said it was neither important nor unimportant and a small proportion said it was not very (2.2%) or not at all (0.8%) important.

The proportion of respondents who considered the natural environment a very important reason for living in the region:

- Was higher in Eastern Bay of Plenty (72.7%) and Western Bay of Plenty (70.9%) than in Rotorua (57.6%).
- Was significantly higher in the middle (72.0%) than older (65.7%) and younger (49.2%) age categories.
- Was similar for females (68.8%) and males (66.5%).
- Was higher for rural (76.9%) than urban (64.6%) respondents.
- Was higher for non-Maori (69.2%) than Maori (63.4%) respondents.
- Was higher in recent (73.6%) than in long-term (67.4%) and medium-term (64.4%) residency categories.

7.4.1 Trends in the importance of the natural environment

The results were compared with Survey 2000 (Figure 36). Survey 2003 showed an increase in the proportion of respondents who rated the natural environment as very important (+5.6%), with a corresponding decrease in the proportion rating important (-2.4%) and neither important nor unimportant (-2.6%).

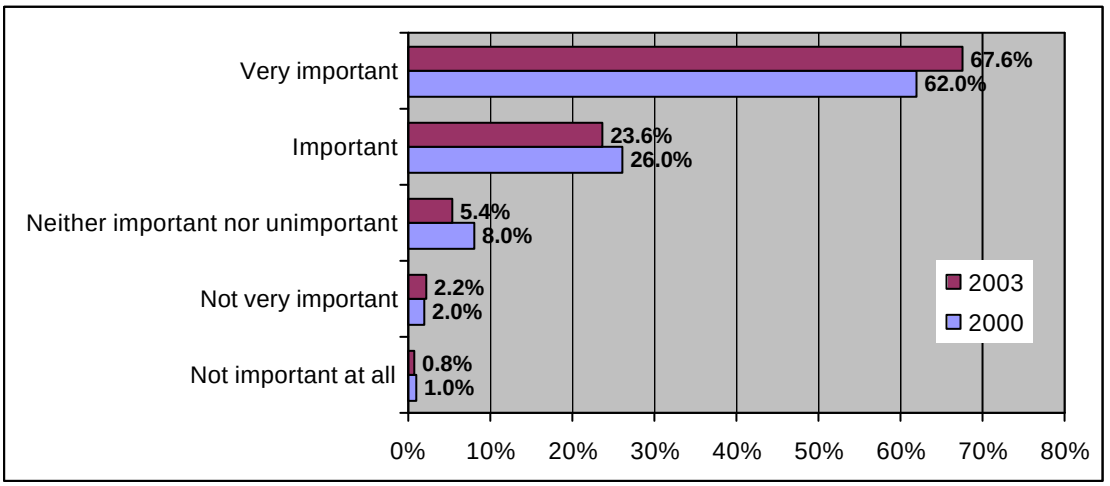

Figure 36 Importance of the natural environment in reasons for living in the region

7.5 Finding information about the region's environment

Survey respondents were asked where they would go or look if they wanted to find out information about the environment in the Bay of Plenty Region (Figure 37).

The most commonly nominated methods were the local Environment Bay of Plenty office (35.8%) and a district council (33.3%). Fourteen percent (14.4%) of respondents said they would look in the telephone book/local directory, eleven percent (11.3%) indicated that they would look on the internet and a similar proportion mentioned the local public library (8.5%).

Methods of finding information also included the Environment Bay of Plenty website (4.8%) the local (visitor) information centre (5.1%), and the Department of Conservation (4.3%).

Six-percent (6.1%) of respondents were unsure where they would look.

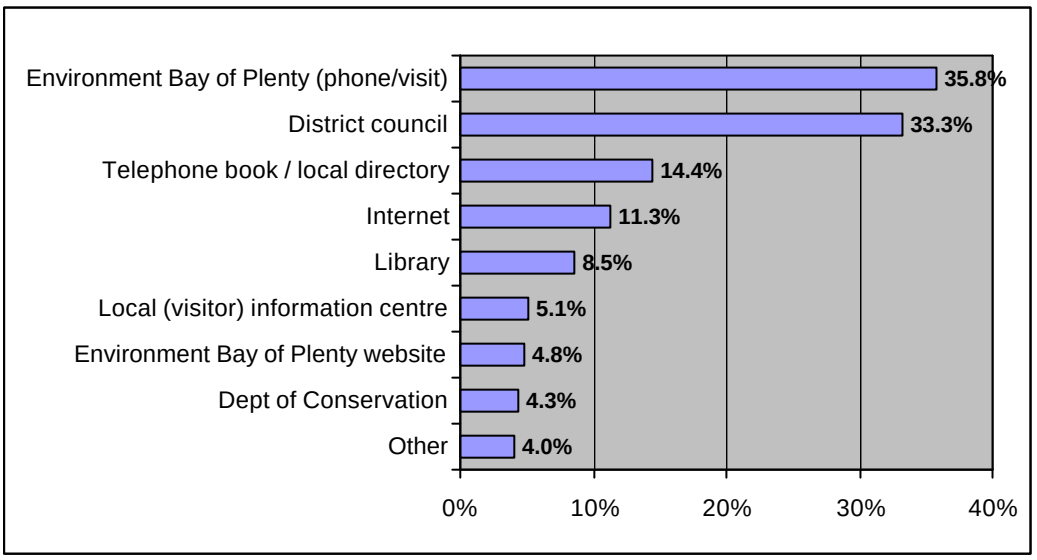

Figure 37 Methods of finding information about the region's environment

Other methods that respondents mentioned included:

- Citizens Advice Bureau, 18 (1.8%).
- Newspaper, 12 (1.2%).
- Appropriate government departments, 4 (0.4%).
- Ask friends/family, 2 (0.2%).

When the results were analysed demographically, it was found that the proportion of respondents who would contact Environment Bay of Plenty for information about the environment was:

- Higher in the Eastern Bay of Plenty (45.4%) and Rotorua (43.8%) than in Western Bay of Plenty (28.0%).
- Higher for middle (38.9%) than older (33.5%) and younger (25.0%) age categories.
- Higher for males (37.1%) than females (34.6%).

- Significantly higher for rural (41.9%) than urban (33.7%) respondents.
- A higher proportion of Maori (38.0%) than non-Maori (35.0%) respondents.
- A significantly higher proportion of respondents in long-term (37.3%) and medium-term (28.7%) than in recent (26.1%) residency categories.

When the results were analysed demographically, it was found that the proportion of respondents who would contact a district council for information about the environment was:

- Higher in the Western Bay of Plenty (38.0%) than Rotorua (29.5%) and Eastern Bay of Plenty (25.9%).
- Higher for older (36.6%) than middle (32.7%) and younger (28.3%) age categories.
- Higher for females (35.7%) than males (30.7%).
- Higher for urban (34.2%) than rural (30.0%) respondents.
- A significantly higher proportion of non-Maori (36.4%) than Maori (23.9%) respondents.
- A higher proportion of respondents in medium-term (40.2%) than recent (34.1%) and long-term (32.6%) residency categories.

Chapter 8: Demographics of Sample

This section describes the demographics of the respondents in the sample, and comments on the representativeness of the sample in terms of area, ethnicity, gender, age, locality and length of residency.

8.1 Area

Quota sampling was used to ensure each area was represented in proportion to its share of the region's adult population.

This resulted in half (52.6%) of respondents being from the Western Bay of Plenty, one-fifth (20.0%) from the Eastern Bay of Plenty and one-third (27.4%) from the Rotorua area. The Rotorua area was over-represented by 1.8%, while the Western Bay of Plenty and Eastern Bay of Plenty were both under-represented (-1.3% and -0.5% respectively).

Population by Area	2001 Census	Survey Sample	Difference
Western Bay of Plenty	53.9%	52.6%	-1.3%
Eastern Bay of Plenty	20.5%	20.0%	-0.5%
Rotorua	25.6%	27.4%	1.8%
Total	100.0%	100.0%	

8.2 Ethnicity

Quota sampling was used to ensure Maori were represented in proportion to their share of the region's adult population.

This resulted in one-quarter (24.9%) of respondents being Maori, and Maori being accurately represented in the sample (-0.1%).

Population by Ethnicity	2001 Census	Survey Sample	Difference
European	70.0%	70.1%	+0.1%
Maori	25.0%	24.9%	-0.1%
Pacific Island		0.6%	
Asian		0.4%	
New Zealander (unspec.)		2.0%	
Other	5.0%	1.7%	
Total	100.0%	100.0%	

8.3 Gender

Quota sampling was used to ensure males and females were represented in similar proportions to the adult population of the region. This resulted in a sample in which forty-nine percent (48.7%) were males and fifty-one percent (51.3%) were females, this being a true gender representation of the region's population.

Population by Gender	2001 Census	Survey Sample	Difference
Male	49.0%	48.7%	-0.3%
Female	51.0%	51.3%	+0.3%
Total	100.0%	100.0%	

8.4 Age

Almost twelve percent (11.7%) of respondents were in the younger age category, which included all those aged from eighteen to twenty-nine.

Three-fifths (60.5%) were in the middle category, which included all those aged from thirty to fifty-nine.

Over one-quarter (27.7%) of respondents were in the older age category, which included all those aged sixty and over.

Age	2000	2003	2001 Census
Younger (18-29 years)	34.0%	11.7%	(20-29 yrs)[3] 15.7%
Middle (30-59 years)	38.0%	60.5%	57.5%
Older (60 years and over)	26.0%	27.7%	26.8%
Refused	1.0%	0.1%	

8.5 Locality

Respondents were asked whether they lived in an urban or rural locality.

Three-quarters (75.2%) said they lived in an urban locality and one-quarter (24.7%) lived in a rural locality. Thus, urban localities were over-represented by three percent (+3.2%) and rural localities were under-represented by three percent (-3.2%) compared with Survey 2000.

Locality	2000	2003	Difference
Urban (city/town)	72.0%	75.2%	+3.2%
Rural	28.0%	24.7%	-3.3%
Refused	0.0%	0.1%	+0.1%

8.6 Length of residency

Respondents were asked to state their length of residency within the Bay of Plenty Region.

Over four-fifths (82.6%) said they had lived within the region for five or more years, 8.6% had lived there for less than two years, and 8.5% had lived there for two to four years.

[3] Due to Statistics New Zealand age category groupings, Census usually resident population data was only available for 20 to 29 years.

Length of residency	Percent
Less than 2 years	8.6%
2 to 4 years	8.5%
5 or more years	82.6%
Refused	0.3%

Appendices

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Appendix 3 – 'Other' Categories Defined *135*

Appendix 1 - Questionnaire

Interview #	Interviewer	**Area #**	Office use only
Date	Start	Finish	

1. Had you heard of Environment Bay of Plenty before this interview? *00

1. Yes	2. No / Don't know (Skip to Q2)	7. Refused

a) Have you ever dealt directly with Environment Bay of Plenty

1. Yes	2. No / Don't know	7. Refused

2. What do you think Environment Bay of Plenty does? *00 (*Probe:* And what else? *Multiple answers*)

1	**No idea**/ don't know / not sure	11	**Air management** (including air pollution)
2	**Vague environment answer** (eg, "Something to do with the environment")	12	**Regulatory / watchdog** (resource consents, compliance monitoring, administering Resource Management Act (RMA)
3	**Managing natural resources** (general answer)	13	**State of the environment monitoring**
4	**Water and land management** (and including soil conservation, landcare, streamcare)	14	**Management of hazardous substances & waste**
5	**Plant and animal pest control**	15	**Environmental Enhancement Fund**
6	**Regional parks**	16	**Education** (about environment / good use of resources / environmental issues / brochures / Regional Guardian newspaper)
7	**River scheme** management and flooding	17	Regional Council
8	**Lakes** management and plans	18	**Geographic description** (serving wider area than the district council) or **structural descriptions** ("local government", "Council").
9	**Land transport/ public transport/ road safety/ total mobility**	19	**DISTRICT COUNCIL FUNCTIONS** (eg, libraries, road maintenance, pavements)
10	**Coast and harbour management** (incl. coastcare)	20	**Other** *(specify)*

3. I'm going to read a list of environmental issues. Please say whether you feel each of these is a big problem, some problem, or no problem in the Bay of Plenty region: *929700

			Big problem	Some problem	No problem	Don't know
a)	Water pollution from:	Industry	1	2	3	4
b)		Farming	1	2	3	4
c)		Storm water	1	2	3	4
d)		Sewage/septic tanks	1	2	3	4
e)	Air quality problems from:	Industrial emissions	1	2	3	4
f)		Trucks	1	2	3	4
g)		Cars	1	2	3	4
h)		Home fires	1	2	3	4
i)		Spray drift	1	2	3	4
j)		Pollen	1	2	3	4
k)	Erosion of the:	Coast	1	2	3	4
l)		Riverbanks	1	2	3	4
m)		Hills	1	2	3	4
n)	Pest plants (plants that are pests like gorse)		1	2	3	4
o)	Pest animals (like possums or rabbits)		1	2	3	4
p)	Roadside rubbish dumping		1	2	3	4
q)	Anything else? (If so, what?)		1	2	3	4
r)	Anything else? (If so, what?)		1	2	3	4

4. How would you rate the overall state of the natural environment of the Bay of Plenty Region? By environment we mean the land, water, air and coast, and the plant and wildlife of the region. *929700 (If necessary: Not thinking about litter).

   Would it be: *(read)*

1. Very good	2. Good	3. Average
4. Poor	5. Very poor	6. Don't know 7. Refused

5. Do you think the environment of the Bay of Plenty region is becoming better, becoming worse or staying the same? *9700

1. Better	2.Staying the same	3. Worse
		6. Don't know 7. Refused

6. Are there any activities that in your opinion are damaging the land in the region? *929700

1. Yes	2. No (Skip to Q7)	6. Don't know 7. Refused

   a) What are these activities? (*Unprompted. Probe*: And what else? *Multiple answers allowed*)*929700 *(Classify)*

1. Clearing land/logging
2. Mining/quarries
3. Dumping of rubbish
4. Motorbikes on sand dunes
5. Erosion
6. Pollution/industrial pollution
7. Farming practices
8. Rubbish dumps/landfills
9. Lack of native forests
10. Subdivisions
11. Land returned to Maori
12. Spraying/chemicals
13. Timber mills/forest processing industries
14. General recreation use, eg walking, swimming, sand-boarding etc
15. Litter
16. Other_____
17. Don't know
18. Refused

7. Are there any activities that in your opinion are damaging the sea, coastline, beach or harbour in the region? *929700

1. Yes	2. No (Skip to Q8)	6. Don't know 7. Refused

   a) What are these activities? *929700 (*Unprompted. Probe*: And what else? *Multiple answers allowed*)

1. Building too close to beaches
2. Rubbish dumping
3. Diversion of estuary/river
4. Run-offs/fertiliser misuse
5. Dredging run-off
6. Sewerage leakages/septic tanks
7. Overfishing
8. Shellfish depletion
9. Overgrazing
10. Silting at bar
11. Overlogging
12. Taking sand
13. Pollution – general
14. Boats/Ships
15. Polluted water
16. Vehicles on beaches
17. Horses on beaches
18. Dogs on beaches
19. Marine farming
20. Maori land/fishing claims
21. Litter
22. Other_____
23. Don't know
24. Refused

8. Is there any lake or river that you consider to be polluted? *929700

1. Yes	2. No (Skip to 9)	6. Don't know 7. Refused

a) Which lake or river are you thinking of? (If more than one, which one do you consider the **most** polluted?)*00 (*Single answer*)

Rivers
1. Kaituna
2. Waimana
3. Motu
4. Waioeka
5. Otara
6. Waiotahi
7. Rangitaiki
8. Wairoa
9. Raukokore
10. Whakatane
11. Tarawera
12. Whirinaki
13. Other_____

Lakes
1. Awatapu
2. Aniwhenua
3. Rerewhakaaitu
4. Blue Lake (Tikitapu)
5. Rotoehu
6. Green Lake (Rotokakihi)
7. Okareka
8. Rotoiti
9. Rotoma
10. Okaro
11. Rotomahana
12. Rotorua
13. Okataina
14. Sullivans
15. Tarawera
16. Te Mahoe
17. Other_____

1. Don't know (skip to Q10)
2. Refused (skip to Q10)

b) What do you feel is the source or cause of the pollution there? (*Probe:* And what else? *Multiple answers allowed*) *929700

1. Birdlife
2. Forestry
3. Boats
4. Industrial waste
5. Chemicals
6. Logging
7. Dairy Co
8. Run-off from hills
9. Effluent unspecified
10. Rubbish dump/landfill contamination
11. Farming practices
12. Sewage/septic tanks
13. General human irresponsibility
14. Over flow from Lake Rotorua
15. Household refuse
16. Timber mills
17. Litter
18. Other_____
19. Don't know
20. Refused

9. Are there any activities that in your opinion are damaging the air quality in the region? *929700

1. Yes	2. No (Skip to 10)	6. Don't know 7. Refused

a) What are these activities? (*Probe*: And what else? *Multiple answers allowed*) *00

1. Burn offs
2. Dust on the road
3. Pulp and paper mills → And is that in Kawerau? RECODE as 4.
4. Kawerau mills
5. Pollen
6. Sprays
7. Dust
8. Industrial emissions
9. Vehicle emissions
10. Domestic fires
11. Other dust
12. Other_____
13. Don't know
14. Refused

10. What natural hazard do you see as being MOST likely to endanger **you or your property?**
*929700 (If necessary: By natural hazards we mean earthquake, storms, volcanic eruptions, floods and the like.) *(ONE answer ONLY. If necessary: And which one is most likely…)*

1. Earthquakes
2. Landslides
3. Volcanic eruptions
4. Storms/high winds
5. Floods
6. Tidal wave/tsunami
7. Geothermal activity
8. Fire/forest fires
9. Don't see any
10. Other_____
11. Don't know
12. Refused

11. Have you noticed **pest plant** problems anywhere in the Bay of Plenty region? *00
(If necessary: By pest plants we mean exotic plants that are not native to New Zealand but which have become established here and threaten our health, native plants or animals, heritage or economy).

1. Yes	2. No (Skip to Q12)	6. Don't Know 7. Refused

a) What pest plant or plants do you think are causing these problems? *(Multiple answers allowed)*

1. Gorse
2. Ragwort
3. Privet
4. Wild ginger
5. Old man's beard
6. Wandering willie/Jew
7. Lantana
8. Moth Plant
9. Pampas
10. Jasmine
11. Woolly nightshade
12. Wilding pines
13. Japanese honeysuckle
14. Other_____
15. Don't know
16. Refused

12. Who would you contact if you noticed a problem with pest plants? (If necessary: Just thinking about privately owned land, so excluding DOC or other public land). *929700 *(Unprompted, single answer)*

1. Environment Bay of Plenty / Regional Council
2. District Council / Council
3. Department of Conservation (DOC)
4. The Maori Trustee
5. Ministry of Agriculture and Forestry (MAF)
6. The landowner → And if the problem wasn't resolved, who would you contact next? RECODE if another option offered
7. No one → And if it was causing you a problem? RECODE if another option offered
8. Other_____
9. Don't know
10. Refused

NOTE: IF they answer "Council"*(Clarify: Which Council is that? If DC code as 2, RC code as 1)*

13. Have you noticed **pest animal** problems anywhere in the Bay of Plenty region? *00
(If necessary: By pest animals we mean exotic animals that are not native to New Zealand but which have become established here and threaten our health, native plants or animals, heritage or economy).

1. Yes	2. No (Skip to Q14)	6. Don't know 7. Refused

a) What animals do you think are causing these problems? *929700 (*Multiple answers allowed*)

1. Possums
2. Feral goats
3. Rabbits
4. Feral cats
5. Mustelids (ferrets, stoats, weasels)
6. Wasps
7. Rats
8. Koi carp, catfish, rudd, perch
9. Feral deer
10. Feral pigs
11. Wallabies
12. Magpies and rooks
13. Bee mite
14. Flies
15. Dogs / Feral dogs
16. Other_____
17. Don't know
18. Refused

14. Who would you contact if you noticed a problem with pest animals? (If necessary: Just thinking about privately owned land, so excluding DOC or other public land. If they give an answer related to **dogs** say: And if the problem was with pest animals other than dogs, who would you contact?). (*Unprompted, single answer*).

