

# ENVIRONMENTAL ISSUES

PEOPLE'S  
VIEWS AND  
PRACTICES

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- For more information about these and related statistics, contact Jeannette Heycox on Canberra 02 6252 7889, or refer to the back cover of this publication.

## NOTES

### ABOUT THIS PUBLICATION

This publication is the fourth of its type and provides data on environmental behaviour and practices of Australian households and individuals collected in 1998. The topics covered include environmental attitudes and concerns, environmental involvement, information sources, environmentally friendly products, packaging, fertiliser and pesticide use, water sources and issues, and use of World Heritage Areas, National and State Parks.

### ABOUT THE SURVEY

The data in this publication is derived from two Australian Bureau of Statistics (ABS) surveys: a supplement to the Monthly Labour Force Population Survey, and the Population Survey Monitor (PSM). Please refer to the Explanatory Notes at the back of this publication for further details on these surveys.

### DATA COMPARABILITY

A core set of data has been collected in 1992, 1994, 1996 and 1998, and will be collected on an annual basis. This core data appears in chapter 1. A set of changing topics rotate over a period of 3 years. The topics contained in this publication compare with data collected in May 1992 and June 1994. Where applicable the data has been included in this publication for comparison purposes.

### SYMBOLS AND OTHER USAGES

ABS	Australian Bureau of Statistics
n.a.	not available
PSM	Population Survey Monitor
RSE	Relative standard error
SE	Standard error
*	subject to sampling variability too high for most practical purposes (i.e. relative standard error greater than 25%)
—	nil or rounded to zero
..	not applicable

### ROUNDING

Where figures have been rounded, discrepancies may occur between sums of the component items and totals. Published percentages are calculated prior to rounding of the figures and therefore some discrepancy may occur between these percentages and those that could be calculated from the rounded figures.

W. McLennan  
Australian Statistician

CHAPTER **1**

**ENVIRONMENTAL VIEWS, CONCERNS AND ISSUES.....**

MAIN FINDINGS

- The most important social issue in 1998 was health (29% of people), followed by crime (24%) and education and unemployment (both with 16%). Environmental problems were an issue to 9% of respondents, the same proportion as in 1996. In 1996 crime was the most important social issue (26% of respondents).
- The survey revealed that the people who were most likely to nominate environmental problems as the most important social issue were aged between 25 and 34 years.
- Most people (46%) reported that they felt that over the last 10 years the quality of the environment had declined (compared to 44% of people in 1996). There were 26% of people who believed the quality of the environment had stayed the same, and 24% stated they thought it had improved over the last 10 years.
- In 1998, 71% of people reported having environmental concerns, compared with 68% in 1996 and 75% in 1992.
- Air pollution continues to be the environmental problem of greatest concern for Australians, with 32% of people reporting this as their major concern. This compares with 31% of people in 1996, 34% in 1994, and 40% in 1992.

## ENVIRONMENT AND SOCIAL/ECONOMIC CONCERNS

In 1998 Australians considered the most important social issue to be health (29%), followed by crime (with 24%) and education and unemployment (both with 16%). Crime was a primary concern in Western Australia (35%), where more than a third of respondents nominated it as their major social issue. Other States where crime was a major issue were the Northern Territory (27%) and Queensland (27%). Environmental problems were an issue for 9% of survey respondents, and rated highest for people in the Australian Capital Territory (11%) and lowest for those in Tasmania (7.5%).

## 1.1 MOST IMPORTANT SOCIAL ISSUES, By States and Territories

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
1998									
<b>Number ('000)</b>									
Crime	1 191.1	542.9	657.0	226.1	450.8	66.3	24.6	36.9	3 195.7
Education	720.5	576.2	390.2	187.1	225.4	46.7	20.2	41.7	2 207.9
Environmental problems	409.1	304.1	193.4	92.3	103.3	25.2	8.3	23.9	1 159.7
Health	1 291.9	1 148.1	654.4	315.4	286.4	100.0	19.6	58.4	3 874.2
Interest rates	133.6	125.4	84.8	38.2	31.6	5.4	5.5	7.7	432.2
Unemployment	655.1	615.1	435.4	204.3	149.4	87.0	10.6	43.5	2 200.4
Can't decide/don't know	177.4	76.9	50.3	27.3	30.2	7.5	*1.7	4.7	375.7
<b>All issues</b>	<b>4 578.7</b>	<b>3 388.6</b>	<b>2 465.5</b>	<b>1 090.6</b>	<b>1 277.1</b>	<b>338.1</b>	<b>90.4</b>	<b>216.8</b>	<b>13 445.7</b>
<b>Proportion (%)</b>									
Crime	26.0	16.0	26.6	20.7	35.3	19.6	27.2	17.0	23.8
Education	15.7	17.0	15.8	17.2	17.6	13.8	22.3	19.2	16.4
Environmental problems	8.9	9.0	7.8	8.5	8.1	7.5	9.2	11.0	8.6
Health	28.2	33.9	26.5	28.9	22.4	29.6	21.6	26.9	28.8
Interest rates	2.9	3.7	3.4	3.5	2.5	1.6	6.1	3.5	3.2
Unemployment	14.3	18.2	17.7	18.7	11.7	25.7	11.8	20.1	16.4
Can't decide/don't know	3.9	2.3	2.0	2.5	2.4	2.2	*1.8	2.2	2.8
APRIL 1996									
<b>Proportion (%)</b>									
Crime	26.8	19.1	29.1	22.1	39.3	26.6	28.7	17.7	26.0
Defence	0.4	0.6	0.9	1.0	0.7	*0.6	*0.4	*1.3	0.6
Education	14.2	15.6	14.3	15.2	12.7	12.7	18.9	16.3	14.5
Environmental problems	8.9	9.4	7.5	10.0	9.3	7.6	*6.0	10.3	8.9
Health	23.7	26.0	18.7	25.2	16.2	22.9	19.0	18.9	22.7
Immigration	3.2	2.1	2.4	1.1	2.5	*0.8	*0.3	*2.3	2.5
Interest rates	3.6	4.9	5.9	3.3	4.2	3.9	*5.5	5.7	4.4
Poverty	3.3	4.5	3.3	3.3	3.7	4.4	*3.3	6.0	3.7
Trade balance	1.1	1.3	1.6	1.4	1.1	*0.6	*2.0	*2.1	1.3
Unemployment	13.2	15.3	14.8	15.8	9.1	18.0	11.9	18.7	14.0
Other	1.5	1.3	1.5	1.6	1.2	*1.9	*3.9	*0.7	1.4

Health as a social issue was highest for older people, with more than half of those aged 65 and over selecting it as their major social issue (53%). Conversely, people aged between 35 and 44 were the age group least concerned with health (20%). The 25–34 years age group rated highest for environmental problems (13%), while unemployment was highest for those aged 18–24 and 45–54.

**1.2 MOST IMPORTANT SOCIAL ISSUES, By Age**

	AGE GROUP (YEARS).....						
	18-24	25-34	35-44	45-54	55-64	65 and over	Total
	%	%	%	%	%	%	%
<b>1998</b>							
Crime	22.5	22.8	25.1	24.4	25.7	22.0	23.8
Education	18.2	21.1	25.1	14.3	6.3	6.6	16.4
Environmental problems	11.0	12.5	8.9	7.1	7.1	3.7	8.6
Health	22.4	21.6	19.7	26.7	38.3	52.5	28.8
Interest rates	2.8	5.2	3.0	3.0	2.8	1.7	3.2
Unemployment	21.4	15.0	16.0	21.4	16.6	8.1	16.4
Can't decide/don't know	1.8	1.7	2.2	3.0	3.2	5.4	2.8
<b>APRIL 1996</b>							
Crime	22.1	26.4	24.4	26.6	29.7	27.6	26.0
Defence	1.2	0.4	*0.2	0.6	0.7	1.0	0.6
Education	16.6	17.3	21.5	12.8	7.7	6.2	14.5
Environmental problems	12.7	10.8	9.2	7.6	6.1	5.5	8.9
Health	14.2	16.9	15.9	22.5	31.9	41.6	22.7
Immigration	3.3	2.2	2.2	2.7	1.8	2.6	2.5
Interest rates	3.4	7.4	5.1	4.5	2.6	1.6	4.4
Poverty	2.9	4.0	4.0	4.1	4.3	2.8	3.7
Trade balance	0.9	1.4	1.2	1.7	1.3	0.9	1.3
Unemployment	22.1	11.8	14.1	15.6	12.8	8.4	14.0
Other	0.6	1.3	2.1	1.4	1.0	1.8	1.4

**ENVIRONMENTAL CONCERNS**

Around 71% of Australians stated that they were concerned about environmental problems in 1998, a slight rise from a survey conducted in April 1996, but less than the 75% who expressed concern when this survey was first conducted in May 1992. People in the Australian Capital Territory indicated the highest level of concern (76%), while the lowest was recorded in Tasmania (65%). This has remained fairly consistent over the four surveys since 1992.

## 1.3 PERSONS CONCERNED ABOUT ENVIRONMENTAL PROBLEMS, By States and Territories

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
1998									
<b>Number ('000)</b>									
Yes	3 340.4	2 395.3	1 663.1	790.9	926.3	218.3	63.6	164.8	9 562.7
No	1 102.9	952.3	769.4	276.1	329.3	115.7	25.9	50.0	3 621.9
Don't know	135.3	40.6	33.0	23.6	21.5	*4.1	*1.0	*2.0	261.2
<b>Total</b>	<b>4 578.7</b>	<b>3 388.7</b>	<b>2 465.5</b>	<b>1 090.6</b>	<b>1 277.1</b>	<b>338.1</b>	<b>90.4</b>	<b>216.8</b>	<b>13 445.7</b>
<b>Proportion (%)</b>									
Yes	73.0	70.7	67.5	72.5	72.5	64.6	70.3	76.0	71.1
No	24.1	28.1	31.2	25.3	25.8	34.2	28.6	23.1	26.9
Don't know	3.0	1.2	1.3	2.2	1.7	*1.2	*1.1	*0.9	1.9
APRIL 1996									
<b>Proportion (%)</b>									
Yes	66.5	70.5	66.8	72.6	70.8	58.1	66.1	75.1	68.4
No	31.0	27.7	32.0	25.8	28.4	41.0	33.9	24.3	29.8
Don't know	2.5	1.8	1.3	1.6	0.8	*0.8	—	*0.6	1.8
JUNE 1994									
<b>Proportion (%)</b>									
Yes	69.2	67.2	68.5	73.0	70.1	61.3	77.2	74.2	68.9
No	27.8	30.5	29.1	25.6	27.1	37.0	25.3	24.9	28.6
Don't know	2.9	2.2	2.4	1.5	2.8	1.7	2.5	*0.9	2.5
MAY 1992									
<b>Proportion (%)</b>									
Yes	73.6	75.2	74.0	77.0	76.0	70.7	79.6	83.5	74.8
No	24.1	22.2	24.0	21.4	21.8	28.2	17.7	14.4	23.0
Don't know	2.3	2.6	1.9	1.5	2.2	1.1	2.7	2.1	2.2

Air pollution remains the environmental problem of greatest concern (32%), followed closely by freshwater pollution (27%) and ocean or sea pollution (24%). The threat of overpopulation is of least concern as an environmental issue (3.7%).

New South Wales rated highest for air pollution (38%) and Tasmania the lowest (24%). The concern most frequently nominated in the Australian Capital Territory (34%), South Australia (31%) and Tasmania (26%) was freshwater pollution, and in the Northern Territory (26%) was ocean/sea pollution.

## 1.4 ENVIRONMENTAL CONCERNS, By States and Territories

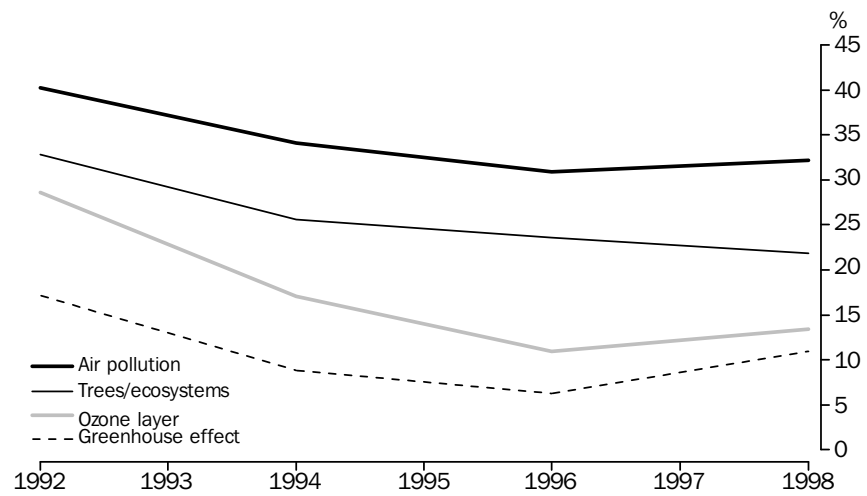
	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
1998(a)									
<b>Number ('000)</b>									
Air pollution	1 745.1	1 089.3	612.1	273.0	446.7	81.7	22.4	65.8	4 336.0
Freshwater pollution	1 575.6	716.2	544.7	338.1	315.3	87.2	19.8	72.6	3 669.5
Ocean/sea pollution	1 207.2	702.3	562.9	300.0	281.4	79.1	23.1	49.5	3 205.2
Destruction of trees/ecosystems	947.3	762.9	536.6	208.8	334.7	70.3	22.1	47.4	2 930.2
Garbage/rubbish disposal	705.1	544.8	289.2	170.6	155.2	46.1	14.8	31.0	1 956.8
Ozone layer	673.4	525.6	248.2	138.6	139.2	34.1	12.3	25.7	1 797.1
Toxic chemicals/hazardous waste	531.3	462.3	252.4	127.6	102.2	21.3	9.9	18.8	1 525.8
Greenhouse effect	641.2	381.6	196.9	94.8	87.6	25.8	9.9	28.0	1 465.8
Soil erosion/salinity	468.5	352.8	158.4	114.2	148.9	29.0	12.0	36.4	1 320.2
Destruction of animals/wildlife	583.0	302.3	182.1	92.4	84.4	23.3	8.7	18.6	1 294.9
Conservation/preservation of resources	387.1	250.3	148.4	79.2	72.5	16.5	7.1	17.7	978.6
Nuclear testing/weapons	444.0	239.9	130.8	44.3	59.5	15.4	5.9	7.4	947.1
Use of pesticides	298.7	200.7	139.5	68.2	65.5	14.3	6.5	9.6	803.0
Uranium mining/radioactive materials	351.2	220.0	80.4	48.9	57.1	10.8	11.0	10.7	790.2
Irresponsible urban development	337.5	173.5	135.1	34.5	48.9	10.3	6.5	9.3	755.5
Other pollution	295.0	134.7	105.5	17.9	47.7	9.8	2.1	4.8	617.2
Other	199.1	70.6	93.4	45.3	75.6	15.6	*1.4	11.6	512.6
Overpopulation	261.0	107.2	68.6	13.9	29.8	7.0	4.5	8.0	499.9
No concerns	1 102.9	952.7	769.4	276.1	329.3	115.7	25.9	50.0	3 621.8
Don't know	175.4	76.7	52.7	31.2	28.8	5.1	*1.0	4.5	375.5
<b>Total</b>	<b>4 578.4</b>	<b>3 388.6</b>	<b>2 465.5</b>	<b>1 090.6</b>	<b>1 277.1</b>	<b>338.1</b>	<b>90.4</b>	<b>216.8</b>	<b>13 445.7</b>
<b>Proportion (%)</b>									
Air pollution	38.1	32.1	24.8	25.0	35.0	24.2	24.8	30.3	32.2
Freshwater pollution	34.4	21.1	22.1	31.0	24.7	25.8	21.9	33.5	27.3
Ocean/sea pollution	26.4	20.7	22.8	27.5	22.0	23.4	25.5	22.8	23.8
Destruction of trees/ecosystems	20.7	22.5	21.8	19.1	26.2	20.8	24.4	21.9	21.8
Garbage/rubbish disposal	15.4	16.1	11.7	15.6	12.2	13.6	16.4	14.3	14.6
Ozone layer	14.7	15.5	10.1	12.7	10.9	10.1	13.6	11.9	13.4
Toxic chemicals/hazardous waste	11.6	13.6	10.2	11.7	8.0	6.3	10.9	8.7	11.3
Greenhouse effect	14.0	11.3	8.0	8.7	6.9	7.6	11.0	12.9	10.9
Soil erosion/salinity	10.2	10.4	6.4	10.5	11.7	8.6	13.3	16.8	9.8
Destruction of animals/wildlife	12.7	8.9	7.4	8.5	6.6	6.9	9.7	8.6	9.6
Conservation/preservation of resources	8.5	7.4	6.0	7.3	5.7	4.9	7.8	8.2	7.3
Nuclear testing/weapons	9.7	7.1	5.3	4.1	4.7	4.6	6.5	3.4	7.0
Use of pesticides	6.5	5.9	5.7	6.3	5.1	4.2	7.1	4.5	6.0
Uranium mining/radioactive materials	7.7	6.5	3.3	4.5	4.5	3.2	12.2	4.9	5.9
Irresponsible urban development	7.4	5.1	5.5	3.2	3.8	3.0	7.2	4.3	5.6
Other pollution	6.4	4.0	4.3	1.6	3.7	2.9	2.3	2.2	4.6
Other	4.3	2.1	3.8	4.2	5.9	4.6	*1.6	5.4	3.8
Overpopulation	5.7	3.2	2.8	1.3	2.3	2.1	5.0	3.7	3.7
No concerns	24.1	28.1	31.2	25.3	25.8	34.2	28.6	23.1	26.9
Don't know	3.8	2.3	2.1	2.9	2.3	1.5	*1.1	2.1	2.8

(a) Totals do not equal the sum of items in each column because more than one item may be specified.

1.4 ENVIRONMENTAL CONCERNS, By States and Territories *continued*

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
APRIL 1996									
<b>Proportion (%)</b>									
Air pollution	32.9	33.9	25.9	28.8	31.0	20.3	21.7	29.0	30.9
Freshwater pollution	24.7	21.3	23.0	31.4	21.2	21.4	18.1	29.1	23.7
Ocean pollution	24.9	21.7	24.8	25.1	23.0	21.3	18.3	25.0	23.8
Destruction of trees/ecosystems	21.5	23.5	25.2	23.4	26.1	23.9	30.0	33.8	23.6
Garbage/rubbish disposal	13.6	16.2	10.6	18.2	13.2	10.9	9.3	13.6	14.0
Ozone layer	9.6	13.4	9.4	11.2	11.5	9.1	14.2	11.0	10.9
Toxic/chemical waste	7.8	9.3	8.0	9.5	9.9	9.0	*7.2	8.5	8.6
Greenhouse effect	6.6	7.6	4.6	5.1	6.4	4.5	*6.1	10.4	6.3
Soil erosion/salinity/land degradation	7.2	8.5	6.1	7.0	10.2	7.0	*8.6	14.5	7.7
Destruction of animals/wildlife/extinction	9.4	8.8	9.8	8.1	8.2	5.8	12.6	13.6	9.1
Conservation of resources	7.0	6.1	5.7	5.7	6.7	6.2	*7.8	11.5	6.5
Nuclear testing/weapons	8.8	8.2	6.3	4.8	6.9	6.0	*7.6	9.0	7.6
Use of pesticides	5.1	3.7	4.0	3.0	3.2	5.7	*5.1	4.0	4.2
Uranium mining/use/radioactive materials	5.6	4.6	3.9	5.6	5.4	4.5	12.1	7.6	5.1
Urban development/overpopulation	6.8	5.0	7.0	3.5	5.3	3.1	*7.8	8.7	5.9
Other pollution	10.3	7.0	7.9	11.7	7.9	7.0	*8.6	8.7	8.8
Other	5.7	4.6	5.6	5.2	6.3	5.0	*7.7	8.1	5.5
No concerns	31.0	27.7	32.0	25.8	28.4	41.0	33.9	24.3	29.8
Don't know	2.5	1.8	1.3	1.6	0.8	*0.8	—	*0.6	1.8
JUNE 1994									
<b>Proportion (%)</b>									
Air pollution	39.5	34.1	29.2	31.1	29.5	27.0	33.4	27.7	34.1
Freshwater pollution	30.2	21.8	22.5	29.5	21.1	24.6	27.0	24.9	25.5
Ocean pollution	31.9	22.8	25.7	29.0	19.3	26.3	25.0	20.7	26.7
Destruction of trees/ecosystems	26.1	22.4	29.3	24.6	26.3	21.6	34.3	26.7	25.6
Garbage/rubbish disposal	16.1	16.0	14.7	18.9	13.5	12.4	13.4	16.7	15.7
Ozone layer	15.8	18.7	15.6	20.7	17.7	13.1	20.4	18.7	17.1
Toxic/chemical waste	12.0	12.2	13.3	12.0	9.5	10.2	8.9	5.9	11.9
Greenhouse effect	9.4	9.7	6.9	10.8	6.1	6.2	8.3	9.9	8.8
Soil erosion/salinity/land degradation	10.3	8.7	9.9	10.5	7.9	8.3	13.6	10.8	9.6
Destruction of animals/wildlife/extinction	15.8	11.2	14.9	10.8	10.4	9.9	20.3	11.6	13.3
Conservation of resources	8.6	8.4	9.4	7.3	6.7	9.3	12.9	8.5	8.5
Nuclear testing/weapons	7.8	7.1	6.4	5.1	4.3	5.9	8.0	2.6	6.7
Use of pesticides	8.2	6.4	7.9	5.4	4.7	5.4	9.5	4.0	7.0
Uranium mining/use/radioactive materials	3.7	3.9	3.8	3.2	3.0	2.9	5.9	1.9	3.6
Urban development/overpopulation	9.5	6.4	8.7	5.5	6.4	6.2	11.3	7.3	7.8
Other pollution	10.9	6.9	9.7	10.7	6.0	7.9	10.2	11.8	9.1
Other	5.5	4.8	7.0	5.5	6.5	4.1	3.0	9.1	5.7
No concerns	27.8	30.5	29.1	25.6	27.1	37.0	25.3	24.9	28.6
Don't know	2.9	2.2	2.4	1.5	2.8	*1.7	*2.5	*0.9	2.5
MAY 1992									
<b>Proportion (%)</b>									
Air pollution	42.3	43.4	36.9	35.8	34.7	34.0	41.4	44.0	40.2
Freshwater pollution	29.9	30.6	31.2	29.1	25.6	30.2	29.6	31.8	29.9
Ocean pollution	34.4	29.2	36.4	29.4	27.8	34.7	41.7	29.4	32.3
Destruction of trees/ecosystems	32.2	31.0	37.1	31.4	31.2	35.9	35.5	40.5	32.8
Garbage/rubbish disposal	24.6	22.9	21.7	21.5	19.3	24.5	31.3	22.0	22.9
Ozone layer	27.5	31.8	26.2	29.1	25.7	28.1	38.5	34.3	28.6
Toxic/chemical waste	21.5	23.0	21.4	18.5	17.6	22.0	31.2	18.3	21.3
Greenhouse effect	17.1	20.5	15.2	15.4	12.9	19.2	20.8	19.0	17.2
Soil erosion/salinity/land degradation	13.4	18.5	16.3	13.8	11.7	16.5	23.4	15.5	15.3
Destruction of animals/wildlife/extinction	19.3	20.6	21.3	17.1	13.2	20.0	29.4	19.8	19.3
Conservation of resources	14.9	16.8	15.5	13.3	10.7	16.6	19.4	15.2	15.0
Nuclear testing/weapons	14.5	17.9	14.5	11.8	8.9	15.9	22.5	8.3	14.6
Use of pesticides	12.8	16.1	15.6	10.6	8.4	17.0	27.6	8.1	13.7
Uranium mining/use/radioactive materials	8.4	9.9	8.3	7.7	5.9	10.5	11.8	3.9	8.5
Urban development/overpopulation	13.0	12.7	15.0	9.0	9.1	14.0	18.8	12.6	12.6
Other pollution	15.2	12.3	15.1	13.6	12.2	16.7	15.9	13.6	14.1
Other	5.3	5.2	6.5	7.5	5.9	5.6	10.5	5.2	5.8
No concerns	24.1	22.2	24.0	21.4	21.8	28.2	17.7	14.4	23.0
Don't know	2.3	2.6	1.9	1.5	2.2	1.1	*2.7	2.1	2.2



