NSW GOVERNMENT Office of Environment & Heritage

SOCIAL RESEARCH SERIES

Who Cares
about the Environment in 2012?

A survey of NSW people's environmental knowledge, attitudes and behaviours

Foreword

Who Cares about the Environment in 2012? is the seventh in a valuable social research series that has been conducted in NSW every three years since 1994. This research provides us with a snapshot in time of the environmental knowledge, attitudes and behaviour of people in NSW, as well as enabling us to track trends over the past 18 years.

The 2012 research shows the people of NSW have a more positive view of the environment and its current condition than we have seen in previous *Who Cares?* surveys. While a majority are still concerned about environmental problems, fewer are concerned than in previous years and people have a more positive assessment of improvement in a range of environmental indicators, compared to 2009 or 2006.

In thinking about environmental issues in NSW, unlike previous surveys where a key issue such as water pollution or water conservation dominated, no individual environmental issue dominates for 2012. Rather, people talk about a wide range of issues including water, mining, air pollution, waste, bushland and biodiversity.

People are also focussing on their local environment. They value a clean, green environment around them and spending time in the outdoors, visiting beaches and waterways, suburban and town gardens and parklands, and natural bushland areas. Many would like to see more emphasis on protection of natural values and habitat.

Encouragingly, almost everyone said they had often done at least one of the 10 surveyed environmentally friendly 'everyday' activities in the last 12 months, with people saying that they had often done an average, of five or six of the activities. It seems that many environmental behaviours have become embedded in daily lives. Recycling, using 'green' shopping bags and being energy- and water-wise have become routine.

Importantly, the research also shows that people who feel their actions make a difference are more active in undertaking environmentally friendly behaviours and activities. This reinforces the need to ensure people understand the difference their contribution can make.

This research tells us much about the ways people in NSW as a whole, or from different regions or of different ages, gender, education levels or language backgrounds, are engaging with the environment. It will be of great assistance to organisations and individuals in designing and delivering environmental policies and programs that are responsive to the community's needs and priorities.

In particular, the research will inform the NSW Government and its partners in their work with, and support for, local communities. It assists us to together develop ways to protect and strengthen our local environments and achieve our social, environmental and economic goals.

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ISBN 978 1 74359 003 4
OEH 2013/0265
First published March 2013, republished April 2013 with minor corrections.

Images:
Discovery Ranger. Jo Caldwell ©OEH
Gymea Lily, Dharug National Park. S Cottrell ©OEH
Cycling, Royal National Park. D Finnegan ©OEH
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Executive summary

This report presents results of the New South Wales Government's 2012 *Who Cares about the Environment?* research – the seventh in a social research series undertaken triennially since 1994. The series measures the current status of environmental knowledge, attitudes and behaviour among the people of NSW, and how these have changed over time.

In 2012, the research comprised a quantitative telephone survey of 2,006 people aged 15 years and over in NSW, along with qualitative research undertaken through nine group discussions in both Sydney and regional locations. The telephone survey took place from late May to end July, and the qualitative research in late September/early October, 2012. This document reports the full set of results from the survey, with abbreviated findings from the qualitative research. The full qualitative findings are available in a separate report.

As context for the results, an outline of topical issues in the period leading up to the research is provided in Section 1, *Introduction: Background to the research*.

Overview

The 2012 research shows that the people of NSW have a more positive view of the environment and its current condition than in previous *Who Cares?* surveys. Environmental concerns have lessened compared to previous years, reflected in the lack of a single dominant environmental issue about which people express concern, an overall drop in concern about environmental problems, and a decline in environmental issues as a priority for government compared to other issues such as health, education and transport. There is also a more positive assessment of a number of environmental indicators compared to 2009 or 2006.

Despite varied concerns about complex global environmental problems, influenced by the confusing nature of debate over these issues, people value the quality of the environment in which they live. 'Clean and green' themes predominated in qualitative discussion of a good place to live and there was a substantial focus on local issues. They also used very positive terms to describe their feelings when out in the natural environment. Many in the survey who said they were not concerned about environmental problems gave reasons related to the current good condition of the environment they see around them.

The value of environmental quality to people's everyday lives is actively demonstrated in high visitation rates to outdoor locations, such as beaches, parks, gardens, bushland and zoos.

This is also carried through to views about protecting these environments where almost half the community believes we do not place enough emphasis on the protection of natural habitats in competition with other land use needs. Further, almost half believe that environmental regulation of mining and property development/construction is too lax, despite an increasingly positive view of environmental regulation of other sectors over successive surveys.

At home, people continue to act in environmentally friendly ways as part of their daily lives, often motivated by a general concept of 'doing the right thing'. The research also shows that those who do more are those who feel their actions make a difference. Developing the community's sense of the efficacy of personal action could thus bring further environmental gains.

Findings

Immediate priorities

- **Environmental issues have declined as an immediate community priority for attention by the State Government** compared to other issues such as health, education and transport, mainly due to the reduced prominence of water issues. In 2012, the environment/environmental issues are mentioned by 6%, down from 11% in 2009.
- In considering environmental issues alone, **in 2012 there is no dominant environmental issue or 'threat' in the public mind**, for the first time since 1997. Lack of a dominant issue was also evident in the qualitative research.
- **The top seven current environmental issues for people in 2012 are:**
  - **water issues**, nominated by 18%, which includes water supply, conservation and management/drought
  - **mining**, 17%
  - **air pollution/air quality**, 17%
  - **waste**, 14%
  - **forest/bushland/biodiversity**, 12%
  - **climate change**, 12%
  - **energy/fuel**, 12%.
- **The prominence of water issues has dropped markedly**, now 18%, down from 43% in 2009, and 58% in 2006 at the height of the drought.
- **Climate change is less prominent** (down from 23% to 12%, returning to the 2006 level), **along with the connected issue of energy/fuel** (down from 17% to 12%, also returning to the 2006 level). The decrease for

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energy/fuel relates to fewer people mentioning issues such as energy efficiency; the need to reduce reliance on coal, or the need to reduce petrol use.

- **Mining has risen sharply** from 3% to 17%, with coal seam gas being a key contributor. The carbon tax, 8%, was the only other issue to be nominated by more people in 2012 than in 2009.

Future priorities

- As in past surveys, **the environment/environmental issues were nominated by more people as a State Government priority in ten years time than as a current priority**. However, mentions as a future priority declined from 23% in 2009 to 14% in 2012. The key contributor is a decline in the prominence of water issues, along with a decrease in mentions of climate change.

Environmental concern

- **A large majority of people in NSW, 71%, are concerned about environmental problems**. This is down from 78% in 2009 and 87% in 2006.
- **The most common reason for concern about environmental problems is concern for future generations**, 32%, as found in 2009 and 2006 (and also identified through the qualitative research).
- **Doubt about the severity of environmental problems is the most common reason for *lack* of concern**, consistent with 2009, and mentioned by 21% of those who say they are not concerned. However, the second most common reason for lack of concern is that people see the condition of the environment as being good or well managed (18%, up from a low of 9% in 2009).
- The qualitative research indicates that this doubt is underpinned by:
  - a belief that **climate/weather issues are part of natural cycles**, or that the Earth can adapt and recover from environmental damage
  - a perception that **issues have been 'over-hyped'**, and that predictions of environmental disasters have failed to materialise
  - **conflicting information or science** about environmental matters.
- **These perceptions, particularly conflicting information and unfulfilled predictions, lead some people to disengage**, because they find it difficult to make sense of the issues, and to find the 'truth'.

Knowledge

- **The survey series shows improvement in community environmental knowledge over time.**
- **Knowledge has improved since 2009 regarding sources of water pollution** (from 39% to 45% correct), and **benefits of recycling** (32% to 37%).
- **However, compared with 2006, fewer are aware that more mammals have become extinct in recorded history in Australia than in any other country** (44% correct, down from 51%).
- **The number of people knowing the greenhouse effect is not caused by a hole in the atmosphere has gradually increased over time** from 24% in 1994 to 54% in 2012.
- From the qualitative research:
  - **few people appear to understand the meaning of 'biodiversity' and 'ecosystem'**
  - **key themes people associate with 'cultural heritage' are: Aboriginal heritage; historical or iconic landmarks** (e.g. historical buildings, the Opera House), and aspects connected with **Australian values and 'way of life'** (e.g. barbeques, sport, multiculturalism).

Views on improvement or deterioration

- **For most of the 18 environmental indicators surveyed, many more people feel the situation in NSW has become *better* over the past three years** than those who feel it has become ***worse***.
- **More people believe there has been improvement in reducing water use than on any other issue surveyed.** This has declined from 74% in 2009 to 63%.
- **There is a substantial rise in those who sense improvement in: (i) ensuring there is enough water flowing in rivers**, up from 27% to 42%; **and (ii) water quality in rivers, lakes and creeks**, up from 33% to 41%.
- The qualitative research found **people recognise that environmental improvements have been made over time but do not necessarily attribute these to government actions**.

Views on environmental regulation

- **Fewer people believe regulations are too lax for seven of the nine sectors surveyed,** compared to 2009. Instead there has been an increase in those unsure about the strictness of regulations or who feel the level of strictness is 'about right'.

- **Nonetheless, close to half continue to believe that regulations are too lax for mining, 49%, and property development/construction, 46%.**

Views on other issues

- **Almost half, 45%, believe there is too little emphasis on protecting natural habitats in NSW**, and 42% feel the balance is 'about right'.
- **About half the community (51%) think that the balance is about right in protecting and conserving historical things in NSW**, but 35%, feel there is too little emphasis on protection.
- **Most people, 72%, believe NSW Government environmental support and funding should be focused within the state of NSW itself** – 34% at a state-wide level, 12% at regional level, and 26% at local level.

Behaviours and activities

- **A large majority say, in the past year, they have spent time at a beach or waterway** (87%); **a** suburban or town **park or botanic garden** (85%); or **bushland** or other natural areas (79%), and about a third or more have visited these areas many times.
- **One-fifth (20%) have taken part in an organised nature education activity** while at outdoor locations such as beaches, parks, gardens, bushland or zoos.
- **Almost everyone, 98%, *often* undertakes at least one of 10 'everyday' environmentally friendly behaviours surveyed**, with an average of 5.6 across the whole sample.
- **The most prevalent behaviours undertaken *often* are: reducing energy consumption**, 81%; **avoiding putting oil/fat/turps/paints or chemicals down sinks and toilets**, 80%, and **reducing water consumption**, 64%.
- **The key changes in behaviour are:**
  - Compared with 2003, slightly more people *often* **avoid putting oil/fat/turps/paints or chemicals down sinks and toilets** (80%, up from 76%).
  - Compared with 2009, fewer people say they *often*: **reduce water consumption** (64%, down from 70%); **avoid plastic bags** (46%, down from 54%); and **re-use things** (57% down from 61%).
- **Reasons for undertaking 'everyday' activities vary depending on the behaviour. For example:**
  - **personal benefit** is the dominant prompt for reducing energy consumption (saving money) and reducing the use of fuel (saving money)
  - **environmental concern or awareness** is the dominant prompt for choosing household products that are better for the environment
  - **a varying mix of factors contributes to other behaviours**, for example reducing water consumption is triggered by a combination of externalities (drought and restrictions) and personal benefit (saving money).
- **There has been a sharp rise in people citing *cost* as the reason they reduce energy consumption, and** to a lesser extent, **water consumption**.
- **Difficulties or barriers to undertaking behaviours also vary by activity**, for example:
  - **external factors** are dominant for not reducing fuel consumption – lack of public transport, the need to use a vehicle, or particular type of vehicle for work or in a particular location
  - **personal benefit** is prominent for not choosing household products better for the environment, including the cost of environmentally friendly alternatives or a belief they are not as effective.
- The qualitative research indicates that **people feel it is important to 'do the right thing'**, and act accordingly, provided it is relatively *easy* to do so. **However, commitment wanes if too much time, effort or personal cost is involved**.
- **In the past 12 months, most people, 91%, participated in at least one of the six 'occasional' environmental activities surveyed.** Compared with 2009, slightly fewer bought an energy-efficient appliance (down from 73% to 70%), or took part in a Landcare, Bushcare, tree planting or other restoration project, (down from 20% to 17%).
- **There is a strong relationship between environmental concern and behaviour.** People with high concern often undertake an average of 6.8 'everyday' activities compared with 4.7 among those with little/no concern. They also engage in an average of 3.3 'occasional' activities compared with 1.9 among those with little/no concern.
- **There is also a relationship between the perceived efficacy of personal actions and behaviour.** People who believe their actions 'make a difference' undertake more 'everyday' and 'occasional' environmentally friendly behaviours. Yet related to this, many participants in the qualitative research felt there is a lack of feedback about the difference their actions actually make.

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Key patterns among segments

Gender

> Men show greater knowledge of environmental issues (as measured by the knowledge questions included in the survey). However, women are more likely to be concerned about environmental problems; to believe what they do makes a difference; and to engage in environmentally friendly behaviours.

Age

> The *degree* of concern about environmental problems, the level of environmental knowledge, and engagement with environmental behaviours tends to rise with age up to the age group 55 to 64. At 65 years or over it levels off or declines.

Education

> The degree of concern about environmental problems, knowledge and behaviour, also tends to rise with level of education.
> People with university qualifications are more likely than others to have the environment or environmental issues top of mind as a priority for the NSW Government; are a little less positive in their assessment of environmental improvement over the past three years, and also a little more critical in relation to environmental regulations.

Environmental concern

> There is a relationship between most issues covered by the survey and the extent to which people say they are concerned about environmental problems. Environmental knowledge and, as noted above, engagement with environmentally friendly behaviours increases with level of concern.
> People with high concern are less positive than others in their assessment of improvement or deterioration on most of the 18 environmental indicators surveyed. This is most marked in relation to protecting and conserving endangered plants and animals, reducing clearing of native vegetation, and greenhouse emissions.
> They are also more critical of environmental regulations, and more likely to think regulations are too lax for each of the nine sectors surveyed.

General observations

Who Cares about the Environment in 2012? reflects community attitudes concerning the environment at two different levels:

> On the one hand, a combination of doubt about the severity of problems, perceptions that the environment is being well-managed and that things are improving, and lack of a perceived immediate environmental 'threat' have contributed to a decline in concern about environmental problems, and community engagement.
> On the other hand, over the longer term, there is a growing belief in the importance of looking after the environment. Moreover, what were once seen as a fringe issues have become embedded in behaviours and daily lives. Recycling, using 'green' shopping bags and being energy- and water-wise have become routine.

So, while prevailing coverage of macro issues and the emergence/retreat of obvious environmental threats influences the 'concern meter', underneath that, the fundamental importance of caring for the environment continues to evolve subtly over time, and people continue to engage in environmentally friendly behaviours.

A combination of factors contributes to people adopting, or not adopting, environmental behaviours. In some cases there is evidence of altruism, in others, laws or regulations such as water restrictions encourage behaviour. Although 'doing the right thing' appears to be a prevalent attitude, personal benefit, or self-interest, is also powerful. It is both a strong motivator to act, for example because of pricing signals for energy, and a strong motivator not to act.

Findings on the perceived efficacy of personal actions add a further dimension. Although there is a clear statistical relationship between perceived efficacy and behaviour, causation is unclear – does belief in making a difference cause behaviour, or does behaviour instil a belief that 'what I do makes a difference'? It is feasible that both causal directions may operate in the community in different situations and for different people.

These findings suggest it is worthwhile considering how belief in personal actions can be developed, because:

> this affects the sphere entirely within the control of ordinary people in their everyday lives – as opposed to environmental issues and solutions that individuals may feel they can do nothing about
> communicated the right way, it may provide the feedback and reward for 'doing the right thing', reinforce the value of individual actions, and even encourage a greater number and frequency of behaviours.

1 Introduction

Background to the research

Who Cares about the Environment? is a social research series that has been conducted every three years since 1994 to measure the environmental knowledge, attitudes and behaviour of people in NSW.

The series was initiated in 1994 by the NSW Environment Protection Authority (EPA). The 2012 survey was commissioned by the NSW Office of Environment and Heritage (OEH).

In keeping with previous surveys, the 2012 research will help inform NSW Government strategies and policies for protecting and caring for the environment.

This report presents the main findings of the 2012 quantitative survey, drawing comparisons with results from previous surveys where available. This is complemented with key findings from qualitative research, conducted after the quantitative survey, to explore relevant issues in greater depth.

Research objectives

The objectives for the 2012 *Who Cares?* research were to:

- gain an understanding of the environmental knowledge, attitudes and behaviours of the NSW population in 2012
- contribute to statistical time-series data by tracking changes in the environmental knowledge, attitudes and behaviour of the NSW population
- provide information to assist OEH, other government agencies, non-government organisations and industry to identify priorities and design, implement, evaluate and coordinate their policies, programs and other initiatives
- promote discussion and awareness of the social dimension of environmental protection and conservation.

Research methods

The 2012 research comprised:

- A state-wide telephone survey of 2,006 people aged 15 years and over. The sample was stratified by 14 regions, to ensure comprehensive representation from all parts of NSW.
- A total of nine group discussions, including five in Sydney and four in regional areas of the state.

The research design and survey questionnaire were developed through consultation with a range of stakeholders. In keeping with project objectives, the questionnaire addressed the three areas of *attitudes, knowledge* and *behaviour*, and included a mix of:

- core questions that have been asked in all previous surveys since 1994
- questions that have been asked in some, but not all previous surveys
- new questions included for the first time in 2012.

The full questionnaire is provided in Appendix C. A grid indicating which questions are core, and which are periodically repeated or new questions is shown in Table 12, Appendix A.

Over the 18-year history of the tracking series, the wording of some questions has been modified to improve clarity. Where modifications are minor, valid comparisons can be made with previous surveys, but where more substantial changes have been made, comparisons are not possible.

As questions have been added to the survey over time, each question's *original* question number has always been retained when the question is included in subsequent surveys. Consequently the question numbering in the questionnaire is not sequential.

Further methodological details are available in Appendix A.

Analysis

This report contains results for all questions fielded in the 2012 survey. Results have been analysed, compared and reported in two ways:

- *across time*, with 2012 being compared with previous surveys
- *between segments* in 2012, including differences between demographic segments (e.g. males vs. females) or differences by attitudinal groups (e.g. people with higher concern about environmental problems vs. those who have less concern).

Significance testing has been conducted at the 95% level of confidence, applying a correction for the 'false discovery rate'.

Differences across time

For a given item in the survey, 2012 results were compared with those from the most recent survey in which the question was last included. In most cases this is the 2009 survey, but some items were last included in earlier surveys in this series. Significant differences are shown through the report using arrows (see highlight box, *Interpreting charts and tables*).

1 Introduction

Differences between segments

Key significant differences between demographic[1] or attitudinal segments are reported in a 'segment highlights' box for each question.

Statistical significance testing was undertaken by comparing a particular segment or group *with its complement*. To illustrate:

- For a test of significance by age, respondents in a given age group (e.g. those aged 15 to 24) were compared with all people who were *not* in that age group (in this example, people aged 25+).
- For a test by region, respondents living in a given region (e.g. those from Murrumbidgee/Murray) are compared with all people in NSW who do *not* live in that region.
- For a test of significance by gender, males are compared with females.

'Segment highlights' boxes report significant differences as follows:

- Where there are only two groups (e.g. males vs. females or people with children vs. people without children), results from each of the two groups are compared. For example: "women (75%) are more likely than men (67%) to be concerned about environmental problems".
- However, for ease of explanation when there are more than two groups, the result from a particular group is reported against the *total sample* result. For example: "People aged 55 to 64 are more likely to be concerned about environmental problems (78% vs. 71% community-wide)".

Some demographic characteristics are strongly related so that patterns of difference may be repeated across these characteristics. Age is related to employment, and to education for the youngest group, with often similar findings for students and young people aged 15 to 24, retired people and those aged 65+, or those aged 15–24 and those who have not yet finished secondary school. See also discussion in Appendix B. Detailed tabulations of demographic results can be found on the OEH website – see *Reporting*.

Reporting

The 2012 *Who Cares?* research reporting follows a similar structure to that for 2009 and includes other components that expand on the data from the main survey – see **www.environment.nsw.gov.au/communty/whocares.htm** for all currently available material.

1 Definitions of the demographic segments used are provided in Appendix A Research Methodology, including regional breakdown.

Interpreting charts and tables

- Significant differences are annotated through the report using arrows.

↑ An 'up' arrow indicates a significant increase in the relevant proportion compared with the previous data point (e.g. from 7% to 10%). It is also used to indicate a significant positive shift along a response scale (i.e. an overall shift in responses away from a negative environmental response towards a positive environmental response).

↓ Similarly, a 'down' arrow indicates a significant decrease in the relevant proportion compared with the previous data point (e.g. from 51% to 43%), or a significant negative shift along a response scale (i.e. an overall shift in responses away from a positive environmental response towards a negative environmental response).

The report also contains some charts illustrating differences by attitudinal segments. Segments that are significantly higher or lower compared with other groups are indicated using 'up' and 'down' arrows.

- Percentages are given to the nearest whole number. In some charts and tables for single response questions, this may result in totals adding to slightly under or over 100%, due to rounding. This also means that combined figures reported in the text may differ slightly from the sum of the rounded figures shown in charts.
- Some results in charts may differ from the corresponding figure in previous reports due to changes in code groupings or definitions.
- Results from 1994 are not included in charts of unprompted questions in Section 2.1 due to the different survey method adopted at the time (see Appendix A).
- The abbreviation 'n/a' in tables comparing data for two surveys indicates the code was not used in one of those surveys.

Context: contemporary issues

As the time span of the *Who Cares?* research grows, it is useful to include with each report a summary of issues that were attracting the community's attention in the period preceding the research.[2] This is done so that, in future years in particular, research results can be considered in the context of the times – community experiences, public debate and media attention. While this context is important when considering the findings from survey Questions 1 and 2, it is also important in considering the long-term trends in the data.

Economy and employment: The period leading into the 2009 *Who Cares?* research was characterised by the initial shock of the global financial crisis in late 2008/early 2009 – arguably the most significant global economic downturn since the Great Depression. Internationally, governments poured stimulus spending into their economies to prevent them from stalling, and unemployment rising.

In mid-2012, however, macroeconomic indicators were showing the Australian economy to be relatively robust, with low unemployment, at approximately 5%, and the Reserve Bank maintaining a modest interest rate. Yet despite this, the mood was not buoyant. Throughout 2011 and 2012 there was much talk of Australia's 'two-speed' economy, with the mining sector performing well, but some other sectors saying they were struggling; a high Australian dollar exchange rate affected the competitiveness of exporters; federal and state governments implemented spending cuts to manage their fiscal positions; and the hangover of the global financial crisis in Europe and the United States affected global confidence.

The environment: The context for environmental issues at the time of the 2012 research is very different from that in 2009.

Drought: At the beginning of 2009, although the severe drought of 2003 to 2007 had receded from its peak, half the state was still in drought. By mid-2009, although water restrictions had been eased in coastal areas, the drought remained topical. La Niña then brought the 4th wettest two-year period on record in 2010–11, including heavy rains in western NSW.

By 2011, there were floods in northern and north western NSW, with record rainfall in early 2012 bringing floods to central, western and southern NSW, and flood warnings across much of the state.

Climate change: Climate change was highly visible in 2009, with the international Climate Change summit held in Copenhagen at the end of that year. Moreover in 2009, there was in-principle bipartisan support at the Federal Government level for the introduction of an Emissions Trading Scheme (ETS).

However, early in 2010, this changed with both the Australian Government and Opposition moving away from an ETS. The Government has since introduced a carbon tax in the lead-up to facilitating an ETS. Fieldwork for the 2012 *Who Cares?* survey was undertaken just prior to and during the initial introduction of the carbon tax.

Coal seam gas (CSG): Although Australian commercial production of CSG began in Queensland in 1996, volumes remained relatively low until 2004/2005 and then began to grow rapidly, mainly in Queensland. Media reporting around CSG initially related to business opportunities and implications. Media attention about environmental concerns did not surface until late 2010. The US film *Gaslands* was released in early 2011. Various community actions groups voicing concerns and resistance to CSG have since emerged.

Energy costs: Since the 2009 *Who Cares?* research, the cost of electricity has risen sharply as a result of network infrastructure costs, and the Renewable Energy Target. 'Cost of living pressures' were a highly visible topic throughout 2010 to 2012.

Health and Education: While hospital waiting times were highly visible in media coverage prior to the 2009 survey, this was not the case prior to the 2012 research. In the education arena, there were also no outstanding issues attracting heavy media attention prior to the 2012 research.

Infrastructure, public transport and roads: Media reporting around these issues was fairly light, but the new (March 2011) state government came in with policies aimed at improving transport in NSW. A discussion paper was released in December 2011, and from February to May 2012, 14 regional forums were held across NSW to inform a long-term Masterplan.

2 A section on contemporary or background issues has been included in all reports since 2003.

2 Survey findings

Snapshot – Priorities, values and attitudes

Immediate priorities

> **Environmental issues have declined as an immediate community priority for attention by the State Government** compared to other issues – mainly due to the reduced prominence of water supply/conservation/drought. In 2012, the environment/environmental issues rank seventh, being mentioned by 6% of the community, down from 11% in 2009. They follow behind health (27%), roads and traffic (26%), education (22%), public transport/railways (22%), cost of living (11%), and other social issues (7%). (p. 6)

> **In considering environmental issues alone, for the first time since 1997, there is no dominant environmental issue in the public mind.** Prior to 2012, all surveys have revealed either one very dominant issue, or a few prominent environmental issues (for example water pollution in 1997 and 2000, or water supply in 2006 and 2009). In 2012, this is no longer the case. This coincides with a rise in the number of people unable to think of any important environmental issue for NSW at present (up from 8% to 15%), and even more noticeably, the number who are unable to nominate two important issues (up from 23% to 35%). (p. 13)

> **The top seven environmental issues for people in 2012 are water supply, conservation and management/drought (18%), mining (17%), air pollution/air quality (17%), waste (14%), forest/bushland/biodiversity (12%), climate change (12%), and energy/fuel (12%).** Although water supply, conservation and management/drought remains the top issue by a slim margin, as the drought has receded this issue dropped markedly from 43% in 2009 and 58% in 2006. (p. 13)

> **Mining has risen sharply from 3% to 17%**, with coal seam gas being a key contributor. The carbon tax (8%) was the only other issue to be nominated by more people in 2012 than in 2009. (p. 13)

> Along with water supply, conservation and management/drought, **other issues that are less prominent in 2012** are: **climate change** (down from 23% to 12% returning to the 2006 level), and the connected issue of **energy/fuel** (down from 17% to 12% also returning to the 2006 level). The decrease for energy/fuel relates to fewer people mentioning issues such as energy efficiency, the need to reduce reliance on coal, or the need to reduce petrol use. (p. 14)

Future priorities

> **The environment/environmental issues also declined as a community priority for attention by the State Government in ten years**, from 23% in 2009 to 14% in 2012. The key contributor is a decline in prominence of water supply issues, along with a decrease in mentions of climate change. (p. 9)

> When it comes to **the most important thing the NSW Government could do to protect and look after the environment over the next few years**, the leading top-of-mind issues are: vegetation/biodiversity (12%), education/community engagement (9%), mining (9%), energy and greenhouse (8%), government strategies (8%), regulation (8%) and waste (7%). (p. 18)

> **The largest gains compared with 2009** are apparent for: **mining**, with coal seam gas a prime contributor; and **vegetation/biodiversity**, with increases in a range of contributing issues such as protecting wildlife/habitats and creation of new reserves or marine reserves. (p.18)

> Although **energy and greenhouse** remains in the top list of issues, it has experienced a significant drop since 2009, back to 2006 levels. (p. 18)

Environmental concern

> **In 2012, a large majority (71%) of people in NSW say they are concerned about environmental problems**, though this is down from 78% in 2009 and even more so from 87% in 2006. Currently, about one in four have **a great deal** of concern, unchanged since 2009. (p. 23)

> **Consistent with 2009 and 2006, the most common reason for concern about environmental problems is future generations** (32%), though this is down from 38%. (p. 25)

> **Also consistent with 2009, doubt about the severity of environmental problems remains the most common reason for lack of concern**, 21%. However, in 2012 another theme, **the condition of the environment being good or well managed** (18%) has returned (from 9%) as the second most important reason, similar to 2006 (17%). This view may be expressed about the environment at either a local area level or at a broader level. (p. 26)

The two most important issues for NSW Government attention now

Question 1(a)
What would you say are the two most important issues for attention by the State Government at present? (Unprompted)

Among the top-of-mind issues for current attention by the NSW Government, the **environment/environmental issues** rank seventh, being mentioned by 6% of the community, down from 11% in 2009.

The environment/environmental issues follow behind **health** (27%), **roads and traffic** (26%), **education** (22%), **public transport/railways** (22%), **cost of living** (11%), and **other social issues** (7%).

Compared with 2009, the 2012 survey finds some measurable shifts in the community's top-of-mind priorities for the NSW Government. Following **health** being the dominant issue across the three previous surveys, mentions are down markedly from 50% to 27%, and have returned to a level similar to that found in 1997 and 2000. At a much lower level, mentions of **unemployment** have halved (from 10% to 5%) with smaller drops evident for **government performance, state budget/finances**, and **economy/economic growth** issues.

As a counterbalance to these decreases there has been:

- a substantial increase in mentions of **roads and traffic** (up from 15% to 26%) which, along with public transport (22%), makes **transport** the most common theme at 43%[3]
- a less-marked increase in **cost of living** (up from 5% to 11%), with energy costs being a key contributor
- the emergence or re-emergence of three areas compared with 2009 (two of which are federal rather than state matters): the **carbon tax** (6%), **immigration** (5%), and **industrial/workplace relations** (3%).

Moreover, while the level of 'don't know' responses (that is, the number of people unable to nominate *any* issue for current attention) is consistent between 2012 (8%) and 2009 (7%), there has been an increase in those who are unable to nominate *two* issues – up from 12% to 21%. This is the highest level since the 1997 and 2000 surveys, before health and education rose to be dominant issues in 2003.

Overall, compared with 2009, the current survey reveals a picture of reduced salience for state issues in the community, with some major federal issues influencing responses to this question.

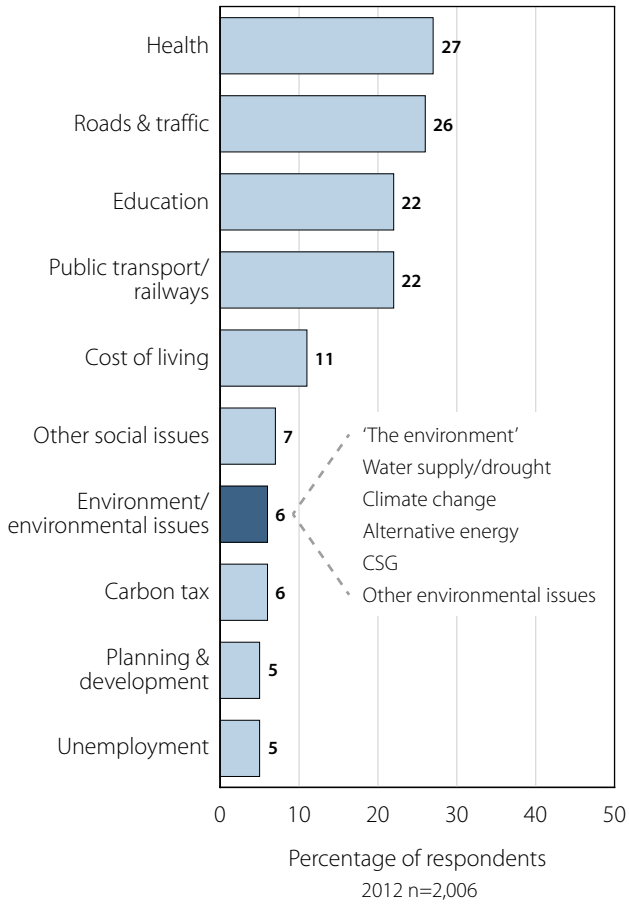
3 The total does not equal the sum of the two separate issues as people who mention both as their two issues, count once in total.

As far as the **environment** is concerned, a decline in mentions of **water supply, conservation and management/drought** matters has been a key contributor to the apparent steep drop in mentions of environmental issues between 2006 and 2012[4]. With the easing of the drought, water supply-related issues had already dropped substantially in 2009, and this has extended further in 2012 (see Figure 3).

All other mentions of the environment or environmental issues *apart* from water supply, conservation and management/drought matters have oscillated between 6% and 8% over the past four surveys since 2003.

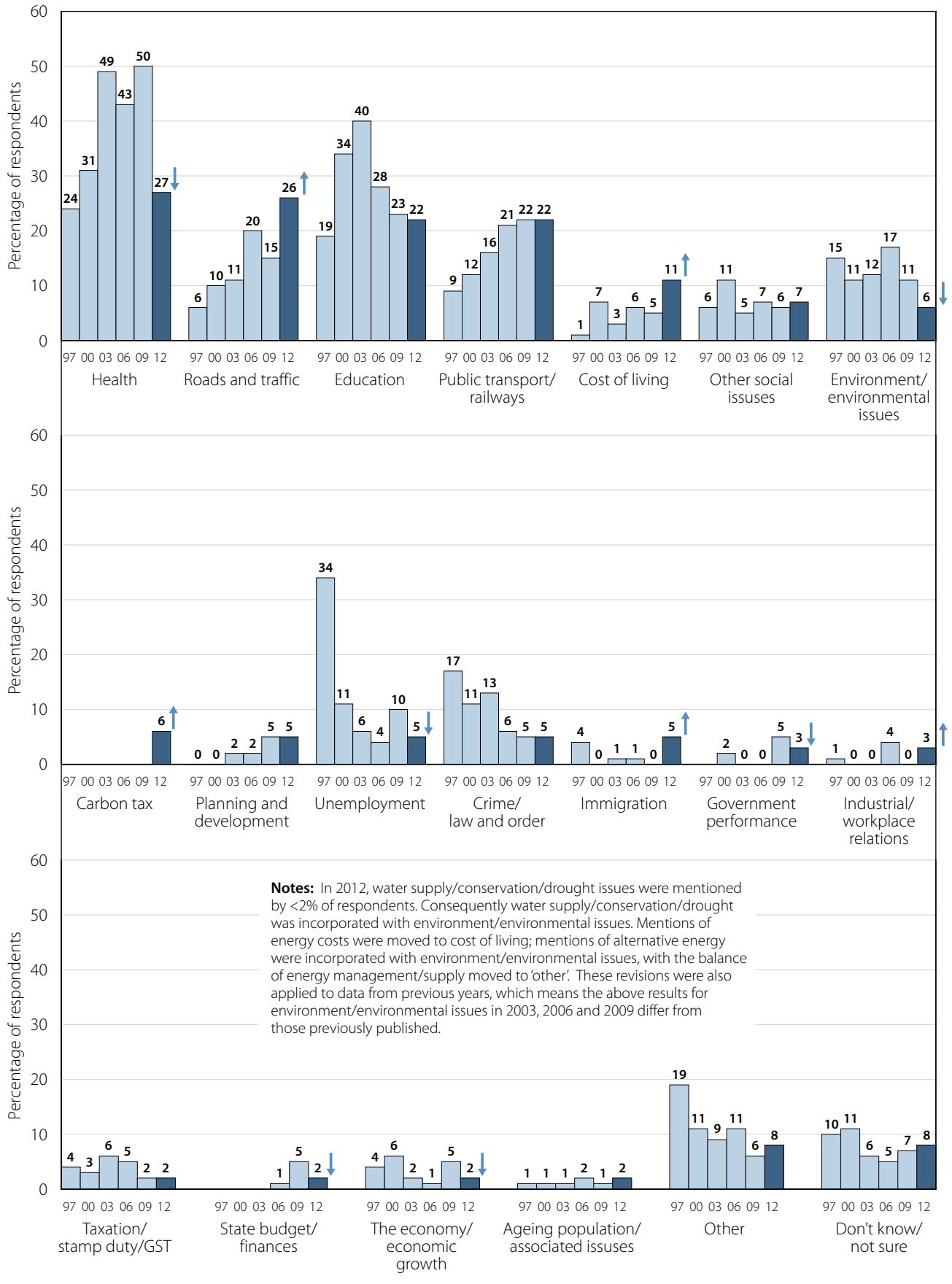
As context for the survey findings, particularly concerning Questions 1 and 2, the *Introduction* to this report contains an overview of prominent topical issues in the period preceding the research.

Figure 1: The top ten issues for NSW Government attention now



4 In 2012, water supply/conservation/drought issues were mentioned by <2% of respondents. Consequently this item was incorporated into the 'environment/environmental issues' for this year. This revision was also applied to data for this issue from previous years, so that results shown for environment/ environmental issues in 2003, 2006 and 2009 differ from those previously published, and water is not shown separately.

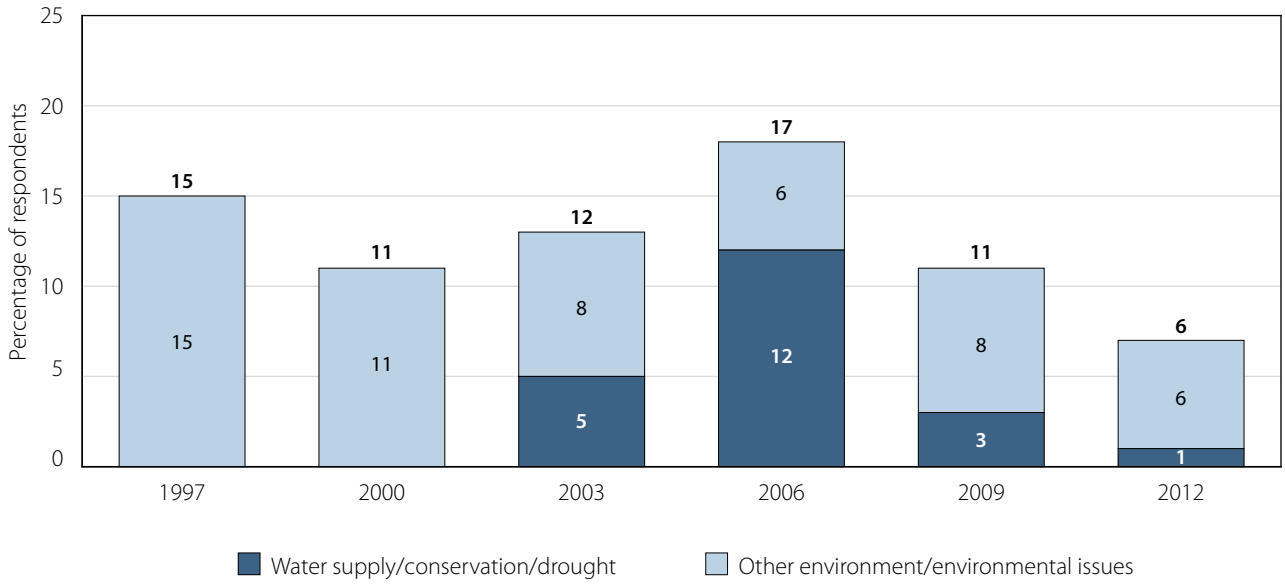
Figure 2: The two most important issues for NSW Government attention now



Notes: In 2012, water supply/conservation/drought issues were mentioned by <2% of respondents. Consequently water supply/conservation/drought was incorporated with environment/environmental issues. Mentions of energy costs were moved to cost of living; mentions of alternative energy were incorporated with environment/environmental issues, with the balance of energy management/supply moved to 'other'. These revisions were also applied to data from previous years, which means the above results for environment/environmental issues in 2003, 2006 and 2009 differ from those previously published.

1997 n=1,129 2000 n=1,102 2003 n=1,421 2006 n=1,724 2009 n=2,003 2012 n=2,006

Figure 3: The two most important issues for NSW Government attention now – trends for environment



Segment highlights

Two most important issues for NSW Government attention now

Note: comparisons are made either to the whole sample or, where there are two categories only, to the other (e.g. males and females). Only environment/environmental issues were examined for demographic differences.

Education

> Mentions of the **environment/environmental issues** are higher among University graduates (9% compared with 6% community-wide).

Region

> Mentions of the **environment/environmental issues** are higher among those living in the Murrumbidgee/Murray region (17% compared with 6%), with concerns about water supply issues, specifically for farmers, being a key contributor.

The two most important issues for NSW Government attention in ten years

Question 1(b)
*Now thinking ahead about ten years, what do you think will be the **two** most important issues for attention by the **State** government ten years from now? (Unprompted)*

Consistent with priorities for current attention, **health** (21%), **education** (19%), **public transport/railways** (18%) and **roads and traffic** (17%), are also the top four issues nominated by people for NSW Government attention ten years from now.

While the **environment/environmental issues** (14%) and **planning and development** (14%) are the equal fifth most mentioned issues, both feature more prominently in peoples' minds as *future* concerns, than they do as issues for *current* attention. Although planning and development has increased significantly in mentions as a future issue since 2009 (from 9% to 14%), **the environment/environmental issues** has declined significantly, mirroring its decline as a current issue.

Reflecting its loss of salience as a current issue, **health** has also dropped sharply as a future priority.

Issues with sharp *increases* in prominence include **roads and traffic, planning and development**, and **cost of living** (reflecting a growth in mentions of energy costs, housing costs, along with general cost of living). Reflecting the changes in current issues, **transport** overall (public transport and roads and traffic together) receives the most mentions as a future issue (31%).

The quite noticeable 2012 drop in salience of the **environment/environmental issues** is caused by a convergence of movement in three components of this group:

- **water supply, conservation and management/drought matters**, which contributed substantially to mentions of environmental issues in 2006, reduced significantly in 2009 with the easing of the drought, and even further in 2012
- in 2009, the drop in importance of water was compensated by the emergence of **climate change** as an issue, but the 2012 survey has seen this also decrease in prominence, and
- mentions of all other environmental factors have gradually been reducing since 1997 (see Figure 6).

Figure 4: The top ten issues for NSW Government attention in ten years

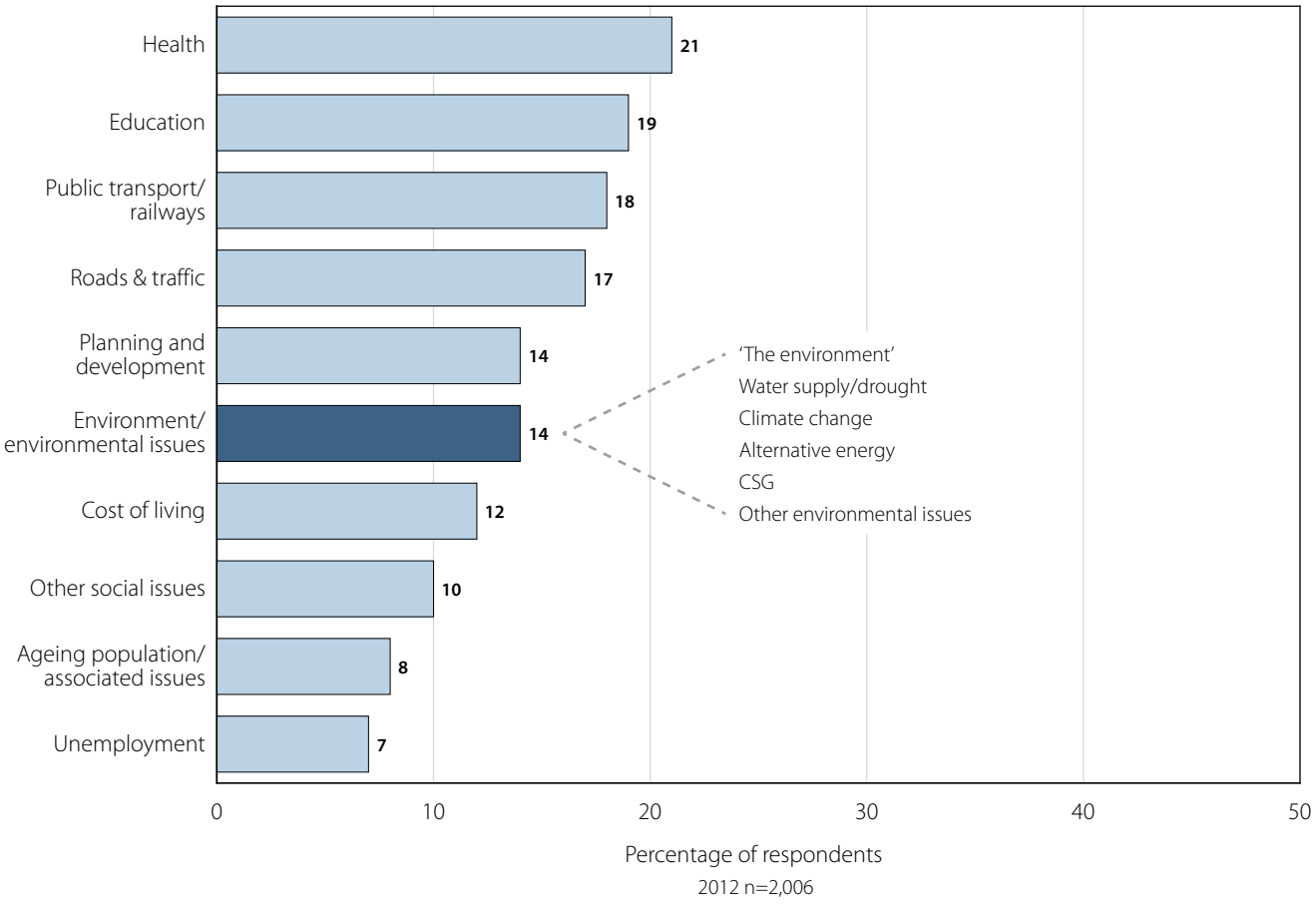
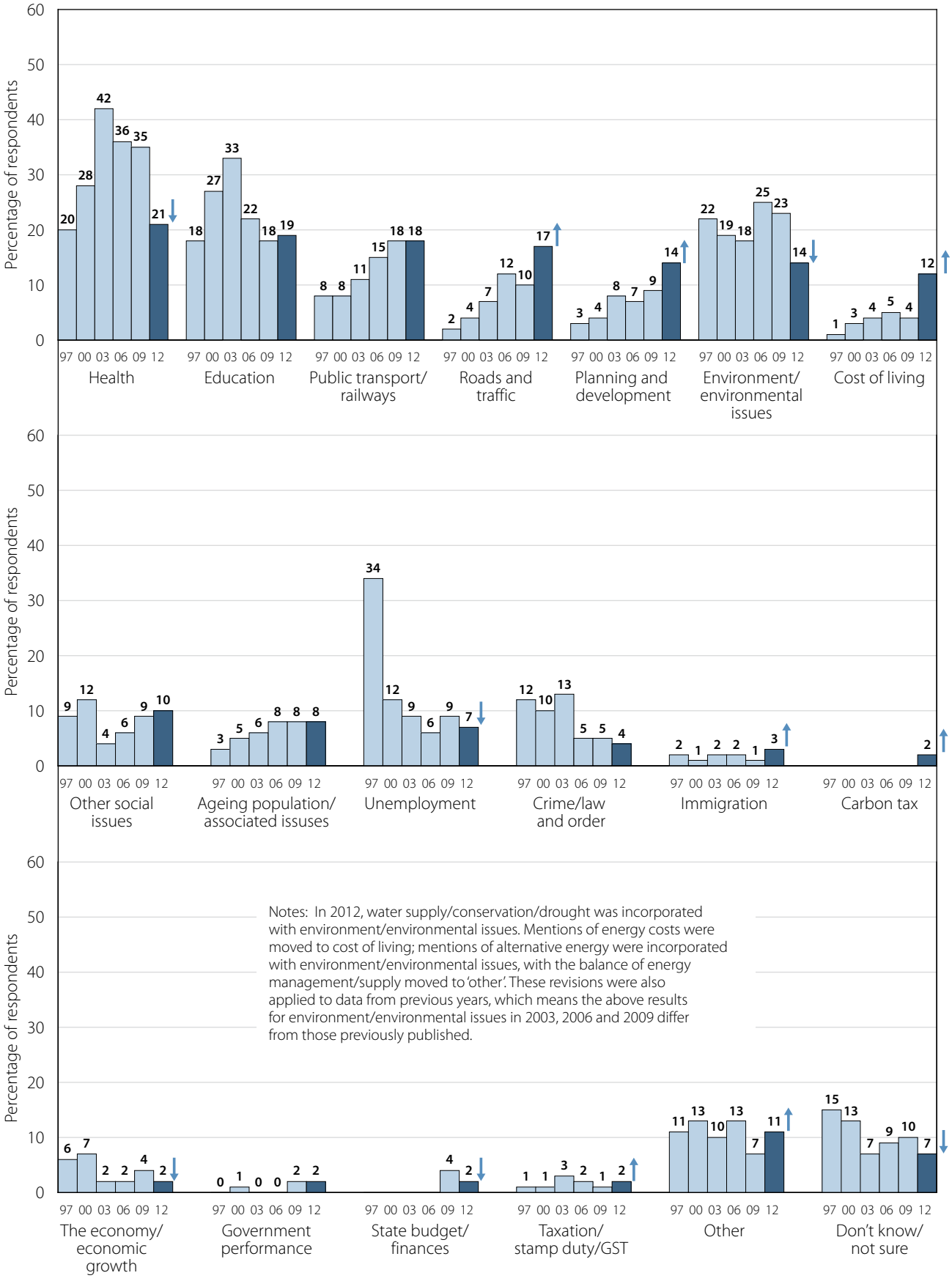
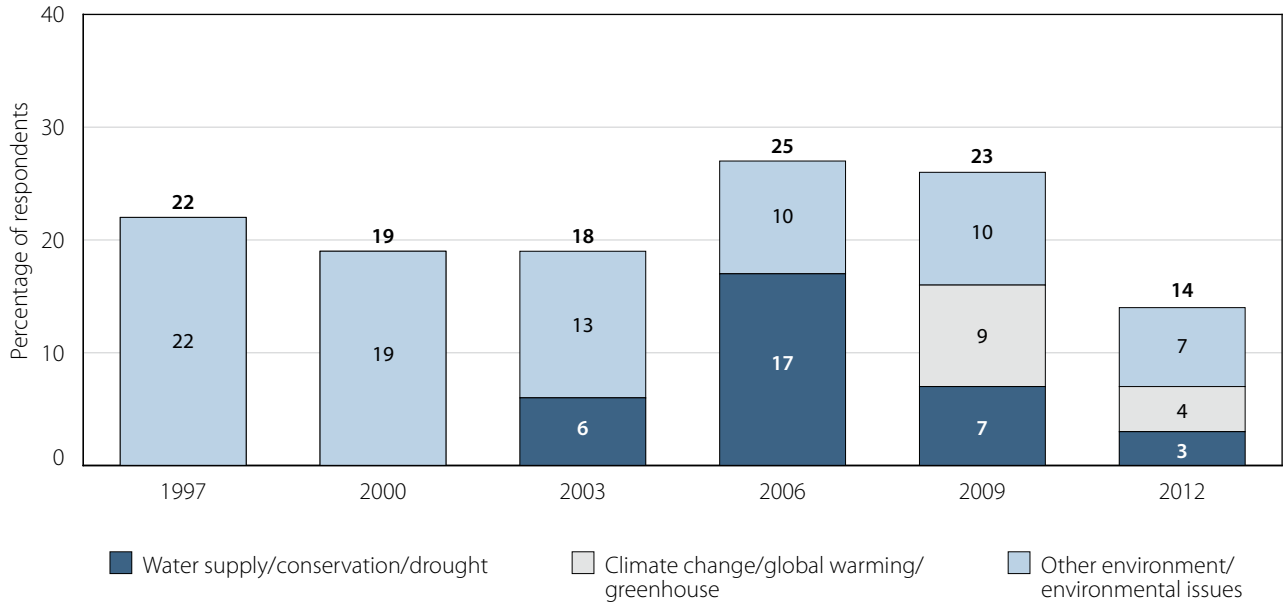


Figure 5: The two most important issues for NSW Government attention in ten years



1997 n=1,129 2000 n=1,102 2003 n=1,421 2006 n=1,724 2009 n=2,003 2012 n=2,006

Figure 6: The two most important issues for NSW Government attention in ten years – trends for environment



Segment highlights

The two most important issues for NSW Government attention *in ten years*

Note: comparisons are made either to the whole sample or, where there are two categories only, to the other (e.g. males and females).