1. Environment Bay of Plenty / Regional Council
2. District Council
3. Department of Conservation (DOC)
4. The landowner → And if the problem wasn't resolved, who would you contact next?
5. No one → And if it was causing you a problem? RECODE if another option offered
6. Other_____
7. Don't know
8. Refused

NOTE: IF they answer "Council" *(Clarify: Which Council is that? If DC code as 2, RC code as 1)*

15. Thinking now about waste. Waste is anything that a person no longer needs, wants or uses, and which needs to be disposed of. How would you dispose of each of the following: *00 *(Interviewers refer to coding list)*

	Landfill incl. rubbish collection	Specialist disposal/ recycling/ return to place of purchase	Down drain	Bury	Burn	No idea	Other
a) Used engine oil	1	2	3	4	5	6	7
b) Leftover farm or garden chemicals	1	2	3	4	5	6	7
c) Solvents, like paint thinners, petrol, diesel	1	2	3	4	5	6	7
d) Car batteries	1	2	3	4	5	6	7
e) Other batteries – standard, cell phone, hearing aid	1	2	3	4	5	6	7

16. In the past year have you needed to dispose of: *00

	Yes	No
a) Used engine oil		
b) Leftover farm or garden chemicals		
c) Solvents, like paint thinners, petrol, diesel		
d) Car batteries		
e) Other batteries		

17. Thinking now about pollution. If you noticed pollution occurring who, if anyone, would you contact? *00 *(unprompted)*

1. The polluter → And anyone else?
2. Environment Bay of Plenty / Regional Council
3. District Council / Council → *(Clarify: Which Council is that? If DC code as 3, RC code as 2)*
4. Department of Conservation (DOC)
5. Ministry of Agriculture and Forestry (MAF)
6. Voluntary organisations (Greenpeace, Forest & Bird, Fish & Game)
7. No one → And if it was causing a problem? RECODE if another option offered
8. Other_____
9. Don't know
10. Refused

18. Environment Bay of Plenty has a service called the "Pollution Hotline". Before today, have you heard about this service? *929700

1. Yes	2. No / Don't know	7. Refused

19. Do you recall seeing or hearing any information or advertising material from Environment Bay of Plenty in the last year? *(Multiple answers allowed, unprompted then prompted)*00

	Unprompted (✓)	Prompted (✓)
1. Radio advertisements for Environment Bay of Plenty		
2. Environment Bay of Plenty's newspaper, the 'Regional Guardian'		
3. Environment Bay of Plenty pamphlet that came with the rates notice		
4. Environment Bay of Plenty advertisements in other newspapers		
5. Articles about Environment Bay of Plenty in other newspapers		
6. Anything else? *(specify):*		
7. No/ Don't know		
8. Refused		

20. Where do you think the funding comes from to operate Environment Bay of Plenty? *00 *(Unprompted, multiple answers allowed)*

1. Rates
2. Investments (incl. Port of Tauranga shares)
3. Central government / taxes
4. Donations
5. Other_____
6. Don't know
7. Refused

21. If you want to find out information about the environment in the Bay of Plenty region, where would you go or look? *(unprompted, multiple answers allowed)*

1. Local Environment Bay of Plenty office
2. District Council
3. Department of Conservation
4. Environment Bay of Plenty website
5. Internet
6. Local (visitor) information centre
7. Library
8. Other _____
9. Don't know
10. Refused

22. Have you used a public bus for transport in the last four weeks? (If necessary: This doesn't include Intercity type buses)

1. Yes	2. No (Skip to part b)	6. Don't Know 7. Refused

a) *(If yes)* What was the primary purpose for using it?
(ONE answer ONLY. If necessary: And what was your main reason for using it?)

1. Work
2. Shopping/paying bills
3. Education/polytech/university
4. Social/recreational
5. Hospital/health/doctors
6. Other *(specify)*_____
7. Don't know
8. Refused

b) *(If no)* Why not? *(Multiple responses. Probe: And any other reasons?)*

1. Cannot be bothered/too lazy/would rather use private vehicle/have work vehicle
2. No service
3. Hours of operation do not suit
4. Routes do not suit
5. Bus fares too high
6. Bus is not accessible (eg, for wheelchair access)
7. Other *(specify)* _____
8. Don't know
9. Refused

23. Thinking about why you live in the Bay of Plenty, how important is the natural environment in your reasons for living here? On a scale of 1 to 5 is it: *(read)**9700

1. Very important
2. Important
3. Neither important nor unimportant
4. Not very important
5. Not important at all
6. Don't know
7. Refused

24. Gender *(ask only if unsure)*

1. Male	2. Female

25. Which of these age groups do you fall into?

1. 18-29	2. 30-39	3. 40-49
4. 50-59	6. 60+	7. Refused

26. Which ethnic group do you mainly identify with? *(read if necessary)*

1. European	2. Maori
3. Pacific Island	4. Asian
5. New Zealander → And are you of European descent? (If so, code as 1). And are you of Maori descent? (If so, code as 2)	6. Other *(specify)* _____
7. Don't know	8. Refused

27. Do you live in an urban (city/town) or in a rural area? (If necessary: Would you consider your area to be more urban than rural, or more rural than urban?)

1. Urban	2. Rural	7. Refused

28. How long have you lived in the Bay of Plenty region?

1. Less than 2 years	2. 2-4 years	3. 5 or more years	7. Refused

29. May I also ask your first name? This is just so my supervisor can do quality control checks on me if necessary.

First name:

Thank you very much for your time. We appreciate your help.

Appendix 2 - Summary Tables

This appendix contains a full set of tables describing how the results vary demographically.

It should be noted that for comparative purposes with previous years, these tables do not include refused or non-specified percentages.

Q1 Had you heard of Environment Bay of Plenty before this interview?

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
Yes	91.4%	90.7%	81.5%	67.5%	91.9%	90.1%	88.3%	88.8%	87.9%	90.4%	76.9%	92.5%	81.8%	88.4%	89.3%	88.5%
No/don't know	8.6%	9.3%	18.5%	32.5%	8.1%	9.9%	11.7%	11.2%	12.1%	9.6%	23.1%	7.5%	18.2%	11.6%	10.7%	11.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

	Survey 2000			Survey 2003		
	West	**East**	**Rot.**	**West**	**East**	**Rot.**
Yes	83.0%	86.0%	85.0%	91.4%	90.7%	81.5%
No/don't know	17.0%	14.0%	15.0%	8.6%	9.3%	18.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Q1a Have you ever dealt directly with Environment Bay of Plenty?

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
Yes	25.3%	22.6%	23.6%	8.8%	27.4%	21.8%	25.9%	22.8%	20.4%	35.2%	18.4%	25.9%	18.6%	21.1%	24.9%	24.3%
No/don't know	74.7%	77.4%	76.4%	91.3%	72.6%	78.2%	74.1%	77.2%	79.6%	64.8%	81.6%	74.1%	81.4%	78.9%	75.1%	75.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Q2 What do you think Environment Bay of Plenty does?

	Western	Eastern	Rotorua	Total
No idea	11.5%	9.8%	18.1%	13.0%
Vague environment answer	20.4%	12.7%	16.4%	17.8%
Managing natural resources (general)	25.8%	24.9%	18.9%	23.7%
Water and land management	15.4%	39.0%	23.5%	22.3%
Plant and animal pest control	8.7%	17.1%	3.2%	8.9%
Regional parks	7.4%	6.3%	2.1%	5.8%
River scheme management and flooding	13.2%	29.3%	11.4%	15.9%
Lakes management and plans	12.8%	15.6%	24.2%	16.5%
Land transport/ public transport/ road safety/ total mobility	3.5%	0.5%	1.8%	2.4%
Coast and harbour management	20.6%	15.1%	4.3%	15.0%
Air management	4.8%	10.2%	7.1%	6.5%
Regulatory / watchdog	9.8%	15.6%	17.8%	13.2%
State of the environment monitoring	13.7%	15.6%	12.5%	13.8%
Management of hazardous substances & waste	6.3%	7.3%	2.8%	5.6%
Environmental Enhancement Fund	1.7%	1.0%	1.4%	1.5%
Education	4.1%	4.4%	3.2%	3.9%
Regional Council	2.2%	2.9%	1.4%	2.1%
Geographic description or structural descriptions	1.3%	2.0%	2.8%	1.9%
District council functions	1.7%	2.9%	2.8%	2.2%
Other	3.5%	8.3%	6.0%	5.2%
Sample	539	205	281	1,025

Note: Not additive as respondents could identify multiple functions.

For respondents who have previously dealt with Environment Bay of Plenty, what do you think Environment Bay of Plenty does?

	Western	Eastern	Rotorua	Total
No idea	1.6%	0.0%	1.9%	1.4%
Vague environment answer	17.2%	4.8%	5.6%	11.9%
Managing natural resources	30.3%	21.4%	29.6%	28.4%
Water and land management	22.1%	50.0%	33.3%	30.3%
Plant and animal pest control	15.6%	28.6%	7.4%	16.1%
Regional parks	8.2%	4.8%	1.9%	6.0%
River scheme management and flooding	14.8%	45.2%	27.8%	23.9%
Lakes management and plans	12.3%	14.3%	42.6%	20.2%
Land transport/ public transport/ road safety/ total mobility	8.2%	2.4%	3.7%	6.0%
Coast and harbour management	18.9%	14.3%	3.7%	14.2%
Air management	9.0%	21.4%	14.8%	12.8%
Regulatory / watchdog	16.4%	28.6%	37.0%	23.9%
State of the environment monitoring	13.9%	23.8%	16.7%	16.5%
Management of hazardous substances & waste	10.7%	9.5%	1.9%	8.3%
Environmental Enhancement Fund	2.5%	0.0%	3.7%	2.3%
Education	5.7%	11.9%	7.4%	7.3%
Regional Council	4.1%	0.0%	1.9%	2.8%
Geographic description or structural descriptions	0.8%	2.4%	3.7%	1.8%
District council functions	0.8%	2.4%	1.9%	1.4%
Other	3.3%	11.9%	11.1%	6.9%
Sample	122	42	54	218

Note: Not additive as respondents could identify multiple functions.

Q3 I'm going to read a list of environmental issues. Please say whether you feel each of these is a big problem, some problem, or no problem in the Bay of Plenty Region.

(a) Water pollution from industry

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	East	Rot.	Younger	Middle	Older	Male	Female	Urban	Rural	Maori	Non-Maori	Recent	Medium	Long-term	Total
Big problem	29.4%	41.5%	47.3%	42.5%	36.5%	34.6%	38.2%	35.4%	36.6%	37.3%	53.7%	31.0%	25.0%	34.5%	37.9%	36.7%
Some problem	47.2%	38.0%	41.3%	38.3%	47.1%	38.9%	46.2%	41.4%	43.7%	43.7%	32.5%	47.5%	45.5%	49.4%	43.1%	43.8%
No problem	10.2%	16.1%	6.4%	10.8%	9.5%	12.0%	10.4%	10.3%	10.0%	11.5%	8.6%	11.0%	10.2%	5.7%	10.9%	10.4%
Don't know	13.2%	4.4%	5.0%	8.3%	6.9%	14.5%	5.2%	12.9%	9.7%	7.5%	5.1%	10.6%	19.3%	10.3%	8.0%	9.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(b) Water pollution from farming

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	East	Rot.	Younger	Middle	Older	Male	Female	Urban	Rural	Maori	Non-Maori	Recent	Medium	Long-term	Total
Big problem	35.1%	40.5%	52.3%	30.8%	42.9%	41.0%	41.0%	40.9%	40.3%	42.9%	51.0%	37.5%	27.3%	47.1%	41.6%	40.9%
Some problem	42.2%	34.1%	31.7%	33.3%	39.2%	36.0%	40.4%	35.2%	37.2%	39.3%	29.4%	40.5%	37.5%	37.9%	37.7%	37.7%
No problem	11.9%	15.6%	10.0%	21.7%	9.4%	14.1%	12.2%	12.0%	11.8%	12.7%	11.8%	12.2%	13.6%	3.4%	12.9%	12.1%
Don't know	10.8%	9.8%	6.0%	14.2%	8.5%	8.8%	6.4%	12.0%	10.6%	5.2%	7.8%	9.8%	21.6%	11.5%	7.8%	9.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(c) Water pollution from storm water

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	East	Rot.	Younger	Middle	Older	Male	Female	Urban	Rural	Maori	Non-Maori	Recent	Medium	Long-term	Total
Big problem	18.1%	16.1%	20.3%	25.0%	17.5%	17.0%	19.3%	17.4%	18.2%	18.7%	25.9%	15.7%	19.3%	13.8%	18.5%	18.3%
Some problem	46.3%	42.9%	45.2%	31.7%	49.0%	43.1%	46.4%	44.3%	45.2%	45.8%	40.4%	46.9%	34.1%	51.7%	45.9%	45.3%
No problem	22.8%	26.3%	23.5%	30.8%	21.0%	26.5%	27.3%	20.2%	23.9%	22.7%	22.4%	24.1%	28.4%	14.9%	24.2%	23.7%
Don't know	12.9%	14.6%	11.0%	12.5%	12.5%	13.4%	7.0%	18.1%	12.7%	12.7%	11.4%	13.2%	18.2%	19.5%	11.5%	12.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(d) Water pollution from sewage/septic tanks

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
Big problem	26.2%	31.7%	37.9%	42.5%	27.5%	32.1%	32.1%	29.0%	28.6%	36.4%	40.9%	26.9%	26.1%	24.1%	31.5%	30.5%
Some problem	41.1%	29.8%	38.9%	33.3%	40.7%	34.6%	40.1%	36.5%	38.4%	38.0%	33.9%	39.6%	34.1%	47.1%	37.8%	38.2%
No problem	17.2%	27.3%	13.2%	13.3%	18.1%	20.4%	18.3%	17.9%	18.3%	17.6%	15.4%	19.2%	18.2%	10.3%	19.0%	18.1%
Don't know	15.5%	11.2%	10.0%	10.8%	13.7%	12.9%	9.5%	16.6%	14.7%	8.0%	9.8%	14.3%	21.6%	18.4%	11.8%	13.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(e) Air quality problems from industrial emissions

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
Big problem	21.5%	35.5%	26.0%	29.2%	27.4%	19.6%	22.0%	28.9%	26.7%	22.0%	39.0%	20.9%	18.6%	31.0%	25.5%	25.5%
Some problem	41.3%	36.9%	44.5%	45.8%	43.8%	34.2%	42.3%	40.3%	42.2%	38.4%	35.8%	43.2%	44.2%	36.8%	41.5%	41.3%
No problem	28.8%	22.2%	23.8%	18.3%	24.1%	33.8%	30.6%	21.8%	24.3%	31.6%	19.7%	28.3%	29.1%	27.6%	25.7%	26.1%
Don't know	8.4%	5.4%	5.7%	6.7%	4.7%	12.5%	5.0%	9.0%	6.8%	8.0%	5.5%	7.6%	8.1%	4.6%	7.2%	7.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(f) Air quality problems from trucks

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
Big problem	37.9%	31.7%	30.2%	31.7%	35.1%	34.3%	30.4%	38.5%	34.5%	34.7%	40.4%	32.5%	39.8%	32.2%	34.1%	34.5%
Some problem	43.1%	45.9%	46.6%	49.2%	44.0%	44.2%	46.1%	43.2%	45.8%	40.6%	43.5%	45.0%	39.8%	48.3%	44.8%	44.6%
No problem	16.4%	20.0%	20.3%	16.7%	18.4%	18.4%	21.7%	14.9%	17.0%	21.9%	13.3%	19.9%	15.9%	16.1%	18.7%	18.2%
Don't know	2.6%	2.4%	2.8%	2.5%	2.4%	3.2%	1.8%	3.4%	2.6%	2.8%	2.7%	2.6%	4.5%	3.4%	2.4%	2.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(g) Air quality problems from cars

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
Big problem	32.9%	20.1%	16.7%	21.7%	26.5%	26.1%	22.3%	29.3%	27.0%	22.7%	24.0%	26.4%	29.5%	21.8%	25.9%	25.9%
Some problem	48.5%	48.0%	46.6%	42.5%	48.0%	50.2%	46.4%	49.3%	48.4%	46.2%	42.1%	49.8%	45.5%	56.3%	47.3%	47.9%
No problem	16.7%	29.4%	34.5%	35.0%	23.4%	21.2%	29.3%	19.2%	22.8%	28.3%	31.1%	22.0%	20.5%	20.7%	24.9%	24.1%
Don't know	1.9%	2.5%	2.1%	0.8%	2.1%	2.5%	2.0%	2.1%	1.8%	2.8%	2.8%	1.8%	4.5%	1.1%	1.9%	2.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

h) Air quality problems from home fires

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	East	Rot.	Younger	Middle	Older	Male	Female	Urban	Rural	Maori	Non-Maori	Recent	Medium	Long-term	Total
Big problem	6.1%	9.8%	16.1%	10.8%	11.1%	5.3%	7.6%	11.5%	9.5%	10.0%	15.7%	7.5%	9.1%	10.5%	9.4%	9.6%
Some problem	38.5%	39.2%	48.2%	46.7%	44.6%	32.0%	38.6%	44.0%	43.0%	36.3%	39.8%	41.9%	39.8%	39.5%	41.8%	41.3%
No problem	51.2%	46.6%	32.9%	36.7%	41.2%	58.0%	51.4%	39.4%	43.7%	49.8%	40.6%	46.8%	45.5%	46.5%	45.1%	45.2%
Don't know	4.1%	4.4%	2.9%	5.8%	3.1%	4.6%	2.4%	5.2%	3.8%	4.0%	3.9%	3.8%	5.7%	3.5%	3.7%	3.8%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(i) Air quality problems from spray drift

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	East	Rot.	Younger	Middle	Older	Male	Female	Urban	Rural	Maori	Non-Maori	Recent	Medium	Long-term	Total
Big problem	34.1%	34.8%	15.7%	21.8%	30.0%	30.2%	25.8%	32.4%	29.1%	29.6%	24.7%	30.6%	20.7%	32.2%	29.7%	29.2%
Some problem	43.3%	34.8%	33.1%	39.5%	39.0%	38.1%	42.7%	35.0%	38.1%	41.2%	31.4%	41.3%	43.7%	39.1%	38.3%	38.8%
No problem	16.8%	23.5%	40.9%	31.9%	23.5%	24.6%	24.8%	24.8%	25.3%	23.2%	36.9%	20.7%	27.6%	19.5%	25.0%	24.8%
Don't know	5.8%	6.9%	10.3%	6.7%	7.4%	7.1%	6.7%	7.8%	7.5%	6.0%	7.1%	7.3%	8.0%	9.2%	7.0%	7.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(j) Air quality problems from pollen

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	East	Rot.	Younger	Middle	Older	Male	Female	Urban	Rural	Maori	Non-Maori	Recent	Medium	Long-term	Total
Big problem	38.6%	60.3%	45.9%	36.1%	48.6%	40.5%	35.8%	53.7%	45.4%	43.4%	47.2%	44.2%	41.4%	45.3%	45.2%	45.0%
Some problem	36.8%	20.1%	32.0%	28.6%	31.8%	34.4%	34.3%	30.0%	33.3%	28.7%	30.3%	32.6%	28.7%	31.4%	32.5%	32.1%
No problem	21.4%	18.6%	18.5%	29.4%	17.3%	22.2%	27.1%	13.4%	18.9%	23.5%	18.9%	20.5%	25.3%	19.8%	19.6%	20.0%
Don't know	3.2%	1.0%	3.6%	5.9%	2.3%	2.9%	2.8%	2.9%	2.3%	4.4%	3.5%	2.6%	4.6%	3.5%	2.6%	2.8%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(k) Erosion of the coast

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	East	Rot.	Younger	Middle	Older	Male	Female	Urban	Rural	Maori	Non-Maori	Recent	Medium	Long-term	Total
Big problem	31.5%	39.7%	16.1%	31.1%	30.3%	25.1%	24.7%	32.9%	29.4%	27.5%	28.2%	29.3%	34.5%	35.6%	27.6%	28.9%
Some problem	44.1%	38.7%	42.3%	28.6%	43.8%	45.9%	46.3%	39.0%	42.6%	42.2%	39.7%	43.3%	31.0%	35.6%	44.6%	42.5%
No problem	17.5%	12.7%	17.6%	19.3%	14.9%	19.1%	20.5%	12.8%	16.5%	16.7%	14.7%	17.3%	18.4%	13.8%	16.7%	16.6%
Don't know	6.9%	8.8%	24.0%	21.0%	11.0%	9.9%	8.5%	15.3%	11.5%	13.5%	17.5%	10.1%	16.1%	14.9%	11.0%	12.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(l) Erosion of the riverbanks

