CRC for Water Sensitive Cities

How influencing behaviours can accelerate the transition to a water sensitive city

Behaviour Assessment Database

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An Australian Government Initiative

How influencing behaviours can accelerate the transition to a water sensitive city Behaviour Assessment Database A3.2-1-2015

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Executive Summary

This Behaviour Assessment Database has been compiled as part of the Corporate Research Centre Water Sensitive Cities (CRCWSC project on "Accelerating to Water Sensitive Cities by Influencing Behaviour" (Project A2.2). The overarching goal of this research project is to develop and test interventions that seek to change desirable behaviours, primarily in residents, to assist a movement toward water sensitive cities. To attain this, multiple phases of research have been planned to achieve the following four objectives:

- 1. Identify a pool of water-sensitive behaviours through consultation with industry stakeholders, literature review, sub-project team expertise and Government water departments.
- Understand the typology of water sensitive behaviour as they relate to Australian communities through a large scale survey in cities (shared with social processes and literacy projects), including identifying both exemplars (water-sensitive users) and target audiences where water sensitivity can be increased.
- 3. Design a behavioural roadmap by prioritising (by ease of influence and efficacy) and sequencing (by considering potential for behavioural spill-over) the pool of behaviours.
- 4. In controlled conditions, test the efficacy of market, social marketing and regulatory tools for influencing prioritised behaviours.

The first of these tasks – identifying a pool of watersensitive behaviours – was completed in 2013 along with a report entitled "Behaviours for reducing individual and collective water footprints". In this report, a number of behaviours were articulated, drawing on a literature and practice review as well as data from three workshops with industry partners in Perth, Melbourne and Brisbane.

The main objective of this database is to partially achieve the second objective by presenting, on a behaviour by behaviour basis, details about the percentage of respondents who are performing/not performing the behaviour, the length of time they have engaged in the behaviour, and profiles of populations (include state by state) who are performing/ not performing each behaviour. Data from the nationally-representative survey of 5,194 people is used to present participation and profile information.

In addition, we also present the impact and likelihood for a series of water conservation and pollution prevention behaviours. The terms "impact" and "likelihood" are of particular importance to both this report as well as to the overall objectives of the research program. By impact, we refer to the effect that participation in the behaviour will have on the issue at hand. For example, in some parts of Australia, water shortages remain an ongoing issue and specific behavioural responses to this issue include turning off taps when brushing teeth, fixing leaks, taking shorter showers and purchasing energy efficient appliances. Each of these behaviours will vary in the impact they have on the problem of water shortages and this report seeks to examine this via assessments of the perceptions of impact from water professionals and water consumers. Perceptions of impact are important because, whether right or wrong, they inform the decision-making of residents and professionals in selecting behaviours to target in campaign (professionals) and whether or not to undertake them (residents). We also look at impact for a series of water pollution behaviours.

Likelihood refers to the likelihood that a given behaviour will be adopted. There are a number of considerations in assessing whether or not a behaviour is intrinsically attractive to consumers. Previous research has shown that some features in behaviour are preferred, including the physical and cognitive ease of performing the behaviour as well as an assessment of the perceived financial cost of undertaking it. Also important is the perceived link between cause and effect (known as response efficacy) of the behaviour. Like impact, assessing these features of likelihood is useful for professionals in considering behaviours to target as well as to residents, who are more likely to undertake behaviours that are viewed as easy and making a tangible difference to a problem.

Perceptions about impact and likelihood were measured by asking, in separate but similar surveys, water professionals and residents about a number of criteria related to the impact and likelihood of 31 different water consumption and pollution behaviours (measures detailed in next section). This data was drawn from additional nationally representative samples of 151 (water consumption) and 150 (pollution) residents.

The importance of assessing impact and likelihood is to determine which behaviours are associated with higher scores on both these metrics. It is often the case that impact is weighted more heavily than likelihood and our hope is that water professionals, or anyone considering a behaviour change program, will use this database to consider the likelihood of adoption in addition to impact assessment.

It is also hoped that users of this database are assisted in identifying their target audiences. While we only provide some crude segmentation around behavioural performance (age, gender and state), considering these criteria as a starting point for who may be target audiences should prove useful in designing more tailored behaviour change programs. 4 | Behaviour Assessment Database

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The Behaviour Assessment Database



This section presents the assessments of 31 water saving and pollution reduction behaviours. As indicated, data for these assessments was drawn from three sources: two surveys administered to Australian residents and one to water professionals.

Recruitment for the surveys of Australian residents was undertaken by engaging an online research panel company. Although issues with the validity of data obtained through online panels has been a concern in the past, most companies, such as the one engaged, provide data supporting the representativeness of respondents against national averages on a range of criteria including age, gender and level of education.

The first online sample was large (5194) and they completed a survey about water-related behaviours they were undertaking as well as how long they've been doing them for. This data is reported here. Participants also responded to a number of demographic, socio-demographic, sociological and psychographic questions, some of which are reported here as well. Specifically, we look at age, gender and location (by state) of respondents who report participation in the behaviour. Reporting on these criteria has been prioritised because it is more likely that this information is more readily available to users of this database. However, this is not to dismiss other data collected in the national survey, it will be included in other reporting from this project and projects on "Understanding social processes to achieve water sensitive futures (Project A2.1) and "Engaging communities with water sensitive cities (Project A2.3) which seek to profile water consumers in different ways.

The second online sample was of 151 residents. These respondents were asked to complete assessments of impact and likelihood for each behaviour relating to water saving. Specifically, they were asked to score each behaviour using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, and very high on the following criteria (for water consumption behaviours):

- 1. Current participation: What is the percentage of households do you think are already doing the behaviour (or have already done it)?
- 2. Adoption impact: What do you think would be the total reduction in the amount of water used if all non-participating households adopted the behaviour?
- **3.** Individual impact: What in your opinion would the effect of taking up the behaviour have on the amount of water saved by an individual household?
- 4. **Physical effort:** What, in your opinion, will be the level of physical effort involved in taking part in the behaviour?
- 5. Mental effort: What is the amount of thinking and planning involved in taking part in the behaviour?
- 6. Financial cost: How much you think it would cost to take part in the behaviour (or the amount of money saved by performing the behaviour)?



Averages for responses to these questions from a total of 22 water professionals (for water saving and pollution behaviours) are reported as part of this database. In addition, a third online sample of 150 residents were asked very similar questions about pollution behaviours as follows:

- Current participation: What is the percentage of households do you think are already doing the behaviour (or have already done it)?
- 2. Adoption impact: What do you think would be the total reduction in the amount of pollution if all non-participating households adopted the behaviour?
- **3.** Individual impact: What in your opinion would the effect of taking up the behaviour have on the amount of pollution generated by an individual household?
- 4. Physical effort: What in your opinion will be the level of physical effort involved in taking part in the behaviour?
- 5. Mental effort: What is the amount of thinking and planning involved in taking part in the behaviour?
- 6. Financial cost: How much you think it would cost to take part in the behaviour?

