

6 KNOWLEDGE OF ENVIRONMENTAL ISSUES

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

Note: The rating scale used in 2006 and 2013 for the questions in this section differs from the rating scale used in 2000. In particular, in the previous measure, a three point scale was used (agree, disagree, depends), whereas in 2006 and 2013, a five point scale was used (strongly agree, agree, disagree, strongly disagree, neither agree nor disagree). Therefore, comparisons over time should be interpreted with caution.

Key findings are:

- Results suggest that some respondents have a lack of understanding or hold misperceptions of the causes of some environmental problems in the region.
- More than half (56%) of respondents agree (correctly) that pollution in the region's rivers and streams comes mainly from farmland, a similar proportion to 2006 (55%), therefore a similar understanding amongst respondents of the main source of water pollution. Māori respondents are significantly more likely to agree with this statement (66%), as are Taupo respondents (71%) and urban respondents (58%). Rural respondents are significantly more likely to disagree (35%).
- Just under half (49%) of respondents agree (incorrectly) that pollution in the region's rivers and streams comes mainly from industry, with Waikato respondents (66%) most likely to agree with this. This is a misperception as industrial discharges are mostly well treated and together represent a minor proportion of the loads of contaminants carried by the rivers and streams.
- Opinions are mixed as to whether discharges of treated human sewage are a major cause of pollution in Waikato waterways, with 39 per cent of respondents agreeing with this statement. The major cause of pollution in the Waikato region's waterways is from run off from agricultural land, however, for Māori respondents, discharge of treated human sewage into waterways is culturally inappropriate and this is reflected in the demographic comparisons, with 61 per cent of Māori agreeing with this statement.

6.1 POLLUTION IN RIVERS AND STREAMS MAINLY FROM FARMLAND

Respondents were asked whether they agree or disagree with the statement that *pollution in the region's river and streams comes mainly from farmland*.

6.1.1 OVERALL RESULT

More than half (56%) of respondents agree that pollution in the region's river and streams comes mainly from farmland, 17 per cent strongly agree with the statement, and a further 39 per cent agree. In contrast, 29 per cent of respondents disagree with this statement (25% disagreeing, 4% strongly disagreeing). Four per cent of respondents report being unsure as to whether pollution in the region's rivers and streams comes mainly from farmland.