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
Big problem	19.0%	36.8%	16.8%	20.8%	24.6%	16.6%	19.7%	24.0%	20.8%	25.5%	29.6%	19.5%	25.0%	23.0%	21.6%	21.9%
Some problem	41.6%	40.7%	37.9%	33.3%	41.1%	41.7%	42.8%	38.2%	39.6%	42.6%	32.8%	42.9%	26.1%	41.4%	41.7%	40.4%
No problem	20.6%	16.7%	23.9%	26.7%	19.4%	21.2%	25.3%	16.4%	20.3%	22.3%	22.9%	20.1%	22.7%	18.4%	20.9%	20.7%
Don't know	18.8%	5.9%	21.4%	19.2%	14.9%	20.5%	12.2%	21.4%	19.4%	9.6%	14.6%	17.5%	26.1%	17.2%	15.9%	16.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(m) Erosion of the hills

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
Big problem	17.1%	31.9%	13.6%	19.3%	20.7%	15.5%	18.1%	20.1%	18.6%	20.8%	27.7%	16.4%	18.2%	16.1%	19.5%	19.1%
Some problem	44.1%	33.8%	38.2%	31.1%	41.1%	42.8%	42.6%	38.4%	41.0%	38.4%	34.4%	42.3%	34.1%	47.1%	40.5%	40.5%
No problem	25.5%	24.0%	28.2%	32.8%	25.2%	24.7%	30.9%	21.2%	24.7%	30.0%	23.7%	26.7%	26.1%	23.0%	26.3%	26.0%
Don't know	13.2%	10.3%	20.0%	16.8%	12.9%	17.0%	8.4%	20.3%	15.7%	10.8%	14.2%	14.7%	21.6%	13.8%	13.8%	14.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(n) Pest plants

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
Big problem	41.7%	57.6%	39.3%	43.3%	45.3%	42.0%	42.6%	45.8%	41.7%	52.2%	46.7%	43.4%	38.6%	44.2%	44.7%	44.2%
Some problem	42.6%	33.7%	44.6%	40.0%	42.7%	39.2%	43.0%	39.9%	42.9%	36.7%	38.4%	42.3%	40.9%	39.5%	41.8%	41.4%
No problem	9.7%	7.3%	12.5%	13.3%	8.1%	12.7%	11.2%	8.8%	10.3%	9.2%	11.8%	9.4%	11.4%	11.6%	9.6%	10.0%
Don't know	6.0%	1.5%	3.6%	3.3%	3.9%	6.0%	3.2%	5.5%	5.2%	2.0%	3.1%	4.8%	9.1%	4.7%	3.9%	4.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(o) Pest animals

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
Big problem	40.8%	56.1%	49.5%	45.0%	47.6%	43.6%	47.9%	44.7%	43.8%	54.0%	50.2%	44.8%	35.2%	53.5%	46.6%	46.2%
Some problem	40.8%	28.8%	37.4%	35.0%	38.5%	36.2%	38.6%	36.3%	37.5%	36.9%	34.9%	38.4%	40.9%	37.2%	37.2%	37.4%
No problem	13.4%	11.7%	11.0%	17.5%	10.5%	14.5%	10.1%	14.6%	13.8%	8.3%	12.2%	12.6%	17.0%	5.8%	12.5%	12.4%
Don't know	5.0%	3.4%	2.1%	2.5%	3.4%	5.7%	3.4%	4.4%	4.9%	0.8%	2.7%	4.3%	6.8%	3.5%	3.7%	3.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(p) Roadside rubbish dumping

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
Big problem	48.9%	63.4%	46.3%	53.8%	52.8%	46.6%	48.7%	53.5%	48.7%	58.4%	55.1%	49.9%	42.5%	51.8%	52.0%	51.1%
Some problem	37.7%	24.9%	45.2%	35.3%	37.5%	37.0%	39.8%	34.7%	39.3%	30.8%	32.7%	38.5%	32.2%	36.1%	37.7%	37.2%
No problem	10.3%	10.2%	6.4%	9.2%	7.6%	12.8%	9.3%	9.1%	9.1%	9.6%	9.4%	9.2%	20.7%	10.8%	7.9%	9.2%
Don't know	3.1%	1.5%	2.1%	1.7%	2.1%	3.6%	2.2%	2.7%	2.9%	1.2%	2.8%	2.4%	4.6%	1.2%	2.4%	2.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(q) Anything else?

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
Big problem	8.2%	2.9%	7.8%	2.5%	6.1%	10.9%	7.0%	7.0%	7.4%	5.9%	3.1%	8.4%	3.4%	10.3%	7.1%	7.0%
Some problem	2.2%	0.5%	1.4%	0.0%	1.9%	1.8%	2.6%	0.8%	2.2%	0.0%	0.0%	2.2%	2.3%	3.4%	1.4%	1.7%
No problem	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
Don't know	0.0%	0.0%	1.1%	0.0%	0.5%	0.0%	0.2%	0.4%	0.4%	0.0%	0.0%	0.3%	1.1%	0.0%	0.2%	0.3%
Sample	539	205	281	120	620	284	499	526	771	253	255	766	88	87	847	1025

Note: Not additive as respondents could identify more than one other problem. See Apprendix 3 for other environmental issues listed (106 were identified, but only 92 were ranked by severity).

Comparison between Survey 2000 and Survey 2003 for environmental issues identified as problem (ie, big problem and some problem):

	2000	2003	Change
Roadside rubbish dumping	87.0%	88.3%	1.3%
Pest animals	76.0%	83.6%	7.6%
Air quality - pollen	78.0%	77.1%	-0.9%
Pest plants	78.0%	85.6%	7.6%
Water pollution - farming	65.0%	78.6%	13.6%
Water pollution - industry	79.0%	80.5%	1.5%
Air quality - trucks	75.0%	79.1%	4.1%
Water pollution - sewage/septic tanks	66.0%	68.7%	2.7%
Air quality - spray drift	68.0%	68.0%	0.0%
Erosion - coast	74.0%	71.4%	-2.6%
Air quality - cars	76.0%	73.8%	-2.2%
Air quality - industrial	60.0%	66.8%	6.8%
Erosion - riverbanks	60.0%	62.3%	2.3%
Erosion - hills	63.0%	59.6%	-3.4%
Water pollution - storm water	61.0%	63.6%	2.6%
Air quality - home fires	50.0%	50.9%	0.9%

Q4 How would you rate the overall state of the natural environment of the Bay of Plenty Region? By environment we mean the land, water, air and coast, and the plant and wildlife of the region.

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	East	Rot.	Younger	Middle	Older	Male	Female	Urban	Rural	Maori	Non-Maori	Recent	Medium	Long-term	Total
Very good	13.9%	15.6%	11.8%	9.2%	14.0%	14.9%	14.5%	13.0%	14.2%	12.3%	11.8%	14.4%	12.5%	13.8%	13.7%	13.7%
Good	50.3%	46.3%	46.2%	53.3%	47.4%	48.2%	49.8%	47.0%	49.6%	44.4%	43.1%	50.1%	59.1%	54.0%	46.7%	48.4%
Average	30.2%	27.8%	31.2%	30.0%	29.7%	30.9%	28.9%	31.0%	30.1%	29.8%	31.0%	29.6%	25.0%	26.4%	31.0%	30.0%
Poor	3.2%	6.3%	7.5%	4.2%	5.6%	3.9%	4.4%	5.5%	3.1%	10.7%	9.8%	3.4%	2.3%	2.3%	5.4%	5.0%
Very poor	1.1%	3.4%	2.5%	2.5%	2.4%	0.7%	1.8%	2.1%	2.2%	1.2%	3.9%	1.3%	0.0%	3.4%	2.0%	2.0%
Don't know	1.3%	0.5%	0.7%	0.8%	0.8%	1.4%	0.6%	1.3%	0.8%	1.6%	0.4%	1.2%	1.1%	0.0%	1.1%	1.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

	1992	1997	2000	2003
Very good	4.4%	13.9%	11.0%	13.7%
Good	24.7%	40.5%	42.0%	48.4%
Average	51.7%	36.1%	39.0%	30.0%
Poor	15.7%	7.1%	5.0%	5.0%
Very poor	3.5%	2.4%	2.0%	2.0%
Don't know	0.0%	0.0%	0.1%	1.0%
Total	100.0%	100.0%	99.1%	100.0%

Q5 Do you think the environment of the Bay of Plenty Region is becoming better, becoming worse or staying the same?

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	East	Rot.	Younger	Middle	Older	Male	Female	Urban	Rural	Maori	Non-Maori	Recent	Medium	Long-term	Total
Better	33.8%	30.2%	27.0%	31.7%	29.8%	34.2%	29.9%	32.5%	32.9%	25.7%	26.7%	32.9%	25.0%	27.6%	32.2%	31.2%
Staying the same	30.8%	44.4%	36.7%	39.2%	34.8%	33.8%	36.5%	33.8%	35.3%	34.8%	35.3%	34.9%	30.7%	35.6%	35.5%	35.1%
Worse	26.9%	21.5%	31.7%	23.3%	29.5%	23.6%	27.9%	26.4%	24.8%	34.4%	30.6%	26.0%	17.0%	25.3%	28.3%	27.1%
Don't know	8.5%	3.9%	4.6%	5.8%	5.8%	8.5%	5.8%	7.2%	7.0%	5.1%	7.5%	6.3%	27.3%	11.5%	3.9%	6.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

	2000	2003	Change
Better	28.0%	31.2%	3.2%
Staying the same	38.0%	35.1%	-2.9%
Worse	28.0%	27.1%	-0.9%
Don't know	5.0%	6.5%	1.5%
Total	99.0%	100.0%	

Q6 Are there any activities that in your opinion are damaging the land in the region?

	Area			Age			Gender		Locality		Ethnicity		Length of residency				
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**	
Yes	40.8%	66.3%	45.2%	40.0%	51.9%	39.4%	49.4%	45.0%	43.8%	56.9%	54.5%	44.6%	36.4%	56.3%	47.2%	47.1%	*Go to Q6a*
No	49.0%	25.4%	42.7%	49.2%	38.3%	48.9%	45.8%	39.4%	45.1%	34.8%	35.3%	45.0%	44.3%	39.1%	42.7%	42.5%	*Go to Q7*
Don't know	10.2%	8.3%	12.1%	10.8%	9.7%	11.6%	4.8%	15.6%	11.1%	8.3%	10.2%	10.3%	19.3%	4.6%	10.1%	10.4%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

	1992	**1997**	**2000**	**2003**
Yes	53.0%	59.0%	53.0%	52.6%
No	47.0%	41.0%	47.0%	47.4%
Total	100.0%	100.0%	100.0%	100.0%

Note: For comparative purposes, don't know responses are excluded.

Q6a What are these activities?

Part I	Area			Age			Gender	
	West	East	Rot.	Younger	Middle	Older	Male	Female
Clearing land/logging	10.0%	25.7%	18.9%	14.6%	15.9%	20.5%	17.9%	15.7%
Mining/quarries	1.4%	1.5%	0.8%	2.1%	1.2%	0.9%	1.2%	1.3%
Dumping of rubbish/car bodies	9.1%	47.1%	18.9%	27.1%	25.2%	12.5%	18.7%	26.3%
Vehicles on sand dunes/beaches	11.4%	11.8%	5.5%	4.2%	10.3%	11.6%	6.5%	13.6%
Erosion	8.2%	21.3%	9.4%	10.4%	12.1%	13.4%	13.8%	10.6%
Pollution/industrial pollution	7.3%	8.1%	14.2%	16.7%	9.0%	7.1%	8.5%	10.2%
Farming practices	13.2%	20.6%	26.0%	22.9%	18.7%	16.1%	19.1%	18.2%
Rubbish dumps/landfills	4.1%	8.1%	9.4%	16.7%	5.3%	6.3%	4.9%	8.5%
Lack of native forests	4.6%	11.8%	9.4%	6.3%	8.7%	6.3%	6.1%	9.7%
Urban development/subdivisions	39.3%	5.1%	8.7%	18.8%	19.6%	27.7%	22.0%	21.2%
Land returned to Maori	1.8%	1.5%	2.4%	2.1%	1.6%	2.7%	1.6%	2.1%
Spraying/chemicals	8.2%	17.6%	13.4%	10.4%	12.8%	11.6%	11.8%	12.7%
Timber mills/forest processing ind.	3.7%	16.9%	11.8%	6.3%	11.8%	4.5%	9.8%	9.3%
General recreation use	5.0%	4.4%	7.1%	4.2%	5.0%	7.1%	4.5%	6.4%
Litter	2.3%	7.4%	3.1%	2.1%	4.4%	3.6%	3.7%	4.2%
Other	29.7%	22.1%	19.7%	25.0%	25.9%	22.3%	26.4%	23.3%
Don't know	0.5%	0.0%	3.1%	0.0%	1.2%	0.9%	0.8%	1.3%
Sample	219	136	127	48	321	112	246	236

Note: Not additive as respondents could identify multiple activities. This table has been split into 2 parts.

Part II	Locality		Ethnicity		Length of residency			
	Urban	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
Clearing land/logging	15.4%	20.1%	25.2%	13.5%	6.3%	8.2%	18.8%	16.8%
Mining/quarries	1.2%	1.4%	2.2%	0.9%	0.0%	0.0%	1.5%	1.2%
Dumping of rubbish/car bodies	18.1%	31.9%	31.7%	18.8%	12.5%	16.3%	24.1%	22.4%
Vehicles on sand dunes/beaches	11.6%	6.3%	5.0%	12.0%	12.5%	12.2%	9.5%	10.0%
Erosion	11.3%	13.9%	14.4%	11.4%	9.4%	10.2%	12.8%	12.2%
Pollution/industrial pollution	11.3%	4.9%	15.1%	7.0%	12.5%	6.1%	9.3%	9.3%
Farming practices	17.8%	20.8%	20.1%	17.9%	18.8%	32.7%	16.8%	18.7%
Rubbish dumps/landfills	7.1%	5.6%	7.9%	6.2%	6.3%	6.1%	6.5%	6.6%
Lack of native forests	7.7%	8.3%	7.9%	7.9%	3.1%	4.1%	8.8%	7.9%
Urban development/subdivisions	22.3%	20.1%	10.8%	25.5%	21.9%	28.6%	20.3%	21.6%
Land returned to Maori	2.4%	0.7%	0.0%	2.6%	3.1%	2.0%	1.8%	1.9%
Spraying/chemicals	11.6%	13.9%	16.5%	10.6%	18.8%	14.3%	11.5%	12.2%
Timber mills/forest processing ind.	9.8%	9.0%	11.5%	8.8%	3.1%	10.2%	10.0%	9.5%
General recreation use	5.9%	4.2%	4.3%	5.9%	9.4%	2.0%	5.5%	5.4%
Litter	3.9%	4.2%	5.0%	3.5%	0.0%	2.0%	4.5%	3.9%
Other	26.4%	21.5%	21.6%	26.4%	18.8%	28.6%	25.1%	24.9%
Don't know	1.5%	0.0%	2.2%	0.6%	0.0%	0.0%	1.3%	1.0%
Sample	337	144	139	341	32	49	399	482

Note: Not additive as respondents could identify multiple activities. This table has been split into 2 parts.

Q7 Are there any activities that in your opinion are damaging the sea, coastline, beach or harbour in the region?

	Area			Age			Gender		Locality		Ethnicity		Length of residency				
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**	
Yes	51.5%	62.0%	36.8%	43.3%	50.8%	49.6%	49.8%	49.3%	46.7%	58.1%	48.2%	50.1%	37.5%	59.3%	49.9%	49.6%	*Go to Q7a*
No	40.5%	29.3%	41.4%	42.5%	37.1%	40.1%	42.8%	34.5%	41.2%	30.4%	34.5%	39.9%	40.9%	33.7%	38.8%	38.5%	*Go to Q8*
Don't know	8.0%	8.8%	21.8%	14.2%	12.1%	10.2%	7.4%	16.2%	12.1%	11.5%	17.3%	9.9%	21.6%	7.0%	11.3%	11.9%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

	1992	**1997**	**2000**	**2003**
Yes	78.0%	58.0%	52.0%	56.3%
No	22.0%	42.0%	48.0%	43.7%
Total	100.0%	100.0%	100.0%	100.0%

Note: For comparative purposes, don't know responses are excluded.

Q7a What are these activities?

Part I	Area			Age			Gender	
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**
1 Building too close to beaches	8.7%	14.2%	19.4%	9.6%	11.8%	14.2%	12.5%	12.0%
2 Dumping of rubbish/car bodies	10.1%	31.5%	26.2%	30.8%	19.7%	12.1%	15.3%	22.0%
3 Diversion of estuary/river	1.8%	2.4%	1.9%	5.8%	1.9%	0.7%	2.0%	1.9%
4 Run-offs/fertiliser misuse	13.4%	17.3%	11.7%	9.6%	16.6%	9.9%	17.3%	10.8%
5 Dredging run-off	1.8%	4.7%	2.9%	5.8%	2.5%	2.1%	3.6%	1.9%
6 Sewerage leakages/septic tanks	13.0%	13.4%	17.5%	11.5%	15.9%	10.6%	15.7%	12.4%
7 Overfishing/commercial fishing	11.2%	20.5%	23.3%	23.1%	15.9%	13.5%	15.7%	16.2%
8 Shellfish depletion	5.4%	9.4%	15.5%	13.5%	6.4%	11.3%	8.5%	8.5%
9 Overgrazing	0.4%	0.0%	1.9%	1.9%	0.6%	0.0%	0.4%	0.8%
10 Silting in harbour/at bar	2.9%	3.9%	1.0%	1.9%	2.9%	2.8%	4.0%	1.5%
11 Overlogging	1.4%	0.8%	0.0%	5.8%	0.6%	0.0%	1.6%	0.4%
12 Taking sand	1.4%	1.6%	0.0%	3.8%	0.6%	1.4%	0.8%	1.5%
13 Pollution - general	14.8%	21.3%	20.4%	15.4%	18.8%	15.6%	17.7%	17.4%
14 Boats/ships/barges	25.3%	21.3%	28.2%	38.5%	24.2%	21.3%	19.4%	30.1%
15 Polluted water/stormwater	11.9%	7.9%	14.6%	5.8%	12.7%	10.6%	11.3%	11.6%
16 Vehicles/bikes on beaches	7.6%	17.3%	7.8%	11.5%	9.2%	11.3%	9.3%	10.8%
17 Horses on beaches	1.4%	3.1%	2.9%	1.9%	1.6%	3.5%	1.2%	3.1%
18 Dogs on beaches	2.2%	4.7%	4.9%	3.8%	3.2%	3.5%	2.4%	4.2%
19 Marine farming	1.1%	0.8%	1.9%	1.9%	1.0%	1.4%	1.2%	1.2%
20 Maori land/fishing claims	1.4%	4.7%	1.9%	1.9%	2.2%	2.8%	2.8%	1.9%
21 Litter	3.6%	16.5%	6.8%	11.5%	8.0%	5.0%	5.6%	9.3%
22 Other	35.0%	18.9%	16.5%	15.4%	25.2%	36.2%	25.8%	28.6%
23 Don't know	1.4%	0.0%	1.0%	0.0%	1.0%	1.4%	1.2%	0.8%
Sample	277	127	103	52	314	141	248	259

Note: Not additive as respondents could identify more than one activity. This table has been split into 2 parts.