The final sample was of 22 water professionals which were recruited through CRCWSC networks and snowballing methods, with a focus on those professionals who had worked on behaviour change campaigns or had a high level of community engagement as part of their position. Upon commencing the survey, water professionals were asked to identify areas of expertise (pollution or water consumption) and completed the same questions outlined above for areas of expert knowledge or experience, but answering on behalf of their target audiences as a collective.

The rationale behind asking these impact and likelihood questions of both residents and professionals is twofold, depending on the degree of alignment. First, if they align, then water professionals have a tool they can use to assess impact and likelihood in the future. Such a tool could be used on a variety of scales to tackle a variety of issues. In particular, more water saving behaviours could be added to this database and professionals could, with some confidence, use assessments of impact and likelihood to prioritise behaviours to target. If impact and likelihood assessments made by professionals and residents don't align, then there is an argument for greater consultation with subjects of behaviour change campaigns about behaviours they are more likely to engage in.

Take shorter showers to save water

Respondents who always take shorter showers

33.9% of respondents indicated that they always take shorter showers. 17.6% are females, 16.4% are males.

The most frequently occurring age group for those always taking shorter showers (27.6%) is 64 years and over. 31% have a Bachelor degree or higher. 42% own their home outright and 31% have a mortgage. 30% are working full time and 16% are working part time.

Respondents who never take shorter showers

11% stated that they never take shorter showers to save water. There are no gender differences between those not engaging in this behaviour.

The most frequently occurring age group for those never taking shorter showers (29%) is 25-34 years. 26% own their own house and 31% have mortgage. 14% had completed a Bachelor or postgraduate degree. 46% are working full time and 8% are retired.

When did they start taking shorter showers?

When asked when they started taking shorter showers to save water, 37.3% stated they have engaged in this behaviour for more than 16 years.

8.2% mentioned they have been taking shorter showers for the last 10 years, while 9.1% said they did so since the last 5 years. 8.6% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents with different levels of this behaviour. The state with the highest levels of this behaviour was Queensland (39.5%).



Frequency of behaviour: take shorter showers to save water



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Always	32.4	32.1	31.4	39	39.5	30.5	31.8	28.1	33.9
Often	24.9	26.6	20.3	25.1	26.8	33.3	36.4	25.8	26.5
Sometimes	22.5	23.5	19.5	20.8	21.6	22.4	9.1	25.8	22.4
Rarely	6	7	14.4	7.6	4.2	5.7	9.1	6.7	6.2
Never	14.2	10.9	14.4	7.6	7.8	8.1	13.6	13.5	11

Percentage of respondents who are taking shorter showers

Consumers

Consumers (N=151) and water professionals (N=19) were asked to score the behaviour "Take shorter showers" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.





Current participation (2.82); Adoption impact (3.57); Individual impact (3.50); Physical effort (2.08); Mental effort (1.92); Financial cost (2.32)



Water professionals

Current participation (2.62); Adoption impact (3.73); Individual impact (3.63); Physical effort (2.21): Mental effort (3.31); Financial cost (2.84) Water professionals stated that this behaviour requires higher thinking and planning as opposed to consumers' perception of the mental efforts required to engage in the behaviour.

Turn off tap when shaving/ brushing teeth

Respondents who always turn the tap off when shaving/ brushing teeth

62.9% of respondents indicated that they always turn the tap off when shaving/brushing teeth. 31.8% are females, 31.2% are males.

The most frequently occurring age group for those who always turn the tap off when shaving/brushing teeth (19.2%) is 64 years and over. 34% have a Bachelor degree or higher. 37% own their home outright and 35% have a mortgage. 34% are working full time and 18% are working part time.

Respondents who never turn the tap off when shaving/ brushing teeth

8% stated that they never turn the tap off when shaving/ brushing teeth. There are no gender differences between those not engaging in this behaviour. The most frequently occurring age group for those who never turn the tap off when shaving/brushing teeth (29.5%) is 25-34 years. 25% own their own house and 30% have mortgage. 14% had completed a Bachelor or postgraduate degree. 48% are working full time and 9% are retired.

When did they start turning the tap off when shaving/ brushing teeth?

When asked when they started turning the tap off when shaving/brushing teeth to save water, 54.1% stated they have always engaged in this behaviour for at least more than 16 years.

6.2% mentioned they have been turning the tap off when shaving/brushing teeth for the last 10 years, while 5.3% said they did so since the last 5 years. 6.4% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents with different levels of this behaviour. The state with the highest levels of this behaviour was Northern Territory (72.7%).



Frequency of behaviour: turn off taps when

shaving/brushing teeth



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Always	62	63.7	50.8	69.1	63	60.4	72.7	69.7	62.9
Often	14.5	16.7	22.9	12.7	18.1	16.9	18.2	11.2	16
Sometimes	10.3	9.5	12.7	8.1	10.3	12	4.5	12.4	10.1
Rarely	3.6	2.2	3.4	3.5	3.1	4.1	4.5	2.2	3.2
Never	9.6	8	10.2	6.6	5.4	6.7	0	4.5	7.8

Percentage of respondents who turn off taps when shaving/brushing teeth

Consumers (N=151) and water professionals (N=19) were asked to score the behaviour "Turn off tap when shaving/brushing teeth" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.



45.0 40.0 35.0 30.0 25.0 20.0 15.0 10.0 5.0 0.0 Individual Physical Mental **Financial cost** Current Adoption participation impact impact efforts efforts

Consumers

Current participation (2.96); Adoption impact (3.27); Individual impact (3.30); Physical effort (2.01); Mental effort (1.95); Financial cost (2.24)

Water professionals



Current participation (3.53); Adoption impact (2.65); Individual impact (2.68); Physical effort (1.63); Mental effort (2.68); Financial cost (1.94)

Wash full loads of clothes

Respondents who always wash full loads of clothes

61% of respondents indicated that they always wash full loads of clothes. 31.4% are females, 29.6% are males.

39% had completed a Bachelor or postgraduate degree. 47% are working full time and 5% are retired.

The most frequently occurring age group for those who always wash full loads of clothes (20.6%) is 64 years and over. 32% have a Bachelor degree or higher. 36% own their home outright and 36% have a mortgage. 34% are working full time and 16% are working part time.

Respondents who never wash full loads of clothes

7% stated that they never wash full loads of clothes. There are no gender differences between those not engaging in this behaviour.

The most frequently occurring age group for those who never wash full loads of clothes (35.8%) is 25-34 years. 24% own their own house and 31% have mortgage.

When did they start washing full loads of clothes?

When asked when they started washing full loads of clothes to save water, 59.1% stated they have always engaged in this behaviour for at least more than 16 years.