**1.5 SELECTED ENVIRONMENTAL CONCERNS**

People in non-metropolitan areas were more likely to have no concerns about the environment (29%) than people living in metropolitan areas (26%). Smaller proportions were concerned about all types of pollution: destruction of trees and ecosystems, garbage and rubbish disposal and the ozone layer. Air pollution was still the concern nominated by most people living in non-metropolitan areas. Issues which were of more concern to people living in non-metropolitan areas than those living in metropolitan areas included toxic chemicals and hazardous waste, soil erosion and salinity, and the use of pesticides.

## 1.6 ENVIRONMENTAL CONCERNS, By Area—1998

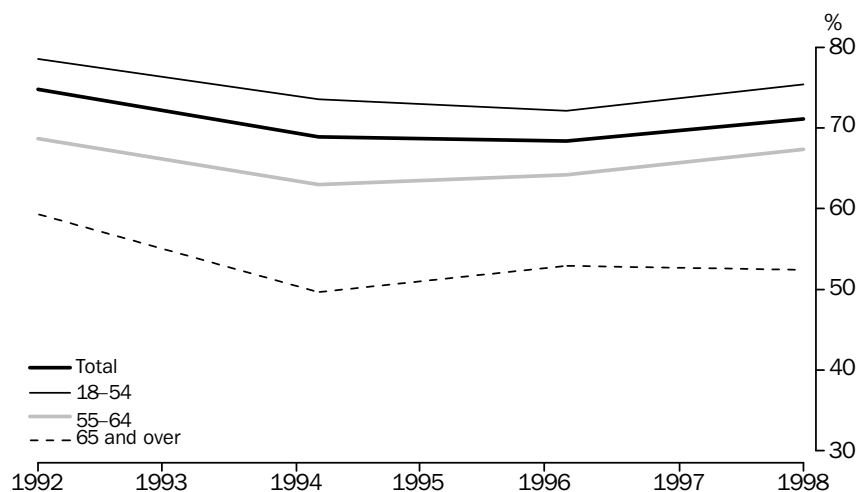
	Metropolitan areas	Non-metropolitan areas	Aust.
NUMBER			
	'000	'000	'000
Air pollution	3 195.2	1 140.8	4 336.0
Freshwater pollution	2 485.2	1 184.2	3 669.5
Ocean/sea pollution	2 131.2	1 074.0	3 205.2
Destruction of trees/ecosystems	1 894.4	1 035.8	2 930.2
Garbage/rubbish disposal	1 312.5	644.2	1 956.8
Ozone layer	1 164.9	632.3	1 797.1
Toxic chemicals/hazardous waste	941.7	584.0	1 525.8
Greenhouse effect	984.5	481.4	1 465.8
Soil erosion/salinity	735.2	585.0	1 320.2
Destruction of animals/wildlife	821.9	473.0	1 294.9
Conservation/preservation of resources	589.5	389.0	978.6
Nuclear testing/weapons	580.4	366.7	947.1
Use of pesticides	432.0	371.0	803.0
Uranium mining/radioactive materials	492.5	297.7	790.2
Irresponsible urban development	478.1	277.4	755.5
Other pollution	447.0	170.2	617.2
Other	322.6	190.0	512.6
Overpopulation	326.7	173.2	499.9
No concerns	2 233.4	1 388.5	3 621.8
Don't know	242.4	133.3	375.5
<b>Total</b>	<b>8 665.0</b>	<b>4 780.7</b>	<b>13 445.7</b>
PROPORTION			
	%	%	%
Air pollution	36.9	23.9	32.2
Freshwater pollution	28.7	24.8	27.3
Ocean/sea pollution	24.6	22.5	23.8
Destruction of trees/ecosystems	21.9	21.7	21.8
Garbage/rubbish disposal	15.1	13.5	14.6
Ozone layer	13.4	13.2	13.4
Toxic chemicals/hazardous waste	10.9	12.2	11.3
Greenhouse effect	11.4	10.1	10.9
Soil erosion/salinity	8.5	12.2	9.8
Destruction of animals/wildlife	9.5	9.9	9.6
Conservation/preservation of resources	6.8	8.1	7.3
Nuclear testing/weapons	6.7	7.7	7.0
Use of pesticides	5.0	7.8	6.0
Uranium mining/radioactive materials	5.7	6.2	5.9
Irresponsible urban development	5.5	5.8	5.6
Other pollution	5.2	3.6	4.6
Other	3.7	4.0	3.8
Overpopulation	3.8	3.6	3.7
No concerns	25.8	29.0	26.9
Don't know	2.8	2.8	2.8

The age groups under 44 years registered higher levels of concern for environmental problems than older age groups. There has been a slight rise in concern amongst the younger age groups, while the level of concern by older people has remained about the same since the last survey run in 1996.

**1.7 PERSONS CONCERNED ABOUT ENVIRONMENTAL PROBLEMS, By Age**

	AGE GROUP (YEARS).....						
	18-24	25-34	35-44	45-54	55-64	65 and over	Total
	%	%	%	%	%	%	%
1998							
Yes	74.1	76.0	77.4	73.9	67.4	52.4	71.1
No	24.7	22.8	21.0	24.4	30.6	43.3	26.9
Don't know	1.2	1.2	1.6	1.8	2.0	4.3	1.9
APRIL 1996							
Yes	72.7	72.1	73.2	70.9	64.2	52.9	68.4
No	25.4	26.1	25.4	27.8	33.9	44.7	29.8
Don't know	2.0	1.8	1.5	1.3	1.9	2.4	1.8
JUNE 1994							
Yes	73.6	73.4	75.8	71.6	63.0	49.7	68.9
No	24.6	24.2	22.4	26.8	34.1	45.6	28.6
Don't know	1.9	2.3	1.8	1.6	2.9	4.8	2.5
MAY 1992							
Yes	78.9	79.8	79.3	76.2	68.7	59.3	74.8
No	18.8	18.2	19.2	21.9	28.9	37.0	23.0
Don't know	2.3	2.1	1.5	1.8	2.4	3.7	2.2

In general, younger people had more concern for longer term environmental problems than those in the older age groups. Of people aged between 18 and 24 years, 20% were concerned about the ozone layer, compared with 5% of people aged 65 years and over. Similarly, 16% of 18-24 year olds were concerned about the greenhouse effect, compared with 5% of people aged 65 and over. People who had no concerns were highest for the older age groups, with 43% of those aged 65 and over having no environmental concerns compared with 21% of 35-44 year olds.

**1.8 CONCERN FOR ENVIRONMENT, By Age**

## 1.9 ENVIRONMENTAL CONCERNS, By Age

	AGE GROUP (YEARS).....						
	18-24	25-34	35-44	45-54	55-64	65 and over	Total
	%	%	%	%	%	%	%
.....							
	1998						
Air pollution	35.1	37.5	36.0	34.2	27.9	18.3	32.2
Freshwater pollution	26.4	29.6	31.4	28.3	26.7	18.4	27.3
Ocean/sea pollution	30.2	29.7	26.9	23.5	17.7	10.9	23.8
Destruction of trees/ecosystems	23.7	25.7	24.5	20.3	18.9	15.0	21.8
Garbage/rubbish disposal	13.8	20.0	17.4	14.0	9.3	8.5	14.6
Ozone layer	20.5	18.6	14.0	11.3	8.9	4.7	13.4
Toxic chemicals/hazardous waste	11.3	14.3	13.5	12.8	7.4	5.5	11.3
Greenhouse effect	15.8	12.9	12.9	10.5	6.9	4.6	10.9
Soil erosion/salinity	8.1	10.5	11.9	11.9	9.3	5.4	9.8
Destruction of animals/wildlife	13.0	11.6	11.3	9.2	6.4	4.5	9.6
Conservation/preservation of resources	8.8	9.7	7.2	7.8	4.9	4.0	7.3
Nuclear testing/weapons	9.6	8.7	7.6	7.3	4.5	3.3	7.0
Use of pesticides	5.2	7.0	7.5	6.5	5.5	2.9	6.0
Uranium mining/radioactive materials	7.6	9.0	6.1	5.7	3.5	1.8	5.9
Irresponsible urban development	4.0	5.7	7.7	6.1	5.4	3.7	5.6
Other pollution	4.7	5.4	5.1	5.4	3.8	2.4	4.6
Other	2.0	3.4	3.7	6.1	3.8	3.4	3.8
Overpopulation	3.8	4.3	3.8	4.2	3.4	2.2	3.7
Don't know	1.6	2.0	2.4	2.5	3.2	5.5	2.8
No concerns	24.7	22.8	21.0	24.4	30.6	43.3	26.9
.....							
	APRIL 1996						
Air pollution	31.3	32.3	35.1	34.0	27.7	21.6	30.9
Freshwater pollution	23.9	25.8	27.6	25.2	21.9	14.8	23.7
Ocean/sea pollution	29.1	27.6	28.4	23.6	17.7	11.8	23.8
Destruction of trees/ecosystems	28.8	26.3	23.6	24.5	20.7	15.9	23.6
Garbage/rubbish disposal	14.3	16.4	16.1	13.9	11.1	9.5	14.0
Ozone layer	17.2	13.9	11.8	9.9	5.6	4.4	10.9
Toxic chemicals/hazardous waste	8.9	9.1	10.7	10.2	6.1	4.9	8.6
Greenhouse effect	10.0	7.7	6.9	5.9	4.1	2.3	6.3
Soil erosion/salinity	5.5	8.0	9.3	9.9	7.0	5.3	7.7
Destruction of animals/wildlife	11.9	11.2	8.9	8.7	7.8	5.1	9.1
Conservation/preservation of resources	5.8	8.3	7.3	6.9	5.9	3.3	6.5
Nuclear testing/weapons	10.4	8.8	9.0	7.2	5.3	3.6	7.6
Use of pesticides	2.9	3.8	4.6	5.9	3.6	3.8	4.2
Uranium mining/radioactive materials	6.4	5.5	5.5	4.8	4.4	3.3	5.1
Urban development/overpopulation	4.9	5.8	6.4	7.2	5.9	4.9	5.9
Other pollution	10.6	8.2	10.3	9.7	8.3	5.1	8.8
Other	3.5	4.6	6.1	6.7	6.5	5.5	5.5
No concerns/Don't know	27.3	27.9	26.8	29.1	35.8	47.1	31.6
.....							

For many of the concerns surveyed, there were no great differences between the sexes. However, the most marked differences were that women were more likely to nominate garbage and rubbish disposal as a concern than men (17% against 12%), while men nominated soil erosion and salinity as a concern more frequently than women (12% compared with 8%).

## 1.10 ENVIRONMENTAL CONCERNS, By Sex

	<i>Males</i>	<i>Females</i>	<i>Total</i>
	%	%	%
1998			
Air pollution	32.1	32.4	32.2
Freshwater pollution	27.8	26.8	27.3
Ocean/sea pollution	25.0	22.7	23.8
Destruction of trees/ecosystems	22.2	21.4	21.8
Garbage/rubbish disposal	11.9	17.2	14.6
Ozone layer	12.7	14.0	13.4
Toxic chemicals/hazardous waste	11.9	10.8	11.3
Greenhouse effect	11.1	10.7	10.9
Soil erosion/salinity	11.6	8.0	9.8
Destruction of animals/wildlife	9.4	9.8	9.6
Conservation/preservation of resources	7.1	7.5	7.3
Nuclear testing/weapons	6.9	7.2	7.0
Use of pesticides	5.6	6.3	6.0
Uranium mining/radioactive materials	6.1	5.7	5.9
Irresponsible urban development	5.7	5.6	5.6
Other pollution	4.3	4.9	4.6
Other	3.9	3.8	3.8
Overpopulation	4.2	3.2	3.7
Don't know	2.1	3.5	2.8
No concerns	26.1	27.8	26.9
APRIL 1996			
Air pollution	28.9	32.8	30.9
Freshwater pollution	24.2	23.2	23.7
Ocean/sea pollution	24.1	23.5	23.8
Destruction of trees/ecosystems	23.3	23.8	23.6
Garbage/rubbish disposal	11.3	16.6	14.0
Ozone layer	9.2	12.5	10.9
Toxic chemicals/hazardous waste	8.2	9.0	8.6
Greenhouse effect	5.9	6.8	6.3
Soil erosion/salinity	8.7	6.7	7.7
Destruction of animals/wildlife	7.8	10.3	9.1
Conservation/preservation of resources	6.3	6.6	6.5
Nuclear testing/weapons	7.1	8.1	7.6
Use of pesticides	3.7	4.6	4.2
Uranium mining/radioactive materials	5.0	5.1	5.1
Urban development/overpopulation	6.1	5.7	5.9
Other pollution	9.1	8.6	8.8
Other	5.4	5.5	5.5
No concerns/Don't know	32.0	31.2	31.6

## PERCEIVED QUALITY OF THE ENVIRONMENT

The majority of people (46%) stated that they believed the quality of the environment had declined over the last 10 years, a slight increase from April 1996. Around a quarter (26%) thought that the environment had stayed much the same, while 24% stated that the condition of the environment had improved, a level virtually identical to April 1996. Western Australians had the highest proportion of people who believed the state of the environment had declined (51%), while Queenslanders rated highest for those who thought the environment had improved (26%). People in the Northern Territory were the most likely to think that the quality of the environment had stayed much the same in the last 10 years (30%).

## 1.11 QUALITY OF THE ENVIRONMENT IN THE LAST 10 YEARS, By States and Territories

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
1998									
<b>Number ('000)</b>									
Declined	2 103.5	1 511.3	1 104.7	488.8	649.5	143.6	43.8	104.5	6 149.7
Improved	1 079.6	839.7	631.0	251.7	231.9	83.5	16.9	48.8	3 183.1
Stayed much the same	1 177.8	886.5	623.8	306.3	334.1	97.7	27.2	56.7	3 510.1
Don't know/not interested	217.8	151.1	106.0	43.9	61.7	13.2	2.6	6.7	602.8
<b>Total</b>	<b>4 578.7</b>	<b>3 388.6</b>	<b>2 465.5</b>	<b>1 090.6</b>	<b>1 277.1</b>	<b>338.1</b>	<b>90.4</b>	<b>216.7</b>	<b>13 445.7</b>
<b>Proportion (%)</b>									
Declined	45.9	44.6	44.8	44.8	50.9	42.5	48.4	48.2	45.7
Improved	23.6	24.8	25.6	23.1	18.2	24.7	18.6	22.5	23.7
Stayed much the same	25.7	26.2	25.3	28.1	26.2	28.9	30.1	26.2	26.1
Don't know/not interested	4.8	4.5	4.3	4.0	4.8	3.9	2.8	3.1	4.5
APRIL 1996									
<b>Proportion (%)</b>									
Declined	43.4	41.7	45.2	46.7	49.5	38.4	41.6	47.1	44.1
Improved	23.7	24.4	22.7	21.5	18.1	30.1	21.8	23.8	23.1
Stayed much the same	25.6	27.5	25.9	26.4	25.7	28.1	30.8	25.9	26.3
Don't know	7.4	6.3	6.2	5.4	6.7	3.5	*5.8	*3.1	6.5

While all age groups believed that the quality of the environment had declined, people in the younger age groups rated higher for this category than older people. Of those aged 18–24 years, 54% believed the environment had declined, compared with 43% of those aged 65 years and more. People in the older age groups were also more likely to state that they believed that the condition of the environment had improved, compared to people in the younger age groups.

**1.12 QUALITY OF THE ENVIRONMENT IN THE LAST 10 YEARS, By Age**

	AGE GROUP (YEARS).....						
	18-24	25-34	35-44	45-54	55-64	65 and over	Total
	%	%	%	%	%	%	%
.....							
	1998						
Declined	53.5	45.0	45.9	44.5	44.1	42.5	45.7
Improved	17.2	20.8	25.3	29.5	26.2	22.3	23.7
Stayed much the same	26.2	28.9	25.5	22.9	26.2	26.7	26.1
Don't know/not interested	3.1	5.4	3.4	3.1	3.4	8.5	4.5
.....							
	APRIL 1996						
Declined	48.3	45.0	44.2	45.8	41.3	38.6	44.1
Improved	16.2	22.2	23.6	25.3	28.3	23.9	23.1
Stayed much the same	26.9	25.4	26.2	24.2	25.3	30.5	26.3
Don't know	8.5	7.4	6.0	4.7	5.2	7.0	6.5
.....							

## CHAPTER 2

## INFORMATION SOURCES AND ENVIRONMENTAL INVOLVEMENT .....

### MAIN FINDINGS

- The principle source of environmental information for people was from the TV or radio (70% of respondents). This was followed by newspapers (55%) and government or local council sources (27%).
- Of the people who had obtained information about the environment, around 64% stated that the information had influenced their behaviour or actions.
- Half of the people surveyed stated that they believed there was enough information available about the environment.
- In the 12 months to March 1998, 8% of respondents had formally registered a concern about an environmental problem, compared with 10% in the 12 months to May 1992. A higher proportion of people stated that they were not concerned about environmental problems in the March 1998 survey compared with the May 1992 survey (37% and 25% respectively).
- The most popular means to formally register an environmental concern was via a signed petition (38%), closely followed by use of a letter (35%). The least stated method was participation in a demonstration (6%). The youngest age groups (18–24) had the highest participation in demonstrations (11%), whereas those aged 65 years and over had the lowest participation in demonstrations (2%). Older age groups generally favoured the use of telephones and letters to register their concern.
- The majority of people who indicated they were concerned about environmental problems in March 1998 also stated that they were not members of an environmental protection group (95%). Of those who were a member of a group, the highest proportion were in non-specified environment groups (65%), followed by landcare or catchment management groups (35%), and marine conservation groups (10%). Landcare or catchment management groups generally had members in the older age brackets, while most people in marine groups were in the 18–24 age group. The main reasons stated for not becoming involved in environmental actions were having no time (45%), age/health preventing involvement (9.5%), and not interested in becoming involved (6%).
- In the 12 months to March 1998, 20% of people had donated either time or money towards helping protect the environment. This compares with 28% in the 12 months to May 1992.