Part II	Locality		Ethnicity		Length of residency			
	Urban	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
1 Building too close to beaches	12.3%	11.6%	15.4%	11.2%	9.1%	11.8%	12.3%	12.2%
2 Dumping of rubbish/car bodies	18.4%	19.7%	26.0%	16.2%	18.2%	17.6%	18.7%	18.7%
3 Diversion of estuary/river	1.9%	2.0%	2.4%	1.8%	0.0%	3.9%	1.9%	2.0%
4 Run-offs/fertiliser misuse	13.6%	15.0%	15.4%	13.6%	15.2%	5.9%	14.9%	14.0%
5 Dredging run-off	2.8%	2.0%	3.3%	2.6%	3.0%	3.9%	2.6%	2.8%
6 Sewerage leakages/septic tanks	14.2%	13.6%	13.0%	14.4%	24.2%	13.7%	13.3%	14.0%
7 Overfishing/commercial fishing	15.3%	17.7%	22.0%	14.1%	12.1%	9.8%	16.8%	16.0%
8 Shellfish depletion	8.9%	7.5%	17.1%	5.7%	3.0%	5.9%	9.2%	8.5%
9 Overgrazing	0.6%	0.7%	0.8%	0.5%	0.0%	0.0%	0.7%	0.6%
10 Silting in harbour/at bar	2.2%	4.1%	3.3%	2.6%	0.0%	0.0%	3.3%	2.8%
11 Overlogging	1.1%	0.7%	2.4%	0.5%	0.0%	2.0%	0.9%	1.0%
12 Taking sand	1.1%	1.4%	3.3%	0.5%	0.0%	3.9%	0.9%	1.2%
13 Pollution - general	15.9%	21.8%	17.9%	17.2%	6.1%	17.6%	18.5%	17.6%
14 Boats/ships/barges	26.5%	21.1%	25.2%	24.8%	21.2%	27.5%	24.9%	24.9%
15 Polluted water/stormwater	12.5%	8.8%	8.9%	12.3%	15.2%	5.9%	11.8%	11.4%
16 Vehicles/bikes on beaches	10.6%	8.2%	8.1%	10.7%	6.1%	11.8%	10.2%	10.1%
17 Horses on beaches	2.5%	0.7%	0.8%	2.6%	0.0%	0.0%	2.6%	2.2%
18 Dogs on beaches	4.2%	0.7%	0.8%	4.2%	0.0%	2.0%	3.8%	3.4%
19 Marine farming	1.1%	1.4%	0.8%	1.3%	0.0%	3.9%	0.9%	1.2%
20 Maori land/fishing claims	2.2%	2.7%	2.4%	2.3%	3.0%	0.0%	2.6%	2.4%
21 Litter	7.8%	6.8%	8.1%	7.3%	6.1%	5.9%	7.8%	7.5%
22 Other	28.7%	23.8%	27.6%	27.2%	33.3%	17.6%	28.0%	27.2%
23 Don't know	0.6%	2.0%	0.0%	1.3%	3.0%	2.0%	0.7%	1.0%
Sample	359	147	123	383	33	51	422	507

Note: Not additive as respondents could identify more than one activity. This table has been split into 2 parts.

Positive responses to activities damaging land, sea and coastline, air quality, and problems with pest plants and animals:

	Survey 2000			Survey 2003		
	West	**East**	**Rot.**	**West**	**East**	**Rot.**
Land	54.0%	49.0%	46.0%	40.8%	66.3%	45.2%
Sea, coastline, beach or harbour	53.0%	55.0%	39.0%	51.5%	62.0%	36.8%
Air quality	65.0%	64.0%	57.0%	52.5%	68.6%	40.1%
Pest plants	60.0%	60.0%	59.0%	61.1%	77.6%	43.8%
Pest animals	46.0%	54.0%	61.0%	48.1%	72.5%	45.6%

Q8 Is there any lake or river that you consider to be polluted?

	Area			Age			Gender		Locality		Ethnicity		Length of residency				
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**	
Yes	62.3%	63.9%	82.9%	55.8%	72.9%	63.4%	69.9%	66.7%	67.1%	71.9%	73.3%	66.7%	45.5%	71.3%	70.4%	68.3%	*Go to Q8a*
No	21.7%	22.0%	7.8%	21.7%	16.5%	19.7%	16.6%	19.2%	18.3%	17.0%	14.1%	19.2%	27.3%	16.1%	17.2%	18.0%	*Go to Q9*
Don't know	16.0%	14.1%	9.3%	22.5%	10.6%	16.9%	13.4%	14.1%	14.7%	11.1%	12.5%	14.1%	27.3%	12.6%	12.4%	13.8%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Q8a Which lake or river are you thinking of?

Part I	Area			Age			Gender	
	West	East	Rot.	Younger	Middle	Older	Male	Female
Rivers								
1 Kaituna	3.3%	0.0%	1.3%	3.0%	1.8%	2.2%	2.0%	2.0%
2 Waimana	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
3 Motu	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4 Waioeka	0.0%	0.8%	0.0%	0.0%	0.2%	0.0%	0.3%	0.0%
5 Otara	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
6 Waiotahi	0.0%	1.5%	0.0%	0.0%	0.4%	0.0%	0.6%	0.0%
7 Rangitaiki	2.1%	0.8%	1.3%	0.0%	2.0%	1.1%	1.7%	1.4%
8 Wairoa	0.6%	0.0%	0.0%	0.0%	0.2%	0.6%	0.3%	0.3%
9 Raukokore	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
10 Whakatane	0.6%	3.1%	0.0%	3.0%	0.7%	0.6%	0.9%	0.9%
11 Tarawera	4.2%	20.8%	4.3%	10.6%	7.8%	5.1%	9.2%	5.5%
12 Whirinaki	0.0%	0.8%	0.4%	1.5%	0.2%	0.0%	0.0%	0.6%
Other rivers	3.3%	3.8%	1.3%	1.5%	2.7%	3.4%	2.9%	2.6%
Lakes								
1 Awatapu	0.3%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.3%
2 Aniwhenua	0.0%	0.8%	0.0%	0.0%	0.2%	0.0%	0.0%	0.3%
3 Rerewhakaaitu	0.3%	0.0%	0.4%	0.0%	0.4%	0.0%	0.0%	0.6%
4 Blue Lake (Tikitapu)	0.0%	0.0%	0.4%	0.0%	0.2%	0.0%	0.3%	0.0%
5 Rotoehu	1.2%	3.1%	1.7%	0.0%	1.8%	2.2%	2.6%	0.9%
6 Green Lake (Rotokakihi)	0.0%	0.8%	0.0%	0.0%	0.0%	0.6%	0.3%	0.0%
7 Okareka	0.3%	0.0%	1.3%	1.5%	0.4%	0.6%	0.3%	0.9%
8 Rotoiti	57.7%	40.0%	41.3%	37.9%	46.4%	59.0%	50.3%	47.6%
9 Rotoma	0.6%	6.2%	11.3%	9.1%	4.7%	5.1%	4.0%	6.3%
10 Okaro	0.0%	0.0%	1.3%	0.0%	0.2%	1.1%	0.3%	0.6%
11 Rotomahana	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
12 Rotorua	21.9%	13.8%	32.2%	27.3%	26.8%	15.2%	22.0%	25.6%
13 Okataina	0.6%	0.0%	0.0%	0.0%	0.2%	0.6%	0.0%	0.6%
14 Sullivans	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15 Tarawera	0.9%	0.0%	0.0%	0.0%	0.4%	0.6%	0.3%	0.6%
16 Te Mahoe	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other lakes	0.9%	3.8%	0.9%	3.0%	1.3%	1.1%	1.2%	1.7%
Don't know	1.2%	0.0%	0.4%	1.5%	0.7%	0.6%	0.6%	0.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Note: This table has been split into two parts.

Part II	Locality		Ethnicity		Length of residency			
	Urban	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
Rivers								
1 Kaituna	1.6%	3.3%	4.3%	1.2%	5.1%	3.2%	1.5%	2.0%
2 Waimana	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
3 Motu	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4 Waioeka	0.2%	0.0%	0.0%	0.2%	0.0%	1.6%	0.0%	0.1%
5 Otara	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
6 Waiotahi	0.2%	0.6%	0.5%	0.2%	0.0%	0.0%	0.3%	0.3%
7 Rangitaiki	1.2%	2.8%	2.2%	1.4%	2.6%	1.6%	1.5%	1.6%
8 Wairoa	0.4%	0.0%	0.0%	0.4%	0.0%	0.0%	0.3%	0.3%
9 Raukokore	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
10 Whakatane	1.0%	0.6%	1.6%	0.6%	0.0%	1.6%	0.8%	0.9%
11 Tarawera	6.6%	9.4%	9.2%	6.7%	2.6%	6.5%	7.8%	7.4%
12 Whirinaki	0.2%	0.6%	0.0%	0.4%	0.0%	0.0%	0.3%	0.3%
Other rivers	2.7%	2.8%	3.2%	2.6%	2.6%	3.2%	2.7%	2.7%
Lakes								
1 Awatapu	0.2%	0.0%	0.0%	0.2%	0.0%	0.0%	0.2%	0.1%
2 Aniwhenua	0.2%	0.0%	0.0%	0.2%	0.0%	0.0%	0.2%	0.1%
3 Rerewhakaaitu	0.2%	0.6%	0.0%	0.4%	0.0%	0.0%	0.3%	0.3%
4 Blue Lake (Tikitapu)	0.2%	0.0%	0.5%	0.0%	0.0%	0.0%	0.2%	0.1%
5 Rotoehu	1.6%	2.2%	1.1%	2.0%	5.1%	0.0%	1.7%	1.7%
6 Green Lake (Rotokakihi)	0.0%	0.6%	0.5%	0.0%	0.0%	0.0%	0.2%	0.1%
7 Okareka	0.8%	0.0%	0.5%	0.6%	0.0%	1.6%	0.5%	0.6%
8 Rotoiti	49.8%	46.1%	33.0%	54.7%	61.5%	54.8%	47.5%	48.9%
9 Rotoma	4.9%	6.1%	10.8%	3.2%	2.6%	3.2%	5.6%	5.2%
10 Okaro	0.4%	0.6%	0.0%	0.6%	0.0%	1.6%	0.3%	0.4%
11 Rotomahana	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
12 Rotorua	24.6%	21.7%	28.1%	22.1%	17.9%	16.1%	25.1%	23.8%
13 Okataina	0.4%	0.0%	0.0%	0.4%	0.0%	1.6%	0.2%	0.3%
14 Sullivans	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15 Tarawera	0.4%	0.6%	0.0%	0.6%	0.0%	0.0%	0.5%	0.4%
16 Te Mahoe	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other lakes	1.4%	1.7%	2.7%	1.0%	0.0%	3.2%	1.4%	1.4%
Don't know	1.0%	0.0%	1.6%	0.4%	0.0%	0.0%	0.8%	0.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Note: This table has been split into two parts.

Waterways perceived as most damaged:

	1992	1997	2000	2003
Tarawera River	16.6%	32.6%	26.0%	7.4%
Lake Rotorua	39.9%	30.5%	36.0%	23.8%
Lake Rotoiti	0.0%	1.1%	2.0%	48.9%

Q8b What do you feel is the source or cause of the pollution there?

Part I	Area			Age			Gender	
	West	East	Rot.	Younger	Middle	Older	Male	Female
1 Birdlife	2.7%	0.8%	9.9%	10.4%	4.6%	2.8%	2.3%	7.1%
2 Forestry	1.8%	1.5%	1.3%	0.0%	2.0%	1.1%	2.3%	0.9%
3 Boats	2.1%	2.3%	9.4%	7.5%	4.9%	2.8%	2.0%	7.1%
4 Industrial waste	8.6%	16.8%	7.3%	11.9%	10.8%	6.1%	10.3%	9.1%
5 Chemicals	7.7%	6.1%	8.6%	7.5%	7.7%	7.8%	7.7%	7.7%
6 Logging	0.6%	0.0%	1.7%	0.0%	0.7%	1.7%	1.1%	0.6%
7 Dairy Co	2.4%	0.0%	0.0%	0.0%	1.1%	1.7%	1.4%	0.9%
8 Run-off from hills	19.3%	11.5%	18.5%	14.9%	15.3%	24.4%	18.6%	16.5%
9 Effluent unspecified	8.6%	8.4%	6.9%	7.5%	8.2%	7.8%	9.5%	6.6%
10 Rubbish dump/landfill contamination	0.6%	2.3%	2.6%	3.0%	1.5%	1.1%	1.4%	1.7%
11 Farming practices	42.6%	36.6%	40.8%	28.4%	40.5%	46.1%	44.7%	37.0%
12 Sewage/septic tanks	22.6%	12.2%	33.0%	19.4%	23.2%	28.3%	27.2%	21.1%
13 General human irresponsibility	11.0%	29.0%	16.7%	13.4%	17.0%	15.6%	15.5%	17.1%
14 Over flow from Lake Rotorua	3.0%	0.0%	6.9%	3.0%	3.1%	5.6%	5.4%	2.0%
15 Household refuse	2.7%	6.1%	1.3%	3.0%	2.2%	4.4%	2.6%	3.1%
16 Timber mills	3.6%	19.8%	4.7%	9.0%	7.5%	5.0%	8.3%	5.7%
17 Litter	0.9%	3.1%	1.3%	3.0%	1.1%	1.7%	0.3%	2.6%
18 Other	19.9%	27.5%	24.9%	17.9%	25.4%	18.3%	21.8%	24.2%
Don't know	12.2%	6.1%	9.4%	11.9%	11.1%	7.2%	7.4%	12.8%
Sample	336	131	233	67	452	180	349	351

Note: Not additive as respondents could identify more than one source or cause. Table has been split into two parts.

Part II	Locality		Ethnicity		Length of residency			
	Urban	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
1 Birdlife	5.2%	3.3%	8.0%	3.5%	5.0%	3.2%	4.9%	4.7%
2 Forestry	0.6%	4.4%	1.6%	1.6%	0.0%	1.6%	1.7%	1.6%
3 Boats	4.8%	3.8%	6.4%	3.9%	5.0%	6.5%	4.4%	4.6%
4 Industrial waste	8.5%	13.2%	12.3%	8.6%	10.0%	8.1%	9.9%	9.7%
5 Chemicals	7.4%	8.8%	4.3%	8.8%	2.5%	11.3%	7.7%	7.7%
6 Logging	1.0%	0.5%	1.6%	0.6%	0.0%	0.0%	1.0%	0.9%
7 Dairy Co	1.4%	0.5%	0.5%	1.4%	2.5%	3.2%	0.8%	1.1%
8 Run-off from hills	18.2%	15.9%	11.2%	20.0%	15.0%	19.4%	17.6%	17.6%
9 Effluent unspecified	9.1%	4.9%	7.0%	8.4%	7.5%	9.7%	7.9%	8.0%
10 Rubbish dump/landfill contamination	1.7%	1.1%	2.7%	1.2%	5.0%	0.0%	1.5%	1.6%
11 Farming practices	38.5%	47.3%	33.7%	43.2%	40.0%	48.4%	40.1%	40.9%
12 Sewage/septic tanks	24.4%	23.6%	21.4%	25.2%	30.0%	24.2%	23.8%	24.1%
13 General human irresponsibility	13.9%	23.1%	23.5%	13.7%	7.5%	12.9%	17.1%	16.3%
14 Over flow from Lake Rotorua	2.9%	6.0%	2.7%	4.1%	5.0%	0.0%	4.0%	3.7%
15 Household refuse	2.5%	3.8%	3.2%	2.7%	0.0%	1.6%	3.2%	2.9%
16 Timber mills	7.0%	7.1%	9.6%	6.1%	2.5%	8.1%	7.2%	7.0%
17 Litter	1.2%	2.2%	1.6%	1.4%	0.0%	1.6%	1.5%	1.4%
18 Other	24.8%	17.6%	23.0%	22.7%	22.5%	17.7%	23.5%	23.0%
Don't know	10.3%	9.9%	8.0%	11.0%	12.5%	9.7%	10.1%	10.1%
Sample	517	182	187	511	40	62	596	700

Note: Not additive as respondents could identify more than one source or cause. Table has been split into two parts.

Sources of pollution for respondents who feel Lake Rotoiti is polluted:

Sources of pollution in Lake Rotoiti	Total	Percent
1 Birdlife	8	2.4%
2 Forestry	5	1.5%
3 Boats	12	3.5%
4 Industrial waste	15	4.4%
5 Chemicals	22	6.5%
6 Logging	2	0.6%
7 Dairy Co	7	2.1%
8 Run-off from hills	73	21.5%
9 Effluent unspecified	29	8.6%
10 Rubbish dump/landfill contamination	1	0.3%
11 Farming practices	166	49.0%
12 Sewage/septic tanks	91	26.8%
13 General human irresponsibility	53	15.6%
14 Over flow from Lake Rotorua	19	5.6%
15 Household refuse	8	2.4%
16 Timber mills	5	1.5%
17 Litter	2	0.6%
18 Other	87	25.7%
Don't know	39	11.5%
Refused/not specified	0	0.0%
Sample	339	

Note: Not additive as respondents could identify more than one source or cause.

Other sources of lake pollution - Lake Rotoiti	Frequency	Percent
Algae/weed	56	16.5%
Increased development/population	8	2.4%
Lack of monitoring/action	4	1.2%
Man made problems	4	1.2%
Stagnant water	3	0.9%
Geothermal activity	2	0.6%
Weather	2	0.6%
Animals	1	0.3%
Control gates.	1	0.3%
Emissions from pleasure craft.	1	0.3%
Lack of oxygen	1	0.3%
Lack of wetland.	1	0.3%
Need more trees.	1	0.3%
Pollen. Climatic.	1	0.3%
Storm water	1	0.3%
Total	87	25.7%

Sources of pollution for respondents who feel Lake Rotorua is polluted:

Sources of pollution in Lake Rotorua	Total	Percent
1 Birdlife	20	12.1%
2 Forestry	2	1.2%
3 Boats	15	9.1%
4 Industrial waste	14	8.5%
5 Chemicals	15	9.1%
6 Logging	4	2.4%
7 Dairy Co	0	0.0%
8 Run-off from hills	28	17.0%
9 Effluent unspecified	18	10.9%
10 Rubbish dump/landfill contamination	4	2.4%
11 Farming practices	64	38.8%
12 Sewage/septic tanks	58	35.2%
13 General human irresponsibility	34	20.6%
14 Over flow from Lake Rotorua	3	1.8%
15 Household refuse	5	3.0%
16 Timber mills	2	1.2%
17 Litter	4	2.4%
18 Other	40	24.2%
Don't know	14	8.5%
Refused/not specified	0	0.0%
Sample	165	

Note: Not additive as respondents could identify more than one source or cause.

Other sources of lake pollution - Lake Rotorua	Frequency	Percent
Algae/weed	28	17.0%
Stormwater	4	2.4%
Man made problems	3	1.8%
Geothermal activity	1	0.6%
Increased development/population	1	0.6%
Lack of monitoring/action	1	0.6%
Petrol.	1	0.6%
Waste products.	1	0.6%
Total	40	24.2%

Q9 Are there any activities that in your opinion are damaging the air quality in the region?

	Area			Age			Gender		Locality		Ethnicity		Length of residency				
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**	
Yes	52.5%	68.6%	40.1%	50.0%	55.2%	47.0%	52.1%	52.6%	51.0%	56.8%	49.8%	53.1%	46.6%	66.7%	51.5%	52.4%	*Go to Q9a*
No	41.2%	26.5%	54.9%	44.9%	39.9%	45.5%	44.6%	39.5%	43.0%	39.2%	45.5%	40.9%	43.2%	31.0%	43.0%	42.0%	*Go to Q10*
Don't know	6.2%	4.9%	5.1%	5.1%	4.9%	7.5%	3.2%	7.9%	6.0%	4.0%	4.7%	6.0%	10.2%	2.4%	5.5%	5.6%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

	2000	**2003**
Yes	62.0%	52.4%
No	35.0%	42.0%
Don't know	3.0%	5.6%
Total	100.0%	100.0%

Q9a What are these activities?