5% mentioned they have been washing full loads of clothes for the last 10 years, while 4.4% said they did so since the last 5 years. 5.3% of the respondents engaged in this watersaving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents with different levels of this behaviour. The state with the highest levels of this behaviour was Northern Territory (68.2%).



Frequency of behaviour: wash full loads of clothes



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Always	57.8	60.7	55.9	65.3	64.4	63.4	68.2	64	61
Often	25.6	24	23.7	33.8	23.1	23.8	27.3	24.7	24.3
Sometimes	7.5	6.7	11	6.1	6.3	5.1	0	9	6.8
Rarely	1.3	1.1	2.5	.8	1.4	1	4.5	1.1	1.2
Never	7.8	7.5	6.8	5.1	4.9	6.7	0	1.1	6.7

Percentage of respondents who wash full loads of clothes

Consumers (N=151) and water professionals (N=18) were asked to score the behaviour "Wash full loads of clothes" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.





Consumers

Current participation (3.22); Adoption impact (3.53); Individual impact (3.52); Physical effort (2.17); Mental effort (2.23); Financial cost (2.51)

Water professionals



Current participation (3.40); Adoption impact (3.18); Individual impact (3.29); Physical effort (2.06); Mental effort (2.23); Financial cost (2.59)

Run dishwasher when full

Respondents who always run the dishwasher when full

38% of respondents indicated that they always run the dishwasher when full. Of these, 19.5% are females, 18.8% are males.

The most frequently occurring age group for those who always run the dishwasher when full (22.5%) is 64 years and over. 36% have a Bachelor degree or higher. 40% own their home outright and 43% have a mortgage. 37% are working full time and 14% are working part time.

30% had completed a Bachelor or postgraduate degree. 33% are working full time and 16% are retired.

Respondents who never run the dishwasher when full

48% stated that they never run the dishwasher when full. 23.5% are males, 24.4% are females. The most frequently occurring age group for those who never run the dishwasher when full (19.2%) is 45-54 years. 31% own their own house and 25% have mortgage.

When did they start running the dishwasher when full to save water?

When asked when they started running the dishwasher when full to save water, 47.2% stated they have always engaged in this behaviour for at least more than 16 years.

5.9% mentioned they have been running the dishwasher when full for the last 10 years, while 5.7% said they did so since the last 5 years. 6.4% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents with different levels of this behaviour. The state with the highest levels of this behaviour was Australian Capital Territory (47.2%).



Frequency of behaviour: running the dishwasher when full



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Always	36.8	41.7	28	39.7	39.2	32.9	27.3	47.2	38.3
Often	9.1	9.4	5.1	5.8	8.6	10.2	13.6	10.1	8.9
Sometimes	4	4.5	2.5	1	3.4	2	0	6.7	3.6
Rarely	2	1.2	1.7	1.5	1	1.2	4.5	0	1.5
Never	48.1	43.2	62.7	51.9	47.9	53.7	54.5	36	47.8

Percentage of respondents who are running the dishwasher when full

Consumers (N=151) and water professionals (N=18) were asked to score the behaviour "Running the dishwasher when full" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.



40.0 35.0 30.0 25.0 20.0 15.0 10.0 5.0 0.0 Current Adoption Individual Physical Mental Financial efforts efforts participation impact impact cost

Current participation (3.19); Adoption impact (3.48); Individual impact (3.49); Physical effort (2.13); Mental effort (2.16); Financial cost (2.47)



Water professionals

Current participation (3.46); Adoption impact (2.94); Individual impact (3.13); Physical effort (2.18); Mental effort (2.65); Financial cost (2.31)

Consumers

Fix leaks when you notice them

Respondents who always fix leaks when they notice them

59.8% of respondents indicated that they always fix leaks when they notice them. 30.4% are females, 29.4% are males.

17% own their own house and 22% have a mortgage. 35% had completed a Bachelor or postgraduate degree. 39% are working full time and 10% are retired.

The most frequently occurring age group for those who always fix leaks when they notice them (25.2%) is 64 years and over.

32% have a Bachelor degree or higher. 41% own their home outright and 35% have a mortgage. 33% are working full time and 17% are working part time.

Respondents who never fix leaks when they notice them

16.3% stated that they never fix leaks when they notice them. 7.9% are males, 8.4% are females.

The most frequently occurring age group for those who never fix leaks when they notice them (30.9%) is 25-34 years.

When did they start fixing leaks when they notice them?

When asked when they started fixing leaks when they notice them to save water, 57.6 % stated they have always engaged in this behaviour for at least more than 16 years.

4.3% mentioned they have been fixing leaks when they notice them for the last 10 years, while 4.2% said they did so since the last 5 years. 7.1% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents with different levels of this behaviour. The state with the highest levels of this behaviour was New South Wales (19.7%).



Frequency of behaviour: fix leaks when they notice them



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Always	19.7	14.6	1.5	4.8	12.5	5.6	0.3	0.9	59.8
Often	16.9	15.1	15.3	13.9	15.2	18.7	22.7	14.6	16
Sometimes	7.7	5.9	4.2	5.6	5.1	6.5	4.5	11.2	6.5
Rarely	1.1	2.2	.8	1.3	1.4	1.2	0	4.5	1.5
Never	17.3	16.3	15.3	16.5	15.7	14.6	4.5	14.6	16.3

Percentage of respondents who fix leaks when they notice them

Consumers

Consumers (N=151) and water professionals (N=20) were asked to score the behaviour "Fix leaks when you notice them" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.



50.0 40.0 30.0 20.0 10.0 0.0 Physical Adoption Individual Mental **Financial cost** Current participation impact impact efforts efforts

Current participation (3.30); Adoption impact (3.47); Individual impact (3.94); Physical effort (3.68); Mental effort (3.53); Financial cost (3.94)



Water professionals

Current participation (2.69); Adoption impact (3.47); Individual impact (3.94); Physical effort (3.68); Mental effort (3.53); Financial cost (3.94)

Collect water from the shower or sink to use in the garden

Respondents who always collect water from the shower or sink to use in the garden?

11.7% of respondents indicated that they always collect water from the shower or sink to use in the garden. 6.2% are females, 5.5% are males.

The most frequently occurring age group for those who always collect water from the shower or sink to use in the garden (22.5%) is 64 years and over. 36% have a Bachelor degree or higher. 45% own their home outright and 38% have a mortgage. 35% are working full time and 17% are working part time.

Respondents who never collect water from the shower or sink to use in the garden?

50.5% stated that they never collect water from the shower or sink to use in the garden to save water. 24% are males, 26.5% are females. The most frequently occurring age group for those who never collect water from the shower or sink to use in the garden (20.2%) is 25-34 years. 31% own their own house and 30% have mortgage. 34% had completed a Bachelor or postgraduate degree. 38% are working full time and 15% are retired.