## SOURCES OF INFORMATION

The principle source of environmental information for Australians was obtained from the media, with TV or radio the main source (70%), followed by newspapers (55%). Around a quarter of people stated that they had obtained information from the government or their local council (27%). Computer facilities, e.g. the Internet, are used by few people to obtain information (2%). The Australian Capital Territory rated highest for obtaining information from the TV or radio (82%), newspapers (68%), government or local council (31%), and computer facilities such as Internet (6%). People in the Australian Capital Territory were twice as likely to report use of computer facilities than people in all other States.

## 2.1 INFORMATION SOURCE, By States and Territories

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
1998(a)									
<b>Number ('000)</b>									
Newspapers	2 463.2	1 795.4	1 346.5	641.9	729.7	196.9	56.6	146.5	7 376.8
TV or radio	3 084.1	2 328.8	1 794.1	790.9	867.6	234.0	65.3	177.1	9 341.9
Government or local council	1 200.9	898.5	648.1	322.6	325.3	87.6	20.0	68.0	3 570.9
Library	165.9	83.2	77.1	30.4	18.3	8.2	4.3	9.3	396.6
School	143.4	103.9	72.8	49.2	41.3	13.3	3.9	4.6	432.3
Environmental interest group	251.6	232.5	123.8	55.2	70.5	27.0	5.0	17.2	782.6
Computer facilities e.g. Internet	126.8	67.3	49.8	27.6	30.1	8.9	2.9	12.4	325.6
Friends or relatives	218.9	200.0	107.1	54.5	62.4	23.0	6.9	15.9	688.1
Other	188.7	171.5	171.5	46.7	103.7	24.7	2.7	24.9	734.4
None of the above	1 005.9	627.1	432.4	181.7	241.2	69.8	16.7	27.0	2 601.8
<b>Total</b>	<b>4 578.7</b>	<b>3 388.6</b>	<b>2 465.5</b>	<b>1 090.6</b>	<b>1 277.1</b>	<b>338.1</b>	<b>90.4</b>	<b>216.7</b>	<b>13 445.7</b>
<b>Proportion (%)</b>									
Newspapers	53.8	53.0	54.6	58.9	57.1	58.2	62.6	67.6	54.9
TV or radio	67.4	68.7	72.8	72.5	67.9	69.2	72.2	81.7	69.5
Government or local council	26.2	26.5	26.3	29.6	25.5	25.9	22.1	31.4	26.6
Library	3.6	2.5	3.1	2.8	1.4	2.4	4.8	4.3	2.9
School	3.1	3.1	3.0	4.5	3.2	3.9	4.3	2.1	3.2
Environmental interest group	5.5	6.9	5.0	5.1	5.5	8.0	5.5	7.9	5.8
Computer facilities e.g. Internet	2.8	2.0	2.0	2.5	2.4	2.6	3.2	5.7	2.4
Friends or relatives	4.8	5.9	4.3	5.0	4.9	6.8	7.6	7.3	5.1
Other	4.1	5.1	7.0	4.3	8.1	7.3	3.0	11.5	5.5
None of the above	22.0	18.5	17.5	16.7	18.9	20.6	18.5	12.5	19.4
MAY 1992									
<b>Proportion (%)</b>									
Media, newspapers or TV	85.6	85.4	86.0	85.7	87.3	85.4	88.4	88.3	85.8
Government or local council	41.2	44.6	41.1	41.7	39.8	31.4	38.8	40.8	41.7
Library	6.6	5.8	7.6	8.5	8.5	6.3	13.0	14.1	7.1
School	15.2	18.6	18.8	21.0	17.9	15.8	23.3	23.6	17.7
Environmental interest group	16.2	16.8	21.6	21.0	24.1	21.0	18.0	31.5	18.8
From anywhere else	5.0	4.8	5.2	6.8	7.1	5.2	10.9	8.1	5.4
None of the above	10.1	10.3	10.6	9.6	8.9	12.1	8.9	7.3	10.1

(a) Totals do not equal the sum of items in each column because more than one source may be specified.

## INFLUENCE AND AVAILABILITY OF ENVIRONMENTAL INFORMATION

Of the people who stated that they had obtained information about the environment, almost two-thirds (64%) stated that their behaviour and actions towards the environment had been influenced by the information. People in the Australian Capital Territory (71%) were the most likely to report that their behaviour had been influenced. People in both Queensland (38%) and the Northern Territory (38%) were the most likely to report that their behaviour was not influenced by the information they obtained.

## 2.2 PERSONS WHO OBTAINED INFORMATION, Influenced Behaviour—By States and Territories

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
1998									
<b>Number ('000)</b>									
Yes	2 340.9	1 791.3	1 210.7	573.9	664.9	165.6	44.8	133.8	6 925.9
No	1 040.2	881.8	765.2	312.2	340.2	96.2	27.7	53.5	3 517.0
Don't know	191.7	88.4	57.2	22.8	30.8	6.6	*1.1	*2.4	401.0
<b>All information</b>	<b>3 572.8</b>	<b>2 761.5</b>	<b>2 033.1</b>	<b>908.9</b>	<b>1 035.9</b>	<b>268.3</b>	<b>73.7</b>	<b>189.7</b>	<b>10 843.9</b>
<b>Proportion (%)</b>									
Yes	65.5	64.9	59.6	63.1	64.2	61.7	60.9	70.5	63.9
No	29.1	31.9	37.6	34.3	32.8	35.8	37.6	28.2	32.4
Don't know	5.4	3.2	2.8	2.5	3.0	2.5	*1.5	*1.3	3.7
MAY 1992									
<b>Proportion (%)</b>									
Yes	61.2	63.1	62.3	62.7	65.1	51.6	59.7	63.5	62.2
No	35.6	34.3	35.8	35.2	33.2	46.6	40.0	33.5	35.3
Don't know	3.2	2.6	1.9	2.0	1.7	1.8	0.3	3.0	2.5

Half of the survey respondents stated that they believed there was sufficient information available on the environment (50%), while 40% thought that more information should be available. People in Western Australia rated highest for stating that not enough information was available on the environment (44%). The largest proportion of people who were satisfied with the levels of environmental information available lived in the Australian Capital Territory (55%).

## 2.3 ENOUGH ENVIRONMENTAL INFORMATION AVAILABLE, By States and Territories

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
1998									
<b>Number ('000)</b>									
Yes	2 270.2	1 653.6	1 304.4	545.9	597.7	179.3	48.5	118.8	6 718.4
No	1 761.5	1 341.6	961.6	437.7	564.3	124.1	35.3	81.9	5 307.9
Depends/Don't know	547.0	393.5	199.5	107.0	115.2	34.7	6.6	16.0	1 419.4
<b>Total</b>	<b>4 578.7</b>	<b>3 388.6</b>	<b>2 465.5</b>	<b>1 090.6</b>	<b>1 277.1</b>	<b>338.0</b>	<b>90.4</b>	<b>216.7</b>	<b>13 445.7</b>
<b>Proportion (%)</b>									
Yes	49.6	48.8	52.9	50.1	46.8	53.0	53.6	54.8	50.0
No	38.5	39.6	39.0	40.1	44.2	36.7	39.1	37.8	39.5
Depends/Don't know	11.9	11.6	8.1	9.8	9.0	10.3	7.3	7.4	10.6
MAY 1992									
<b>Proportion (%)</b>									
Yes	50.4	51.0	49.8	48.4	49.2	55.2	52.3	48.6	50.3
No	36.1	34.9	37.8	37.3	37.4	35.3	37.5	40.5	36.4
Depends/Don't know	13.5	14.0	12.4	14.3	13.4	9.6	10.2	11.0	13.3

INFLUENCE AND AVAILABILITY OF ENVIRONMENTAL INFORMATION *continued*

People in the younger age groups were more likely to obtain environmental information from libraries than those in the older age groups. Of 18–24 year olds, 15% used a library for information, compared with 0.7% of those aged 55–64 years. People aged between 18 and 54 were also more likely to use computer facilities such as the Internet than people aged over 55. Newspapers, TV or radio, government or local council, and environmental interest groups rated more highly as a source of environmental information for the 45–54 year age group, than for any other age group. This age group was the most likely to have accessed environmental information from some source.

**2.4 INFORMATION SOURCE, By Age**

	AGE GROUP (YEARS).....						
	18-24	25-34	35-44	45-54	55-64	65 and over	Total
	%	%	%	%	%	%	%
.....							
	1998(a)						
Newspapers	49.5	53.4	60.7	61.2	55.9	45.2	54.9
TV or radio	68.7	71.7	71.1	72.6	68.5	61.9	69.5
Government or local council	13.7	29.1	31.4	36.0	26.2	16.7	26.6
Library	5.2	2.3	3.8	3.5	*0.7	1.7	2.9
School	7.1	3.6	4.6	2.3	*0.7	*0.2	3.2
Environmental interest group	6.6	6.2	6.7	6.8	5.0	2.9	5.8
Computer facilities e.g. Internet	3.2	3.1	3.3	3.3	*0.6	*0.1	2.4
Friends or relatives	6.0	6.1	5.5	5.2	4.0	3.2	5.1
Other	4.5	6.5	7.9	6.6	3.9	1.4	5.5
None of the above	20.4	17.7	16.9	14.9	18.8	30.0	19.4
.....							
	MAY 1992						
Media, newspapers or TV	87.1	89.2	90.0	85.0	82.9	76.5	85.8
Government or local council	32.7	43.4	50.4	45.5	40.9	32.4	41.7
Library	9.7	5.9	9.8	6.8	4.6	4.6	7.1
School	17.4	20.4	34.1	15.3	5.3	2.5	17.7
Environmental interest group	22.7	22.0	24.0	18.3	12.2	8.1	18.8
From anywhere else	6.5	6.4	6.7	5.6	3.1	2.4	5.4
None of the above	9.1	6.8	6.1	10.5	13.3	18.7	10.1
.....							

(a) Totals do not equal the sum of items in each column because more than one source may be specified.

In general, people in the younger age groups reported in larger proportions than older age groups that their behaviour had been influenced by the environmental information they had accessed. Of 25–34 year olds, 69% stated they were influenced by the information, while 48% of people aged 65 years and over stated that the information they obtained had not influenced their behaviour.

**2.5 PERSONS WHO OBTAINED INFORMATION, Influenced Behaviour—By Age**

	AGE GROUP (YEARS).....						
	18–24	25–34	35–44	45–54	55–64	65 and over	Total
	%	%	%	%	%	%	%
.....							
	1998						
Yes	67.1	69.4	68.4	67.8	57.1	44.3	63.9
No	29.8	26.8	29.2	29.1	39.3	48.4	32.4
Don't know	3.1	3.8	2.4	3.1	3.6	7.3	3.7
.....							
	MAY 1992						
Yes	68.2	68.1	64.3	61.9	53.5	48.7	62.2
No	30.0	29.5	33.6	35.7	43.7	47.3	35.3
Don't know	1.7	2.4	2.1	2.4	2.8	4.1	2.5
.....							

People in the older age groups rated higher for stating that they believed there was enough information available on the environment, compared with younger people. The proportion of people who felt there was not enough environmental information available decreased steadily by age from 47% for 18–24 year olds to 28.7% for 65 year olds or older.

**2.6 ENOUGH ENVIRONMENTAL INFORMATION AVAILABLE, By Age**

	AGE GROUP (YEARS).....						
	18–24	25–34	35–44	45–54	55–64	65 and over	Total
	%	%	%	%	%	%	%
.....							
	MARCH 1998						
Yes	44.8	47.8	50.2	53.7	50.8	52.3	50.0
No	47.0	43.6	40.8	37.9	37.3	28.7	39.5
Depends/Don't know	8.2	8.6	9.0	8.4	11.9	19.0	10.6
.....							
	MAY 1992						
Yes	43.8	43.7	51.5	53.7	57.2	56.4	50.3
No	45.1	44.4	36.7	33.7	27.0	24.5	36.4
Depends/Don't know	11.1	11.9	11.8	12.6	15.7	19.1	13.3
.....							

**ENVIRONMENTAL INVOLVEMENT**

Of the 8% of people who registered an environmental concern, the greatest proportion were in the Northern Territory (10%), and the least proportion in Queensland (7%). Of those that did not register a concern, the majority (54%) had an environmental concern and 37% did not.

## 2.7 ENVIRONMENTAL CONCERN REGISTERED IN LAST 12 MONTHS, By States and Territories

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
MARCH 1998									
<b>Number ('000)</b>									
Yes	433.7	294.6	176.9	79.3	104.5	26.2	10.1	18.6	1 143.8
No	2 466.9	1 799.3	1 348.9	635.6	766.5	160.0	58.3	129.0	7 364.7
Don't know	*15.3	28.2	16.8	*2.1	14.5	*2.0	*0.3	—	79.2
No concerns	1 711.3	1 314.1	938.4	386.4	428.1	152.2	32.4	67.3	5 030.3
<b>Total</b>	<b>4 627.2</b>	<b>3 436.2</b>	<b>2 481.1</b>	<b>1 103.4</b>	<b>1 313.7</b>	<b>340.3</b>	<b>101.0</b>	<b>214.9</b>	<b>13 617.9</b>
<b>Proportion (%)</b>									
Yes	9.4	8.6	7.1	7.2	8.0	7.7	10.0	8.6	8.4
No	53.3	52.4	54.4	57.6	58.3	47.0	57.7	60.0	54.1
Don't know	*0.3	0.8	0.7	*0.2	1.1	*0.6	*0.3	—	0.6
No concerns	37.0	38.2	37.8	35.0	32.6	44.7	32.1	31.3	36.9
MAY 1992									
<b>Proportion (%)</b>									
Yes	10.2	9.1	9.5	9.0	12.2	11.1	11.3	10.2	9.9
No	63.3	65.7	64.2	68.0	63.5	59.4	68.1	72.7	64.6
Don't know	0.2	0.4	0.3	0.1	0.3	0.1	0.3	0.6	0.3
No concerns	26.4	24.8	26.0	23.0	24.0	29.3	20.4	16.5	25.2

The most popular method of registering an environmental concern amongst those people who did so was via a signed petition (38%), while attending a demonstration was lowest (6%). Use of a signed petition amongst those who registered an environmental concern was highest in the Northern Territory (68%), followed by Western Australia (43%), while South Australia rated the lowest for signed petitions (31%). Letter writing as a means of registering an environmental concern was highest in New South Wales (42%), followed by South Australia (34%). Demonstrations rated highest in the Northern Territory (20%) and lowest in Western Australia (4%).

2.8 PERSONS WHO REGISTERED ENVIRONMENTAL CONCERNS, Method: **States & Territories**—March 1998

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
NUMBER ('000)									
Letter	181.5	86.5	58.4	26.7	33.0	8.7	*2.7	5.8	403.4
Telephone	74.3	76.4	49.7	25.6	22.8	8.7	*1.0	*3.0	261.4
Demonstration	37.1	*14.4	*8.7	*3.3	*4.0	*1.1	*2.0	*2.3	73.0
Signed petition	155.2	119.0	66.9	24.7	44.5	10.9	6.8	7.2	435.3
Other	83.1	57.9	28.5	15.5	19.0	*4.3	*1.8	*4.0	214.0
<b>All methods</b>	<b>433.7</b>	<b>294.6</b>	<b>176.9</b>	<b>79.3</b>	<b>104.5</b>	<b>26.2</b>	<b>10.1</b>	<b>18.6</b>	<b>1 143.8</b>
PROPORTION (%)									
Letter	41.8	29.4	33.0	33.7	31.6	33.4	*26.6	31.2	35.3
Telephone	17.1	25.9	28.1	32.2	21.8	33.1	*9.6	*16.0	22.8
Demonstration	8.6	*4.9	*4.9	*4.2	*3.8	*4.3	*20.4	*12.2	6.4
Signed petition	35.8	40.4	37.8	31.1	42.6	41.7	67.8	38.5	38.1
Other	19.2	19.6	16.1	19.6	18.2	*16.3	*17.6	*21.6	18.7

ENVIRONMENTAL INVOLVEMENT *continued*

Of the people concerned about the environment in March 1998, those aged between 35 and 44 had the highest proportion of those registering a concern in the last 12 months (16%). Those aged 65 years and over, and between 18 and 24 were the least likely to have registered a concern in the last 12 months (10%).

## 2.9 PERSON CONCERNED ABOUT ENVIRONMENT, Concern Registered In Last 12 Months—By age

	AGE GROUP (YEARS).....						
	18-24	25-34	35-44	45-54	55-64	65 and over	Total
	%	%	%	%	%	%	%
.....							
	MARCH 1998						
Yes	10.0	13.1	15.5	15.0	14.3	9.9	13.3
No	87.1	85.9	84.0	84.6	85.2	89.6	85.8
Don't know	2.9	1.0	*0.6	*0.4	*0.5	*0.5	0.9
.....							
	MAY 1992						
Yes	9.9	14.1	16.4	13.5	13.2	10.0	13.2
No	89.8	85.6	83.2	86.3	86.1	89.6	86.4
Don't know	0.3	0.3	0.4	0.2	0.7	0.4	0.4
.....							

Signing a petition was most favoured by people aged between 18 and 44 as a means of registering an environmental concern, and least favoured by those aged between 55 and 64. In general, younger age groups showed a preference towards demonstrations and signed petitions, whereas older age groups favoured using the telephone or writing a letter. Demonstrations were used by 11% of 18–24 years olds, compared with 2% of those aged 65 and over. Conversely, letter writing was highest for those aged 55–64 (40%) and 65 and over (37%), compared with 29% for people aged 18–24.

## 2.10 PERSONS WHO REGISTERED ENVIRONMENTAL CONCERNS, Method: By Age—March 1998

	AGE GROUP (YEARS).....						
	18-24	25-34	35-44	45-54	55-64	65 and over	Total
	%	%	%	%	%	%	%
.....							
Letter	29.4	36.4	35.7	32.9	40.0	37.1	35.3
Telephone	15.9	21.7	20.8	21.2	35.2	26.5	22.8
Demonstration	*10.7	9.5	*5.4	*5.1	*5.0	*2.0	6.4
Signed petition	45.1	43.0	42.0	32.4	27.8	33.5	38.1
Other	*12.8	14.5	20.0	27.3	17.1	*14.2	18.7
.....							

The majority of people who stated they were concerned about the environment as at March 1998 were not members of groups concerned with protecting the environment (95%). For people who were a member of a group, the highest participation rate was in the Northern Territory (8%), followed by the Australian Capital Territory (7.5%), while Queensland rated the lowest (4%).

**2.11 PERSONS CONCERNED ABOUT ENVIRONMENT, Environment Group Member: States & Territories—March 1998**

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
NUMBER ('000)									
Yes	170.2	118.5	61.2	45.8	44.3	12.2	5.7	11.1	469.1
No	2 745.8	2 003.5	1 481.4	671.2	841.2	176.0	62.9	136.5	8 118.6
<b>All concerned</b>	<b>2 915.9</b>	<b>2 122.1</b>	<b>1 542.7</b>	<b>717.1</b>	<b>885.6</b>	<b>188.1</b>	<b>68.6</b>	<b>147.6</b>	<b>8 587.7</b>
PROPORTION (%)									
Yes	5.8	5.6	4.0	6.4	5.0	6.5	8.4	7.5	5.5
No	94.2	94.4	96.0	93.6	95.0	93.5	91.6	92.5	94.5

Of those people in an environment protection group as at March 1998, the highest proportion were in Landcare or catchment management (35%), followed by a marine conservation group (10%).

Landcare or catchment management membership was highest in Tasmania (42%), followed closely by New South Wales (41%), while lowest in the Northern Territory (20%). Marine groups were highest in South Australia (19%), followed by the Australian Capital Territory (18%), with the lowest proportion in Victoria (6.5%).

**2.12 PERSONS MEMBERS OF ENVIRONMENT GROUP, Type Of Group: States & Territories—March 1998**

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
NUMBER ('000)									
Marine conservation group	*14.0	*7.7	*5.1	*8.8	*5.7	*1.7	*0.6	*1.9	45.5
Landcare or catchment management group	69.1	39.8	13.8	17.3	14.4	5.1	*1.1	*4.0	164.6
Any other environment group	106.4	83.8	45.0	23.2	28.8	7.0	*4.9	6.6	305.8
<b>All members</b>	<b>170.2</b>	<b>118.5</b>	<b>61.2</b>	<b>45.8</b>	<b>44.3</b>	<b>12.2</b>	<b>5.7</b>	<b>11.1</b>	<b>469.1</b>
PROPORTION (%)									
Marine conservation group	*8.2	*6.5	*8.3	*19.2	*12.8	*13.6	*10.6	*17.6	9.7
Landcare or catchment management group	40.6	33.6	22.6	37.8	32.4	42.2	*19.9	*36.0	35.1
Any other environment group	62.5	70.7	73.5	50.5	65.0	57.7	*86.2	60.1	65.2

Of those persons concerned about the environment, the highest environment group membership was for those people aged 45–54 years (7%), followed by the 55–64 age group (5.8%), although differences between many of the age groups were minimal. The lowest proportion were people aged 18–24 (3.4%).