Part I	Area			Age			Gender	
	West	East	Rot.	Younger	Middle	Older	Male	Female
1 Burn offs	9.3%	14.3%	5.4%	10.2%	10.0%	9.2%	7.0%	12.5%
2 Dust on the road	1.4%	2.9%	0.0%	1.7%	1.8%	0.8%	0.8%	2.2%
3 Pulp and paper mills	2.9%	3.6%	15.3%	11.9%	4.7%	5.3%	5.4%	5.9%
4 Kawerau mills	10.0%	43.6%	25.2%	32.2%	22.4%	16.8%	23.3%	20.9%
5 Pollen	11.8%	36.4%	18.9%	13.6%	22.1%	16.8%	12.8%	26.4%
6 Sprays	26.2%	36.4%	9.9%	25.4%	24.8%	26.7%	24.5%	26.4%
7 Dust	3.6%	2.9%	0.9%	1.7%	2.4%	4.6%	1.6%	4.0%
8 Industrial emissions	36.9%	20.0%	29.7%	39.0%	33.0%	22.1%	26.8%	34.8%
9 Vehicle emissions	52.3%	27.9%	45.0%	45.8%	44.0%	45.0%	42.0%	46.5%
10 Domestic fires	6.5%	7.1%	21.6%	8.5%	12.4%	3.8%	8.2%	11.4%
11 Other dust	0.4%	0.0%	0.0%	1.7%	0.0%	0.0%	0.0%	0.4%
12 Other	13.3%	5.7%	15.3%	10.2%	11.2%	13.7%	10.9%	12.5%
Don't know	0.7%	0.0%	0.0%	1.7%	0.3%	0.0%	0.4%	0.4%
Sample	279	140	111	59	339	131	257	273

Part II	Locality		Ethnicity		Length of residency			
	Urban	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
1 Burn offs	9.0%	12.0%	11.1%	9.5%	2.4%	16.1%	9.7%	9.8%
2 Dust on the road	1.8%	0.7%	0.8%	1.7%	2.4%	3.6%	1.2%	1.5%
3 Pulp and paper mills	5.7%	5.6%	4.8%	6.0%	4.9%	10.7%	5.1%	5.7%
4 Kawerau mills	18.6%	31.7%	35.7%	18.0%	7.3%	26.8%	22.7%	22.1%
5 Pollen	21.1%	16.2%	23.8%	18.7%	12.2%	16.1%	21.1%	19.8%
6 Sprays	22.7%	33.1%	24.6%	25.7%	9.8%	33.9%	25.8%	25.5%
7 Dust	3.1%	2.1%	0.8%	3.5%	2.4%	3.6%	2.8%	2.8%
8 Industrial emissions	33.8%	23.2%	27.0%	32.2%	26.8%	33.9%	31.1%	30.9%
9 Vehicle emissions	46.4%	38.7%	38.9%	46.1%	65.9%	46.4%	42.0%	44.3%
10 Domestic fires	10.3%	8.5%	7.9%	10.5%	12.2%	8.9%	9.7%	9.8%
11 Other dust	0.3%	0.0%	0.0%	0.2%	0.0%	1.8%	0.0%	0.2%
12 Other	12.9%	8.5%	13.5%	11.2%	14.6%	8.9%	11.8%	11.7%
Don't know	0.5%	0.0%	0.0%	0.2%	2.4%	0.0%	0.2%	0.4%
Sample	388	142	126	401	41	56	431	530

Note: Not additive as respondents could identify more than one activity. This table has been split into two parts

Q10 What natural hazard do you see as being MOST likely to endanger you or your property?

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
Earthquakes	39.4%	48.8%	45.8%	39.0%	46.1%	38.2%	41.5%	44.6%	43.9%	40.5%	42.9%	43.3%	29.5%	36.0%	45.2%	43.1%
Landslides	3.3%	2.9%	1.1%	5.1%	2.5%	1.8%	2.4%	2.7%	2.4%	3.2%	4.0%	2.1%	3.4%	3.5%	2.4%	2.6%
Volcanic eruptions	5.2%	8.3%	12.6%	5.9%	8.2%	8.0%	8.4%	7.4%	7.0%	10.5%	7.5%	8.0%	8.0%	7.0%	8.0%	7.9%
Storms/high winds	10.9%	5.9%	8.7%	9.3%	9.3%	9.1%	11.4%	7.2%	7.8%	13.8%	9.9%	8.8%	10.2%	8.1%	9.2%	9.3%
Floods	7.8%	23.4%	9.7%	16.1%	13.1%	6.2%	11.0%	12.1%	10.7%	14.2%	14.7%	10.5%	9.1%	14.0%	11.6%	11.5%
Tidal wave/tsunami	11.5%	2.0%	0.0%	2.5%	5.9%	9.1%	7.1%	5.6%	7.5%	2.8%	4.4%	7.1%	6.8%	12.8%	5.7%	6.4%
Geothermal activity	0.0%	0.0%	11.2%	8.5%	2.9%	1.1%	3.1%	3.1%	3.6%	1.6%	6.7%	1.9%	4.5%	1.2%	3.1%	3.1%
Fire/forest fires	4.2%	2.0%	1.4%	5.1%	2.8%	2.5%	2.9%	3.1%	3.3%	2.0%	2.0%	3.3%	6.8%	4.7%	2.4%	3.0%
Don't see any	9.9%	0.5%	5.4%	3.4%	3.8%	14.9%	5.3%	8.2%	7.5%	4.5%	2.8%	8.0%	13.6%	9.3%	5.8%	6.8%
Other	1.3%	2.4%	0.4%	0.8%	1.6%	0.7%	1.8%	0.8%	0.9%	2.4%	0.4%	1.6%	1.1%	0.0%	1.4%	1.3%
Don't know	6.5%	3.9%	3.6%	4.2%	3.9%	8.4%	5.1%	5.3%	5.4%	4.5%	4.8%	5.3%	6.8%	3.5%	5.2%	5.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

	1992	1997	2000	2003
Earthquakes	56.2%	60.6%	43.0%	43.1%
Volcanic eruptions	12.9%	14.5%	13.0%	7.9%
Floods	11.6%	7.7%	13.0%	11.5%
Storms	9.5%	3.2%	9.0%	9.3%
Tidal waves/tsunami	5.3%	4.8%	9.0%	6.4%

Q11 Have you noticed pest plant problems anywhere in the Bay of Plenty Region?

	Area			Age			Gender		Locality		Ethnicity		Length of residency				
	West	East	Rot.	Younger	Middle	Older	Male	Female	Urban	Rural	Maori	Non-Maori	Recent	Medium	Long-term	Total	
Yes	61.1%	77.6%	43.8%	42.0%	64.5%	56.3%	60.3%	59.0%	54.2%	75.9%	50.0%	63.0%	51.1%	57.5%	60.7%	59.6%	*Go to Q11a*
No	36.5%	21.5%	51.6%	55.5%	33.3%	39.8%	37.1%	38.2%	42.8%	22.1%	47.2%	34.4%	44.3%	41.4%	36.6%	37.6%	*Go to Q12*
Don't know	2.4%	1.0%	4.6%	2.5%	2.3%	3.9%	2.6%	2.9%	3.0%	2.0%	2.8%	2.6%	4.5%	1.1%	2.7%	2.7%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

	2000	2003
Yes	60.0%	59.6%
No	39.0%	37.6%
Don't know	1.0%	2.7%
Total	100.0%	99.9%

Q11a What pest plant or plants do you think are causing these problems?

Part I	Area			Age			Gender	
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**
1 Gorse	57.6%	69.2%	75.6%	78.0%	66.2%	55.6%	65.1%	63.4%
2 Ragwort	21.0%	24.5%	35.0%	18.0%	22.6%	31.9%	25.2%	24.3%
3 Privet	18.6%	49.1%	13.0%	14.0%	28.1%	22.5%	23.6%	27.2%
4 Wild ginger	12.8%	12.6%	8.9%	8.0%	12.0%	13.1%	9.6%	14.2%
5 Old man's beard	7.6%	7.5%	14.6%	0.0%	10.3%	8.8%	10.0%	8.1%
6 Wandering willie/jew	5.8%	2.5%	7.3%	2.0%	6.3%	3.8%	5.3%	5.2%
7 Lantana	0.6%	0.0%	0.0%	0.0%	0.3%	0.6%	0.3%	0.3%
8 Moth Plant	2.4%	0.6%	0.0%	0.0%	1.8%	1.3%	0.3%	2.6%
9 Pampas	2.4%	1.3%	0.8%	0.0%	1.5%	3.1%	1.7%	1.9%
10 Jasmine	3.4%	3.1%	6.5%	0.0%	4.5%	3.8%	2.7%	5.2%
11 Woolly nightshade	24.1%	11.9%	4.9%	8.0%	18.0%	17.5%	19.9%	14.2%
12 Wilding pines	0.6%	0.0%	0.8%	2.0%	0.5%	0.0%	0.7%	0.3%
13 Japanese honeysuckle	1.5%	3.1%	3.3%	4.0%	2.3%	1.9%	2.0%	2.6%
14 Other	32.6%	24.5%	39.0%	18.0%	32.3%	34.4%	33.2%	30.4%
Don't know	3.0%	2.5%	0.8%	0.0%	2.0%	4.4%	1.7%	3.2%
Sample	328	159	123	50	399	160	301	309

Note: Not additive as respondents could identify more than one problem plant. This table has been split into two parts.
Refer to Appendix 3 for a breakdown of responses in 'other' category.

Part II	Locality		Ethnicity		Length of residency			
	Urban	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
1 Gorse	58.3%	77.1%	70.1%	62.9%	66.7%	66.0%	64.1%	64.3%
2 Ragwort	22.5%	29.7%	27.6%	23.9%	20.0%	26.0%	25.0%	24.8%
3 Privet	25.4%	25.0%	32.3%	23.7%	20.0%	24.0%	25.9%	25.4%
4 Wild ginger	11.8%	12.5%	15.0%	11.2%	8.9%	8.0%	12.7%	12.0%
5 Old man's beard	10.6%	5.7%	7.1%	9.5%	6.7%	0.0%	9.9%	9.0%
6 Wandering willie/jew	6.5%	2.6%	3.9%	5.6%	0.0%	6.0%	5.7%	5.2%
7 Lantana	0.5%	0.0%	0.8%	0.2%	0.0%	0.0%	0.4%	0.3%
8 Moth Plant	1.4%	1.6%	0.8%	1.7%	2.2%	0.0%	1.6%	1.5%
9 Pampas	1.7%	2.1%	1.6%	1.9%	4.4%	0.0%	1.8%	1.8%
10 Jasmine	4.3%	3.1%	3.9%	3.9%	4.4%	2.0%	4.1%	3.9%
11 Woolly nightshade	16.1%	19.3%	9.4%	19.1%	13.3%	10.0%	18.1%	17.0%
12 Wilding pines	0.5%	0.5%	0.8%	0.4%	0.0%	2.0%	0.4%	0.5%
13 Japanese honeysuckle	1.7%	3.6%	3.1%	2.1%	0.0%	0.0%	2.7%	2.3%
14 Other	30.2%	35.4%	29.9%	32.2%	20.0%	28.0%	32.9%	31.8%
Don't know	3.1%	1.0%	3.9%	2.1%	2.2%	2.0%	2.5%	2.5%
Sample	417	192	127	482	45	50	513	610

Note: Not additive as respondents could identify more than one problem plant. This table has been split into two parts.
Refer to Appendix 3 for a breakdown of responses in 'other' category.

Q12 Who would you contact if you noticed a problem with pest plants?

Part I	Area			Age			Gender	
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**
1 Environment Bay of Plenty / Regional Council	41.9%	39.4%	30.8%	28.6%	42.0%	34.2%	37.8%	38.9%
2 District Council / Council	39.1%	35.5%	38.4%	28.6%	36.9%	45.2%	37.4%	38.9%
3 Department of Conservation (DOC)	2.6%	10.3%	17.9%	14.3%	8.8%	5.0%	7.5%	9.2%
4 The Maori Trustee	0.0%	0.0%	0.4%	0.0%	0.2%	0.0%	0.0%	0.2%
5 Ministry of Agriculture and Forestry (MAF)	2.6%	0.5%	2.2%	1.7%	2.3%	1.8%	2.6%	1.5%
6 The landowner	1.3%	1.0%	0.0%	2.5%	0.6%	0.7%	1.6%	0.2%
7 No one	2.4%	3.0%	1.1%	4.2%	2.3%	1.1%	2.8%	1.5%
8 Other	2.8%	3.9%	1.8%	5.0%	2.4%	2.5%	3.2%	2.3%
Don't know	7.3%	6.4%	7.5%	15.1%	4.5%	9.6%	7.1%	7.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Note: This table has been split into two parts.

Part II	Locality		Ethnicity		Length of residency			
	Urban	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
1 Environment Bay of Plenty / Regional Council	38.5%	38.0%	24.1%	43.1%	45.5%	29.9%	38.5%	38.3%
2 District Council / Council	38.4%	37.2%	39.5%	37.6%	39.8%	48.3%	37.1%	38.2%
3 Department of Conservation (DOC)	8.6%	7.6%	19.0%	4.9%	1.1%	9.2%	8.9%	8.4%
4 The Maori Trustee	0.0%	0.4%	0.4%	0.0%	0.0%	1.1%	0.0%	0.1%
5 Ministry of Agriculture and Forestry (MAF)	2.2%	1.6%	0.8%	2.5%	0.0%	2.3%	2.3%	2.1%
6 The landowner	0.3%	2.8%	1.6%	0.7%	2.3%	0.0%	0.8%	0.9%
7 No one	1.8%	3.2%	2.4%	2.1%	2.3%	0.0%	2.4%	2.2%
8 Other	2.2%	4.4%	4.3%	2.2%	2.3%	4.6%	2.6%	2.8%
Don't know	8.0%	4.8%	7.9%	7.0%	6.8%	4.6%	7.4%	7.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Note: This table has been split into two parts.

Q13 Have you noticed pest animal problems anywhere in the Bay of Plenty Region?

	Area			Age			Gender		Locality		Ethnicity		Length of residency				
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**	
Yes	48.1%	72.5%	45.6%	39.5%	55.7%	50.0%	55.9%	48.9%	47.2%	67.6%	49.4%	53.1%	42.0%	59.8%	52.5%	52.3%	*Go to Q13a*
No	51.5%	26.0%	53.0%	58.0%	43.6%	49.3%	42.9%	50.6%	51.9%	31.6%	48.6%	46.3%	58.0%	40.2%	46.4%	46.8%	*Go to Q14*
Don't know	0.4%	1.5%	1.4%	2.5%	0.6%	0.7%	1.2%	0.6%	0.9%	0.8%	2.0%	0.5%	0.0%	0.0%	1.1%	0.9%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

	2000	**2003**
Yes	52.0%	52.3%
No	48.0%	46.8%
Don't know	0.0%	0.9%
Total	100.0%	100.0%

Q13a What animals do you think are causing these problems?

Part I	Area			Age			Gender	
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**
1 Possums	44.8%	79.7%	80.5%	76.6%	64.6%	54.2%	64.2%	61.7%
2 Feral goats	3.1%	6.8%	3.1%	2.1%	4.1%	4.9%	5.4%	2.7%
3 Rabbits	52.1%	31.8%	48.4%	44.7%	48.7%	38.0%	42.7%	48.8%
4 Feral cats	10.4%	3.4%	11.7%	8.5%	7.0%	13.4%	7.2%	10.5%
5 Mustelids (ferrets, stoats, weasels)	9.3%	9.5%	9.4%	0.0%	10.4%	9.9%	12.2%	6.3%
6 Wasps	3.5%	0.0%	3.1%	0.0%	2.6%	2.8%	1.4%	3.5%
7 Rats	6.2%	15.5%	13.3%	19.1%	11.3%	5.6%	8.2%	12.9%
8 Koi carp, catfish, rudd, perch	0.8%	0.0%	0.8%	0.0%	0.6%	0.7%	1.1%	0.0%
9 Feral deer	1.2%	4.1%	4.7%	4.3%	1.2%	6.3%	3.9%	1.6%
10 Feral pigs	0.4%	2.0%	3.1%	2.1%	0.6%	3.5%	1.8%	1.2%
11 Wallabies	0.8%	2.0%	18.0%	2.1%	6.4%	3.5%	6.8%	3.5%
12 Magpies and rooks	1.5%	3.4%	6.3%	0.0%	3.2%	4.2%	3.2%	3.1%
13 Bee mite	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
14 Flies	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15 Dogs / feral dogs	10.4%	12.8%	7.8%	4.3%	9.6%	14.8%	9.3%	11.7%
16 Other	5.4%	2.0%	14.1%	8.5%	5.5%	8.5%	6.1%	7.0%
Don't know	0.0%	0.0%	0.8%	0.0%	0.3%	0.0%	0.4%	0.0%
Sample	259	148	128	47	345	142	279	256

Note: Not additive as respondents could identify multiple pest animals. This table has been split into two parts.

Part II	Locality		Ethnicity		Length of residency			
	Urban	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
1 Possums	55.6%	78.4%	77.8%	58.1%	51.4%	57.7%	64.4%	63.0%
2 Feral goats	3.9%	4.7%	4.0%	4.2%	2.7%	9.6%	3.6%	4.1%
3 Rabbits	44.1%	48.5%	31.7%	50.0%	62.2%	50.0%	43.5%	45.6%
4 Feral cats	11.3%	3.5%	6.3%	9.6%	5.4%	15.4%	8.3%	8.8%
5 Mustelids (ferrets, stoats, weasels)	6.9%	14.6%	5.6%	10.6%	2.7%	3.8%	10.4%	9.3%
6 Wasps	2.5%	2.3%	0.0%	3.2%	0.0%	1.9%	2.7%	2.4%
7 Rats	8.0%	15.8%	15.9%	8.9%	2.7%	3.8%	11.9%	10.5%
8 Koi carp, catfish, rudd, perch	0.3%	1.2%	0.8%	0.5%	0.0%	0.0%	0.7%	0.6%
9 Feral deer	1.7%	5.3%	4.8%	2.2%	0.0%	1.9%	3.2%	2.8%
10 Feral pigs	1.4%	1.8%	1.6%	1.5%	0.0%	1.9%	1.6%	1.5%
11 Wallabies	5.8%	4.1%	6.3%	4.9%	2.7%	1.9%	5.9%	5.2%
12 Magpies and rooks	1.9%	5.8%	2.4%	3.4%	0.0%	1.9%	3.6%	3.2%
13 Bee mite	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
14 Flies	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15 Dogs / feral dogs	12.9%	4.7%	10.3%	10.6%	5.4%	13.5%	10.6%	10.5%
16 Other	6.9%	5.8%	3.2%	7.6%	13.5%	9.6%	5.6%	6.5%
Don't know	0.3%	0.0%	0.8%	0.0%	0.0%	0.0%	0.2%	0.2%
Sample	363	171	126	406	37	52	444	535

Note: Not additive as respondents could identify multiple pest animals. This table has been split into two parts.

Q14 Who would you contact if you noticed a problem with pest animals?

Part I	Area			Age			Gender	
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**
1 Environment Bay of Plenty / Regional Council	29.8%	29.9%	22.1%	20.2%	31.0%	23.3%	28.3%	27.1%
2 District Council	41.9%	27.0%	37.4%	24.4%	36.7%	45.6%	33.7%	41.4%
3 Department of Conservation (DOC)	5.8%	22.5%	24.6%	20.2%	15.8%	8.5%	15.7%	13.0%
4 The landowner	1.1%	2.5%	0.4%	0.8%	1.3%	1.1%	2.0%	0.4%
5 No one	0.9%	1.5%	0.4%	1.7%	0.8%	0.7%	1.8%	0.0%
6 Other	11.7%	7.8%	4.6%	11.8%	7.8%	10.6%	9.4%	8.6%
Don't know	8.8%	8.8%	10.7%	21.0%	6.6%	10.2%	9.0%	9.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Note: This table has been split into two parts.

Part II	Locality		Ethnicity		Length of residency			
	Urban	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
1 Environment Bay of Plenty / Regional Council	27.6%	28.2%	17.8%	31.0%	34.1%	23.0%	27.5%	27.7%
2 District Council	40.2%	30.2%	31.2%	39.7%	36.4%	44.8%	37.2%	37.7%
3 Department of Conservation (DOC)	12.1%	20.6%	29.2%	9.4%	5.7%	17.2%	14.8%	14.3%
4 The landowner	1.2%	1.2%	1.2%	1.2%	1.1%	0.0%	1.3%	1.2%
5 No one	0.5%	2.0%	0.4%	1.0%	0.0%	0.0%	1.1%	0.9%
6 Other	8.8%	9.5%	8.3%	9.3%	12.5%	8.0%	8.8%	9.0%
Don't know	9.6%	8.3%	11.9%	8.4%	10.2%	6.9%	9.4%	9.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Note: This table has been split into two parts.