Age

> Consistent with 2009, mentions of the **environment/environmental issues** as a future priority are more prevalent among young people aged 15 to 24 (22% compared with 14% community-wide).

Education

> Mentions of the **environment/environmental issues** are also higher among university graduates (16% compared with 14%).

Employment

> As found in 2009, students are more likely to see the **environment/environmental issues** as a future priority (27% compared with 14%).

Children

> Also consistent with 2009 (and 2006), mentions of the **environment/environmental issues** are higher among people without children (18%) than those with children (11%).

Region

> People living in the Murrumbidgee/Murray region are also more likely to regard the **environment/ environmental issues** as a matter for NSW Government attention ten years from now (27% compared with 14% state-wide).

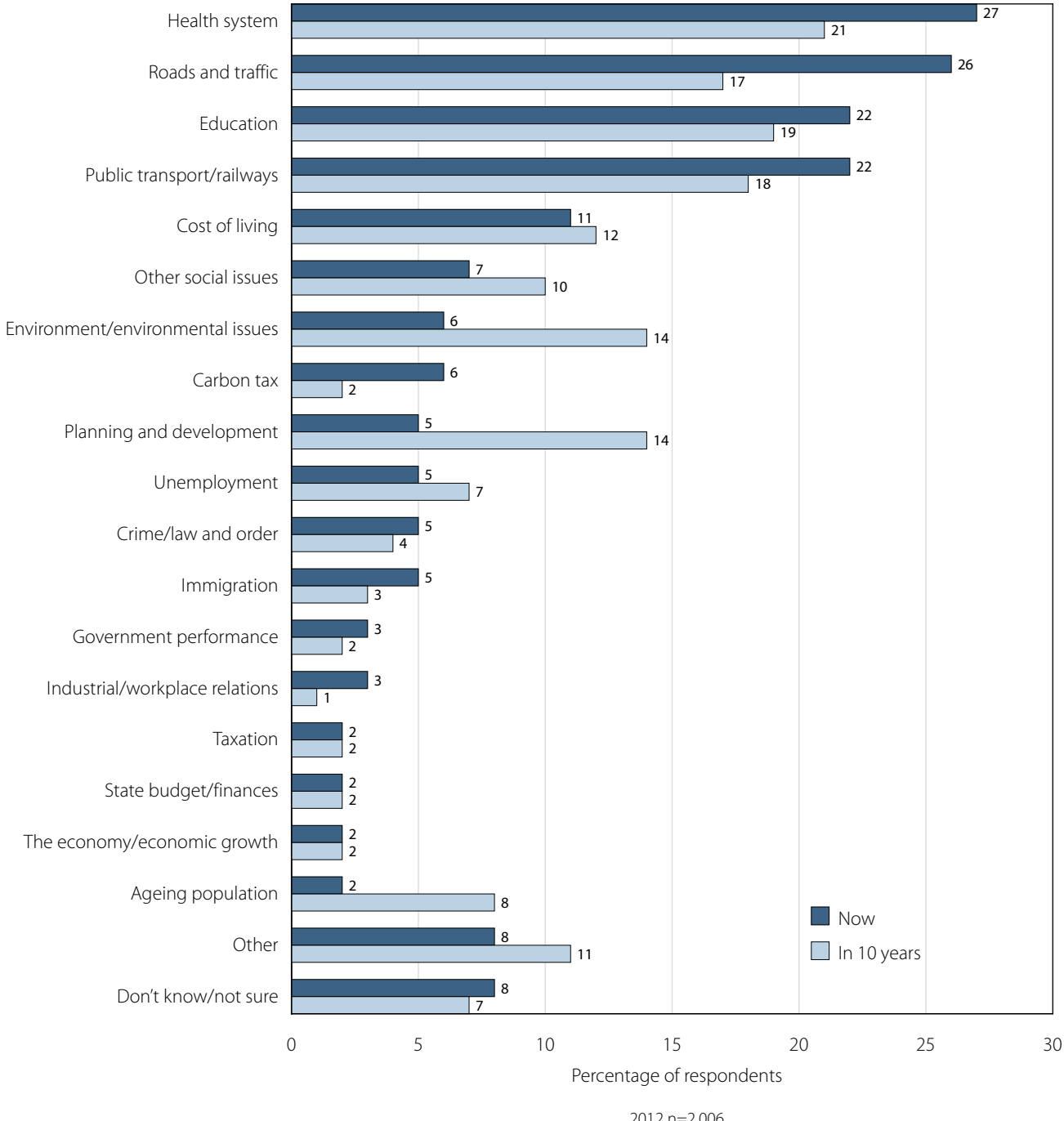
The two most important issues: now and in ten years

A comparison between priorities for NSW Government attention now versus the future shows a good deal of similarity between the two sets of priorities, with **health**, **education**, **public transport/railways** and **roads and traffic** featuring as the top four issues in both.

Nonetheless, there are differences in emphasis. While **health** and **roads and traffic** in particular *rank* highly regardless of the time frame, they are less prominent as future issues than as current issues. Similarly, the **carbon tax** is mentioned by significantly fewer people as a future issue than as a current issue.

On the other hand, four areas are significantly more prominent for people as future rather than current issues – **environment**, **planning and development**, **ageing population issues**, and **other social issues** (a wide range of issues from poverty and welfare to family and community issues). In most cases, these areas come to mind for more than twice as many people as issues for the future, than as present issues.

Figure 7: The two most important issues for NSW: now and in ten years



2012 n=2,006

The most important environmental issues in NSW today

Question 2(a)
What would you say is the single most important environmental issue in NSW today?

Question 2(b)
And what would you say is the second most important environmental issue in NSW today? (Unprompted)

The 2012 survey finds some marked shifts in perceptions about the two most important **environmental** issues in NSW today, and reveals a pattern somewhat different to that observed in previous surveys.

All surveys from 1997 to 2009 (Figure 8) have revealed either one very dominant issue, or sometimes a few more prominent issues relevant to the time:

- The 1997 and 2000 surveys captured the 'pollution' stage, with **water pollution/water quality** being the dominant environmental issue in the public mind, and to a lesser extent **air pollution/air quality**.
- In 2003, although water pollution had receded from its peak, it remained, along with air pollution, highly salient, while **water supply, conservation and management/drought** also emerged as a pressing matter, and issues concerning **forests/bushland/biodiversity** were also on the rise.
- The 2006 survey saw **water supply**, **conservation and management/drought** rise to strong dominance, and although not quite as pronounced in 2009, it remained very prominent compared with any other environmental issue.

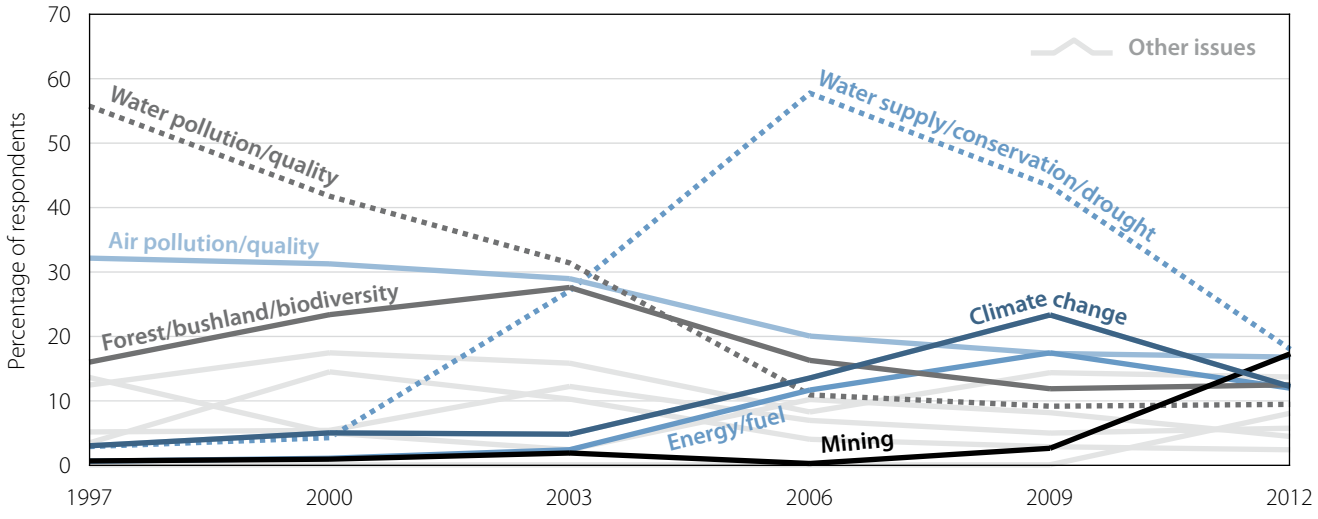
However, in 2012, with the drought receded, mentions of **water supply, conservation and management/drought** as an environmental issue have dropped substantially to 18%, from 43% in 2009 and 58% in 2006. While **water supply, conservation and management/drought** still ranks as the top issue, there is no current, *dominant* environmental issue for people. Rather, the community's top-of-mind thoughts about the environment are spread over a range of issues, many of which receive a similar volume of mentions. The lack of a dominant issue coincides with a sharp rise in the 'don't know' response, in two ways:

- firstly, in the number of people unable to think of *any* important environmental issue for NSW at the present (up from 8% to 15%)
- even more noticeably, the number unable to nominate *two* important issues (up from 23% to 35%) – though this level had already been gradually rising between 2003 and 2009.

The top seven issues for people in 2012 are:

- **water supply, conservation and management/drought** (18%)
- **mining** (17%, including CSG 12%)
- **air pollution/air quality** (17%)
- **waste** (14%)
- **forest/bushland/biodiversity** (12%)
- **climate change** (12%)
- **energy/fuel** (12%).

Figure 8: Two most important environmental issues – overview



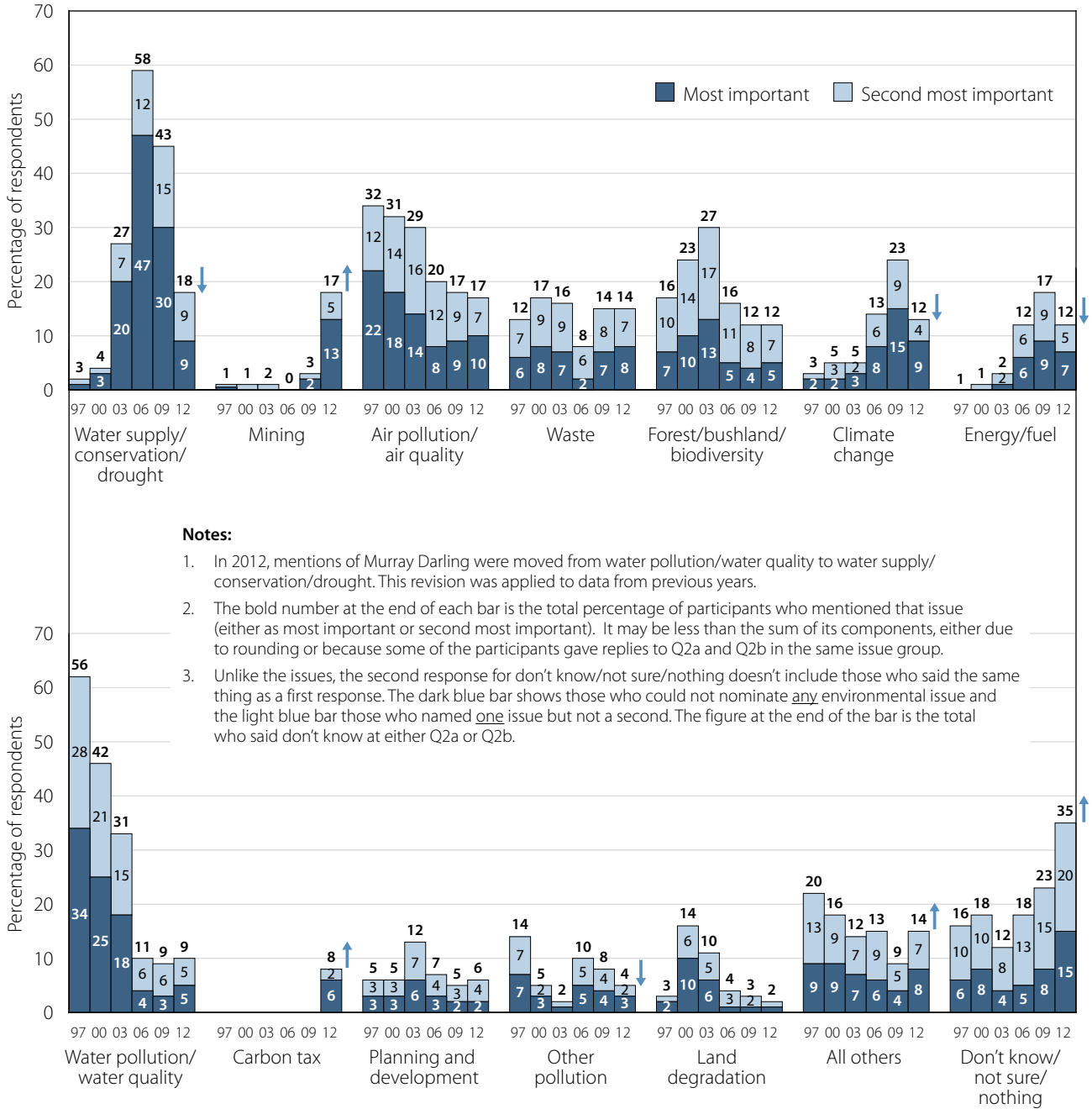
1997 n=1,129 2000 n=1,102 2003 n=1,421 2006 n=1,724 2009 n=2,003 2012 n=2,006

Coal seam gas has been a key contributor to mining rising sharply to be among the top environmental issues.

While the 2009 survey saw **climate change** and **energy/fuel** increase significantly, in 2012 they have receded in prominence back to 2006 levels. A connected issue is the emergence of the **carbon tax** (8%), comprising 5% expressing 'anti' carbon tax comments, some on cost grounds, and the balance of 3% simply nominating it as an issue without expressing a clear view. A small number of positive mentions concerning the carbon tax are incorporated with the climate change group.

Some themes in the **energy/fuel** category have climate change implications, including energy efficiency, promotion of renewables, and the need to reduce reliance on coal or fossil fuels. Considering these responses together with the direct climate change category finds that 20% mention issues with climate change implications, making this the overall most mentioned.

Figure 9: Two most important environmental issues – detailed



Notes:

1. In 2012, mentions of Murray Darling were moved from water pollution/water quality to water supply/ conservation/drought. This revision was applied to data from previous years.
2. The bold number at the end of each bar is the total percentage of participants who mentioned that issue (either as most important or second most important). It may be less than the sum of its components, either due to rounding or because some of the participants gave replies to Q2a and Q2b in the same issue group.
3. Unlike the issues, the second response for don't know/not sure/nothing doesn't include those who said the same thing as a first response. The dark blue bar shows those who could not nominate any environmental issue and the light blue bar those who named one issue but not a second. The figure at the end of the bar is the total who said don't know at either Q2a or Q2b.

1997 n=1,129 2000 n=1,102 2003 n=1,421 2006 n=1,724 2009 n=2,003 2012 n=2,006

Table 1: The two most important environmental issues (2012 and 2009 surveys)

	2012 (%)	2009 (%)
Water supply/conservation/drought	**18**	**43**
Water conservation/management/supply general or multiple	9	37
Uneven allocation/redirection to rural/regional areas	3	1
Desalination plant	2	2
Need more dams	2	1
The Murray/Darling basin general mentions	1	1
Need to develop water recycling/stormwater capture	1	1
Flooding	1	0
Rainwater tanks	<0.5	<0.5
Mining	**17**	**3**
Coal seam gas/CSG – concerns/queries/doubts/dislike	12	0
Mining – other general	5	1
Coal mining	2	2
Air pollution/air quality	**17**	**17**
Motor vehicles, vehicle emissions	7	7
Air pollution/air quality – other	4	7
Traffic/congestion	2	2
Industrial emissions or waste	2	1
Air pollution caused by mining	1	0
Smoking/smokers	<0.5	<0.5
Smells, odours	<0.5	0
Waste	**14**	**14**
Litter and dumping of rubbish	5	2
Waste or waste disposal/waste management – other, general	5	5
Recycling issues/household rubbish or garbage	4	5
Plastic bags	1	1
Plastic waste	<0.5	1
Wasteful packaging of products	<0.5	<0.5
Forest/bushland/biodiversity issues	**12**	**12**
Protection of/loss of/threats to bushland, trees, forests	4	6
Wilderness protection, need for national parks	4	1
Protection of native/endangered animals or plants, threats to marine life	2	3
Bushfires, bushfire risks, bushfire prevention	1	1
Noxious weeds/introduced species/feral animals	<0.5	<0.5
Logging/wood chipping	<0.5	1
Land clearing	<0.5	1
Climate change	**12**	**23**
Carbon pollution/carbon emissions/greenhouse gases	6	11
Greenhouse effect/global warming/climate change	5	12
Carbon tax – support for/positive comments about carbon tax	1	0
Rising sea levels	1	1

Table 1: The two most important environmental issues (2012 and 2009 surveys) (cont.)

	2012 (%)	2009 (%)
Energy/fuel	**12**	**17**
Consider/promote renewable energy	6	6
Cost of electricity/fuel	2	<0.5
Need to reduce reliance on coal for energy production	1	4
Energy conservation/energy efficiency/reducing use	1	3
Energy production – general	1	1
Need to reduce reliance on fossil fuels – other, general	1	1
Nuclear power debate	<0.5	<0.5
Need to reduce petrol use – better public transport/hybrid/LPG	<0.5	2
Water pollution/water quality	**9**	**9**
Fresh water pollution – pollution of waterways/creeks/rivers	3	2
Water pollution/water quality – other, general	3	4
Pollution of beaches and/or the ocean	2	1
River health, including salinity and river flows	1	2
Sewage treatment/sewerage problems, general	<0.5	<0.5
Carbon tax	**8**	**n/a**
Carbon tax – anti introduction	5	0
Carbon tax – general	3	0
Development and planning	**6**	**5**
Urban development/loss of natural environment/trees/open space	3	2
Urban sprawl, inadequate urban planning, problems with planning housing	2	1
Overpopulation/overdevelopment/coastal development	1	2
Other pollution	**4**	**8**
Pollution – general, unspecified	4	8
Pollution of air and water	1	<0.5
Land degradation	**2**	**3**
Land degradation, soil erosion, salinity problems	1	2
Coastal erosion	1	1
Other	**14**	**9**
Sustainable management of food supplies	1	1
Too many 'greenies'/minority groups/environmentalism/over-regulation	1	1
Resource preservation/sustainability	1	1
Climate change/global warming not happening/just natural weather cycles	1	<0.5
Anti-marine/national parks	1	<0.5
Other agricultural/farming issues	1	1
Need for education on environmental issues	1	1
All other	8	4

Segment highlights

The two most important environmental issues in NSW today

Note: comparisons are made either to the whole sample or, where there are two categories only, to the other (e.g. males and females).

Age

> Young people aged 15 to 24 are more likely to mention **waste** (24% vs. 14% community-wide)

> Those aged 35 to 44 are more likely to mention **energy/fuel** (18% vs. 12%).

Education

> The university educated are more likely to nominate **energy/fuel** (17% vs. 12%) and **mining** (20% vs. 17%) as issues.

> People who have completed secondary school, but with no further qualification, are less able to think of any important environmental issue (21% vs. 15%).

Employment

> Students are more likely to mention **waste** (24% vs. 14%), and those in paid employment, **energy/fuel** (14% vs. 12%).

> Retirees are less likely to mention both **waste** (6% vs. 14%) and **energy/fuel** (7% vs. 12%).

Children

> People without children (17%) are more likely than those with children (12%) to mention **waste**.

Language

> Consistent with 2009, people from multi-lingual households are more likely to mention **waste** than those from English-only households (19% vs. 12%).

Region

> **Water supply, conservation and management/ drought** issues are top of mind for more people in the Murrumbidgee/Murray (50%) and Central West/South Eastern (28%) regions of NSW compared with the total state (18%). Water allocation (28%) is a key component of the response in Murrumbidgee/Murray.

> Those from the Central West/South Eastern regions are more likely to mention **energy/fuel** (21% vs. 12%).

> Consistent with 2009 and 2006, **air pollution** is more top of mind in Sydney, 20%, compared with 12% among those outside Sydney.

> Mentions of **water pollution** are higher in Sydney's Northern Beaches (20%) compared with 9% state-wide.

> General mentions of **pollution** are more prominent in Sydney (5%) than outside Sydney (3%), most particularly in Southern Sydney, 11%.

> Mentions of **mining** are higher outside Sydney (23%) than in Sydney (14%), most particularly in Richmond/Tweed (39%); Mid North Coast (31%) and North/North West/Far Western NSW (31%).

> Those from the Mid North Coast are also more likely to mention **land degradation** issues (8% vs. 2% state-wide).

Concern about environmental problems

> Those who say they are concerned a great deal about environmental problems nominate three issues to a greater degree than the whole sample:
  - **mining** (27% vs. 17%)
  - **forest/bushland/biodiversity** (18% vs. 12%)
  - **energy/fuel** (16% vs. 12%).

Most important environmental initiative for the NSW Government in the next few years

Question 21
What would you say is the single most important thing that the NSW Government could do to protect and look after the environment over the next few years? (Unprompted)

Consistent with previous surveys, opinions on this question are spread across a range of issues, with no single issue being nominated by a particularly large number of people.

Seven topics each attract mention by approximately one person in ten: **vegetation/biodiversity** (12%), **education/ community engagement** (9%), **mining** (9%), **energy and greenhouse** (8%), **government strategies** (8%), **regulation** (8%), and **waste** (7%).

Among this top group, significant gains compared with 2009 are apparent for three areas:

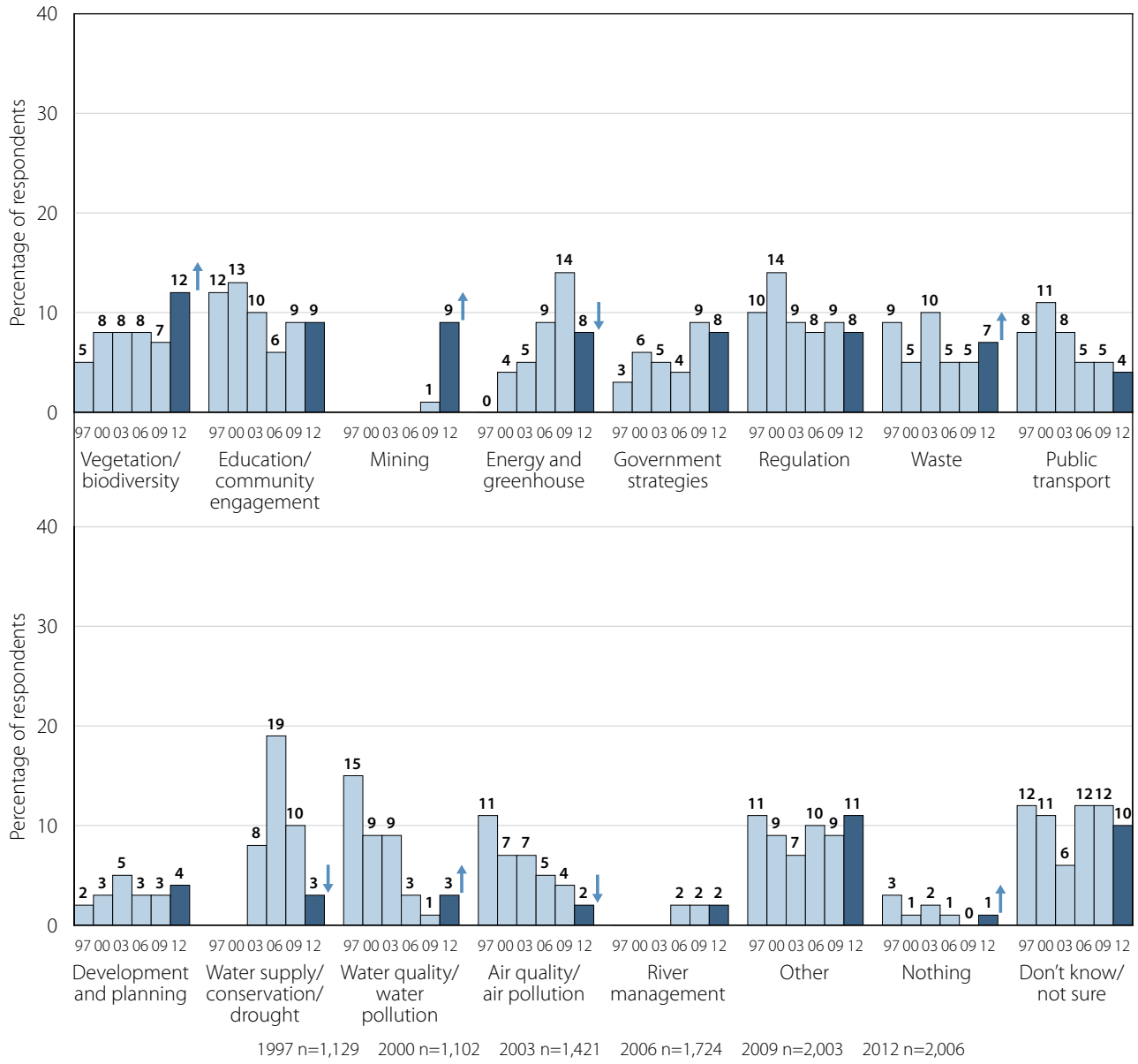
- **Vegetation/biodiversity:** contributing to the growth in this area is a combination of small increases in each of a few issues: protecting wildlife/habitats; the creation of new reserves or marine reserves; better management of weeds and feral animals, and new to the agenda, concerns about shooting in national parks.
- **Mining:** certainly the most marked change is evident for mining, having risen from virtually nothing to a top issue since the last survey. Approximately half the mentions relate specifically to CSG, while most of the remainder are more general mentions of mining. Comments about CSG vary from people saying it should be stopped altogether, or stopped with qualifications (e.g. stopped in certain places, or stopped until the implications are better understood), to those saying or implying it should be better regulated.
- **Waste:** this area has shown only a small increase, including mentions of litter/rubbish dumping and recycling.

While addressing **energy and greenhouse** issues remains in the top list of suggested actions, it has experienced a significant drop back to 2006 levels (reflecting the pattern for climate change in relation to *current* environmental issues). In 2012 there are fewer mentions of reducing greenhouse emissions, the use of coal/fossil fuels, and encouraging alternative fuels, although the latter remains as the key component to this area.

Although many people nominate the most pressing issues they feel should be addressed, others mention, in similar proportions to previous years, the tools they think should be used to address the issues. These include the use of public **education** to increase awareness of environmental issues; followed by **regulation** through better enforcement or harsher penalties, along with **government strategies** (including environmental research and public consultation).

All other categories are mentioned by fewer than 5%, with **water supply, conservation and management** having dropped significantly in prominence in both the 2009 and the 2012 surveys.

Figure 10: Most important environmental initiative for the NSW Government over the next few years



Note: In 2012, mentions of education for recycling were moved from Education to Waste. This revision was also applied to previous years data.

Table 2: Most important environmental initiative for the NSW Government over the next few years – 2012 and 2009

	2012 (%)	2009 (%)
Vegetation/biodiversity	**12**	**7**
Better management – wildlife/habitat	2	1
Stop/reduce loss of vegetation through logging/deforestation	2	2
Create new national parks, reserves, conservation areas, marine parks	2	<0.5
Increase vegetation through planting/replanting	1	2
Concerns about shooting in national parks	1	0
Better management – national parks/reserves	1	1
Better management – weeds and feral animals	1	<0.5
Better management – fire	1	1
Better management – stop/reduce loss of vegetation/land clearing	<0.5	<0.5
Education/community engagement	**9**	**9**
Increase education/community awareness – general	6	7
Increase education – school/youth	2	1
Increase education/community awareness – specific – TV/media	1	1
Educate people to conserve energy and water	<0.5	<0.5
Encourage/promote community involvement in environmental/conservation issues	<0.5	0
Mining	**9**	**1**
Stop/reduce/better management/regulation of coal seam gas/CSG mining	4	0
Stop/reduce/better management of mining – general	4	1
Stop/reduce/better management – coal mining	<0.5	<0.5
Energy and greenhouse	**8**	**14**
Find/promote alternative 'green' fuel/alternative energy sources	3	6
Reduce greenhouse emissions	1	4
Incentives, subsidies for alternative energy (e.g. solar)	1	1
Introduce/promote carbon trading/carbon tax	1	1
Reduce energy consumption	<0.5	<0.5
Stop global warming/address climate change	<0.5	1
Reduce use of fossil fuel – general	<0.5	2
Promotion of/planning for energy conservation	<0.5	<0.5
Nuclear power issues	<0.5	<0.5
Government strategies	**8**	**9**
Listen to the people/better consultation	3	2
Government should put more money into research/environmental issues	2	3
Government should continue what it is doing	1	<0.5
Better planning for conservation/environmental protection	1	1
Dissatisfaction with government performance on environmental issues	1	<0.5
Government should stop talking/make environment a priority	1	2
Government should set an example	<0.5	<0.5
Regulation	**8**	**9**
Increase enforcement – enforce laws more strictly	4	3
Increase regulation – make laws harsher/increase fines	3	3
Increase regulation – more laws for industries	1	2

	2012 (%)	2009 (%)
Waste	**7**	**5**
Better waste management – litter/rubbish dumping	2	1
Better waste management – recycling	2	1
Better waste management – general	1	1
Better waste management – industry	1	1
Better waste management – plastic/plastic bags/plastic bottles	<0.5	1
Solutions – education – recycling	<0.5	<0.5
Better waste management – reduce packaging	<0.5	<0.5
Public transport	**4**	**5**
Improve/promote use of public transport to reduce use of vehicles	2	2
Improve/fix public transport/rail system	1	2
Promote use of public transport – general	<0.5	<0.5
Promote use of public transport – cheaper prices	<0.5	<0.5
Development and planning	**4**	**3**
Better manage/limit growth/sprawl/development-general/urban/commercial	2	2
Limit/control population/urban density	1	1
Better manage/limit growth – coastal development	<0.5	<0.5
Solutions-better planning	<0.5	<0.5
Encourage building of environmentally friendly housing	<0.5	<0.5
Water supply/conservation/drought	**3**	**10**
Water conservation – general	1	4
Solutions – infrastructure – dams/pipelines	1	1
Solutions – recycling/stormwater use/water harvesting	<0.5	1
Solutions – regulation/restrictions	<0.5	1
Solutions – better management – crops/irrigation/water allocation to farms	<0.5	<0.5
Address water use/consumption – general	<0.5	1
Solutions – infrastructure – tanks	<0.5	<0.5
Solutions – planning/research	<0.5	<0.5
Solutions – other	0	2
Water quality/water pollution	**3**	**1**
Cleaner waterways/stop pollutants entering water	2	1
Improve water quality	<0.5	<0.5
Solutions– alternatives – sewage entering oceans etc.	<0.5	<0.5
Air quality/air pollution	**2**	**4**
Solutions – reduce vehicle emissions – specific – reduce vehicles on roads	1	1
Solutions – reduce vehicle emissions – general	1	1
Reduce air pollution – general	<0.5	1
Solutions – reduce industrial emissions	<0.5	<0.5
River management	**2**	**2**
Better management of river systems – other	1	1
Better management of river systems – environmental flows	1	1
Other	**11**	**9**
Sustainable resource use	1	<0.5
Incentives – tax/pricing/other incentives	1	1
Less pollution generally	<0.5	1
More understanding/assistance to farmers	<0.5	1
Incentives – tax/pricing/other incentives – general	<0.5	1
All others	**9**	**6**
Don't know/not sure	**10**	**12**

Segment highlights

Most important environmental initiative for the NSW Government over the next few years

Note: comparisons are made either to the whole sample or, where there are two categories only, to the other (e.g. males and females).

Age

> Young people aged 15 to 24 are more likely to mention **education/community engagement** as an initiative to protect the environment (19% vs. 9% community-wide).

> 45 to 54 years olds place more emphasis on **water quality/water pollution** issues (5% vs. 3%).

> Those aged 65 years and over are more likely to focus on **mining** (15% vs. 9%) or **water supply, conservation and management/drought** (6% vs. 3%) – yet they are also less able to think of any important initiative (16% vs. 10% community-wide).

Education

> Those with a trade or technical qualification are more likely to raise **mining** as an issue (13% vs. 9%).

> Those who have completed secondary, but have no further qualifications, are less able to think of any important initiative (18% vs. 10%).

Employment

> Students are more likely to mention **education/community engagement** (18% vs. 9%).

> Retired people are more likely to raise **mining** (14% vs. 9%) or be unable to offer any initiative (17% vs. 10%). They are less likely to mention education (3% vs. 9%).

Children

> People with children (11%) are more likely than those without children (6%) to mention **mining**, while those without children are more likely to think of **education/community engagement** (14% vs. 7%) as an initiative.

Language

> Those from multi-lingual households (14%) are also more likely to mention **education/community engagement** than people from English-only households (8%).

Region

> Those from Sydney's Eastern/Inner suburbs are more likely to mention **energy and greenhouse** issues (13% vs. 8% state-wide), and those from Western Sydney less likely to mention this issue (3% vs. 8%), while those from North/North West/Far Western NSW place a greater emphasis on **mining**, 23%, compared with 9% state-wide.

Concern about environmental problems

> Those who are concerned a great deal about environmental problems nominate three issues to a greater degree than the state-wide sample:
  - **energy and greenhouse** (12% vs. 8%)
  - **mining** (14% vs. 9%)
  - **development, population and planning** (7% vs. 4%).

Concern about environmental problems

Question 3(a)
In general, are you concerned about environmental problems?

Question 3(bi)
Would you say you are concerned a great deal, a fair amount, or a little?

A large majority (71%) of people in NSW say they are concerned about environmental problems, though this is down from 78% in 2009 and even more so from 87% in 2006. Currently, about one in four say they have **a great deal** of concern; 40% **a fair amount** of concern, and 8% say they are concerned only **a little**.

As found in previous years, women and those with a higher level of education are more likely than others to be concerned about environmental problems. The *degree* of concern rises with age up to the age of 64.

For the past three surveys, environmental concern has been measured using a two-part question: the first asking whether people are concerned about environmental problems, and for those who are, the second part asks about their *degree* of concern (is it a great deal, a fair amount, or a little).

Prior to 2006, however, survey respondents were asked to nominate their level of concern with a single question using a four-point scale, ranging from 'a great deal' to 'not at all'. Consequently results from 2006 to 2012 are not comparable with those from earlier surveys, and are shown separately in Figures 11 and 12 below. A comparison of the 2006 results with those from previous surveys suggests that, at face value, the change to the question did not greatly affect the number claiming to have 'a great deal' of concern (34% in 2006 compared with figures varying between 31% and 38% prior to 2006).

At the other extreme, prior to 2006, only 1% or 2% said they were 'not at all concerned' about environmental problems. But in 2006, in response to a simple 'yes/no' question, 13% said they were not concerned, and this has grown through 2009 and 2012. There are also large differences, for example, in the number saying they are concerned 'a fair amount' using the two different question approaches.

Figure 11: Level of concern about environmental problems (2006–2012)

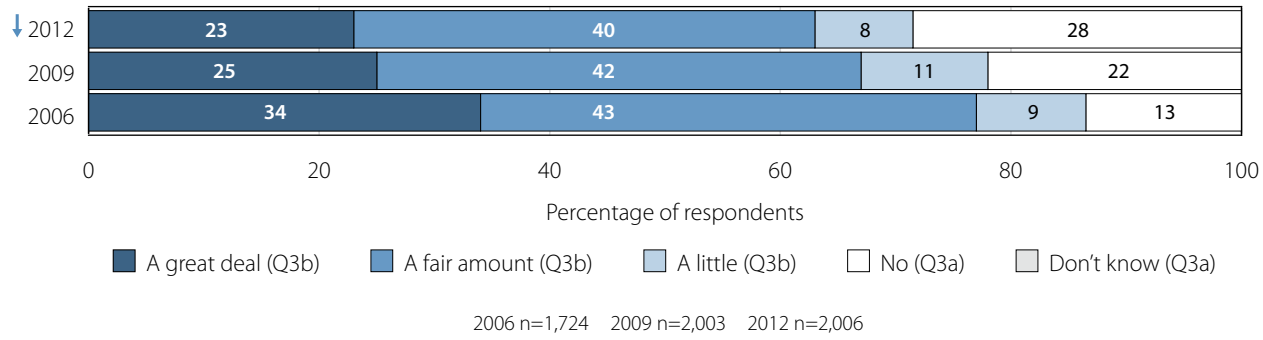
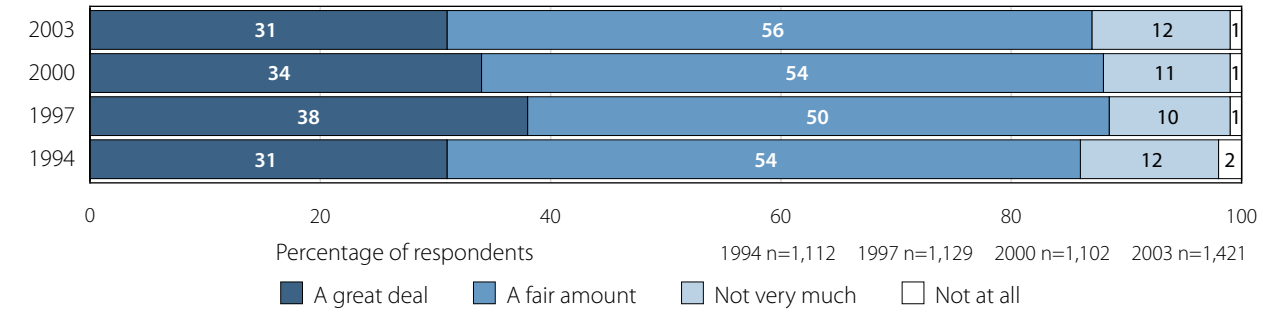


Figure 12: Level of concern about environmental problems (1994–2003)



Note: Prior to 2006, survey participants were asked to rate their level of concern about environmental problems on a four-point scale ranging from 'a great deal' to 'not at all'. Since 2006 the question has been split into two parts, as indicated above. Responses to these questions are charted separately, given the change in question format.

2 Survey findings

From the qualitative research

In the quantitative research (by telephone), a respondent indicates their degree of concern based on what they personally are thinking of when asked the question. However, the qualitative research found that concern varies depending on the issue – people may be concerned about some things, but not others.

In a group discussion, different types of environmental issues may arise, from the very local (e.g. rubbish dumping) to the very macro (e.g. climate change). Even participants recruited on the basis of being 'not concerned' can encounter issues for which they do, in fact, feel there is a need to be concerned.

Consequently, whether a person is 'concerned' or 'not concerned' about environmental problems, can be somewhat fluid.

Segment highlights

Concern about environmental problems

Note: comparisons are made either to the whole sample or, where there are two categories only, to the other (e.g. males and females).

Gender

> As found in both 2009 and 2006, women (75%) are more likely than men (67%) to be concerned about environmental problems.

Age

> In terms of overall concern, people aged 55 to 64 are more likely to be concerned than others (78% compared with 71% community-wide).

> There is variation in the *degree* of concern across age groups:
  - the youngest group, 15 to 24, are more likely to be **a little** concerned (13% vs. 8% community-wide)
  - those aged 25 to 34 are more likely to be concerned **a fair amount** (47% vs. 40%)
  - those aged 45 to 54 (30%) and 55 to 64 (36%) are more likely to be concerned **a great deal** (compared with 23% community-wide).

Education

> Consistent with 2009, university graduates are more likely to be concerned (79% compared with 71% community-wide), and in particular, concerned **a great deal** (31% vs. 23%).

> Those who have completed secondary education but have no further qualifications are more likely than others to be concerned **a little** (12% vs. 8%).

> More people who have not completed secondary education are unconcerned about environmental problems (38% vs. 28%).

Employment

> Retirees are more likely to be concerned **a great deal** (31% vs. 23% community-wide).

Children

> Consistent with both 2006 and 2009, people with children (25%) are more likely than those without children (20%) to be concerned **a great deal**.

Region

> Those from Sydney's Eastern/Inner suburbs (79%) and Northern Beaches (84%) are more likely than the community at large (71%) to be concerned about environmental problems. People from the Eastern/Inner suburbs are also more likely to be concerned **a great deal** (30% vs. 23% state-wide).

> Fewer people in South Western Sydney are concerned **a great deal** about environmental problems (13% vs. 23% state-wide).

> More people in Murrumbidgee/Murray have little or no concern about environmental problems (50% vs. 36% state-wide). (Note that this region, however, has a relatively high volume of mentions of water allocation as an 'environmental' issue).

Major reason for concern about environmental problems

Question Q3(c)
*(If concerned) Which one of the following best describes **what** you are concerned about?*

Those concerned about environmental problems were asked which of a list of six reasons best describes what they are concerned about. **Concern for future generations** (32%) remains the most commonly chosen reason, well above the second and third nominated reasons of **maintaining ecosystems** (21%) and **long-term economic sustainability** (15%).

The remaining three reasons are nominated by around one in ten people: the **availability of resources**; **health effects of pollution**, and **quality of life**.

The same ranking of priorities was evident in 2009. However, the 2012 survey reveals slightly less emphasis on concern for future generations, but increasing emphasis since 2006 on maintaining ecosystems and long-term economic sustainability.

There are no significant differences in the reasons given by those concerned 'a great deal' about environmental problems compared with those concerned 'a fair amount' or only 'a little'.

Segment highlights

Major reason for concern about environmental problems

Note: comparisons are made either to the whole sample or, where there are two categories only, to the other (e.g. males and females).

Employment

> Students are more likely to nominate **maintaining ecosystems** (33% compared to 21% community-wide).