### 2.13 PERSONS CONCERNED ABOUT ENVIRONMENT, Environment Group Member—March 1998

	AGE GROUP (YEARS).....						
	18–24	25–34	35–44	45–54	55–64	65 and over	Total
	%	%	%	%	%	%	%
Yes	3.4	5.6	5.7	6.9	5.8	4.5	5.5
No	96.6	94.4	94.3	93.1	94.2	95.5	94.5

For the non-specific environment groups the highest proportion was for people aged between 18 and 24 (78%), followed by those aged 65 and over (72%), while the lowest occurred for people aged 55–64 (48%). Landcare/catchment management groups rated highest for those aged 55–64 (51%), with the lowest proportion for these groups being people aged 18–24 (25%).

Marine groups had the highest proportion for people aged 18–24 and 55–64 (12%), while lowest for those aged 65 and over (7.3%).

### 2.14 PERSONS MEMBERS OF ENVIRONMENT GROUP, By Age—March 1998

	AGE GROUP (YEARS).....						
	18–24	25–34	35–44	45–54	55–64	65 and over	Total
	%	%	%	%	%	%	%
Marine conservation group	*11.9	*8.9	*11.4	*8.0	*11.7	*7.3	9.7
Landcare or catchment management group	*25.2	31.9	32.0	36.0	51.2	36.9	35.1
Any other environment group	77.5	68.6	67.8	60.6	47.9	71.7	65.2

For marine conservation environment groups those people who were unemployed recorded the highest proportion of members (19%). Employed persons had the highest proportion of people involved in Landcare or catchment management groups (38%).

### 2.15 PERSONS MEMBERS OF ENVIRONMENT GROUP, By Labour Force Status—March 1998

	Employed	Unemployed	Not in the Labour Force	Total
	%	%	%	%
Marine conservation group	9.2	*19.4	*9.5	9.7
Landcare or catchment management group	38.4	*4.1	29.1	35.1
Any other environment group	63.3	*86.2	68.1	65.2



ENVIRONMENTAL INVOLVEMENT *continued*

Marine groups rated highest for one person households (17%), while all other households, and couple only households, rated highest for participation in Landcare or catchment management groups (45% and 41% respectively).

**2.16 PERSONS MEMBERS OF ENVIRONMENT GROUP, By Household Type—March 1998**

	One person	Couple only	Households with members over 15	Couple, dependent child(ren)	One parent, dependent child(ren)	All other households	Total
	%	%	%	%	%	%	%
Marine conservation group	*17.4	*10.2	*12.7	*6.5	*7.9	*4.5	9.7
Landcare or catchment management group	*26.5	41.4	34.1	30.4	*20.3	44.5	35.1
Any other environment group	70.6	60.2	62.0	70.9	*82.5	58.3	65.2

In the 12 months prior to March 1998, 20% of Australians indicated that they had donated either time or money towards protecting the environment. The highest proportion for these donations occurred in the Australian Capital Territory (24%), followed closely by the Northern Territory and Western Australia (23%). Queensland and Tasmania rated lowest with 19%.

**2.17 DONATED TIME OR MONEY TO ENVIRONMENTAL PROTECTION, By States And Territories—March 1998**

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
1998									
<b>Number ('000)</b>									
Yes	933.5	673.5	461.1	246.3	299.2	64.8	23.3	51.4	2 753.2
No	3 693.7	2 762.7	2 020.0	857.1	1 014.5	275.5	77.7	163.5	10 864.7
<b>Total</b>	<b>4 627.2</b>	<b>3 436.2</b>	<b>2 481.1</b>	<b>1 103.4</b>	<b>1 313.7</b>	<b>340.3</b>	<b>101.0</b>	<b>214.9</b>	<b>13 617.9</b>
<b>Proportion (%)</b>									
Yes	20.2	19.6	18.6	22.3	22.8	19.1	23.1	23.9	20.2
No	79.8	80.4	81.4	77.7	77.2	80.9	76.9	76.1	79.8
MAY 1992									
<b>Proportion (%)</b>									
Yes	25.1	26.4	30.8	30.8	33.7	26.1	38.6	36.4	28.0
No	74.9	73.6	69.2	69.2	66.3	73.9	61.4	63.6	72.0

The principle reason people gave for not being involved in environmental actions was that they did not have the time (45%). Around 16% of people did not state a reason. Another 10% stated they were unable to participate due to age or health reasons. A small percentage of people indicated that they were either not interested, or believed their involvement would make no difference (both 4.1%).

People who stated they had no time rated highest for the Northern Territory (56%), followed by the Australian Capital Territory (52%), while the lowest proportion occurred in Tasmania (40%). However, Tasmania ranked highest for those who gave age and health reasons (12%), followed by New South Wales and South Australia (10%), with the Australian Capital Territory the lowest (5.7%).

**2.18 PERSONS NOT INVOLVED IN ENVIRONMENTAL ACTIONS, Main Reason: States & Territories—March 1998**

Main reason	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
NUMBER ('000)									
No money	87.4	52.0	47.3	22.8	22.8	4.7	*2.7	*3.8	243.5
No time	838.1	636.8	467.5	196.6	244.8	50.2	24.4	48.0	2 506.5
Don't know how to get involved	89.6	98.0	64.9	27.1	39.0	5.1	*2.1	*3.7	329.5
Don't care/not interested	55.0	60.8	52.4	23.5	27.1	6.6	*1.7	*3.2	230.5
Don't think it will make a difference	57.4	51.1	49.9	19.6	40.2	6.1	*1.9	4.7	230.8
Age/health/unable to	190.9	132.6	93.2	46.5	43.5	15.6	*2.9	5.3	530.4
Other	116.7	83.9	85.1	31.5	45.2	10.6	*2.0	7.9	383.0
No reason	293.2	221.8	159.3	79.5	87.8	23.7	6.1	14.2	885.8
Don't know	128.9	41.3	40.4	13.2	27.4	*3.9	—	*1.9	257.1
<b>All not involved</b>	<b>1 857.2</b>	<b>1 378.4</b>	<b>1 060.1</b>	<b>460.3</b>	<b>577.7</b>	<b>126.6</b>	<b>43.9</b>	<b>92.8</b>	<b>5 597.0</b>
PROPORTION (%)									
No money	4.7	3.8	4.5	4.9	3.9	3.7	*6.2	*4.1	4.4
No time	45.1	46.2	44.1	42.7	42.4	39.7	55.6	51.8	44.8
Don't know how to get involved	4.8	7.1	6.1	5.9	6.7	4.0	*4.8	*4.0	5.9
Don't care/not interested	3.0	4.4	4.9	5.1	4.7	5.2	*4.0	*3.5	4.1
Don't think it will make a difference	3.1	3.7	4.7	4.3	7.0	4.8	*4.2	5.0	4.1
Age/health/unable to	10.3	9.6	8.8	10.1	7.5	12.3	*6.5	5.7	9.5
Other	6.3	6.1	8.0	6.8	7.8	8.4	*4.6	8.5	6.8
No reason	15.8	16.1	15.0	17.3	15.2	18.7	13.9	15.4	15.8
Don't know	6.9	3.0	3.8	2.9	4.7	*3.1	—	*2.1	4.6

The greatest proportion of people by age group who donated either time or money to protecting the environment occurred in the 35–44 group (25%). The lowest were those aged 65 and over (13%).

**2.19 DONATED TIME OR MONEY TO ENVIRONMENTAL PROTECTION, By Age**

AGE GROUP (YEARS).....							
	18–24	25–34	35–44	45–54	55–64	65 and over	Total
	%	%	%	%	%	%	%
MARCH 1998							
Yes	19.8	22.2	25.0	20.7	18.1	12.5	20.2
No	80.2	77.8	75.0	79.3	81.9	87.5	79.8
MAY 1992							
Yes	26.8	31.9	36.0	28.4	22.5	15.7	28.0
No	73.2	68.1	64.0	71.6	77.5	84.3	72.0

ENVIRONMENTAL INVOLVEMENT *continued*

In 1998, 20% of people said that they had donated time or money. This proportion has fallen since May 1992, when 28% of people had donated time or money. People aged 35–44 were the highest group for those with no time to become involved in environmental actions (58%). In general, people in the younger age groups were more likely to state a lack of time as the main reason for not being involved in actions designed to protect the environment, whereas those aged 65 and over rated highest for age and health preventing them from becoming involved (45%).

**2.20 PERSONS NOT INVOLVED IN ENVIRONMENTAL ACTIONS, By Age—March 1998**

	AGE GROUP (YEARS).....						
	18–24	25–34	35–44	45–54	55–64	65 and over	Total
Main reason	%	%	%	%	%	%	%
No money	5.2	4.6	3.8	3.6	4.5	4.7	4.4
No time	49.5	54.6	58.1	48.4	30.0	12.7	44.8
Don't know how to get involved	7.3	5.7	6.4	6.0	6.7	3.2	5.9
Don't care/not interested	4.1	2.7	4.1	4.1	6.5	4.4	4.1
Don't think it will make a difference	4.5	2.7	2.8	5.1	6.0	5.1	4.1
Age/health/unable to	*1.4	2.0	*1.3	4.1	13.0	45.1	9.5
Other	5.7	6.8	6.9	7.0	8.1	6.8	6.8
No reason	17.0	15.5	14.0	16.5	18.6	14.7	15.8
Don't know	5.3	5.4	2.5	5.2	6.6	3.2	4.6

Households with child(ren) rated highest for those households who had no time for environmental action (59% for households comprising a couple with dependent child(ren) and 51% for those comprising a one parent and dependent child(ren) structure).

Age and health reasons were highest for one person households (22%), while no money rated highest for households with one parent and dependent child(ren) (11%).

**2.21 PERSONS NOT INVOLVED IN ANY ENVIRONMENTAL ACTIONS, By Household Type—March 1998**

	One person	Couple only	Households with members over 15	Couple, dependent child(ren)	One parent, dependent child(ren)	All other households	Total
Main reason	%	%	%	%	%	%	%
No money	5.5	3.7	3.6	4.0	*11.2	5.1	4.4
No time	30.8	35.0	46.7	58.9	51.4	44.8	44.8
Don't know how to get involved	7.5	5.8	4.5	6.0	*5.5	6.9	5.9
Don't care/not interested	4.5	4.2	4.1	4.4	*1.3	3.7	4.1
Don't think it will make a difference	4.6	5.5	4.4	2.3	*4.2	3.9	4.1
Age/health/unable to	22.4	16.4	6.2	*1.0	*3.3	7.5	9.5
Other	7.5	7.5	6.7	6.5	*4.3	6.4	6.8
No reason	13.7	17.8	16.5	14.3	16.2	15.7	15.8
Don't know	3.4	4.1	7.3	2.6	*2.7	6.0	4.6

ENVIRONMENTAL INVOLVEMENT *continued*

For people who indicated that they were concerned about environmental problems, those donating either time or money to protecting the environment fell from 33% in May 1992 to 28% in March 1998. For those people who were not concerned about environmental problems, those donating time or money dropped from 15% in the May 1992 survey to 7% in the March 1998 survey.

**2.22** DONATION OF TIME OR MONEY TO ENVIRONMENT PROTECTION,  
By Concern About Environment

CONCERN ABOUT ENVIRONMENT.....				
	Yes	No	Don't know	Total
	%	%	%	%
.....				
	1998			
Yes	28.0	7.1	5.5	20.2
No	72.0	92.9	94.5	79.8
.....				
	MAY 1992			
Yes	32.7	14.5	8.5	28.0
No	67.3	85.5	91.5	72.0
.....				

MAIN FINDINGS

- Refillable containers are the most widely used environmentally friendly product used by households (61%), followed by recycled paper (48%). Organically grown fruit and vegetables were used by only 18% of households.
- The main reasons for not using environmentally friendly products are that they are more expensive (33%) and that they are not readily available (21%).
- Around 87% of people indicated that they would accept less packaging of the products they buy, compared with 85% in a May 1992 survey. The principal reasons given were less garbage (75%), that it was considered safer for the environment (28%), and it could mean cheaper product prices (24%). In the May 1992 survey, 59% of people stated they believed that less packaging would result in less garbage.
- Manure or compost are the most common fertilisers used to grow fruit and vegetables (79% of households). Of the specific types of fertiliser identified in the survey, blood and bone had the highest use (39%), with gypsum/lime being used by only 5%. A smaller number (15%) of households did not use any type of fertiliser to grow fruit and vegetables.
- Around 71% of households did not use pesticides or weed killers on fruit or vegetables grown in their gardens. Around 38% of households used pesticides on other plants in their gardens.
- Around 79% of households reported using flysprays or baits inside their dwelling, with the highest use in Queensland (84%) and Western Australia (81%). Victoria had the lowest use with 74%. Households with dependent child(ren) had a higher level of use than those with one person.

## ENVIRONMENTALLY FRIENDLY PRODUCTS

The main environmentally friendly product used by households was refillable containers (61% of households), followed by recycled paper (48%). Organically grown fruit and vegetables were used by only 18% of households. For those households who stated that they only sometimes used these types of products, or that their choice was dependent upon other factors, the main product used was recycled paper (24%), followed by organically grown fruit and vegetables (22%). Refillable containers were only used by 11% of households.

The Australian Capital Territory recorded the highest use of all the products surveyed, except for organically grown fruit and vegetables, where Tasmania had marginally more households than the Australian Capital Territory (21%). More than half of all households stated that they never ate organically grown fruit and vegetables (57%).

For those households using environmentally friendly products, the proportions were all less than those experienced in May 1992. The most marked decline was unbleached paper (63.4% in May 1992 compared with 31.1% in March 1998).

## 3.1 HOUSEHOLD USE OF ENVIRONMENTALLY FRIENDLY PRODUCTS

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
MARCH 1998									
<b>Number ('000)</b>									
Unbleached paper									
Yes	742.3	538.1	405.1	175.4	202.9	54.5	18.2	39.6	2 176.2
Sometimes/depends	478.9	376.4	276.3	129.5	146.9	38.1	9.1	22.8	1 478.0
No	971.1	729.3	548.1	264.9	312.8	87.6	26.9	51.0	2 991.9
Don't know	161.3	78.9	51.8	24.4	26.2	6.5	*2.2	*2.3	353.6
Recycled paper									
Yes	1 122.5	859.5	600.2	281.1	300.0	83.6	26.2	60.7	3 333.8
Sometimes/depends	523.3	402.6	306.3	139.8	187.6	44.4	11.6	26.5	1 642.1
No	613.8	407.8	346.4	159.0	187.2	53.1	16.9	27.2	1 811.3
Don't know	94.1	52.9	28.4	14.4	14.1	5.6	*1.6	*1.3	212.4
Phosphate-free cleaning products									
Yes	789.9	484.8	375.8	170.6	191.2	50.5	16.2	39.9	2 118.9
Sometimes/depends	292.2	207.1	156.7	73.4	80.2	24.5	7.5	13.3	855.0
No	836.0	678.1	510.4	235.9	328.1	74.7	27.6	49.0	2 739.7
Don't know	435.6	352.7	238.4	114.4	89.4	37.0	*5.1	13.5	1 286.1
Refillable containers									
Yes	1 401.7	1 052.4	825.5	348.6	423.5	104.2	35.8	77.2	4 268.9
Sometimes/depends	277.6	201.3	137.6	67.1	72.2	24.0	*4.0	12.7	796.5
No	609.0	443.1	297.6	170.0	184.5	55.2	16.2	24.9	1 800.4
Don't know	65.3	26.1	20.6	*8.6	*8.6	*3.3	*0.5	*1.0	133.9
Organically grown fruit and vegetables									
Yes	388.5	334.2	213.9	109.8	110.0	39.5	9.6	24.2	1 229.6
Sometimes/depends	504.5	392.2	298.8	118.7	158.6	41.4	13.5	24.1	1 551.7
No	1 348.4	945.3	742.4	346.7	401.2	99.1	31.7	65.8	3 980.6
Don't know	112.3	51.1	26.2	19.1	19.1	6.7	*1.5	*1.7	237.7
<b>Total</b>	<b>2 353.6</b>	<b>1 722.8</b>	<b>1 281.3</b>	<b>594.3</b>	<b>688.9</b>	<b>186.7</b>	<b>56.4</b>	<b>115.8</b>	<b>6 999.7</b>
<b>Proportion (%)</b>									
Unbleached paper									
Yes	31.5	31.2	31.6	29.5	29.5	29.2	32.3	34.2	31.1
Sometimes/depends	20.3	21.8	21.6	21.8	21.3	20.4	16.2	19.7	21.1
No	41.3	42.3	42.8	44.6	45.4	46.9	47.7	44.1	42.7
Don't know	6.9	4.6	4.0	4.1	3.8	3.5	*3.9	*2.0	5.1
Recycled paper									
Yes	47.7	49.9	46.8	47.3	43.5	44.8	46.5	52.4	47.6
Sometimes/depends	22.2	23.4	23.9	23.5	27.2	23.8	20.6	22.9	23.5
No	26.1	23.7	27.0	26.7	27.2	28.4	30.0	23.5	25.9
Don't know	4.0	3.1	2.2	2.4	2.1	3.0	*2.9	*1.1	3.0
Phosphate-free cleaning products									
Yes	33.6	28.1	29.3	28.7	27.8	27.0	28.7	34.5	30.3
Sometimes/depends	12.4	12.0	12.2	12.3	11.6	13.1	13.4	11.5	12.2
No	35.5	39.4	39.8	39.7	47.6	40.0	49.0	42.3	39.1
Don't know	18.5	20.5	18.6	19.3	13.0	19.8	*9.0	11.7	18.4
Refillable containers									
Yes	59.6	61.1	64.4	58.7	61.5	55.8	63.4	66.7	61.0
Sometimes/depends	11.8	11.7	10.7	11.3	10.5	12.9	*7.1	11.0	11.4
No	25.9	25.7	23.2	28.6	26.8	29.5	28.7	21.5	25.7
Don't know	2.8	1.5	1.6	*1.4	*1.3	*1.7	*0.8	*0.8	1.9
Organically grown fruit and vegetables									
Yes	16.5	19.4	16.7	18.5	16.0	21.1	17.1	20.9	17.6
Sometimes/depends	21.4	22.8	23.3	20.0	23.0	22.2	24.0	20.8	22.2
No	57.3	54.9	57.9	58.3	58.2	53.1	56.2	56.9	56.9
Don't know	4.8	3.0	2.0	3.2	2.8	3.6	*2.7	*1.5	3.4

3.1 HOUSEHOLD USE OF ENVIRONMENTALLY FRIENDLY PRODUCTS *continued*

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
MAY 1992									
<b>Proportion (%)</b>									
Unbleached paper									
Yes	60.8	62.6	65.1	65.7	70.0	62.7	56.2	63.3	63.4
No	33.4	31.8	31.5	30.0	27.3	35.2	43.1	33.5	31.9
Don't know	5.8	5.6	3.4	4.3	2.8	2.1	0.7	3.2	4.7
Recycled paper									
Yes	67.2	66.1	68.6	69.6	73.7	62.4	64.4	72.7	67.9
No	27.8	29.0	28.2	26.4	22.7	33.8	32.9	24.6	27.7
Don't know	5.1	4.9	3.2	4.0	3.6	3.8	2.7	2.7	4.4
Phosphate-free cleaning products									
Yes	36.4	36.4	40.4	36.2	40.8	41.6	38.3	37.5	37.7
No	36.9	34.3	31.6	31.1	32.9	34.3	40.8	31.6	34.3
Don't know	26.7	29.4	28.0	32.7	26.3	24.1	20.9	30.9	28.0
Refillable containers									
Yes	62.3	60.5	67.0	63.9	65.9	66.7	62.0	66.2	63.3
No	35.3	37.0	31.9	34.6	33.0	32.4	38.0	31.5	34.8
Don't know	2.4	2.5	1.1	1.5	1.1	1.0	—	2.3	1.9

The principle reason given for households not using environmentally friendly products was because they considered them to be too expensive (33%), followed by the products not being readily available (21%). Only 4% of households not using environmentally friendly products stated that they were not convinced that using these products would benefit the environment. Another 17.0% of households did not state a reason as to why they did not use environmentally friendly products.

Amongst the State and Territories, the Northern Territory recorded the highest proportion of households who stated that these products were considered too expensive (46%) or were not available (26%). People in Tasmania were the least likely to specify that expense (26%) and availability (14%) as reasons they didn't use these products. Western Australia recorded the highest proportion of households who stated that they were not interested in using these products (16%).