Q15 Thinking now about waste. Waste is anything that a person no longer needs, wants or uses, and which needs to be disposed of. How would you dispose of each of the following:

(a) Used engine oil

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	East	Rot.	Younger	Middle	Older	Male	Female	Urban	Rural	Maori	Non-Maori	Recent	Medium	Long-term	Total
Landfill incl rubbish collection	3.6%	2.0%	6.8%	3.4%	5.5%	1.4%	2.4%	5.7%	4.7%	2.4%	3.9%	4.2%	4.5%	5.7%	3.8%	4.1%
Specialist disposal	66.7%	70.0%	59.8%	52.9%	70.7%	59.4%	74.2%	57.2%	65.1%	66.3%	60.6%	67.2%	69.3%	65.5%	65.1%	65.4%
Down drain	0.8%	0.5%	2.1%	0.0%	1.1%	1.4%	1.2%	1.0%	1.0%	1.2%	2.0%	0.8%	0.0%	3.4%	1.0%	1.1%
Bury	3.0%	6.4%	8.2%	6.7%	4.4%	6.0%	5.1%	5.2%	5.1%	5.2%	7.9%	4.2%	3.4%	4.6%	5.4%	5.1%
Burn	1.3%	2.0%	1.4%	0.8%	1.3%	2.1%	2.4%	0.6%	0.8%	3.6%	1.6%	1.5%	1.1%	1.1%	1.6%	1.5%
No idea	23.2%	16.3%	21.7%	32.8%	16.0%	28.1%	13.4%	28.9%	22.3%	18.7%	21.7%	21.0%	21.6%	19.5%	21.5%	21.4%
Other	1.5%	3.0%	0.0%	3.4%	1.0%	1.4%	1.2%	1.5%	0.9%	2.8%	2.4%	1.1%	0.0%	0.0%	1.7%	1.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(b) Leftover farm or garden chemicals

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	East	Rot.	Younger	Middle	Older	Male	Female	Urban	Rural	Maori	Non-Maori	Recent	Medium	Long-term	Total
Landfill incl rubbish collection	8.6%	7.7%	8.6%	5.3%	9.7%	7.2%	6.8%	10.1%	9.5%	5.3%	6.6%	9.1%	7.1%	9.1%	8.5%	8.5%
Specialist disposal	44.2%	39.3%	40.9%	27.2%	44.1%	45.2%	45.0%	39.8%	40.5%	48.2%	34.9%	44.7%	51.8%	39.0%	41.7%	42.3%
Down drain	1.6%	0.6%	2.2%	2.6%	1.9%	0.4%	1.5%	1.6%	2.1%	0.0%	2.2%	1.4%	2.4%	5.2%	1.2%	1.6%
Bury	4.2%	5.4%	7.5%	9.6%	4.6%	5.3%	6.3%	4.5%	4.7%	7.5%	9.6%	4.1%	4.7%	5.2%	5.5%	5.4%
Burn	0.8%	0.6%	1.4%	0.9%	0.7%	1.5%	1.5%	0.4%	1.0%	0.9%	1.3%	0.8%	1.2%	0.0%	1.0%	1.0%
No idea	34.1%	35.1%	35.8%	48.2%	31.6%	35.7%	31.0%	38.4%	36.1%	30.5%	39.3%	33.3%	30.6%	32.5%	35.5%	34.8%
Other	6.4%	11.3%	3.6%	6.1%	7.4%	4.6%	7.9%	5.1%	6.1%	7.5%	6.1%	6.6%	2.4%	9.1%	6.7%	6.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(c) Solvents

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
Landfill incl rubbish collection	9.8%	9.3%	11.9%	7.9%	11.7%	8.3%	8.1%	12.4%	11.0%	7.9%	9.7%	10.6%	7.2%	9.9%	10.6%	10.3%
Specialist disposal	46.1%	32.0%	41.4%	29.8%	44.8%	42.1%	46.2%	38.4%	41.7%	44.1%	34.0%	44.9%	54.2%	48.1%	40.4%	42.2%
Down drain	2.7%	5.8%	3.2%	5.3%	3.4%	2.6%	3.6%	3.3%	3.7%	2.6%	4.2%	3.2%	1.2%	6.2%	3.4%	3.4%
Bury	4.3%	5.2%	7.2%	7.9%	4.6%	5.6%	6.4%	4.3%	5.2%	5.7%	7.6%	4.6%	4.8%	4.9%	5.4%	5.3%
Burn	2.7%	5.2%	1.4%	1.8%	2.6%	3.8%	4.5%	1.2%	2.5%	4.0%	4.2%	2.4%	0.0%	2.5%	3.1%	2.8%
No idea	28.3%	29.7%	30.6%	40.4%	25.8%	32.0%	22.3%	35.8%	29.8%	26.9%	31.5%	28.5%	26.5%	19.8%	30.6%	29.2%
Other	6.1%	12.8%	4.3%	7.0%	7.1%	5.6%	8.9%	4.7%	6.1%	8.8%	8.8%	6.0%	6.0%	8.6%	6.5%	6.8%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(d) Car batteries

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
Landfill incl rubbish collection	4.7%	10.3%	12.5%	15.0%	8.3%	4.0%	6.2%	9.6%	8.2%	7.2%	11.1%	6.9%	4.7%	12.8%	7.6%	8.0%
Specialist disposal	83.5%	74.9%	73.0%	59.2%	82.2%	80.2%	83.9%	74.0%	78.3%	80.5%	71.1%	81.6%	75.6%	81.4%	79.1%	78.8%
Down drain	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bury	0.6%	0.5%	0.7%	0.0%	0.6%	0.7%	0.6%	0.6%	0.4%	1.2%	1.6%	0.3%	0.0%	1.2%	0.6%	0.6%
Burn	0.2%	0.5%	0.4%	0.0%	0.5%	0.0%	0.2%	0.4%	0.4%	0.0%	0.8%	0.1%	0.0%	0.0%	0.4%	0.3%
No idea	10.3%	10.8%	12.5%	20.0%	7.6%	14.7%	8.0%	13.9%	11.5%	9.6%	12.6%	10.4%	16.3%	4.7%	11.2%	11.0%
Other	0.8%	3.0%	1.1%	5.8%	0.8%	0.4%	1.0%	1.5%	1.2%	1.6%	2.8%	0.8%	3.5%	0.0%	1.2%	1.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(e) Other batteries

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
Landfill incl rubbish collection	86.1%	61.0%	82.6%	86.3%	79.3%	79.6%	78.6%	81.7%	83.4%	70.7%	68.8%	84.2%	87.2%	81.4%	79.4%	80.2%
Specialist disposal	8.2%	31.5%	14.2%	5.1%	15.9%	15.4%	14.9%	14.1%	12.7%	19.7%	23.3%	11.3%	7.0%	12.8%	15.4%	14.5%
Down drain	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bury	0.4%	1.5%	0.7%	0.0%	1.0%	0.4%	1.0%	0.4%	0.1%	2.4%	1.2%	0.5%	0.0%	1.2%	0.7%	0.7%
Burn	0.4%	1.0%	0.0%	0.9%	0.3%	0.4%	0.6%	0.2%	0.3%	0.8%	0.8%	0.3%	0.0%	0.0%	0.5%	0.4%
No idea	4.5%	5.0%	2.5%	6.8%	3.4%	4.3%	4.9%	3.2%	3.3%	6.4%	5.9%	3.4%	5.8%	4.7%	3.8%	4.0%
Other	0.4%	0.0%	0.0%	0.9%	0.2%	0.0%	0.0%	0.4%	0.3%	0.0%	0.0%	0.3%	0.0%	0.0%	0.2%	0.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Comparison of methods used to dispose of used engine oil, leftover farm or garden chemicals and solvent in 2000 and 2003.

	Used engine oil			Leftover farm or garden chemicals			Solvents		
	2000	2003	Change	2000	2003	Change	2000	2003	Change
Landfill incl. rubbish collection	11.0%	4.1%	-6.9%	7.0%	8.5%	1.5%	11.0%	10.3%	-0.7%
Specialist disposal	54.0%	65.4%	11.4%	46.0%	42.3%	-3.7%	42.0%	42.2%	0.2%
Down drain	1.0%	1.1%	0.1%	2.0%	1.6%	-0.4%	2.0%	3.4%	1.4%
Bury	8.0%	5.1%	-2.9%	7.0%	5.4%	-1.6%	8.0%	5.3%	-2.7%
Burn	2.0%	1.5%	-0.5%	2.0%	1.0%	-1.0%	4.0%	2.8%	-1.2%
No idea	24.0%	21.4%	-2.6%	35.0%	34.8%	-0.2%	31.0%	29.2%	-1.8%
Other	0.0%	1.4%	1.4%	1.0%	6.5%	5.5%	1.0%	6.8%	5.8%
Total	100.0%	100.0%		100.0%	100.1%		99.0%	100.0%	

Q16 In the past year have you needed to dispose of:

(a) Used engine oil

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	East	Rot.	Younger	Middle	Older	Male	Female	Urban	Rural	Maori	Non-Maori	Recent	Medium	Long-term	Total
Yes	15.4%	47.5%	24.5%	22.0%	29.9%	13.2%	29.6%	19.3%	21.9%	31.5%	29.4%	22.8%	11.5%	13.8%	26.8%	24.4%
No	84.6%	52.5%	75.5%	78.0%	70.1%	86.8%	70.4%	80.7%	78.1%	68.5%	70.6%	77.2%	88.5%	86.2%	73.2%	75.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(b) Leftover farm or garden chemicals

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	East	Rot.	Younger	Middle	Older	Male	Female	Urban	Rural	Maori	Non-Maori	Recent	Medium	Long-term	Total
Yes	3.2%	6.4%	9.1%	2.5%	7.0%	3.2%	5.7%	5.2%	4.5%	8.4%	7.5%	4.7%	5.7%	2.3%	5.6%	5.4%
No	96.8%	93.6%	90.9%	97.5%	93.0%	96.8%	94.3%	94.8%	95.5%	91.6%	92.5%	95.3%	94.3%	97.7%	94.4%	94.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(c) Solvents

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	East	Rot.	Younger	Middle	Older	Male	Female	Urban	Rural	Maori	Non-Maori	Recent	Medium	Long-term	Total
Yes	8.5%	13.7%	17.5%	9.4%	15.6%	5.3%	14.3%	9.7%	11.2%	14.3%	14.1%	11.3%	8.0%	16.1%	11.9%	12.0%
No	91.5%	86.3%	82.5%	90.6%	84.4%	94.7%	85.7%	90.3%	88.8%	85.7%	85.9%	88.7%	92.0%	83.9%	88.1%	88.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(d) Car batteries

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
Yes	26.1%	42.4%	37.1%	34.2%	36.6%	22.4%	37.6%	27.4%	30.1%	39.2%	38.0%	30.5%	24.1%	25.3%	34.0%	32.4%
No	73.9%	57.6%	62.9%	65.8%	63.4%	77.6%	62.4%	72.6%	69.9%	60.8%	62.0%	69.5%	75.9%	74.7%	66.0%	67.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(e) Other batteries

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
Yes	74.9%	82.2%	79.1%	71.2%	80.2%	74.1%	77.0%	78.0%	77.8%	76.4%	75.6%	78.3%	69.0%	78.2%	78.3%	77.5%
No	25.1%	17.8%	20.9%	28.8%	19.8%	25.9%	23.0%	22.0%	22.2%	23.6%	24.4%	21.7%	31.0%	21.8%	21.7%	22.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Proportion of respondents who have disposed of used engine oil, leftover farm or garden chemicals and solvent, 2000 and 2003:

	2000	**2003**	**Change**
Used engine oil	15.0%	24.4%	9.4%
Leftover farm or garden chemicals	4.0%	5.4%	1.4%
Solvents	7.0%	12.0%	5.0%

Q17 Thinking now about pollution. If you noticed pollution occurring who, if anyone, would you contact?

Part I	Area			Age			Gender	
	West	East	Rot.	Younger	Middle	Older	Male	Female
1 The polluter	2.6%	3.4%	3.2%	5.0%	2.3%	3.5%	4.4%	1.5%
2 Environment Bay of Plenty / Regional Council	46.2%	53.2%	30.2%	33.3%	48.7%	35.2%	45.3%	41.3%
3 District Council / Council	42.3%	31.2%	62.6%	47.5%	43.2%	50.4%	43.7%	47.5%
4 Department of Conservation (DOC)	0.7%	5.4%	1.8%	2.5%	1.9%	1.8%	2.0%	1.9%
5 Ministry of Agriculture and Forestry (MAF)	0.2%	1.0%	0.0%	0.8%	0.0%	0.7%	0.6%	0.0%
6 Voluntary organisations	0.0%	0.5%	0.4%	0.8%	0.2%	0.0%	0.0%	0.4%
7 No one	0.9%	1.5%	0.7%	1.7%	1.1%	0.4%	1.4%	0.6%
8 Other	3.3%	5.9%	0.0%	4.2%	2.3%	3.9%	2.8%	3.0%
Don't know	6.1%	6.3%	6.4%	10.0%	4.5%	8.5%	5.2%	7.2%
Sample	539	205	281	120	620	284	499	526

Note: Not additive as respondents could identify more than one contact. This table has been split into two parts.

Part II	Locality		Ethnicity		Length of residency			
	Urban	Rural	Maori	Non-Maori	Recent	Medium	Long-term	Total
1 The polluter	2.1%	5.5%	4.3%	2.5%	4.5%	3.4%	2.7%	2.9%
2 Environment Bay of Plenty / Regional Council	41.0%	49.8%	30.6%	47.5%	36.4%	40.2%	44.2%	43.2%
3 District Council / Council	48.1%	37.9%	53.7%	42.8%	46.6%	48.3%	45.3%	45.7%
4 Department of Conservation (DOC)	1.7%	2.8%	3.1%	1.4%	0.0%	1.1%	2.2%	2.0%
5 Ministry of Agriculture and Forestry (MAF)	0.3%	0.4%	0.0%	0.4%	0.0%	1.1%	0.2%	0.3%
6 Voluntary organisations	0.1%	0.4%	0.8%	0.0%	0.0%	0.0%	0.2%	0.2%
7 No one	1.0%	0.8%	1.2%	0.9%	1.1%	2.3%	0.8%	1.0%
8 Other	2.7%	3.6%	3.1%	2.9%	5.7%	2.3%	2.7%	2.9%
Don't know	6.4%	5.9%	7.8%	5.7%	9.1%	4.6%	6.1%	6.2%
Sample	771	253	255	766	88	87	847	1025

Note: Not additive as respondents could identify more than one contact. This table has been split into two parts.

Who would you contact if you noticed a problem with pollution, pest plants and pest animals, 2000 and 2003:

	Pollution			Pest plant problems			Pest animal problems		
Contact agency	**2000**	**2003**	**Change**	**2000**	**2003**	**Change**	**2000**	**2003**	**Change**
Environment Bay of Plenty	45.0%	43.2%	-1.8%	40.0%	38.3%	-1.7%	28.0%	27.7%	-0.3%
District council	39.0%	45.7%	6.7%	37.0%	38.2%	1.2%	38.0%	37.7%	-0.3%
Department of Conservation	1.0%	2.0%	1.0%	7.0%	8.4%	1.4%	8.0%	14.3%	6.3%

Q18 Environment Bay of Plenty has a service called the "Pollution Hotline". Before today, have you heard about this service?

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
Yes	22.7%	26.1%	19.9%	15.0%	26.1%	18.1%	26.3%	19.1%	20.7%	28.6%	18.1%	24.1%	15.9%	17.2%	23.7%	22.6%
No/don't know	77.3%	73.9%	80.1%	85.0%	73.9%	81.9%	73.7%	80.9%	79.3%	71.4%	81.9%	75.9%	84.1%	82.8%	76.3%	77.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

	1992	**1997**	**2000**	**2003**
Yes	19.0%	35.0%	27.0%	22.6%
No/don't know	81.0%	65.0%	73.0%	77.4%
Total	100.0%	100.0%	100.0%	100.0%

Q19 Do you recall seeing or hearing any information or advertising material from Environment Bay of Plenty in the last year?

Part I	Area								
	Western			Eastern			Rotorua		
	Unprompted	Prompted	Total	Unprompted	Prompted	Total	Unprompted	Prompted	Total
Radio advertisements for Environment Bay of Plenty	9.1%	10.8%	19.9%	12.7%	24.4%	37.1%	11.7%	10.7%	22.4%
Environment Bay of Plenty's newspaper, the 'Regional Guardian'	34.1%	20.8%	54.9%	25.9%	16.1%	42.0%	23.5%	26.3%	49.8%
Environment Bay of Plenty pamphlet that came with the rates notice	18.2%	26.2%	44.3%	26.3%	22.9%	49.3%	11.4%	24.2%	35.6%
Environment Bay of Plenty advertisements in other newspapers	18.0%	15.8%	33.8%	19.5%	22.4%	42.0%	13.5%	18.5%	32.0%
Articles about Environment Bay of Plenty in other newspapers	15.6%	13.5%	29.1%	13.2%	26.3%	39.5%	11.7%	18.1%	29.9%
Anything else? (specify):	19.3%	n/a	19.3%	8.8%	n/a	8.8%	10.7%	n/a	10.7%
No/ Don't know	16.7%	n/a	16.7%	14.6%	n/a	14.6%	23.8%	n/a	23.8%
Sample			539			205			281

Note: Not specified as respondents could identify multiple categories. This table has been split into 7 parts for formating purposes.

Part II	Age								
	Younger			Middle			Older		
	Unprompted	Prompted	Total	Unprompted	Prompted	Total	Unprompted	Prompted	Total
Radio advertisements for Environment Bay of Plenty	12.5%	8.3%	20.8%	11.9%	16.1%	28.0%	6.7%	9.9%	16.6%
Environment Bay of Plenty's newspaper, the 'Regional Guardian'	12.5%	10.0%	22.5%	29.5%	24.8%	54.3%	36.7%	18.7%	55.5%
Environment Bay of Plenty pamphlet that came with the rates notice	0.8%	6.7%	7.5%	19.2%	26.4%	45.6%	22.6%	29.7%	52.3%
Environment Bay of Plenty advertisements in other newspapers	10.0%	9.2%	19.2%	18.5%	20.8%	39.3%	17.0%	15.2%	32.2%
Articles about Environment Bay of Plenty in other newspapers	6.7%	12.5%	19.2%	15.9%	19.5%	35.4%	13.1%	14.8%	27.9%
Anything else? (specify):	11.7%	n/a	11.7%	16.3%	n/a	16.3%	13.1%	n/a	13.1%
No/ Don't know	42.5%	n/a	42.5%	13.8%	n/a	13.8%	17.7%	n/a	17.7%
Sample			120			621			283

Note: Not specified as respondents could identify multiple categories. This table has been split into 7 parts for formating purposes.

Part III	Gender					
	Male			**Female**		
	Unprompted	**Prompted**	**Total**	**Unprompted**	**Prompted**	**Total**
Radio advertisements for Environment Bay of Plenty	11.8%	15.4%	27.2%	9.3%	11.6%	21.0%
Environment Bay of Plenty's newspaper, the 'Regional Guardian'	25.6%	21.8%	47.4%	33.3%	21.0%	54.3%
Environment Bay of Plenty pamphlet that came with the rates notice	15.6%	26.6%	42.2%	20.2%	23.4%	43.6%
Environment Bay of Plenty advertisements in other newspapers	15.6%	18.6%	34.2%	18.5%	17.1%	35.6%
Articles about Environment Bay of Plenty in other newspapers	11.8%	20.4%	32.2%	16.2%	14.5%	30.7%
Anything else? (specify):	13.6%	n/a	13.6%	16.0%	n/a	16.0%
No/ Don't know	20.4%	n/a	20.4%	16.2%	n/a	16.2%
Sample			500			525

Note: Not specified as respondents could identify multiple categories. This table has been split into 7 parts for formating purposes.

Part IV	Location					
	Urban			**Rural**		
	Unprompted	**Prompted**	**Total**	**Unprompted**	**Prompted**	**Total**
Radio advertisements for Environment Bay of Plenty	10.6%	11.7%	22.3%	10.3%	19.0%	29.2%
Environment Bay of Plenty's newspaper, the 'Regional Guardian'	30.2%	21.8%	52.0%	27.3%	20.2%	47.4%
Environment Bay of Plenty pamphlet that came with the rates notice	17.6%	24.1%	41.8%	19.0%	27.7%	46.6%
Environment Bay of Plenty advertisements in other newspapers	17.8%	16.1%	33.9%	15.0%	23.3%	38.3%
Articles about Environment Bay of Plenty in other newspapers	15.0%	15.6%	30.6%	10.7%	22.9%	33.6%
Anything else? (specify):	15.0%	n/a	15.0%	14.2%	n/a	14.2%
No/ Don't know	18.4%	n/a	18.4%	17.8%	n/a	17.8%
Sample			771			253

Note: Not specified as respondents could identify multiple categories. This table has been split into 7 parts for formating purposes.

Part V	Ethnicity					
	Maori			Non-Maori		
	Unprompted	Prompted	Total	Unprompted	Prompted	Total
Radio advertisements for Environment Bay of Plenty	10.2%	15.0%	25.2%	10.7%	13.1%	23.8%
Environment Bay of Plenty's newspaper, the 'Regional Guardian'	17.3%	20.1%	37.4%	33.6%	21.9%	55.5%
Environment Bay of Plenty pamphlet that came with the rates notice	14.2%	16.1%	30.3%	19.3%	27.8%	47.1%
Environment Bay of Plenty advertisements in other newspapers	11.8%	18.5%	30.3%	18.9%	17.8%	36.7%
Articles about Environment Bay of Plenty in other newspapers	9.8%	20.1%	29.9%	15.5%	16.6%	32.1%
Anything else? (specify):	11.0%	n/a	11.0%	16.2%	n/a	16.2%
No/ Don't know	26.8%	n/a	26.8%	15.4%	n/a	15.4%
Sample			254			766

Note: Not specified as respondents could identify multiple categories. This table has been split into 7 parts for formating purposes.