Children

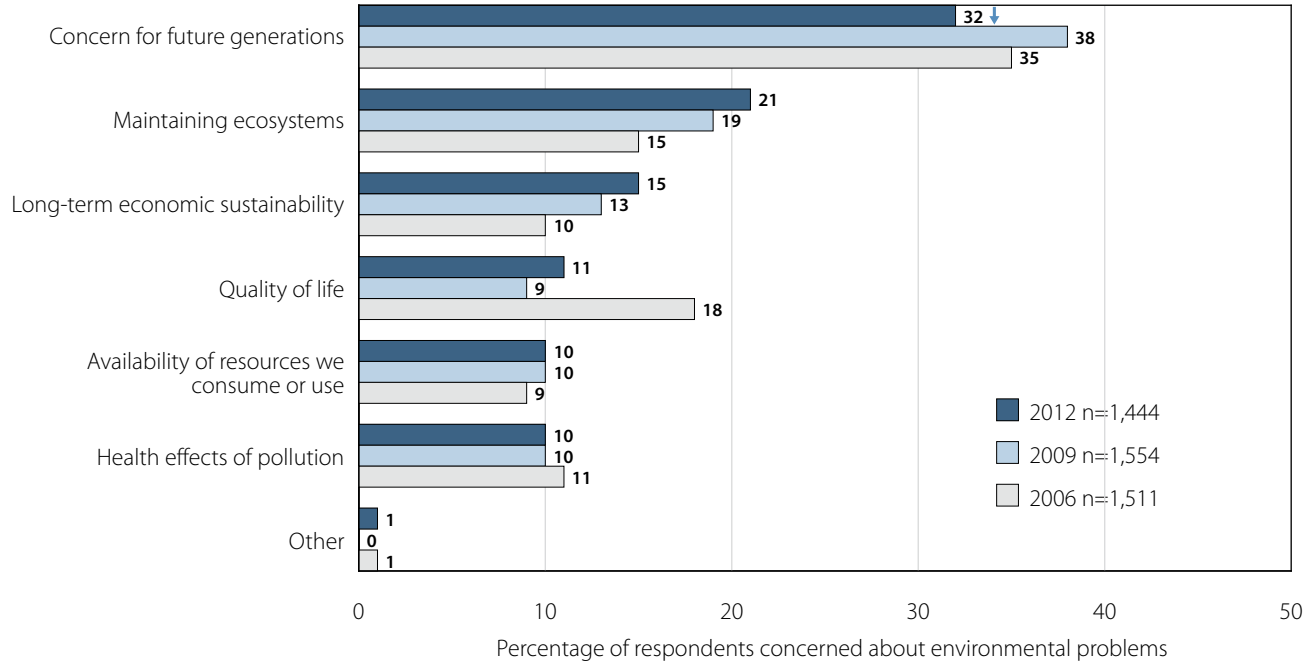
> As found in 2009:
  - those with children are more likely to cite **concern for future generations** (36% vs. 24% among those without children)
  - conversely, those with no children are more likely to nominate **maintaining ecosystems** (28% vs. 18%).

Region

> Sydney people (12%) are more likely than people outside Sydney (6%) to cite the **health effects** of pollution.

> Those living in Western Sydney are more likely (18%), and those in the Central West/South Eastern region less likely (1%), to nominate **quality of life**, compared with 11% state-wide.

Figure 13: Major reason for concern about environmental problems



Reasons for lack of concern about environmental problems

Question Q3(bii)
*(If not concerned) For what particular reasons would you say you are **not** concerned about environmental problems? (Unprompted)*

In 2009, doubt about the severity of environmental problems rose markedly to be the most frequently mentioned reason for lack of concern (24%). **The problem is not as bad as they say** remains the most common reason in 2012, at 21%. This includes 12% referring to, or implying, climate change issues, very often expressing a view that the weather is just following natural cycles.

However, following a decline between 2006 and 2009, the current survey sees a rise again to second for **the condition of the environment being good or well managed** (up from 9% to 18%). This includes people either referring to the environment as being good or well managed in their own area (5%), or more generally (13%).

Put simply, these people are saying they are not concerned about environmental problems, because they do not see there is a problem to be concerned about. This coincides with fewer people in 2012 being able to nominate an important environmental issue for NSW in Question 2 of the survey.

Slightly below that, 15% say they are not concerned about environmental problems because they regard them as a **low priority compared with other things**.

Other stated reasons for lack of concern are each mentioned by fewer than one in ten people, and include:

- **lack of interest** in the environment
- environmental problems **having no impact on me personally**
- environmental problems are being **taken care of by someone else**, or **beyond my control**.

Segment highlights

Reasons for lack of concern about environmental problems

Note: comparisons are made either to the whole sample or, where there are two categories only, to the other (e.g. males and females).

Across all segments, there is only one significant difference on this question.

Age

- Young people aged 15 to 24 are less likely to say they are not concerned because **the problem is not as bad as they say** (7% compared with 21% community-wide).

From the qualitative research

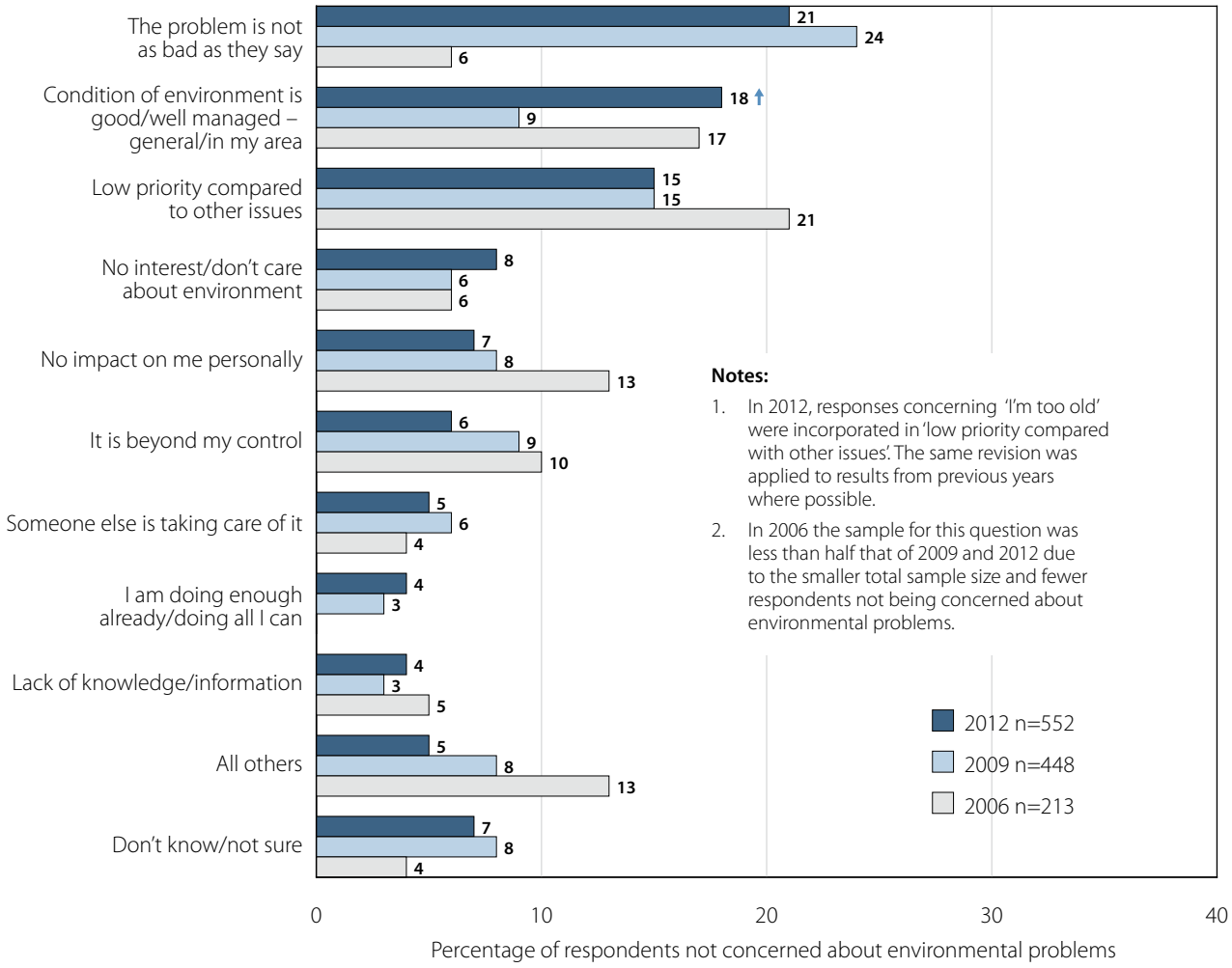
The qualitative research also found that concerns about environmental problems are moderated by the belief that 'it's not as bad as they say', along with a perceived lack of a pressing environmental issue or threat.

Doubt, or scepticism, was underpinned by a few factors:

- A belief that climate/weather issues are part of natural cycles, or that Earth can adapt and recover from environmental damage.
- A perception that issues have been 'over-hyped', and predictions of environmental disasters have failed to materialise.
- Conflicting information or science about environmental issues, including but not limited to climate change.

Together, conflicting information and unfulfilled predictions make it difficult for people to make sense of things, and to find the 'truth'. Consequently for some, this leads to disengagement from the issues.

Figure 14: Reasons for lack of concern about environmental problems



Snapshot – Knowledge and views

Knowledge

> **Typically, people can correctly answer two or three of the five knowledge questions surveyed.** (p. 30)

> **In the highest level of correct response, 74% know that bushfires do *not* cause long-term damage to Australian ecosystems.** After that, 54% know that the greenhouse effect is *not* caused by a hole in the Earth's atmosphere, while the remaining three questions are answered correctly by 45% or less. (p. 29)

> **Knowledge has improved slightly since 2009 on two issues:** that industrial sites and sewerage treatment plants do *not* cause more pollution of waterways and beaches than general rainfall runoff (up from 39% to 45%); and that recycling paper, cardboard and glass saves materials and also water, energy and fuel (up from 32% to 37%). (p. 29)

> **However, compared with 2006, fewer are aware that more mammals have become extinct in recorded history in Australia than in any other country** (down from 51% to 44%). (p. 29)

> **Those with high concern are more likely than others to correctly answer four of the five knowledge questions.** (p. 30)

Environmental improvement or deterioration

> For most of the 18 issues surveyed, many more people feel the situation in NSW has become ***better*** over the past three years than those who feel it has become ***worse***.

> **There is a marked increase in the number who sense improvement in ensuring there is enough water flowing in rivers** (up from 27% to 42%) **and in those who sense improvement in water quality in rivers, lakes and creeks** (up from 33% to 41%). (p. 32)

> **For six other areas, there has either been a small gain in those who sense improvement, or a small decrease in those who believe things have become worse:** reducing electricity use, greenhouse emissions, using alternatives to motor vehicles, air quality, coastal planning and development, and prosecuting environmental offenders.

> **On only one issue, reducing water consumption, has there been a *decrease* in those who feel the situation in NSW is getting better** (down from 74% to 63%). Despite this, more people believe there has been improvement in reducing water use than on any other issue. (p. 32)

> **Those with high environmental concern are generally less positive than others in their view of the state of these issues.**

Environmental regulation

> **Perceptions about environmental regulations being too strict or too lax vary according to sector.** About half think environmental regulation is 'about right' for the tourism (55%) and retailing (47%) industries, along with individuals and households (52%). Close to half continue to feel regulations are too lax for mining (49%) and property development/ construction (46%). Around 20% believe regulations are too strict for farming and agriculture and recreational and commercial fishing, whereas for other sectors only about one in ten feel it is too strict. (p. 41)

> Of the nine sectors surveyed, **the number who feel that regulations are too lax has decreased** in all except mining and recreational and commercial fishing. In the main, this has largely been compensated by an increase in those unsure about the strictness of regulations, and in some cases in the number who feel the level of strictness is 'about right'. (p. 42)

Other issues

> **Slightly less than half (45%) feel there is too little emphasis on protecting natural habitats in NSW.** Few (9%) think there is too much emphasis, and 42% feel the balance is 'about right'. (p. 45)

> **About one third (35%) feel there is too little emphasis on protecting and conserving historical things in NSW**, though the most common view (51%) is that the balance is about right. Again relatively few (12%) think there is too much emphasis. (p. 46)

> **Most people, 72%, believe NSW Government environmental support and funding should be focused within the state of NSW itself** – including 34% who feel initiatives should be managed at a state-wide level; 12% at a regional level, and 26% at a local level. However, some feel that NSW Government efforts and funding should push beyond NSW, to a national, 18%, or even international level, 7%. (p. 47)

Knowledge of environmental issues

Question 11
Please tell me whether you think each of the following statements is true or false. (Five statements presented in random order)

Of the five knowledge statements included in 2012, three were also surveyed in 2009; one concerning the extinction of mammals was last surveyed in 2006, and the remaining issue concerning bushfires was new in 2012.

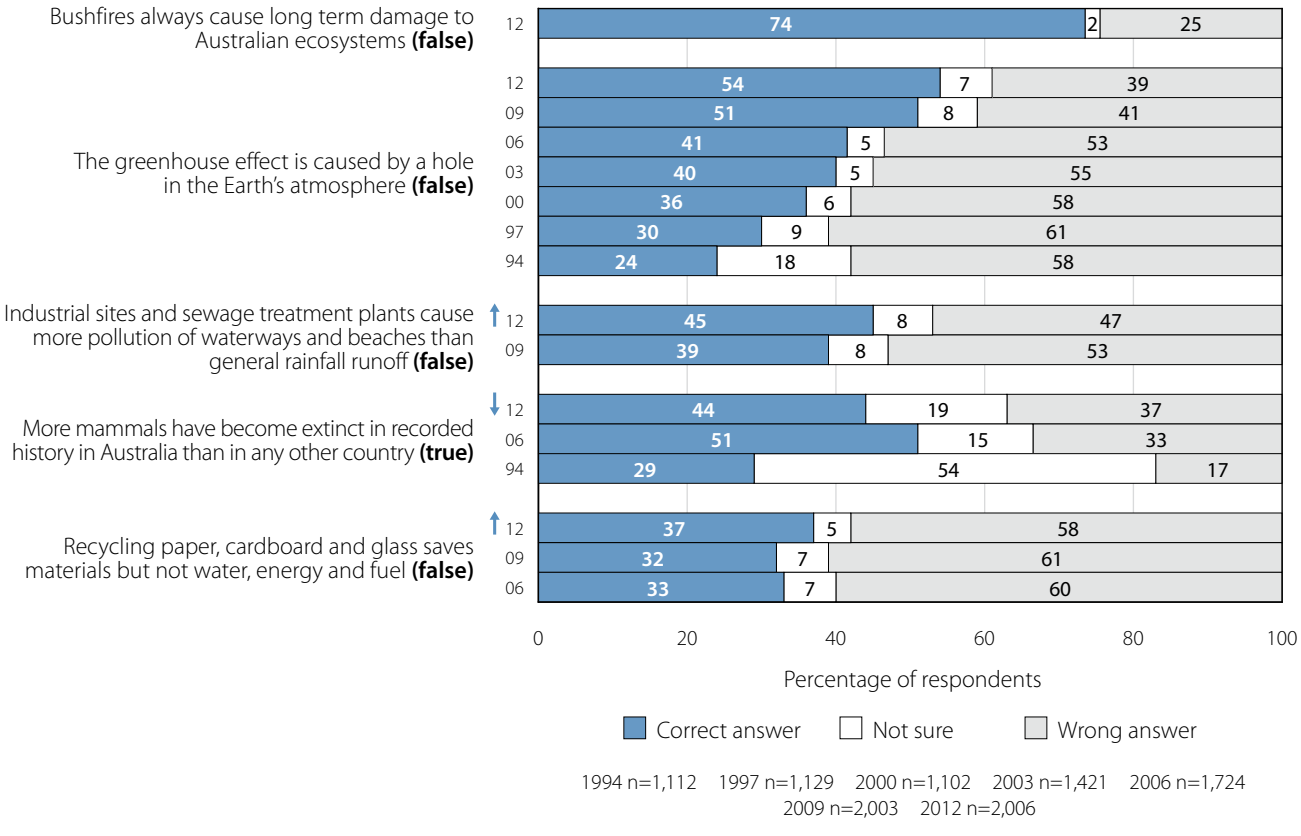
By far the highest level of correct response relates to the new question about bushfires, with 74% knowing **that bushfires do *not* always cause long-term damage to Australian ecosystems**.

Somewhat below that, just over half, 54%, correctly identify that **the greenhouse effect is *not* caused by a hole in the Earth's atmosphere**. Understanding of this issue has increased steadily over time since 1994 when only a quarter (24%) answered this question correctly.

The 2012 survey does, however, show a small improvement since 2009 in understanding that **industrial sites and sewerage treatment plants do *not* cause more pollution of waterways and beaches than general rainfall runoff** (45%, up from 39%). Similarly, a small improvement is evident for people knowing that **recycling paper, cardboard and glass saves materials and also water, energy and fuel** (37%, up from 32%).

Yet the 2012 survey finds that, compared with six years ago in 2006, there has been a *decline* in awareness that **more mammals have become extinct in recorded history in Australia than in any other country** (down from 51% to 44%). Even if it is not always statistically significant, this pattern is evident across the demographic spectrum in terms of gender, age and education.
This decrease follows a very large change between 1994 and 2006, when the number of people who answered 'not sure' on this question reduced dramatically. (Although the wording of this knowledge question was modified slightly in 2006, the 1994 and 2006 survey results are still considered comparable).

Figure 15: Knowledge of environmental issues



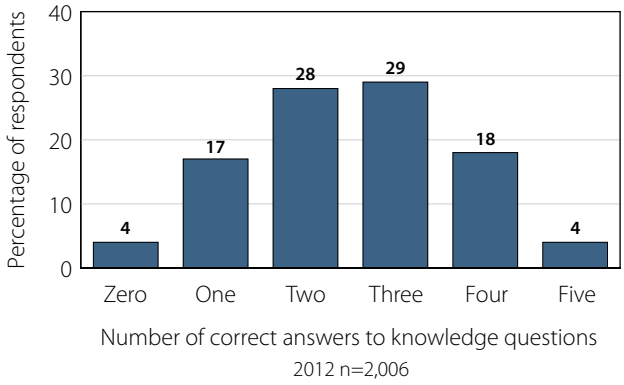
Note: Prior to 2006, the words 'in recorded history' were not included in the question about mammals.

Overall, the survey series has shown improvement in knowledge over time. Nonetheless, it's also clear that knowledge gaps remain. On four of the five knowledge questions, around half the community or more are unable to provide the correct answer.

In terms of the number of knowledge questions answered correctly, people can most commonly answer two or three of the five correctly (57%) and the average across the sample is 2.5. At the extremes, about 20% answer four or five correctly, and similarly about 20% can provide only one correct answer or none at all (Figure 16).

Figure 17 compares responses to the knowledge questions among those with varying levels of concern about environmental problems – high (*concerned a great deal*), medium (*concerned a fair amount*) and low/none (*concerned a little or not at all*). On four of the five knowledge questions, those with high environmental concern (27%) are significantly more likely to know the correct answer.

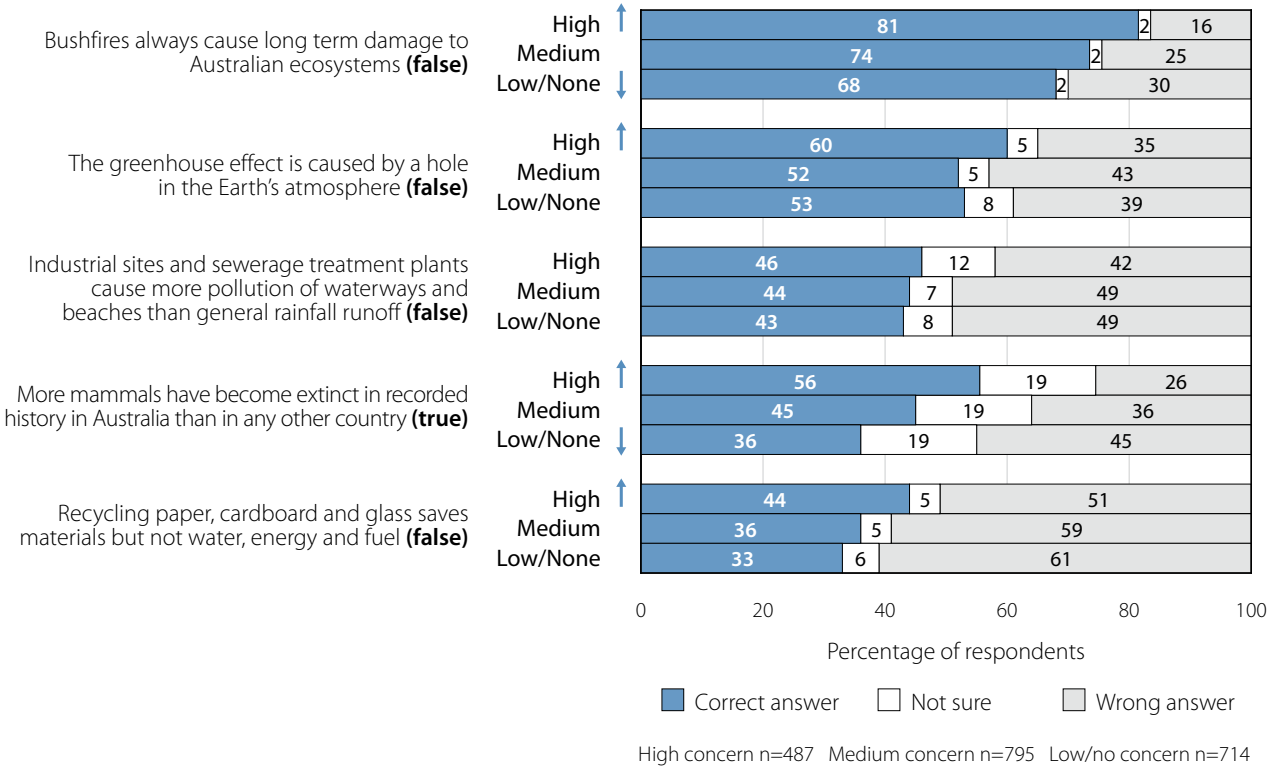
Figure 16: Number of correct answers to knowledge questions



2012 n=2,006

Consequently, at least on the issues surveyed, there is a correlation between environmental knowledge and environmental concern, though this does not necessarily mean that greater knowledge has caused or contributed to higher concern about environmental problems, or the reverse.

Figure 17: Knowledge of environmental issues by concern about environmental problems



High concern n=487 Medium concern n=795 Low/no concern n=714

Segment highlights

Knowledge of environmental issues

Note: comparisons are made either to the whole sample or, where there are two categories only, to the other (e.g. males and females).

Gender

> As found in both 2009 and 2006, men exhibit a higher level of knowledge than women:
  - On average, men answer more knowledge questions correctly (2.7 vs. 2.4 for women).
  - Men are more likely than women to be correct about **bushfires** (78% vs. 70% for women); the **greenhouse effect** (60% vs. 49%), and **causes of pollution in waterways** (50% vs. 39%).

Age

> The number of correct answers increases with age up to age 64, with those aged 15 to 24 (2.2) and 25 to 34 (2.3) significantly below the average of 2.5, rising to 2.7 for those 45 to 54 and 2.8 for those 55 to 64, both significantly above the average.

> In relation to specific questions:
  - younger people aged 15 to 24 are more likely to give the *incorrect* answer for four of the five questions: about **bushfires** (41% vs. 25%); **mammals** (48% vs. 37%); **causes of pollution in waterways** (61% vs. 47%), and the **greenhouse effect** (47% vs. 39%)
  - those aged 25 to 34 are more likely to be *incorrect* about **bushfires** (32% vs. 25%) and the **greenhouse effect** (51% vs. 39%)
  - people aged 35 to 44 are more likely to answer correctly about **bushfires** (79% vs. 74%) and **causes of pollution in waterways** (53% vs. 45%)
  - those aged 45 to 54 are more likely to be correct about **bushfires** (84% vs. 74%), and this is also true for 55 to 64 year olds (82% vs. 74%)
  - people aged 65+ are more likely to be unsure about **recycling** (15% vs. 5%), the **greenhouse effect** (17% vs. 7%), and **bushfires** (4% vs. 2%).

Education

> University graduates give more correct answers (2.7 compared with 2.5 across the community), while those who have not completed a secondary education give fewer (2.2 vs. 2.5). Specifically:
  - the university educated are more likely to be correct about **bushfires** (79% vs. 74%), **causes of pollution in waterways** (50% vs. 45%), and the **greenhouse effect** (60% vs. 54%)
  - those who have not completed secondary education are more likely to give the *incorrect* answer for **bushfires** (40% vs. 25%) and **causes of pollution in waterways** (61% vs. 47%)
  - those with a trade or technical qualification are more likely to be *incorrect* about **recycling** (63% vs. 58%).

Employment

> People in paid employment give more correct answers (2.6 vs. 2.5), students give fewer (2.3):
  - those in paid employment are more likely to be correct about **bushfires** (78% vs. 74%) and **causes of pollution in waterways** (48% vs. 45%)
  - students are more likely to be *incorrect* about **bushfires** (36% vs. 25%); **mammals** (47% vs. 37%), and **causes of pollution in waterways** (64% vs. 47%)
  - retirees are more likely to be correct about **mammals** (51% vs. 44%), but more likely to be unsure about **recycling** (12% vs. 5%), the **greenhouse effect** (17% vs. 7%),and **bushfires** (4% vs. 2%).

Children

> People with children give more correct answers (2.6) than those without children (2.4).

> Those with children are more likely to give the correct answer for **bushfires** (77% compared with 67% for those without children) and **causes of pollution in waterways** (47% vs. 40%).

Language

> Those from English-only households give more correct answers than those from multi-lingual households (2.6 vs. 2.2).

> Those from English-only households are more likely to be correct about **bushfires** (78% vs. 53%) and **causes of pollution in waterways** (47% vs. 32%).

Region

> People who live outside Sydney give more correct answers, 2.6, than people from Sydney, 2.5.

> They are also more likely to be correct about **bushfires** (77% vs. 72%) and **mammals** (49% vs. 41%).

> People in South Western Sydney are more likely to answer incorrectly for **bushfires** (38% vs. 28% state-wide), and **mammals** (46% vs. 37%).

> Those in Central West/South Eastern NSW are more likely to give the correct answer for **bushfires** (84% vs. 74%).

Concern

> Those with high concern give more correct answers (2.9 compared to average of 2.5).

Environmental improvement or deterioration in NSW over the past three years

Question 10
I'll now read out a list of different environmental issues or situations. For each one can you tell me if you think that, over the last three years, things in NSW generally have become much better, a bit better, a bit worse, much worse or there has been little or no change? (18 issues presented in random order)

All environmental issues covered by this question in 2012 were also surveyed in 2009, apart from the addition of a new attribute concerning preparation for rising sea levels.

Overall, the results point to a sense within the community that progress is being made on environmental issues in NSW. In nearly all areas surveyed, there are substantially more people who feel the situation in NSW has become *better* over the past three years than those who feel it has become *worse*. In a few cases the balance of opinion is more even, with those holding a positive view only slightly outweighing those with a negative view.

For eight of the 18 issues covered in 2012, there has either been an increase in positive sentiment, or a decrease in negative sentiment. In only one area, **reducing water consumption**, has there been a *decrease* in the number who feel the situation in NSW is getting better, reverting back to the 2006 level. Nonetheless even in this case, the majority of people remain of the view that things have improved over the last three years.

It is worth noting, however, that compared with other people, those with a high level of concern about environmental problems are generally less positive in their views about these issues.

The 18 issues have been grouped into five categories for more detailed analysis:

- Water issues — Figure 18
- Air and climate change issues — Figure 19
- Waste issues — Figure 20
- Biodiversity issues — Figure 21
- Other issues — Figure 22

Water issues

The largest changes in 2012 compared to 2009 in perceptions of environmental improvement or deterioration relate to water issues.

There has been a decrease in the number of people who believe that **reducing water consumption** has improved in the last three years (down from 74% to 63%), and an increase in those who feel there has been no change (up from 14% to 24%). As will be seen in Section 2.3 this is reflected in peoples' reported behaviour about their own water-saving practices.

Nonetheless, water reduction remains the strongest of the 18 issues surveyed, because: (i) in absolute terms, more people believe the situation has improved on this issue than any other, and (ii) the extent to which those who believe it has improved *exceeds* those who believe it has become worse by the largest margin.

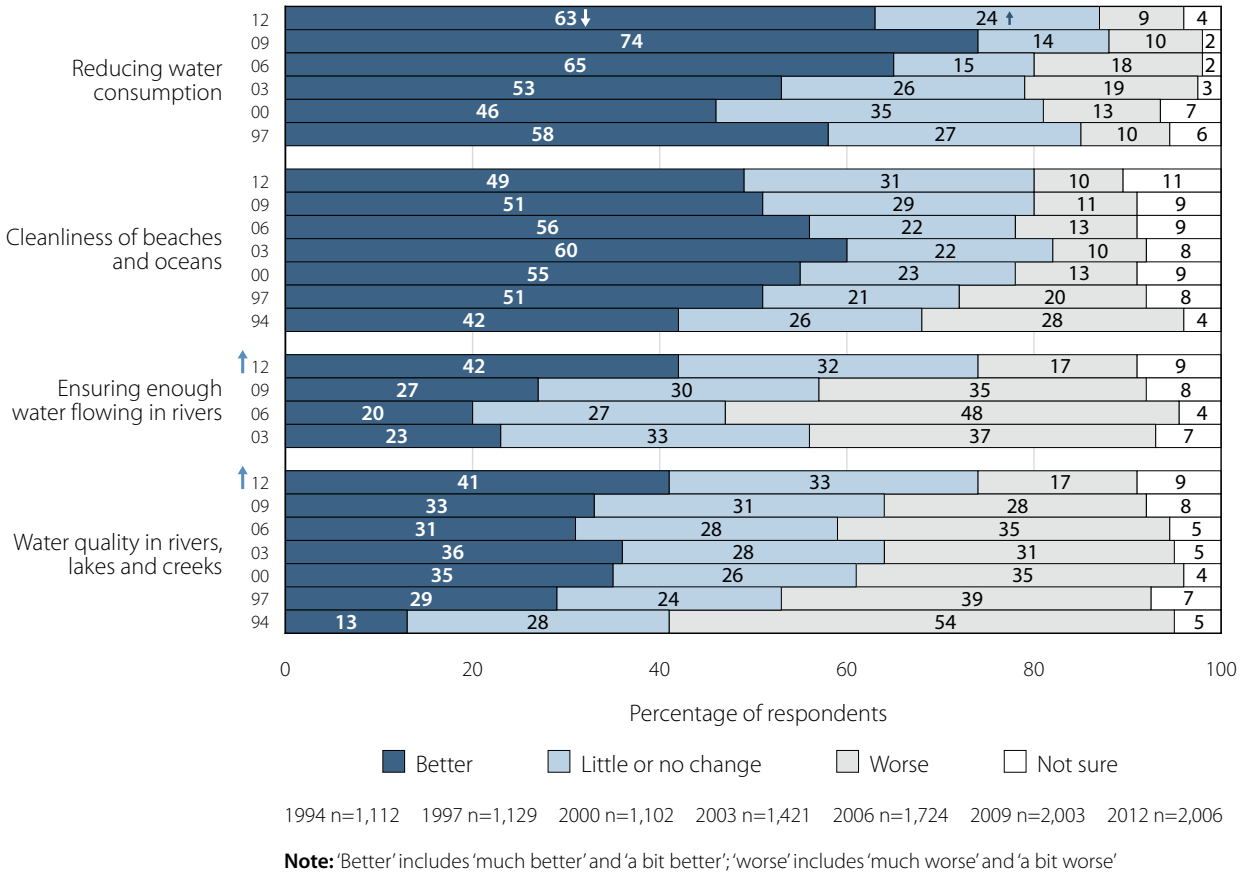
There has been a marked positive shift in perceptions about **ensuring there is enough water flowing in rivers**. Belief in this issue improving is up from 27% to 42%, and the number that think it has become worse has decreased from 35% to 17%.

Although not as large, there has also been a substantial improvement in connection with **water quality in rivers, lakes and creeks**. Those who sense improvement on this issue have increased from 33% to 41% of the community, while those who feel it has become worse are down from 28% to 17%.

Although there is no change in beliefs about the **cleanliness of beaches and the ocean**, the balance of opinion remains very favourable: 49% believe things have improved compared with only 10% who feel it has become worse.

There is a clear connection between the rise, and then fall, of the perceived level of improvement in the cleanliness of beaches, and the prominence of water pollution as an environmental issue found in Question 2 of the survey (see Section 2.1). Between the late 90s and 2003 as the salience of water pollution fell from a very high peak, an increasing number of people felt there was improvement in the cleanliness of beaches and oceans. But from 2006 onwards, with water pollution no longer so top of mind, sentiment about the cleanliness of beaches and oceans gradually drifted from a sense of improvement, to one of no change. This same linkage is evident between the level of improvement/deterioration for reducing water consumption and the salience of water supply as an issue in Question 2.

Figure 18: Improvement or deterioration over the past three years – water issues



Note: 'Better' includes 'much better' and 'a bit better'; 'worse' includes 'much worse' and 'a bit worse'

Segment highlights

Views on improvement or deterioration – water issues

Note: comparisons are made either to the whole sample or, where there are two categories only, to the other (e.g. males and females).

Age

> Young people aged 15 to 24 are more likely to feel that the situation has improved for **cleanliness of beaches and the ocean** (59% compared with 49% community-wide), and also for ensuring there is enough **water flowing in rivers** (53% vs. 42%).

Education

> Those with a university degree are more likely to think there has been no change in the **cleanliness of beaches and the ocean** (36% vs. 31%), and less likely to think it has improved (44% vs. 49%).

> People who have not completed secondary education are more likely to feel that the situation has improved for ensuring there is enough **water flowing in rivers** (52% vs. 42%).

Concern about environmental problems

> Those concerned a great deal about environmental problems are more likely to think things have become worse for **water quality in rivers, lakes and creeks** (24% vs. 17%), and for ensuring there is enough **water flowing in rivers** (26% vs. 17%).

Air and climate change issues

The 2009 survey saw a very large positive shift in relation to **reducing electricity use**, and the current survey finds another small gain on this issue. The number who feel the situation has improved is up slightly from 48% to 52%, while fewer believe the situation has not changed compared with three years ago (down from 30% to 25%).

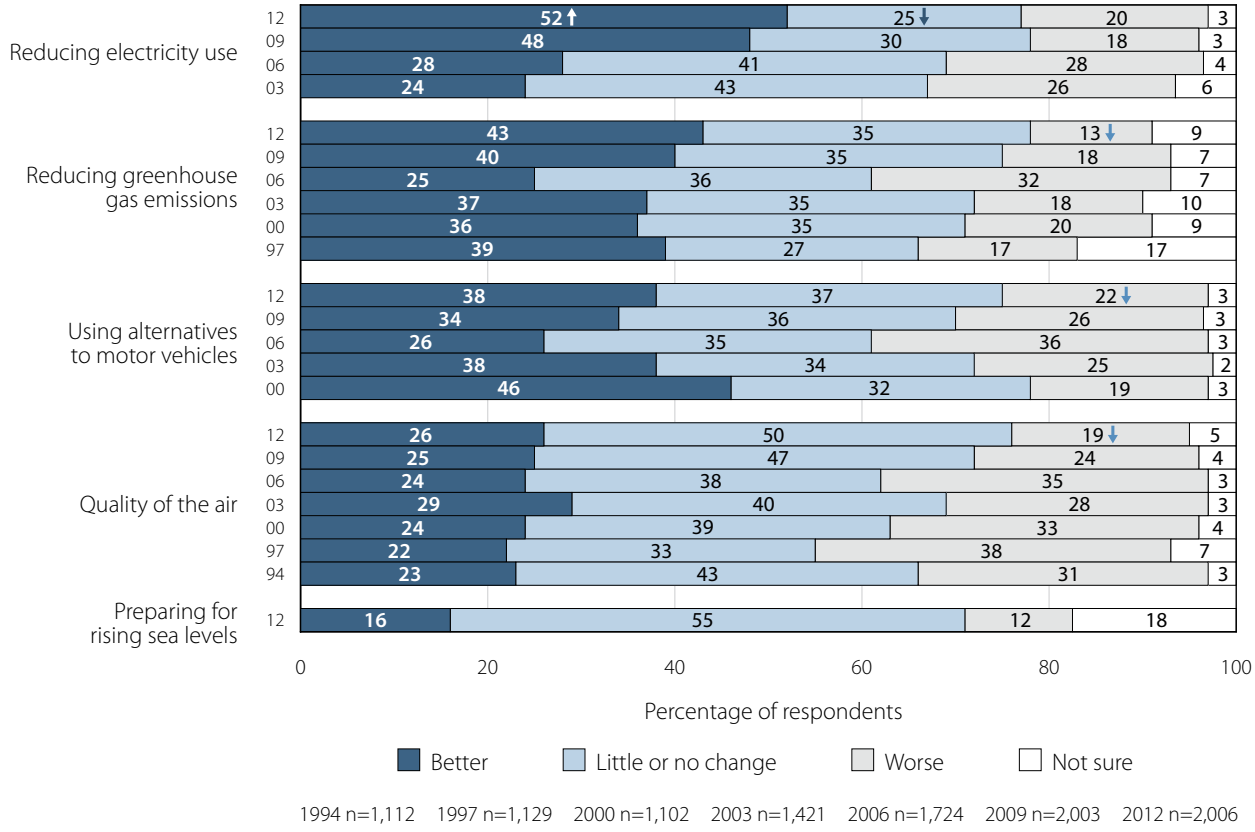
The 2009 survey also saw large improvements for **reducing greenhouse gas emissions** and **using alternatives to motor vehicles** – though these gains were a recovery after a large drop in 2006. Again there is evidence of further small improvement in 2012, to the extent that fewer people believe things have become worse over the past three years (reducing greenhouse gas emissions down from 18% to 13%, and using alternatives to motor vehicles, down from 26% to 22%).

Across the 18 issues surveyed, the difference in opinion between those with high concern and other people is among the most marked for greenhouse emissions.

Similarly, fewer people believe the **quality of the air** has become worse over the last three years (down from 24% to 19%). This represents a continuation of a longer-term trend on this issue, with a gradual drift away from a belief things are getting worse, towards one of no change.

Perceptions about improvement or deterioration in **preparing for rising sea levels** were measured for the first time in 2012. About one in five do not have a view on this matter (one of the higher 'don't know' levels for these indicators). The most common perception (55%) is one of no change, and among the rest, the opinion is evenly divided between those who feel things have improved (16%) and those who feel things have become worse (12%).

Figure 19: Improvement or deterioration over the past three years – air and climate change issues



Note: 'Better' includes 'much better' and 'a bit better'; 'worse' includes 'much worse' and 'a bit worse'.

Segment highlights

Views on improvement or deterioration – air and climate change issues

Note: comparisons are made either to the whole sample or, where there are two categories only, to the other (e.g. males and females).

Gender

> Women (22%) are more likely than men (15%) to believe **air quality** has become worse.

> Men are more likely to see no change in **preparing for rising sea levels** (60% vs. women 50%), while women are more likely to have no view on this (22% vs. 14% for men).

Age

> Similar to 2009, young people aged 15 to 24 tend to have a more positive view than others, and in 2012 are more likely to feel that the situation has improved for **reducing greenhouse gas emissions** (59% compared with 43% community-wide); **using alternatives to motor vehicles** (57% vs. 38%), and **preparing for rising sea levels** (26% vs. 16%).

> At the opposite end of the age spectrum, also similar to 2009, people over 65 are less likely to believe things have become better for several issues: **reducing greenhouse gas emissions** (31% compared with 43% community-wide); **using alternatives to motor vehicles** (25% vs. 38%); **preparing for rising sea levels** (9% vs. 16%), and **reducing electricity use** (44% vs. 52%).

Education

> As found in 2009, those with a university degree are less positive than others in their assessment of two issues. They are:
  - less likely to think **reducing greenhouse emissions** has improved (39% vs. 43%), and more likely to see deterioration (17% vs. 13%)
  - more likely to think things have deteriorated in **using alternatives to motor vehicles** (26% vs. 22%).

> In contrast, people who have not completed secondary school are more likely to think things have improved on these same issues (**reduce greenhouse emissions** 52% vs. 43%, and **using alternatives to motor vehicles**, 47% vs. 38%).

Language

> People from English-only households (53%) are more likely than those from multi-lingual households (40%) to think there has been no change on **air quality**.

Children

> Those without children (48%) are more likely than those with children (32%) to believe there has been improvement in **using alternatives to motor vehicles**.

Employment

> Findings among employment segments broadly reflect those from 2009. Students are more likely to think things have become better in **reducing greenhouse emissions** (57% compared with 43% community-wide), and **using alternatives to motor vehicles** (58% vs. 38%), along with **preparing for rising sea levels** (24% vs. 16%).

> Retirees are less likely to think that things have improved in **reducing greenhouse emissions** (35% compared with 43% community-wide), **using alternatives to motor vehicles** (26% vs. 38%), and **reducing electricity use** (42% vs. 52%).

Region

> Those in Murray/Murrumbidgee are less likely to think **air quality** has deteriorated (6% vs 19% state-wide)

> Sydney people (41%) are more likely than people outside Sydney (33%) to see improvement in **using alternatives to motor vehicles** – particularly those living in Eastern/Inner Sydney (48%) and Northern Sydney (49%).

Settlement Type

> Those living in a small country town or in rural areas are more likely to think here has been no change in **using alternatives to motor vehicles** (both 48% compared to 37% state-wide)

Concern about environmental problems

> Those with high environmental concern are more likely to see deterioration in **reducing greenhouse emissions** (24% compared with 13% community-wide); **using alternatives to motor vehicles** (28% vs. 22%); **preparing for rising sea levels** (20% vs. 12%), and **air quality** (27% vs. 19%).

> People with high concern are also less likely to sense improvement in **greenhouse emissions** (34% vs. 43%). Across the 18 issues surveyed, the difference in opinion between those with high concern and other people is among the most marked for greenhouse emissions (along with two of the biodiversity issues.)

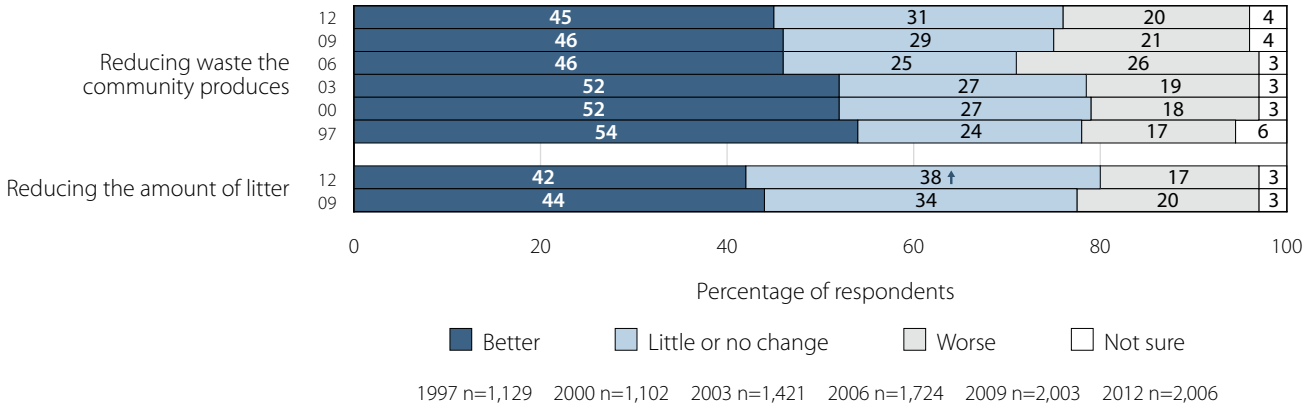
> Those with little or no concern are more likely to see little or no change in **air quality** (56% vs. 50%), and less likely to think reducing greenhouse gas emissions is getting worse (8% vs 13%).

Waste issues

The 2012 survey finds no change in relation to perceptions about **reducing waste the community produces**. While those who feel things have improved (45%) far outweigh those who believe things have become worse (20%), collectively, the last three surveys show a subtle deterioration from positive to negative sentiment compared with attitudes between 1997 and 2003.

On **reducing litter**, the perception of no change is up slightly (from 34% to 38%), with a commensurate decline in those who feel things are better or worse.

Figure 20: Improvement or deterioration over the past three years – waste issues



Note: Note: 'Better' includes 'much better' and 'a bit better'; 'worse' includes 'much worse' and 'a bit worse'. A detailed breakdown for each category can be found in the data tables at www.environment.nsw.gov.au/community/whocares.html

Segment highlights

Views on improvement or deterioration – waste issues

Note: comparisons are made either to the whole sample or, where there are two categories only, to the other (e.g. males and females).

Age

> Young people aged 15 to 24 are more likely to feel things have become better for **reducing litter** (52% compared with 42% community-wide).

Education

> Those with a university degree are less likely to feel things have become better for **reducing litter** (36% compared with 42% community-wide), and more likely to think there has been no change (45% vs. 38%).

Region

> People from South Western Sydney are more likely to believe things have become worse for **reducing litter** (26% vs. 17% state-wide).

Language

> Those from English-only households (40%) are more likely than people from multi-lingual households (29%) to think there has been no change in **reducing litter**.

Concern about environmental problems

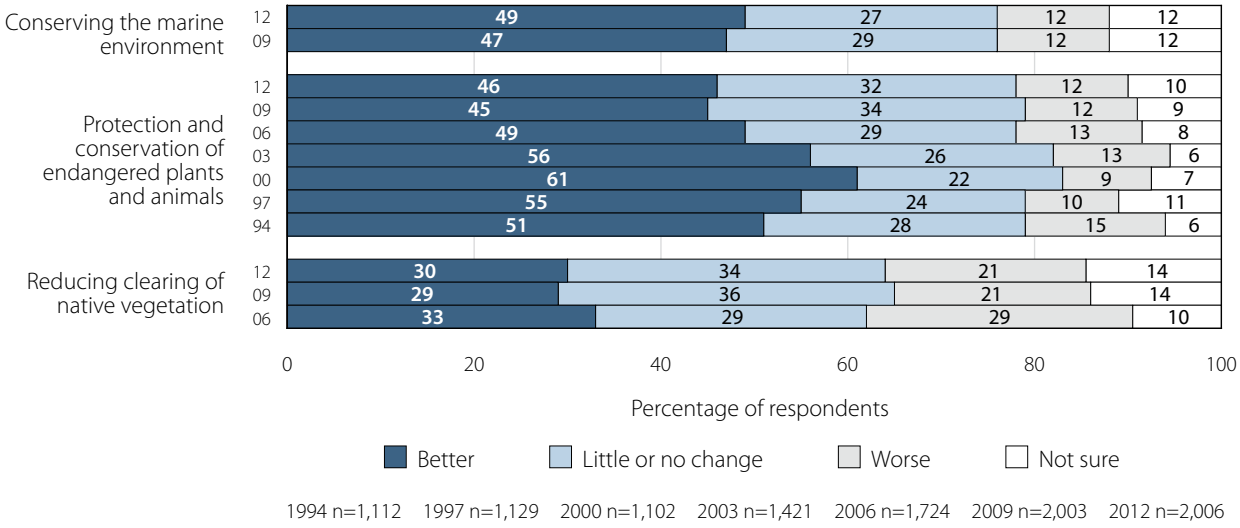
> Those concerned a great deal about environmental problems are less likely to believe things have improved both for **reducing litter** (34% vs. 42%), and **community waste** (36% vs. 45%).