## 3.2 HOUSEHOLDS NOT USING PRODUCTS, Reason Products Are Not Used—States &amp; Territories

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
MARCH 1998									
<b>Number ('000)</b>									
More expensive	561.0	467.2	368.6	140.0	181.2	37.3	20.8	34.2	1 810.3
Always buy the same brand	243.1	189.2	127.7	66.4	76.3	14.6	8.7	10.7	736.7
Inferior quality	274.9	222.3	177.8	70.8	83.7	21.8	7.1	19.6	878.0
Not convinced about environment claims	68.4	54.6	36.1	16.1	16.5	6.0	*1.6	5.0	204.3
Not interested/too much effort	260.1	207.7	125.2	67.3	87.8	20.8	*3.8	14.0	786.7
Grows own fruit/vegetables	76.5	109.5	28.9	31.4	18.5	13.3	*0.2	5.5	283.8
Not readily available	428.7	224.2	221.2	107.2	135.2	19.4	11.8	16.2	1 163.9
Other	167.3	146.2	95.2	41.9	53.6	12.4	*2.9	9.7	529.2
No reason	319.0	226.5	165.0	79.0	80.4	34.9	5.4	14.7	924.9
<b>All reasons</b>	<b>1 793.5</b>	<b>1 321.0</b>	<b>1 009.0</b>	<b>468.6</b>	<b>554.4</b>	<b>143.2</b>	<b>45.4</b>	<b>94.0</b>	<b>5 429.1</b>
<b>Proportion (%)</b>									
More expensive	31.3	35.4	36.5	29.9	32.7	26.1	45.8	36.3	33.3
Always buy the same brand	13.6	14.3	12.7	14.2	13.8	10.2	19.2	11.3	13.6
Inferior quality	15.3	16.8	17.6	15.1	15.1	15.2	15.6	20.9	16.2
Not convinced about environment claims	3.8	4.1	3.6	3.4	3.0	4.2	*3.4	5.4	3.8
Not interested/too much effort	14.5	15.7	12.4	14.4	15.8	14.5	*8.4	14.9	14.5
Grows own fruit/vegetables	4.3	8.3	2.9	6.7	3.3	9.3	*0.4	5.9	5.2
Not readily available	23.9	17.0	21.9	22.9	24.4	13.6	26.0	17.3	21.4
Other	9.3	11.1	9.4	9.0	9.7	8.7	*6.4	10.3	9.7
No reason	17.8	17.1	16.4	16.9	14.5	24.4	11.9	15.6	17.0
MAY 1992									
<b>Proportion (%)</b>									
More expensive	23.4	22.4	24.7	26.2	24.7	23.9	33.2	19.9	23.8
Always buy the same brand	31.2	27.9	27.2	27.0	19.9	25.3	20.2	28.7	27.9
Inferior quality	24.6	23.7	25.0	23.5	27.8	28.7	19.6	22.5	24.7
Not convinced about environment claims	7.3	6.4	4.3	3.9	3.4	4.9	4.4	8.2	5.8
Not interested	15.8	17.7	15.2	17.0	17.8	17.6	11.6	17.6	16.5
Other	17.3	16.0	19.0	17.6	22.3	18.4	21.1	18.7	17.9

One parent households with dependent child(ren) were the highest users of unbleached paper products (37%). Households consisting of a couple with dependent child(ren) were the highest users of recycled paper (55%), phosphate-free cleaning products (35%), and refillable containers (73%). All other households recorded the highest use of organically grown fruit and vegetables (20%).

The type of household that was most likely to state they never used certain environmentally friendly products was one person households. This type of household experienced the highest levels of non-use for all the product types, where 48% never used unbleached paper, 34% never used recycled paper, 45% never used phosphate-free cleaning products, 38% never used refillable containers and 60% never used organically grown fruit and vegetables.

## 3.3 USE OF ENVIRONMENTALLY FRIENDLY PRODUCTS, By Household Type

	One person	Couple only	Households with members over 15	Couple, dependent child(ren)	One parent, dependent child(ren)	All other households	Total
	%	%	%	%	%	%	%
MARCH 1998							
Unbleached paper							
Yes	28.0	29.2	29.9	34.5	36.9	33.9	31.1
Sometimes/depends	18.3	20.7	23.3	22.9	24.4	19.9	21.1
No	47.8	45.4	41.2	38.1	34.0	41.9	42.7
Don't know	5.9	4.7	5.6	4.5	*4.7	4.3	5.1
Recycled paper							
Yes	40.9	45.5	48.0	55.0	53.5	48.4	47.6
Sometimes/depends	21.8	25.1	24.3	23.8	23.0	22.0	23.5
No	33.6	26.6	24.0	19.1	20.3	26.9	25.9
Don't know	3.7	2.9	3.8	2.1	*3.3	2.7	3.0
Phosphate-free cleaning products							
Yes	24.9	30.6	31.3	34.6	34.4	29.0	30.3
Sometimes/depends	10.4	11.4	11.3	15.0	15.1	12.3	12.2
No	44.8	37.8	39.2	34.7	35.4	40.6	39.1
Don't know	19.9	20.3	18.2	15.7	15.1	18.2	18.4
Refillable containers							
Yes	45.4	60.8	63.3	72.6	70.5	63.6	61.0
Sometimes/depends	13.8	11.0	10.5	10.5	9.2	11.0	11.4
No	38.1	26.5	23.8	15.5	19.6	23.8	25.7
Don't know	2.7	1.8	2.4	1.3	*0.7	*1.5	1.9
Organically grown fruit and vegetables							
Yes	15.5	17.9	17.8	18.0	17.9	20.0	17.6
Sometimes/depends	20.9	22.6	22.1	23.7	21.8	20.9	22.2
No	59.5	56.8	56.2	55.4	55.4	55.9	56.9
Don't know	4.1	2.7	3.9	2.8	**4.9	3.2	3.4
MAY 1992							
Unbleached paper							
Yes	51.8	60.4	61.7	72.5	72.9	66.3	63.4
No	41.7	34.6	33.5	24.0	23.8	29.1	31.9
Don't know	6.5	5.0	4.8	3.5	3.2	4.6	4.7
Recycled paper							
Yes	53.3	64.2	66.9	80.0	76.5	70.1	67.9
No	39.8	31.8	28.3	17.3	21.0	25.0	27.7
Don't know	6.9	4.1	4.8	2.7	2.5	4.9	4.4
Phosphate-free cleaning products							
Yes	26.2	35.7	37.9	45.8	45.8	38.6	37.7
No	42.4	34.0	34.3	29.6	29.9	33.5	34.3
Don't know	31.4	30.3	27.7	24.5	24.3	28.0	28.0
Refillable containers							
Yes	47.4	62.1	67.1	72.5	70.1	64.2	63.3
No	50.1	35.9	30.8	26.2	29.2	33.3	34.8
Don't know	2.5	2.0	2.1	1.3	0.8	2.5	1.9

ENVIRONMENTALLY FRIENDLY PRODUCTS *continued*

Expense as the principle reason for not using these products was highest for households which contained dependent child(ren), with 46% of one parent and dependent child(ren) households, and 41% of households consisting of a couple with dependent child(ren) stating this as their major reason for not using environmentally friendly products. One person households were least likely to nominate cost as a reason for not using environmentally friendly products (29%). This household type also recorded the highest proportion of those who were not interested in using these products (21%).

## 3.4 HOUSEHOLDS NOT USING PRODUCTS, Reason Products Are Not Used—By household type

	One person	Couple only	Households with members over 15	Couple, dependent child(ren)	One parent, dependent child(ren)	All other households	Total
	%	%	%	%	%	%	%
MARCH 1998							
More expensive	28.9	29.7	31.0	40.9	46.3	34.1	33.3
Always buy the same brand	14.0	14.6	15.7	11.6	11.8	12.2	13.6
Inferior quality	12.3	18.1	20.0	17.1	14.5	14.2	16.2
Not convinced about environment claims	3.6	3.9	5.6	3.0	*1.8	3.4	3.8
Not interested/too much effort	20.9	14.3	11.5	11.1	10.7	12.8	14.5
Grows own fruit/vegetables	2.9	7.5	7.3	5.3	*2.4	3.5	5.2
Not readily available	19.6	22.3	21.2	24.5	17.6	19.5	21.4
Other	12.1	9.8	8.4	8.5	*7.1	9.9	9.7
No reason	18.7	16.9	16.1	14.6	12.4	22.1	17.0
MAY 1992							
More expensive	17.7	21.0	25.2	27.6	37.9	26.8	23.8
Always buy the same brand	30.0	29.7	28.5	26.5	22.7	23.6	27.9
Inferior quality	17.6	29.7	28.2	27.5	22.0	18.2	24.7
Not convinced about environment claims	5.3	5.8	4.2	6.6	2.7	8.6	5.8
Not interested	25.4	14.7	12.9	11.3	15.6	19.0	16.5
Other	19.3	17.4	17.8	17.3	16.4	18.0	17.9

## PACKAGING

The majority of Australians were prepared to accept less packaging in the products they purchase (87%), a slight rise from the May 1992 survey figure of 85%. Around 7% stated that they are not prepared to give up the present level of product packaging. Variations between the States and Territories were minimal. Proportions experienced were similar to those recorded in May 1992.

## 3.5 ACCEPT LESS PRODUCT PACKAGING, By States and Territories

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
1998									
<b>Number ('000)</b>									
Yes	3 964.1	2 921.9	2 126.2	977.5	1 134.8	290.5	80.7.0	197.9	11 693.7
Depends	191.3	116.6	57.3	37.5	27.8	7.1	2.9	6.3	446.9
No	285.6	232.2	198.1	59.7	81.5	33.4	5.4	9.2	905.0
Don't know	137.7	118.0	83.9	15.9	32.9	7.1	*1.4	3.4	400.1
<b>Total</b>	<b>4 578.7</b>	<b>3 388.6</b>	<b>2 465.5</b>	<b>1 090.6</b>	<b>1 277.1</b>	<b>338.0</b>	<b>90.4</b>	<b>216.7</b>	<b>13 445.7</b>
<b>Proportion (%)</b>									
Yes	86.6	86.2	86.2	89.6	88.9	85.9	89.2	91.3	87.0
Depends	4.2	3.4	2.3	3.4	2.2	2.1	3.3	2.9	3.3
No	6.2	6.9	8.0	5.5	6.4	9.9	6.0	4.2	6.7
Don't know	3.0	3.5	3.4	1.5	2.6	2.1	*1.5	1.5	3.0
MAY 1992									
<b>Proportion (%)</b>									
Yes	83.9	83.8	85.0	86.3	86.2	84.4	85.3	84.6	84.5
Depends	4.4	3.9	5.0	4.5	4.7	2.6	4.3	4.9	4.4
No	7.3	7.1	6.3	6.2	6.3	8.4	7.2	7.3	6.9
Don't know	4.3	5.2	3.7	3.0	2.9	4.5	3.2	3.2	4.2

Of the people who stated they were prepared to accept less product packaging, the principle reason was that it would result in less garbage being generated (75%). This was followed by the belief that less packaging is safer for the environment (28%), and that products with less packaging could be cheaper to buy (24%).

The 'less garbage' reason stated by respondents was highest in South Australia (79%), and lowest in Queensland and Western Australia (71%). Around one-third (36%) of people in the Northern Territory stated that they would accept less packaging because it would be safer for the environment.

## 3.6 PERSONS ACCEPTING LESS PACKAGING, Reason—By States and Territories

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
1998									
<b>Number ('000)</b>									
Less garbage	3 239.6	2 230.4	1 549.8	805.1	826.3	216.2	64.9	154.3	9 086.5
Cheaper	1 079.5	644.0	510.3	224.6	277.2	70.4	18.1	36.5	2 860.5
Safer for the environment	1 205.0	887.7	544.7	214.4	312.0	74.5	29.9	61.3	3 337.5
Saves resources	1 029.8	642.8	388.5	204.3	253.9	50.8	20.7	44.7	2 635.5
Convenience	285.2	187.1	107.8	28.9	57.8	16.4	5.3	9.5	698.0
Dislikes advertising	220.2	136.0	64.8	33.5	52.8	10.1	5.2	7.0	529.6
Other	103.3	105.2	103.4	25.4	51.8	8.5	*1.4	7.5	406.5
Don't know	76.3	25.3	25.2	15.8	*15.0	4.7	*0.7	4.2	167.2
<b>Total</b>	<b>4 155.4</b>	<b>3 038.5</b>	<b>2 183.5</b>	<b>1 015.0</b>	<b>1 162.7</b>	<b>297.6</b>	<b>83.6</b>	<b>204.2</b>	<b>12 140.6</b>
<b>Proportion (%)</b>									
Less garbage	78.0	73.4	71.0	79.3	71.1	72.6	77.6	75.6	74.8
Cheaper	26.0	21.2	23.4	22.1	23.8	23.6	21.6	17.9	23.6
Safer for the environment	29.0	29.2	24.9	21.1	27.5	25.0	35.7	30.0	27.5
Saves resources/paper/trees	24.8	21.2	17.8	20.1	21.8	17.1	24.8	21.9	21.7
Convenience	6.9	6.2	4.9	2.8	5.0	5.5	6.3	4.6	5.7
Dislikes advertising	5.3	4.5	3.0	3.3	4.5	3.4	6.3	3.4	4.4
Other	2.5	3.5	4.7	2.5	4.5	2.9	*1.7	3.7	3.3
Don't know	1.8	0.8	1.2	1.6	*1.3	1.6	*0.9	2.0	1.4
MAY 1992									
<b>Proportion (%)</b>									
Less garbage	63.0	58.8	58.4	53.8	52.4	59.2	55.2	52.6	59.0
Cheaper	34.4	33.7	34.8	32.3	27.9	41.0	32.7	24.9	33.5
Safer for the environment	24.5	27.3	26.0	19.6	23.2	24.7	31.4	19.8	24.9
Packaging is unnecessary	42.0	42.1	41.4	43.6	46.1	48.6	40.3	57.1	42.9
Saves resources	16.8	18.6	18.2	16.0	12.3	18.3	26.2	11.7	17.0
Convenience	11.8	11.5	10.5	7.2	7.4	10.1	7.1	5.4	10.5
If product standards maintained	8.3	9.7	8.5	6.4	4.2	7.6	11.4	3.9	8.1
Dislikes advertising	6.1	7.8	7.1	3.3	3.2	9.8	4.7	5.2	6.2
Other	1.5	1.2	1.9	2.4	2.7	1.4	1.3	2.1	1.7

## FERTILISER AND PESTICIDE USE

The principle fertilisers used by households growing fruit and vegetables in their gardens were manure or compost (79%). Around 15% of households stated that they did not use any fertilisers to grow fruit and vegetables. The highest use of manure or compost was by households in the Australian Capital Territory and New South Wales (both recording 83%), with the lowest use in South Australia (72%). For other fertilisers the greatest use was in the Northern Territory (43%), while Victoria recorded the lowest use of these fertilisers (31%). South Australia ranked highest for those households who stated that they did not use any fertilisers to grow fruit or vegetables (19%), with New South Wales the lowest for no fertiliser use (12%).

## 3.7 HOUSEHOLDS GROWING FRUIT/VEGETABLES, Fertiliser Use—March 1998

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
NUMBER ('000)									
Manure or compost	717.2	660.6	393.6	224.0	220.2	81.1	17.2	46.9	2 360.7
Other fertilisers	311.2	268.0	195.0	127.8	111.0	39.5	9.3	22.3	1 084.1
No fertilisers used	102.1	156.5	66.7	59.8	36.4	18.6	*2.8	8.6	451.7
<b>Total</b>	<b>866.0</b>	<b>870.5</b>	<b>495.1</b>	<b>311.0</b>	<b>281.0</b>	<b>104.3</b>	<b>21.6</b>	<b>56.2</b>	<b>3 005.8</b>
PROPORTION (%)									
Manure or compost	82.8	75.9	79.5	72.0	78.4	77.7	79.7	83.3	78.5
Other fertilisers	35.9	30.8	39.4	41.1	39.5	37.8	43.2	39.6	36.1
No fertilisers used	11.8	18.0	13.5	19.2	13.0	17.8	*13.0	15.3	15.0

Of the types of fertiliser surveyed, blood and bone was used by the highest proportion of households (39%), followed by nitrogen fertiliser (18%). Gypsum/lime was used by only 5% of households.

Tasmania reported the greatest use of blood and bone (63%) and gypsum/lime (17%), while the Northern Territory used the most nitrogen fertiliser (27%) and superphosphate (18%).

## 3.8 HOUSEHOLDS USING OTHER FERTILISERS, Type Used—March 1998

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
NUMBER ('000)									
Blood and bone	117.9	113.0	69.1	57.0	33.1	24.6	*4.1	8.0	426.6
Superphosphate	30.9	24.9	25.5	12.5	*10.7	6.8	*1.7	*2.0	115.0
Gypsum/lime	*12.1	*12.5	*11.0	*7.6	*2.3	6.7	*0.6	*1.6	54.3
Nitrogen fertiliser	52.2	38.6	47.1	20.5	28.2	4.4	*2.5	5.7	199.2
Fish fertiliser	*12.0	*12.8	14.3	*6.3	*9.7	*2.1	*0.8	*1.6	59.5
Other	154.3	129.0	94.6	59.3	55.6	13.1	*3.6	9.9	519.5
<b>Total</b>	<b>311.2</b>	<b>268.0</b>	<b>195.0</b>	<b>127.8</b>	<b>111.0</b>	<b>39.5</b>	<b>9.3</b>	<b>22.3</b>	<b>1 084.1</b>
PROPORTION (%)									
Blood and bone	37.9	42.1	35.4	44.6	29.8	62.5	*44.0	35.9	39.4
Superphosphate	9.9	9.3	13.1	9.8	*9.7	17.3	*18.1	*9.1	10.6
Gypsum/lime	*3.9	*4.7	*5.6	*5.9	*2.1	16.9	*6.2	*7.0	5.0
Nitrogen fertiliser	16.8	14.4	24.1	16.0	25.4	11.2	*26.5	25.6	18.4
Fish fertiliser	*3.9	*4.8	7.3	*4.9	*8.7	*5.4	*8.3	*7.1	5.5
Other	49.6	48.1	48.5	46.4	50.1	33.3	*38.6	44.7	47.9

Almost three-quarters (71%) of the households surveyed who grew fruit or vegetables stated that they did not use any form of pesticide to kill insects or weeds when growing those fruit or vegetables in their gardens. Of those who did use pesticides, the greatest use was made by households in the Australian Capital Territory and New South Wales (both 33%), while households in the Northern Territory recorded the lowest use (21%).

**3.9 HOUSEHOLDS GROWING FRUIT/VEGETABLES, Pesticides—March 1998**

<i>Pesticides used</i>	<i>NSW</i>	<i>Vic.</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas.</i>	<i>NT</i>	<i>ACT</i>	<i>Aust.</i>
NUMBER ('000)									
Yes	287.2	224.4	137.0	85.6	73.5	29.9	*4.6	18.8	861.0
No	578.8	646.0	358.1	225.4	207.5	74.4	17.0	37.5	2 144.8
<b>Total</b>	<b>866.0</b>	<b>870.5</b>	<b>495.1</b>	<b>311.0</b>	<b>281.0</b>	<b>104.3</b>	<b>21.6</b>	<b>56.2</b>	<b>3 005.8</b>
PROPORTION (%)									
Yes	33.2	25.8	27.7	27.5	26.2	28.7	*21.1	33.3	28.6
No	66.8	74.2	72.3	72.5	73.8	71.3	78.9	66.7	71.4

Around 38% of households with gardens stated that they used some form of pesticide to kill insects or weeds on plants other than fruit and vegetables grown in their gardens. Western Australia had the highest use of these products (42%), closely followed by the Australian Capital Territory (41%). The lowest level of use was in the Northern Territory (31%).

**3.10 HOUSEHOLDS WITH GARDENS, Pesticide/Weedicide Used On Other Plants—March 1998**

	<i>NSW</i>	<i>Vic.</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas.</i>	<i>NT</i>	<i>ACT</i>	<i>Aust.</i>
NUMBER ('000)									
Yes	701.3	574.1	428.0	211.8	266.0	66.5	14.5	41.7	2 304.0
No	1 186.6	981.4	672.5	333.5	362.7	104.7	33.0	60.8	3 735.3
<b>Total</b>	<b>1 887.9</b>	<b>1 555.5</b>	<b>1 100.5</b>	<b>545.4</b>	<b>628.8</b>	<b>171.2</b>	<b>47.6</b>	<b>102.5</b>	<b>6 039.3</b>
PROPORTION (%)									
Yes	37.1	36.9	38.9	38.8	42.3	38.8	30.6	40.7	38.2
No	62.9	63.1	61.1	61.2	57.7	61.2	69.4	59.3	61.8

Over three-quarters (79%) of households reported using pest killers such as flysprays or baits inside their dwelling in the 12 months to March 1998. Queensland rated the highest for use of these products (with 84%), closely followed by Western Australia (81%). Victoria had the lowest level of use with 74% of households.

**3.11 FLYSPRAYS USED—March 1998**

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
NUMBER ('000)									
Yes	1 859.1	1 280.2	1 069.9	459.8	554.6	141.1	43.4	86.9	5 494.9
No	494.5	442.5	211.4	134.5	134.3	45.5	13.0	28.8	1 504.7
<b>Total</b>	<b>2 353.6</b>	<b>1 722.8</b>	<b>1 281.3</b>	<b>594.3</b>	<b>688.9</b>	<b>186.7</b>	<b>56.4</b>	<b>115.8</b>	<b>6 999.7</b>
PROPORTION (%)									
Yes	79.0	74.3	83.5	77.4	80.5	75.6	76.9	75.1	78.5
No	21.0	25.7	16.5	22.6	19.5	24.4	23.1	24.9	21.5

Households with dependent child(ren), and households with all members over 15, were the greatest users of flysprays and baits in dwellings, with all these household types rating over 80%. One person households were the lowest users of these pest killers (71%).