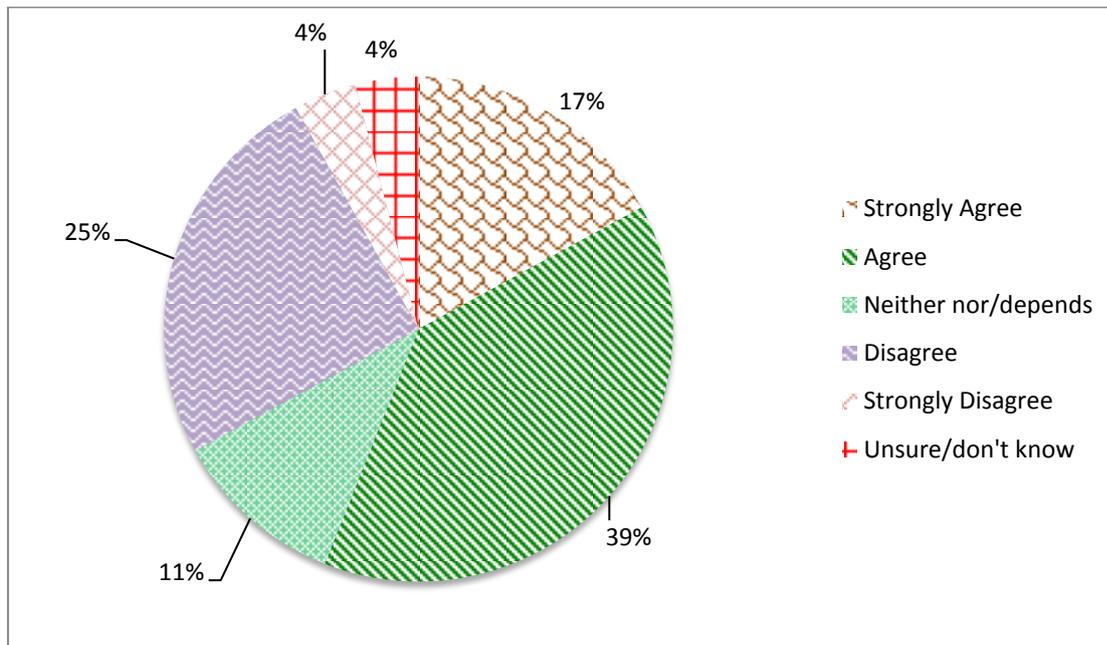


Figure 6-1: Pollution in Rivers and Streams Coming Mainly From Farmland

6.1.2 COMPARISON WITH PREVIOUS YEARS

Disagreement that water pollution in the region's rivers and streams comes mainly from farmland has decreased since 2006 (total disagree down from 37% to 29%). The proportion of the region's respondents who agree with this statement has remained similar (total agree for 2013 was 56% and 2006 was 55%). While the proportion of respondents who neither agree nor disagree shows an increase on the 2006 findings (from 2% in 2006 to 11% in 2013).

Table 6-1: Changes in Agreement with Pollution in Rivers and Streams Coming Mainly from Farmland 2000 to 2013

	2000 %	2006 %	2013 %	Change 00-13	Change 06-13
Strongly agree	N/A	16	17	N/A	+1
Agree	N/A	39	39	N/A	-
Total Agree	35	55	56	+21	+1
Neither agree nor disagree/depends	8	2	11	+3	+9
Disagree	N/A	30	25	N/A	-5
Strongly disagree	N/A	7	4	N/A	-3
Total Disagree	49	37	29	-20	-8
Unsure/don't know	7	6	4	-3	-2
Base (respondents)	1873	1000	1005		

N/A denotes code not used in previous years. This trend is shown below (over the page).

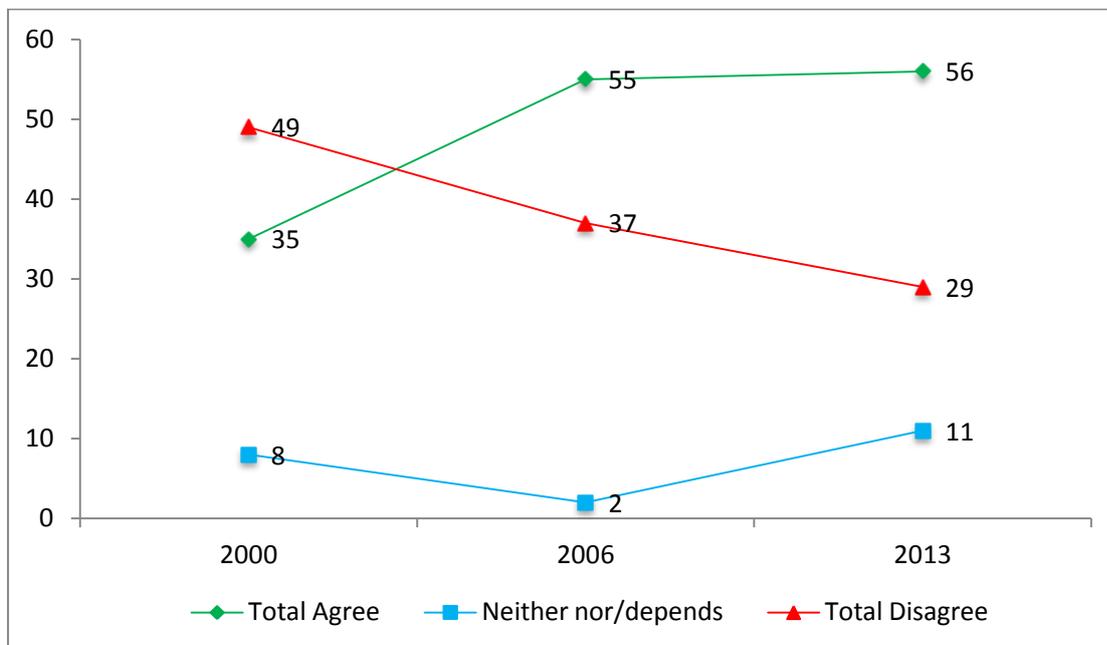


Figure 6-2: Agreement with Pollution in Rivers and Streams Coming Mainly from Farmland 2000 to 2013

6.1.3 DEMOGRAPHIC VARIATION

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

- Māori (66%).