Biodiversity issues

Perceptions in relation to improvement or deterioration in the biodiversity issues surveyed are unchanged compared with 2009. It remains true that many more people believe things have improved rather than become worse on **conserving the marine environment** and **protecting and conserving endangered plants and animals**. Opinions are more evenly divided when it comes to **reducing clearing of native vegetation**.

Looking across the entire survey series for protecting and conserving endangered plants and animals, the rise and then gradual decline and levelling off in the number who believe things are improving reflects changes in the prominence of forest/bushland/diversity issues found in Question 2 (the most important environmental issues). Since 2000, the bulk of the decrease in sense of improvement has been matched with a commensurate gain in the level of no change. Consequently the pattern is more one of levelling off after a strong rate of growth, as opposed to a negative deterioration in sentiment.

Figure 21: Improvement or deterioration over the past three years – biodiversity issues



Note: 'Better' includes 'much better' and 'a bit better'; 'worse' includes 'much worse' and 'a bit worse'. A detailed breakdown for each category can be found in the data tables at www.environment.nsw.gov.au/community/whocares.html

Segment highlights

Views on improvement or deterioration – biodiversity issues

Note: comparisons are made either to the whole sample or, where there are two categories only, to the other (e.g. males and females).

Gender

> Men (38%) are more likely than women (31%) to believe there has been no change in **reducing clearing of native vegetation**.

Age

> As found in 2009, young people aged 15 to 24 are more likely to feel that the situation has improved for protecting and **conserving endangered plants and animals** (65% compared with 46% community-wide).

> Conversely, people aged 35 to 44 are less likely to believe things have improved for protecting and **conserving endangered plants and animals** (38% vs. 46%), and more likely to perceive no change in **reducing clearing of native vegetation** (42% vs. 34%).

> Consistent with 2009, people over 65 are more likely to see deterioration in **reducing clearing of native vegetation** (28% vs. 21%).

Education

> People with a university degree are less likely to believe things have improved on all issues: protecting and **conserving endangered plants and animals** (36% vs. 46%), **reducing clearing of native vegetation** (24% vs. 30%), and **conserving the marine environment** (42% vs. 49%).

> In contrast, people who have not completed secondary school are more likely than others to think things have become better on each issue: protecting and **conserving endangered plants and animals** (64% vs. 46%), **reducing clearing of native vegetation** (39% vs. 30%), and **conserving the marine environment** (59% vs. 49%).

Employment

> Students are more likely to think things have become better for protecting and **conserving endangered plants and animals** (63% vs. 46%), while retirees are more likely to sense deterioration in **reducing clearing of native vegetation** (27% compared with 21% community-wide). These findings are consistent with those from 2009.

> Those in paid employment are less likely to believe things have become better for protecting and **conserving endangered plants and animals** (42% vs. 46%).

Regions

> Those living outside Sydney (50%) are more likely than Sydney people (43%), particularly those from Sydney's Eastern/Inner suburbs (34%) to see improvement in **protecting and conserving endangered plants and animals**. Indeed, Eastern/Inner Sydney residents are more likely to see deterioration (18% vs. 12% state-wide).

> As found in 2009, people outside Sydney (34%) are more likely than Sydney people (28%) to see improvement in **reducing clearing of native vegetation** – though this is largely because Sydney people (17%) are more likely to have no view on the issue, especially Eastern/Inner Sydney (21%), compared with 14% state-wide. A sense of improvement is highest in the state's North/North West/Far Western (45%) and Murrumbidgee/Murray (47%) regions, compared with 30% state-wide.

> Those in Western Sydney are more likely to not have a view on the status of **conserving the marine environment** (19% compared with 12%).

Concern about environmental problems

> Those concerned a great deal about environmental problems are more likely to believe things have become worse on each of the three biodiversity issues surveyed:
  - protecting and conserving endangered plants and animals (24% vs. 12%)
  - reducing clearing of native vegetation (36% vs. 21%)
  - conserving the marine environment (21% vs. 12%).

> Conversely, those with high concern were less likely to think things have became better on each issue:
  - protecting and conserving endangered plants and animals (34% vs. 46%)
  - reducing clearing of native vegetation (21% vs. 30%)
  - conserving the marine environment (41% vs. 49%).

> Across **the 18 issues surveyed, it is on protecting and conserving endangered plants and animals**, and **reducing clearing of native vegetation**, that the opinions of those with high concern differ the most from others.

Other environmental issues

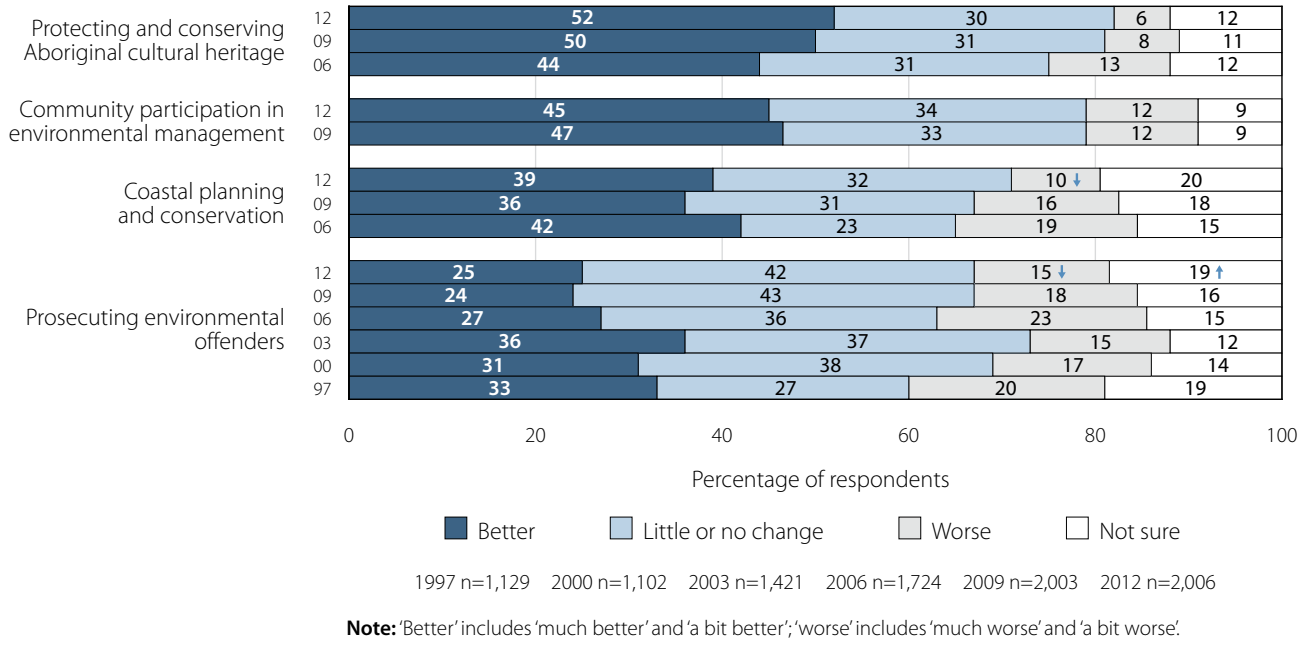
The 2009 survey identified an increase in the number who believe things have improved in **protecting and conserving Aboriginal cultural heritage**, and this higher level has been maintained in 2012. The extent to which those who see improvement on this issue outweigh those who sense deterioration, is among the highest across the 18 issues surveyed.

Consistent with 2009, the balance is also very favourable **for community participation in environmental management**.

The 2012 survey finds fewer people believing things have become worse for both **coastal planning and conservation** and **prosecuting environmental offenders**, and for the latter, a small increase in the number with no opinion.

Consistent with 2009 and 2006, overall, younger people and those with lower levels of education are more likely than others to say things have improved on these issues over the last three years. University educated people are the least positive in their assessment.

Figure 22: Improvement or deterioration over the past three years – other environmental issues



Note: 'Better' includes 'much better' and 'a bit better'; 'worse' includes 'much worse' and 'a bit worse'.

Segment highlights

Views on improvement or deterioration – other environmental issues

Note: comparisons are made either to the whole sample or, where there are two categories only, to the other (e.g. males and females).

Gender

> Women (58%) are more likely than men (46%) to see improvement on protecting and **conserving Aboriginal cultural heritage**, as found in 2009. Men (47%) are more likely than women (38%) to believe there has been no change in **prosecuting environmental offenders**, while women are more likely to be unsure on this issue (22% vs. 16%).

Age

> Young people aged 15 to 24 are more likely to feel that the situation has improved for each issue: protecting and **conserving Aboriginal cultural heritage** (68% compared with 52% community-wide); **prosecuting environmental offenders** (36% vs. 25%); **coastal planning and conservation** (52% vs. 39%, as found in 2009); and **community participation** (57% vs. 45%).

> People aged 25 to 34 are less likely to see improvement in protecting and **conserving Aboriginal cultural heritage** (44% vs. 52%), and 55 to 64 year olds are less likely to see improvement in **prosecuting environmental offenders** (15% vs. 25%).

> As found in 2009, those aged 65+ are more likely to believe things have deteriorated in **prosecuting environmental offenders** (23% vs. 15%).

Education

> People with a university degree are less likely to believe things have improved on three issues: protecting and **conserving Aboriginal cultural heritage** (45% compared with 52% community-wide), **prosecuting environmental offenders** (18% vs. 25%), and **coastal planning and conservation** (33% vs. 39%).

> Conversely, people who have not completed secondary school are more likely than others to think things have become better on these same issues: protecting and **conserving Aboriginal cultural heritage** (66% compared with 52%), **prosecuting environmental offenders** (34% vs. 25%), and **coastal planning and conservation** (48% vs. 39%).

Employment

> Students are more likely to think things have become better on all issues: protecting and **conserving Aboriginal cultural heritage** (65% vs. 52%), **prosecuting environmental offenders** (34% vs. 25%), and **coastal planning and conservation** (49% vs. 39%).

> As found in 2009, retirees are more likely to see deterioration in **prosecuting environmental offenders** (21% vs. 15%).

Language

> Those from multi-lingual households (12%) are more likely than people from English-only households (5%) to believe things have become worse for protecting and **conserving Aboriginal cultural heritage**, while those from English-only households are more likely to see no change (31% vs 22% for multi-lingual households).

Region

> People outside Sydney (58%) are more likely than Sydney people (49%), particularly those from Sydney's Eastern/Inner suburbs (42%) to see improvement in protecting and **conserving Aboriginal cultural heritage**.

> One-fifth (20%) of the community state-wide has no opinion on the status of **coastal planning and conservation**, especially those who live in the North/North West/Far West (37%) and Murrumbidgee/Murray (42%) regions.

> However, this is only 7% among people from the Mid North Coast region. More people from this region (21% vs. 10% state-wide) believe things have become worse concerning this issue. No other coastal region has a significantly different view on this issue to the whole community.

> Those from Northern Sydney are more likely to have no view about the status of **prosecuting environmental offenders** (30% vs. 19% state-wide).

Concern about environmental problems

> Those with high concern are more likely to think things have deteriorated on all issues: **coastal planning and conservation** (19% vs. 10%); **prosecuting environmental offenders** (20% vs. 15%); protecting and **conserving Aboriginal cultural heritage** (9% vs. 6%); and **community participation** (18% vs.12%). Moreover, fewer see improvement in **protecting and conserving Aboriginal cultural heritage** (44% vs. 52%).

Strictness of environmental regulations for community sectors

Question 17
The NSW government is responsible for enforcing rules which are intended to protect or improve the environment. I'll now read out a number of different groups in NSW and I'd like you to tell me if you feel that the environmental regulations that apply to these groups are much too strict, a bit too strict, about right, a bit too lax, or much too lax. (Nine sectors covered in random order)

For six of the nine sectors surveyed, the most prevalent belief is that the strictness of environmental regulations is 'about right' – **recreational and commercial fishing** (41%), **individuals and households** (52%), **farming and agriculture** (42%), **tourism** (55%), **retailing** (47%), and **forestry** (40%).

For the **manufacturing** industry, the number who feel the strictness of regulations is about right, (34%), is approximately equal to the number who feel it is too lax (36%). This represents a very marked change from views in 1994 where perceptions that regulation for manufacturing were too lax were held by double (74%) that of 2012, and views that it was about right (15%) were held by half those in 2012.

The most common view about the remaining two sectors is that environmental regulations are too lax – **mining** (49%), and **property development and construction** (46%).

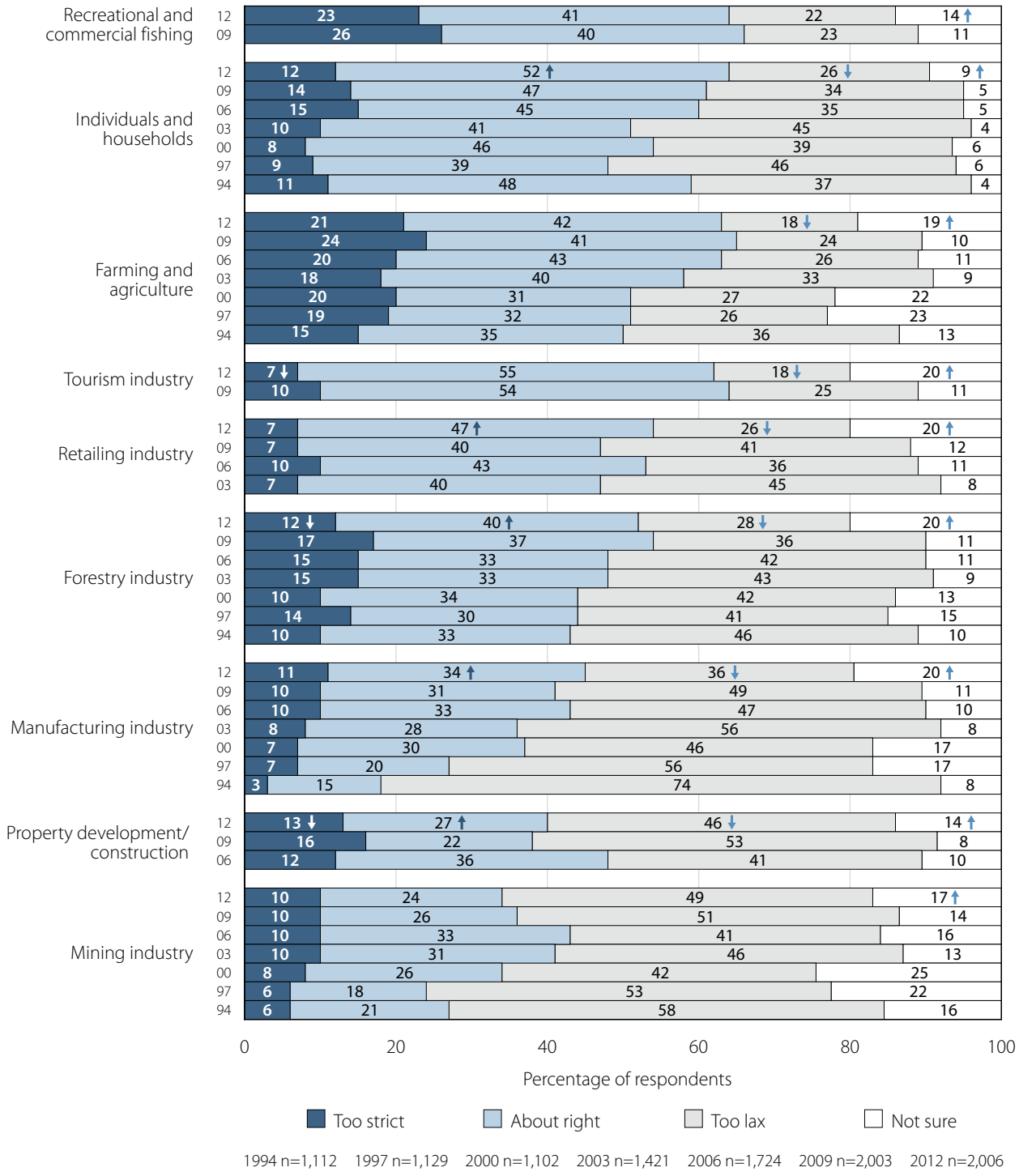
In all but two cases, only about one in ten or fewer believe environmental regulations are too strict; however, this rises to around 20% for farming and agriculture, along with recreational and commercial fishing.

Over the longer term, sectors that have been included in the survey since 1994 show a general trend away from people believing environmental regulations are too lax, towards believing they are either about right, and in some cases, too strict.

Specifically in 2012, for all sectors apart from mining and recreational and commercial fishing, there has been a marked drop in the number who feel regulations are too lax. In each of these seven cases, this has been compensated by an increase in the level of 'not sure', and in five, also in the level of 'about right'.

Consequently, the 2012 results capture a greater *absence* of concern about lax regulation, though this is not always matched with a positive sense that the regulations are 'about right'.

Figure 23: Strictness of environmental regulations for community sectors



Segment highlights

Strictness of environmental regulations for community sectors

Note: comparisons are made either to the whole sample or, where there are two categories only, to the other (e.g. males and females).

Gender

> Men (26%) are more likely than women (20%) to think that regulation is too strict for recreational and commercial **fishing**, but too lax for **mining** (men 54% vs. women 43%).
> Men are also more likely than women to believe regulations are about right for **manufacturing** (38% vs. 30%), **forestry** (43% vs. 37%), and **retailing** (50% vs. 43%).
> For six of the nine sectors surveyed, women are more unsure about environmental regulations:
  - **farming** and agriculture (23% vs. 15%)
  - **manufacturing** (23% vs. 16%)
  - **mining** (22% vs. 12%)
  - **forestry** (24% vs. 16%)
  - **property development** and construction (18% vs. 10%)
  - recreational and commercial **fishing** (18% vs. 10%).

Age

> Younger people 15 to 24 are more likely to think that regulations are about right for **farming** and agriculture (52% vs. 42%); **mining** (34% vs. 24%), and **property development** and construction (37% vs. 27%).
> Compared with the community at large, people aged 55 to 64 are more likely to think that regulations for **mining** are too lax (59% vs. 49%) and also for **property development** and construction (56% vs. 46%).
> While people over 65 are more likely to believe that regulations for recreational and commercial **fishing** are too strict (32% vs. 23%), and less likely to think regulation of farming and **agriculture** is about right (32% vs. 42%), they are more likely to be unsure about regulations for:
  - **farming** and agriculture (25% vs. 19%)
  - **manufacturing** (27% vs. 20%)
  - **forestry** (26% vs. 20%)
  - **property development** (19% vs. 14%)
  - **tourism** (27% vs. 20%).

Children

> People with children (13%) are more likely than those without children (9%) to view regulations for **forestry** as being too strict, and also regulations for recreational and commercial **fishing** (26% vs. 18%). Conversely, more people without children think regulations for **forestry** are too lax (32% vs. 26% – as found in 2009).

Language

> People from English-only households are more likely to say that regulation for **forestry** is about right (42% compared with 32% of those from multi-lingual households), along with **retailing** (49% vs. 37%) and **tourism** (58% vs. 44%).
> On the other hand, as found in 2009, people from multi-lingual households are more likely to think regulations for **tourism** are too strict (13% vs. 6%).
> For four industries, those from multi-lingual households are more unsure about regulations:
  - **farming** and agriculture (26% vs. 17%)
  - **individuals and households** (15% vs. 8%)
  - **mining** (22% vs. 16%)
  - recreational and commercial **fishing** (21% vs. 13%).

Education

> University educated people are more likely to believe that regulations are too lax for:
  - **mining** (58% vs. 49%)
  - **retailing** (30% vs. 26% as found in 2009)
  - **property development** and construction (56% vs. 46%), as found in 2009
  - recreational and commercial **fishing** (25% vs. 22%), also found in 2009.
> More of this group is unsure about regulation for **farming** and agriculture (23% vs. 19%), and fewer say it is too strict (16% vs. 21%).
> More people with technical/trade education see regulations as too strict for **farming** and agriculture (27% vs. 21%), and recreational and commercial **fishing** (30% vs. 23%).
> Those who have not completed a secondary education are more likely to think regulations are about right for **mining** (36% vs. 24%) and less likely to think they are too lax for **property development** and construction (33% vs. 46%).

Employment

> Also as found in 2009, students are more likely to believe regulations for **property development** and construction are about right (36% vs. 27%).
> More people in paid employment feel that regulations for **mining** are too strict (13% vs. 10%).
> More retirees view regulations for recreational and commercial fishing as too strict (30% vs. 23%), but more are unsure about regulations for **farming** and agriculture (25% vs. 19%).

Segment highlights (cont.)

Strictness of environmental regulations for community sectors

Region

> People outside Sydney are more likely than Sydney people to think regulations are too strict for:
  - **farming** and agriculture (27% vs. 18%) – as found in 2009 – particularly among those from Murrumbidgee/Murray (40%) and North/West/Far West (42%).
  - **forestry** (15% vs. 10%), particularly Murrumbidgee/Murray (24%), North/West/Far West (21%), and Mid North Coast (22%)
  - **property development** and construction (16% vs. 12%), especially those in small country towns (21%)
  - recreational and commercial **fishing** (29% vs. 20%), particularly those from the Hunter (32%), and those in rural areas (31%)
> On the other hand, outside Sydney, people are more likely to think regulations are about right for:
  - **retailing** (51% vs. 44%)
  - **tourism** (60% vs. 53%).
> More Sydney people, 49%, than people outside Sydney, 41%, believe regulations for **property development** and construction are too lax – particularly those from Northern Sydney (57%).
> More Sydney people are also unsure about regulations for:
  - **farming** and agriculture (22%, compared to 13% outside Sydney, and only 2% in North/West/Far West and 5% in Murrumbidgee/Murray)
  - **individuals and households** (11% vs. 7%)
  - **mining** (19% vs. 13%)
  - **recreational and commercial fishing** (16% vs. 10%), especially Western Sydney (20%)
  - **forestry** (22% vs. 16%).
> Residents of Sydney's Eastern/Inner suburbs are more likely to see regulations as being too lax for **farming** and agriculture (24% vs. 18% state-wide), **forestry** (36% vs. 28%), and recreational and commercial **fishing** (31% vs. 22%). However, they are more likely to see regulations for **retailing** as being too strict (12% vs. 7%).
> People from Western Sydney are more likely to believe regulations for **retailing** are too lax (34% vs. 26% state-wide).
> Fewer people from Northern Sydney think regulations for **farming** and agriculture are too strict (9% vs. 21% state-wide), and more likely to be unsure about regulations for this sector (30% vs. 19%), as well as for **manufacturing** (30% vs. 20%).
> Those from Eastern/Inner Sydney are more likely to be unsure about regulations for **individuals and households** (15% vs. 9%).
> Those from the Central Coast are less likely to think regulation is too strict for **individuals and households** (3% vs. 12%).

Concern about environmental problems

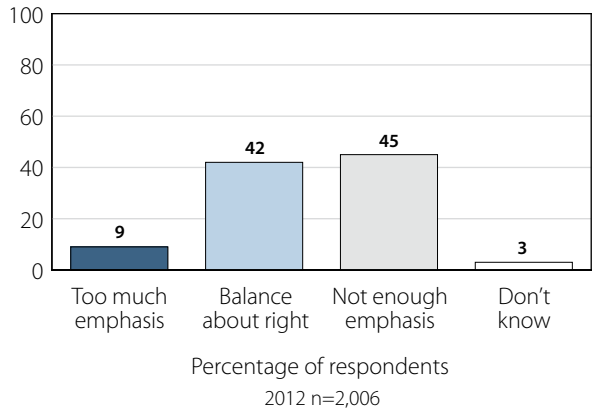
> Those with high concern are more likely to think regulations are too lax for each of the nine sectors:
  - recreational and commercial **fishing** (33% vs. 22%)
  - **individuals and households** (39% vs. 26%)
  - **farming** and agriculture (31% vs. 18%)
  - **tourism** (23% vs. 18%)
  - **retailing** (38% vs. 26%)
  - **forestry** (45% vs. 28%)
  - **manufacturing** (50% vs. 36%)
  - **property development** (64% vs. 46%)
  - **mining** (71% vs. 49%).
> Those with little or no concern are more likely to think regulations are too strict for:
  - recreational and commercial **fishing** (32% vs. 23%)
  - **individuals and households** (18% vs. 12%)
  - **farming and agriculture** (26% vs. 21%)
  - **forestry** (16% vs. 12%)
  - **manufacturing** (15% vs. 11%)
  - **property development** (20% vs. 13%)
  - **mining** (15% vs. 10%).
> Those with little or no concern are more likely to think regulations are about right for:
  - **retailing** (52% vs. 47%)
  - **property development** (34% vs. 27%)
  - **mining** (32% vs. 24%).

Emphasis on protecting natural habitats

Question 64
There are various competing needs for the use of land in NSW. Sometimes decisions need to be made to either protect areas for natural habitats, or to use the land for other needs. Overall, do you think there is... too much emphasis on protecting natural habitats; not enough emphasis on protecting natural habitats, or, do you think the balance is about right in NSW?

This is a new item added to the survey in 2012. Relatively few people, 9%, feel there is **too much emphasis** on protecting natural habitats. Rather, most are either of the view that in NSW there is **too little emphasis** on the protection of natural habitats (45%), or that the balance between the needs of natural habitats and the use of land for other purposes is **about right**, 42%.

Figure 24: Emphasis on protecting natural habitats



Segment highlights

Emphasis on protecting natural habitats

Note: comparisons are made either to the whole sample or, where there are two categories only, to the other (e.g. males and females).

Gender

> Women (49%) are more likely than men (41%) to think there is **not enough emphasis** on protecting natural habitats, while more men (12%) than women (7%) feel there is too much.

Age

> People aged 55 to 64 (14%) are more likely to think there is **too much emphasis** on protecting natural habitats, while young people 15 to 24 (3%) are less likely (both compared with a community-wide 9%).

Education

> Those with a trade or technical qualification are more likely to think there is **too much emphasis** (12% vs. 9%).

Employment

> Students are less likely to think there is **too much emphasis** (3% vs. 9%).

Children

> Those without children (49%) are more likely than people with children (43%) to believe there is **not enough emphasis** on protecting natural habitats.

Region

> People outside Sydney (12%), more so than Sydney people (8%) feel there is **too much emphasis** – particularly those from the Mid North Coast (17%) and North/North West/Far West (22%) regions of the state. Also, those from Murrumbidgee/ Murray are less likely to think there is **not enough emphasis** (31% vs 45% state-wide).

Concern about environmental problems

> Those with a great deal of concern about environmental problems (65%) and those with a fair amount of concern (49%), are more likely to think there is **not enough emphasis** on protecting natural habitats (compared with 45% community-wide). Those with little or no concern are more likely to think there is **too much emphasis** (16% vs. 9%).

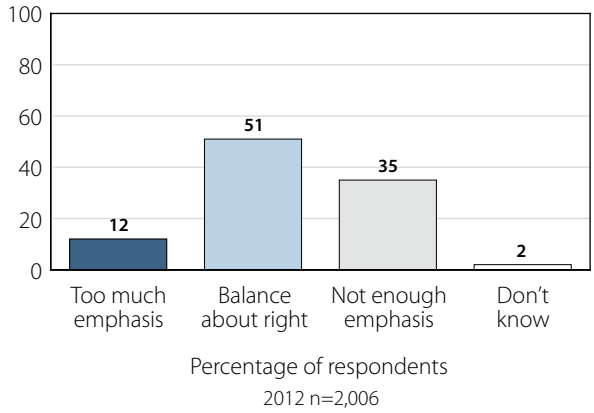
Emphasis on protecting and conserving historic things

Question 65
And now thinking about population growth and development, and protecting and conserving historic buildings, places and items in NSW. Overall, do you think there is ... too much emphasis on protecting and conserving these historic things; not enough emphasis on protecting and conserving these historic things; or do you think the balance is about right in NSW?

This is also a new item added to the survey in 2012. The most common view about this issue, held by 51%, is that NSW has the balance **about right** for protecting and conserving historical things. For the remainder, those who feel there is **too little emphasis**, 35%, outweigh those who feel there is **too much**, 12%.

Consequently, a belief that there is too little emphasis on **protecting natural habitats** is more prevalent than the belief there is too little emphasis on protecting and conserving **historic things**. These two issues are, however, correlated – people who believe there is too little emphasis on protecting natural habitats are also more likely than others to think there is too little emphasis on protecting and conserving historic things.

Figure 25: Emphasis on protecting and conserving historic things



Segment highlights

Emphasis on protecting and conserving historic things

Note: comparisons are made either to the whole sample or, where there are two categories only, to the other (e.g. males and females).

Gender

> Men (15%) are more likely than women (8%) to think there is **too much emphasis** on protecting and conserving historic things.

Age

> People aged 45+ are more likely to think there is **too little emphasis** on this issue (42% vs. 35% community-wide), while younger people under 35 are more likely to think the balance is **about right** (61% vs. 51%).

> In between, 35 to 44 year olds are more likely to think there is **too much emphasis** on protecting and conserving **historic things** (17% vs. 12%).

Employment

> Retirees are more likely to think there is **too little emphasis** (42% vs. 35%), but students are more likely to think the balance is about right (62% vs. 51%).

Children

> Those without children (56%) are more likely than people with children (48%) to believe the balance is **about right**.

Region

> Those from the Hunter region are more likely to think there is **too much emphasis** on protecting and conserving historic things (21% vs. 12% state-wide).

Concern about environmental problems

> Those with high environmental concern are more likely to think there is **too little emphasis** (46% vs. 35%), while those with little or no concern are more likely to think there is **too much** (15% vs. 12%).

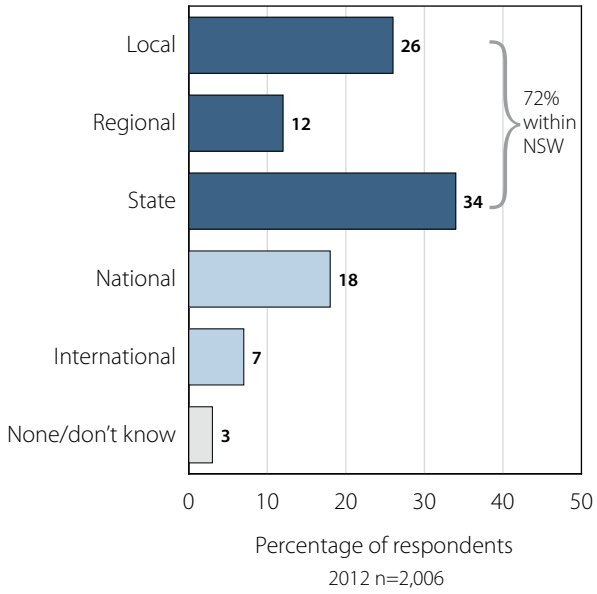
Geographic focus for NSW Government environmental support and funding

Question 63
*In supporting and funding action to look after the environment, at what level do you think the **State** Government should focus **most** effort? Should it be at ... the local level, the regional level, the state level, the national level, the international level?*

Also new for 2012, responses to this question find that most people, 72%, believe NSW Government environmental support and funding should be focused within the state of NSW itself. However, there is a spread of views about the geographic focus *within* the state, with 34% believing initiatives should be focused at a state-wide level, but a similar number would prefer devolution to either a regional (12%) or local level (26%).

There are some with the view that NSW Government efforts and funding should push beyond NSW itself, to a national, 18%, or even international level, 7%.

Figure 26: Geographic focus for environmental support/funding



Segment highlights

Geographic focus for environmental support and funding

Note: comparisons are made either to the whole sample or, where there are two categories only, to the other (e.g. males and females).

Age
> People aged 65+ are more likely to think that NSW Government support and funding should be focused at a **state** level (45% vs. 34% community-wide). Young people aged 15 to 24 are more likely to believe it should be at an **international** level (15% vs. 7%).

Employment
> Retirees are more likely to think efforts should be focused at a **state** level (43% vs. 34%), while students are more likely than others to suggest either a **regional** (20% vs. 12%) or **international** (13% vs. 7%) focus.

Education
> University graduates are also more likely to suggest a **regional** focus (16% vs. 12%).

Children
> More people without children (9%) than those with children (5%) support an **international** focus.

Language
> More people from multi-lingual households than people from English-only households feel State Government support and funding should reach to a **national level** (27% vs. 16%) or **international** level (11% vs. 6%). Those from English-only households are more inclined to think efforts should be focused at **state** level (36% vs. 26%).

Region
> Those from Sydney (38%) are more likely than people outside Sydney (27%) to support a **state** level focus. People from South Western Sydney are stronger supporters than others of a **national** focus (26% vs. 18% state-wide).

Settlement type
> Those who live in rural areas outside any town, believe a **local** area focus is most appropriate (36% vs. 26% state-wide).

Concern about environmental problems
> There are no significant differences by degree of environmental concern.

Snapshot – Personal behaviour

- **Almost everyone (98%) *often* undertakes at least one of the 10 'everyday' environmentally friendly behaviours surveyed.** On average, people have *often* engaged in five or six in the past year. (p. 49)
- **The most prevalent behaviours undertaken *often* are:** reducing energy consumption (81%); avoiding putting oil/fat/turps/paints or chemicals down sinks and toilets (80%), and reducing water consumption (64%). (p. 49)
- **The key changes in behaviour are:** compared with 2003, slightly more people often avoid putting oil/fat/turps/paints or chemicals down sinks and toilets (up from 76% to 80%). However, compared with 2009, fewer often reduce water consumption (down from 70% to 64%); fewer often avoid plastic bags (down from 54% to 46%), and fewer often re-use things (down from 61% to 57%). (p. 49)
- **Reasons for undertaking 'everyday' activities vary depending on the behaviour** (p. 55):
  - **Personal benefit** is the dominant motivation for reducing energy consumption (saving money); reducing the use of fuel (saving money), and composting/worm farms (good for the garden).
  - **Environmental concern or awareness** is the dominant motivation for choosing household products that are better for the environment.
  - **A varying mix of factors contributes to other behaviours.** For example, reducing water consumption is underpinned by a combination of externalities (drought and restrictions) and self-interest (saving money). Avoiding plastic bags is underpinned by the ready availability of an alternative, 'green bags', but also because of environmental concern or awareness.
- **Difficulties or barriers to undertaking 'everyday' behaviours also vary by activity**, for example (p. 59):
  - **Externalities** are dominant for **not reducing fuel consumption** – lack of public transport, or the need to use a vehicle, or a particular *type* of vehicle for work or in a particular location.
  - **Personal benefit** is prominent for **not choosing household products better for the environment**, including the cost of environmentally friendly alternatives or a belief they are not as effective.
- **Most people, 91%, have participated in at least one of the six 'occasional' environmental activities surveyed.** Compared with 2009, slightly fewer bought an energy-efficient appliance (down from 73% to 70%), or took part in a Landcare, Bushcare, tree planting or other restoration project, (down from 20% to 17%). (p. 63)
- **Personal benefit (saving money) is the dominant reason for buying energy-efficient appliances, but environmental concern/ awareness/interest feature as at least one of the key motivations for the other five behaviours.** (p. 67)
- **There are demographic differences based on sex, age and education.** On average, women engage in more 'everyday' environmentally friendly behaviours than men, and more women undertake each of the 10 'everyday' behaviours apart from composting. The average number of 'everyday' and 'occasional' activities undertaken rises with age up to 55 to 64, but either levels off or drops among those aged 65+. The average is also higher among people with a university degree. (pp. 49 and 63)
- **There is a strong relationship between environmental concern and behaviour.** People with high concern often undertake 6.8 **everyday** activities vs. 4.7 among those with little/no concern. Those with high concern have engaged in an average of 3.3 **occasional** activities vs. 1.9 among those with little/no concern. (pp. 51 and 64)
- **People who believe their actions 'make a difference' also undertake more everyday *and* occasional activities.** And importantly, stronger belief in the efficacy of personal actions can be associated with higher levels of behaviour *independent* of environmental concern. (p. 70)
- **A large majority say that in the past year, they have visited or spent time at a beach or waterway (87%); a suburban or town park or botanic garden (85%); and any bushland or other natural areas (79%).** Visits to a zoo or wild life park are lower, at 44%. People with high environmental concern are more likely to have visited these places 'many times'. One in five say they have participated in an **organised nature education activity** in the past 12 months. (pp. 72 and 75)

Frequency of 'everyday' environmental activities

Question 12(a)
From this next list of things I'll read out, can you please tell me, for each one, whether in the past 12 months you have often done that, sometimes done it, just occasionally done it, or never done that? (Ten environmentally friendly behaviours presented in random order)

In the past 12 months, each of the 'everyday' environmentally friendly behaviours was undertaken, even if only occasionally, by around three-quarters or more of the community, with the exception of composting which is limited to about one in two people.

Of the activities people say they have *often* done in the past year, two stand out above all others: **reducing energy consumption**, and the **avoidance of putting oil/fat/turps/paints or chemicals down sinks and toilets**, each claimed by around 80%. The quite large 2009 gain in reducing electricity consumption has been maintained in 2012, and there has been a small increase since 2003 in the number who *often* avoid putting things such as oils, fats and chemicals down sinks or toilets (up from 76% to 80%).

Somewhat below these, but nonetheless very prevalent, are reducing **water consumption, reducing the amount of food the household throws out, deciding to re-use things instead of throwing them away, and choosing household products that are better for the environment**. A majority of people, ranging between 50% and 64%, say they have *often* done these activities in the past 12 months.

With the easing of the drought, the 2009 survey found a decrease in water consumption reduction practices, and 2012 finds some further decrease. *Often* re-using items rather than throwing them away is also down slightly in 2012.

Between a third and a half claim to have *often* done each of the four remaining activities. Among these, the number who say they *often* **avoid plastic bags to carry shopping home** has decreased from a peak of 54% in 2009 to 46% in 2012, returning to the 2006 level, though still well above 2003. Although the prevalence of *often* **composting food and/or garden refuse or using worm farms** declined between 2003 and 2009, there has been no further drop in 2012.

In 2012 there has been a small increase in the prevalence of people buying fewer unneeded items *just occasionally*, and a small decrease in the number of survey participants for which this behaviour is *not applicable* (for example, respondents who say they do not do the household shopping and therefore cannot comment, or who perhaps say they do not buy unneeded items at all).

Figure 28 summarises how many of the 10 surveyed activities were undertaken *often* in the past 12 months. Almost everyone (98%) has *often* done at least one of the 10 activities, and on average, people have undertaken between five or six. Very few, 4%, have *often* undertaken all 10.

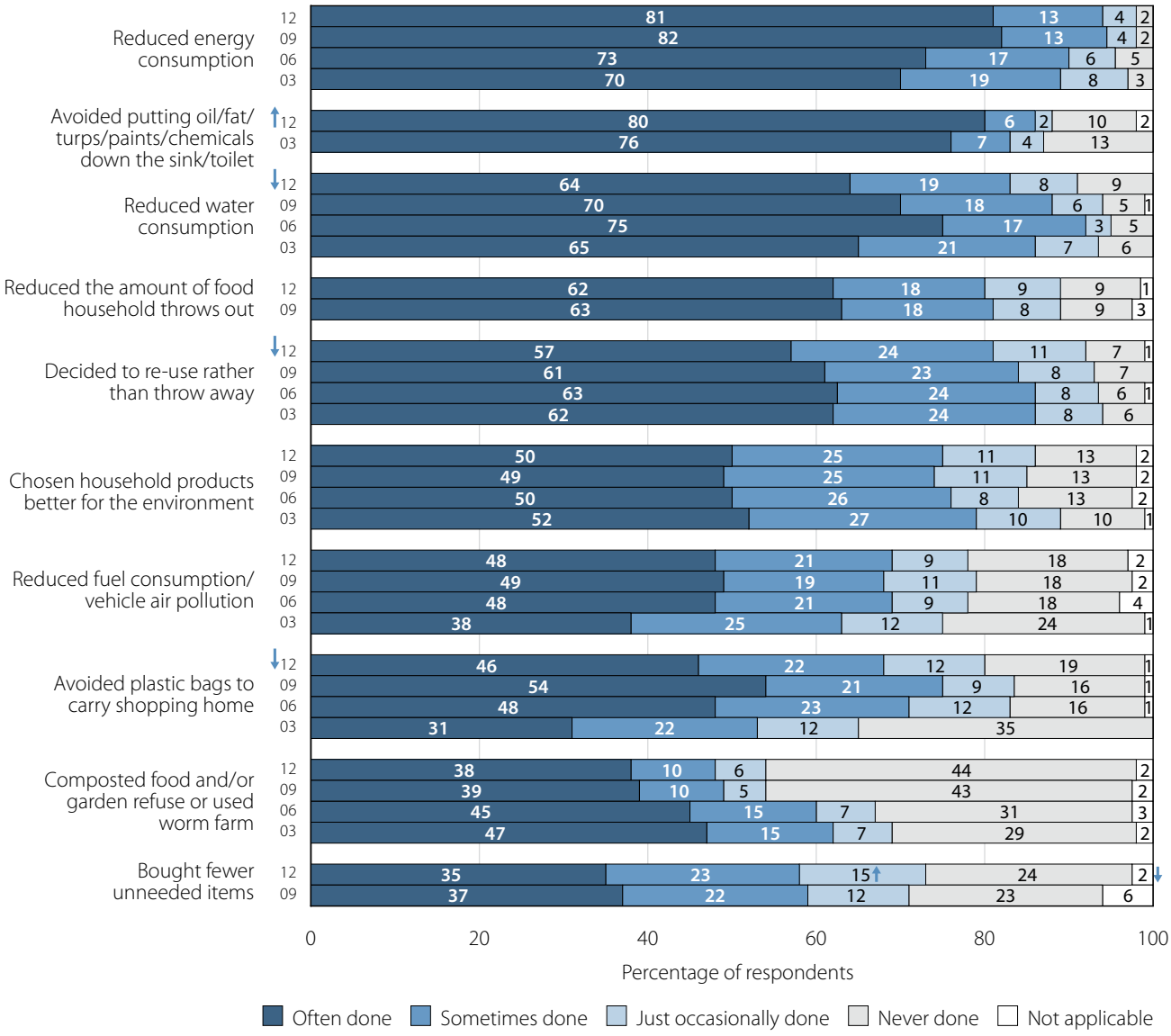
The number of 'everyday' activities undertaken rises progressively with concern about environmental problems. For example, 8% of those with little or no concern undertake 9 or 10 behaviours, rising to 25% among those with high concern (Figure 29). Behaviours also increase with the extent to which people believe what they do 'makes a difference' (discussed in detail under *The perceived efficacy of personal actions*, p. 69).

In relation to demographics:

- The number of everyday activities rises with age: for example while only 3% of those aged 15 to 24 *often* undertake 9 or 10 behaviours, this progressively rises to 21% among those aged 55 and over (Figure 30).
- The average number of 'everyday' activities undertaken *often* is also higher among women than men; among people with children; those from households speaking only English, and those living outside Sydney.

Each of these demographic patterns is consistent with those found in 2009. However, unlike 2009, the 2012 survey finds a relationship with education, with the average number of behaviours undertaken rising across levels of education.

Figure 27: Frequency of everyday environmental behaviours in the past 12 months



Note: Data from surveys prior to 2003 have been excluded due to the different (yes/no) answer format used in those surveys.

Figure 28: Number of everyday environmental behaviours often undertaken

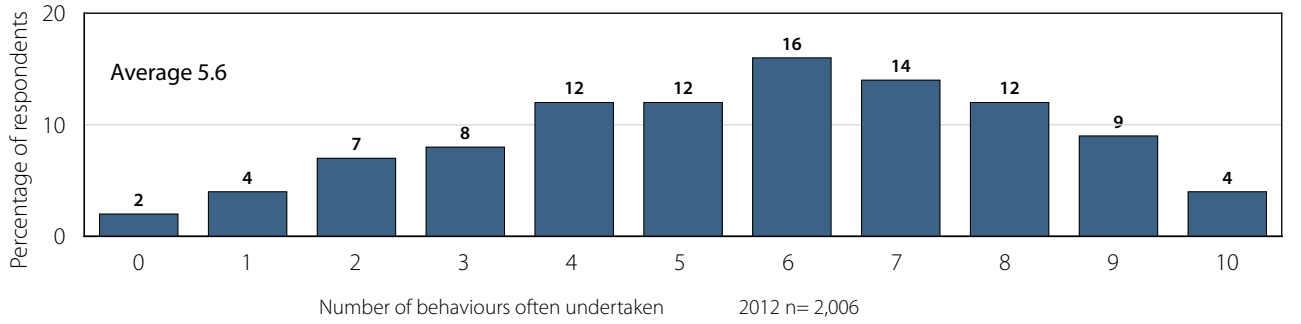


Figure 29: Number of everyday environmental behaviours undertaken by concern about environmental problems

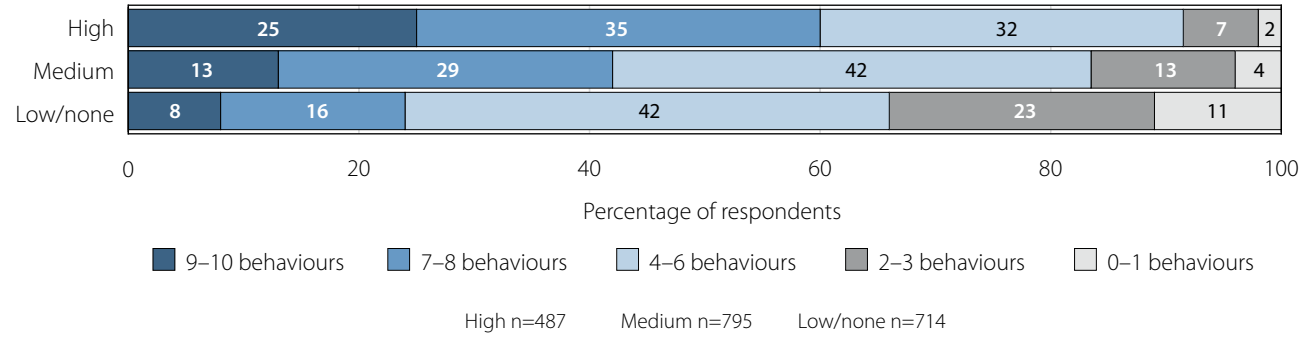
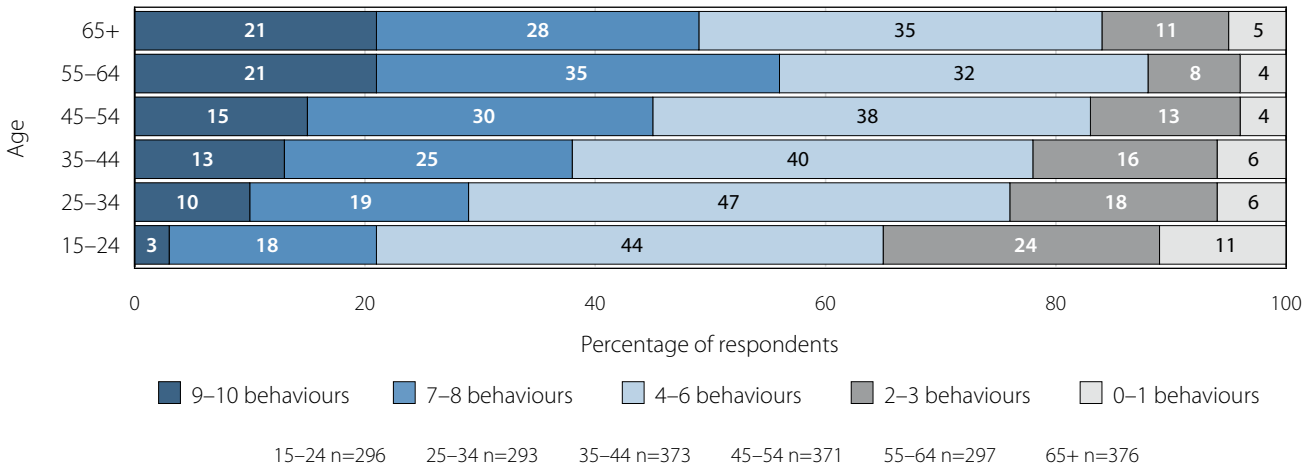


Figure 30: Number of everyday environmental behaviours undertaken by age group



Segment highlights

Frequency of everyday environmental behaviours

Note: comparisons are made either to the whole sample or, where there are two categories only, to the other (e.g. males and females).