**3.12 FLYSPRAYS USED, By Household Type—March 1998**

	One person	Households Couple with members only over 15	Couple, dependent child(ren)	One parent, dependent child(ren)	All other households	Total
	%	%	%	%	%	%
Yes	70.9	79.6	80.3	83.4	80.6	78.5
No	29.1	20.4	19.7	16.6	19.4	21.5



## CHAPTER 4

## WATER SOURCES, USE AND ISSUES.....

### MAIN FINDINGS

- Mains (or town) water was the major source of water for Australian households (93%).
- Around 18% of households used a filter for their drinking water (compared with 15% in the June 1994 survey).
- Almost two-thirds (65%) of Australian households were satisfied with the quality of their mains tap water for drinking. Of those who were not satisfied, the main problems were taste (62%), chlorine (30%), and dirt in the water (18%).
- About 84% of households with a rainwater tank consider that their tank(s) provided a sufficient water supply.
- Cost was found to be the main inhibitor to installing a rainwater tank, as it was in the June 1994 survey.
- Around 10% of households had a swimming pool.
- About 55% of households had a dual flush toilet (compared with 39% in the June 1994 survey), while 32% use reduced flow shower heads (22% in 1994).
- Around 53% of households took no specific water conservation steps in their dwellings (compared with 54% in the June 1994 survey), while 39% took no steps to conserve water in their garden.
- Most people believed that the cost of water was about right (38%), while 33% believed the price was too high, and 9% were not aware of the cost of water. Less than 2% stated that they thought the cost of water was too low.
- Just over half (54%) of respondents stated that the cost of water did not influence the amount they use.
- Almost three-quarters of respondents (71%) took into account the amount of water a washing machine or dishwasher uses when they considered their purchase.
- The survey found that 70% of people were aware of water rating information used on washing machines and dishwashers.

## WATER SUPPLY

Mains/town water was the predominant water source for 93% of households across Australia in March 1998 (the same proportion as in the June 1994 survey) with Tasmania ranking lowest for mains water with 88% of households. Around 17% of households reported using rainwater tanks as one of their sources of water, with a high 54% of South Australian households making use of water from rainwater tanks. South Australia also had the highest number of households using bottled water (20%). Western Australia had the highest proportion of households with water sourced from a bore or well (21%).

## 4.1 SOURCES OF WATER

	<i>NSW</i>	<i>Vic.</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas.</i>	<i>NT</i>	<i>ACT</i>	<i>Aust.</i>
MARCH 1998(a)									
<b>Number ('000)</b>									
Mains/town	2 188.3	1 593.0	1 145.2	571.2	668.1	163.5	51.8	115.8	6 496.8
Rainwater tank	288.7	239.7	230.4	318.0	67.8	31.1	*2.8	*1.4	1 180.0
Bottled	249.5	178.4	121.9	120.3	94.6	16.4	5.5	14.9	801.7
Spring	*10.6	*10.2	*1.5	*3.9	—	*1.6	—	—	27.9
Bore/well	55.4	43.7	106.0	17.0	141.8	4.6	*5.1	—	373.7
River/creek/dam	104.9	59.9	56.4	10.6	*9.2	11.5	*0.5	—	253.0
Other	22.0	24.6	15.0	*5.8	*4.1	*1.3	—	—	72.8
<b>All sources</b>	<b>2 353.6</b>	<b>1 722.8</b>	<b>1 281.3</b>	<b>594.3</b>	<b>688.9</b>	<b>186.7</b>	<b>56.4</b>	<b>115.8</b>	<b>6 999.7</b>
<b>Proportion (%)</b>									
Mains/town	93.0	92.5	89.4	96.1	97.0	87.6	91.9	100.0	92.8
Rainwater tank	12.3	13.9	18.0	53.5	9.8	16.7	*5.0	*1.2	16.9
Bottled	10.6	10.4	9.5	20.2	13.7	8.8	9.8	12.9	11.5
Spring	*0.5	*0.6	*0.1	*0.7	—	*0.9	—	—	0.4
Bore/well	2.4	2.5	8.3	2.9	20.6	2.5	*9.1	—	5.3
River/creek/dam	4.5	3.5	4.4	1.8	*1.3	6.2	*1.0	—	3.6
Other	0.9	1.4	1.2	*1.0	*0.6	*0.7	—	—	1.0
JUNE 1994									
<b>Proportion (%)</b>									
Mains/town	94.4	93.4	88.7	95.4	93.6	86.1	95.4	100.0	93.0
Rainwater tank	9.1	12.6	17.7	48.0	11.2	17.9	2.6	0.9	15.2
Spring	0.6	0.5	0.5	2.4	0.6	4.1	0.4	—	0.8
Bore	2.2	2.0	7.5	4.4	20.9	2.0	7.5	—	5.1
Bottled	2.5	1.3	2.1	9.3	3.5	0.6	1.8	1.3	2.8
Other	2.8	2.2	3.4	1.3	2.8	4.7	—	0.3	2.6

(a) Totals do not equal the sum of items in each column because more than one source may be specified.

Mains water was the principle source of water for gardens (88%), followed by bore or well water (5%), and water from a rainwater tank, or a river, creek or dam (all 3%). The Australian Capital Territory ranked highest for the use of mains water, with all garden water sourced from this supply (100%). Western Australia was highest for water sourced from a bore or well (22%), while Tasmania had the highest proportion of garden water sourced from rainwater tanks (7%). Recycled and grey water (e.g. water from washing machines) had the greatest level of use by Queensland households (1%), although its use was minimal compared to the other water sources surveyed.

## 4.2 MAIN SOURCE OF GARDEN WATER

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
MARCH 1998									
<b>Number ('000)</b>									
Mains/town	1 893.4	1 415.7	968.2	445.4	467.2	144.7	46.0	101.2	5 481.9
Rainwater tank	54.5	42.2	37.9	25.5	*4.9	11.4	*0.5	—	176.9
Spring	*3.5	*0.5	*1.5	*0.4	—	*0.2	—	—	*6.2
Bore/well	44.3	34.6	72.4	12.7	135.2	*3.0	*4.3	—	306.6
River/creek/dam	75.6	42.3	35.8	*8.7	*6.3	8.5	*0.5	—	177.8
Recycled/grey water	*11.1	*0.5	*11.6	*1.2	—	*0.2	—	—	24.7
Other	*1.4	*17.2	*8.4	*1.1	*1.7	*0.1	—	—	29.9
<b>All sources</b>	<b>2 083.8</b>	<b>1 553.0</b>	<b>1 135.9</b>	<b>495.0</b>	<b>615.3</b>	<b>168.2</b>	<b>51.4</b>	<b>101.2</b>	<b>6 203.9</b>
<b>Proportion (%)</b>									
Mains/town	90.9	91.2	85.2	90.0	75.9	86.1	89.6	100.0	88.4
Rainwater tank	2.6	2.7	3.3	5.1	*0.8	6.8	*0.9	—	2.9
Spring	*0.2	—	*0.1	*0.1	—	*0.1	—	—	*0.1
Bore/well	2.1	2.2	6.4	2.6	22.0	*1.8	*8.5	—	4.9
River/creek/dam	3.6	2.7	3.2	*1.8	*1.0	5.1	*1.0	—	2.9
Recycled/grey water	*0.5	—	*1.0	*0.2	—	*0.1	—	—	0.4
Other	*0.1	*1.1	*0.7	*0.2	*0.3	*0.1	—	—	0.5
JUNE 1994									
<b>Proportion (%)</b>									
Mains/town	91.2	92.0	85.3	90.4	75.6	85.7	92.5	99.7	88.6
Rainwater tank	2.5	3.5	3.4	3.9	0.5	4.2	—	0.3	2.8
Spring	0.5	0.4	0.4	0.3	0.5	3.7	0.6	—	0.5
Bore	2.6	2.1	7.3	3.8	21.3	1.5	7.2	—	5.4
Other	3.2	2.0	3.6	1.6	2.2	5.0	—	—	2.7

The principle water source for bathing, showering and washing clothes was the mains supply (91%).

For bathing and showering the next most used source was water from a rainwater tank (6%), followed by water from a bore or well (1.6%). Tasmania ranked highest amongst the States and Territories for water supplied by rainwater tanks (12%), while the Northern Territory was highest for water sourced from a bore or well (7%).

For washing clothes the second main source of water after the mains supply was also that supplied by rainwater tanks (7%). Tasmania again ranked highest for water supplied by rainwater tanks (11%), and was also highest for water supplied from a river, creek or dam (2%).

People in Queensland were the most likely to use bore/well water for bathing, showering (5%) and washing (4%).

## 4.3 MAIN SOURCES OF BATH, SHOWER AND WASHING WATER

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
MARCH 1998									
<b>Bathing and showering</b>									
Number ('000)									
Mains/town	1 951.8	1 429.6	1 017.1	476.1	599.4	147.7	47.1	101.4	5 770.3
Rainwater tank	127.9	104.8	92.5	35.2	13.8	20.2	*0.5	—	394.9
Spring	*2.2	*0.5	*0.5	—	—	*0.3	—	—	*3.6
Bore/well	23.2	*8.2	*53.2	*4.8	*7.5	*1.1	*3.6	—	101.6
River/creek/dam	*18.6	*11.5	*6.9	*3.2	*0.6	*2.5	*0.5	—	43.8
Other	—	*12.1	*2.2	—	—	—	—	—	*14.3
<b>All sources</b>	<b>2 123.8</b>	<b>1 566.8</b>	<b>1 172.3</b>	<b>519.4</b>	<b>621.2</b>	<b>171.9</b>	<b>51.7</b>	<b>101.4</b>	<b>6 328.5</b>
Proportion (%)									
Mains/town	91.9	91.2	86.8	91.7	96.5	85.9	91.2	100.0	91.2
Rainwater tank	6.0	6.7	7.9	6.8	2.2	11.8	*0.9	—	6.2
Spring	*0.1	—	—	—	—	*0.2	—	—	*0.1
Bore/well	1.1	*0.5	4.5	*0.9	*1.2	*0.7	*6.9	—	1.6
River/creek/dam	*0.9	*0.7	*0.6	*0.6	*0.1	*1.5	*1.0	—	0.7
Other	—	*0.8	*0.2	—	—	—	—	—	*0.2
<b>Washing</b>									
Number ('000)									
Mains/town	1 950.9	1 426.9	1 013.8	461.5	597.6	147.7	47.1	101.2	5 746.7
Rainwater tank	128.5	106.9	96.1	49.1	15.9	19.7	*0.5	*0.2	416.9
Spring	*1.9	*0.5	*1.0	—	—	*0.3	—	—	*3.8
Bore/well	26.3	*11.0	50.4	*4.7	*6.4	*1.0	*3.6	—	103.2
River/creek/dam	*16.1	*11.5	*8.2	*3.2	*1.0	*3.2	*0.5	—	43.8
Other	—	*10.0	*2.8	*0.9	*0.4	—	—	—	*14.0
<b>All sources</b>	<b>2 123.8</b>	<b>1 566.8</b>	<b>1 172.3</b>	<b>519.4</b>	<b>621.2</b>	<b>171.9</b>	<b>51.7</b>	<b>101.4</b>	<b>6 328.5</b>
Proportion (%)									
Mains/town	91.9	91.1	86.5	88.9	96.2	85.9	91.2	99.8	90.8
Rainwater tank	6.1	6.8	8.2	9.4	2.6	11.4	*0.9	*0.2	6.6
Spring	*0.1	—	*0.1	—	—	*0.2	—	—	*0.1
Bore/well	1.2	*0.7	4.3	*0.9	*1.0	*0.6	*6.9	—	1.6
River/creek/dam	*0.8	*0.7	*0.7	*0.6	*0.2	*1.9	*1.0	—	0.7
Other	—	*0.6	*0.2	*0.2	*0.1	—	—	—	*0.2
JUNE 1994									
<b>Bathing, showering and washing (%)</b>									
Mains/town	94.0	93.1	88.1	90.3	92.9	85.7	95.1	100.0	92.2
Rainwater tank	4.5	5.4	8.7	8.2	2.8	9.2	—	—	5.7
Spring	0.3	0.2	0.2	—	0.3	2.5	0.4	—	0.3
Bore/well	0.3	0.7	2.5	0.9	2.7	0.6	4.6	—	1.1
Other	0.9	0.5	0.6	0.6	1.1	1.9	—	—	0.8

The principle water source for drinking was the mains supply (81%), followed by rainwater tanks (13%) and bottled water (5%). Drinking water from rainwater tanks and bottles was highest for South Australia (38% and 14%, respectively). Rainwater tanks as a source of drinking water was lowest for the Australian Capital Territory (0.2%), while the Northern Territory was lowest for bottled drinking water (0.9%).

## 4.4 MAIN SOURCE OF DRINKING WATER

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
MARCH 1998									
<b>Number ('000)</b>									
Mains/town	1 991.7	1 444.9	1 005.4	280.9	593.9	150.9	50.6	111.6	5 630.0
Rainwater tank	238.3	199.8	199.7	223.4	44.5	26.5	*1.9	*0.2	934.3
Spring	*1.3	*4.6	*1.1	*3.5	*0.4	*0.8	—	—	*11.7
Bottled	110.6	61.4	45.9	81.5	45.8	5.3	*0.5	*3.9	354.9
Other	*7.5	*7.4	*7.1	*4.2	*2.7	*1.1	*0.3	—	30.4
<b>All sources</b>	<b>2 349.5</b>	<b>1 718.1</b>	<b>1 259.3</b>	<b>593.6</b>	<b>687.2</b>	<b>184.6</b>	<b>53.3</b>	<b>115.8</b>	<b>6 961.3</b>
<b>Proportion (%)</b>									
Mains/town	84.8	84.1	79.8	47.3	86.4	81.8	95.0	96.4	80.9
Rainwater tank	10.1	11.6	15.9	37.6	6.5	14.3	*3.6	*0.2	13.4
Spring	*0.1	*0.3	*0.1	*0.6	*0.1	*0.4	—	—	*0.2
Bottled	4.7	3.6	3.6	13.7	6.7	2.9	*0.9	*3.4	5.1
Other	*0.3	*0.4	*0.6	*0.7	*0.4	*0.6	*0.5	—	0.4
JUNE 1994									
<b>Proportion (%)</b>									
Mains/town	89.8	87.6	81.3	53.3	85.8	81.5	92.9	99.1	84.1
Rainwater tank	7.7	11.0	15.6	36.7	8.8	14.9	1.6	—	12.6
Spring	0.1	0.1	0.1	1.7	0.2	1.8	0.4	—	0.3
Bottled	1.9	0.7	1.6	7.9	2.9	0.1	1.3	0.9	2.1
Other	0.4	0.5	0.6	0.2	1.0	1.2	0.4	—	0.5
Bore	0.1	0.1	0.7	0.1	1.3	0.4	3.4	—	0.4

For the most part Australians believed that the cost of water to them was at about the right level (38%), with Western Australians rating highest (44%) and Northern Territorians the lowest (28%) for believing this to be the case. However, one-third stated that they thought the price of water was too high, while around 9% of respondents were not aware of the cost of water. South Australians rated highest for those people who believed that the cost of water was too high (45%), followed closely by Victorians (43%). Tasmanians rated lowest for those people who thought the price of water was too high (19%).

## 4.5 COST OF WATER—1998

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
NUMBER ('000)									
Too high	1 357.1	1 469.6	576.2	490.2	446.6	64.6	26.2	63.3	4 493.8
About right	1 760.0	1 253.1	915.6	335.5	566.4	120.4	25.0	93.2	5 069.4
Too low	94.1	36.0	30.4	*5.5	24.2	5.9	*1.5	9.7	207.2
No opinion	209.9	118.9	106.8	47.2	46.5	10.7	3.4	6.9	550.4
Not aware of cost of water	407.8	274.6	334.4	72.0	96.2	41.2	7.4	20.1	1 253.8
No water costs to pay	749.6	236.5	502.0	140.2	97.1	95.3	26.9	23.5	1 871.1
<b>Total</b>	<b>4 578.7</b>	<b>3 388.6</b>	<b>2 465.5</b>	<b>1 090.6</b>	<b>1 277.1</b>	<b>338.1</b>	<b>90.4</b>	<b>216.7</b>	<b>13 445.7</b>
PROPORTION (%)									
Too high	29.6	43.4	23.4	45.0	35.0	19.1	29.0	29.2	33.4
About right	38.4	37.0	37.1	30.8	44.4	35.6	27.7	43.0	37.7
Too low	2.1	1.1	1.2	*0.5	1.9	1.7	*1.6	4.5	1.5
No opinion	4.6	3.5	4.3	4.3	3.6	3.2	3.8	3.2	4.1
Not aware of cost of water	8.9	8.1	13.6	6.6	7.5	12.2	8.2	9.3	9.3
No water costs to pay	16.4	7.0	20.4	12.9	7.6	28.2	29.7	10.8	13.9

WATER SUPPLY *continued*

Of the people aware of the cost of water they were required to pay, most did not alter the amount they used because of cost (54%). People in Tasmania were the least likely to alter the amount used because of water cost, while those in South Australia had the highest proportion of people whose usage of water was influenced by its cost.

**4.6 PERSONS AWARE OF WATER COST, Influences Amount Used—1998**

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
NUMBER ('000)									
Yes	1 452.3	1 399.8	749.8	465.8	545.5	70.7	24.6	80.9	4 789.4
No	1 968.9	1 477.8	879.2	412.6	538.3	130.8	31.5	92.2	5 531.3
<b>All influenced</b>	<b>3 421.2</b>	<b>2 877.6</b>	<b>1 629.0</b>	<b>878.4</b>	<b>1 083.8</b>	<b>201.6</b>	<b>56.1</b>	<b>173.1</b>	<b>10 320.8</b>
PROPORTION (%)									
Yes	42.4	48.6	46.0	53.0	50.3	35.1	43.9	46.7	46.4
No	57.6	51.4	54.0	47.0	49.7	64.9	56.1	53.3	53.6

## WATER QUALITY

Around two-thirds of Australians (65%) were satisfied with the quality of their drinking water obtained from the mains supply. The most satisfied people were in the Northern Territory and the Australian Capital Territory (84%), while the least satisfied were people living in South Australia (45%). South Australians also rated highest for those people who did not drink water from the mains supply (10%), compared with an average of 1.4% across the other States and Territories.

**4.7 PERSONS WITH MAINS WATER, Quality Of Tap Water For Drinking**

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
MARCH 1998									
<b>Number ('000)</b>									
Satisfied	2 831.1	2 179.2	1 413.0	469.2	793.7	218.8	78.3	179.4	8 162.7
Not satisfied	1 157.0	747.8	655.8	439.2	393.2	63.4	9.1	25.5	3 490.9
Depends	217.4	166.2	100.4	41.0	67.2	12.7	5.6	8.7	619.3
Don't drink mains water	106.8	85.9	32.7	104.9	18.8	*3.0	*0.2	*1.2	353.6
<b>Total</b>	<b>4 312.3</b>	<b>3 179.0</b>	<b>2 202.0</b>	<b>1 054.3</b>	<b>1 272.8</b>	<b>297.9</b>	<b>93.2</b>	<b>214.9</b>	<b>12 626.4</b>
<b>Proportion (%)</b>									
Satisfied	65.7	68.5	64.2	44.5	62.4	73.4	84.0	83.5	64.6
Not satisfied	26.8	23.5	29.8	41.7	30.9	21.3	9.7	11.9	27.6
Depends	5.0	5.2	4.6	3.9	5.3	4.3	6.0	4.1	4.9
Don't drink mains water	2.5	2.7	1.5	10.0	1.5	*1.0	*0.2	*0.6	2.8
JUNE 1994									
<b>Proportion (%)</b>									
Satisfied	61.5	69.3	64.8	47.0	59.9	74.8	88.1	85.6	63.5
Not satisfied	34.3	28.1	31.8	50.9	35.7	22.4	10.5	12.5	33.1
Depends	4.1	2.5	3.4	2.1	4.3	2.8	1.4	1.9	3.3

## WATER QUALITY continued

The main problem reported with the quality of the mains water supply for drinking was its taste (62%), followed by too much chlorine (30%) and dirt in the water (18%). Of the problems surveyed, the least problems of concern were the colour and odour of the water (16.5%).

Western Australia rated highest for people reporting problems with the taste of the water (68%), while the Australian Capital Territory reported the least problem of water taste (37%). However, the Australian Capital Territory ranked highest for chlorine problems (37%), whereas South Australia ranked lowest for problems with chlorine (23%). Dirty water and colour were highest for people in the Northern Territory (41% and 36%, respectively), although they rated lowest for problems with odour (4%).

## 4.8 PERSONS DISSATISFIED WITH MAINS WATER, Problems—March 1998

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
NUMBER ('000)									
Taste	910.1	579.9	499.6	379.4	325.5	40.5	5.7	13.3	2 754.1
Colour	236.7	180.3	108.7	113.3	72.6	15.1	5.4	*2.4	734.5
Chlorine	480.9	295.3	246.4	133.9	142.7	22.5	*4.5	13.1	1 339.2
Dirty	297.5	184.5	128.9	96.4	64.1	22.9	6.1	6.3	806.8
Odour	229.9	210.0	119.9	101.9	57.1	14.1	*0.6	*3.8	737.4
Other	214.0	174.8	140.3	109.1	91.6	11.2	*3.7	12.3	756.9
<b>Total</b>	<b>1 481.2</b>	<b>999.8</b>	<b>789.0</b>	<b>585.1</b>	<b>479.1</b>	<b>79.1</b>	<b>14.9</b>	<b>35.5</b>	<b>4 463.7</b>
PROPORTION (%)									
Taste	61.4	58.0	63.3	64.8	67.9	51.2	38.4	37.4	61.7
Colour	16.0	18.0	13.8	19.4	15.2	19.1	36.2	*6.6	16.5
Chlorine	32.5	29.5	31.2	22.9	29.8	28.4	*30.4	36.8	30.0
Dirty	20.1	18.5	16.3	16.5	13.4	29.0	40.8	17.8	18.1
Odour	15.5	21.0	15.2	17.4	11.9	17.8	*4.1	*10.8	16.5
Other	14.4	17.5	17.8	18.6	19.1	14.1	*25.0	34.7	17.0

Water filters for drinking water were used by 18% of Australian households. Western Australians were the highest users (21%), followed very closely by households in Queensland (20%). Australian Capital Territory households were the least likely to use water filters (9.5%).