Part VI	Length of Residence								
	Recent			Medium			Long-term		
	Unprompted	Prompted	Total	Unprompted	Prompted	Total	Unprompted	Prompted	Total
Radio advertisements for Environment Bay of Plenty	8.0%	13.6%	21.6%	12.6%	12.6%	25.3%	10.5%	13.6%	24.1%
Environment Bay of Plenty's newspaper, the 'Regional Guardian'	22.7%	15.9%	38.6%	25.3%	21.8%	47.1%	30.6%	22.0%	52.6%
Environment Bay of Plenty pamphlet that came with the rates notice	14.8%	17.0%	31.8%	14.9%	20.7%	35.6%	18.7%	26.2%	44.9%
Environment Bay of Plenty advertisements in other newspapers	22.7%	13.6%	36.4%	21.8%	12.6%	34.5%	16.0%	18.9%	34.9%
Articles about Environment Bay of Plenty in other newspapers	17.0%	14.8%	31.8%	13.8%	13.8%	27.6%	13.8%	18.0%	31.8%
Anything else? (specify):	13.6%	n/a	13.6%	17.2%	n/a	17.2%	14.8%	n/a	14.8%
No/ Don't know	0.0%	n/a	0.0%	0.0%	n/a	0.0%	0.0%	n/a	0.0%
Sample			88			87			846

Note: Not specified as respondents could identify multiple categories. This table has been split into 7 parts for formating purposes.

Part VII	Total		
	Unprompted	Prompted	Total
Radio advertisements for Environment Bay of Plenty	10.5%	13.5%	24.0%
Environment Bay of Plenty's newspaper, the 'Regional Guardian'	29.6%	21.4%	50.9%
Environment Bay of Plenty pamphlet that came with the rates notice	18.0%	25.0%	42.9%
Environment Bay of Plenty advertisements in other newspapers	17.1%	17.9%	34.9%
Articles about Environment Bay of Plenty in other newspapers	14.0%	17.4%	31.4%
Anything else? (specify):	14.8%	n/a	14.8%
No/ Don't know	18.2%	n/a	18.2%
Sample			1025

Note: Not specified as respondents could identify multiple categories. This table has been split into 7 parts for formating purposes.

Comparison of media recall, 2000 and 2003:

	2000	2003	Change
Radio advertisements	35.0%	24.0%	-11.0%
Regional Guardian	55.0%	50.9%	-4.1%
Pamphlet that came with rates notice	51.0%	42.9%	-8.1%
Advertisements in other newspapers	39.0%	34.9%	-4.1%
Articles in other newspapers	45.0%	31.4%	-13.6%
Other	8.0%	14.8%	6.8%

Q20 Where do you think the funding comes from to operate Environment Bay of Plenty?

Part I	Area			Age			Gender	
	West	East	Rot.	Younger	Middle	Older	Male	Female
1 Rates	69.2%	55.6%	52.7%	32.5%	64.4%	69.0%	63.9%	60.1%
2 Investments (incl. Port of Tauranga shares)	7.4%	2.9%	1.8%	3.3%	5.6%	4.2%	7.0%	3.0%
3 Central government / taxes	29.3%	43.4%	47.3%	57.5%	37.6%	27.1%	36.7%	37.5%
4 Donations	3.0%	0.0%	5.0%	5.8%	3.1%	1.4%	1.4%	4.4%
5 Other	12.4%	3.9%	5.3%	5.0%	10.0%	7.7%	8.4%	9.1%
Don't know	11.5%	14.1%	14.2%	20.8%	9.8%	15.8%	10.8%	14.6%
Sample	539	205	281	120	620	284	499	526

Note: Not additive as respondents could identify more than one source of funding. The table has been split into two parts.

Part II	Locality		Ethnicity		Length of residency			
	Urban	Rural	Maori	Non-Maori	Recent	Medium	Long-term	Total
1 Rates	62.5%	60.5%	44.3%	67.8%	55.7%	56.3%	63.2%	62.0%
2 Investments (incl. Port of Tauranga shares)	4.2%	7.5%	1.2%	6.3%	3.4%	3.4%	5.3%	5.0%
3 Central government / taxes	37.0%	37.5%	46.3%	33.9%	44.3%	39.1%	36.0%	37.1%
4 Donations	3.4%	1.6%	3.1%	2.9%	3.4%	4.6%	2.7%	2.9%
5 Other	9.2%	7.5%	5.5%	9.9%	9.1%	11.5%	8.5%	8.8%
Don't know	13.1%	11.5%	17.6%	11.1%	11.4%	11.5%	13.1%	12.8%
Sample	771	253	255	766	88	87	847	1025

Note: Not additive as respondents could identify more than one source of funding. The table has been split into two parts.

Comparison of perceived funding sources, 2000 and 2003:

	2000	2003	Change
Rates	62.0%	62.0%	0.0%
Investments	1.0%	5.0%	4.0%
Central government / taxes	32.0%	37.1%	5.1%
Donations	2.0%	2.9%	0.9%
Other	1.0%	8.8%	7.8%
Don't know	15.0%	12.8%	-2.2%

Q21 If you want to find out information about the environment in the Bay of Plenty Region, where would you go or look?

Part I	Area			Age			Gender	
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**
1 Environment Bay of Plenty office (phone/visit)	28.0%	45.4%	43.8%	25.0%	38.9%	33.5%	37.1%	34.6%
2 District Council	38.0%	25.9%	29.5%	28.3%	32.7%	36.6%	30.7%	35.7%
3 Department of Conservation	3.7%	8.3%	2.5%	2.5%	5.0%	3.5%	4.0%	4.6%
4 Environment Bay of Plenty website	5.2%	4.9%	3.9%	1.7%	6.5%	2.5%	6.4%	3.2%
5 Internet	9.3%	11.2%	15.3%	20.8%	12.7%	4.2%	12.8%	9.9%
6 Local (visitor) information centre	5.2%	7.3%	3.2%	7.5%	5.3%	3.5%	1.6%	8.4%
7 Library	10.0%	3.9%	8.9%	15.0%	7.6%	7.7%	7.2%	9.7%
8 Other	22.8%	12.2%	14.6%	11.7%	18.7%	20.8%	15.0%	21.7%
Don't know	6.3%	5.9%	6.0%	10.8%	3.9%	9.2%	7.8%	4.6%
Sample	539	205	281	120	620	284	499	526

Note: Not additive as respondents could identify more than one source. This table has been split into two parts.

Part II	Locality		Ethnicity		Length of residency			
	Urban	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
1 Environment Bay of Plenty office (phone/visit)	33.7%	41.9%	38.0%	35.0%	26.1%	28.7%	37.3%	35.8%
2 District Council	34.2%	30.0%	23.9%	36.4%	34.1%	40.2%	32.6%	33.3%
3 Department of Conservation	3.6%	6.3%	4.3%	4.3%	2.3%	2.3%	4.7%	4.3%
4 Environment Bay of Plenty website	4.7%	5.1%	3.1%	5.4%	6.8%	4.6%	4.6%	4.8%
5 Internet	11.8%	9.9%	14.1%	10.4%	10.2%	17.2%	10.9%	11.3%
6 Local (visitor) information centre	5.1%	5.1%	3.5%	5.6%	4.5%	8.0%	4.8%	5.1%
7 Library	9.6%	5.1%	7.5%	8.7%	14.8%	9.2%	7.8%	8.5%
8 Other	20.1%	13.4%	12.9%	20.4%	26.1%	17.2%	17.8%	18.4%
Don't know	6.4%	5.5%	9.0%	5.2%	2.3%	4.6%	6.7%	6.1%
Sample	771	253	255	766	88	87	847	1025

Note: Not additive as respondents could identify more than one source. This table has been split into two parts.

Q22 Have you used a public bus for transport in the last four weeks?

	Area			Age			Gender		Locality		Ethnicity		Length of residency				
	West	East	Rot.	Younger	Middle	Older	Male	Female	Urban	Rural	Maori	Non-Maori	Recent	Medium	Long-term	Total	
Yes	10.2%	2.9%	7.5%	20.0%	4.8%	9.9%	7.4%	8.6%	9.6%	3.2%	9.8%	7.4%	9.1%	12.6%	7.3%	8.0%	*Go to Q22a*
No	89.8%	97.1%	92.5%	80.0%	95.2%	90.1%	92.6%	91.4%	90.4%	96.8%	90.2%	92.6%	90.9%	87.4%	92.7%	92.0%	*Go to Q22b*
Don't know	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Q22a If yes, what was the primary purpose for using it?

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	East	Rot.	Younger	Middle	Older	Male	Female	Urban	Rural	Maori	Non-Maori	Recent	Medium	Long-term	Total
Work	25.0%	16.7%	14.3%	19.0%	36.7%	7.1%	25.0%	18.6%	22.5%	12.5%	20.8%	21.8%	12.5%	40.0%	20.0%	21.5%
Shopping/paying bills	32.7%	16.7%	52.4%	23.8%	33.3%	50.0%	27.8%	44.2%	36.6%	37.5%	29.2%	40.0%	62.5%	10.0%	36.7%	36.7%
Education/polytech/university	1.9%	0.0%	14.3%	14.3%	3.3%	0.0%	5.6%	4.7%	5.6%	0.0%	12.5%	1.8%	0.0%	10.0%	5.0%	5.1%
Social/recreational	15.4%	50.0%	14.3%	38.1%	10.0%	10.7%	27.8%	9.3%	14.1%	50.0%	29.2%	12.7%	12.5%	20.0%	18.3%	17.7%
Hospital/health/doctors	9.6%	0.0%	4.8%	0.0%	6.7%	14.3%	2.8%	11.6%	8.5%	0.0%	4.2%	9.1%	0.0%	10.0%	8.3%	7.6%
Other	15.4%	16.7%	0.0%	4.8%	10.0%	17.9%	11.1%	11.6%	12.7%	0.0%	4.2%	14.5%	12.5%	10.0%	11.7%	11.4%
Don't know	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Q22b If no, why not?

Part I	Area			Age			Gender	
	West	East	Rot.	Younger	Middle	Older	Male	Female
Too lazy/would rather use private vehicle/have work vehicle	73.8%	68.8%	66.9%	70.8%	72.0%	68.4%	70.3%	71.3%
No service	15.3%	34.2%	16.5%	13.5%	20.7%	19.1%	23.2%	16.2%
Hours of operation do not suit	8.3%	4.0%	11.5%	6.3%	10.3%	4.3%	7.6%	8.9%
Routes do not suit	6.0%	7.5%	10.0%	2.1%	8.5%	7.0%	5.6%	9.1%
Bus fares too high	0.4%	2.0%	1.9%	2.1%	1.0%	1.2%	1.1%	1.2%
Bus is not accessible (eg, for wheelchair access)	1.4%	0.5%	1.5%	0.0%	0.5%	3.5%	0.2%	2.3%
Other	18.8%	3.0%	13.1%	12.5%	11.2%	20.7%	11.3%	16.4%
Don't know	0.2%	0.0%	0.8%	2.1%	0.2%	0.0%	0.4%	0.2%
Sample	484	199	260	96	590	256	462	481

Note: Not additive as respondents could identify more than one reason not to use bus services. This table has been split into two parts.

Part II	Locality		Ethnicity		Length of residency			
	Urban	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
Too lazy/would rather use private vehicle/have work vehicle	76.3%	55.1%	64.8%	72.8%	77.5%	76.3%	69.7%	70.8%
No service	7.9%	53.1%	22.2%	18.6%	12.5%	9.2%	21.3%	19.6%
Hours of operation do not suit	9.8%	4.1%	9.1%	8.0%	7.5%	5.3%	8.7%	8.3%
Routes do not suit	8.3%	4.9%	5.2%	8.2%	6.3%	5.3%	7.8%	7.4%
Bus fares too high	1.6%	0.0%	2.2%	0.8%	0.0%	3.9%	1.0%	1.2%
Bus is not accessible (eg, for wheelchair access)	1.3%	1.2%	0.9%	1.4%	0.0%	1.3%	1.4%	1.3%
Other	17.5%	3.7%	6.1%	16.5%	15.0%	14.5%	13.8%	13.9%
Don't know	0.3%	0.4%	0.9%	0.1%	1.3%	0.0%	0.3%	0.3%
Sample	697	245	230	709	80	76	785	943

Q23 Thinking about why you live in the Bay of Plenty, how important is the natural environment in your reasons for living here? On a scale of 1 to 5 is it:

	Area			Age			Gender		Locality		Ethnicity		Length of residency			
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
Very important	70.9%	72.7%	57.6%	49.2%	72.0%	65.7%	66.5%	68.8%	64.6%	76.9%	63.4%	69.2%	73.6%	64.4%	67.4%	67.6%
Important	22.4%	19.0%	29.3%	33.1%	20.5%	26.5%	23.8%	23.4%	25.2%	18.7%	22.8%	23.7%	17.2%	26.4%	24.0%	23.6%
Neither important nor unimportant	3.9%	5.4%	8.3%	8.5%	4.9%	5.3%	5.1%	5.7%	6.5%	2.0%	8.7%	4.3%	4.6%	5.7%	5.5%	5.4%
Not very important	2.2%	1.5%	2.5%	6.8%	1.3%	2.1%	3.2%	1.1%	2.5%	1.2%	3.5%	1.7%	2.3%	1.1%	2.1%	2.2%
Not important at all	0.6%	1.0%	1.1%	1.7%	1.0%	0.0%	1.0%	0.6%	0.8%	0.8%	1.2%	0.7%	2.3%	1.1%	0.6%	0.8%
Don't know	0.0%	0.5%	1.1%	0.8%	0.3%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.0%	1.1%	0.4%	0.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

	2000	**2003**	**Change**
Very important	62.0%	67.6%	5.6%
Important	26.0%	23.6%	-2.4%
Neither important nor unimportant	8.0%	5.4%	-2.6%
Not very important	2.0%	2.2%	0.2%
Not important at all	1.0%	0.8%	-0.2%
Don't know	0.0%	4.0%	4.0%

Q24 Gender of respondent:

	Area			Age			Locality		Ethnicity		Length of residency			
	West	East	Rot.	Younger	Middle	Older	Urban	Rural	Maori	Non-Maori	Recent	Medium	Long-term	Total
Male	50.1%	48.3%	46.3%	53.3%	47.6%	49.3%	47.6%	52.2%	51.4%	48.0%	52.3%	56.3%	47.6%	48.7%
Female	49.9%	51.7%	53.7%	46.7%	52.4%	50.7%	52.4%	47.8%	48.6%	52.0%	47.7%	43.7%	52.4%	51.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Q25 Age group of respondent:

	Area			Gender		Locality		Ethnicity		Length of residency			
	West	East	Rot.	Male	Female	Urban	Rural	Maori	Non-Maori	Recent	Medium	Long-term	Total
Younger	7.8%	13.2%	18.2%	12.8%	10.7%	12.2%	10.3%	24.3%	7.6%	15.9%	11.5%	11.2%	11.7%
Middle	55.1%	71.2%	63.2%	59.1%	61.9%	58.8%	65.9%	60.4%	60.6%	63.6%	65.5%	59.7%	60.5%
Older	37.1%	15.6%	18.6%	28.1%	27.4%	29.1%	23.8%	15.3%	31.9%	20.5%	23.0%	29.0%	27.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Q26 Which ethnic group do you mainly identify with?

	Area			Age			Gender		Locality		Length of residency			
	West	East	Rot.	Younger	Middle	Older	Male	Female	Urban	Rural	Recent	Medium	Long-term	Total
Maori	6.9%	43.9%	45.9%	51.7%	24.9%	13.8%	26.3%	23.8%	21.8%	34.3%	11.4%	19.5%	26.8%	25.0%
Non Maori	93.1%	56.1%	54.1%	48.3%	75.1%	86.2%	73.7%	76.2%	78.2%	65.7%	88.6%	80.5%	73.2%	75.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Q27 Do you live in an urban (city/town) or in a rural area?

	Area			Age			Gender		Ethnicity		Length of residency			
	West	East	Rot.	Younger	Middle	Older	Male	Female	Maori	Non-Maori	Recent	Medium	Long-term	Total
Urban	81.8%	55.9%	76.9%	78.3%	73.2%	78.9%	73.5%	77.0%	66.1%	78.5%	76.1%	78.2%	75.1%	75.3%
Rural	18.2%	44.1%	23.1%	21.7%	26.8%	21.1%	26.5%	23.0%	33.9%	21.5%	23.9%	21.8%	24.9%	24.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Q28 How long have you lived in the Bay of Plenty Region?

	Area			Age			Gender		Locality		Ethnicity		
	West	**East**	**Rot.**	**Younger**	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Total**
Less than 2 years	12.2%	3.4%	5.4%	11.8%	9.0%	6.3%	9.2%	8.0%	8.7%	8.4%	4.0%	10.2%	8.6%
2-4 years	10.4%	8.3%	5.0%	8.4%	9.2%	7.0%	9.8%	7.3%	8.8%	7.6%	6.7%	9.1%	8.5%
5 or more years	77.4%	88.3%	89.6%	79.8%	81.7%	86.6%	80.9%	84.7%	82.5%	84.1%	89.3%	80.7%	82.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Household location of respondent:

	Age			Gender		Locality		Ethnicity		Length of residency			
	Younger	**Middle**	**Older**	**Male**	**Female**	**Urban**	**Rural**	**Maori**	**Non-Maori**	**Recent**	**Medium**	**Long-term**	**Total**
Western Bay of Plenty	35.0%	47.9%	70.4%	54.1%	51.1%	57.2%	38.7%	14.5%	65.3%	75.0%	64.4%	49.2%	52.6%
Eastern Bay of Plenty	22.5%	23.5%	11.3%	19.8%	20.2%	14.8%	35.6%	35.3%	15.0%	8.0%	19.5%	21.4%	20.0%
Rotorua	42.5%	28.5%	18.3%	26.1%	28.7%	28.0%	25.7%	50.2%	19.7%	17.0%	16.1%	29.4%	27.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Appendix 3 - 'Other' Categories Defined

Q2 What do you think Environment Bay of Plenty does? – other

Other role	Frequency	Percent
Unrelated comments	13	1.4%
Doesn't do much	8	0.9%
Conservation	3	0.3%
Bureaucrats	2	0.2%
Development	2	0.2%
Liase with District Council	2	0.2%
Policy decisions/planning	2	0.2%
Walkways	2	0.2%
Community organisation	1	0.1%
Coordinate different projects around the country.	1	0.1%
Environment BOP through Sport BOP.	1	0.1%
Find trouble to create jobs for themselves.	1	0.1%
Fisheries.	1	0.1%
Forests.	1	0.1%
Islands.	1	0.1%
Keep place safe.	1	0.1%
Like DOC.	1	0.1%
Manages non-urban part of the environment.	1	0.1%
Public areas.	1	0.1%
Restore damaged areas.	1	0.1%
Roadside rest area management.	1	0.1%
Scientific exploration.	1	0.1%
Surveying.	1	0.1%
Taken over some of the functions of the Council. Unnecessary duplication.	1	0.1%
Trees. Replanting.	1	0.1%
Works with Marae.	1	0.1%
World policies from UN.	1	0.1%
Total	**53**	**5.9%**

Note: Respondents had the opportunity to identify up to two other environmental issues.