Gender

> Consistent with 2009 and 2006, on average women undertake more activities *often* (6.1) than men (5.2).

> Women are also more likely to *often* undertake each individual behaviour apart from composting:

- **choose household products** that are better for the environment (women 57%, men 42%); while men are more likely to never do this (men 17%, women 9%)
- **re-use something** (women 62%, men 51%); 9% of men never do so, compared with 5% of women
- **reduce water consumption** (women 72%, men 56%), but men are more likely to do this only *occasionally or never* (men 21%, women 12%)
- **reduce energy consumption** (women 84%, men 77%)
- **take steps to reduce fuel use and vehicle air pollution** (women 52%, men 45%) with men more likely to do this only *occasionally or never* (men 34%, women 22%)
- **avoid plastic bags** (women 52%, men 40%) with men more likely to do so only *occasionally or never* (men 37%, women 25%)
- **reduce food thrown out** (women 66%, men 58%) with men more likely to do so only *occasionally or never* (men 23%, women 14%)
- **buy fewer unneeded items** (women 39%, men 31%) with men more likely to do so only *occasionally or never* (men 45%, women 34%)
- **avoid putting oil/fat/turps/paints or chemicals down sinks or toilets** (women 83%, men 76%).

Age

> As found in 2009 and 2006, the number of activities *often* undertaken rises progressively with age up to the 55 to 64 year age group:

15 to 24:	4.4	45 to 54:	6.0
25 to 34:	5.2	55 to 64:	6.5
35 to 44:	5.6	65+:	6.2

> Those aged 65+ are more likely to *often*: **reduce water consumption** (75% vs. 64% community-wide); **reduce energy consumption** (88% vs. 81%); **compost/use a worm farm** (47% vs. 38%); and **reduce food thrown out** (72% vs. 62%).

> People aged 55 to 64 are more likely to *often*: **choose household products** that are better for the environment (61% vs. 50% community-wide); **re-use something** (66% vs.57%); **reduce water consumption** (77% vs. 64%); **reduce energy consumption** (87% vs. 81%); **compost/use a worm farm** (51% vs. 38%); **avoid plastic bags** (55% vs. 46%); **reduce food thrown out** (74% vs. 62%); and **buy fewer unneeded items** (45% vs. 35%).

> Those aged 45 to 54 are more likely to *often*: **choose household products** that are better for the environment (56% vs. 50% community-wide); and **reduce water consumption** (71% vs. 64%).

> People aged 25 to 34 are more likely to *sometimes*: **reduce water consumption** (27% compared with 19% community-wide); and **avoid putting oil/fat/turps/paints or chemicals down sinks or toilets** (10% vs. 6%).They are also more likely to only *occasionally* **reduce food thrown out** (13% vs. 9%).

> The youngest group, 15 to 24 year olds, are more likely to have never **composted/used a worm farm** (56% vs. 44% community-wide). They are also more likely to have *sometimes*, or *only occasionally*: **reduced water consumption** (40% vs. 27%); **reduced energy consumption** (32% vs. 17%); **reduced food thrown out** (41% vs. 27%); and **avoid putting oil/fat/turps/paints or chemicals down sinks or toilets** (16% vs.8%). In **choosing household products that are better for the environment**, they are more likely to do so either *sometimes*, just *occasionally or never* (68% vs. 49%).

Language

> Also consistent with 2009 and 2006, on average, people from English-only households undertake more activities **often** (5.7) than those from multi-lingual households (5.2).

> Those from English-only households are more likely to *often*: **compost/use a worm farm** (41% vs. 27% for people from multi-lingual households); and **avoid putting inappropriate liquids down sinks or toilets** (81% vs.74%). However, they are more likely to *never* **reduce fuel consumption or reduce vehicle pollution** (20% vs. 13%).

> Those from multi-lingual households are more likely to *sometimes*: **reduce water consumption** (25% vs. 17%); and **avoid putting inappropriate liquids down sinks or toilets** (11% vs. 5%). They are also more likely to *only occasionally or never* **compost/use a worm farm** (58% vs. 48%).

Segment highlights (cont)

Frequency of everyday environmental behaviours

Education

- The number of environmentally friendly activities tends to rise with level of education: not completed secondary 4.9; completed secondary 5.5; trade or technical qualification 5.8; and university 5.8.
- Those with a university degree are more likely to *often*: **choose household products** that are better for the environment (55% compared with 50% community-wide) and **avoid putting oil/fat/turps/paints or chemicals down sinks or toilets** (84% vs. 80%).
- People with a trade/technical qualification are more likely to *often*: **reduce water consumption** (70% vs. 64%); and **reduce food thrown out** (68% vs. 62%).
- Those who have not completed secondary schooling, are more likely to *never*: **choose household products** that are better for the environment (22% compared with 12% community-wide) or **compost/use a worm farm** (53% vs. 44%). They are also more likely to only *occasionally or never* **reduce energy consumption** (12% vs. 6%); **reduce food thrown out** (26% vs. 18%); **avoid putting things down sinks or toilets** (23% vs. 13%).

Employment

- Reflecting patterns by age, on average, retirees do more activities often (6.3), while students do fewer than others (4.5 vs. 5.6 community-wide).
- Retirees are more likely to *often*: **re-use something** (65% vs. 57%); **reduce water consumption** (74% vs. 64%); **reduce energy consumption** (90% vs. 81%); **reduce fuel use/vehicle air pollution** (55% vs. 48%); **compost/use a worm farm** (48% vs. 38%); and **reduce the amount of food thrown out** (72% vs. 62%).
- Students are more likely to have *sometimes*, or only *occasionally*: **reduced energy consumption** (32% vs. 17%); and **reduced food thrown out** (46% vs. 27%). They are also more likely to *sometimes*: **reduce water consumption** (33% vs. 19%); **buy fewer unneeded items** (32% vs. 23%); and **avoid putting oil/fat/turps/paints or chemicals down sinks or toilets** (13% vs. 6%). As far as **choosing household products** that are better for the environment is concerned, they are more likely than others to do so either *sometimes*, *just occasionally or never* (66% vs. 49%). They are also more likely to *sometimes or occasionally* **reduce the amount of food thrown out** (46% vs. 27%).

Children

- As found in 2009 and 2006, those with children undertake a higher average number of activities *often* (6.0) than those without children (5.0).
- Those with children are more likely to *often* do most activities: **choose household products** that are better for the environment (55% compared with 40% for those without children); **re-use something** (59% vs. 53%); **reduce water consumption** (71% vs. 53%); **reduce energy consumption** (85% vs. 73%); **compost/use a worm farm** (44% vs. 28%); **reduce food thrown out** (67% vs. 54%); **buy fewer unneeded items** (38% vs. 30%); and **avoid putting oil/fat/turps/paints or chemicals down sinks or toilets** (82% vs. 76%).
- Those without children are more likely to *never* **compost/use a worm farm** (53% compared with 39% for those with children). They are more likely to *never* or *only occasionally* **choose household products** that are better for the environment (30% vs. 20%).
- They are also more likely to *sometimes or just occasionally*: **reduce energy consumption** (24% vs. 13%); **reduce the amount of food thrown out** (36% vs. 22%), and **avoid putting oil/fat/turps /paints or chemicals down sinks or toilets** (12% vs. 6%). In reducing water consumption, they are more likely to do so either *sometimes, just occasionally or never* (48% vs. 28%).

Household Income

- Results on 'everyday' behaviours were analysed by household income at three levels: Low (under $50,000), Medium ($50,000–$99,000) and High ($100,000 or more). On average, Low-income households (6.1) undertake more behaviours than Medium- (5.8) and High- (5.5) income households.
- Low-income households are more likely to *often*: **re-use something** (63% vs. 57% community-wide); **take steps to reduce fuel use and vehicle air pollution** (56% vs. 48%); **buy fewer unneeded items** (41% vs. 35%); and **choose household products** that are better for the environment (55% vs. 50% community-wide).

Segment highlights (cont)

Frequency of everyday environmental behaviours

Dwelling type

> People who live in a separate house, on average, often do more environmentally friendly behaviours (5.7 compared with 5.6 community-wide).
> This is principally because they are more likely to *often* **compost/use a worm farm** (44% compared with 14% for those who live in a flat or unit, and 25% for those who live in a semi-detached, townhouse, terrace or row house). Conversely, those who do not live in a separate house are more likely to only *occasionally or never* do this (flat/unit dwellers 72%; those in a semi-detached, townhouse, terrace or row house, 63%, vs. people in separate houses, 44%).
> Those who live in separate houses are also more likely to *often* **avoid putting inappropriate liquids down sinks or toilets** (81% compared with 76% for flat/unit dwellers, and 74% for those in a semi-detached, townhouse, terrace or row house).

Region

> People living outside Sydney engage in more activities *often* (5.9) than Sydney people (5.4). This is particularly the case for those living in the Central West/South Eastern regions, 6.3.
> People living outside Sydney are more likely to *often*: **choose household products** that are better for the environment (54% compared with 47% for those from Sydney); **re-use something** (61% vs. 54%); **reduce energy consumption** (84% vs. 79%); **compost/use a worm farm** (48% vs. 32%); and **reduce food thrown out** (67% vs. 60%).
> Sydney people are more likely to *never*: **re-use something** (8% vs. 5%); **compost/use a worm farm** (50% [Northern Sydney 55%] vs. 35%); and **reduce food thrown out** (10% vs. 7%).
> People from the state's Central West/South Eastern regions, are more likely to *often*: **choose household products** that are better for the environment (64% compared with 50% state-wide); and **reduce food thrown out** (75% vs. 62%).
> People from several rural regions are more likely to *often* **compost/use a worm farm**: Central West/South Eastern 57%, Mid North Coast 58%, Richmond/Tweed 56%, Murrumbidgee/Murray 52%, compared with 38% state-wide.
> Those from Sydney's Northern Beaches are more likely to *often* **avoid putting oil/fat/turps/paints or chemicals down sinks or toilets** (91% vs. 80%).
> People from Eastern/Inner Sydney are more likely to often reduce fuel consumption (58% vs. 48%).

Settlement type

> People living in rural areas outside any town engage in more activities (6.2 vs. 5.6 state-wide).
> They are also more likely to *often*: **choose household products** better for the environment (60% compared with 50% state-wide); **reduce water consumption** (74% vs. 64%); and **compost/use a worm farm** (59% vs. 38%).
> But they are more likely to *never* **reduce fuel use/vehicle air pollution** (27% vs. 18%).

Concern about environmental problems

> The average number of activities undertaken rises with concern about environmental problems: those with little or no concern 4.7; medium concern (concerned 'a fair amount') 5.8; and high concern (concerned 'a great deal'), 6.8.
> Those with high concern are more likely to *often* do all of environmentally friendly behaviours surveyed: **choose household products** that are better for the environment (69% compared with 50% community-wide); **re-use something** (68% vs. 57%); **reduce water consumption** (79% vs. 64%); **reduce energy consumption** (90% vs. 81%); **reduce fuel use/vehicle air pollution** (59% vs. 48%); **compost/use a worm farm** (52% vs. 38%); **avoid plastic bags** (57% vs. 46%); **reduce food thrown out** (71% vs. 62%); **buy fewer unneeded items** (48% vs. 35%); and **avoid putting oil/fat/turps/paints or chemicals down sinks or toilets** (85% vs. 80%).
> Those with medium concern are more likely to *often*: **reduce water consumption** (68% vs. 64% community-wide); and **avoid plastic bags** (51% vs. 46%).
> Those with little or no concern are more likely to *never*: **choose household products** better for the environment (23% compared with 12% community-wide); **re-use something** (13% vs. 7%); **reduce fuel use/vehicle air pollution** (26% vs. 18%); **compost/use a worm farm** (55% vs. 44%); **avoid plastic bags** (32% vs. 19%;) **buy fewer unneeded items** (34% vs. 24%); and **avoid putting oil/fat/turps/paints or chemicals down sinks or toilets** (15% vs. 10%). They are also more likely to only *occasionally or never*: **reduce water consumption** (27% vs. 17%); **reduce energy consumption** (11% vs. 6%); or **reduce food thrown out** (26% vs. 18%).

Prompts/reasons for starting specific environmental behaviours

Question 12(b)
(For one of the behaviours at Question 12(a) undertaken sometimes or often, randomly selected for each participant). You mentioned that you often or sometimes (insert behaviour). Can you please tell me what prompted you to start doing that? (If don't know: Can you tell me more generally then why you do that?) (Unprompted)

The reasons people give for undertaking everyday environmentally friendly behaviours are shown in Table 3 in 17 categories. However, these can be summarised into four broad themes:

- **Personal benefit:** cost/saving money is a key component, along with personal convenience or other reasons to do with personal advantage. (In some cases, people *simultaneously* mention cost *and* environment as motivators).
- **Environmental awareness/concern:** including general responses about protecting the environment, or awareness/concern relating to a specific environmental outcome (e.g. pollution of waterways as a result of pouring inappropriate items down the sink).
- **Other values or entrenched behaviours:** including stated motivators such us upbringing; a dislike of waste or overconsumption; 'common sense'; or habit.
- **External influences or enablers:** including external events (e.g. drought); laws/regulations; education (including media campaigns and other forms of education); or the influence of other people.

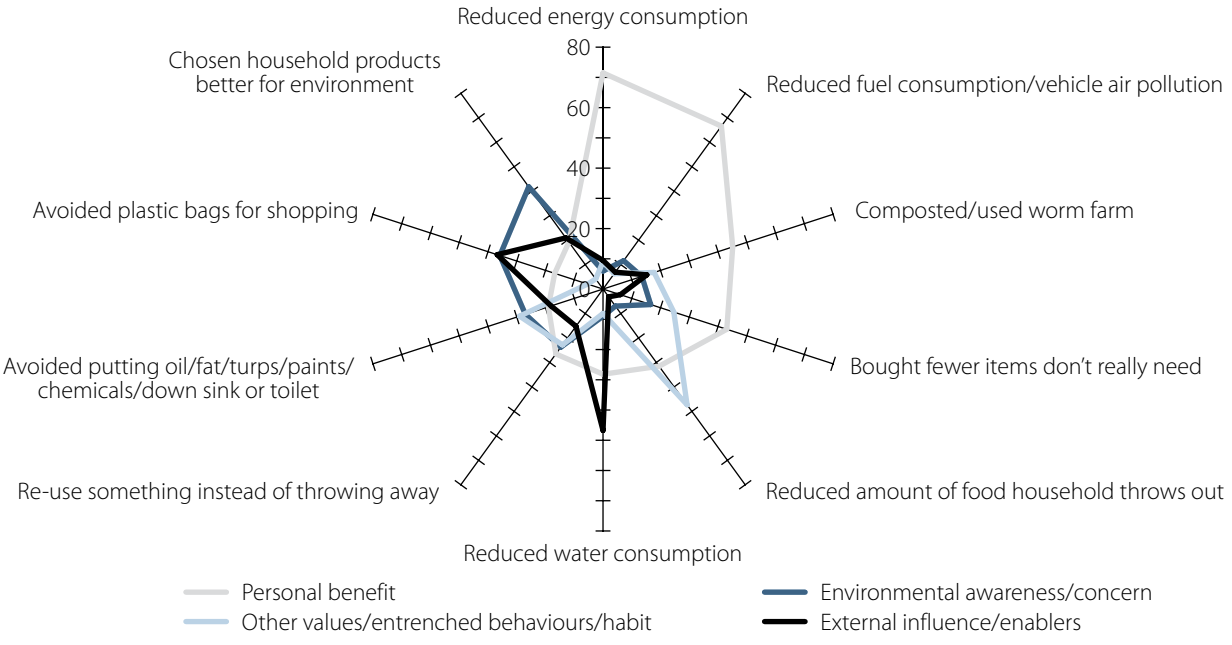
As Figure 31 and Table 3 show, personal benefit (mainly saving money) is the dominant reason for **reducing energy consumption**; **reducing the use of fuel**, and also **composting/worm farms**, though benefitting the garden rather than saving money is the key factor for the latter.

A mix of personal benefit (saving money) and personal values/entrenched behaviours (a dislike of waste, or upbringing/habit/common sense) is evident for **buying fewer unneeded items** and **reducing the amount of food thrown out**.

Although external factors, principally the drought and water restrictions are the most prevalent reasons for **reducing water consumption**, personal benefit (because of cost) is also strong. Consequently, while the drought has receded, it appears to have triggered more long-lasting behaviours for some people.

A varying combination of three factors – personal benefit, environmental awareness/concern, and personal values/entrenched behaviours – underpins **re-using items** and **avoiding putting oil/fat/turps/paints/chemicals down sinks and toilets**. While saving money is the personal benefit in re-using items, it is the avoidance of drainage problems for not putting inappropriate things down sinks and toilets.

Figure 31: Prompts/reasons for undertaking specific environmental behaviours in 2012



Environmental awareness/concern along with external influences (the availability of green bags and education via advertising/media) are the most commonly stated reasons for **avoiding plastics bags for shopping**.

Finally, environmental awareness/concern is the dominant stated reason for **choosing household products better for the environment**, though education is also evident at a much lower level.

Table 3: Prompts/reasons for undertaking specific environmental behaviours in 2012

	Reduced energy consumption	Reduced fuel consumption/ vehicle air pollution	Composted food/garden refuse/used a worm farm	Bought fewer items that you don't really need	Reduced amount of food household throws out	Reduced water consumption	Re-use something instead of throwing it away	Avoided putting oil/fat/ turps/paints/chemicals/ down the sink or toilet	Avoided plastic bags for shopping	Chosen household products better for environment
Sample size n=	200	200	199	201	200	200	200	199	200	201
Prompt/reasons	%	%	%	%	%	%	%	%	%	%
Personal benefit										
Cost/save money	**71**	**49**		**38**	**32**	**27**	**20**		4	7
Lifestyle and convenience		10		5			7		9	
Good for garden			**43**							
Problem caused by non-environmental items								**18**		
Health/protect children		7								7
Environmental awareness/concern										
Environmental concern or awareness	6	11	14	**16**	6	8	**23**	27	**29**	**42**
Personal experience of bad outcomes									7	
Other values/entrenched behaviours/habit										
Upbringing/habit/common sense	7	5	**15**		**15**	6	**15**	**29**		
Dislike waste/overconsumption/no point buying what don't need				**21**	**20**		8			
No leftovers – only cook or buy what needed					12					
External influences/enablers										
Dam levels/drought						**22**				
Laws/regulations						13				
Available infrastructure/services e.g. green bags, transport		6				4			**16**	
Education via advertising/media	4					4	5		13	10
Other education (formal or community)							4	8		7
Influence of others e.g. children/family/ friends	4		7			4	6	5	5	4
Incentive (eg compost bin)			4							
Other		5	5	6	10	5	4	5		7
Don't know/not applicable		4	4				7			5

n Most frequent response n Others given by 15%+ n Given by 4–14% Given by 1–3% Given by <1%

A comparison of results from 2012 and 2009 shows:

- A marked increase in mentions of cost/saving money as the reason for **reducing energy consumption** (up from 38% to 71%), and **reducing water consumption** (up from 12% to 27%)
- For **choosing household products that are better for the environment**, fewer give education via advertising/media as a reason (down from 18% to 10%), but more mention environmental awareness/concern (up from 27% to 42%)
- Benefits for the garden is more prevalent as a reason for **composting/worm farms** (up from 26% to 43%), but fewer people mention the influence of others (down from 15% to 7%)
- A dislike of waste/overconsumption or a belief that 'there's no point buying things you don't need' is now more prevalent as a reason for **buying fewer unneeded items** (up from 10% to 21%) and **reducing the amount of food thrown out** (up from 9% to 20%).

Table 4: Prompts/reasons for undertaking specific environmental behaviours, 2012 compared with 2009

	2012 (%)	2009 (%)
Taken active steps to reduce energy consumption	n = 200	n = 365
Total mentioning cost: ↑	71	38
> Economic/save money	64	38
> Dual cost AND environmental	8	n/a
Upbringing/common sense/habit	7	5
Environmental concern or awareness ↓	6	18
Taken active steps to reduce fuel consumption & vehicle air pollution	n = 200	n = 362
Total mentioning cost:	49	42
> Economic/save money	39	42
> Dual cost AND environmental	10	n/a
Environmental concern or awareness	11	16
Lifestyle and convenience	10	11
Health reasons/to protect children	7	7
Available infrastructure/services	6	9
Upbringing/common sense/habit	5	4
Composted food and/or garden refuse or used a worm farm	n = 199	n = 360
Good for the garden ↑	43	26
Upbringing/common sense/habit	15	18
Environmental concern or awareness	14	16
Influence of others e.g. children/family/friends ↓	7	15
For environmental reasons, bought fewer items that you don't really need	n = 201	n = 366
Total mentioning cost	38	31
> Economic/save money	35	31
> Dual cost AND environmental	3	n/a
Don't like waste/overconsumption/no point buying what don't need ↑	21	10
Environmental concern or awareness	16	16
Lifestyle and convenience	5	3
Reduced the amount of food that your household throws out	n = 200	n = 369
Total mentioning cost:	32	30
> Economic/save money	31	30
> Dual cost AND environmental	<.5	n/a
Don't like waste/overconsumption/no point buying what don't need ↑	20	9
Upbringing/common sense/habit	15	12
No leftovers, eat everything, cook or buy only what needed	12	6
Environmental concern or awareness	6	9

Reasons contributing to the most important group of reasons are highlighted for each behaviour

Table 4: Prompts/reasons for undertaking specific environmental behaviours, 2012 compared with 2009

	2012 (%)	2009 (%)
Made an effort for environmental reasons to reduce water consumption	n = 200	n = 369
Total mentioning cost: ↑	27	12
> Economic/save money	22	12
> Dual cost AND environmental	5	n/a
Dam levels/drought/water storage	22	25
Laws/regulations	13	12
Environmental concern or awareness	8	11
Upbringing/common sense/habit	6	7
Decided for environmental reasons to re-use something instead of throwing it away	n = 200	n = 369
Environmental concern or awareness	23	23
Total mentioning cost:	20	17
> Economic/save money	13	17
> Dual cost AND environmental	7	n/a
Upbringing/common sense/habit	15	20
Don't like waste/overconsumption/no point buying what don't need	8	8
Don't know/not applicable	7	7
Lifestyle and convenience	7	8
Influence of others e.g. children/family/friends	6	7
Education via advertising/media	5	5
Avoided putting things like oil, fat, turps, paints or chemicals down the sink or toilet	n = 199	
Upbringing/common sense/habit	29	n/a
Environmental concern or awareness	27	n/a
Problems caused by non-environmental items	18	n/a
Other education (formal or community)	8	n/a
Influence of others e.g. children/family/friends	5	n/a
Avoided plastic bags to carry shopping home	n = 200	n = 367
Environmental concern or awareness	29	32
Available infrastructure/services – green bags	16	14
Education via advertising/media	13	18
Lifestyle and convenience	9	6
Personal experience of bad environmental outcomes	7	2
Influence of others e.g. children/family/friends	5	4
Chosen household products that you think are better for the environment	n = 201	n = 367
Environmental concern or awareness ↑	42	27
Education via advertising/media ↓	10	18
Health reasons/to protect children	7	4
Other education (formal or community)	7	5
Total mentioning cost:	7	7
> Economic/save money	4	7
> Dual cost AND environmental	3	n/a

Reasons contributing to the most important group of reasons are highlighted for each behaviour

↑↓ Arrows indicate a significant increase or decrease in 2012 compared to 2019

Reasons for not undertaking environmental behaviours

Question 12(c)
(For one of the behaviours at Question 12(a) undertaken never or occasionally, selected randomly for each participant). You mentioned that you never, or just occasionally (insert behaviour). Is there any particular reason you don't do that more often, or find it difficult to do?

Reasons for not, or only occasionally, undertaking the everyday environmental behaviours surveyed are shown in Table 5. Although some reasons can be grouped into the theme of **personal benefit**, and others relate to **external factors**, the remaining reasons cannot be readily summarised.

Either personal benefit or forgetfulness/inattentiveness underpins people **not avoiding plastic bags when shopping**. The personal benefit is primarily connected with plastic bags being convenient or people saying they can 'recycle' them. As for forgetfulness/inattentiveness, sometimes this can be because people undertake unexpected shopping, and have therefore not brought their 'green bags' with them.

Personal benefit is also prominent for **not choosing household products better for the environment**, including: the cost of more environmentally friendly alternatives; a belief they are not as effective; and people simply placing a higher priority on other things (including buying preferred brands). At a much lower level there is also an element of forgetfulness/inattentiveness; most commonly, people say that they 'just don't think about it'.

Three equally prominent reasons are cited for **not reducing energy consumption**: forgetfulness; other things being more important/laziness (including personal comfort/convenience or habit); and people feeling they are doing all they can and cannot reduce their consumption any further.

The external constraint of lack of infrastructure (in this case lack of space for a garden or a compost bin) is the dominant reason for **not composting or using worm farms** – though further elements are also evident at a lower level, including: other things being more important (convenience) or laziness; the environmental approach being less satisfactory (in this case problems connected with vermin); and forgetfulness/inattentiveness ('I don't really think about it').

A set of external factors are dominant for **not reducing fuel consumption** – lack of infrastructure (in this case, lack of public transport), or the external constraint of either needing to use a vehicle, or a particular *type* of vehicle (e.g. four-wheel drive) for work or in a particular location (e.g. in country areas). The influence of other things being more important (in this case, personal convenience) is also evident.

Reasons connected with 'doing what I can'/'lack of opportunity'/'already frugal'/'don't use or waste much' are the most commonly cited reasons for not engaging with four of the 10 behaviours: **re-using items**; **buying fewer unneeded items**; **reducing water consumption**; and **reducing the amount of food thrown out**. Other external influences, principally the fact that the drought has broken, are also quite prevalent for **not reducing water consumption**.

The most common response given by respondents for **not avoiding putting oil/fat/turps/paints/chemicals down sinks and toilets**, indicated that they had incorrectly reported their behaviour in the previous question, and that they did, in fact, avoid putting these things down sinks and drains – nominated by 55% of those asked about their reason (or about 6% of the total sample). Consequently the proportion of people who *do* avoid putting oil/fat/turps/paints/chemicals down sinks and toilets is even higher than the 86% who reported this appropriate behaviour in the previous question.

The remainder who only occasionally or never avoid this behaviour either discount the consequences of their actions; say they do not know how else to dispose of such materials; cite laziness, or say that they do not use these substances in their household.

A comparison of responses from the 2012 and 2009 surveys (Table 6) finds only a few statistically significant differences:

- More people cite forgetfulness/inattentiveness as the reason they do not take steps to **reduce energy consumption** (up from 8% to 24%), and more also say they find this difficult to do (up from >0.5% to 8%).
- More cite forgetfulness/inattentiveness/lack of planning or habit as the reason they do not **compost or use worm farms** (up from 3% to 10%).
- In 2012, fewer people are unable to give their reason for not **reducing water consumption** (down from 20% to 7%) or **re-using things** (down from 24% to 12%).

Table 5: Main reasons for not undertaking specific environmental behaviours in 2012

	Avoided plastic bags for shopping	Chosen household products better for the environment	Reduced energy consumption	Composted/used worm farm	Reduced fuel consumption/ vehicle air pollution	Re-use something instead of throwing it away	Bought fewer items that you don't really need	Reduced water consumption	Reduced amount of food household throws out	Avoided putting oil/fat/ turps/paints/chemicals/ down the sink or toilet
Sample size n=	163	162	121	208	162	163	164	161	162	146
Reasons	%	%	%	%	%	%	%	%	%	%
Personal benefit										
Economic/cost factors		**17**			4	6				
Other things more important/laziness	**46**	**18**	**20**	13	**17**	13	10	11		8
Environmental alternative less satisfactory		6		7						
External Constraints										
External – lack of infrastructure				**42**	**28**					
Other external influence/constraint			9		**32**			**18**	12	
Other										
Forgetfulness/inattentiveness/ lack of planning/habit	**37**	**15**	**24**	10		7	12	13	11	
Doing what I can/lack of opportunity/ already frugal/don't use/waste much		6	**17**	6	7	**36**	**41**	**30**	**42**	
Difficult to do			8	6	8			4	4	
Lack of information		6				4				6
Discounting consequences – my activities don't impact environment			5					4		8
Doing an environmentally friendly alternative				4					8	
Responses indicating respondent actually doing the behaviour OR doing for non-environmental reasons			7			12	14	10		**55**
All others		6	4			8				
Don't know/not applicable	7	**15**	4	7		12	14	7	**15**	**15**

n Most frequent response **n** Others given by 15%+ n Given by 4–14% Given by 1–3% Given by <1%

Table 6: Main reason for *not* undertaking specific environmental behaviours, 2012 compared with 2009

	2012 (%)	2009 (%)
Avoided plastic bags to carry shopping home	n = 163	n = 263
Other things more important/laziness	46	52
Forgetfulness/inattentiveness/lack of planning/habit	37	26
Don't know/not applicable	7	6
Chosen household products you think are better for the environment	n = 162	n = 266
Other things more important/laziness	18	15
Economic/cost factors	17	16
Forgetfulness/inattentiveness/lack of planning/habit	15	23
Don't know/not applicable	15	13
Environmental alternative less satisfactory	6	6
Doing what I can/lack of opportunity/already frugal/don't use/waste much	6	5
Lack of information	6	9
Taken active steps to reduce energy consumption	n = 121	n = 97
Forgetfulness/inattentiveness/lack of planning/habit ↑	24	8
Other things more important/laziness	20	20
Doing what I can/lack of opportunity/already frugal/don't use/waste much	17	12
Other external influence/constraint	9	8
Difficult to do ↑	8	<0.5
Response indicates actually doing behaviour or doing for non-environmental reasons	7	7
Discounting consequences – my activities don't impact the environment	5	8
Composted food and/or garden refuse or used a worm farm	n = 208	n = 363
External – lack of infrastructure	42	42
Other things more important/laziness	13	13
Forgetfulness/inattentiveness/lack of planning/habit ↑	10	3
Don't know/not applicable	7	9
Environmental alternative less satisfactory	7	6
Doing what I can/lack of opportunity/already frugal/don't use/waste much	6	10
Difficult to do	6	3
Taken active steps to reduce fuel consumption & vehicle air pollution	n = 162	n = 266
Other external influence/constraint	32	22
External – lack of infrastructure – public transport	28	24
Other things more important/laziness	17	19
Difficult to do	8	4
Doing what I can/lack of opportunity/already frugal/don't use/waste much	7	6

↑↓ Arrows indicate a significant increase or decrease in 2012 compared to 2019

Table 6: Main reason for *not* undertaking specific environmental behaviours, 2012 compared with 2009 (cont)

	2012 (%)	2009 (%)
Decided for environmental reasons to re-use something instead of throwing it away	n = 163	n = 230
Doing what I can/lack of opportunity/already frugal/don't use/waste much	36	26
Other things more important/laziness	13	8
Response indicates actually doing behaviour or doing for non-environmental reasons	12	14
Don't know/not applicable ↓	12	24
Forgetfulness/inattentiveness/lack of planning/habit	7	16
Economic/cost factors	6	2
For environmental reasons, bought fewer items don't really need	n = 164	n = 263
Doing what I can/lack of opportunity/already frugal/don't use/waste much	41	28
Response indicates actually doing behaviour or doing for non-environmental reasons	14	12
Don't know/not applicable	14	23
Forgetfulness/inattentiveness/lack of planning/habit	12	16
Other things more important/laziness	10	13
Made an effort for environmental reasons to reduce water consumption	n = 161	n = 183
Doing what I can/lack of opportunity/already frugal/don't use/waste much	30	32
Other external influence/constraint	18	12
Forgetfulness/inattentiveness/lack of planning/habit	13	5
Other things more important/laziness	11	11
Response indicates actually doing behaviour or doing for non-environmental reasons	10	8
Don't know/not applicable ↓	7	20
Reduced the amount of food that your household throws out	n = 162	n = 230
Doing what I can/lack of opportunity/already frugal/don't use/waste much	42	39
Don't know/not applicable	15	18
Other external influence/constraint	12	7
Forgetfulness/inattentiveness/lack of planning/habit	11	13
Doing an environmentally friendly alternative.	8	5
Avoided putting things like oil, fat, turps, paints or chemicals down sink/toilet	n = 146	–
Response indicates actually doing behaviour or doing for non-environmental reasons	55	n/a
Don't know/not applicable	15	n/a
Discounting consequences – my activities don't impact the environment	8	n/a
Other things more important/laziness	8	n/a
Lack of information	6	n/a

↑↓ Arrows indicate a significant increase or decrease in 2012 compared to 2019

Participation in occasional environmental activities

Question 12(d)
From this next list of things, please tell me whether or not you have done it in the past 12 months. (Six environmental activities read out in random order, yes/no response)

In the past 12 months, buying an **energy-efficient appliance**, 70%, was by far the most prevalent of the six occasional environmental activities surveyed (although responses to a subsequent question about *why* people undertook behaviours indicated that some respondents may be including energy-efficient light globes as an 'energy-efficient appliance'). This was lower than 2009, but slightly above 2006.

In the next tier down, 49% say that in the past year they **tried to encourage someone to change an activity or practice that was harmful to the environment**, and 46% **tried to get information on an environmental topic or issue**. Each of these is unchanged compared with 2009.

A new item for 2012, **disposing of household chemicals at a special council drop-off or clean-out event**, is claimed to have been done by 43% in the past 12 months.

Participation in a local development or environmental issue was somewhat lower, at 24% – again unchanged from 2009. (Note: the last three surveys have seen a lower level of participation in this activity compared with 1997 and 2000, because in the earlier surveys, the question was *not* restricted to *local* environmental issues).

Finally, 17% claim to have taken part in a **Landcare, Bushcare, tree planting or other restoration project**, which is down slightly from 20% in previous surveys.

Of the six activities surveyed, on average, people have participated in 2.5. Most, 91%, have participated in at least one, but very few, 2%, have engaged in all six.

As found for the 'everyday' environmental activities, the average number of occasional activities undertaken rises progressively with age from people aged 15 to 24 up to those aged 45 to 54 and 55 to 64, though it drops again among those aged 65+. The average is also higher among people with a university degree, and among those who have children compared with those who do not.

There is also a clear relationship with environmental concern. For example, 14% of those with little or no environmental concern engaged in four or more activities, but this rises to 45% among those with high concern about environmental problems.

Figure 32: Number of occasional environmental activities undertaken in the past 12 months

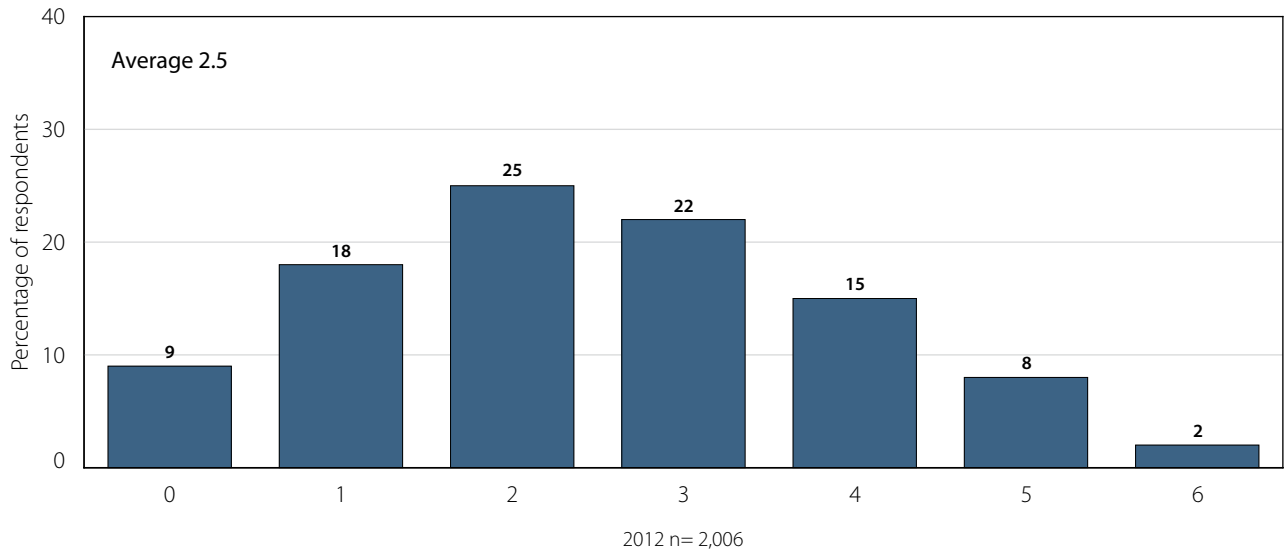


Figure 33: Occasional pro-environmental activities undertaken in the past 12 months

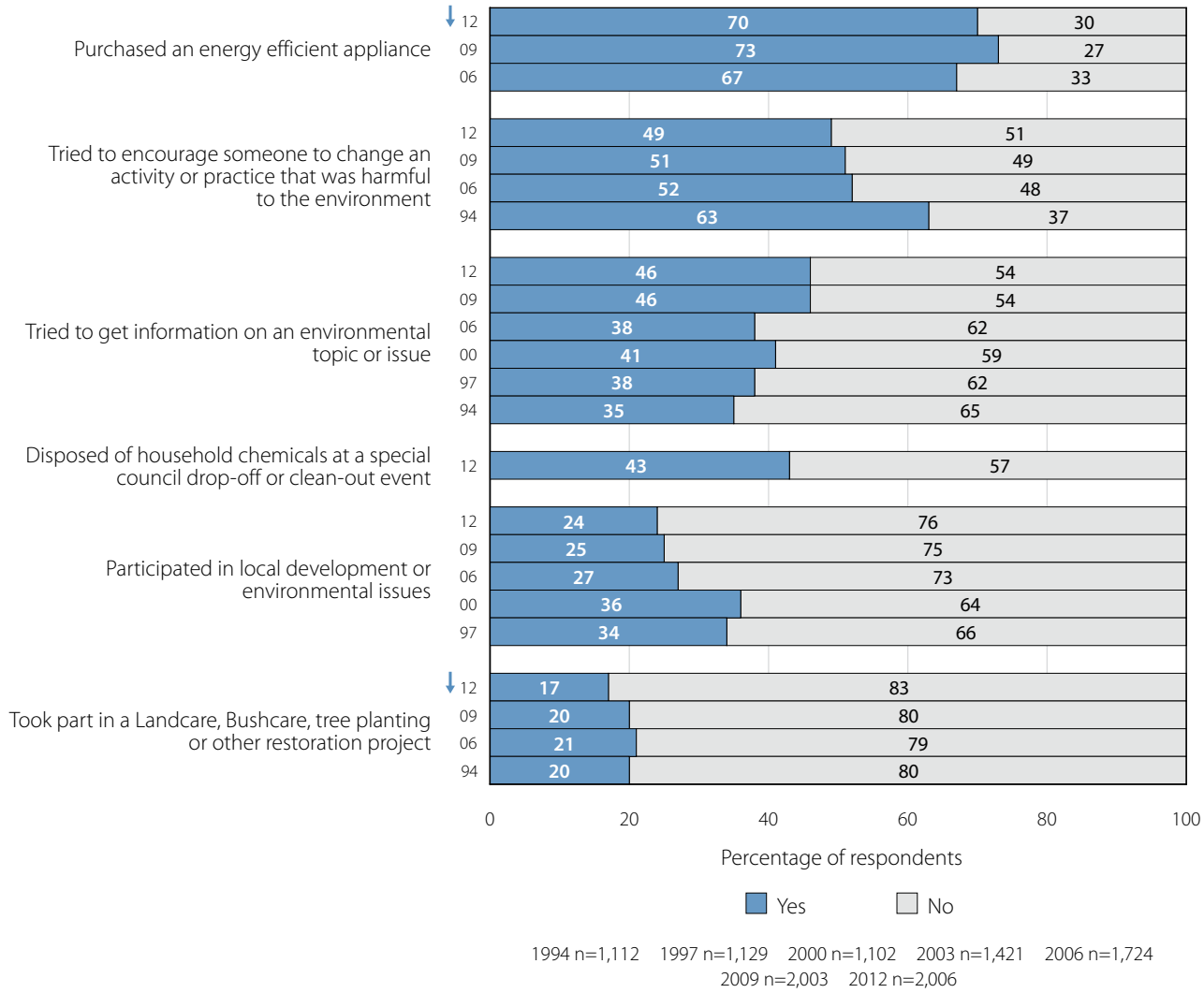
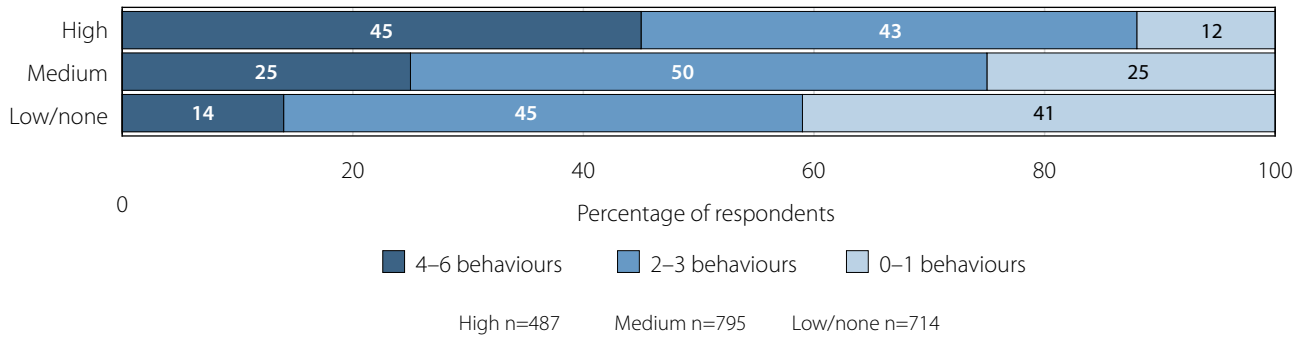


Figure 34: Number of occasional environmental behaviours undertaken by concern with environmental problems



Segment highlights

Participation in occasional environmental activities

Note: comparisons are made either to the whole sample or, where there are two categories only, to the other (e.g. males and females).

Gender

> Overall there is no difference in the average number of activities undertaken by men and women, but there are differences on some individual items.

> Men (74%) are more likely than women (66%) to have **bought an energy-efficient appliance**, and to have **disposed of chemicals at a council drop-off centre or event** (men 46% compared with 39% for women).

> On the other hand, women are more likely to have **tried to encourage someone to change an activity or practice** that was harmful to the environment (52% vs. 46% for men).

Age

> The average number of occasional activities undertaken rises progressively with age from 15 to 24 (2.3), up to 45 to 54 (2.8) and 55 to 64 (2.7), though it drops again among those aged 65+ (2.2).

> People aged 65+ are more likely to have **participated in a local development or environmental issue** (32% compared with 24% community-wide).

> Those aged 55 to 64 are more likely to have **participated in a local development or environmental issue** (33% vs. 24%), and **disposed of chemicals at a council drop-off centre or event** (54% vs. 43%).

> Those aged 45 to 54 are more likely to have: **bought an energy-efficient appliance** (76% vs. 70%); **tried to encourage someone to change an activity or practice** that was harmful to the environment (56% vs. 49%); and **disposed of chemicals at a council drop-off centre or event** (52% vs. 43%).

> People aged 35 to 44 are more likely to have **bought an energy-efficient appliance** (75% vs. 70%).

> Those aged 25 to 34 were more likely to have **tried to encourage someone to change an activity or practice** that was harmful to the environment (56% vs. 49%), but less likely to have **participated in a local development or environmental issue** (15% vs. 24%).

> Those aged 15 to 24 were less likely to have **participated in a local development or environmental issue** (15% vs. 24%) or **used a chemicals drop-off centre or event** (26% vs. 43%).

Education

> People with a university degree are more likely to have **participated in a local development or environmental issue** (32% vs. 24%); **tried to get information on an environmental topic or issue** (57% vs. 46%); and **tried to encourage someone to change an activity or practice** that was harmful to the environment (57% vs. 49%).

Employment

> Students are more likely to have **tried to get information on an environmental topic** or issue (58% vs. 46%).

> Retirees are more likely to have: **participated in a local development or environmental issue** (31% vs. 24%); and have **disposed of chemicals at a council drop-off centre or event** (49% vs. 43%).

> People in paid employment are more likely to have: **bought an energy-efficient appliance** (76% vs. 70%); **tried to encourage someone to change an activity or** practice that was harmful to the environment (53% vs. 49%); and **disposed of chemicals at a council drop-off centre or event** (45% vs. 43%).

Language

> Those from multi-lingual households are more likely than people from English-only households to have **tried to get information on an environmental topic** or issue (53% vs. 44%). Those from English-only households are more likely to have **bought an energy-efficient appliance** (71% vs. 64%), and **disposed of chemicals at a council drop-off centre or event** (45% vs. 32%).

Children

> People with children are more likely than those without children to have **participated in a local development or environmental issue** (27% vs. 20%) and **disposed of chemicals at a council drop-off centre or event** (48% vs. 34%).

> Conversely, those without children (53%) are more likely than those with children (47%) to have **tried to encourage someone to change an activity or practice** that was harmful to the environment.

Segment highlights (cont)

Participation in occasional environmental activities

Dwelling type

> People living in a separate house are more likely to have **bought an energy-efficient appliance** (72% vs. 70% community wide) and **disposed of chemicals at a council drop-off centre or event** (47% vs. 43%).