When did they start collecting water from the shower or sink to use in the garden?

When asked when they started collecting water from the shower or sink to use in the garden, 21.1% stated they have always engaged in this behaviour for at least more than 16 years.

7.5% mentioned they engaged in this behaviour for the last 10 years, while 7.7% said they did so since the last 5 years. 18% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents with different levels of this behaviour. The state with the highest levels of this behaviour was Northern Territory (18.2%).





shower or sink to use in the garden



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Always	10.8	13.4	13.6	14.7	10.6	10.2	18.2	12.4	11.7
Often	7.5	13.4	13.6	14.7	10.6	10.2	18.2	12.4	11.7
Sometimes	12.7	16.5	11.9	12.4	13.1	13	0	14.6	13.7
Rarely	14.2	15.7	14.4	18	16.9	20.7	9.1	14.6	16
Never	54.8	45.5	50.8	44.8	52.2	47.6	72.7	50.6	50.5

Percentage of respondents who collect water from the shower or sink to use in the garden

Consumers (N=151) and water professionals (N=19) were asked to score the behaviour "Collect water from the shower or sink to use in the garden" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.



45.0 40.0 35.0 30.0 25.0 20.0 15.0 10.0 5.0 0.0 Current Adoption Individual Physical Mental **Financial cost** efforts efforts participation impact impact

Current participation (1.87); Adoption impact (3.18); Individual impact (3.03); Physical effort (2.80); Mental effort (2.33); Financial cost (2.16)



Water professionals

Current participation (1.59); Adoption impact (2.53); Individual impact (2.61); Physical effort (3.53); Mental effort (3.37); Financial cost (1.89)

Consumers

Allow lawn to go brown

Respondents who always allow the lawn to go brown

24.7% of respondents indicated that they always allow the lawn to go brown. 13.1% are females, 11.6% are males.

The most frequently occurring age group for those who always allow the lawn to go brown (22.4%) is 64 years and over. 31% have a Bachelor degree or higher. 40% own their home outright and 37% have a mortgage. 32% are working full time and 16% are working part time.

Respondents who never allow the lawn to go brown

31.2% stated that they never allow the lawn to go brown. 16% are males, 15.2% are females. The most frequently occurring age group for those who never allow the lawn to go brown (24.7%) is 25-34 years. 39% had completed a Bachelor or postgraduate degree. 41% are working full time and 13% are retired.

When did they start allowing the lawn to go brown?

When asked when they started allowing the lawn to go brown, 37.7% stated they have always engaged in this behaviour for at least more than 16 years.

5.9% mentioned they have been allowing the lawn to go brown for the last 10 years, while 6.3% said they did so since the last 5 years. 13.3% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents with different levels of this behaviour. The state with the highest levels of this behaviour was Tasmania (50%).



Frequency of behaviour: allow their lawn to go brown



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Always	18	35.6	50	21.3	27.8	11.8	18.2	25.8	24.7
Often	16.4	17.5	17.8	12.4	21.5	14.8	18.2	18	17.3
Sometimes	18.6	14	11.9	19.2	18.8	18.1	22.7	16.9	17.4
Rarely	11.1	5	4.2	13.7	7.1	16.7	9.1	7.9	9.4
Never	35.9	27.8	16.1	33.4	24.7	38.6	31.8	31.5	31.2

Percentage of respondents who allow their lawn to go brown

Consumers (N=151) and water professionals (N=17) were asked to score the behaviour "Allow lawn to go brown" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.





Current participation (2.72); Adoption impact (3.31); Individual impact (3.29); Physical effort (2.11); Mental effort (2.14); Financial cost (2.36)



Water professionals

Current participation (2.93); Adoption impact (3.35); Individual impact (3.41); Physical effort (1.35); Mental effort (2.59); Financial cost (1.24)

Consumers

Hose with trigger or timed watering system

Respondents who always hose with trigger or timed watering system

41.6% of respondents indicated that they always hose with trigger or timed watering system. 21.5% are females, 20.1% are males.

The most frequently occurring age group for those who always hose with trigger or timed watering system (26.6%) is 64 years and over. 32% have a Bachelor degree or higher. 43% own their home outright and 38% have a mortgage. 34% are working full time and 16% are working part time.

Respondents who never hose with trigger or timed watering system

36.6% stated that they never hose with trigger or timed watering system. There are no gender differences between those not engaging in this behaviour.

The most frequently occurring age group for those who never hose with trigger or timed watering system (25.3%)

is 25-34 years. 25% own their own house and 28% have mortgage. 38% had completed a Bachelor or postgraduate degree. 39% are working full time and 11% are retired.

When did they start hosing with a trigger or timed watering system?

When asked when they started using a hose with a trigger or timed watering system, 37.8% stated they have always engaged in this behaviour for at least more than 16 years.

7.7% mentioned they have been using a hose with a trigger or timed watering system for the last 10 years, while 7.6 % said they did so since the last 5 years. 7.9% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents with different levels of this behaviour. The state with the highest levels of this behaviour was Northern Territory (68.2%).



Frequency of behaviour: hose with a trigger or timed watering system



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Always	39	43.3	34.7	51.6	39.2	45.5	68.2	34.8	41.6
Often	9.8	10.5	17.8	10.4	9.8	11.2	0	7.9	10.3
Sometimes	6.9	7.3	9.3	6.8	8.1	7.9	0	13.5	7.5
Rarely	4.4	3.6	4.2	3.8	4.4	4.1	4.5	3.4	4.1
Never	39.9	35.3	33.9	27.3	38.4	31.3	27.3	40.4	36.6

Percentage of respondents who hose with a trigger or timed watering system

Consumers (N=151) and water professionals (N=17) were asked to score the behaviour "Hose with trigger or timed watering system" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.





Consumers

Current participation (3.25); Adoption impact (3.25); Individual impact (3.25); Physical effort (2.78); Mental effort (2.91); Financial cost (3.05)

Water professionals



Current participation (2.43); Adoption impact (3.38); Individual impact (3.44); Physical effort (3.35); Mental effort (3.41); Financial cost (3.41)

Mulch garden beds

Respondents who always mulch garden beds

29.9% of respondents indicated that they always mulch garden beds. 15.7% are females, 14.2% are males.

The most frequently occurring age group for those who always mulch garden beds (27.3%) is 64 years and over. 31% have a Bachelor degree or higher. 33% own their home outright and 16% have a mortgage. 33% are working full time and 16% are working part time.

Respondents who never mulch garden beds

34.9% stated that they never mulch garden beds. There are no gender differences between those who did not engage in this behaviour.

The most frequently occurring age group for those who never mulch garden beds (26.8%) is 25-34 years. 21% own their own house and 20% have mortgage. 36% had completed a Bachelor or postgraduate degree. 39% are working full time and 11% are retired.