Respondents who are significantly more likely (than the regional average) to **neither agree nor disagree (depends)** that pollution in the region's rivers and streams comes mainly from farmland are those who are:

- in a household with an income of \$30,000 or less per annum (15%).

Respondents who are significantly more likely (than the regional average) to **disagree** that pollution in the region's rivers and streams comes mainly from farmland are those who are:

- aged between 30 and 39 years (37%)
- working as farmers (47%).

6.1.4 GEOGRAPHIC VARIATION

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

- Respondents living in Taupo (72%) or in urban areas (58%) are more likely (than the regional average) to **agree** that pollution in the region's rivers and streams comes mainly from farmland.
- Respondents living in Matamata-Piako (19%) are more likely (than the regional average) to **neither agree nor disagree (depends)** that pollution in the region's rivers and streams comes mainly from farmland.
- Respondents living in Waitomo (39%) or rural respondents (35%) are more likely (than the regional average) to **disagree** that pollution in the region's rivers and streams comes mainly from farmland.

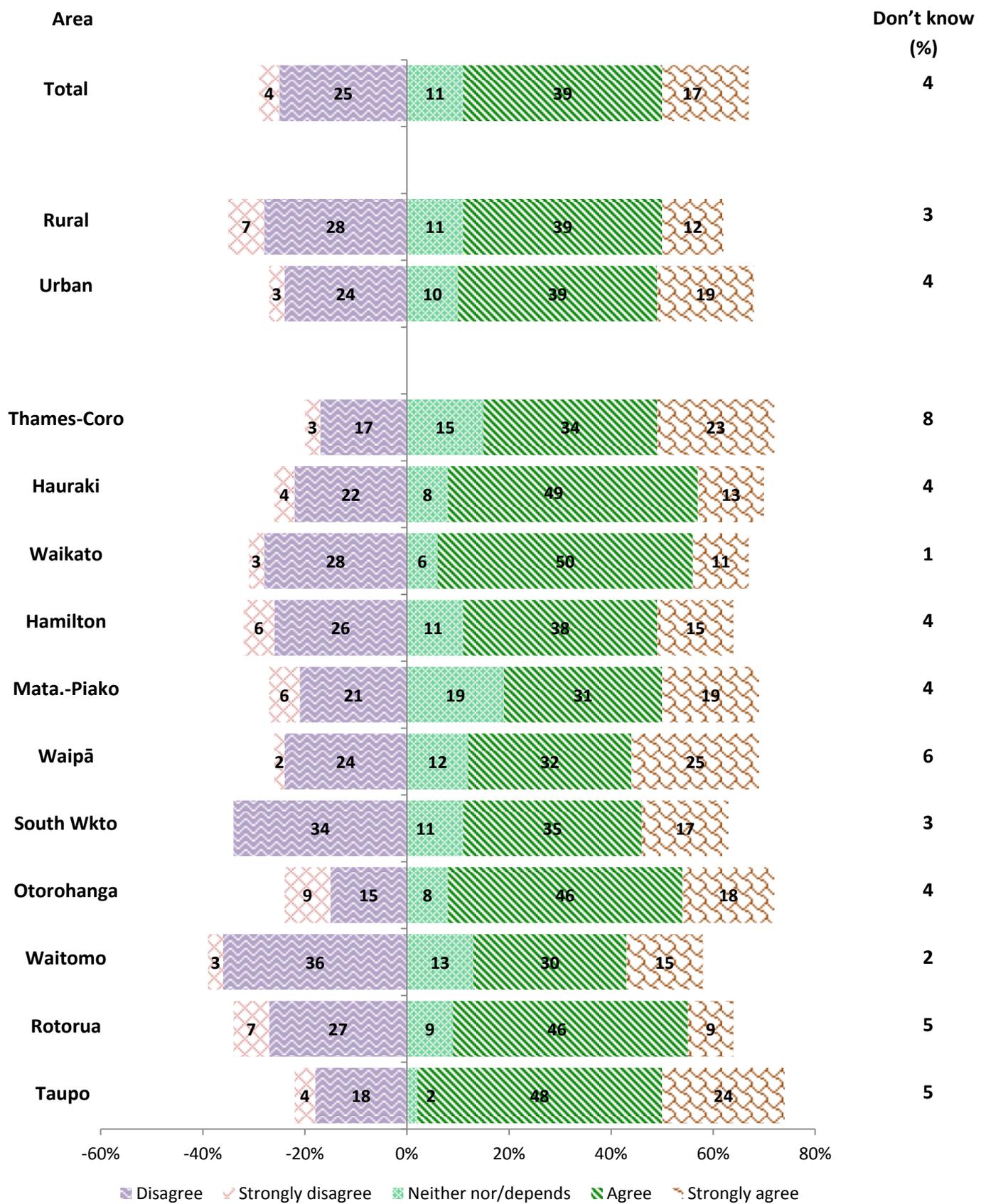


Figure 6-3: Agreement with Pollution in Rivers and Streams Coming Mainly from Farmland by Area, Rural and Urban