Region

> People living outside Sydney are more likely to have **bought an energy-efficient appliance** (74% vs. 68% in Sydney), particularly those from the Hunter (79%).

> Those outside Sydney are also more likely to have taken part in a **Landcare, Bushcare, tree planting** or other restoration project (21% vs. 15% for Sydney), particularly, people in Central West/South Eastern (31% vs. 17% state-wide).

> People in Richmond/Tweed are more likely to have **participated in a local development or environmental issue** (42% vs. 24%), and people in South Western Sydney are less likely to have done this (16% vs. 24%).

> In Sydney, those who live on the Northern Beaches had are more likely to have **used a council chemicals drop-off centre or event** (58% vs. 43% state-wide), while those from the Eastern/Inner suburbs, were more likely to have **tried to get information on an environmental topic** or issue (56% vs. 46%).

> Those in Murray/Murrumbidgee are less likely to have **used a council chemicals drop-off centre or event** (29% compared with 43%).

Settlement type

> People who live in a rural area outside any town are more likely to have taken part in a **Landcare, Bushcare, tree planting** or other restoration project (30% vs. 17% community wide).

Concern about environmental problems

> The average number of occasional environmental activities undertaken rises with concern about environmental problems: those with little or no concern 1.9; medium concern 2.5; and those with high concern, 3.3.

> Those with high concern are more likely than others to have engaged in five of the six activities: **participated in a local development or environmental issue** (48% vs. 24% community-wide); **tried to get information on an environmental topic or issue** (68% vs. 46%); taken part in a **Landcare, Bushcare, tree planting** or other restoration project (27% vs. 17%); **tried to encourage someone to change an activity or practice** that was harmful to the environment (67% vs. 49%); and **used a council chemicals drop-off centre or event** (49% vs. 43%).

> Three-quarters of both those with high and medium concern had **bought an energy-efficient appliance** (compared with 70% community-wide), and those with medium concern were also more likely than the community at large to have **tried to encourage someone to change an activity or practice** that was harmful to the environment (53% vs. 49%).

> Those with little or no concern were more likely than others to have undertaken none of the activities surveyed (16% vs. 9% community-wide).

Reasons for participating in occasional environmental activities

Question 12(e)
*(For one of the behaviours undertaken at Question 12(d), randomly selected for each participant). You mentioned that in the past 12 months you (insert behaviour). Can you tell me **why** you did that?*

The reasons people give for undertaking occasional environmental behaviours surveyed are shown in Table 7, and are further summarised into four broad themes in Figure 35: **environmental concern/awareness/interest**; **other values**; **external enablers/influences**; and **personal benefit**.

Reasons for **purchasing an energy-efficient appliance** are distinguished by the dominance of personal benefit (primarily cost saving, and to a lesser degree, to save energy consumption, and therefore cost).

Reasons to do with environmental concern/awareness/interest feature as the dominant, or at least as one of the key motivations for each of the remaining five behaviours. This includes general environmental concerns or interest, along with concern, awareness or interest in some specific environmental issue.

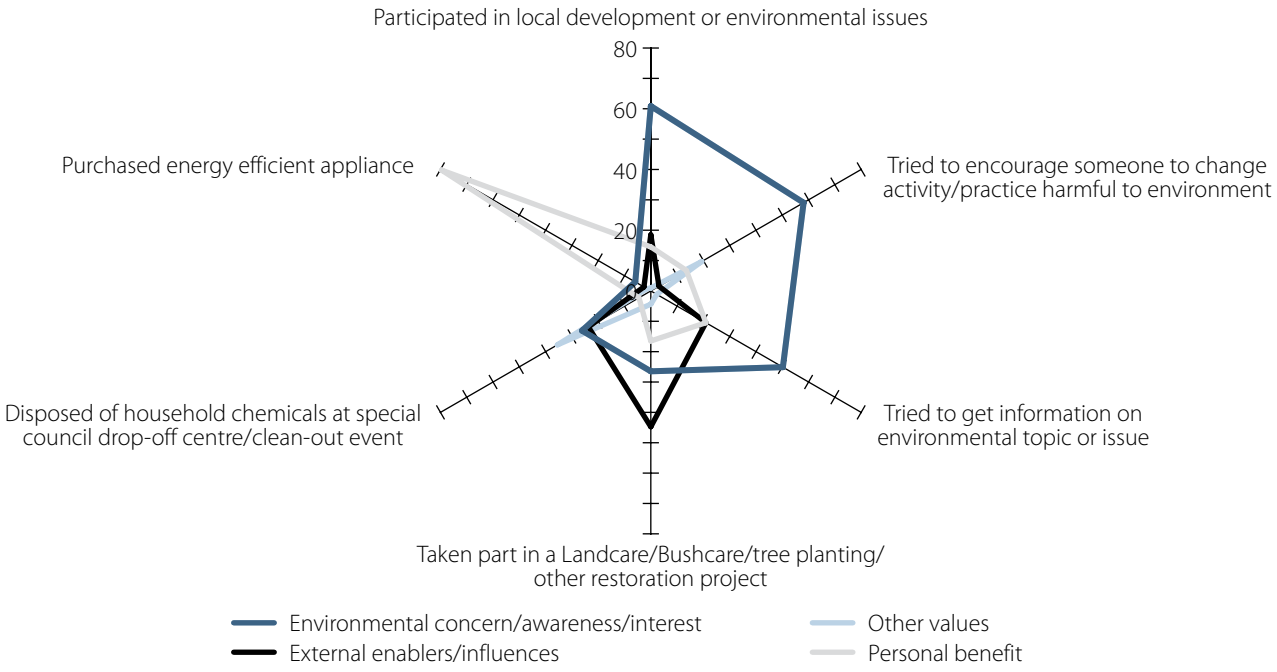
Environment-related motivations are particularly prominent for: **participating in a local development or environmental issue** (61%); **encouraging others to change an activity or practice harmful to the environment** (58%); and **seeking information on environmental topics or issues** (50%).

Nonetheless there are other factors as well, but at much lower levels:

- For example, involvement in local development issues sometimes relates to personal benefit (15%), with people concerned about the impact of a development on their property.
- Personal benefit also emerges in relation to seeking information about an environmental topic or issue, for example, looking for information on practical matters such as saving on electricity or water use (18%). External factors including school projects or work related matters are also evident.
- Even encouraging others to change a behaviour harmful to the environment can sometimes be motivated by personal benefit, because they relate to saving money (e.g. turning off lights).

Environmental concern/awareness, and more particularly, external factors both feature prominently in the reasons for **taking part in a Landcare, Bushcare, tree planting or other restoration project**, with external factors including school, work, the influence of other people (family or friends), and in some cases involvement with a community group, club or event. To a smaller degree, personal benefit is also evident in relation to getting involved to benefit personal property, or simply for personal enjoyment.

Figure 35: Reasons for participating in occasional environmental activities



Disposing of household chemicals at a special council drop-off centre or clean-out event is underpinned by a spread of reasons across environmental, external and other values related factors. In this case, the external influences include community education/advertising or encouragement from local councils; laws/regulations, and in a few instances, people saying that they have no other alternative way to dispose of these substances. One-in-four say they dispose of chemicals in this way 'to do the right thing', and about one-in-ten cite safety or health as the motivation – either for people, animals or the environment.

Table 7: Reasons for participating in occasional environmental activities

	Participated in local development or environmental issues	Tried to encourage someone to change activity/practice harmful to environment	Tried to get information on environmental topic or issue	Taken part in Landcare/ Bushcare/tree planting/ other restoration project	Disposed of household chemicals at special council drop-off centre/ clean out event	Purchased an energy efficient appliance
Sample size n=	295	309	310	295	309	310
Prompt/reasons	%	%	%	%	%	%
Environmental concern/awareness/interest	**61**	**58**	**50**	**26**	**26**	6
Other values						
Do the right thing		7			**23**	
To educate children/others		11				
Safer for people/animals/the environment/health					13	
External enablers						
Laws/regulations					6	
No other option/had no choice					5	
For school/education project – self or children			14	14		
Work related reasons	4		5	7		
External influences						
Community education/advertising/letterbox drops/ encouragement from local council					12	
Involvement with community group/club project/ community event/community activity	8			14		
Influence of other people: family/friends/colleagues	4			7		
Personal benefit						
Cost		7				**59**
To reduce energy/electricity/water consumption		6				**20**
To get info to do something in a practical way			**18**			
To benefit own property/personal amenity				9		
Participated in local environmental issue to protect own interests	**15**					
Personal enjoyment/gain				7		
Easy/convenient option					4	
Other values	4	4	5	6		7
Don't know/no reason given					8	

n Most frequent response n Given by 4–14% Given by 1–3% Given by <1%

The perceived efficacy of personal actions

Question 60
*Thinking about **any** of the things you may do connected with the environment, for example, recycling, reducing water consumption, choosing environmentally friendly products and so on. Where would you put yourself on a scale from 0 to 10, where 10 means you **strongly** believe what you **personally** do makes a difference to the environment, and 0 means you believe what you **personally** do makes **no** difference at all?*

The previous sections show that there is a wide range of reasons that people give to explain their everyday and more occasional environmental activities. However, for the first time, the 2012 survey sought to test the relationship between behaviour and the **perceived efficacy** of personal actions: the extent to which people believe their personal environmental behaviours *make a difference*.

On the efficacy rating scale in this question:

- relatively few people, 15%, give themselves a rating of only 0–4
- a substantial minority, 32%, position themselves in the middle at either 5 or 6
- the balance of just over half, 53%, rate themselves 7 or higher, suggesting a moderate to strong belief in the value of personal actions.

Efficacy is related to **knowledge**. Those with higher levels of efficacy (rating 7–10) were more likely to answer the knowledge questions correctly (average 2.7 of 5, compared to 2.4 for those with ratings 0–6).

Previous sections have shown a clear relationship between **behaviour** and **concern**, with higher levels of concern being progressively associated with undertaking more everyday and occasional environmental behaviours.

There is also a relationship between **behaviour** and **perceived efficacy** (Table 8), at least partly because concern and efficacy are themselves highly correlated.

To demonstrate these overlapping relationships, Figure 37 shows the average number of **everyday** environmental activities undertaken often, among those with high, medium and low or no environmental concern. Those with each level of concern are further subdivided into two groups: **high perceived efficacy** (those rating themselves 7 or more out of 10), and **low perceived efficacy** (0–6 rating).

This shows not only how behaviour increases with concern, but also that, regardless of the degree of concern, levels of behaviour are significantly greater among those with high perceived efficacy than among those with low perceived efficacy. This shows the unique contribution of perceptions of efficacy after taking account of concern. Figure 38 demonstrates how the same pattern is manifest for **occasional** environmental behaviours.

While there is a clear correlation between concern, perceived efficacy and behaviour, this does not prove any causal link. Although concern about environmental problems could be seen to motivate environmentally friendly behaviour, the causal direction between perceived efficacy and behaviour is less clear. On the one hand, it seems likely that belief in the value of one's personal actions can motivate someone to act. However, it may also be true that action triggered by an *external* factor could, over time, lead to a belief in the value of one's actions. For example, the visible community-wide participation triggered by providing recycling bins to households might, over time, lead more people to believe in the value of recycling behaviour.

Figure 36: Rating the efficacy of personal environmental actions

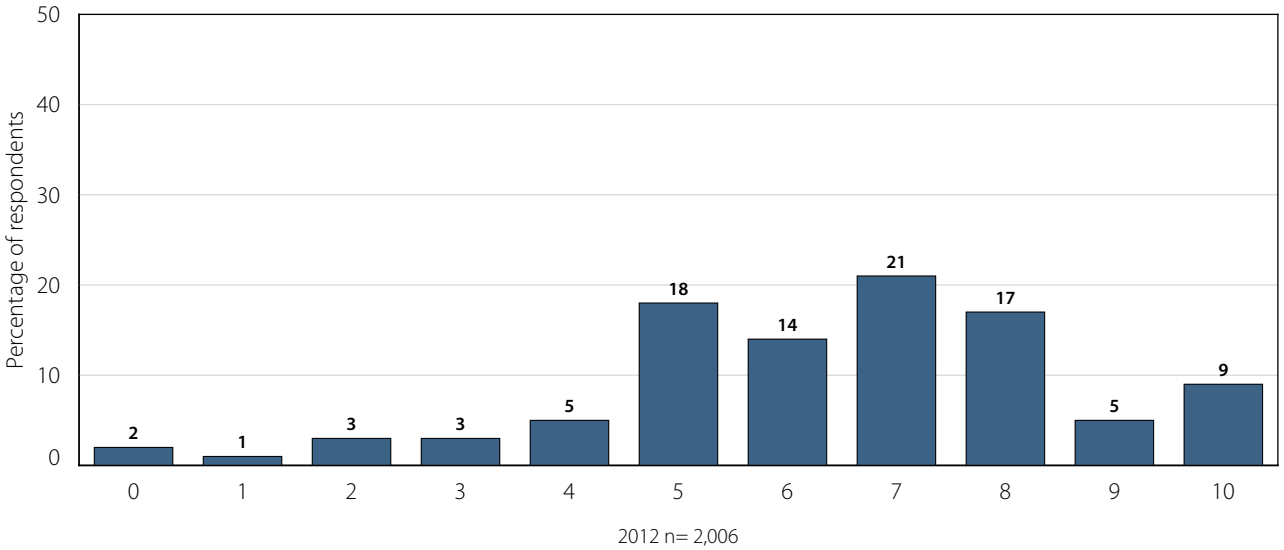


Table 8: Relationship between efficacy and 'everyday' and 'occasional' behaviours

	Efficacy 0–4	Efficacy 5–6	Efficacy 7–8	Efficacy 9–10
Average number of 'everyday' behaviours	3.8	5.1	6.3	7.0
Average number of 'occasional' behaviours	1.7	2.3	2.8	3.1

Figure 37: Relationship between concern, perceived efficacy and behaviour in average number of 'everyday' environmental behaviours often done

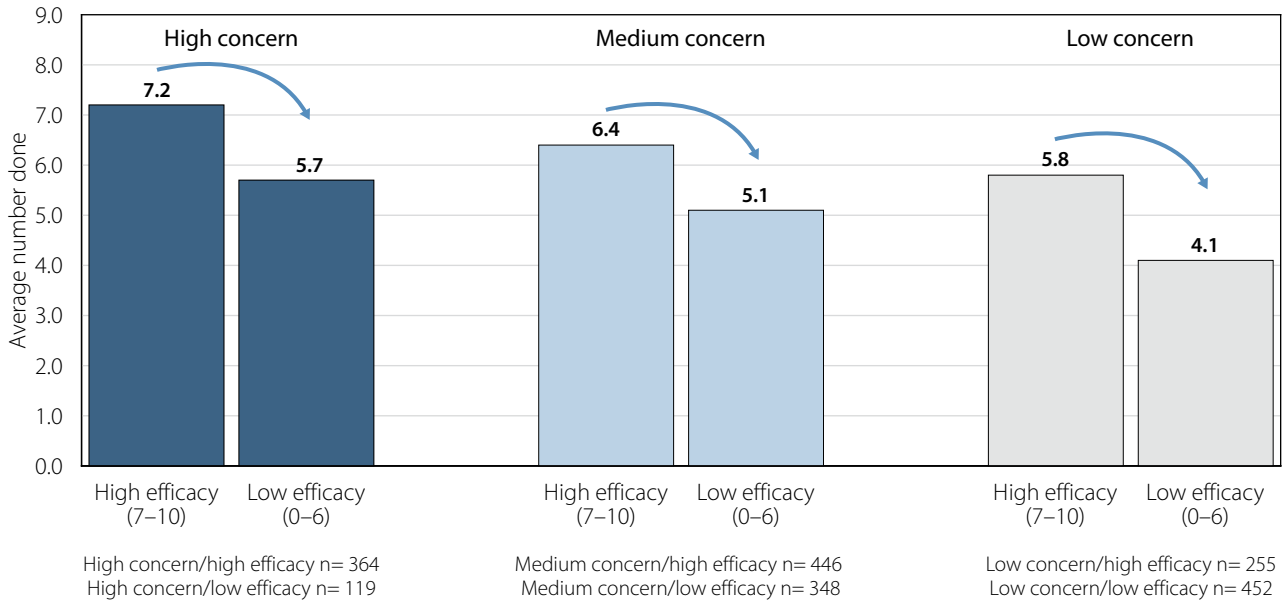
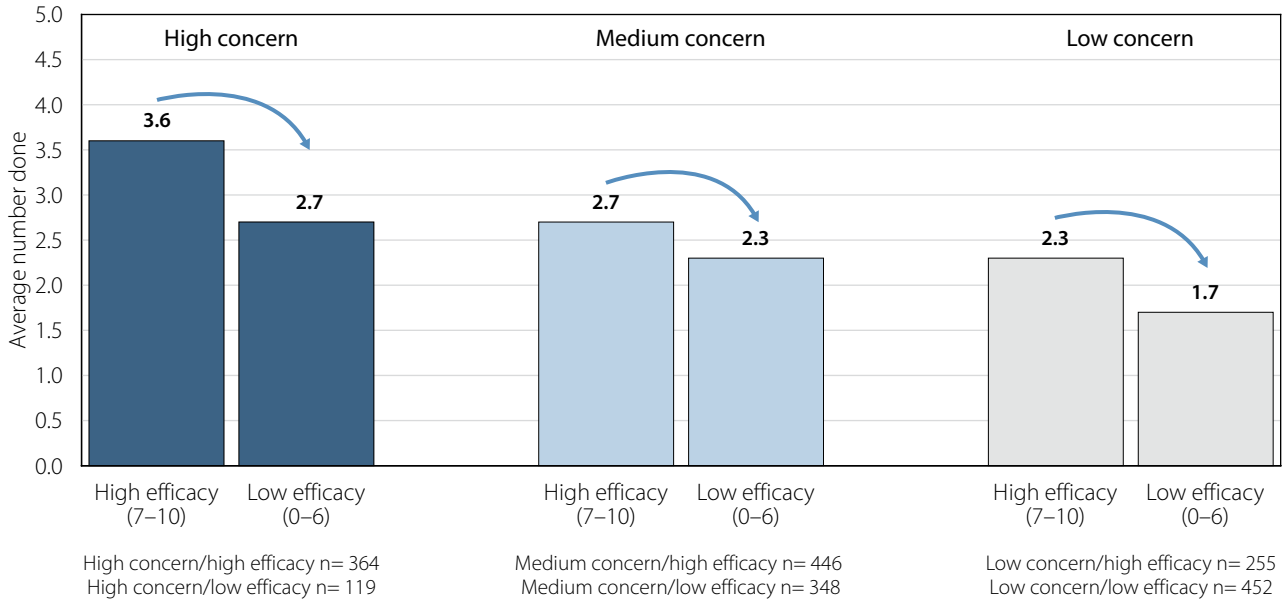


Figure 38: Relationship between concern, perceived efficacy and behaviour in average number of 'occasional' environmental behaviours done in past 12 months



From the qualitative research

Most participants in the qualitative research thought their actions made a difference, and for many, this contributed to them undertaking environmental behaviours. Indeed many felt they *needed* to believe what they do makes a difference – otherwise, there was no point in undertaking environmentally friendly behaviours.

As a separate but related issue, some also say there's a lack of feedback about outcomes achieved from environmentally friendly behaviours, and a lack of 'reward'.

Yet it was also found that the efficacy argument can be used interchangeably by people to support both pro- and anti-environmental behaviours, as required. That is, environmental behaviours being undertaken 'made a difference', but avoidance of behaviours that were more difficult or costly could be justified on the basis that they 'made no difference'.

In summary, there is a clear statistical relationship between perceived efficacy and behaviour, but the direction of causation is ambiguous. It is feasible that *both* causal directions may operate in the community in different situations and among different people.

While perceived efficacy does not appear to be a *primary* driver of behaviour, it is at least worthwhile considering how belief in personal actions can be instilled, because:

- perceived efficacy relates to actions that are entirely within the control of ordinary people in their everyday lives – as opposed to environmental issues and solutions that individuals may feel they can do nothing about
- communicated the right way, efficacy may provide the reward for 'doing the right thing', reinforce the value of individual actions, and even encourage greater behaviours.

Segment highlights

The perceived efficacy of personal actions

Note: comparisons are made either to the whole sample or, where there are two categories only, to the other (e.g. males and females).

Gender

- Women (57%) are more likely than men (48%) to rate themselves highly on efficacy (that is, give themselves a score of 7 or more out of 10).

Age

- People aged 55 to 64 are more likely to rate themselves highly on efficacy (66% vs. 53% community-wide), while 25 to 34 year olds are less likely to do so (44%).

Education

- University graduates are more likely to have a high efficacy rating (59% vs. 53%), but those with a trade/technical qualification are less likely to do so (47%).

Concern about environmental problems

- Around three-quarters (74%) of those with high concern rate themselves highly on efficacy, compared with 56% of those with medium concern, and only 36% of those with little or no concern.

Visits to outdoor settings in the past 12 months

Question 61
In the past 12 months, how often, if ever, have you visited or spent time at each of the following sorts of places? Would it be many times, a few times, once or twice, or not at all in the past 12 months. (Four locations read out in random order)

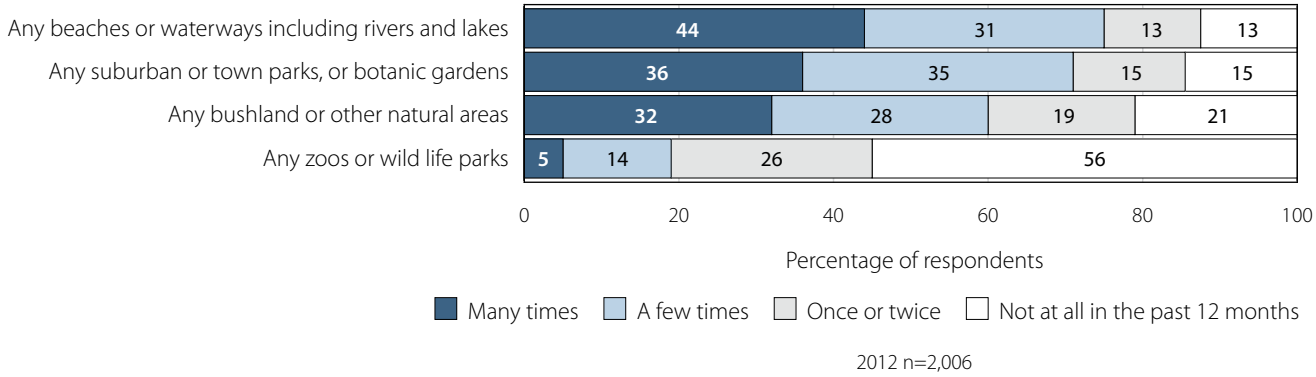
Nearly everyone, 97%, says they have visited or spent time in at least one of the four outdoor settings surveyed over the past 12 months.

This includes 87% who have visited or spent time at **beaches or waterways, including rivers and lakes,** 85% at **suburban or town parks or botanic gardens**, and 79% in **bushland or other natural areas**. Visits to any **zoo or wildlife park** are somewhat lower, though still prevalent, at 44%.

A sizable minority say they have visited or spent time on **many** occasions in the past year at a beach or waterway (44%), park or botanic gardens (36%), and bushland or other natural areas (32%). Not surprisingly, visits to zoos or wild life parks are less frequent – typically either once or twice, or perhaps a few times in the year.

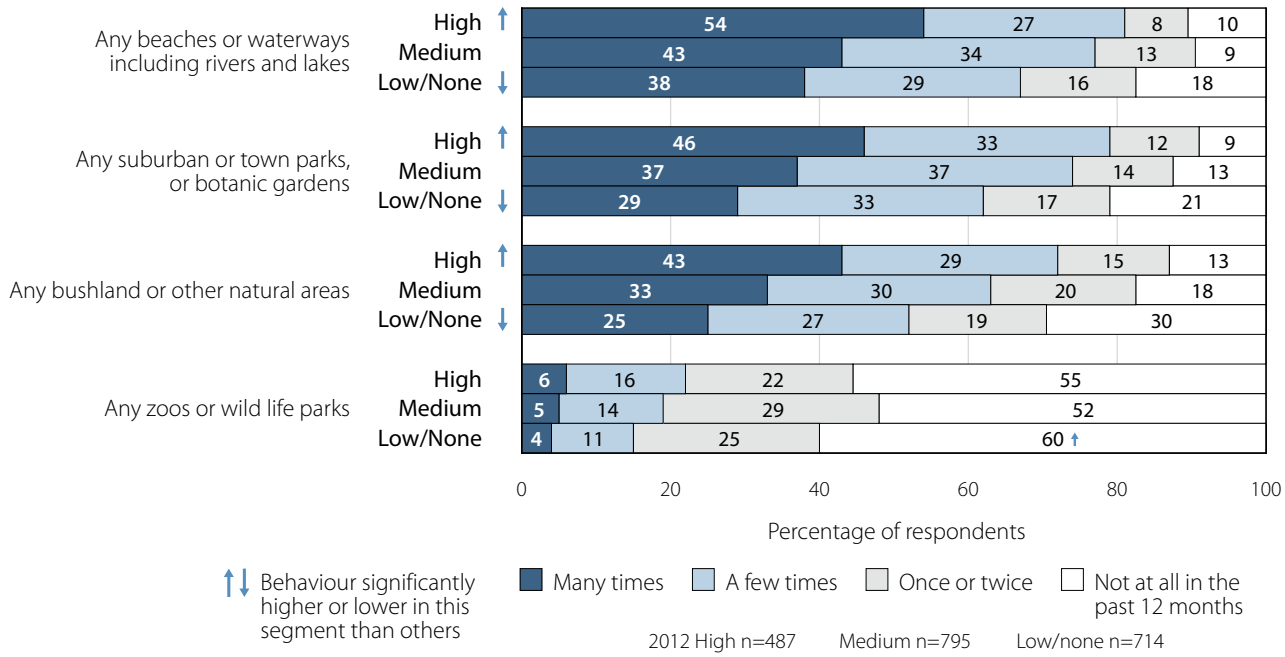
Visits to three of the four locations are correlated with environmental concern. For example, while 38% of those with little or no concern about environmental problems have visited a **beach or waterway** many times in the past 12 months, this rises to 54% among those with high concern (Figure 40). A similar pattern is evident for **parks/ botanic gardens** and **bushland/other natural areas**.

Figure 39: Visits to outdoor settings in the past 12 months



2012 n=2,006

Figure 40: Visits to outdoor settings in past 12 months by environmental concern



Segment highlights

Visits to outdoor settings in the past 12 months

Note: comparisons are made either to the whole sample or, where there are two categories only, to the other (e.g. males and females).

Gender

> In the past 12 months, men are more likely than women to have been to a **beach or waterway** (90% vs. 85%) and **bushland** or other natural area (83% vs. 76%).

> They are also more likely to have visited **bushland** or other natural area 'many times' (36% vs. 29%).

Age

> Young people aged 15 to 24 are more likely to have been to a **beach or waterway** (92% vs. 87% community wide), or a **zoo or wildlife park** (52% vs. 44%, particularly *once or twice* 36% vs. 26%). People aged 25 to 34 are also more likely to have been to a **zoo or wildlife park** (53% vs. 44%).

> People aged 15-24 and 25-34 are more likely to have been in bushland *once or twice* (both 25% vs 19%.)

> Those aged 35 to 44 are more likely to have been to all four locations: **beach or waterway** (93% vs. 87%); **bushland** or other natural area (89% vs. 79%); **zoo or wildlife park** (60% vs. 44%); or a suburban or town **park or botanic gardens** (94% vs. 85%). They are more likely to have been to each location *many times*': **beach or waterway** (50% vs. 44%); **bushland** or other natural area (39% vs. 32%); **zoo or wildlife park** (8% vs. 5%); or a suburban or town **park or botanic gardens** (46% vs. 36%).

> People aged 55 to 64 are more likely to have not visited a **zoo or wildlife park** in the past 12 months (67% vs. 56%).

> People aged 65 and over are more likely to have not visited any of the four locations: **beach or waterway** (28% vs. 13%); **bushland** or other natural area (34% vs. 21%); **zoo or wildlife park** (74% vs. 56%); or a suburban or town **park or botanic gardens** (25% vs. 15%).

Employment

> Those in paid employment are more likely to have been to each of the four locations: **beach or waterway** (92% vs. 87%); **bushland** or other natural area (84% vs. 79%); **zoo or wildlife park** (50% vs. 44%); or a suburban or town **park or botanic gardens** (88% vs. 85%). They are more likely to have been *many times* to **a beach or waterway** (47% vs. 44%) and **bushland** or other natural area (35% vs. 32%).

> Retirees are more likely to have not visited these locations: **beach or waterway** (25% vs. 13%); **bushland** or other natural area (34% vs. 21%); **zoo or wildlife park** (75% vs. 56%); or a suburban or town **park or botanic gardens** (24% vs. 15%).

Segment highlights (cont)

Visits to outdoor settings in the past 12 months

Education

> University graduates are more likely to have been to each of the four locations: **beach or waterway** (92% vs. 87%); **bushland** or other natural area (85% vs. 79%); **zoo or wildlife park** (51% vs. 44%); or a suburban or town **park or botanic gardens** (92% vs. 85%). They are more likely to have been to three locations 'many times': **beach or waterway** (49% vs. 44%); **bushland** or other natural area (36% vs. 32%); or a suburban or town **park or botanic gardens** (44% vs. 36%).

> Those who have completed secondary education but have no further qualifications are more likely to have *not* visited each of the four locations: **beach or waterway** (18% vs. 13%); **bushland** or other natural area (27% vs. 21%); **zoo or wildlife park** (66% vs. 56%); or a suburban or town **park or botanic gardens** (19% vs. 15%).

> Similarly, people who have not completed secondary education are more likely to have not visited three locations: **beach or waterway** (19% vs. 13%); **bushland** or other natural area (29% vs. 21%); or a suburban or town **park or botanic gardens** (28% vs. 15%).

Children

> People with children are more likely than people without children to have been 'many times' to each location: **beach or waterway** (47% vs. 39%); **bushland** or other natural area (35% vs. 27%); a **zoo or wildlife park** (6% vs. 3%); or a suburban or town **park or botanic gardens** (38% vs. 32%).

Language

> People from English-only households are more likely than people from multi-lingual households to have been to **bushland** or other natural area (81% vs. 71%), and also to have done so 'many times' (36% vs. 17%). They are also more likely to have been to a **beach or waterway** 'many times' (46% vs. 33%).

Dwelling type

> Those who live in a separate house are more likely to have been to a **beach or waterway** (89% vs. 87% community wide), and **bushland** or other natural area (81% vs. 79%) – and are more likely to have been to the latter 'many times' (34% vs. 32%).

> Those who live in a flat, home unit or apartment are more likely *not* to have been to **a beach or waterway** (18% vs. 13%), or **bushland** or other natural area (30% vs. 21%).

Region

> Compared with the community at large (44%), people living in coastal regions are more likely to have been 'many times' to a **beach or waterway**: Sydney's Northern Beaches 73% and Central Coast 57%; the Hunter 57%, Illawarra 57%, Richmond/Tweed 64%, and the Mid North Coast, 71%.

> People from South Western Sydney (21%) and the NSW North/North West/Far West (31%) are more likely than the community at large (13%) to have not been to a **beach or waterway** at all in the past 12 months.

> People from Richmond/Tweed (46%), Mid North Coast (49%) and Central West/South Eastern (45%) are more likely than the community at large (32%) to have been to **bushland** or other natural areas 'many times'. People from South Western Sydney are more likely to have *not* been to any **bushland** or other natural area at all (31% vs. 21%).

> Those living in Eastern/Inner Sydney are more likely to have been 'many times' to a suburban or **town park or botanic gardens** (55% vs. 36% state-wide).

> Those living in Northern Sydney are more likely to have been 'many times' to a **zoo or wildlife park** (11% vs. 5% state-wide).

Concern about environmental problems

> Those with high concern are more likely to have been to three of the four locations 'many times': **beach or waterway** (54% vs. 44%); **bushland** or other natural area (43% vs. 32%); or a suburban or town **park or botanic gardens** (46% vs. 36%).

> Those with medium concern are more likely to have been at least once in the past 12 months to a **beach or waterway** (91% vs. 87%) or to **bushland** or other natural area (82% vs. 79%).

> Those with little or no concern are more likely to have not been to each of the four locations: **beach or waterway** (18% vs. 13%); **bushland** or other natural area (30% vs. 21%); **zoo or wildlife park** (60% vs. 56%); or a suburban or town **park or botanic gardens** (21% vs. 15%).

Participation in organised nature education activities

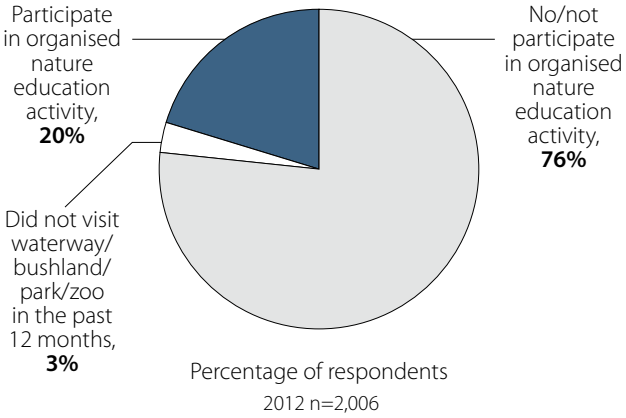
Question 62
(For those who visited or spent time at any location): When you visited any of these places in the past 12 months, did you take part in any organised nature education activity, such as a guided walk, talk, wildlife show or eco-tour?

One in five people, 20%, say they took part in an organised nature education activity in the past 12 months, for example, a guided walk, talk, wildlife show or eco-tour.

The balance of the population includes:

- 3% who did not visit or spend time at any waterway, bushland, park or zoo/wildlife park in the past 12 months
- 76% who visited or spent time at one of these places, but did not participate in an organised nature education activity.

Figure 41: Participation in organised nature education activity in the past 12 months



Segment highlights

Participation in organised nature education activities

Note: comparisons are made either to the whole sample or, where there are two categories only, to the other (e.g. males and females).

Gender

- Men are more likely to have not participated in an organised nature education activity (80% compared to women 73%).

Education

- University graduates are more likely to have participated in an organised nature education activity (24% vs. 20% community-wide).
- Those who have completed secondary, but with no further qualifications, are less likely to have done so (14% vs. 20%).

Region

- People living in the North/North Western/Far Western regions of NSW are less likely to have taken part in an organised activity (7% vs. 20%).

Concern about environmental problems

- Those with a great deal of concern about environmental problems are more likely to have participated in an organised nature education activity (25% vs. 20%).

3 Qualitative findings

How are people engaging with the environment in 2012?

Snapshot – How are people engaging with the environment in 2012?

- Nine group discussions were conducted in Sydney and NSW regional centres, split according to participants' self-reported level of concern about environmental problems and the extent to which they felt their actions made a difference to environmental outcomes (their perceived self-efficacy). Overall participants and groups exhibited more similarities than differences in their views and behaviours.
- Participants placed considerable intrinsic value on the environment – as fundamental to quality of life through local amenity where they lived, and in terms of how they felt when outdoors experiencing natural environments.
- People's concepts of 'environment' have moved away from those of 2009, when ideas related to drought and climate change were prevalent, and back to more traditional associations based on air, water, pollution and nature.
- Changing meanings of environment over a longer time period were identified: from an idealised cleaner and less crowded past to uncertainties of the present and a deteriorating future with major global problems of overpopulation and access to food and water.
- Groups were able to identify a range of environmental improvements over recent years, particularly those obvious at local level.
- The groups had difficulty linking positive environmental outcomes with government actions at any level, but where problems existed it tended to be regarded as the 'government's fault'.
- Nearly everyone acknowledged environmental problems did exist and all groups exhibited some level of concern about environmental problems and believed it was important to act in a responsible way.
- A diverse range of environmental concerns were mentioned, but no single issue dominated.
- The over-riding impression was that when thinking about environmental problems, people in the groups were quite focussed on local issues and threats to the general amenity of the places where they live.
- There were a range of beliefs that either moderated people's concern or acted as barriers to engaging with environmental issues. These included:

  'It's just cyclical'

  'The Earth recovers'

  'Predictions have not come true'

  'Issues are over hyped'

  'I don't know what to believe or who to trust'

  'It's not that bad'.
- Environmental issues were seen as often politicised. The cumulative effect of highly politicised debate and problems with information led to a strong sense of environmental issue fatigue among participants. An inability to make sense of it all resulted in a retreat from engagement on macro issues and greater focus on environmental matters close to home.

  "So it gets to the point you think 'well I'm just going to go and do my own thing, because in the scheme of things, what can I do to really change anything?' So that's why I try to think of my own little backyard." Newcastle group
- At the same time, in daily life many once fringe issues have become embedded in behaviours and everyday living. Recycling, using 'green' shopping bags and being energy and water wise were felt to be routine. The drivers of behaviours, however, varied according to the issue and the individual.
- Participants believed that it was important to 'do the right thing' for the environment but when personal cost was involved, some found reasons for rejecting environmentally friendly behaviours, notably arguing that such actions made no difference globally. Those with lower concern were more likely to say this, while those with higher concern tended to feel it was important to always behave in an environmentally friendly way.
- While expressing a desire 'do the right thing' many said they lacked feedback that their actions made a difference. Any evidence that their behaviours did not make a difference tended to undermine their commitment.

3 Qualitative findings

Introduction

The qualitative research provides deeper insights into the ways people are engaging with the environment in 2012, although the views expressed are not 'representative' in the same way as the quantitative survey. People were recruited for nine discussion groups in Sydney and regional areas based on their self-reported level of concern about environmental problems and the extent to which they felt their actions made a difference to environmental outcomes (their perceived self-efficacy) – see methodology in Appendix A. Their engagement with the environment was explored through their understanding associated with various aspects of 'environment', their concerns about environmental issues and the state of the environment, including at local, national and global scales, and their personal behaviours in relation to the environment. The research took place approximately three months after the quantitative survey and there were no major environmental issues during that time that may have influenced findings.

Although the sample was split on the basis of level of concern and perceived efficacy, participants overall exhibited more similarities in attitudes and behaviours than differences; this section therefore summarises findings mainly at an overall level. However, there is also a separate section that discusses segment differences. A separate report of the qualitative research provides further detail from this research.

Community understandings: 'environment'

Conceptualising 'environment' and 'sustainability'

When asked to write down words or ideas associated with the terms 'environment, 'sustainability' and 'sustainable living', participants' responses were quite varied. Table 9 summarises and comments on these responses.

In comparing 2009 with 2012 (Figure 42), it is noteworthy that there appears to have been some changes to the top-of-mind concepts related to the word 'environment' from 2009. The themes that dominated in 2009 included 'water', 'climate change', 'sustainability' and 'global warming'. Most of these were absent or were mentioned at a much reduced frequency in 2012. Instead, in 2012 the themes that were prevalent included: 'clean' (waterways, air), 'pollution', 'water' and 'air'; these are more traditionally prevalent concepts associated with the environment. When viewed overall, it seems that the community has moved away from concepts related to the drought, possible causes and associated pressures that were being experienced in 2009. (Similar patterns are evident in the quantitative survey results – see Section 2.1, *Most important environmental issues in NSW today*, p. 13).

Figure 42 shows the most commonly mentioned words written down by participants in each group in a 'tag cloud' for 2009 and 2012. The size of each word represents its frequency of mention: larger font indicates more frequent mentions.

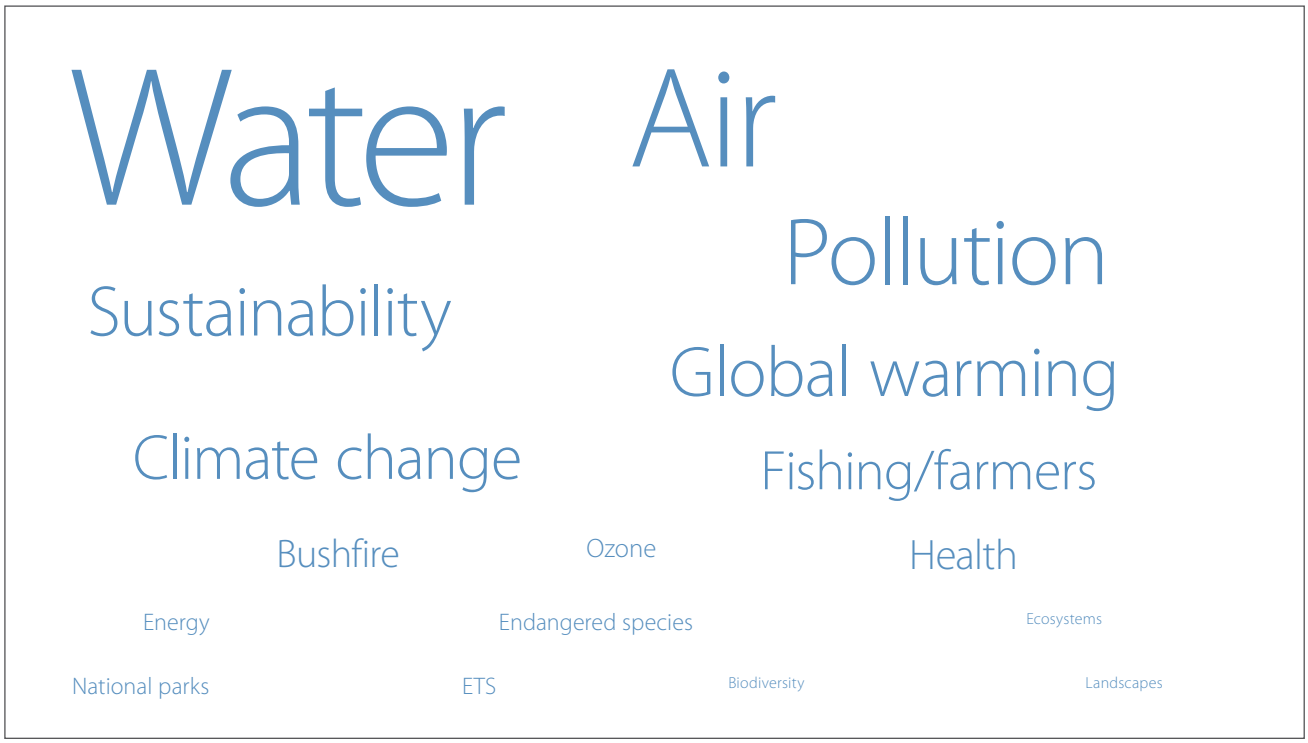
Table 9: Word Association[5]: 'Environment' and 'Sustainability/Sustainable Living'

Please write down ideas, words or concepts that come to mind when you think about..."		
Word/phrase	**Comments**	**Participant descriptors**
'Environment'	A very broad spectrum of responses were given. Some interpreted this as including everything around us, while others were more specific.	Nature, Surroundings, Community, Green, Damage, Clean, Future/ Preservation, Resources, Cost/Reward/ Deterrent. Infrastructure
'Sustainability'/ 'sustainable Living'	Although asked separately, participants tended to have difficulty distinguishing between sustainability and sustainable living. Both terms were less clearly understood and fewer written comments were made overall than for 'environment'.	Ecosystem, Trees, Biodegradable, Re-using/recycle, Green environment. An environment that can persist. The ability of continued growth of life. Solar power, self sufficiency/self sustaining, affordable energy. Alternative fuels

5 At different times during the groups, participants were asked to write down words or ideas that came to mind when environment-related concepts were read to them. Each word was then discussed. Written responses were given for a total of nine concepts. The response to each concept is shown and discussed in the relevant section of this chapter.

Figure 42: Word clouds – concepts commonly associated with 'the environment', 2009 and 2012

2009



2012

Changing interpretations

When asked to think about what 'environment' meant to them, in the recent past, at present and what it might mean in the future, there were distinct differences in the way people conceptualised the environment for each time period.

Past interpretations – idealised?

Many participants spoke about the environment of the past as being better than today – at least at a local level. Typically, participants described a simpler, safer existence where urban congestion and pollution were not major issues and there were no water restrictions. Participants also said the environment was not the big issue it is today and that they had a much simpler understanding of the term. There were some global issues recalled such as Amazon de-forestation and ozone depletion, but for the most part, there was no sense of threat posed by environmental issues.

> ***"Years ago it was less busy, less pollution, there was more space, not so many cars and not so many high rises. Now it's all a lot busier, a lot of high rises, a lot more traffic, a lot more pollution." Parramatta: High Efficacy, Low Concern group***

"Ten years ago we probably knew about 'environment' but 'sustainability' wasn't heard of." Tamworth: Low Efficacy, Low Concern group

" … you actually think the end of the world is coming, whereas 15 years ago everything was good, we had water, we had everything … " Parramatta: Low Efficacy, Low Concern group

There were some environmental problems identified in the past including fewer controls on industry resulting in greater pollution. Many cited examples of industry discharging waste into waterways and recalled creeks and waterways that were highly polluted. Many also thought that littering was worse, the use of incinerators to burn rubbish in homes and schools was common, and there was no recycling.

"There was an oil slick and chemicals going down the Parramatta and the Lane Cover Rivers into the harbour. The harbour is certainly cleaner. There were a couple of beaches in Sydney you wouldn't go to as a family because there was a sewerage outlet not too far from it and it didn't go out to sea very far and it was pretty much untreated." Sydney CBD: High Efficacy, High/Medium Concern group

"You used to be able to light your bonfire in the backyard in the middle of Sydney, everyone would do it every weekend, burning off all your rubbish for that week, and it would be going all weekend." Orange: Low Efficacy, High/Medium Concern group

"When we were growing up we used to have one of those aluminium rubbish tins, that's it. No recycling, no garden recycling, no nothing; all your rubbish fitted in that." Parramatta: Low Efficacy, Low Concern group

Present interpretations – understanding yet confusion

The groups believed they now held a much broader understanding of the environment and that it had permeated many areas of day-to-day life. Issues of recycling, environmental building regulations, improved controls on industry and tougher emission standards on cars were all cited as examples of positive change from the past.

However, as community knowledge increased, so too did a sense of the enormity of some issues. Many commented on the poor state of the environment in developing countries and thought it unlikely these issues could be addressed. Awareness of environmental issues was also considered to be much greater now than in the past, but as awareness increased so too did confusion as to the 'true' state of the environment. Participants in every group expressed difficulty in being able to sort fact from fiction, due to conflicting media reports and because the environment has become a highly politicised topic.

Present interpretations therefore, revealed themes of greater awareness and personal engagement coupled with increased confusion. There was a belief that some environmental issues had improved (notably at a local level) but there remained global problems and highly contentious issues that were the source of disagreement and political impasse.

> ***"You used to surf at Manly and a southerly would come up and the sewage would come in. Now they put stuff right out, so that was something the government did which is marvellous for the environment." Parramatta: Low Efficacy, Low Concern group***

"I feel like our population is just growing and growing. You see them buying acres and then six months later you drive down that street and there's just houses built on top of each other." Parramatta: Low Efficacy, Low Concern group

Future interpretations – worrying

Many participants were somewhat pessimistic in their predictions for the future of the environment, especially at a global level. Many believed that there would be a greater overall understanding and awareness and continued improvements at a local level. However, it was anticipated that the environment would remain a strongly debated topic and that agreement would be hard to achieve at a global level. The main challenges for the future were considered to be in the areas of over-population, food security and access to water.