## 4.9 WATER FILTERS USED FOR DRINKING WATER—March 1998(a)

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
NUMBER ('000)									
Yes	431.2	269.5	247.9	87.8	132.0	25.6	6.9	10.7	1 211.5
No	1 811.8	1 391.9	987.5	425.0	511.1	155.7	49.0	101.2	5 433.2
<b>Total</b>	<b>2 243.0</b>	<b>1 661.4</b>	<b>1 235.4</b>	<b>512.8</b>	<b>643.1</b>	<b>181.3</b>	<b>55.9</b>	<b>111.8</b>	<b>6 644.8</b>
PROPORTION (%)									
Yes	19.2	16.2	20.1	17.1	20.5	14.1	12.4	9.5	18.2
No	80.8	83.8	79.7	82.9	79.5	85.9	87.6	90.5	81.8

(a) Excludes bottled water

## RAINWATER TANKS

Of those households who had a rainwater tank as part of their water supply, 84% stated that they considered that their tanks provided a sufficient supply of water for their needs. This perception was highest in Queensland and South Australia (both 87%), and lowest in the Australian Capital Territory (29%).

## 4.10 HOUSEHOLDS WITH RAINWATER TANKS, Sufficient Supply

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
MARCH 1998									
<b>Number ('000)</b>									
Yes	235.7	197.1	199.8	275.7	51.7	23.4	*1.4	*0.4	985.3
No	53.1	42.6	30.6	42.3	16.0	7.6	*1.5	*1.0	194.7
<b>Total</b>	<b>288.7</b>	<b>239.7</b>	<b>230.4</b>	<b>318.0</b>	<b>67.8</b>	<b>31.1</b>	<b>*2.8</b>	<b>*1.4</b>	<b>1 180.0</b>
<b>Proportion (%)</b>									
Yes	81.6	82.2	86.7	86.7	76.3	75.4	*47.8	*29.4	83.5
No	18.4	17.8	13.3	13.3	23.7	24.6	*52.2	*70.6	16.5
JUNE 1994									
<b>Proportion (%)</b>									
Yes	83.4	82.5	85.4	91.9	80.1	78.4	83.4	34.8	85.6
No	16.6	17.5	14.6	8.1	19.9	21.6	16.6	65.2	14.4

Of those households who had considered installing a rainwater tank on their property, the principle reason for not doing so was its cost (38%), followed by not having the time to install one (32%). Around 10% stated that rainwater tanks were not allowed in their district or shire.

The Northern Territory ranked highest for cost being the main inhibitor to installing a tank (50%), followed by Queensland (44%). Victoria was highest for tanks not being allowed (15%), followed by New South Wales and the Northern Territory (12%). South Australia rated lowest for tanks not being permitted to be installed (0.5%).



#### 4.11 HOUSEHOLDS CONSIDERED INSTALLING RAINWATER TANK, Reasons Not Installed—March 1998

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
NUMBER ('000)									
Not allowed in district/shire	47.1	49.4	14.5	*0.4	*1.6	*0.9	*0.9	*3.2	117.9
Cost	138.0	111.7	92.9	30.0	62.0	11.8	*3.7	12.0	462.2
No room	64.9	43.5	19.5	14.8	25.8	*2.0	*0.6	*4.4	175.5
Not home owner/not responsible	—	—	—	*0.3	*0.4	—	—	*0.2	*0.9
Water quality	*14.4	*5.9	*12.7	*5.3	*8.0	*1.6	*0.6	*1.3	49.7
No time	131.1	105.2	62.8	28.7	35.3	10.6	*2.8	10.1	386.5
Other	59.1	43.2	35.4	*8.5	20.2	*3.9	*0.2	*4.6	175.0
<b>Total</b>	<b>411.3</b>	<b>321.8</b>	<b>209.1</b>	<b>78.7</b>	<b>142.2</b>	<b>27.4</b>	<b>7.5</b>	<b>30.7</b>	<b>1 228.8</b>
PROPORTION (%)									
Not allowed in district/shire	11.5	15.4	6.9	*0.5	*1.1	*3.3	*11.5	*10.3	9.6
Cost	33.6	34.7	44.4	38.1	43.6	42.9	*49.5	39.0	37.6
No room	15.8	13.5	9.3	18.8	18.1	*7.4	*7.7	*14.3	14.3
Not home owner/not responsible	—	—	—	*0.4	*0.3	—	—	*0.6	*0.1
Water quality	*3.5	*1.8	*6.1	*6.7	*5.6	*5.8	*7.7	*4.2	4.0
No time	31.9	32.7	30.0	36.5	24.8	38.6	*37.0	32.7	31.5
Other	14.4	13.4	16.9	*10.8	14.2	*14.3	*2.4	*14.9	14.2

#### SWIMMING POOLS

The majority of Australian households (90%) did not have a swimming pool. Tasmania has the lowest proportion of swimming pools (3%, the same proportion as in the June 1994 survey), while the Northern Territory had the highest (19%, a slightly higher proportion than the June 1994 survey).

#### 4.12 SWIMMING POOLS

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
MARCH 1998									
<b>Number ('000)</b>									
Filtered swimming pool	258.1	111.6	196.2	32.6	84.5	5.1	10.2	6.5	704.9
No swimming pool	2 095.5	1 611.2	1 085.1	561.7	604.3	181.6	46.2	109.2	6 294.8
<b>Total</b>	<b>2 353.6</b>	<b>1 722.8</b>	<b>1 281.3</b>	<b>594.3</b>	<b>688.9</b>	<b>186.7</b>	<b>56.4</b>	<b>115.8</b>	<b>6 999.7</b>
<b>Proportion (%)</b>									
Filtered swimming pool	11.0	6.5	15.3	5.5	12.3	2.7	18.0	5.6	10.1
No swimming pool	89.0	93.5	84.7	94.5	87.7	97.3	81.9	94.3	89.9
JUNE 1994									
<b>Proportion (%)</b>									
Filtered swimming pool	10.5	6.3	11.6	5.9	10.9	3.4	17.9	5.6	9.1
No swimming pool	89.4	93.7	88.4	94.2	89.1	96.5	82.1	94.4	90.9

## WATER CONSERVATION

Around 55% of Australian households had a dual flush toilet at March 1998, compared with 39% in the June 1994 survey. Around one-third (32%) had a reduced flow shower head, compared with 22% in the 1994 survey. Victoria had the highest proportion of households with a dual flush toilet (64%), while New South Wales had the lowest (46%). Western Australia rated highest for reduced flow shower heads (38%), while the Northern Territory had the lowest proportion with 28%. As for other water conservation methods, the primary one is to turn off or repair dripping taps (20%), followed by full loads when washing clothes (17%).

The proportion of households who took no water conservation steps within their dwelling had remained virtually unchanged between the 1994 and 1998 surveys (54% and 53% respectively).

## 4.13 HOUSEHOLD WATER CONSERVATION METHODS

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
MARCH 1998									
<b>Number ('000)</b>									
Dual flush toilet	1 088.0	1 105.2	680.0	375.3	434.6	89.9	35.5	55.7	3 864.3
Reduced flow shower head	705.7	545.6	437.5	198.9	259.7	60.3	15.8	37.8	2 261.3
Neither item	1 011.7	475.5	439.0	166.0	173.2	71.7	16.8	44.0	2 397.8
Recycle/reuse water	349.6	237.7	178.2	97.9	126.9	28.9	6.6	13.4	1 039.3
Full loads when washing	376.5	352.0	182.8	71.0	106.7	30.3	12.3	23.3	1 154.9
Shorter showers	382.7	249.1	197.1	66.0	110.4	26.9	9.4	15.3	1 056.9
Turn off/repair dripping taps	502.5	340.3	283.4	83.8	107.0	30.9	17.3	24.8	1 389.9
Brick in toilet cistern	68.6	26.3	19.8	*7.7	10.9	*4.0	*1.2	*3.2	141.6
Use bucket to wash car	125.8	98.4	46.2	30.9	43.6	8.4	*4.6	*4.6	362.6
Wash car on lawn	259.6	106.0	53.2	32.6	37.1	13.0	6.4	7.3	515.4
Use broom to clean paths	169.4	84.8	44.3	16.3	34.4	6.6	*4.7	*4.3	364.9
Other	168.3	126.9	153.7	46.3	59.8	14.2	*2.2	11.6	583.0
No water conservation steps	1 198.4	922.3	672.8	347.7	351.6	105.7	28.3	60.4	3 687.0
<b>Total</b>	<b>2 353.6</b>	<b>1 722.8</b>	<b>1 281.3</b>	<b>594.3</b>	<b>688.9</b>	<b>186.7</b>	<b>56.4</b>	<b>115.8</b>	<b>6 999.7</b>
<b>Proportion (%)</b>									
Dual flush toilet	46.2	64.2	53.1	63.2	63.1	48.1	63.0	48.1	55.2
Reduced flow shower head	30.0	31.7	34.1	33.5	37.7	32.3	28.0	32.6	32.3
Neither item	43.0	27.6	34.3	27.9	25.2	38.4	29.7	38.0	34.3
Recycle/reuse water	14.9	13.8	13.9	16.5	18.4	15.5	11.6	11.6	14.8
Full loads when washing	16.0	20.4	14.3	12.0	15.5	16.2	21.8	20.1	16.5
Shorter showers	16.3	14.5	15.4	11.1	16.0	14.4	16.6	13.2	15.1
Turn off/repair dripping taps	21.4	19.8	22.1	14.1	15.5	16.5	30.6	21.4	19.9
Brick in toilet cistern	2.9	1.5	1.5	*1.3	1.6	*2.1	*2.2	*2.8	2.0
Use bucket to wash car	5.3	5.7	3.6	5.2	6.3	4.5	*8.1	*4.0	5.2
Wash car on lawn	11.0	6.2	4.2	5.5	5.4	7.0	11.4	6.3	7.4
Use broom to clean paths	7.2	4.9	3.5	2.8	5.0	3.6	*8.4	*3.7	5.2
Other	7.2	7.4	12.0	7.8	8.7	7.6	*3.9	10.0	8.3
No water conservation steps	50.9	53.5	52.5	58.5	51.0	56.6	50.1	52.2	52.7
JUNE 1994									
<b>Proportion (%)</b>									
Dual flush toilet	30.5	50.8	31.5	48.2	46.6	31.0	41.6	33.2	39.0
Reduced flow shower head	19.5	21.2	22.5	26.1	26.1	20.6	14.6	28.6	21.8
Recycle/reuse water	13.3	9.0	16.5	13.2	19.5	11.9	7.7	12.3	13.3
Full loads when washing	16.3	15.9	15.1	10.5	22.1	18.5	19.0	16.8	16.1
Shorter showers	16.7	13.3	15.3	12.5	21.9	16.7	13.5	15.9	15.7
Turn off/repair dripping taps	25.3	21.1	29.7	13.1	20.8	23.5	24.5	29.5	23.5
Brick in toilet cistern	2.3	1.1	1.4	1.6	2.2	1.8	—	2.5	1.8
Other	8.9	5.7	10.7	7.2	10.8	5.1	5.2	15.0	8.4
No water conservation steps	54.6	60.3	47.2	62.6	43.4	55.8	61.6	45.3	54.3

Almost three-quarters of respondents (71%) stated that they considered the water consumption of an appliance, such as a washing machine or dishwasher, when they were purchasing such an item. This consideration was highest in the Australian Capital Territory (78%) and lowest in the Northern Territory and Tasmania (65%).

## 4.14 WATER CONSUMPTION CONSIDERED IN APPLIANCE PURCHASE—1998

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
NUMBER ('000)									
Yes	3 253.8	2 403.1	1 702.1	823.5	961.8	221.1	58.5	169.4	9 593.4
No	1 076.3	863.8	698.3	226.3	280.8	107.3	30.1	42.7	3 325.6
Don't know	248.6	121.8	65.0	40.8	34.5	9.7	*1.8	4.6	526.7
<b>Total</b>	<b>4 578.7</b>	<b>3 388.7</b>	<b>2 465.5</b>	<b>1 090.6</b>	<b>1 277.1</b>	<b>338.1</b>	<b>90.4</b>	<b>216.7</b>	<b>13 445.7</b>
PROPORTION (%)									
Yes	71.1	70.9	69.0	75.5	75.3	65.4	64.7	78.2	71.3
No	23.5	25.5	28.3	20.7	22.0	31.8	33.3	19.7	24.7
Don't know	5.4	3.6	2.6	3.7	2.7	2.9	*2.0	2.1	3.9

Most people surveyed (70%) were aware of the water rating system used to determine the relative efficiency and water consumption of appliances. This awareness was highest for people in the Australian Capital Territory (79%), and lowest for those in Tasmania (66%).

## 4.15 AWARE OF WATER RATING SYSTEM ON APPLIANCES—1998

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
NUMBER ('000)									
Yes	3 265.1	2 288.1	1 698.6	770.9	926.2	223.3	62.9	170.2	9 405.3
No	1 313.6	1 100.5	766.9	319.7	350.9	114.8	27.5	46.6	4 040.4
<b>Total</b>	<b>4 578.7</b>	<b>3 388.6</b>	<b>2 465.5</b>	<b>1 090.6</b>	<b>1 277.1</b>	<b>338.1</b>	<b>90.4</b>	<b>216.7</b>	<b>13 445.7</b>
PROPORTION (%)									
Yes	71.3	67.5	68.9	70.7	72.5	66.0	69.6	78.5	70.0
No	28.7	32.5	31.1	29.3	27.5	34.0	30.4	21.5	30.0

Around 58% of households with gardens took steps to conserve water in their garden. This water conservation was highest in the Northern Territory (68%) and lowest in Queensland (52%).

## 4.16 HOUSEHOLDS WITH GARDENS, Conserve Water In Garden—March 1998

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
NUMBER ('000)									
Yes	1 084.8	920.4	576.0	324.7	417.1	96.8	32.2	68.5	3 520.4
Sometimes	74.3	42.4	20.5	9.1	*10.8	8.2	*0.3	*2.8	168.4
No	728.8	592.7	503.9	211.6	200.9	66.3	15.1	31.1	2 350.5
<b>Total</b>	<b>1 887.9</b>	<b>1 555.5</b>	<b>1 100.5</b>	<b>545.4</b>	<b>628.8</b>	<b>171.2</b>	<b>47.6</b>	<b>102.5</b>	<b>6 039.3</b>
PROPORTION (%)									
Yes	57.5	59.2	52.3	59.5	66.3	56.5	67.7	66.9	58.3
Sometimes	3.9	2.7	1.9	1.7	*1.7	4.8	*0.6	*2.8	2.8
No	38.6	38.1	45.8	38.8	32.0	38.7	31.7	30.4	38.9

WATER CONSERVATION *continued*

The principle method used by households to conserve water in the garden was to water early or late in the day to reduce water losses due to evaporation (49%). The Northern Territory had the highest proportion of households employing this method (72%), while Queensland had the lowest (37%).

Around 10% relied on rainfall to provide sufficient water for their garden, and did not water. This was highest for Tasmania (15%) and lowest for Western Australia (3%).

**4.17 HOUSEHOLDS WHO CONSERVE GARDEN WATER, Methods—March 1998**

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
NUMBER ('000)									
Water early morning/late evening	605.6	448.2	219.3	149.7	266.7	49.3	23.2	43.3	1 805.4
Check soil moisture before watering	135.4	154.9	92.2	50.1	48.9	10.8	*3.3	9.5	505.2
Use recycled water	240.6	189.2	116.2	53.8	65.0	20.5	*5.1	6.3	696.6
Other	258.1	284.7	190.8	117.4	129.5	28.5	6.1	21.3	1 036.5
Don't water/rely on rainfall	115.1	107.9	76.9	19.5	13.5	15.3	*2.2	5.7	355.9
<b>Total</b>	<b>1 159.1</b>	<b>962.8</b>	<b>596.6</b>	<b>333.7</b>	<b>427.9</b>	<b>104.9</b>	<b>32.5</b>	<b>71.4</b>	<b>3 688.8</b>
PROPORTION (%)									
Water early morning/late evening	52.2	46.6	36.8	44.9	62.3	47.0	71.5	60.7	48.9
Check soil moisture before watering	11.7	16.1	15.5	15.0	11.4	10.3	*10.1	13.3	13.7
Use recycled water	20.8	19.6	19.5	16.1	15.2	19.5	*15.8	8.8	18.9
Other	22.3	29.6	32.0	35.2	30.3	27.2	18.8	29.9	28.1
Don't water/rely on rainfall	9.9	11.2	12.9	5.8	3.1	14.6	*6.7	7.9	9.6

Around 57% of households with gardens had planted native trees or shrubs, while 68% used mulch around their plants. The Australian Capital Territory rated highest for the use of native trees and shrubs (65%) and mulch (76%), while the Northern Territory was the lowest for having planted natives (49%), with Victoria the lowest for mulch use (65%).

Around 19% of households who had planted native trees and shrubs stated that they had done so in order to conserve water, with Western Australia the highest (40%) and Queensland the lowest (10%). Of those households who used mulch, 70% did so in order to conserve water. Western Australia rated highest for mulch use to conserve water (82%), with Queensland rating the lowest (61%).

**4.18 HOUSEHOLDS WITH GARDENS, Planted Natives—March 1998**

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
NUMBER ('000)									
Yes	1 081.5	870.9	674.9	297.5	344.8	93.9	23.2	67.1	3 453.9
No	806.4	684.6	425.6	247.8	284.0	77.3	24.3	35.4	2 585.4
<b>Total</b>	<b>1 887.9</b>	<b>1 555.5</b>	<b>1 100.5</b>	<b>545.4</b>	<b>628.8</b>	<b>171.2</b>	<b>47.6</b>	<b>102.5</b>	<b>6 039.3</b>
PROPORTION (%)									
Yes	57.3	56.0	61.3	54.6	54.8	54.9	48.9	65.4	57.2
No	42.7	44.0	38.7	45.4	45.2	45.1	51.1	34.6	42.8

**4.19 HOUSEHOLDS WITH GARDENS, Mulch Used In Garden—March 1998**

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
NUMBER ('000)									
Yes	1 270.6	1 014.6	792.7	357.0	419.5	119.9	35.8	78.3	4 088.3
No	617.4	540.9	307.8	188.4	209.3	51.3	11.8	24.2	1 951.0
<b>Total</b>	<b>1 887.9</b>	<b>1 555.5</b>	<b>1 100.5</b>	<b>545.4</b>	<b>628.8</b>	<b>171.2</b>	<b>47.6</b>	<b>102.5</b>	<b>6 039.3</b>
PROPORTION (%)									
Yes	67.3	65.2	72.0	65.5	66.7	70.1	75.2	76.3	67.7
No	32.7	34.8	28.0	34.5	33.3	29.9	24.8	23.7	32.3

**4.20 HOUSEHOLDS WHO PLANT NATIVES, Reason—March 1998**

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
NUMBER ('000)									
To conserve water	153.4	148.8	69.8	99.1	138.3	11.4	6.9	14.9	642.7
Other	1 013.4	796.9	645.6	238.3	248.2	87.7	20.4	60.9	3 111.3
<b>Total</b>	<b>1 081.5</b>	<b>870.9</b>	<b>674.9</b>	<b>297.5</b>	<b>344.8</b>	<b>93.9</b>	<b>23.2</b>	<b>67.1</b>	<b>3 453.9</b>
PROPORTION (%)									
To conserve water	14.2	17.1	10.3	33.3	40.1	12.1	29.8	22.3	18.6
Other	93.7	91.5	95.7	80.1	72.0	93.4	87.8	90.7	90.1

**4.21 HOUSEHOLDS USING MULCH, Reason Mulch Used—March 1998**

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
NUMBER ('000)									
To conserve water	846.9	722.8	486.7	286.8	343.8	77.4	28.9	59.8	2 853.1
Other	702.6	523.5	461.7	141.9	138.0	66.5	15.9	41.1	2 091.2
<b>Total</b>	<b>1 270.6</b>	<b>1 014.6</b>	<b>792.7</b>	<b>357.0</b>	<b>419.5</b>	<b>119.9</b>	<b>35.8</b>	<b>78.3</b>	<b>4 088.3</b>
PROPORTION (%)									
To conserve water	66.7	71.2	61.4	80.4	82.0	64.6	80.8	76.4	69.8
Other	55.3	51.6	58.2	39.8	32.9	55.5	44.5	52.5	51.2

Hand watering was the dominant method used to water gardens (65%), followed by fixed and moveable sprinkler systems (29%). Drip irrigation systems were used by only 9% of households watering gardens.