Q3 I'm going to read a list of environmental issues. Please say whether you feel each of these is a big problem, some problem, or no problem in the Bay of Plenty region – other

Other environmental issue	Frequency	Percent
Sea lettuce/seaweed	19	1.9%
Lake water quality/lake weed/algae	9	0.9%
Noise pollution/Noise pollution from cars and trucks	9	0.9%
Mangroves.	7	0.7%
Lack of opportunity, awareness and encouragement for recycling	6	0.6%
Dumping of car bodies	5	0.5%
Chemical residue/dumping/burning and toxic waste	4	0.4%
General litter.	4	0.4%
New subdivisions and urban growth	4	0.4%
Traffic congestion/density	4	0.4%
Biosecurity	3	0.3%
Animal waste on reserves/domestic dogs.	2	0.2%
Landfill and sewage treatment (smells/noise)	2	0.2%
Ships in the harbour.	2	0.2%
Sulphur.	2	0.2%
Trains/monorail	2	0.2%
Air quality problems are a huge issue.	1	0.1%
Council not constant.	1	0.1%
Courtney Road issue, storm water flooding.	1	0.1%
Deforestation.	1	0.1%
Fishing.	1	0.1%
Freight trains too heavy now.	1	0.1%
Inconsiderate use of resources.	1	0.1%
Level of control in a stream.	1	0.1%
Light pollution from the sawmill.	1	0.1%
Oil disposal	1	0.1%
People in charge of EBOP.	1	0.1%
People.	1	0.1%
Pilot Bay area.	1	0.1%
Plant problems.	1	0.1%
Policy regarding disposal of drums out of laser printers.	1	0.1%
Pollution of marine environment.	1	0.1%
River.	1	0.1%
Settling pond. Concerned at smell and consent.	1	0.1%
Silting of Tauranga Harbour.	1	0.1%
Smoking.	1	0.1%
Stock effluent on roads.	1	0.1%
The removal of willows at Horomanga River.	1	0.1%
Total	**106**	**10.3%**

Q6 Are there any activities that in your opinion are damaging the land in the region? – other

Other land damaging activity	Frequency	Percent
Population growth/increased development	19	3.9%
Traffic/trucks/roading	14	2.9%
Vehicles/motorbikes in forests/4x4 off-roading	14	2.9%
People/irresponsibility	11	2.3%
Pest plants/weeds (incl. Wild kiwifruit, pines).	11	2.3%
Pest animals	7	1.5%
Sewage/septic tanks	6	1.2%
Industry	4	0.8%
Acts of nature/storms/thermal eruptions	3	0.6%
Barriers to recycling/landfill fees	3	0.6%
Dumping of waste	3	0.6%
Fires	3	0.6%
Land/water management	3	0.6%
Run off	3	0.6%
Forestry	2	0.4%
Land development for kiwifruit plantings/kiwifruit contouring	2	0.4%
Barging.	1	0.2%
Causeway at Allan Road.	1	0.2%
Cutting trees back on Tarawera riverbanks.	1	0.2%
Dog excretion.	1	0.2%
Drainage.	1	0.2%
Earthworks.	1	0.2%
Jet boats.	1	0.2%
Lack of information.	1	0.2%
Lack of rubbish bins on side of the road.	1	0.2%
Leasing land for crops.	1	0.2%
No green belts.	1	0.2%
Parliament.	1	0.2%
Pleasure boating.	1	0.2%
Settling pond.	1	0.2%
Storm water.	1	0.2%
Wall at Rotorua lakefront. Weed hits the wall and goes back.	1	0.2%
Total sample	**120**	**24.9%**

Note: Not additive as some comments could be coded into multiple categories.

Q7 Are there any activities that in your opinion are damaging the sea, coastline, beach or harbour in the region? – other activities

Other sea and coast damaging activity	Frequency	Percent
Weed/algae/sea lettuce	41	8.1%
Humans/recreational users/campers/holiday makers	20	3.9%
Boats/water activities involving vehicles/jet skis	14	2.8%
Erosion/landslides	13	2.6%
Mangroves	9	1.8%
Chemicals	6	1.2%
Over development	6	1.2%
Natural events/weather	4	0.8%
Industry	3	0.6%
Animals	2	0.4%
Lack of rubbish bins	2	0.4%
Marinas	2	0.4%
Shellfish contamination	2	0.4%
Argument over foreshore.	1	0.2%
Divers leaving fish heads.	1	0.2%
Dumping kiwifruit.	1	0.2%
Environment Bay of Plenty are shirking their duties in this area.	1	0.2%
Fishing nets being washed up.	1	0.2%
Iwi and hapu, and environment. Lack of consultation.	1	0.2%
Lack of planting.	1	0.2%
Lack of prevention or control.	1	0.2%
Maketu Estuary real problem.	1	0.2%
Netting.	1	0.2%
Oil spills.	1	0.2%
Opening up land carelessly.	1	0.2%
Planting dunes and roping off.	1	0.2%
Protesters.	1	0.2%
Putting something on wood so that it doesn't rot and letting it go into the rivers.	1	0.2%
Reclaim land.	1	0.2%
Sandpit at Mount Maunganui. How much more can it take with deep foundations.	1	0.2%
Stock banks getting worked away.	1	0.2%
Taking shingle out of rivers.	1	0.2%
Waste tipped down drains.	1	0.2%
Water supply.	1	0.2%
Water waste.	1	0.2%
Total sample	**138**	**27.2%**

Note: Not additive as some comments could be coded into multiple categories.

Q8 Is there any lake or river that you consider to be polluted? - other

Other polluted rivers	Frequency	Percent
Utuhina.	2	0.3%
Waimapu.	2	0.3%
Black Stream on the road to Whakatane.	1	0.1%
Bledisloe Park Inlet.	1	0.1%
By Omokoroa(?)	1	0.1%
Harrisons cut rubbish etc.	1	0.1%
Kawerau.	1	0.1%
Matipihi River off highway 29.	1	0.1%
Tarawa.	1	0.1%
Uetara Stream.	1	0.1%
Waiaua	1	0.1%
Waikato (Reporoa district)	1	0.1%
Waikato Estuary.	1	0.1%
Waikato.	1	0.1%
Waioweka	1	0.1%
Welcome Bay.	1	0.1%
Whangaparoa.	1	0.1%
Total	19	2.7%

Other polluted lakes	Frequency	Percent
All Rotorua lakes.	3	0.4%
Aniwhenua.	1	0.1%
Kawerau.	2	0.3%
Lake Atiamuri.	1	0.1%
Lake Kawerau/Paremahana.	1	0.1%
Little Waihi	1	0.1%
McClarren Lake.	1	0.1%
Total	**10**	**1.4%**

Q8b What do you feel is the source of the pollution there? – other

Other sources of lake/river pollution	Frequency	Percent
Lake-weed/sea-weed	66	9.4%
Algal bloom/algae	44	6.3%
Increased development/population	12	1.7%
Lack of monitoring/action	5	0.7%
Man made problems	5	0.7%
Storm water	5	0.7%
Weather	5	0.7%
Rubbish	4	0.6%
Stagnant water	4	0.6%
Geothermal activity	3	0.4%
Animals	2	0.3%
Lack of oxygen	2	0.3%
Control gates.	1	0.1%
Dams.	1	0.1%
Dredging.	1	0.1%
Erosion.	1	0.1%
Ground seepage.	1	0.1%
Ill enforced rules.	1	0.1%
Lack of wetland.	1	0.1%
Landfill dragging river sand out.	1	0.1%
Need more trees.	1	0.1%
Noise pollution	1	0.1%
Petrol.	1	0.1%
Pollen.	1	0.1%
Removing willows from bank.	1	0.1%
Use.	1	0.1%
Total sample	**161**	**23.0%**

Note: Not additive as some comments could be coded into multiple categories.

Q9 Are there any activities that in your opinion are damaging the air quality in the region? – other activities

Other air quality damaging activity	Frequency	Percent
Industry/factories	10	1.9%
Airport/airplanes	8	1.5%
Geothermal emissions	7	1.3%
Motor racing/boy racers	6	1.1%
Noise pollution	6	1.1%
Everything man does	5	0.9%
Sewerage/sewerage plant	5	0.9%
Burning tar/plastics/treated timber/tyres	3	0.6%
Smokers	3	0.6%
Forestry	2	0.4%
Progress/growth	2	0.4%
Traffic/cars/tractors	2	0.4%
Bush fires.	1	0.2%
CFC's.	1	0.2%
Coal ships.	1	0.2%
Farming.	1	0.2%
Growth.	1	0.2%
Sea lettuce.	1	0.2%
Toxic wastes.	1	0.2%
Total sample	**62**	**11.7%**

Note: Not additive as some comments could be coded into multiple categories.

Q10 What natural hazard do you see as being MOST likely to endanger you or your property – other

Other natural hazard	Frequency	Percent
Erosion.	2	0.2%
Trees falling.	2	0.2%
Atmospheric pollution.	1	0.1%
Drainage problem from hills.	1	0.1%
Drying up of water tables.	1	0.1%
Feral animals.	1	0.1%
Methane gas.	1	0.1%
Not enough trees.	1	0.1%
Over population.	1	0.1%
Sea erosion.	1	0.1%
Severe drought.	1	0.1%
Total	**13**	**1.3%**

Q11 Have you noticed pest plant problems anywhere in the Bay of Plenty region? – Which ones do you think are causing problems – other

Other plant pest	Frequency	Percent
Blackberry	45	7.4%
Kiwifruit	36	5.9%
Tobacco plant.	21	3.4%
Broom	13	2.1%
Thistle.	8	1.3%
Wattle	8	1.3%
Sea lettuce	7	1.1%
Morning glory.	6	1.0%
Mangroves.	5	0.8%
Nodding thistle.	5	0.8%
Buddleia	4	0.7%
Barberry	3	0.5%
Convolvulus.	3	0.5%
Oxalis.	3	0.5%
Banana passionfruit.	2	0.3%
Californian thistles.	2	0.3%
Clematis.	2	0.3%
Datura.	2	0.3%
Deadly nightshade.	2	0.3%
Duck weed.	2	0.3%
Grasses.	2	0.3%
Ink weed.	2	0.3%
Ladder fern.	2	0.3%
Lake weed.	2	0.3%
Lupin.	2	0.3%
Toi toi	2	0.3%
Willow trees.	2	0.3%
Anything not native.	1	0.2%
Apple.	1	0.2%
Bamboo.	1	0.2%
Barley grass.	1	0.2%
Beet red, five fingered plant.	1	0.2%
Big type of shrub with furry leaf that grows rampantly.	1	0.2%
Black wattle.	1	0.2%
Calico plant.	1	0.2%
Caypot.	1	0.2%
Choko.	1	0.2%
Climbing vines.	1	0.2%
Creeping thing in waterways at Kaituna River.	1	0.2%
Cypress.	1	0.2%
Fern-type plant.	1	0.2%
Flannel plant.	1	0.2%
Grandfathers whiskers.	1	0.2%
Hiasis.	1	0.2%

Invasive creepers.	1	0.2%
Ipomoea.	1	0.2%
Ivy.	1	0.2%
Kikuyu.	1	0.2%
Mexican daisy.	1	0.2%
Monkey nut tree.	1	0.2%
Nandina.	1	0.2%
Onehunga weed.	1	0.2%
Poisonous ones nursery sells.	1	0.2%
Pollen from pine.	1	0.2%
Pollen.	1	0.2%
Prince of wales feathers.	1	0.2%
Purple flower climber.	1	0.2%
Purple flower vine.	1	0.2%
Purple oxalis.	1	0.2%
Scotts thistle.	1	0.2%
Sedge.	1	0.2%
Stinging nettle.	1	0.2%
Summer grasses.	1	0.2%
Thorn.	1	0.2%
Tuk.	1	0.2%
Type of daisy.	1	0.2%
Type of vine.	1	0.2%
Vabalium.	1	0.2%
Vines.	1	0.2%
Weeds out of control.	1	0.2%
Weeds.	1	0.2%
With yellow flower.	1	0.2%
Total sample	**194**	**31.8%**

Note: Not additive as some comments could be coded into multiple categories.

Q12 Who would you contact if you noticed a problem with pest plants? – other

Other contact for pest plants	Frequency	Percent
Clean up ourselves.	8	0.8%
Police.	3	0.3%
Contractor/private contractor	2	0.2%
Garden centre.	2	0.2%
Whanau/family/friend	2	0.2%
Community service.	1	0.1%
Environment Maketu.	1	0.1%
F.R.I.	1	0.1%
Farming shop for direction (Anchormart).	1	0.1%
Information centre.	1	0.1%
Look in the yellow pages.	1	0.1%
NIWA, Opus Consultants.	1	0.1%
Noxious weed inspection.	1	0.1%
Pest control board or noxious weed officer.	1	0.1%
Some pest control thing.	1	0.1%
Wood inspector.	1	0.1%
Total	**28**	**2.7%**

Q13 Pest animals causing problems – other

Other pest animal	Frequency	Percent
Ants	6	1.1%
Swans.	5	0.9%
Cockroaches.	4	0.7%
Peacocks.	3	0.6%
Domestic cats.	2	0.4%
Myna birds.	2	0.4%
Pheasants.	2	0.4%
Pukeko.	2	0.4%
Seagulls.	2	0.4%
White tailed spider.	2	0.4%
Blackbirds.	1	0.2%
Canadian geese.	1	0.2%
Cockroaches.	1	0.2%
Ducks.	1	0.2%
Feral animals.	1	0.2%
Mosquitos.	1	0.2%
Mynas.	1	0.2%
Shags.	1	0.2%
Spider.	1	0.2%
Spurwing plovers.	1	0.2%
Swans.	1	0.2%
Total sample	**35**	**6.5%**

Note: Not additive as some comments could be coded into multiple categories.

Q14 Who would you contact if you noticed a problem with pest animals? – other

Other contact for pest animals	Frequency	Percent
SPCA.	18	1.8%
Ministry of Agriculture and Forestry	17	1.7%
Handle it themselves	12	1.2%
Pest control	9	0.9%
Animal control/ranger	8	0.8%
Police.	6	0.6%
Private contractor/local hunter/trapper	5	0.5%
Family/friend	4	0.4%
Fish and Game.	2	0.2%
Health Department.	2	0.2%
Rabbit board (no longer exists)	2	0.2%
Environment Maketu	1	0.1%
Exterminator.	1	0.1%
Information.	1	0.1%
Maori Trust Officer.	1	0.1%
Nonsensical	1	0.1%
Pest people out of the yellow pages.	1	0.1%
Phone book.	1	0.1%
Total	**92**	**9.0%**

Q15a How would you dispose of used engine oil – other

Other method of disposal	Frequency	Percent
Store it.	6	0.6%
Throw it out.	1	0.1%
Use it all.	1	0.1%
Not specified	6	0.6%
Total	**14**	**1.4%**

Q15b How would you dispose of leftover farm or garden chemicals – other

Other method of disposal	Frequency	Percent
Use it all	26	2.5%
Store it	17	1.7%
Dispose as per label.	1	0.1%
Paddock effluent.	1	0.1%
Professionally.	1	0.1%
Not specified	15	1.5%
Total	**61**	**6.0%**

Q15c How would you dispose of leftover solvents – other

Other method of disposal	Frequency	Percent
Use it all	21	2.0%
Store it	19	1.9%
Evaporate it	3	0.3%
I think on garden. Has very little.	1	0.1%
More to get rid of.	1	0.1%
Professionally.	1	0.1%
They disappear anyway.	1	0.1%
Use waterbased	1	0.1%
Not specified	17	1.7%
Total	**65**	**6.3%**

Q15d How would you dispose of leftover car batteries – other

Other method of disposal	Frequency	Percent
Store it	11	1.1%
Land fill hole.	1	0.1%
Not specified	1	0.1%
Total	**13**	**1.3%**

Q17 Thinking now about pollution. If you noticed pollution occurring who, if anyone, would you contact?

Other contact	Frequency	Percent
Police	13	1.3%
MP	3	0.3%
OSH	2	0.2%
Family/whanau/hapu	2	0.2%
Citizens Advice Bureau	1	0.1%
Look in phonebook	1	0.1%
LTSA	1	0.1%
Fire brigade	1	0.1%
Media	1	0.1%
Public Health Protection Officer	1	0.1%
Community Service.	1	0.1%
Harbour Master if sea related.	1	0.1%
Total	**28**	**2.7%**

Q19 Do you recall seeing or hearing any information or advertising material from Environment Bay of Plenty in the last year? – other

Other media	Frequency	Percent
Flyer/pamphlet/mail outs/brochures	42	4.1%
Television	18	1.8%
Through family/whanau/work/word of mouth	14	1.4%
Billboards/signs	12	1.2%
Through children/school/kids club	9	0.9%
Newsletters	6	0.6%
Phonebook/local directory	5	0.5%
Advertising on vehicles/buses	4	0.4%
Displays	4	0.4%
Articles in publications other than newspapers	3	0.3%
Meetings	3	0.3%
Pollution hotline	3	0.3%
Public notices/noticeboards	3	0.3%
Stickers/magnets	3	0.3%
Air pollution measuring device on roadside.	2	0.2%
Presentation/guest speaker	3	0.3%
A form when you voted for the Council.	1	0.1%
Beaches.	1	0.1%
Books.	1	0.1%
BOP papers.	1	0.1%
Coastcare.	1	0.1%
Community grants.	1	0.1%
Council office.	1	0.1%
Crippled Children's Society BOP total mobility scheme.	1	0.1%
Discussed at Environment Maketu.	1	0.1%
Elections.	1	0.1%
Enviro challenge.	1	0.1%
Environment week.	1	0.1%
Great Job - Folder.	1	0.1%
In office of Environment Bay of Plenty.	1	0.1%
Job vacancies.	1	0.1%
Magazine handout.	1	0.1%
Manawhenua Landcare.	1	0.1%
On waiting table.	1	0.1%
Public library.	1	0.1%
Rat traps.	1	0.1%
Rubbish bags.	1	0.1%
Rubbish, pamphlet and personal visit.	1	0.1%
Story about sand dunes.	1	0.1%
Went on a course about clean water.	1	0.1%
Whale watch info.	1	0.1%
Yearly booklet.	1	0.1%
Total sample	**152**	**14.8%**

Note: Not additive as some comments could be coded into multiple categories.

Q20 Where do you think the funding comes from to operate Environment Bay of Plenty – other

Other source of funding	Frequency	Percent
Councils	59	5.8%
Charges for permits/fees for fishing licences/fines	9	0.9%
Lotteries/grants/sponsors/charities	7	0.7%
Industries/businesses	3	0.3%
Fundraising/private functions	2	0.2%
Farmers.	1	0.1%
From DOC	1	0.1%
Harbour board.	1	0.1%
Interested parties.	1	0.1%
Ministry of the Environment.	1	0.1%
Road tolls. Route K.	1	0.1%
Stolen property, stolen land.	1	0.1%
Tanning community.	1	0.1%
Trust fund.	1	0.1%
Trustpower.	1	0.1%
Total	**90**	**8.8%**

Q21 If you want to find out information about the environment in the Bay of Plenty region, where would you go or look? – other

Other source of information	Frequency	Percent
Phone book/local directory	148	14.4%
Citizens Advice Bureau	18	1.8%
Newspaper	12	1.2%
Appropriate Government departments	4	0.4%
Ask someone/family	2	0.2%
Blurb in mail.	1	0.1%
BOP Coast Care.	1	0.1%
Fish and Game.	1	0.1%
Go to a meeting.	1	0.1%
Magazine.	1	0.1%
Secretary of Maori organisation dealing within the Bay of Plenty.	1	0.1%
Sigma Consultants.	1	0.1%
Sort it out himself. Has spent years learning about the environment.	1	0.1%
Tourism Bay of Plenty.	1	0.1%
Tramping club.	1	0.1%
Total sample	**189**	**18.4%**

Note: Not additive as some comments could be coded into multiple categories.

Q22 Have you used a public bus for transport in the last four weeks?

Q22a Purpose for using a bus – other

Other purpose	Frequency	Percent
Car broken down.	2	2.4%
Daily/weekly use due to eyesight problem.	1	1.2%
Don't have a car.	1	1.2%
From Mount to Tauranga.	1	1.2%
Mobility.	1	1.2%
Pick up car that had been serviced.	1	1.2%
Returning from holiday.	1	1.2%
To go anywhere.	1	1.2%
Total	**9**	**11.0%**

Q22b Reasons for not using a public bus – other

Other reason	Frequency	Percent
Prefer to walk	43	4.6%
Bus not convenient	22	2.3%
No need to use a bus	21	2.2%
Not aware of bus routes/timetable/service	9	1.0%
Prefer to cycle	7	0.7%
Medical reasons	4	0.4%
Have children/no child restraints on buses	5	0.5%
Work from home	4	0.4%
Buses unreliable	3	0.3%
Family/friends provide transport	4	0.4%
Takes dogs	2	0.2%
Been out of town.	1	0.1%
Don't think the system in Rotorua is very good.	1	0.1%
Don't travel.	1	0.1%
Got a mobility scooter.	1	0.1%
No money.	1	0.1%
Sometimes work.	1	0.1%
Taxi.	1	0.1%
Total	**131**	**13.9%**