> ***"I think there'll be more discussion about water, because water's going to be harder and harder to come by. I think there'll be a lot more solar … that'll be more and more prevalent too." Newcastle: Low Efficacy, High/Medium Concern group***

Table 10 Changing interpretations of 'environment'

Idealised past, *minor issues*	Problematic present	Worrying future
A simpler interpretation. Limited consideration of global issues. Industry pollution was regarded as worse and largely unregulated leading to polluted waterways. Incinerators were common and recycling was not considered. A more idealised view that Australia was less polluted, less crowded and cleaner. There was no awareness of environmental problems threatening our way of life.	Greater depth of understanding but accompanied by greater sense of problems, some of which seem intractable. Improved regulation of industry resulting in improved health of waterways. Greater awareness of global problems and the importance of personal actions, such as recycling. Awareness of people being a part of the environment. Less optimism about the overall state of the environment.	Likely to see the overall state of the environment deteriorating before it improves. Likely to be worse for future generations but no immediate threat. However, improvements will continue with cleaner cars, lower emissions and more regulation (which might be onerous but probably better). Main problems predicted to include over-population, access to water and food security.

Importance of the environment in quality of life

At the beginning of each group before discussing the environment specifically, participants were asked what characteristics made an area a nice place to live. Environmental characteristics were often mentioned first, and there was a range of consistent themes in this discussion, including the importance of:

- greenery and trees
- a clean environment, absence of rubbish and pollution
- services and facilities: schools, shopping, hospitals
- adequate infrastructure such as public transport
- safety
- a sense of space (especially in rural groups)
- affordability.

Mostly, participants felt that they had these attributes in their environment, but a large proportion raised early in the discussion what they saw as increasing problems in their local communities. These problems (discussed in detail later) included illegal rubbish dumping, safety and infrastructure problems such as traffic congestion and public transport problems (among Sydney groups). One of the consistent themes to emerge from this research was a focus by participants on local environmental issues.

Participants also placed considerable intrinsic value on the environment. When asked to describe how they feel when outdoors, in a national park or the bush, they typically used words and phrases such as: 'good for the soul', 'beautiful', 'peaceful', 'clean', 'calming'. Many also drew favourable comparisons with developing countries and commented upon how clean Australia was and the amount of space available relative to overseas.

Community perceptions: environmental performance at local, state and global levels

Participants identified a range of positive changes, both in recent years and continuing. These had occurred mostly at a local level and across the groups included:

- the introduction of green shopping bags
- improved regulation of businesses
- improved waterways with better industry controls
- more fuel-efficient cars
- reduced littering
- increased recycling
- emphasis on tree planting
- energy-saving light globes
- community gardens
- environmental building regulations.

> ***"There's no outstanding, massive problem or decline that I'm aware of." Parramatta: Low Efficacy, Low Concern group***

"The legislation that they've brought in, in the last ten or 15 years is stopping companies from dumping their waste into the environment; things like that – making companies more environmentally responsible for what they produce." Wagga Wagga: Low Perceived Efficacy, High/Medium Concern group

"With new building codes, with the Basix and things [like] that, they are getting more environmentally friendly; like you have to have the water tank and this, that and the other." Newcastle: Low Perceived Efficacy, High/Medium Concern group

"I think recycling is something we've addressed. I think all of that steel and glass and plastic that you see that comes out of your recycling bin. I think that we've come a long way." Orange: Low Efficacy, High/Medium Concern group

(For related quantitative survey results, see Section 2.2, *Environmental improvement or deterioration in NSW over the past three years*, pp. 32–40)

Local level

When environmental issues were discussed, many group participants thought initially of their local area. Mostly, they were supportive of efforts made by local councils and tended to think that the environment was managed 'reasonably' at a local level. Positive council actions included recycling, looking after parks, community gardens and tree giveaways.

"They do make an effort on a few things. We have council pickups for certain stuff. They've had days in the local paper when you can just dump your electronic goods at the Blacktown showground. So they make an effort for certain things like that … Our local council has tree giveaways a couple of times a year." Parramatta: High Efficacy, Low Concern group

There were some criticisms

Local planning failures (Sydney): Although many planning issues are state government responsibilities, in many groups, participants commented unprompted on what they saw as a failure of successive local governments to provide infrastructure and plan for appropriate development. Many expressed high levels of frustration at perceived overcrowding, inappropriate development and poor public transport. This meant that participants' local environment and amenity had become less attractive over time.

" … I just feel that they just want more and more people there and we just don't have the capacity to deal with it. You've only got to try and go up or down Bondi Road on a Sunday, in the middle of winter, not the middle of summer, and you just can't move with all the cars and the buses and pollution." Sydney CBD: High Efficacy, High/Medium Concern group

Increase in illegal rubbish dumping: In Parramatta, Wagga, Tamworth and Newcastle, participants expressed frustration at what they saw as an increase in rubbish dumping, driven by escalating costs (tipping fees) and a failure of local government to act on this.

"You don't have to go very far around Wagga to see people that have dumped stuff because they couldn't be bothered going to the tip." Wagga Wagga: Low Efficacy, High/Medium Concern group

"The fees to dump things at the tip, the environmental levy, which is enormous now. That's why there is all the littering, the illegal littering and the dumping." Parramatta: Low Efficacy, Low Concern group

Increase in vandalism and graffiti that impacted on the community was seen as a problem by some.

State level

Issues of visibility: a number of people had difficulty assessing the performance of the state with respect to environmental issues on the basis that they felt they did not know much about what was happening at that level. There was lower visibility of issues and solutions, especially among regional participants.

"I think it's been more visible over the past five years how much they're trying to help like with the solar panel incentive." Wagga Wagga: Low Efficacy, High/Medium Concern group

"I can't think of any policy or practical thing that the State Government does to improve the environment." Parramatta: Low Efficacy, Low Concern group

"They build a desal plant instead of spending that money on recycling stormwater or capturing stormwater, which is what they should have done. Now look at it, it's just sitting there. That was just ridiculous." Parramatta: High Efficacy, Low Concern group

"They do put a lot back into the community. They are trying and you've got to start somewhere. The State Government have brought out regulations. You look at building a road now – they've got to have sump traps in, they've got to have this and that so dirty water can't flow into the stream." Tamworth: Low Efficacy, Low Concern group

Regulations lead to environmental improvements: There was recognition that governments have tightened up on polluting industry and educated people about dumping oil and chemicals. Positive regulations also applied to building and cars.

"I think there has been a big improvement in the pollution from motor vehicles." Tamworth: Low Efficacy, Low Concern group

"I've just bought five and a half acres and I have to plant 1,000 native trees before I can have my house approved so they're forcing it at a local level as well." Wagga Wagga: Low Efficacy, High/Medium Concern group

"Everybody used to just dump stuff and the chemicals in the river and now, they've brought in that you could get fined and educating people that we just don't dump it in there." Tamworth: Low Efficacy, Low Concern group

(For related quantitative survey results, see Section 2.2, *Strictness of environmental regulations*, pp. 41–44)

Too much talk, not enough action: There were many who were critical of the state government for failing to address public infrastructure needs, especially rail, among Sydney groups. This was seen as important from the perspective of improving the appeal of the local environment.

"I mean they've been talking about the high speed train for the last 300 years. If that went in it might take a few cars off the road; but they just talk about it." Newcastle: Low Efficacy, High/Medium Concern group

"All I hear from the state government is 'we've got no money, we've got no money.'" Tamworth: Low Efficacy, Low Concern group

Awareness of and attitudes towards government focus on local communities: Participants were asked to comment on the State Government's focus on local communities. Comments here suggested that no one was aware of this approach, but that overall it was desirable. This focus fitted with community concern for environments and public amenity close to home.

"Well to fix local problems you really need to have something come from local first whether it be your local government or a body. It needs to be designated towards a particular project; they can't just give local government money to say 'just do something with the environment with that'. There needs to be some sort of communication with local needs." Wagga Wagga: Low Efficacy, High/Medium Concern group

Global level

Participants were much less optimistic about the state of the environment globally. This was driven by a belief that the problems in developing countries were substantial (overpopulation and pollution especially) and that there was little likelihood that these would be addressed in the short-medium term. They saw the problems as exacerbated by a belief that it was impossible to get global agreement on the problems, let alone the solutions.

"Whenever they have meetings they don't seem to be agreeing on anything and we try and make other countries lessen their emissions and it's always 'No, can't do that'. To me it feels like we're in a stalemate with other countries." Wagga Wagga: Low Efficacy, High/Medium Concern group

Community perceptions and understandings: biodiversity, land and heritage

Several specific areas of the environment were explored through both word/idea associations and general discussion.

Biodiversity, land and nature terms

Table 11: Word Association: 'biodiversity', 'ecosystems', 'catchment', 'landscapes'

"Please write down ideas, words or concepts that come to mind when you think about..."		
Word/Phrase	**Comments**	**Descriptors**
'Biodiversity'	There was a significant proportion of the sample that had little understanding of the term 'biodiversity'. Consequently, this word generated the fewest responses. It also generated responses that were far from the meaning of the word.	Habitat preservation, co-existing species, native animals, health of rivers. Earth diversity, adaptability, range of living things, different environments (parks, rivers), extinction.
'Ecosystems'	Like biodiversity, many were unsure as to how to interpret 'ecosystems'. This led to some variation in responses.	Interaction, food chain, greenhouse, habitats, where flora and fauna live, balance, life cycles, precious, nature, Great Barrier reef, species, living environment. One system affecting another. Relationships.
'Catchment'	This term was well understood, although the range of responses tended to be narrower and focussed on water.	Water quality, controlled area, dams, rainfall, water tanks, land clearing, run-off, creeks, rivers, pipelines, need for more dams, drinking water, fragile, important.
'Landscapes'	This evoked a range of responses including more adjectives and images of beauty. Some thought about artwork and paintings and others commented on urban gardens.	Trees and gardens, beautiful, relaxed, bushland, mountains, earth, green, terrain, views, sunset, scenery. Native trees. Pristine environment, paintings.

Threatened species

The majority had difficulty naming any threatened species. Where species were nominated, it was without any conviction and they were mentioned more as questions than statements of fact.

"There's those fairy penguins over at Manly threatened."
Parramatta: Low Efficacy, Low Concern group

"I have heard koalas are threatened, but I couldn't tell you where within the country that would be."
Parramatta: Low Efficacy, Low Concern group

Heritage terms

Natural heritage

When asked to think about natural heritage, participants gravitated to iconic areas such as Uluru and the Great Barrier Reef as well as concepts associated with National Parks (see Table 12).

Cultural heritage

Participants found it difficult to come up with words and concepts associated with cultural heritage. However, two themes were prevalent: Aboriginal heritage and the Australian way of life or post-colonial settlement heritage.

Many tended to think about cultural heritage from the perspective of buildings. Some mentioned the Sydney Opera House and Harbour Bridge as well as other historic buildings and areas such as The Rocks. Table 12 shows the results of the word association exercise.

When the groups began to discuss cultural heritage more broadly, a broader range of views and concepts were expressed, as outlined below.

Aboriginal cultural heritage: One of the first and most commonly made associations with cultural heritage was 'Aborigines'. Although Aboriginal culture was mentioned by many, most appeared to have limited depth of knowledge and did not make many comments beyond that basic association.

Table 12: Word association: 'natural heritage' and 'cultural heritage'

"Please write down ideas, words or concepts that come to mind when you think about..."		
Word/Phrase	**Comments**	**Descriptors**
'Natural heritage'	When asked to think about natural heritage, participants tended to find this more difficult than some other concepts. Overall, fewer words were associated with 'natural heritage' and there was greater variation in responses. Where consistencies emerged it was about iconic areas.	Preservation, national parks, bush, forests, lakes, rivers, streams, Ayers Rock (Uluru), Blue Mountains, Great Barrier Reef, valuable, landmarks, legacy, world heritage, gum trees, native animals.
'Cultural heritage'	Participants wrote fewer words associated with cultural heritage as compared to natural heritage. The main themes were: Aboriginal traditions and customs as well as the 'Australian way of life' and historical or iconic buildings.	> Aborigines, (art, customs). > Historical landmarks. > Assimilation of migrants. Protecting Australian way of life, barbeques, sport. Art, museums, multiculturalism, cultural foods, lack of understanding by foreigners. Historic buildings.

"Their way of life has been lost. What they had for 60,000 years is gone, similar to our 200 years has been – that cultural heritage has been eroded, well, we've eroded their cultural heritage." Parramatta: Low Efficacy, Low Concern group

"I was contemplating the other day what it would be like if Aboriginals represented 50 per cent of the population because their focus would be quite different when it came to the environment, wilderness, habitat maintenance and stuff like that." Sydney CBD: High Efficacy, High/Medium Concern group

In a small number of groups, and notably in Tamworth, the subject of Aborigines was met with some annoyance. A minority felt that aborigines had been "given an unfair advantage".

Pride in post-settlement cultural heritage: Discussion of Aboriginal heritage, their history and connection to the land led many to reflect on post-European settlement history and the fact that, although only 'new' compared with European and with Aboriginal history, it was equally important. Some were quite outspoken about the need to celebrate and be proud of Australia's post-settlement cultural heritage.

"Australia doesn't have a very large cultural heritage; we've only been here 200 years. You go over to places like … oh, anywhere in Europe; they've got houses that people have been living in for hundreds of years. We've only been here 200 years and a lot of what was there then has been knocked down too." Wagga Wagga: Low Efficacy, High/Medium Concern group

"I guess that word "original" is probably something I think of… when I think of "heritage" I think of the buildings in Central Wagga like Peter Street and the heritage houses have to be certain colours and they're not allowed to be purple." Wagga Wagga: Low Efficacy, High/Medium Concern group

Fear of Australian culture being eroded: There were also a number of comments made across the groups to the effect that it was important to preserve Australian culture. In this respect participants were referring to 'Australian values' and way of life. One of the reasons that this was raised was a sense that immigration, minorities and cultures that chose not to assimilate represented a threat to Australian culture.

"I see a lot of white Australia's way of life being eroded away and influenced from overseas, so our cultural heritage here is being eroded." Parramatta: Low Efficacy, Low Concern group

Concern for loss of community/rise of individualism, loss of Australian way of life: The discussion of the erosion of Australian culture had some suggesting that their local environments were not as easy-going and safe as they used to be, especially among the Parramatta groups.

"I think that now people don't really care about other people. They're not as compassionate as they used to be. I think now they're more selfish and I think that the community thing to me is just a farce." Sydney CBD: High Efficacy, High/Medium Concern group

Heritage and development: There was some debate about the balance between protecting the environment and development. Most appeared to believe that the balance was about right, although a minority thought that too much public land had been 'locked up'. This view appeared to come mainly from regional groups.

"If I want to go in my four wheel drive you come to a barricaded, locked out fence. It's not private land." Tamworth: Low Efficacy, Low Concern group

"They've locked up a lot of land but they don't manage it. They've just left it to go to scrub now, they don't even back-burn it or anything." Parramatta: High Efficacy, Low Concern group

Some protections appeared to be spurious and stood in the way of necessary development.

"They're talking about 'Oh you want to run a road up here near Kapooka but you can't because there's a horny-toed frog up there in the tree' – there's another tree just over behind it I'm sure he could hop into. I'm not being smart about this but … I don't think we're destructing too much natural habitat you know." Wagga Wagga: Low Efficacy, High/Medium Concern group

Balancing heritage protection and development: A number of people in each group mentioned examples where they felt heritage protection had gone too far. This included protecting building facades and remnants of old houses that were not perceived to be worth saving. Some also commented on onerous restrictions, such as on house paint colours, believing such restrictions encroached on individual freedoms. Notwithstanding such views, many also acknowledged the importance of heritage protection for 'iconic' cultural sites, such as The Rocks, but doubted the wisdom of some heritage decision-making.

"I think I'd prefer to spend the money on the local hospital than spend $200,000 to maintain a bridge." Wagga Wagga: Low Efficacy, High/Medium Concern group

"But aren't they trying to heritage protect (sic) houses which are about 1950s or something, some ridiculous thing?" Parramatta: Low Efficacy, Low Concern group

"If you're buying this land and you should have a right to build what you want, rather than preserving the nature around you; having the same roof as everyone and things like that. Then you have the situation where you buy a building in the street and so long as you keep the façade up, you can do what you like with the back." Newcastle: Low Efficacy, High/Medium Concern group

"And you see some old house with the old art deco tiled walls and that but they can't knock down. Although some of those look horrendous. I don't really see the point in keeping a building for the sake of it just because it's old." North Sydney: Low Efficacy, High/Medium Concern group

Community engagement with the environment: concern

All groups exhibited some level of concern about environmental problems mentioning a range of issues, but with no single dominant issue. However, there was a strong focus on local issues and threats to the general amenity of the places where they lived.

Level of concern

Yes, there are problems: There was widespread agreement that levels of concern for the environment overall had increased over the years. Very few people exhibited no concern. Most pointed to a range of examples and news stories which highlighted environmental problems. The cumulative effect of media coverage of everything from ice-cap melting to extinctions and extreme weather events led most to conclude that there were environmental problems and reason to be concerned.

Although there was ongoing debate about some issues, notably climate change, there was consensus among the groups that the environment faced a range of challenges that was cause for some concern and a need to act.

"I'm more concerned about taking the oil out of the Earth though. It's been there for a billion years. It must serve some functional purpose." Sydney CBD: High Efficacy, High/Medium Concern group

"The first two that come to mind for me are the burning of the Amazon rainforest and the deforestation of Australia where we have – we're desperately trying to plant trees again so all the topsoil and that doesn't blow away forever." Sydney CBD: High Efficacy, High/Medium Concern group

"Look at what's happening on the Great Barrier Reef. I mean, this is a kind of Australian treasure. But it will probably disappear, I mean, how can we save that?" Sydney CBD: High Efficacy, High/Medium Concern group

Greater awareness contributes to greater concern: One of the factors contributing to greater concern was increased awareness. Media saturation of events in all parts of the world had the effect of increasing awareness of problems. Some believed that the environmental situation at a global level was not necessarily worse, but that people were just more aware of these issues than was previously the case.

Issues of concern

Local issues dominate: In many groups, when asked about top-of-mind environmental problems, people tended to comment on issues close to home such as illegal rubbish dumping, graffiti, and increased tipping fees. In Sydney, participants also mentioned over-crowding, traffic congestion and infrastructure issues.

"Well, there is an ongoing thing on public transport, which for me is very much a part of the environment, and (there is) always some excuse for not fixing public transport, or doing something." North Sydney: High Efficacy, Low Concern group

One of the other areas of environmental concern in Sydney was associated with poor planning and controls on development. This included perceptions of overdevelopment and a lack of amenities such as parks and infrastructure to support that development. There was a sense expressed by the groups of diminished quality of life due to congestion, development and lack of infrastructure.

"Well, look at the way Sydney is growing, urban development. We've lost parklands, our roads have become narrower, there are less parklands. There's no backyards, anymore … you've got the old quarter acre block gone down now to 350 square metres." Parramatta: High Efficacy, Low Concern group

"They let developers mow 50 acres down and then (all) they have to supply is one playground with a little bit of woodchip that's not even as big as this room. There's no leaving trees anymore." Parramatta: High Efficacy, Low Concern group

There were also other local issues mentioned frequently that were not directly related to the environment such as crime and public safety.

Once participants had expressed their concerns about local environment issues, their list of environmental concerns tended to move to a more macro level. A range of issues were identified. These included:

Over-population:
"There's too many people. There's more people on Earth now as ever existed in all human history." Sydney CBD: High Efficacy, High/Medium Concern group

"I think the biggest environmental problem is population. If population can settle, the environment will grow with it but at the ever-increasing rate of world population we can't increase land mass, environmental factors or anything like that so it's eventually going to come to an end somewhere." Tamworth: Low Efficacy, Low Concern group

Food security and foreign ownership:
With overpopulation came concern about the ability to feed the world. This led a number of people to raise concerns about overseas interests buying Australian agricultural assets. There was strong agreement that this was a growing issue and that Australia's farming assets needed to be protected.

"I'm just a bit concerned about how much of Australia China's buying up at the moment." Newcastle: Low Efficacy, High/Medium Concern group

River systems/water issues:
"I think about the Murray–Darling Basin and water things. I've never been there. I don't know anything about it. But I can see that in Australia fresh water is an important issue and there are decisions that we need to make about agriculture." Sydney CBD: High Efficacy, High/Medium Concern group

"(The Murray–Darling basin) has been dying and we're trying to do something about it. But we've got three states bickering about who's to do what and who's going to take water and who isn't. I sort of sit back and go, "Why on Earth can't we just sit down and say, for God's sake, look how it was, look how it is and let's just get on with it." Sydney CBD: High Efficacy, High/Medium Concern group

Extinctions:
"How many animal species do you hear are nearly extinct or extinct these days?" Parramatta: High Efficacy, Low Concern group

Land-clearing:
"The amount of deforestation that's occurred in eastern Australia. There is some swing back in the last decade or two, a realisation, but there's a long way to go. After 200 years we've really stripped a lot of the natural forests out of eastern Australia." Orange: Low Efficacy, High/Medium Concern group

Pollution:
"… you know, it's a bit scary when you turn on the radio and they go, 'Okay, don't go out today because there's too much pollution'. It's just coming up so much that it can endanger your health. That, to me, is a bit scary." Sydney CBD: High Efficacy, High/Medium Concern group

Coal-seam gas (Newcastle and Tamworth groups):
Coal-seam gas received some minor comments as an environmental issue to be concerned about, but not a great deal overall. Those that did comment tended to express the view that it appeared to be bad for the environment but there were many unknowns about it.

"I haven't heard anything good about it, except from the companies that are actually doing it. With the climate change thing you've got arguments for and against everywhere you look, but with the coal seam gas, the companies that are trying to get the stuff out of the ground, they think it's wonderful, but I haven't heard a report from any scientist or anybody else that says it's a good thing." Newcastle: Low Efficacy, High/Medium Concern group

"I think the scary one is the coal-seam gas. When you come to coal-seam gas and you see what's happened I can honestly say I don't like that." Tamworth: Low Efficacy, Low Concern group

"And the fracking; they've got proof of what that does but they don't care." Tamworth: Low Efficacy, Low Concern group

Natural disasters/extreme weather events: Haiti, Japanese tsunami, and floods were mentioned.

Consumerism:
"You've been told to eat more, to drive faster, to fly higher, to wear more clothes; it's a consumer society. A new car every two years; how much of resources does a car take up to manufacturer?" Newcastle: Low Efficacy, High/Medium Concern group

"I'm concerned because you look back 50 years ago and we didn't have all the plastics and plastic bags and throwaway items now. They don't last so you throw it away and buy another one; that's a concern." Tamworth: Low Efficacy, Low Concern group

Irreparable damage:
"My concern is that once you've lost something; you can't get it back. Like if the Barrier Reef dies it's gone. If it gets to a point where you can't recover something, that's a big concern." Newcastle: Low Efficacy, High/Medium Concern group

Rising energy prices:
"The main thing at the moment is all your power isn't it? It's just going through the roof and that puts fear into people." Newcastle: Low Efficacy, High/Medium Concern group

Threats to natural habitats: When asked about natural habitats, it was apparent that this was not a topic about which participants had thought much. Nevertheless they identified a range of threats. Chief among these was development including roads, housing and general population expansion. Some also cited mining as a threat to natural habitats. Other threats discussed included: weeds and feral animals such as cats, rabbits, foxes, cane-toads and introduced species of fish such as carp.

"We're losing wilderness habitat and there's a reason that that might be valuable to us in the future that we're not necessarily aware of now. So we have the capacity to damage the environment without really realising the cost of it." Sydney CBD: High Efficacy, High Concern group

No headline environmental issues:
It was noteworthy in all groups that a diverse range of environmental concerns were mentioned but no single issue dominated. This differs from previous years where there have been strong single issues, such as the drought and water scarcity in 2009.

(This is also evident in the quantitative survey results – see Section 2.1, *Most important environmental issues in NSW today*, pp. 13–17).

The absence of a major environmental issue to dominate conversation may also partly explain the lower levels of overall concern about environmental problems the preoccupation among this sample with local environment issues. (See quantitative survey results, Section 2.1, *Concern about environmental problems*, pp. 23–24).

Carbon tax received only minor mention: There were only a small number of people who made mention of the carbon tax. Where it was discussed the discussion tended to be very negative and raised by strongly opinionated people.

"Now the carbon tax is coming through you think 'Is that going to affect us?' It's going to affect everybody no matter who you are, no matter what sector you live in, what sector you work in, it's going to affect everyone." Tamworth: Low Efficacy, Low Concern group

Water and drought: Compared with previous years, this topic also received little attention. When it was discussed it was usually in relation to an ongoing need to be careful about water usage. Because of a perception that the drought had 'broken', some used this as evidence that climate change was not the threat that it was made out to be some years ago.

> ***"Five years ago they were telling us it was never going to rain again, almost literally, that's all they said. It was never going to rain, and that was because of global warming. As soon as it started raining again, they're saying that's because of global warming as well. Well it seems like an idea that they just can't lose. So that's kind of why I just don't have any respect for either side." North Sydney: Low Efficacy, High/Medium Concern group***

Global warming/climate change: This issue generated few comments. When it was mentioned it was usually by people who argued against its existence or suggested that there was so much confusing information that one could not be sure.

Regional vs. metro differences

There were some differences observed in regional versus metro groups. Metropolitan groups raised issues of public transport, congestion and pollution more than their regional counterparts. These were issues that impacted negatively on their local environment and for which they were critical of the State Government. In regional areas there were also some issues raised that were specific to these areas. For example, coal pollution, mining and coal-seam gas received more comment in Newcastle and Tamworth than other areas. However, these were minor comments and differences overall.

Source of concern

Future generations: For many participants their main concern was for the quality of life that their children and grandchildren would experience. Few thought that they would see any major, life-changing environmental issues in their lifetimes, but were much more inclined to think that major problems would occur several generations hence.

"Just for the future generations, that's my concern. So my children, my grandchildren, that's when I'm starting to worry, not so much now. It's ten, 20 years from now." Parramatta: Low Efficacy, Low Concern group

"I've got grandkids – what's going to happen to them? That's what I think about. They've got to have something to go into without getting into a world that's just going upside down. They'll never have the lifestyle that I had when I was a kid. I'll guarantee that." Tamworth: Low Efficacy, Low Concern group

(See quantitative results, Section 2.1, *Major reason for concern about environmental problems*, p. 25).

Community engagement with the environment: barriers

There were several contributing factors that led many to feel that the environment was a difficult topic with which to engage.

Beliefs that moderate concern

Overall, the participants tended to exhibit concern for the environment and recognised that there are some genuine environmental problems. This prompted a sense that it was important to 'do what you can' for the environment. However, many believed that the overall environmental situation was perhaps not as bad as the media might have you believe and that there were a range of reasons why one needed to be 'alert but not alarmed'. These included the following:

It's just cyclical:
"I think it's just a cycle. There have been droughts and things throughout history." Parramatta: Low Efficacy, Low Concern group

"When they're looking at the environment now, they're taking a very small snapshot of what we know is recent history and making assumptions based upon what's happened in the last 200, 300 even up to 1000 and 1500 years, when the earth's been around for millions of years. How do they know that what's happening now is not a 3000 or 5000 year cycle that's occurring?" Parramatta: Low Efficacy, Low Concern group

"The world is also cyclical. I mean, there's an Ice Age, what, every 10,000 years or so. I mean, these things just happen." Sydney CBD: High Efficacy, High/Medium Concern group

Earth adapts and recovers:

> ***"I just can't get myself worried about it. I believe in being a steward of the environment, looking after it to the point where you don't damage it deliberately or you do things which will help it to recover are necessary, but I just can't get concerned about it." Parramatta: Low Efficacy, Low Concern group***

"There was one (TV show) about two months ago. It projected the human race died and what actually happened – everything grew over and the world took care of itself. That was National Geographic – it had David Attenborough in it. He backed it. The environment will always adapt." Tamworth: Low Efficacy, Low Concern group

"I think they just over-dramatise everything. I think nature will recover." Parramatta: Low Efficacy, Low Concern group

"I go to Fiji every year. When I was six the coral was all white on the island we go to and now the colour's come back into it. Now, I always thought that it took 200 years to repair coral but this stuff's come back in 15, 20 years." Sydney CBD: High Efficacy, High/Medium Concern group

Predictions have not come true: A number of participants cited examples of seemingly major environmental disasters that had failed to materialise, such as acid rain, nuclear war and running out of water. The impact of this was to increase overall community scepticism about claims of environmental disaster and to 'prove' that predictions of imminent environmental disaster were unfounded.

"I think that why most people's concern for the environment has diminished. I remember growing up we always had this threat of nuclear war. But it didn't actually happen. If they say that the environment's going … and it hasn't happened in a few years … well, therefore it mustn't be real. That's why most people would think, their concern for the environment isn't there. So they think, well, it's either not going to happen now or it may never happen." Sydney CBD: High Efficacy, High/Medium Concern group

"Or there was that government consultant paid millions of dollars who said it was never going to rain on the east coast of Australia again and they built the desal plant and we have just come out of the wettest couple of years ever." Parramatta: Low Efficacy, Low Concern group

Media exaggerates:
"I think the media are making more of an issue of it now, though. I think the media have a bit to answer for some of the scare campaigns, that come out." Parramatta: Low Efficacy, Low Concern group

"I'm less concerned. I remember being sucked up by Al Gore and his movie that came out and being all concerned, but now I think back and I think that was just an exercise in trying to make money, in a sense. So I think if that's a good example of where people's concern for the environment and how it's played out by making stupid movies like that, then I don't want to have a bar of it. So my concern is actually less now." Parramatta: Low Efficacy, Low Concern group

"The media will beat up some particular story. I can remember hearing that particular fish are dying out and yet you can find statistics elsewhere that will say 'No, they're actually getting greater'. The statistics that are used in some of these media stories can be bent one way or the other … That's where I have an issue – finding out what the real truth is." Wagga Wagga: Low Efficacy, High/Medium Concern group

Conflicting information or science:
"You can get two completely different arguments from either side of the coin; 'Yes it does matter' or 'No it doesn't matter' – they're both convincing arguments." Tamworth: Low Efficacy, Low Concern

"If you watch a documentary they'll say 'yes there's climate change; we've got the facts'. Then you'll watch another documentary and 'there's no such thing as climate change; we've got the facts'. Newcastle: Low Efficacy, High/Medium Concern group

"Well I'm a little bit cynical with the whole thing because I grew up in the 70s and the 80s when they were telling us that the world was going to freeze over. And now they're telling us it's going to burn. So I just want them to make their minds up and get the science right." North Sydney: Low Efficacy, High/Medium Concern group

It's not that bad:
"I have a small concern as well, but at the moment I know there's room for improvement but I don't feel like our environment is that bad." Parramatta: Low Efficacy, Low Concern group

"I'm not really worried. I think everything's travelling along all right. At least I'm living in a clean environment at the moment, that's all I'm worried about. The council does clean-ups". Parramatta: Low Efficacy, Low Concern group

(Related quantitative survey results are provided in, Section 2.1, *Reasons for lack of concern about environmental problems*, pp. 26–27)

Information problems

One of the major issues identified by participants was difficulty in accessing trusted information about environmental issues. There was a range of problems including: the sheer volume and complexity of information, perceived hype, inability to trust information sources, conflicting information and (somewhat surprisingly) a lack of information.

Conflicting information leads to confusion: As well as apparently conflicting information or 'science' that impacts people's level of concern, some just felt confused.

"I don't feel like I have the facts or the truth because there's so many things out there that are supposed to be happening. It's hard for me to gauge, to say 'yeah that does look like it's happening'. It's just a bit confusing." North Sydney: Low Efficacy, High/Medium Concern group

Over- and under-supply of information: Despite a strong sense of being overwhelmed with competing information, many also expressed a belief that there was a lack of information in some areas. At a most basic level, some participants asked whether they needed to rinse their containers before recycling or whether it was OK to throw batteries into general rubbish or whether it was better to use cloth nappies as opposed to disposable.

"There's a lot of things that I don't know, like maybe more awareness of certain things that can be recycled, and where to go to recycle them." Parramatta: High Efficacy, Low Concern group

"Yes, there is a lack of information. I did not know also that there are some wastes that cannot be put inside that green bin or whatever. They have to be going to the council dump, but that in itself is such a big effort. I mean, for batteries and stuff like that, you know? You wouldn't want to go that far to dump it." Parramatta: High Efficacy, Low Concern group

"I think there's not only just a lack of information, there's also an oversupply of disinformation." North Sydney: Low Efficacy, High/Medium Concern group

Complexity of information:
"I'm an engineer by qualification, you show me the science, show me the facts. The problem is, with an earth, it's a very, very difficult concept too. It's not like a simple experiment you can do on a table, in a bunch of test tubes. It' a very, very complex issue that I think a lot of documentaries oversimplify and create this world of mixed messages in both directions about the whole topic." North Sydney: Low Efficacy, High/Medium Concern group

Lack of trust in information sources: The volume of information and inability to sift through it coherently caused participants to wonder who they could trust. All parties were perceived to have agendas and could not be trusted:

- **politicians:** spin, for political benefit
- **business:** financial interests
- **experts:** don't appear impartial and disagree
- **media:** interested in extreme issues and views to sell their product.

"I think it's a lot of media hype, like the Barrier Reef, where I think 12 months ago, maybe two years, they said it was going to get damaged and then it just adapted and it's all good again." Parramatta: Low Efficacy, Low Concern group

Perceptions of a politicised issue

Many expressed frustration at how the whole topic had been hijacked by politicians. In nearly all groups an anti-government sentiment emerged and all levels of government were criticised to some extent. Issues frequently mentioned included:

- bickering and inability to make decisions
- decisions being made for political expedience
- Government failures e.g. the pink batts scheme
- failure to adequately plan for growth and build infrastructure (especially public transport)
- lies and spin.

"Just how it's been politicised … I don't know, I think there are a lot of mistruths. There is too much spin around the whole thing. I don't think governments are being honest with us about it." Sydney CBD: High Efficacy, High/Medium Concern group

"People are sick of the political agendas." Parramatta: Low Efficacy, Low Concern group

Confusion leading to tune-out

The cumulative effect of a highly politicised debate and information problems was a strong sense of environmental issue fatigue among participants. Every environmental topic seemed to have competing views which made it very difficult for people to find the 'truth'. From 'everyday' issues (e.g. over the relative environmental merits of cloth versus disposable nappies) to major topics (e.g. the Murray–Darling basin debate), there seemed to be competing and often compelling opinions. The inability to make sense of these issues caused some to retreat into their own environments and deal with issues over which they had some control.

> ***"One year someone will come out and say all these facts; the next year they'll all dispute it and say 'no, no, no; it's not true'. So it gets to the point you think 'well I'm just going to go and do my own thing, because in the scheme of things, what can I do to really change anything?' So that's why I try to think of my own little backyard." Newcastle: Low Efficacy, High/Medium Concern group***

"It just leaves you confused. Maybe it's true. You see the DVDs and you see the ice caps falling off and all the rest of it and that makes you think one way, but then you listen to other people that talk about how the temperatures have varied so much over centuries. So you're just punch-drunk and stuck in the middle. I don't know what's going on, really." Parramatta: High Efficacy, Low Concern group

"I think we've been a bit bombarded with environmental issues. I mean I'm as equally concerned as I was five years ago, but I think when you get bombarded with information you tend to forget a lot of it. Maybe you concern yourself less." Newcastle: Low Efficacy, High/Medium Concern group

Competing priorities

> ***"I think environment takes a back seat because of the other things going around like job security and stuff. I know the environment concerns you but these are things that are going to impact you more than the environment." Parramatta: High Efficacy, Low Concern group***

While conscious of the environment, nearly all participants agreed that it was currently of lower importance compared with other day-to-day issues such as finances, health and education. This was in part due to the perception that there were no obviously pressing environmental issues and also because of an increased concern about debt and personal finances following the Global Financial Crisis. The net result was that most said that they continued to undertake environmentally conscious behaviours such as recycling and conserving energy, but would not put the environment high on the list relative to issues affecting day-to-day life.

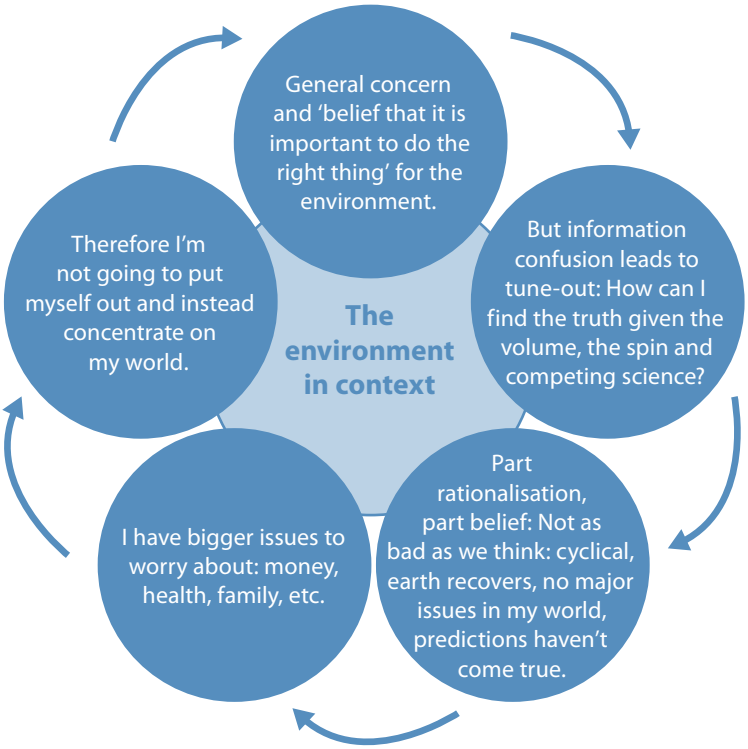
"Job security is number one, yes. The environment is not even close." Wagga Wagga: Low Efficacy, High/Medium Concern group

"I think the environment gets put on the back-burner too. There's always something that's more important. Job security, education, health care – a new hospital in Wagga – the environment is always behind something else because it's not as high on the list for general wellbeing." Wagga Wagga: Low Efficacy, High/Medium Concern group

"As a mum and having to live on one wage, food on the table comes first. But it is there in the back of my mind." North Sydney: Low Efficacy, High/Medium Concern group

Figure 43 summarises participants' attitudes and engagement with environmental issues and their relationship to their likely actions.

Figure 43: Community engagement with the environment



Community engagement with environment: actions and behaviours

Actions taken

Many acknowledged that their individual actions probably make minimal difference to the environment, especially when they considered the environment on a global scale. That is, some had considered the environmental problems in countries like China and India and saw how insignificant their actions were at this level. Despite this, most still believed that environmentally friendly behaviours were important and 'the right thing to do'.

When asked to nominate specific behaviours undertaken, nearly all commented on actions they had taken close to home. These actions included:

- conserving water
- using environmentally friendly shopping bags
- switching off lights and appliances
- planting natives/vegetable gardens
- composting
- using the car less
- recycling
- participating in 'Clean up Australia day'
- membership of environmental organisation (e.g. Greenpeace), mentioned by a minority,
- using power at off peak times (some).

"Even though there are no water restrictions at the moment I still make sure I wash my car on the grass and I only use a bucket, I don't have the hose running the whole time." Parramatta: Low Efficacy, Low Concern group

Almost no one had taken any other actions and indeed few could think of other actions they might take.

(For related quantitative survey results, see Section 2.3, *Frequency of 'everyday' environmental behaviours'*, pp. 49–54, and *Participation in occasional environmental activities*, pp. 63–66).

Behavioural drivers and barriers

Environmentally friendly behaviours tended to be driven by a combination of factors. For the majority, the main driver was to save money/avoid cost, followed by 'saving' the environment, a belief that such actions were 'the right thing to do' and made a difference, and its importance for future generations.

"I still want to do the right thing. That's me. I want to do the right thing by my conscience." Sydney CBD: High Efficacy, High/Medium Concern group

"A lot of people say 'Oh why should we bother? In China pollution's so bad, India, they don't care' and that sort of thing but I still feel that if I'm still doing my bit and hopefully that will make a difference." Tamworth: Low Efficacy, Low Concern group

But not if it 'costs' me

Although there was recognition that personal actions close to home had no impact on a global scale, no one used this as an excuse for inaction. Indeed most were quite adamant that despite global problems (or even because of them) it was important to 'do your bit'.

However, if a personal cost was involved in time or money, then participants' commitment to doing the right thing for the environment tended to wane. In a somewhat contradictory stance, participants then tended to use the excuse that their actions made no difference, to justify to themselves occasional anti-environmental behaviours or unwillingness to act/pay.

For example, there were a few people in each group who admitted that they don't always behave appropriately towards the environment, for example throwing batteries in general rubbish bins, and using the ordinary bin if the recycling bin was full.

"I will probably buy a cheaper laundry detergent to wash my clothes with rather than a more expensive one when the expensive one is supposed to be more environmentally friendlier." Sydney CBD: High Efficacy, High/Medium Concern group

"Ours (recycling bin) is always chockers and then you end up putting things that can be recycled in the red bin." Orange: Low Efficacy, High/Medium Concern group

Provided it was relatively easy to behave in an environmentally friendly way and did not incur cost or time, then actions would occur. However, even minor obstacles to environmentally friendly behaviours tended to adversely change behaviour with people then finding excuses to justify that behaviour.

Though the Emissions Trading Scheme/Carbon Tax received few comments overall, when it was discussed, a number of participants became quite vocal in the use of the argument that 'it made no difference' and therefore this legislation should be rejected (despite also believing it was important to 'do the right thing' at home). Other arguments were also then used to justify this position including that the science is inconclusive, and climate change is just part of the natural cycles.

"I think people too have the mentality as long as their house and everything is tidy and neat in their house, they're not too concerned." Parramatta: Low Efficacy, Low Concern group

"I'm a little bit 'two-faced' because I watch the news and see all these horrible things happening and go 'Oh my God, my kids have to grow up and one day live in this world' but I don't actually do anything. I freak out and think 'This is horrible' but I don't go to any extent to change anything. I really should do more and I probably should pass that onto my kids as well like as in living-wise and teach them that but I don't. There are so many people out there going 'Oh my God the environment' – well, are you doing anything because I'm not and I'm one of those people going 'Oh my God the environment' ". Tamworth: Low Efficacy, Low Concern group

In addition to 'cost' there were other barriers to environmentally friendly behaviours:

- politician/government 'lies'/endless arguing – lack of agreement
- no rewards/no tangible improvements/lack of feedback
- no evidence of predicted disaster and therefore such behaviours are unnecessary
- 'drop in the ocean' compared to problems in China and India
- inaction among others
- actions undermined by others not behaving 'appropriately'
- lower levels of concern.

My mum and dad paid for all their solar panels and it was about $12,500; I can't afford $12,500 – there's no way. I couldn't even afford $4,000. There's no way. If I wanted to put solar panels on my house, I'd have to borrow money to do it. We've got bills, rates, insurance." Tamworth: Low Efficacy, Low Concern group

"On the news the garbage bin man did his lap and did the red wheelie bins which is for rubbish and then he did another lap and put the recycling straight into the rubbish. So there was no point in recycling." Tamworth: Low Efficacy, Low Concern group

(For related quantitative survey results, see Section 2.3, *Prompts/reasons for starting environmental behaviours*, p. 55; *Reasons for not undertaking environmental behaviours*, p. 59 and *Reasons for participation in occasional environmental activities*, p. 67).

Personal efficacy

Most thought their actions made some difference, though probably only at the local level and not on any large scale. The belief that local actions made a difference contributed to positive environmental behaviours for many people. Even among those who thought their actions made little difference (viewed, say, on a global scale), most tended to take the stance that, irrespective of outcomes, it remained important to act in an environmentally responsible way.

However, if there were contentious issues or if the environmental behaviour took time, cost and/or effort, then people were inclined to draw upon the argument that their behaviours were not efficacious.

In summary, people's perceptions of the efficacy of environmental behaviours were used changeably to support both their pro- and anti-environmental behaviours as required. Environmental behaviours that were relatively easy to undertake 'made a difference' and environmental behaviours that were avoided because they were difficult or costly could be justified on the basis that it 'made no difference'.

There appeared to be some segment differences in this logic. Those groups that exhibited lower levels of concern tended to rationalise their behaviours using the logic above more than those that held higher levels of concern. Groups with higher levels of concern tended to hold the view that it was always important to behave in an environmentally friendly way regardless of perceived efficacy and personal cost.

"All I see is cost to myself but no result. I'm quite happy to pay if I see a result but I don't see a result." Tamworth: Low Efficacy, Low Concern group

"I'm a good environmentalist but it's only for my own satisfaction to try and convince myself that I'm doing something. I'm under no illusion that it actually has any discernible impact." North Sydney: Low Efficacy, High/Medium Concern group

"It's no good us jumping up and down and saving Tamworth when the entire world is going to collapse around you." Tamworth: Low Efficacy, Low Concern group

"They have to be making a difference, like with our recycling and things, just your little things like turning the power off and there's lots of little things, preserving water and yeah. It's got to be making a difference and the more we do it."
Orange: Low Efficacy, High/Medium Concern group

While all groups believed that their actions made a difference, the groups with higher concern tended to hold this view more strongly. Lower-concern groups were more inclined to be selective in their perceptions of efficacy and used this as an argument for not behaving in an environmentally friendly way if cost was involved.

Overall, there was a strong sense that, despite global issues and the possible futility of actions, it remained important to do something, unless there were 'costs' involved, in which case inaction was justified on the basis of it making no difference (notably among the lower concern groups).

(For related quantitative results, see Section 2.3, *The perceived efficacy of personal actions*, pp. 69–71).

Segment differences: concern and perceived efficacy

Group participants were allocated to one of four segments based on a recruiting screener that identified an individual's level of concern about environmental problems and their perceived efficacy of behaviours. Recruiting suggested that their attitudes and behaviours in the group should reflect the way they were recruited and therefore fit approximately in four quadrants of high/medium concern/high perceived efficacy, high/medium concern/low perceived efficacy, low concern/low perceived efficacy, and low/medium concern/high perceived efficacy.

However, in the discussions, the groups exhibited similar responses. Nearly all participants exhibited a certain level of concern for the environment and believed that their behaviours made a difference and hence, in a self-rating exercise, all groups tended to cluster in the middle ground or towards higher concern/higher perceived efficacy, except the low concern/low perceived efficacy groups who were true to their expected profile.

The similarity in responses (where most claimed to be concerned and that their behaviours made a difference) may be due to a group effect whereby individuals were reluctant to voice a belief that they were not concerned about the environment in front of others. However, it seems more likely that participants genuinely held a level of concern and a belief in their behaviours having an impact.