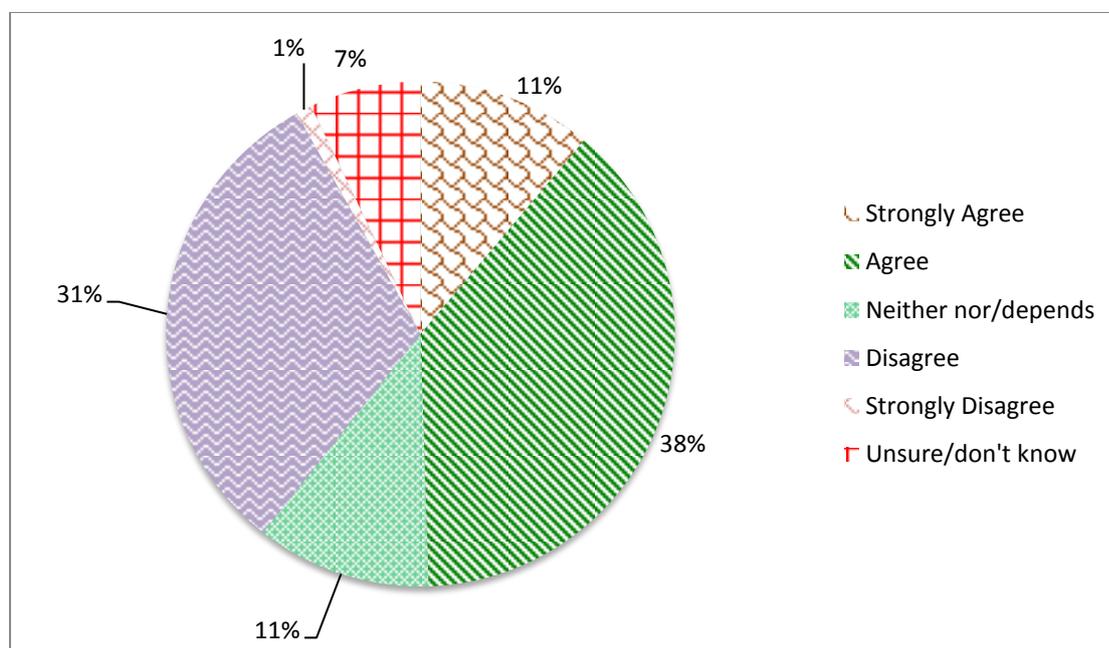
6.2 POLLUTION IN RIVERS AND STREAMS MAINLY FROM INDUSTRY

Respondents were asked whether they agree or disagree with the statement that *pollution in the region's rivers and streams comes mainly from industry*.

Note: This is a negatively framed question – that is, agreement with this statement is incorrect. Industrial discharges are mostly well-treated and together represent a minor proportion of the loads of key contaminants carried by the rivers and streams.

6.2.1 OVERALL RESULT

Just under half (49%) of respondents agree that pollution in the region's river and streams comes mainly from industry; 11 per cent strongly agree with the statement, and a further 38 per cent agree. In contrast, 32 per cent of respondents disagree with this statement (31% disagreeing, 1% strongly disagreeing). Seven per cent of respondents report being unsure as to whether pollution in the region's rivers and streams comes mainly from industry.



Base: All respondents (n=1005)

Figure 6-4: Pollution in Rivers and Streams Coming Mainly From Industry

6.2.2 COMPARISON WITH PREVIOUS YEARS

This question was asked for the first time in 2013; as such no comparative results are available.

6.2.3 DEMOGRAPHIC VARIATION

Respondents who are significantly more likely (than the regional average) to **agree** that pollution in the region's rivers and streams comes mainly from industry are those who are:

- Māori (65%)
- aged between 20 and 29 years (65%)
- in a household with an income of \$30,000 or less per annum (60%).