When did they start mulching garden beds?

When asked when they started mulching garden beds, 41.1 % stated they have always engaged in this behaviour for at least more than 16 years.

6.5% mentioned they have been mulching garden beds for the last 10 years, while 6% said they did so since the last 5 years. 9.1% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents with different levels of this behaviour. The state with the highest levels of this behaviour is Australian Capital Territory (44.9%).



Frequency of behaviour: mulch garden beds



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Always	27.9	30.7	28.8	33.2	31.2	28	27.3	44.9	29.9
Often	14	14.7	21.2	17.2	15.3	18.9	18.2	12.4	15.3
Sometimes	13.9	13.5	12.7	10.9	14.1	18.5	18.2	11.2	14
Rarely	6	6.4	2.5	5.3	5.3	6.7	4.5	3.4	5.9
Never	38.2	34.8	34.7	33.4	27.8	34.1	31.8	28.1	34.9

Percentage of respondents who mulch garden beds

Consumers (N=151) and water professionals (N=17) were asked to score the behaviour "Mulch garden beds" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.





Consumers

Current participation (2.61); Adoption impact (3.20); Individual impact (3.11); Physical effort (2.90); Mental effort (2.68); Financial cost (2.85)



Current participation (3.27); Adoption impact (3.24); Individual impact (3.29); Physical effort (3.41); Mental effort (3.18); Financial cost (3.18)

Don't use a hose to clean outside spaces, use a broom

Respondents who always use a broom instead of a hose to clean outside spaces

41.4% of respondents indicated that they always use a broom instead of a hose to clean outside spaces. 21.3% are females, 20.1% are males.

38% had completed a Bachelor or postgraduate degree. 41% are working full time and 12% are retired.

Respondents who never use a broom instead of a hose to clean outside spaces

20.7% stated that they never use a broom instead of a hose to clean outside spaces. There are no gender differences between those who did not undertake this behaviour.

The most frequently occurring age group for those who never use a broom instead of a hose to clean outside spaces (26.5%) is 25-34 years. 24% own their own house and 26% have mortgage.

When did they start using a broom instead of a hose to clean outside spaces?

When asked when they started using a broom instead of a hose to clean outside spaces, 47% stated they have always engaged in this behaviour for at least more than 16 years.

7.1% mentioned they have been using a broom instead of a hose to clean outside spaces for the last 10 years, while 6.2 % said they did so since the last 5 years. 7.1% of the respondents engaged in this water-saving behaviour for less than a year.

The most frequently occurring age group for those who always use a broom instead of a hose to clean outside spaces (22.8%) is 64 years and over. 35% have a Bachelor degree or higher. 38% own their home outright and 36% have a mortgage. 34% are working full time and 17% are working part time.

Different uptake across states

The table below shows the percentage of respondents with different levels of this behaviour. The state with the highest levels of this behaviour was South Australia (49.1%).



Frequency of behaviour: don't use a hose but a broom to clean outside spaces



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Always	39.7	47	31.4	49.1	35	42.7	27.3	46.1	41.4
Often	20.3	19.3	28.8	19.7	23.4	24.8	22.7	19.1	21.3
Sometimes	12.8	8.7	15.3	10.4	18	13.2	22.7	12.4	12.8
Rarely	4	3.3	6.8	3.5	4.6	3	9.1	2.2	3.9
Never	23.2	21.7	17.8	17.2	19	16.3	18.2	20.2	20.7

Percentage of respondents who don't use a hose but a broom to clean outside spaces

Consumers (N=151) and water professionals (N=17) were asked to score the behaviour "Don't use a hose to clean outside spaces, use a broom" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.





Current participation (2.94); Adoption impact (3.64); Individual impact (3.52); Physical effort (3.01); Mental effort (2.26); Financial cost (2.47)



Water professionals

Current participation (3.47); Adoption impact (3.12); Individual impact (3.12); Physical effort (3.65); Mental effort (2.82); Financial cost (2.41

Use half flush or don't flush every time

Respondents who always use half flush or not flushing every time

46.1% of respondents indicated that they always use half flush or not flush every time. 23.8% are females, 22.3% are males.

The most frequently occurring age group for those who always use half flush or not flushing every time (24%) is 64 years and over. 32% have a Bachelor degree or higher. 39% own their home outright and 37% have a mortgage. 33% are working full time and 17% are working part time.

Respondents who never use half flush or not flushing every time

11.3% stated that they never use half flush or not flushing every time. There are no gender differences between those who did not undertake this behaviour.

The most frequently occurring age group for those who never use half flush or not flushing every time (31.6%) is 25-34 years.



Frequency of behaviour: use half flush or don't flush all the time

23% own their home outright and 25% have a mortgage. 33% have a Bachelor or postgraduate degree. 44% are working full time and 8% are retired.

When did they start using half flush or not flushing every time?

When asked when they started using half flush or not flushing every time, 46.4 % stated they have always engaged in this behaviour for at least more than 16 years.

7.4% mentioned they have been using half flush or don't flush every time for the last 10 years, while 6.1% stated they did so since the last 5 years. 5.6% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents with different levels of this behaviour. The state with the highest levels of this behaviour was South Australia (52.9%).



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Always	43.6	46.9	41.5	52.9	46.1	46.1	50	49.4	46.1
Often	26.8	28	27.1	28.1	30.3	29.5	31.8	24.7	28.1
Sometimes	12.5	11.5	15.3	9.1	10	12	0	15.7	11.5
Rarely	2.6	3	5.9	2.8	2.9	3.7	0	0	2.9
Never	14.4	10.6	10.2	7.1	9.8	8.7	18.2	10.1	11.3

Percentage of respondents who use half flush or don't flush all the time

Consumers (N=151) and water professionals (N=19) were asked to score the behaviour "Use half flush or don't flush every time" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.





Current participation (2.47); Adoption impact (3.35); Individual impact (3.30); Physical effort (2.14); Mental effort (2.12); Financial cost (2.27)

Water professionals



Current participation (2.07); Adoption impact (2.81); Individual impact (2.88); Physical effort (1.67); Mental effort (2.94); Financial cost (2.39)

Consumers

Water garden in morning and evening

Respondents who always water their gardens in morning and evening?

32.9% of respondents indicated that they always water their gardens in morning and evening. 16.9% are females, 16% are males.

The most frequently occurring age group for those who always water their gardens in morning and evening (25.7%) is 64 years and over. 34% have a Bachelor degree or higher. 42% own their home outright and 38% have a mortgage. 34% are working full time and 16% are working part time.

Respondents who never water their gardens in morning and evening?

32.8% stated that they never water their gardens in morning and evening. There are no gender differences between those who did not undertake this behaviour.

The most frequently occurring age group for those who never water their gardens in morning and evening (25.3%) is 25-34 years.