This may not be inconsistent with the recruiting because concern tended to differ depending upon the issue being discussed. It was possible to be more concerned about some problems (rubbish dumping) and less about others (global warming). Similarly, with efficacy, participants may have believed that their actions made a difference at a local level but not globally. Hence levels of concern and perceptions of efficacy differed depending upon the problem and scale being considered. Therefore, depending upon the nature and scale of the issue, a person could reasonably sit in a number of positions on this map. However, overall most claimed to be concerned and believed that their actions made a difference.

Conclusions

The in-depth qualitative research for *Who Cares about the Environment in 2012?* has provided further insights into the ways the NSW community's understanding of and engagement with the environment is evolving.

The groups felt that 10 or 20 years ago environment was not really a part of daily lives in Australia. Today there is a growing belief in the need to look after the environment for future generations, driven by a subtle sense of a longer-term potential threat from global environmental problems. Nearly all participants acknowledged that environmental issues did exist. This was driven by media coverage of environmental problems and a range of personal experiences associated with pollution, resource depletion and rising energy costs along with drought and extreme weather events.

What were once perceived as a fringe issues have become embedded in behaviours and daily lives. Recycling, using 'green' shopping bags and being energy and water wise have become routine. Such behaviours are driven by a combination of:

- level of environmental concern/perceptions of the seriousness of environmental issues
- proximity to an issue
- self-interest/avoidance of 'cost'
- legislative changes/lack of choice
- beliefs that such behaviours made a positive difference
- altruism and the perceived importance of 'doing the right thing'.

The relative influence of these drivers varied among individuals in ways that were not always easy to predict and differed depending upon the issue. On any given issue, the main driver for some may have been cost-avoidance, for others it may have been altruism.

Nevertheless, people feel it is important 'to do the right thing', and act accordingly, provided it is relatively easy to do so. Commitment wanes, however, if too much time, effort or personal cost is involved.

Despite the growing awareness of problems and a sense of longer-term concern, as well as a belief in the importance of looking after the environment, this research also found a retreat from engagement on macro issues and a greater focus on environmental matters close to home. This can be attributed to:

- the absence of any headline environmental problems attracting public attention (such as the drought in 2006 and 2009).
- a sense there are more important matters to worry about, such as job security, health and family.
- the ongoing confusing nature of debate over environmental issues that makes it too hard for many to engage at a macro level.

Implications

There are a range of challenges in respect to current community engagement with the environment:

- Positive feedback regarding efficacy offers an opportunity for policy makers and communicators to encourage and reinforce behaviours. Positive feedback on improvements may increase perceptions of efficacy and may contribute to more and better behaviours.
- While there is concern, there are also competing priorities (notably personal finances and family matters) and information confusion. This dilutes engagement.
- Information problems that could be addressed include overload, complexity, perceived credibility and conflicting sources.
- Absence of a headline environmental problem, while positive, does lead to a lack of engagement and sense of urgency in the community.
- The community recognises environmental improvements that have been made over time but does not spontaneously attribute these to government actions. Yet, when there are unresolved environmental issues, government tends to be blamed for not fixing them.

Appendices

Appendices

Background

This is the seventh main survey of the *Who Cares about the Environment?* research series. The first survey was conducted in 1994, and it has subsequently been repeated every three years: in 1997, 2000, 2003, 2006, 2009, and now 2012. A smaller survey was conducted in 2007 but is not considered a main research data collection point.

The 2012 *Who Cares?* research was conducted by Newspoll and comprised:

- a survey of a sample of 2,006 respondents using Computer Assisted Telephone Interviewing (CATI)
- qualitative research with nine focus group discussions conducted in Sydney and various regional locations.

As in 2006 and 2009, the 2012 survey was conducted via telephone interviews with people aged 15 years and older living in NSW. *Who Cares?* surveys prior to 2006 (excluding 1994) also used telephone interviews, but interviewed people aged 15 to 70 years.

The 1994 survey was conducted using door-to-door interviewing, with show-cards to display response options for some questions. All the questions using show-cards in 1994 that were included in subsequent surveys were modified for telephone interviewing. For questions with limited options, telephone interviewers read out possible response options. Other questions became open-ended and were either entered by the interviewer in a pre-coded list or recorded verbatim for subsequent coding.

Changing the methodology from face-to-face to telephone data collection has limited the comparability of the 1994 results to subsequent surveys, particularly for those questions using show-cards. For this reason, the 1994 data point is included in charts for historical interest where the question and format are similar. Where 1994 figures are presented, it is important to note that comparative results that may suggest trends are indicative only.

In 2006, an 'extension survey' was conducted a few weeks after the main survey with participants from the main survey who had agreed to participate in another shorter survey. This approach enabled more issues to be covered than could be accommodated in the main survey, and most findings from the extension survey are included in the 2006 main report.

The 2007 survey was conducted one year after the 2006 survey among a sub-sample of the 2006 respondents and included both new questions on climate change and core *Who Cares?* questions. Following increased media attention on climate change from late 2006, the 2007 survey explored this issue in detail, and assessed how individuals' attitudes may have shifted from 2006 to 2007 on core questions. However, as the 2007 sample was not a full independent and randomly drawn sample), any differences between this sample and each of the other years on core questions cannot be taken as evidence of a change in community attitudes, but rather as indicative of trends only. For this reason, the 2007 data point is not included in the charts for 2012 reporting.

Research methodology

Qualitative research

The primary segmentation underlying the nine group discussions conducted in 2012 was based on two dimensions:

- level of concern about environmental problems (those with high/medium concern vs. those with little or no concern)
- 'perceived efficacy', or the extent to which people believe their personal actions make a difference to environmental outcomes – divided into those with high perceived efficacy (i.e. people with a stronger belief in the impact of their personal actions), and those with low perceived efficacy. However, in describing the groups below and in Section 3, this is simply called 'efficacy'.

The segments covered, and geographic locations for groups were as follows:

Location	Group composition
Sydney*	Low concern/low efficacy
	Low concern/high efficacy (X 2)
	High-medium concern/low efficacy
	High-medium concern/high efficacy
Wagga	High-medium concern/low efficacy
Newcastle	High-medium concern/low efficacy
Orange	High-medium concern/high efficacy
Tamworth	Low concern/low efficacy

* City/North Sydney X 3 and Parramatta X 2

Quantitative research

Questionnaire development

The 2012 questionnaire covered environmental **attitudes**, **knowledge**, **views** and **behaviours** in a mix of open, unprompted questions and closed questions with predetermined response options. It included:

- core questions that have been asked in all previous surveys since 1994
- questions that have been asked in some, but not all previous surveys, and
- questions new to the 2012 survey.

While the wording of some questions has varied slightly over the years since 1994, the structure and wording of questions has been retained as much as possible to ensure comparability across surveys.

For some core questions or other previously asked questions that consist of a number of items or issues, the specific items have sometimes changed. For example, the true/false knowledge statements have varied across years (with only the greenhouse effect statement included in all seven surveys). Other questions have been used for some past surveys and are selected for each survey according to their relevance at that point in time. Reflecting the dynamic nature of environmental interest, each survey has generally also included some new questions. Table 12 shows the history of the 2012 question set.

Table 12: History of questions included in the 2012 survey

	Type*	1994	1997	2000	2003	2006	2007	2009	2012
Core questions									
Priorities for the NSW Government now	UP	■	■	■	■	■	■	■	■
Priorities for the NSW Government in ten years time	UP	■	■	■	■	■		■	■
Most important environmental issues in NSW	UP	■	■	■	■	■	■	■	■
Knowledge of specific environmental issues (some different items across surveys)	C	■	■	■	■	■		■	■
Level of concern for the environment	C	■	■	■	■	■		■	■
Major reason for concern	C	■	■	■	■	■		■	■
Priority initiatives for government to address environmental problems	UP	■	■	■	■	■	■	■	■
Improvement or deterioration in environmental issues or indicators (some different issues across surveys)	C	■	■	■	■	■		■	■
Frequency of selected everyday environmental behaviours in the past 12 months	C				■	■	■	■	■
Selected occasional environmental activities done in the past 12 months (yes/no)	C	■	■	■		■		■	■
Strictness of environmental regulations for various community sectors	C	■	■	■	■	■		■	■
Questions asked in some previous surveys									
Reasons for not being concerned about environmental problems	UP					■		■	■
Reasons for starting/undertaking selected environmentally friendly behaviours	UP					■	■	■	■
Reasons for not doing selected environmentally friendly behaviours	UP					■		■	■
New questions for 2012									
Emphasis on protecting natural habitats	C								■
Emphasis on protecting & conserving historic things	C								■
Geographic focus for NSW Government environmental support and funding	C								■
Reasons for undertaking occasional environmental behaviours	UP								■
Efficacy of personal actions	C								■
Visitation to environmental locations	C								■

* UP = unprompted question, C = closed question with prompted options.

■ Shading indicates survey years in which the question topic has been included in the questionnaire

Appendices

The questionnaire for 2012 was piloted to test survey flow, routing and comprehension. Formal fieldwork was conducted from 23 May to 25 July, 2012. All aspects of the 2012 survey were managed by Newspoll in accordance with the requirements of ISO 20252.

Sampling and data weighting

The 2012 survey comprised 2,006 interviews with people aged 15 years and over in NSW. The sample size for the surveys has grown steadily over time:

Who Cares? survey year	Sample size
1994	1,112
1997	1,129
2000	1,102
2003	1,421
2006	1,724
2007 (supplementary survey)	825 (subset of 2006 survey sample)
2009	2,003
2012	2,006

The 2012 sample was geographically stratified by 14 regions (for definitions, see *Demographic segments: definition and analysis*, p. 102). The sample was allocated by region as closely as possible to the proportions of population, subject to a minimum requirement of n= 100 interviews per region.

Within each region, a gender quota was set in proportion to population. Age quotas were also managed within each region according to seven groups: 15–19, 20–24, 25–34, 35–44, 45–54, 55–64 and 65 years and over. The quota management rules were based on obtaining minimum threshold samples of people aged 20–24 and 25–34 (well known to be the most difficult to reach), without imposing the more costly rule that the sample size in each age group is exactly according to the population profile. The gender and age quotas within each region were not interlocking.

The survey results were post-weighted by age *within* sex *within* region, with regions re-combined in proportion to population. At the time of sample design set-up and survey weighting, the necessary 2011 Census data were not available, consequently the 2006 Census was used. The weighting was based on the seven age groups, though when reporting survey results, age is segmented into only six groups (with the 15–19 and 20–24 ages combined into one group).

For the 2012 survey, the sample frame comprised a list-based sample from *samplepages*, supplemented with random digit dialling. The average interview length was 24.9 minutes.

Table 13: 2012 survey sample – sex and age

	2012 sample			NSW pop'n 2006
Gender	Unweighted n	Weighted n	Weighted %	%
Male	978	978	48.8	48.8
Female	1,028	1,028	51.2	51.2
Total	**2,006**	**2,006**	**100.0**	**100.0**

	2012 sample			NSW pop'n 2006
Age	Unweighted n	Weighted n	Weighted %	%
15–19	158	169	8.4	8.4
20–24	138	164	8.2	8.2
25–34	293	339	16.9	17.0
35–44	373	365	18.2	18.2
45–54	371	346	17.2	17.2
55–64	297	275	13.7	13.7
65+	376	348	17.3	17.3
Total	**2,006**	**2,006**	**100.0**	**100.0**

Table 14: 2012 survey sample – region

	2012 sample			NSW pop'n 2006
Location	Unweighted n	Weighted n	Weighted %	%
Sydney				
Central Coast	100	91	4.5	4.5
Eastern/Inner Sydney	248	275	13.7	13.7
Northern Sydney	152	170	8.5	8.5
Northern Beaches	100	70	3.5	3.5
South Western Sydney	198	221	11.0	11.0
Southern Sydney	125	131	6.5	6.6
Western Sydney	278	310	15.5	15.5
Rest of NSW				
Hunter	172	182	9.1	9.0
Illawarra	114	121	6.0	6.0
Richmond/ Tweed	101	67	3.3	3.4
Mid North coast	101	86	4.3	4.4
North/North West/Far West	100	87	4.3	4.3
Central West/ South Eastern	117	121	6.0	6.0
Murrumbidgee/ Murray	100	74	3.7	3.7
Total	**2,006**	**2,006**	**100.0**	**100.0**

To assess the sample profile based on education, a comparison was undertaken with Census data[6]. Although at least two ABS sources are available to examine education characteristics, neither collects education information using the exact approach adopted in the *Who Cares?* survey. While the survey asks respondents to nominate which one of six categories best describes their highest level of education, ABS questions involve, at least in part, asking an open-ended question to collect information, which is coded into categories after fieldwork (where the required information has been given). Nonetheless the Census probably provides the closest approximation to the question used in *Who Cares?* Table 15 shows the closest available comparison between the Census and weighted survey data.

An upward education bias is evident in the survey sample. An upper education bias has also been noted in relation to previous *Who Cares?* surveys. Consequently from the standpoint of comparing results between different survey years, perhaps the most important issue to consider is the *consistency* of the survey sample profile from survey to survey.

To that end, the education profiles of the 2012 and 2009 samples were compared, and some differences were identified. The impact of this was tested by, in addition to the core gender, sex, age and area weighting, applying a further education weight to the 2012 data so that the sample profiles of both 2009 and 2012 were identical. The results from both surveys were then compared, question by question, and this found that the education weighting resulted in no difference of any greater than one percentage point. Given such a lack of material difference, the additional layer of education weighting was not employed for the final survey data tabulations.

Coding

Responses to open-ended questions in *Who Cares?* are coded using detailed code frames based on the issues people mention. Answers that are the same or similar in meaning are assigned a code number with a descriptor. The code lists have grown over the years as new issues have been identified and coded. All verbatim responses to open-ended questions were thoroughly reviewed against pre-existing code frameworks (from previous surveys). For any emerging 2012 issue that could not be back-coded into the existing code framework, a new code was developed. Codes are further grouped under major headings for charting and reporting. Generally, a code or category has to reach a threshold of 2% to be included in the chart, although the tables accompanying some questions provide more detailed data.

For 2012 there have been only a small number of changes to allocation of codes into different groups, and these have been noted in the relevant charts in the report.

Table 15: 2012 survey sample – highest education

	2012 sample			NSW pop'n 2011 %
Education level	Unweighted n	Weighted n	Weighted %	
No formal schooling	3	4	0.2	
Primary school	12	12	0.6	26.7
Some secondary school	241	238	11.9	
Completed secondary school	417	415	20.7	14.4
A trade or technical qualification (e.g. TAFE)	502	503	66.5	57.2
University or C.A.E. diploma, degree or higher degree	827	830		
Refused	4	4	0.2	
Total	**2,006**	**2,006**	**100.0**	**100.0**

Statistical significance testing

A description of the types of statistical significance testing undertaken, and how significant differences are annotated in charts is provided in the Introduction to the report. The specific statistical methods used were as follows:

- **Second order Rao–Scott Test of Independence of a Contingency Table:** This was used to test for statistically significant differences between proportions, across survey years, and across demographic or segment categories. The majority of significant results in the report are based on this type of test.
- **Independent samples t-test of means:** This was used when comparing mean values across segments for numeric variables; for example, comparing the average number of 'everyday' occasional activities undertaken within demographic segments.

A False Discovery Rate correction was used to ensure the robustness of reported differences. All statistical significance testing was conducted at the 95% confidence level.

6 By the time post-analysis of the 2012 survey results was undertaken, 2011 Census data had become available. Because of the gradual upward shift in the population's education profile over time, the more recent 2011 Census figures were used for comparisons with the survey data on education

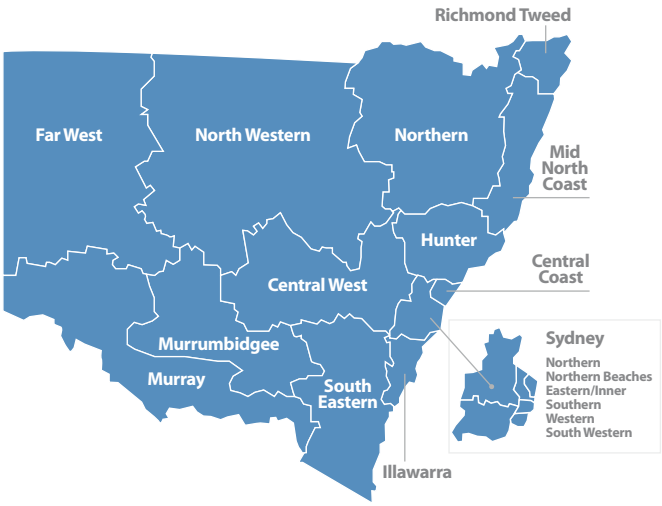
Appendices

Demographic segments: definition and analysis

Differences between demographic groups are presented throughout the report. Each question includes a 'segment highlights' box, which outlines any key statistically significant differences.

Key demographic definitions are as follows:

- **Gender and age:** Participants were classified as male or female and by age group based on 12 5-year age ranges (but reported in 6 groups as discussed under 'sampling').
- **Education:** Respondents were asked the highest level of education they had completed and grouped into those who said they had completed: less than secondary school (no formal schooling, primary school, less than full secondary school), secondary school, trade or technical qualifications, or a degree (university or CAE diploma, degree or higher degree).
- **Language:** To ascertain language and cultural backgrounds, respondents were asked two questions: (i) the main language spoken in their household, and (ii) whether they speak another language other than English in their homes (that is not necessarily their main language). This was used to segment respondents into: (i) those living in a household where only English is spoken; and (ii) those from multi-lingual households.
- **Employment:** Respondents were asked which one of seven categories best described them: In paid work – either full time or part time, unemployed, a student, home duties, retired or an age pensioner, other pensioner, or something else.
- **Location by region:** Comments concerning differences by region in the report relate to the 14 regions upon which the sample was stratified (see Table 14). References to 'Sydney' or areas 'outside Sydney' in the report are based on these regions, with 'Sydney' being defined as the Sydney Statistical Division. Regions outside Sydney are based on local government regions; however, within Sydney, to support more detailed analysis, regions were based on those used in the NSW Government's 2021 plan.
- **Location by settlement type:** Participants were also asked to self-classify where they lived from a list of six items: Sydney, Newcastle, Wollongong, a large country town (over 15,000 people), a small country town (up to 15,000 people) or a country rural area. Some people who live in outer parts of Sydney Statistical Division may not consider themselves to live in 'Sydney'. Consequently survey results for 'Sydney' can differ for Sydney 'region' vs. Sydney 'settlement type'.
- **Children:** Respondents were asked whether they have children of *any* age, who may or may not be currently living in the household.
- **Dwelling type:** Respondents were asked which one of four categories best described the dwelling in which they live: a separate house; a semi-detached house, townhouse, row house, terrace or villa, etc; a flat, home unit, or apartment, or, something else.
- **Household income:** Respondents were asked their pre-tax annual household income and allocated to one of 11 income groups.



Reporting

The charts in this report generally show all unprompted question code groups that were nominated by 2% or more of the participants, unless otherwise stated. Percentages are given to the nearest whole number. In some charts and tables, this may result in totals slightly under or over 100% due to rounding. Percentages reported in the text that are the sum of percentages appearing in a table or chart may be slightly under or over what would be calculated from adding the figures on the table or chart because the actual (unrounded) figures were used to calculate the percentage.

The story among the segments

The body of the report contains detailed listings of significant differences in attitudes, knowledge and behaviour by segments, on a question by question basis. Following is an overview of key differences and themes that emerge from the data.

Gender

Men show greater knowledge of environmental issues (as measured by the knowledge questions included in the survey). They are also more likely to have a view about the environmental regulations that apply to various sectors being too strict or too lax – while for six out of nine sectors surveyed, women are more likely to be unsure about this.

Yet, women are more likely to be concerned about environmental problems, and to believe that what they do makes a difference to environmental outcomes.

They are also more likely to engage in environmentally friendly behaviours – more women 'often' do nine of the 10 'everyday' behaviours surveyed. There is not, however, the same systematic behavioural difference between men and women when it comes to 'occasional' environmental behaviours.

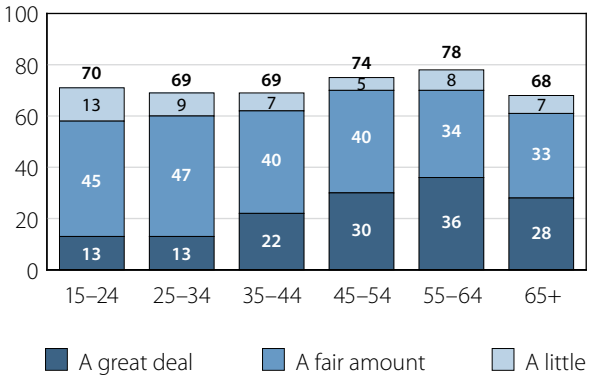
Age

As far as age is concerned, the *degree* of concern about environmental problems; the level of environmental knowledge; and engagement with environmental behaviours tends to rise through the age spectrum up to the age of 55 to 64, but either levels off or drops at age 65 years and over.

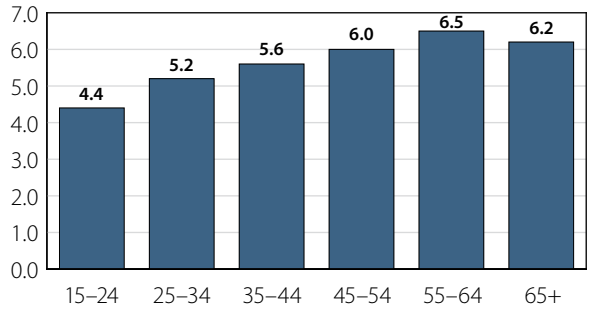
Somewhat paradoxically, while the youngest group aged 15 to 24 are more likely than others to have the environment/environmental issues top of mind as a priority for the NSW Government ten years from now, they are among the lowest in terms of degree of concern, knowledge and behaviour. Their life stage may, however, partly dictate their lower engagement in environmental activities. They also stand out as being the most positive in their assessment of improvement on environmental issues. For 11 of the 18 issues surveyed, they are more likely than others to believe things have improved over the past three years.

Figure 44: Key patterns of findings by age

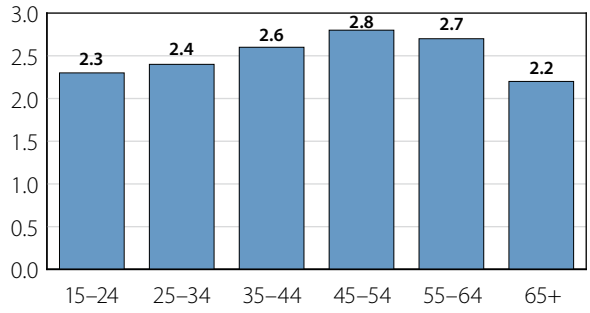
Concern about environmental problems



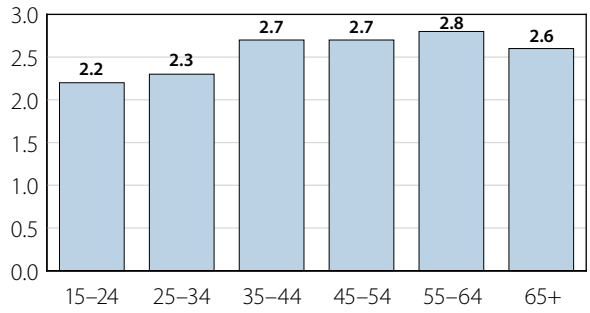
Average no. of 'everyday' environmental activities



Average no. of 'occasional' environmental activities



Average no. of knowledge questions correct



Education

Similar to age, broadly there is a progression across education segments in relation to degree of concern about environmental problems, knowledge and behaviour.

However, this needs to be qualified, because 15 to 19-year olds constitute a significant proportion of those who have not completed secondary schooling. Consequently *age* has an important bearing on attitudes, knowledge and behaviour in this lowest education group. Arguably, the key discriminator in relation to education is the divide between those who are university educated, and those who are not.

In many respects, knowledge, attitudes and behaviour among those with university qualifications emulate those of people with a high concern about environmental problems – though they are not as pronounced. The university educated are:

- more likely than others to have the environment/ environmental issues top of mind as a priority for the NSW Government, both now and in ten years
- a little less positive, at one level or another, in their assessment of environmental improvement over the past three years (on 10 of the 18 issues surveyed)
- a little more critical in relation to environmental regulations – because they are more likely than others to think that regulations are too lax for four of the nine sectors surveyed.

Employment

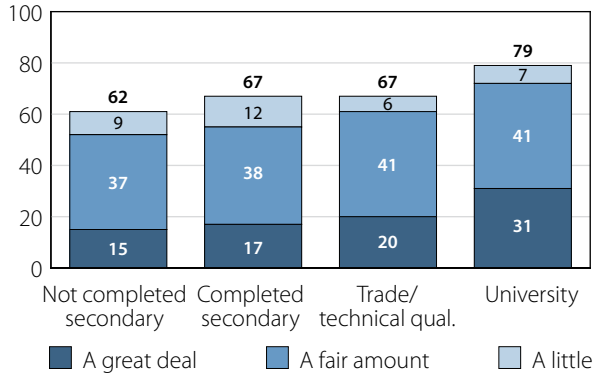
Generally, when discrimination is found in attitudes, knowledge or behaviour based on employment, it is because students or retired people are different from others in some way. In the vast majority of cases, patterns among students follow patterns among young people aged 15 to 24. Similarly, but not quite as closely, patterns among retired people follow patterns for people aged 65+.

Dwelling type

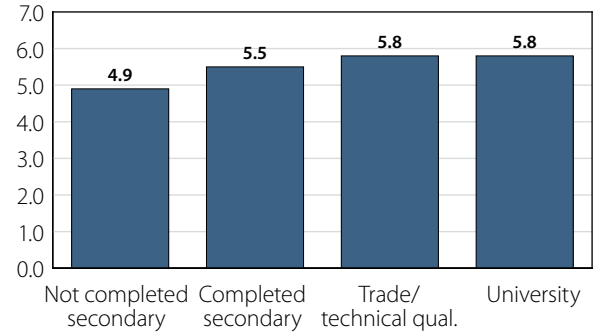
Perhaps the key distinction between those who live in a separate house compared with others is that they are more likely to *often* **compost or use a worm farm, and avoid putting oil/fat/turps/paints/chemicals down the sink or toilet**.

Figure 45: Key patterns of findings by education

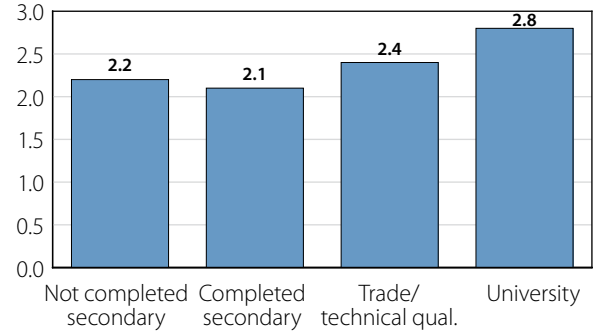
Concern about environmental problems



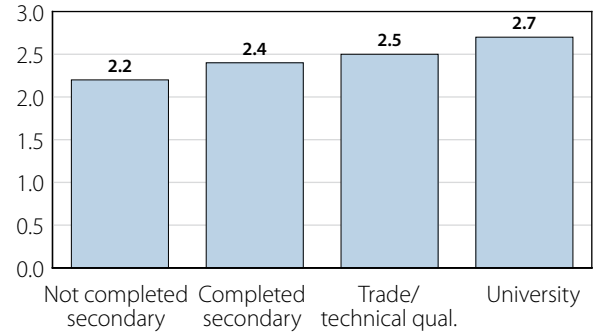
Average no. of 'everyday' environmental activities



Average no. of 'occasional' environmental activities



Average no. of knowledge questions correct



Children

For the purpose of *Who Cares?*, people with children are defined as people with children of *any* age – not just parents of young children under 15. Since a large majority of people over the age of 35 have children (even if the children are themselves older adults), and the vast majority of people under the age of 35 (and particularly under 25) do not, then age is actually a key driver of the *Who Cares?* parenting segmentation.

People with children (of any age) are more likely to be concerned 'a great deal' about environmental problems, and for the reason of concern for future generations. They also have higher environmental knowledge, and undertake more 'everyday' and 'occasional' environmental activities. Yet they are also more likely to think there is too much emphasis on protecting habitats (though a small absolute number).

People without children are more likely to think of the environment/environmental issues as a top-of-mind priority for the NSW Government ten years from now – but are less likely to have high concern about environmental problems; have lower environmental knowledge and undertake fewer environmental behaviours. All of this broadly reflects the characteristics of younger people.

Language

People from English-only households have higher environmental knowledge than people from multi-lingual households. They also undertake a higher average number of 'everyday' environmentally friendly behaviours, though this is principally because they are far more likely to *often* **compost or use a worm farm**, and they are also more likely to **avoid putting oil/fat/turps/paints/chemicals down the sink or toilet**. Connected with this, people from English- only households are also more likely to live in a separate house.

Region

It is important to appreciate that every region contains people that cover the complete spectrum of environmental attitudes, knowledge and behaviour. Nonetheless, the *balance* of attitudes, knowledge and behaviour does vary, to some degree, from place to place. In this context, the survey results reveal some interesting vignettes about people living in the various regions. For example, based on the data collected:

- Those from the Eastern/Inner suburbs appear to have an inner city 'green' profile.
- People on Sydney's Northern Beaches have a heightened awareness of water pollution, and act in ways to help prevent it.
- On the other hand, residents from South Western Sydney appear to be less engaged than other people in environmental issues.
- For those living in the Murrumbidgee/Murray region, water issues, specifically water allocation, are more top of mind; many more people in this region also believe environmental regulations are too strict for farming and agriculture along with forestry, and a relatively high proportion have little or no concern about environmental problems.

Following is a list of key significant differences among the 14 regions.

Eastern/Inner Sydney

- More likely to nominate addressing **energy and greenhouse** issues as the most important thing the NSW Government could do to look after and protect the environment over the next few years.
- More likely to be **concerned** about environmental problems.
- Less positive in their assessment of improvement in the last three years for: protection and conservation of endangered plants and animals; and protecting and conserving Aboriginal cultural heritage. But more positive about improvement in using alternatives to motor vehicles.
- More likely to think environmental regulations are *too lax* for farming and agriculture, forestry and recreational and commercial fishing, but more likely to think regulations are *too strict* for retailing.
- More likely to *often* take steps to reduce fuel consumption and vehicle air pollution.
- In the past 12 months, more likely to have tried to get information on an environmental topic or issue.
- In the past 12 months, more likely to have visited or spent time at a park or botanic gardens 'many times'.

Northern Beaches

- More likely to nominate **water pollution** as an important top-of-mind environmental issue.
- More likely to be **concerned** about environmental problems.
- More likely to *often* **avoid putting oil/fat/turps/paints/chemicals down the sink or toilet**.
- In the past 12 months, more likely to have **disposed of chemicals at a council drop-off centre or event**.

> In the past 12 months, more likely to have visited or spent time at a **beach or waterway** *many times*.

Northern Sydney

> More positive in their assessment of improvement in the last three years for **using alternatives to motor vehicles**.
> More likely to think environmental regulations are *too lax* for **property development and construction**.
> In the past 12 months, more likely to have **visited or spent time at a zoo or wild life park** *many times*.

Southern Sydney

> More likely to nominate **general pollution** as an important top-of-mind environmental issue.

South Western Sydney

> More likely to be unable to think of any important top-of-mind environmental issue.
> Lower proportion of people who are concerned 'a great deal' about environmental problems.
> Environmental knowledge is a little lower than in other regions.
> Less positive in their assessment of improvement in the last three years for: **reducing litter**.

Western Sydney

> Those who are concerned about environmental problems are more likely to nominate quality of life as the reason.
> More likely to think environmental regulations are *too lax* for **retailing**.

It is important to note that differences described here refer to a group being more (or less) likely than other groups to express a particular view or adopt a particular behaviour. However it does *not* necessarily mean this view is the most commonly held by that group. For example, women (22%) are more likely than men (15%) to believe that air quality has deteriorated (but the *most common* female view (47%) is that there is little or no change). Figures for results provided here can be found in the Segments Highlights boxes for each question through the report.

Central Coast

> In the past 12 months, more likely to have visited or spent time at a **beach or waterway** *many times*.

Illawarra

> In the past 12 months, more likely to have visited or spent time at a **beach or waterway** *many times*.

Hunter

> More likely to think environmental regulations are *too strict* for **recreational and commercial fishing**.
> More likely to think there is too much emphasis on **protecting and conserving historic things**.
> In the past 12 months, more likely to have **purchased an energy-efficient appliance**.
> In the past 12 months, more likely to have visited or spent time at a **beach or waterway** *many times*.

Richmond/Tweed

> More likely to nominate **mining** as an important top-of-mind environmental issue.
> More likely to *often* **compost or use a worm farm**.
> In the past 12 months, more likely to have **participated in a local development or environmental issue**.
> In the past 12 months, more likely to have visited or spent time at a **beach or waterway**, and **bushland or other natural areas** *many times*.

Mid North Coast

> More likely to nominate **mining** and **land degradation** as important top-of-mind environmental issues.
> Less positive in their assessment of improvement in the last three years for **coastal planning and conservation**.
> More likely to think environmental regulations are *too strict* for **forestry**.
> More likely to think there is too much emphasis on **protecting natural habitats**.
> More likely to *often* **compost or use a worm farm**.
> In the past 12 months, more likely to have visited or spent time at a **beach or waterway**, and **bushland or other natural areas** *many times*.

North/North West/Far Western

- More likely to nominate **mining** as an important top-of-mind environmental issue.
- More likely to nominate mining as the most important thing the NSW Government could do to look after and protect the environment over the next few years.
- More positive in their assessment of improvement in the last three years for **reducing clearing of native vegetation**.
- More likely to think environmental regulations are *too strict* for **farming and agriculture**, **mining** and **forestry**.
- More likely to think there is too much emphasis on **protecting natural habitats**, and less likely to think there is not enough emphasis

Central West/South Eastern

- More likely to nominate **energy/fuel** and **water supply/conservation/management/drought** as important top-of-mind environmental issues.
- On average, undertake **more 'everyday' environmental behaviours**.
- More likely to *often* **choose household products better for the environment**, **compost or use a worm farm**, and **reduce the amount of food thrown out**.
- In the past 12 months, more likely to have taken part in a **Landcare**, **Bushcare**, **tree planting or other restoration project**.
- In the past 12 months, more likely to have visited or spent time at any **bushland or other natural areas** *many times*.

Murrumbidgee/Murray

- The environment/environmental issues more likely to be considered a priority for the state government attention, both now and in ten years time. Water supply issues are the key driver.
- More likely to nominate **water supply/conservation/management/drought** as an important environmental issue. Water allocation is a key component.
- A relatively high proportion have little or no concern about environmental problems.
- More positive in their assessment of improvement in the last three years for **reducing clearing of native vegetation**.
- More likely to think environmental regulations are *too strict* for **farming and agriculture**, and **forestry**.
- More likely to *often* **compost or use a worm farm**.

Sydney vs. outside Sydney

A more general comparison of Sydney people compared with those outside Sydney shows:

- Sydney people are more likely to nominate **air pollution** or **pollution in general** as important top-of-mind environmental issues, while those outside Sydney are more likely to mention **water supply/conservation/management/drought**, and **mining**.
- People outside Sydney have slightly higher environmental knowledge (principally because of their better understanding concerning **bushfires** and **mammals**).
- People outside Sydney are also more positive in their assessment of environmental improvement for **protection and conservation of endangered plants and animals**, **protecting and conserving Aboriginal cultural heritage**, and **reducing clearing of native vegetation**. On the other hand, Sydney people are more positive about improvements in **using alternatives to motor vehicles**.
- People outside Sydney are more inclined to think regulations are *too strict* for **farming and agriculture**, **forestry**, **property development and construction**, and **recreational and commercial fishing**. They are also a little more likely to think there is too much emphasis on **protecting natural habitats**. Sydney people are more likely to think regulations are *too lax* for **property development and construction**, and **recreational and commercial fishing**.
- People outside Sydney undertake more 'everyday' environmentally friendly behaviours. Although both groups undertake the same average number of 'occasional' behaviours, people outside Sydney are more likely to have taken part in a **Landcare**, **Bushcare**, **tree planting or other restoration project**, or **bought an energy-efficient appliance**.
- People outside Sydney are also more likely to have visited or spent time at a **beach or waterway**, and **bushland or other natural area** *many times* in the past 12 months.

Settlement type

The key additional information settlement type adds to the above observations is that people who live in rural areas outside any town: undertake the highest average number of 'everyday' environmental behaviours; have the highest participation in **Landcare**, **Bushcare**, **tree planting or other restoration projects**; and are more likely to say that State Government environmental support and funding should occur at the **local** level.

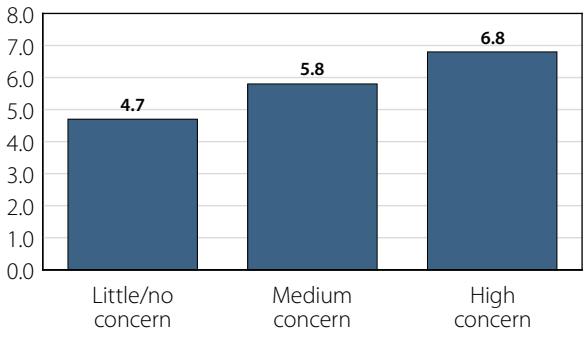
Environmental concern

There is a clear relationship between concern with environmental problems and most other issues covered by the survey:

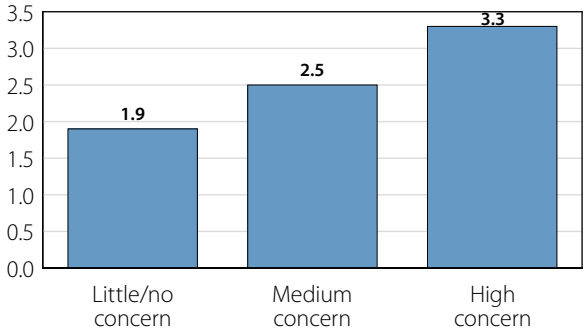
- Environmental knowledge and engagement with both 'everyday' and 'occasional' environmental behaviours increases with concern. People with high concern are also more likely to have visited or spent time, on many occasions in the past 12 months, at a **beach or waterway**; **bushland or other natural area**, or at a **park or botanic gardens**.
- In relation to important top-of-mind environmental issues, those with high concern are more likely than others to nominate **mining**, **energy/fuel**, and **forest/bushland/biodiversity issues**. When it comes to the most important thing the NSW Government could do to protect and look after the environment over the next few years, people with high concern are more likely to nominate **mining**, **energy and greenhouse**, along with **development**, **population and planning**.
- At one level or another, people with high concern are less positive in their assessment of improvement or deterioration on most of the 18 issues surveyed. This is most marked in relation to **protecting and conserving endangered plants and animals**, **reducing clearing of native vegetation**, and **greenhouse emissions**.
- Connected with this, they are also more inclined to think there is too little emphasis in NSW on **protecting natural habitats** and **protecting and conserving historic things**.
- People with high concern are more critical of environmental regulations, and are more likely than others to think regulations are *too lax* for each of the nine sectors surveyed.

Figure 46: Key patterns by level of concern about environmental problems

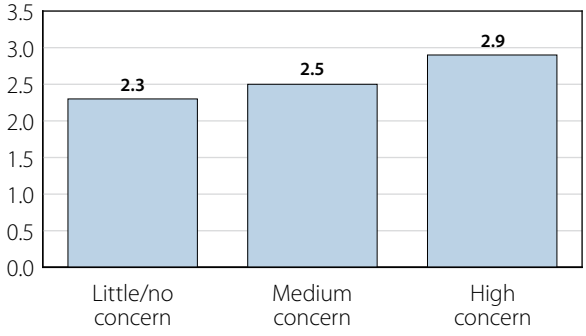
Average no. of 'everyday' environmental activities



Average no. of 'occasional' environmental activities



Average no. of knowledge questions correct



2012 Survey questionnaire

Note: questions are listed below in the order they were asked during the survey. As all questions retain their original question number through the *Who Cares?* series, they are not necessarily in numerical order.

Q1a What would you say are the two most important issues for attention by the State government at present? (Unprompted)

Q1b Now thinking ahead about ten years, what do you think will be the two most important issues for attention by the State government at that time? **(Unprompted)**

Q2a What would you say is the single most important environmental issue in NSW today? (Unprompted)

Q2b And what would you say is the second most important environmental issue in NSW today? (Unprompted)

Q3a In general, are you concerned about environmental problems? Yes/No

Q3b(i) [If yes] Would you say you are concerned a great deal, a fair amount, or a little?

Q3b(ii) [If Q3a=No] For what particular reasons would you say you are not concerned about environmental problems? (Unprompted)

Q3c [If Q3a=yes] Regarding your concern about environmental problems, which of the following best describes what you are concerned about?

1. Health effects of pollution
2. Quality of life
3. Concern for future generations
4. Long-term economic sustainability
5. Maintaining eco-systems – nature, plants and animals
6. Availability of resources we consumer or use
7. Other [Do not read out].

Q10 I'll now read out a list of different environmental issues or situations. For each one, can you tell me if you think that, over the last three years, things in NSW generally have become much better, a bit better, a bit worse, much worse or there has been little or no change?

a. Reducing greenhouse gas emissions
b. Protection and conservation of endangered plants and animals
c. Cleanliness of beaches and the ocean
d. Reducing the amount of waste the community produces
e. Quality of the air
f. Water quality in rivers, lakes and creeks
g. Reducing water consumption
h. Prosecuting environmental offenders
i. Using alternatives to motor vehicles such as public transport, cycling or walking instead of driving
j. Reducing electricity use
k. Ensuring there is enough water flowing in rivers to maintain healthy rivers, streams and wetlands
l. Coastal planning and conservation
m. Reducing clearing of native vegetation
n. Protecting and conserving Aboriginal cultural heritage
o. Reducing the amount of litter
p. Conserving the marine environment
q. Community participation in environmental management and decision making
r. Preparing for rising sea levels.

Q11 Please tell me whether you think each of the following statements is true or false.

1. The greenhouse effect is caused by a hole in the Earth's atmosphere (f)
2. Recycling paper, cardboard and glass saves on materials but doesn't help with saving water, energy and fuel (f)
3. Industrial sites and sewerage treatment plants cause more pollution of our waterways and beaches than general rainfall runoff such as urban stormwater and farm runoff (f)
4. More mammals have become extinct in recorded history in Australia than in any other country (t)
5. Bushfires always cause long term damage to Australian ecosystems (f)

Q12a Doing the right thing for the environment may not always be easy for people in today's busy world. Different people find they can do different things and, perhaps for people in some situations, there may not be a lot they can really do. From this next list of things I'll read out, can you please tell me, for each one, whether in the past 12 months you have often done that, sometimes done it, just occasionally done it, or never done that?

a. Chosen household products that you think are better for the environment
b. Decided for environmental reasons to re-use something instead of throwing it away
c. Made an effort for environmental reasons to reduce water consumption
d. Taken active steps to reduce energy consumption, for example, turning off lights or using appliances or home heating and cooling more efficiently
e. Taken active steps to reduce fuel consumption and vehicle air pollution, for example by driving a smaller or more fuel efficient car, car-pooling, using public transport, bicycling or walking
f. Composted food or garden refuse, or used a worm farm
g. Avoided plastic bags to carry shopping home
h. Reduced the amount of food that your household throws out
i. For environmental reasons, bought fewer items that you don't really need
j. Avoided putting things like oil, fat, turps, paints or chemicals down the sink or toilet.

Q12b You mentioned that you often or sometimes (one randomly chosen 'often' or 'sometimes' response from Question 12a). Can you please tell me what prompted you to start doing that? (Unprompted)

Q12c You mentioned that you never or only occasionally (one randomly chosen 'never' or 'only occasionally' response from Q12a). Is there any particular reason you don't do that more often, or find it difficult to do? (Unprompted)

Q12d From this next list of things I'll read out, please tell me whether or not you have done it in the past 12 months. (yes/no)

1. Participated in local development or environmental issues with the aim of protecting or improving the environment, for example by writing a letter, attending a meeting, making a report or complaint or being on a committee.
2. Tried to get information on an environmental topic or issue
3. Purchased an energy-efficient appliance
4. Taken part in a Landcare, Bushcare, tree planting or other restoration project
5. Tried to encourage someone else to change an activity or practice that you thought was harmful to the environment
6. Disposed of household chemicals at a special council drop-off centre or clean-out event.

Q12e You mentioned that in the past 12 months you (one randomly chosen 'yes' response from Q12d). Can you tell me why you did that? (Unprompted)

Q60 Thinking about any of the things you may do connected with the environment, for example, recycling, reducing water consumption, choosing environmentally friendly products and so on. Where would you put yourself on a scale from 0 to 10, where 10 means you strongly believe what you personally do makes a difference to the environment, and 0 means what you personally do makes no difference at all?

Q61 Now for something different. In the past 12 months, how often, if ever, have you visited or spent time at each of the following sorts of places? Would it be many times, a few times, once or twice, or not at all in the past 12 months?

a. Any beaches or waterways including rivers and lakes
b. Any suburban or town parks, or botanic gardens
c. Any zoos or wild life parks
d. Any bushland or other natural areas, for example in national parks, reserves or on private property.

Q62 [If visited any in Q61] When you visited any of these places in the past 12 months, did you take part in any organised nature education activity, such as a guided walk, talk, wildlife show or eco-tour? (yes/no)

Q17 The NSW government is responsible for enforcing rules which are intended to protect or improve the environment. I'll now read out a number of different groups in NSW and I'd like you to tell me if you feel that the environmental regulations that apply to these groups are much too strict, a bit too strict, about right, a bit too lax, or much too lax.

a. Farming and agriculture
b. The manufacturing industry
c. Individuals and households
d. The mining industry
e. The forestry industry
f. The retailing industry
g. The property development and construction industry
h. Recreational and commercial fishing
i. The tourism industry.

Q21 What would you say is the single most important thing that the NSW Government could do to protect and look after the environment over the next few years? (Unprompted)

Q63 In supporting and funding action to look after the environment, at what level do you think the State Government should focus most effort? (Local, regional, state, national, international).

Q64 Now a question about protecting natural habitats for native plants and animals in NSW. There are various competing needs for the use of land in NSW. Sometimes decisions have to be made to either protect areas for natural habitats, or, to use the land for other needs. Overall, do you think there is…?

1. Too much emphasis on protecting natural habitats
2. Not enough emphasis on protecting natural habitats
3. Or, do you think the balance is about right in NSW
4. Don't know [Do not read out]

Q65 And now thinking about population growth and development, and protecting and conserving historic buildings, places and items in NSW. Overall, do you think there is…?

1. Too much emphasis on protecting and conserving these historic things
2. Not enough emphasis on protecting and conserving these historic things
3. Or, do you think the balance is about right in NSW
4. Don't know [Do not read out]

Demographics

Q24 Main language spoken at home

Q24a Any other language spoken at home

Q25 Highest level of education completed

Q26 Employment status

Q32 Dwelling type

Q34 Location

Q36a Parental status

Q29 Household income

Z3 Consent to participate in further research

STOP