Respondents who are significantly more likely (than the regional average) to **neither agree nor disagree (depends)** that pollution in the region's rivers and streams comes mainly from industry are those who are:

- in a household with an income of between \$30,001 and \$60,000 per annum (15%)
- working part time (19%).

Respondents who are significantly more likely (than the regional average) to **disagree** that pollution in the region's rivers and streams comes mainly from industry are those who are:

- aged between 50 and 59 years (39%)
- in a household with an income of between \$90,001 and \$150,000 per annum (44%)
- currently a student (77%)
- in a family household with mainly school-aged children (37%)
- of no Māori ancestry (36%)
- working in technical or trade roles (71%).

6.2.4 GEOGRAPHIC VARIATION

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

- Respondents in Waikato are more likely (than the regional average) to **agree** that pollution in the region's rivers and streams comes mainly from industry (65%).
- Respondents in Matamata-Piako (19%) or rural areas (15%) are more likely (than the regional average) to **neither agree nor disagree (depends)** that pollution in the region's rivers and streams comes mainly from industry.
- Respondents in Waipā (45%) or Thames-Coromandel (44%) are more likely (than the regional average) to **disagree** that pollution in the region's rivers and streams comes mainly from industry.

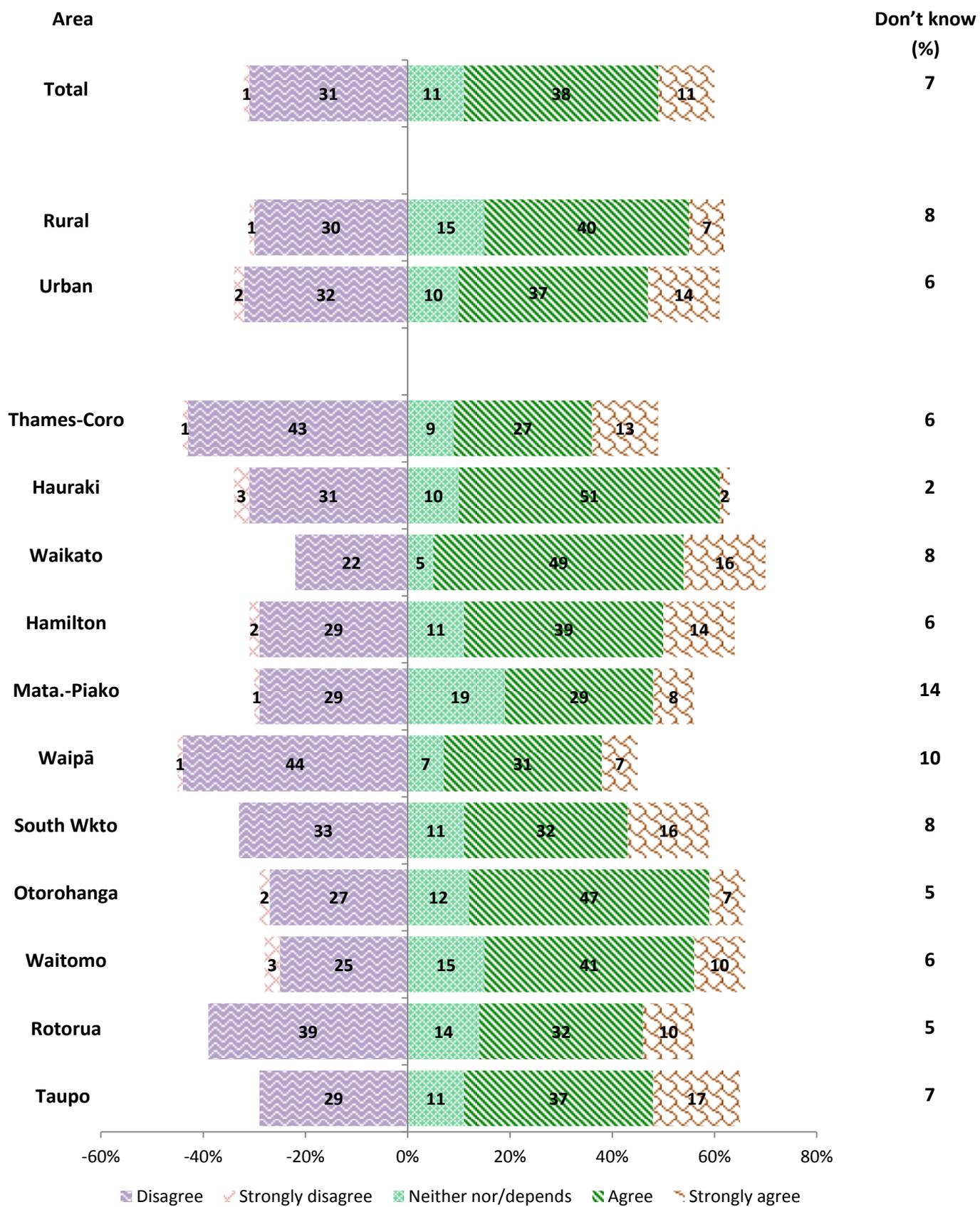


Figure 6-5: Pollution in Rivers and Streams Coming Mainly From Industry by Area, Rural and Urban

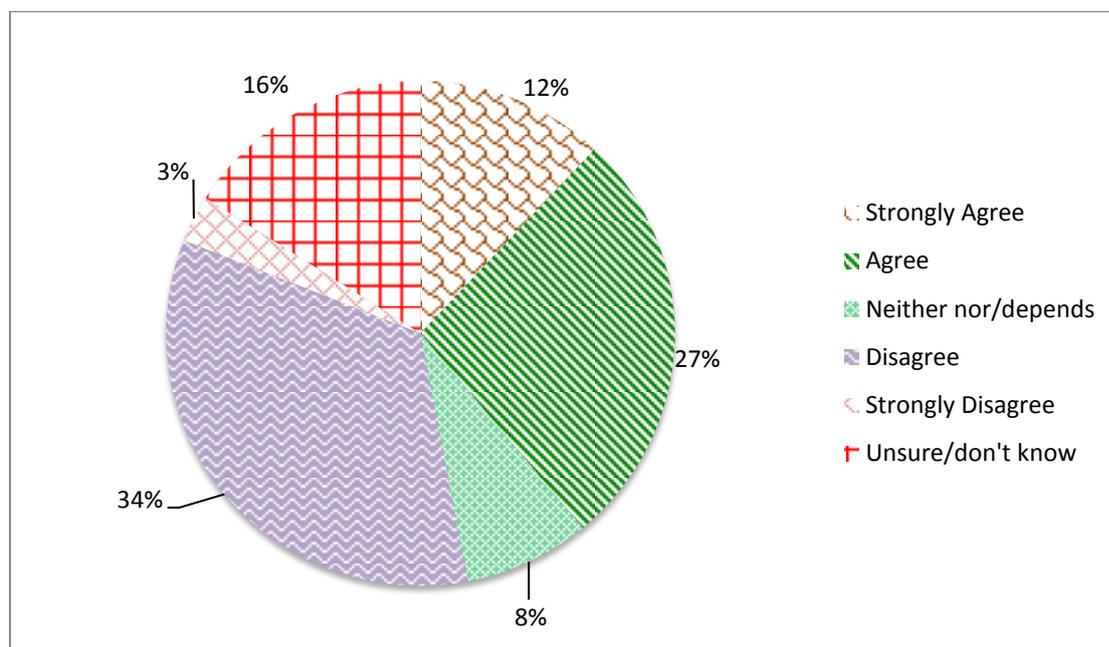
6.3 DISCHARGES OF TREATED HUMAN SEWAGE

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

Note: The major cause of pollution in the Waikato region's waterways is run off from agricultural land. However, for Māori respondents, discharge of treated human sewage into waterways is culturally inappropriate and this is reflected in the demographic comparisons, with 61% of Māori agreeing with this statement.

6.3.1 OVERALL RESULT

Opinions are mixed as to whether discharges of treated human sewage are a major cause of pollution in Waikato waterways. Thirty-nine per cent of respondents agree with this statement (12% strongly agree, 27% agree), while 37 per cent feel that this statement is untrue (3% strongly disagree, 34% disagree). Sixteen per cent of respondents are not sure if treated human sewage is a major cause of pollution in Waikato waterways.