Frequency of behaviour: water garden in morning and evening

25% own their home outright and 29% have a mortgage. 36% have a bachelor or postgraduate degree. 40% are working full time and 11% are retired.

When did they start watering their gardens in morning and evening?

When asked when they started watering their gardens in morning and evening, 45.8% stated they have always engaged in this behaviour for at least more than 16 years.

6.3% mentioned they have been watering their gardens in morning and evening for the last 10 years, while 4.5% said they did so since the last 5 years. 11% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents with different levels of this behaviour. The state with the highest levels of this behaviour was Northern Territory (68.2%).



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Always	30.6	29.9	33.9	44.8	30.7	41.9	68.2	33.7	32.9
Often	13.4	11.2	11.9	12.9	11	10	4.5	13.5	12
Sometimes	11.1	12.7	13.6	10.1	11.3	12.8	0	12.4	11.6
Rarely	9	12.8	11.9	7.8	12	10.8	0	11.2	10.7
Never	35.8	33.4	28.8	24.3	35	24.6	27.3	29.2	32.8

Percentage of respondents who water garden in morning and evening

Consumers (N=151) and water professionals (N=17) were asked to score the behaviour "Water garden in morning and evening" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.





Consumers

Current participation (3.07); Adoption impact (3.51); Individual impact (3.42); Physical effort (2.34); Mental effort (2.31); Financial cost (2.39)

Water professionals



Current participation (3.67); Adoption impact (3.41); Individual impact (3.47); Physical effort (2.47); Mental effort (2.88); Financial cost (2.59)

Choose less polluting products for the garden

Respondents who always choose less polluting products for the garden

30.5% of respondents indicated that they always choose less polluting products for the garden. 16.5% are females, 14% are males.

The most frequently occurring age group for those who always choose less polluting products for the garden (25.6%) is 64 years and over. 33% have a Bachelor degree or higher. 42% own their home outright and 39% have a mortgage. 32% are working full time and 18% are working part time.

Respondents who never choose less polluting products for the garden

24.9% stated that they never choose less polluting products for the garden. There are no gender differences between those who do not undertake this behaviour.

The most frequently occurring age group for those who never choose less polluting products for the garden (20.9%) is 25-34 years. 31% own their own house and 30% have mortgage.



Frequency of behaviour: choose less polluting products for their gardens

28% had completed a Bachelor or postgraduate degree. 38% are working full time and 13% are retired.

When did they start choosing less polluting products for the garden?

When asked when they started choosing less polluting products for the garden to save water, 39.9% stated they have always engaged in this behaviour for at least more than 16 years.

7.9% mentioned they have been choosing less polluting products for the garden for the last 10 years, while 7.2% stated they did so since the last 5 years. 7% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents with different levels of this behaviour. The state with the highest levels of this behaviour was Australian Capital Territory (38%).



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Always	30.8	28.1	35.9	33.5	29.1	33.3	31.6	38	30.5
Often	23.1	22.1	17.5	21.8	24.7	26.1	31.6	19.7	23.2
Sometimes	17.3	16.6	11.7	14.9	16.2	15.9	10.5	14.1	16.4
Rarely	4.9	5.9	5.8	4.9	3.9	4.5	5.3	7	5
Never	23.9	27.3	29.1	24.9	26.1	20.2	21.1	21.1	24.9

Percentage of respondents who choose less polluting products for their gardens

Consumers (N=151) and water professionals (N=11) were asked to score the behaviour "Choose less polluting products for the garden" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.





Consumers

Current participation (2.67); Adoption impact (3.50); Individual impact (3.26); Physical effort (2.44); Mental effort (2.82); Financial cost (3.09)

Water professionals



Current participation (2.10); Adoption impact (3.60); Individual impact (3.10); Physical effort (2.64); Mental effort (3.18); Financial cost (2.82)

Use garden chemicals appropriately

Respondents who always use garden chemicals appropriately

41.9% of respondents indicated that they always use garden chemicals appropriately. Of these, 22.5% are females.

The most frequently occurring age group for those who always use garden chemicals appropriately (25.7%) is 64 years and over. 32% have a Bachelor degree or higher. 44% own their home outright and 39% have a mortgage. 32% are working full time and 17% are working part time.

30% own their own house and 32% have mortgage. 28% had completed a Bachelor or postgraduate degree. 34% are working full time, and 13% are retired.

Respondents who never use garden chemicals appropriately

27% stated that they never use garden chemicals appropriately. There are no gender differences between those who did not engage in this behaviour. The most frequently occurring age group for those who never use garden chemicals appropriately (20.2%) is 25-34 years.

When did they start using garden chemicals appropriately?

When asked when they started using garden chemicals appropriately to save water, 48.5% stated they have always engaged in this behaviour for at least more than 16 years.

5.8% mentioned they have been using garden chemicals appropriately for the last 10 years, while 5.8% stated they did so since the last 5 years. 6.5% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents with different levels of this behaviour. The state with the highest levels of this behaviour were Australian Capital Territory (52.1%) and South Australia (52.1%).



Frequency of behaviour: use garden chemicals appropriately



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Always	42.1	37.6	42.7	52.1	41.1	43.5	42.1	52.1	41.9
Often	16.2	14.2	12.6	12.3	16.5	20.4	26.3	8.5	15.7
Sometimes	11.4	10.4	8.7	7.4	10.2	10.4	10.5	11.3	10.4
Rarely	4.3	6.2	3.9	4.3	4.7	4.1	0	7	4.8
Never	26	31.5	32	23.8	27.7	21.5	21.1	21.1	27.1

Percentage of respondents who use garden chemicals appropriately

Consumers (N=151) and water professionals (N=11) were asked to score the behaviour "Use garden chemicals appropriately by following instructions provided" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.



45% 40% 35% 30% 25% 20% 15% 10% 5% 0% Adoption Individual Physical effort Mental effort Financial cost Current participation impact impact

Consumers

Current participation (2.98); Adoption impact (3.30); Individual impact (3.17); Physical effort (2.39); Mental effort (2.63); Financial cost (2.43)

Water professionals



Current participation (2.90); Adoption impact (3.70); Individual impact (3.20); Physical effort (2.64); Mental effort (3.55); Financial cost (1.91)

Keep car well-maintained

Respondents who always keep their cars well maintained

56.4% of respondents indicated that they always keep their cars well maintained. 29.5% are females, 27% are males.

The most frequently occurring age group for those who always keep their cars well maintained (25.7%) is 64 years and over.

32% have a Bachelor degree or higher. 43% own their home outright and 33% have a mortgage. 34% are working full time and 16% are working part time.

Respondents who never keep their cars well maintained

12.7% stated that they never keep their cars well maintained. There are no gender differences between those who did not engage in this behaviour.