Hand watering rated highest in New South Wales (69%) and lowest in the Northern Territory (39%). However, the Northern Territory had the highest use of drip irrigation systems (33%), with New South Wales and Western Australia the lowest (both 6%). Western Australia also had a higher reported use of timers on taps (29%) and fixed sprinkler systems (59%).

## 4.22 HOUSEHOLDS WHO WATER GARDENS, Methods—March 1998

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
NUMBER ('000)									
Hand watering	1 228.9	956.9	695.9	335.9	283.5	102.4	17.8	44.8	3 666.0
Moveable sprinkler	462.0	374.8	311.9	212.8	145.7	74.2	11.7	43.5	1 636.5
Fixed sprinkler system	340.4	439.5	234.2	184.2	361.3	31.1	17.7	40.0	1 648.4
Drip system	103.1	142.8	79.0	95.5	35.5	12.2	14.8	8.0	490.9
Timer on tap	84.7	134.8	61.5	77.2	175.5	9.1	9.0	15.0	566.8
Other	81.5	63.3	44.0	19.3	26.3	6.1	*0.8	*1.7	243.0
Rely on rainfall	123.2	55.0	62.6	9.4	**8.6	7.2	*2.7	*1.1	269.9
<b>Total</b>	<b>1 772.9</b>	<b>1 447.6</b>	<b>1 023.6</b>	<b>525.9</b>	<b>615.3</b>	<b>155.8</b>	<b>45.4</b>	<b>96.9</b>	<b>5 683.4</b>
PROPORTION (%)									
Hand watering	69.3	66.1	68.0	63.9	46.1	65.7	39.2	46.2	64.5
Moveable sprinkler	26.1	25.9	30.5	40.5	23.7	47.6	25.7	44.9	28.8
Fixed sprinkler system	19.2	30.4	22.9	35.0	58.7	20.0	38.9	41.3	29.0
Drip system	5.8	9.9	7.7	18.2	5.8	7.8	32.5	8.3	8.6
Timer on tap	4.8	9.3	6.0	14.7	28.5	5.9	19.7	15.5	10.0
Other	4.6	4.4	4.3	3.7	4.3	3.9	*1.8	*1.7	4.3
Rely on rainfall	7.0	3.8	6.1	1.8	*1.4	4.6	*6.0	*1.1	4.7

CHAPTER **5**

**USE OF WORLD HERITAGE AREAS,  
NATIONAL AND STATE PARKS .....**

MAIN FINDINGS

- Around 54% of people had visited a World Heritage Area, National or State park in the 12 months prior to March 1998, compared with 63% in a May 1992 survey.
- People below the age of 54 were more likely to have visited a World Heritage Area or park than those who were older, particularly those over 65 years.
- Households with dependent child(ren) had a higher proportion of visits to a Heritage Area or park than households with one person.
- The main reason for not visiting a World Heritage Area or park was no time available (37% of respondents). This compares with 25% in the May 1992 survey. Age and health factors were significant inhibitors for older people (51%) compared with those aged 18–24 years (3%). People not interested in visiting these areas was highest for 18–24 year olds (16%) and lowest for those aged 65 years and over (8%).



## VISITS TO WORLD HERITAGE AREAS, NATIONAL AND STATE PARKS

In the 12 months prior to March 1998, 54% of Australians over 18 years old had visited a World Heritage Area, National or State park. This compares with 63% in the May 1992 survey. The highest proportion of people who had visited occurred in the Northern Territory (63%) and the Australian Capital Territory (60%), while Tasmania had the lowest proportion of people with 50%.

## 5.1 VISITED A WORLD HERITAGE AREA OR PARK, By States and Territories

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
MARCH 1998									
<b>Number ('000)</b>									
Yes	2 469.6	1 814.7	1 399.7	572.9	782.6	171.4	63.4	129.2	7 403.4
No	2 051.4	1 537.4	1 043.3	511.4	505.0	163.2	37.4	82.0	5 931.1
Don't know	106.2	84.1	38.2	19.1	26.1	5.7	*0.3	*3.8	283.4
<b>Total</b>	<b>4 627.2</b>	<b>3 436.2</b>	<b>2 481.1</b>	<b>1 103.4</b>	<b>1 313.7</b>	<b>340.3</b>	<b>101.0</b>	<b>214.9</b>	<b>13 617.9</b>
<b>Proportion(%)</b>									
Yes	53.4	52.8	56.4	51.9	59.6	50.4	62.7	60.1	54.4
No	44.3	44.7	42.0	46.3	38.4	48.0	37.0	38.1	43.6
Don't know	2.3	2.4	1.5	1.7	2.0	1.7	*0.3	*1.7	2.1
MAY 1992									
<b>Proportion(%)</b>									
Yes	62.9	60.6	61.8	64.8	68.0	65.7	74.7	62.8	62.9
No	36.4	38.2	37.7	34.9	31.5	33.9	25.3	35.0	36.3
Don't know	0.7	1.2	0.6	0.3	0.5	0.4	—	2.2	0.8

Of the 5.9 million Australians who had not visited a World Heritage Area, National or State park, 37% of these people stated that it was because they did not have the time, followed by age and health reasons (16.8%). Cost was the reason given by only 5% for not visiting a World Heritage Area or park.

Amongst the States and Territories problems with access and distance were highest for Western Australia (12%) and less of a problem for people in the Australian Capital Territory (3%).

## 5.2 PERSONS NOT VISITING A WORLD HERITAGE AREA OR PARK, Reason

	<i>NSW</i>	<i>Vic.</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas.</i>	<i>NT</i>	<i>ACT</i>	<i>Aust.</i>
MARCH 1998									
<b>Number ('000)</b>									
Cost	85.8	70.7	77.1	29.7	23.9	18.4	*3.6	*4.4	313.6
Access/distance	194.8	121.9	99.9	34.1	59.6	10.8	*3.2	*2.6	526.9
Age/heath/unable	361.4	280.3	157.5	89.3	63.9	21.7	5.4	15.6	995.1
No time	751.2	578.3	383.9	180.1	199.7	52.2	15.4	32.3	2 193.3
Not interested	239.9	174.1	97.3	65.3	47.2	21.6	*4.0	7.5	657.0
Other	54.4	24.0	45.2	14.5	19.1	5.5	*1.3	*2.6	166.5
No reason	344.3	258.5	162.7	85.3	79.1	31.1	*4.2	15.6	980.8
Don't know	*19.5	29.6	19.6	13.1	12.5	*1.9	*0.3	*1.4	97.9
<b>All reasons</b>	<b>2 051.4</b>	<b>1 537.4</b>	<b>1 043.3</b>	<b>511.4</b>	<b>505.0</b>	<b>163.2</b>	<b>37.4</b>	<b>82.0</b>	<b>5 931.1</b>
MAY 1992									
<b>Proportion (%)</b>									
Cost	4.2	4.6	7.4	5.8	4.7	11.3	*9.6	*5.3	5.3
Access/distance	9.5	7.9	9.6	6.7	11.8	6.6	*8.5	*3.2	8.9
Age/heath/unable	17.6	18.2	15.1	17.5	12.6	13.3	14.5	19.0	16.8
No time	36.6	37.6	36.8	35.2	39.5	32.0	41.3	39.4	37.0
Not interested	11.7	11.3	9.3	12.8	9.4	13.3	*10.8	9.1	11.1
Other	2.7	1.6	4.3	2.8	3.8	3.4	*3.4	*3.2	2.8
No reason	16.8	16.8	15.6	16.7	15.7	19.0	*11.3	19.0	16.5
Don't know	*1.0	1.9	1.9	2.6	2.5	*1.2	*0.7	*1.7	1.7
MAY 1992									
<b>Proportion (%)</b>									
Cost	3.7	3.6	5.2	6.5	3.9	3.0	—	5.7	4.2
Access/distance	6.9	7.5	7.8	6.9	8.9	9.2	12.9	5.7	7.5
Age/heath/unable	8.1	7.8	8.2	6.5	7.3	8.7	2.4	4.0	7.7
No time	24.0	25.5	23.7	23.3	27.8	26.4	44.8	34.7	25.0
Not interested	3.9	3.3	4.7	3.1	4.3	3.7	1.4	2.5	3.8
Other	2.7	3.0	4.5	3.1	2.8	3.3	1.4	2.3	3.1
No reason	50.4	48.5	45.6	49.4	44.1	45.6	37.1	45.0	48.2
Don't know	0.3	0.8	0.3	1.1	0.9	0.1	—	—	0.5

On an age basis, the proportion of people who had visited a World Heritage Area or National or State park varied considerably. People aged between 25 and 44 had the highest proportions of people visiting these areas in the last 12 months. The proportion decreased as the population became older, with only 31% of the oldest age group, those aged 65 and over, having been to a World Heritage Area or park. This compares with 40% of those aged 65 and over in the May 1992 survey.

### 5.3 VISITED A WORLD HERITAGE AREA OR PARK, By Age

	AGE GROUP (YEARS).....						
	18-24	25-34	35-44	45-54	55-64	65 and over	Total
	%	%	%	%	%	%	%
MARCH 1998							
Yes	58.7	64.9	61.9	55.5	46.2	31.3	54.4
No	37.9	32.8	36.5	42.8	52.0	66.6	43.6
Don't know	3.4	2.2	1.5	1.8	1.8	2.1	2.1
MAY 1992							
Yes	69.2	70.8	71.8	61.6	54.0	39.8	62.9
No	30.0	28.3	27.5	37.6	45.4	59.2	36.3
Don't know	0.7	0.9	0.7	0.7	0.6	1.0	0.8

Age and problems with their health were the dominant reasons stated by older people for not visiting a World Heritage Area or park in the 12 months to March 1998. Of people aged 65 and older, 51% stated this as their primary reason, compared with only 3% of those aged 18–24. Conversely, the principle reason given by the younger age groups was that they had no time. Interestingly, those aged between 18 and 24 years recorded the highest proportion of people who stated that they were not interested in visiting these areas (16%).

### 5.4 PERSONS NOT VISITING AREAS/PARKS, Reason—March 1998

	AGE GROUP (YEARS).....						
	18-24	25-34	35-44	45-54	55-64	65 and over	Total
	%	%	%	%	%	%	%
Cost	5.4	5.5	5.6	6.9	6.0	3.2	5.3
Access/distance	7.7	8.2	7.3	8.0	10.5	10.8	8.9
Age/heath/unable	*2.5	3.2	2.9	6.1	16.0	51.2	16.8
No time	44.8	47.6	51.5	49.2	31.3	9.8	37.0
Not interested	16.4	11.2	11.4	10.0	12.6	8.0	11.1
Other	*1.8	2.7	2.1	3.3	4.8	2.3	2.8
No reason	17.7	20.0	17.2	15.8	17.6	13.1	16.5
Don't know	3.7	*1.5	1.8	*0.7	*1.2	1.5	1.7

Households with a child or children and all other households recorded the highest proportions for the household types visiting a World Heritage Area or park, with a couple with dependent child(ren) the highest (65%). One person households recorded the lowest proportion of visits (43%).

## 5.5 VISITED A WORLD HERITAGE AREA OR PARK, By Household Type

	<i>One person</i>	<i>Couple only</i>	<i>Households with members over 15</i>	<i>Couple, dependent child(ren)</i>	<i>One parent, dependent child(ren)</i>	<i>All other households</i>	<i>Total</i>
	%	%	%	%	%	%	%
MARCH 1998							
Yes	43.4	52.6	50.4	64.7	54.4	54.9	54.4
No	54.8	46.0	47.0	33.8	44.2	41.3	43.6
Don't know	1.8	1.4	2.6	1.5	*1.5	3.8	2.1
MAY 1992							
Yes	49.4	59.3	59.6	71.8	62.9	65.3	62.9
No	49.7	40.1	39.6	27.4	36.5	33.7	36.3
Don't know	0.8	0.6	0.7	0.8	0.6	1.0	0.8

## EXPLANATORY NOTES .....

### INTRODUCTION

**1** This publication presents results from two ABS surveys: a supplementary survey run in association with the March 1998 Labour Force Survey, and information obtained from the February, May and August 1998 quarters of the Population Survey Monitor (PSM).

### METHODOLOGY

**2** As two different ABS surveys were used to obtain data, the methodology of each survey is presented below.

#### Labour Force Survey

**3** The Labour Force Survey is based on a multi-stage area sample of private dwellings (approximately 37,000 houses, flats, etc.) and a list sample of non-private dwellings (hotels, motels, etc.). The proportion of Australian dwellings selected this way is approximately 0.5%. For this survey, half the private dwelling sample (i.e. 18,500 dwellings) was used. Information was obtained by personal interviews from responsible adult members of selected households, whose next birthday was closest to the date of the interview. Their views were representative of the entire household. The information obtained related to the week before the interview (i.e. the reference week).

#### Population Survey Monitor

**4** The PSM is a quarterly household survey of approximately 3,000 households conducted throughout Australia. Each survey asks a set of questions of each usual resident aged 18 years and over within the selected household. For the data in this publication, questions were asked of the person whose birthday was closest to the date of the interview, and sought their personal opinion regarding environmental concerns and problems, information available on the environment, packaging, the cost of water and water ratings of appliances. The information related to the last week of the survey month.

**5** Results from the three quarterly PSM surveys have been collated to produce the estimates. For each quarterly survey, an initial sample of approximately 4,000 private dwellings is chosen. This sample is generally sufficient to provide quarterly data for Australia and annual data for the States and Territories at an acceptable level of accuracy and reliability after allowing for sample loss through factors such as vacant dwellings inadvertently selected in the sample, non-contacts, persons out of scope, etc.

**6** The total population for each survey was different. The Labour Force Survey population relates to March 1998, while the PSM population relates to the survey quarters of February, May and August 1998.

## SCOPE

**7** The surveys covered rural and urban areas across all States and Territories of Australia, except sparsely settled areas. Persons aged 18 years and over who were usual residents of private dwellings were included in the surveys except:

- members of the Australian permanent defence forces;
- certain diplomatic personnel of overseas governments, customarily excluded from censuses and surveys;
- overseas residents in Australia;
- members of non-Australian defence forces (and their dependents) stationed in Australia; and
- residents of other non-private dwellings such as hospitals, motels and gaols.

## COVERAGE

**8** Coverage rules were applied which aimed to ensure that each person was associated with only one dwelling, and hence had only one chance of selection in each survey.

## DATA COMPARABILITY

**9** A core set of data has been collected in 1992, 1994, 1996 and 1998, and will be collected on an annual basis. This core data appears in chapter 1. A set of changing topics rotate over a period of 3 years. The topics contained in this publication compare with data collected in May 1992 and June 1994. Where applicable the data has been included in this publication for comparison purposes.

## RELIABILITY OF ESTIMATES

**10** The two types of error possible in an estimate based on a sample survey are:

- Non-sampling error which arises from inaccuracies in collecting, recording and processing the data. The most significant of these errors are:
  - ◆ misreporting of data items
  - ◆ deficiencies in coverage
  - ◆ non-response
  - ◆ processing errors

Every effort is made to minimise these errors by the careful design of questionnaires, intensive training and supervision of interviewers and efficient data processing procedures.

- Sampling error which occurs because a sample, rather than the entire population is surveyed. One measure of the likely difference resulting from not including all persons in the survey is given by the standard error (please consult the Technical Notes).

## RELATED PUBLICATIONS

**11** Users may also wish to refer to the following publications:

*Environmental Issues: People's Views and Practices* (Cat. no. 4602.0)—1992, 1994 and 1996 issues

Current publications produced by the ABS are listed in the *Catalogue of Publications and Products* (Cat. no. 1101.0). The ABS also issues, on Tuesdays and Fridays, a *Release Advice* (Cat. no. 1105.0) which lists publications to be released in the next few days. The Catalogue and the Release Advice are available from any ABS office.

## TECHNICAL NOTES .....

### SAMPLING VARIABILITY

**1** As the estimates in this publication are based on information obtained from occupants of a sample of dwellings they are subject to sampling variability, that is, the estimates may differ from those that would have been produced if all dwellings had been included in the survey. One measure of the likely difference is given by the standard errors (SEs) (see tables T1 and T2), which estimate the extent to which an estimate might have varied by chance because only a sample of dwellings was included. There are about two chances in three (67%) that a sample estimate will vary by less than one SE from the number that would have been obtained if all dwellings had been included, and about 19 chances in 20 (95%) that the difference will be less than two SEs.

**2** Another measure of the likely difference is the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the estimate. The RSE is a useful measure in that it provides an immediate indication of the percentage of errors likely to have occurred due to sampling.

**3** Particular care should be taken when comparing figures. It is not correct to assume that an apparent difference between figures is actually significant. Such an estimate is subject to sampling error. An approximate SE of the difference between two estimates (x-y) may be calculated by the following formula:

$$SE(x - y) = \sqrt{[SE(x)]^2 + [SE(y)]^2}$$

While this formula will only be exact for differences between separate and uncorrelated characteristics of sub-populations, it is expected to provide a good approximation for all differences likely to be of interest in this publication.

**4** As the table of SEs shows, the size of the SE increases with the size of the estimate. However, the smaller the estimate the higher the RSE. Thus, large estimates will be relatively more reliable than smaller estimates.

Very small estimates are subject to such high SEs (relative to the size of the estimate) that their value for most practical purposes is unreliable. In the tables in this publication, only estimates with RSEs of 25% or less and percentages based on such estimates are considered sufficiently reliable for most purposes. However, estimates with SEs of greater than 25% have been included and are preceded by an asterisk (e.g. \*2.8) to indicate that they should be treated with caution and viewed as being merely indicative of the magnitude involved.

**5** This publication contains data derived from two different surveys. Total population numbers will be slightly different and SEs vary between the surveys. T1 gives SEs for the Labour Force Survey, while SEs for the PSM are presented in T2. Tables derived from the Labour Force Survey are labeled as being for March 1998. Tables derived from the PSM are labeled as being for 1998.

**T1 LABOUR FORCE SURVEY, Standard Errors of Estimates—March 1998**

Size of Estimate	RSE									
	NSW	Vic.	Qld.	SA	WA	Tas.	NT	ACT	Aust.	Aust.
	no.	no.	no.	no.	no.	no.	no.	no.	no.	%
100	..	..	..	..	..	..	..	..	..	..
200	..	..	..	..	..	260.0	..	..	..	..
300	..	..	..	..	..	320	360	350	..	..
500	..	..	..	580	660	410	460	440	..	..
700	..	..	840	690	780	490	530	510	..	..
1 000	..	1 120	1 010	820	930	580	630	600	1 000	100.0
1 500	1 530	1 380	1 230	1 000	1 120	700	750	720	1 240	82.7
2 000	1 760	1 590	1 410	1 140	1 280	790	860	810	1 450	72.5
2 500	1 950	1 750	1 550	1 250	1 400	850	950	900	1 650	66.0
3 000	2 150	1 950	1 700	1 350	1 550	950	1 050	950	1 800	60.0
3 500	2 300	2 100	1 850	1 450	1 650	1 000	1 100	1 050	1 950	55.7
4 000	2 450	2 200	1 950	1 550	1 750	1050	1 200	1 100	2 100	52.5
5 000	2 700	2 450	2 150	1 750	1 950	1 150	1 300	1 200	2 350	47.0
7 000	3 200	2 900	2 550	2 000	2 250	1 300	1 500	1 400	2 750	39.3
10 000	3 750	3 400	2 950	2 350	2 600	1 500	1 800	1 600	3 300	33.0
15 000	4 500	4 100	3 550	2 800	3 100	1 750	2 150	1 850	4 050	27.0
20 000	5 100	4 650	4 000	3 150	3 500	1 900	2 450	2 100	4 650	23.3
30 000	6 050	5 550	4 800	3 700	4 150	2 150	3 000	2 450	5 600	18.7
40 000	6 850	6 250	5 400	4 150	4 700	2 350	3 400	2 700	6 400	16.0
50 000	7 500	6 850	5 950	4 550	5 100	2 550	3 800	2 950	7 100	14.2
100 000	10 000	9 100	7 850	5 950	6 750	3 050	5 250	3 800	9 650	9.7
150 000	11 750	10 700	9 200	6 950	7 850	3 400	6 350	4 400	11 500	7.7
200 000	13 100	11 950	10 300	7 700	8 750	3 600	7 300	4 850	13 000	6.5
300 000	15 300	13 900	12 000	8 900	10 200	3 950	..	5 550	15 350	5.1
500 000	18 500	16 800	14 550	10 650	12 300	4 350	..	..	18 900	3.8
1 000 000	23 750	21 450	18 650	13 450	15 700	..	..	..	24 700	2.5
2 000 000	30 150	27 100	23 650	16 800	19 850	..	..	..	31 950	1.6
5 000 000	40 700	36 300	31 950	..	..	..	..	..	44 100	0.9
10 000 000	..	..	..	..	..	..	..	..	55 500	0.6
15 000 000	..	..	..	..	..	..	..	..	63 100	0.4

**T2 POPULATION SURVEY MONITOR, Standard Errors Of Estimates—1998**

## PERSONS 18 YEARS AND OVER.

Size of estimate	SE	RSE
'000	'000	%
5	2.8	56.6
10	4.0	40.0
20	5.6	28.2
50	8.7	17.5
100	12.0	12.0
200	16.1	8.0
500	23.4	4.7
800	27.9	3.5
1 000	30.6	3.1
1 500	34.6	2.3
2 000	39.4	2.0
5 000	54.4	1.1









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