Base: All respondents (n=1005)

Figure 6-6: Agreement that Discharges of Treated Human Sewage are a Major Cause of Pollution in the Waterways

6.3.2 COMPARISON WITH PREVIOUS YEARS

Agreement with this statement has decreased since 2006 (total agree down from 48% to 39%). The proportion of the region's respondents who disagree with this statement has also decreased slightly (total disagree for 2013 is 37% and in 2006 it was 39%), while the proportion of respondents who neither agree nor disagree shows an increase on the 2006 findings (from 3% in 2006 to 8% in 2013).

Table 6-2: Agreement that Discharges of Treated Human Sewage are a Major Cause of Pollution in the Waterways 2006 and 2013

	2006	2013	Change
	%	%	06-13
Strongly agree	18	12	-6
Agree	30	27	-3
Total Agree	48	39	-9
Neither agree nor disagree/depends	3	8	+5
Disagree	35	34	-1
Strongly disagree	4	3	-1
Total Disagree	39	37	-2
Unsure/don't know	10	16	+6
Base (respondents)	1000	1005	

This trend is shown below.

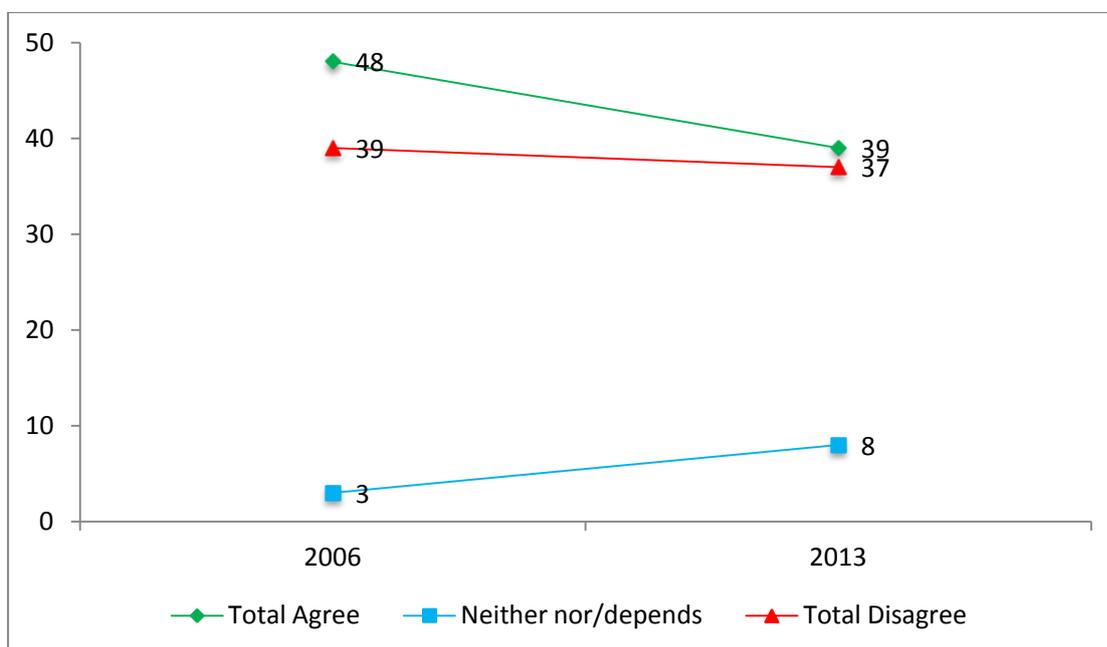


Figure 6-7: Agreement that Discharges of Treated Human Sewage are a Major Cause of Pollution in the Waterways 2006 and 2013

6.3.3 DEMOGRAPHIC VARIATION

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

- Māori (61%)
- in a household with income of \$30,000 or less per annum (56%).

Respondents who are significantly more likely (than the regional average) to **neither agree nor disagree (depends)** that discharges of treated human sewage are a major cause of pollution in the waterways are those who are:

- aged between 40 and 49 years (11%)
- in semi-skilled employment (19%).

Respondents who are significantly more likely (than the regional average) to **disagree** that discharges of treated human sewage are a major cause of pollution in the waterways are those who are:

- in a household with an income of between \$90,001 and \$150,000 per annum or between \$150,001 and \$200,000 per annum (48% and 51% respectively)
- currently a student (62%)
- educated to a trade certificate level (46%)
- of no Māori ancestry (40%).