The most frequently occurring age group for those who never keep their cars well maintained (28.5%) is 25-34 years.

23% own their own house and 22% have mortgage. 36% had completed a Bachelor or postgraduate degree. 35% are working full time and 11% are retired.

When did they start keeping their cars well-maintained?

When asked when they started keeping their cars wellmaintained to save water, 63.9% stated they have always engaged in this behaviour for at least more than 16 years.

4.1% mentioned they have been keeping their cars wellmaintained for the last 10 years, while 4.3% said they did so since the last 5 years. 4.6% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents with different levels of this behaviour. The state with the highest levels of this behaviour was Northern Territory (72.7%).



Frequency of behaviour: keep their car well maintained



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Always	54.5	54.2	57.3	62	60.2	55.5	72.7	52.8	56.4
Often	19.1	18.9	17.8	18.2	20.2	22.6	18.2	24.7	19.6
Sometimes	9.4	10	6.8	6.6	9.3	8.9	4.5	11.2	9.2
Rarely	2.1	2.6	3.4	1.8	1.7	1.8	0	1.1	2.1
Never	14.9	14.2	12.7	11.4	8.6	11.2	4.5	10.1	12.7

Percentage of respondents who keep their car well maintained
Consumers (N=150) and water professionals (N=11) were asked to score the behaviour "Keep car well-maintained" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.



Consumers



Current participation (2.98); Adoption impact (3.46); Individual impact (3.24); Physical effort (2.88); Mental effort (2.80); Financial cost (2.89)

Water professionals



Current participation (2.70); Adoption impact (3.36); Individual impact (3.36); Physical effort (3.27); Mental effort (3.55); Financial cost (2.90)

Wash car at a car wash or on grass

Respondents who always wash their cars at a car wash or on grass

43.1% of respondents indicated that they always wash their cars at a car wash or on grass. 21.9% are females, 21.2% are males.

The most frequently occurring age group for those who always wash their cars at a car wash or on grass (22.1%) is 64 years and over.

32% have a Bachelor degree or higher. 38% own their home outright and 36% have a mortgage. 36% are working full time and 18% are working part time.

Respondents who never wash their cars at a car wash or on grass

23.2% stated that they never keep their cars well maintained. There are no gender differences between those who did not engage in this behaviour.

The most frequently occurring age group for those who never wash their cars at a car wash or on grass (21.5%) is 25-34 years



Frequency of behaviour: wash their cars on grass or at a car wash

29% own their own house and 27% have mortgage. 36% had completed a Bachelor or postgraduate degree. 35% are working full time and 15% are retired.

When did they start washing their cars at a car wash or on grass?

When asked when they started washing their cars at a car wash or on grass to save water, 55.5% stated they have always engaged in this behaviour for at least more than 16 years.

6% mentioned they have been washing their cars at a car wash or on grass for the last 10 years, while 4.7% said they did so since the last 5 years. 6.3% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents with different levels of this behaviour. The state with the highest levels of this behaviour was South Australia (54.7%).



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Always	42.4	38.8	33.9	54.7	43.9	47	31.8	52.8	43.1
Often	14.3	14.2	14.4	9.9	14.2	15.7	22.7	10.1	14
Sometimes	11.6	13.9	10.2	8.6	13.6	12	36.4	11.2	12.5
Rarely	7.2	7.3	5.9	6.3	8.3	6.5	4.5	5.6	7.2
Never	24.5	25.8	35.6	20.5	20	18.9	4.5	20.2	23.2

Percentage of respondents who wash their cars on grass or at a car wash

Consumers (N=150) and water professionals (N=11) were asked to score the behaviour "Wash car at a car wash or on grass" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.



Consumers



Current participation (2.76); Adoption impact (3.27); Individual impact (3.11); Physical effort (2.36); Mental effort (2.24); Financial cost (1.84)



Water professionals

Current participation (2.82); Adoption impact (3.64); Individual impact (3.55); Physical effort (2.82); Mental effort (3.09); Financial cost (1.45)

Prevent animal waste from entering waterways

Respondents who always prevent animal waste from entering waterways

39.4% of respondents indicated that they always prevent animal waste from entering waterways. 19.8% are females, 19.5% are males.

The most frequently occurring age group for those who always prevent animal waste from entering waterways (20.8%) is 64 years and over.

30% have a bachelor degree or higher. 38% own their home outright and 37% have a mortgage.

Respondents who never prevent animal waste from entering waterways

46.6% stated that they never prevent animal waste from entering waterways. 22.6% are males, 24% are females. The most frequently occurring age group for those who never prevent animal waste from entering waterways (30.1%) is 64 years and over. 34% own their own house and 30% have mortgage. 36% had completed a Bachelor or postgraduate degree. 37% are working full time and 17% are retired.

When did they start preventing animal waste from entering waterways?

When asked when they started preventing animal waste from entering waterways to save water, 61.6% stated they have always engaged in this behaviour for at least more than 16 years.

4.4% mentioned they have been preventing animal waste from entering waterways for the last 10 years, while 3.5% said they did so since the last 5 years. 6.8% of the respondents engaged in this water-saving behaviour for less than a year.

35% are working full time and 17% are working part time.

Different uptake across states

The table below shows the percentage of respondents with different levels of this behaviour. The state with the highest levels of this behaviour was Northern Territory (54.5%).

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Always > 16



Frequency of behaviour: prevent animal waste from entering waterways



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Always	36.8	39.1	44.9	49.6	40.6	37.2	54.5	34.8	39.4
Often	8.2	8	6.8	5.1	5.1	7.1	4.5	9	7.2
Sometimes	4.6	3.8	5.1	2.5	3.6	2.8	0	3.4	3.9
Rarely	2.2	3.3	3.4	3	3.3	4.5	4.5	2.2	3
Never	48.1	45.8	39.8	39.7	47.4	48.4	36.4	50.6	46.6

Percent

Percentage of respondents who prevent animal waste from entering waterways

Consumers (N=150) and water professionals (N=11) were asked to score the behaviour "Prevent animal waste from entering waterways" against the characteristics below, using a Likerttype scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.



Consumers



Current participation (3.15); Adoption impact (3.37); Individual impact (3.34); Physical effort (2.38); Mental effort (2.25); Financial cost (1.96)

Water professionals



Current participation (2.91); Adoption impact (3.82); Individual impact (3.55); Physical effort (3.00); Mental effort (3.27); Financial cost (1.36)

Report pollution to the appropriate authority

Respondents who always report pollution incidents to the appropriate authority

17.8% of respondents indicated that they always report pollution incidents to the appropriate authority. 8.7% are females, 9.1% are males.

The most frequently occurring age group for those who always report pollution incidents to the appropriate authority (21%) is 35-44.

33% have a Bachelor degree or higher. 36% own their own house and 37% have mortgage. 40% are working full time and 14% work part time.