6.3.4 GEOGRAPHIC VARIATION

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

- Respondents living in Waikato (51%) or Waitomo (54%) are more likely (than the regional average) to **agree** that discharges of treated human sewage are a major cause of pollution in the waterways.

No respondents from a particular urban or rural setting are more likely to **neither agree nor disagree (depends)** or to **disagree** that discharges of treated human sewage are a major cause of pollution in the waterways.

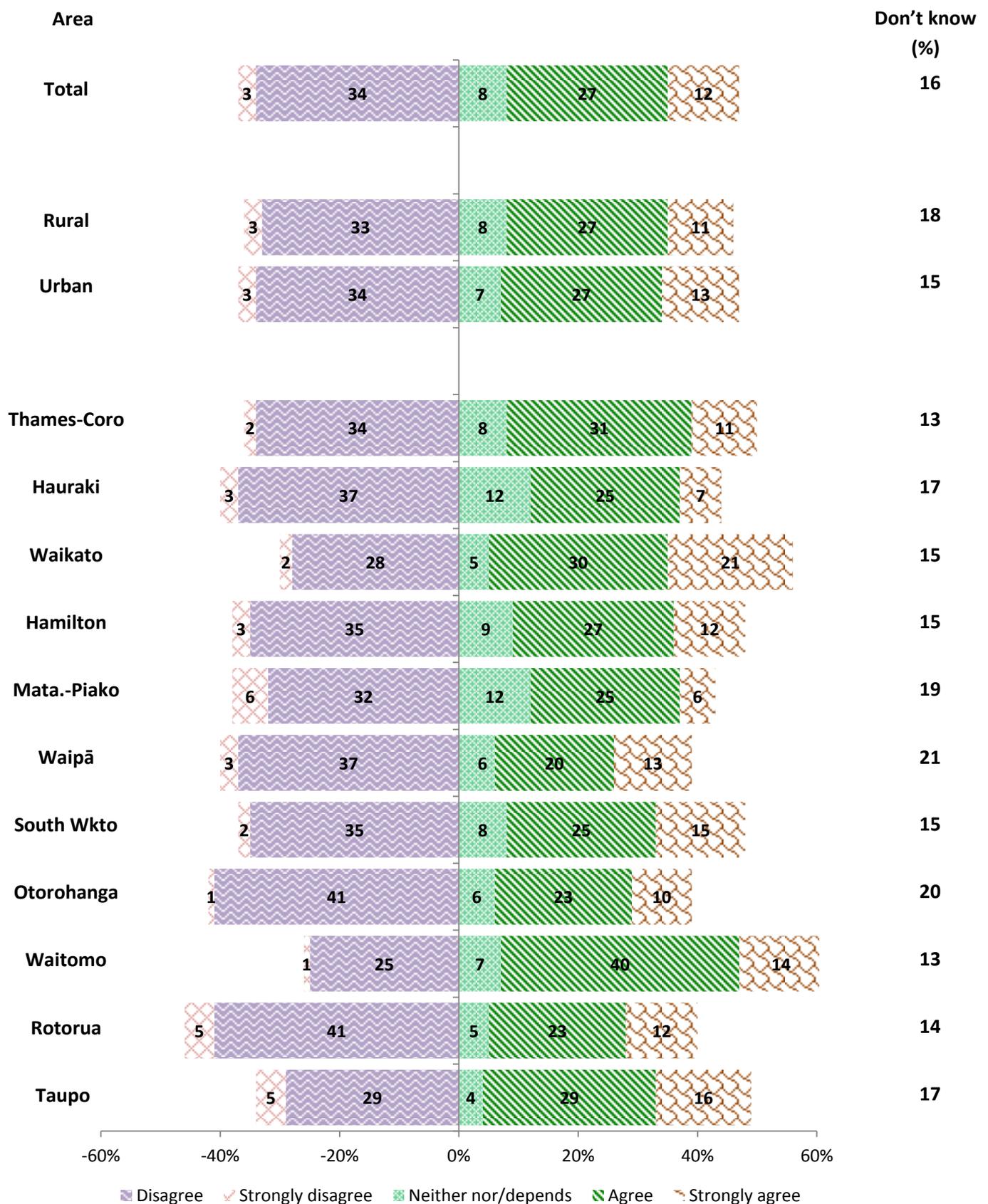


Figure 6-8: Agreement that Discharges of Treated Human Sewage are a Major Cause of Pollution in the Waterways by Area, Rural and Urban