Respondents who never report pollution incidents to the appropriate authority

55.9% stated that they never report pollution incidents to the appropriate authority. 26.9% are males, 29% are females.

The most frequently occurring age group for those who never report pollution incidents to the appropriate authority (20.1%) is 35-44.



Frequency of behaviour: report pollution incidents to the appropriate authorities

34% had completed a Bachelor or postgraduate degree. 33.1% own their own house and 33% have mortgage. 36% are working full time and 14% are retired.

When did they start reporting pollution incidents to the appropriate authority?

When asked when they started reporting pollution incidents to the appropriate authority to save water, 43.8% stated they have always engaged in this behaviour for at least more than 16 years.

5% mentioned they have been reporting pollution incidents to the appropriate authority for the last 10 years, while 5.5% said they did so since the last 5 years. 13.1% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents with different levels of this behaviour. The state with the highest levels of this behaviour was Northern Territory (22.7%).



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Always	19.2	15.6	21.2	22	17.2	14.6	22.7	20.2	17.8
Often	6	6.2	3.4	5.1	5.1	5.1	13.6	5.6	5.7
Sometimes	9	9.5	10.2	8.4	8.6	11.4	18.2	6.7	9.2
Rarely	9.4	12.9	12.7	11.4	11.4	14.4	0	12.4	11.4
Never	56.4	55.7	52.5	53.2	57.7	54.4	45.5	55.1	55.9

Percentage of respondents who report pollution incidents to the appropriate authorities

Consumers (N=150) and water professionals (N=11) were asked to score the behaviour "Report pollution incidents to the appropriate authority" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.



45% 40% 35% 30% 25% 20% 15% 10% 5% 0% Adoption Individual Physical effort Mental effort Financial cost Current impact participation impact

Consumers

Current participation (2.53); Adoption impact (3.38); Individual impact (3.24); Physical effort (2.35); Mental effort (2.50); Financial cost (2.01)



Water professionals

Current participation (0.84); Adoption impact (1.22); Individual impact (1.14); Physical effort (0.82); Mental effort (1.16); Financial cost (0.57)

Differences are noted in consumers' and water professionals' perception in impact and likelihood of this behaviour as reported above.

Put rubbish in the bin

Respondents who always put rubbish in the bin

87.3% of respondents indicated that they always put rubbish in the bin. 44.6% are females, 42.7% are males.

The most frequently occurring age group for those who always put rubbish in the bin (20.7%) is 64 and over.

33% have a Bachelor degree or higher. 36% own their own house and 34% have mortgage. 35% are working full time and 17% work part time.

Respondents who never put rubbish in the bin

5.2% stated that they never put rubbish in the bin. There are no gender differences between those who did not engage in this behaviour.

The most frequently occurring age group for those who never put rubbish in the bin (34.1%) is 25-34 years.

26% own their own house and 29% have mortgage. 42% had completed a Bachelor or postgraduate degree. 47% are working full time and 6% are retired.

When did they start putting rubbish in the bin?

When asked when they started putting rubbish in the bin to save water, 78.6% stated they have always engaged in this behaviour for at least more than 16 years.

2.2% mentioned they have been putting rubbish in the bin for the last 10 years, while 2% said they did so since the last 5 years. 3.2% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents with different levels of this behaviour. The state with the highest levels of this behaviour was Australian Capital Territory (94.4%).



Frequency of behaviour: put rubbish in bin



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Always	84.8	86.3	88.1	91.9	89.8	88	86.4	94.4	87.3
Often	6	5.4	4.2	3.5	4.8	4.7	13.6	2.2	5.2
Sometimes	2.3	1.8	1.7	1	1.5	1.6	0	1.1	1.8
Rarely	.6	.6	.8	0	.4	.4	0	1.1	.5
Never	6.2	6	5.1	3.5	3.5	5.3	0	1.1	5.2

Percentage of respondents who put rubbish in bin

Consumers (N=150) and water professionals (N=11) were asked to score the behaviour "Put rubbish in the bin" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.





Consumers

Current participation (2.86); Adoption impact (3.68); Individual impact (3.50); Physical effort (2.77); Mental effort (2.42); Financial cost (2.21)

Water professionals



Current participation (2.50); Adoption impact (4.00); Individual impact (3.73); Physical effort (3.60); Mental effort (3.36); Financial cost (1.90)

Placing all cigarette butts in bin

Respondents who always place all cigarette butts in bin

24% of respondents indicated that they always place all cigarette butts in bin. 12.1% are females, 11.9% are males.

The most frequently occurring age group for those who always place all cigarette butts in bin (22.2%) is 45-54 years.

28% have a Bachelor degree or higher. 31.5% own their home outright and 33% have a mortgage. 36% are working full time and 17% are working part time.

Respondents who never place all cigarette butts in bin

66.8% stated that they never place all cigarette butts in bin. 32.7% are males, 34.1% are females. The most frequently occurring age group for those who never place all cigarette butts in bin (21.3%) is 64 years and over.

37% own their own house, 35% have mortgage. 36% had completed a Bachelor or postgraduate degree. 36% are working full time and 16% are retired.

When did they start placing cigarette butts in bins?

When asked when they started placing cigarette butts in bins to save water, 55.6% stated they have always engaged in this behaviour for at least more than 16 years.

5.3% mentioned they have been placing cigarette butts in bins for the last 10 years, while 4% said they did so since the last 5 years. 6% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents with different levels of this behaviour. The state with the highest levels of this behaviour was South Australia (30.6%).



Frequency of behaviour: place all cigarette butts in bins



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Always	22.6	23.7	22.9	30.6	25	25.2	22.7	9	24
Often	6.1	4.8	5.9	2.5	4.9	6.5	13.6	6.7	5.4
Sometimes	3.2	3	2.5	2.3	2.5	3	4.5	4.5	2.9
Rarely	1.1	1.4	0	0	.9	1	0	1.1	1
Never	67.1	67.1	68.6	64.6	66.7	64.2	59.1	78.7	66.8

Percentage of respondents who place all cigarette butts in bins

Consumers (N=150) and water professionals (N=11) were asked to score the behaviour "Placing all cigarette butts in bins" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.



45% 40% 35% 30% 25% 20% 15% 10% 5% 0% Mental effort Financial cost Adoption Individual Physical Current effort participation impact impact

Consumers

Current participation (2.80); Adoption impact (3.60); Individual impact (3.47); Physical effort (2.20); Mental effort (2.21); Financial cost (1.91)

Water professionals



Current participation (2.75); Adoption impact (3.50); Individual impact (3.36); Physical effort (2.55); Mental effort (3.27); Financial cost (1.55)

Recycling or disposing of used oil, paint and cleaners

Respondents who always recycle/dispose of oil, paint, cleaners

43.2% of respondents indicated that they always recycle/ dispose of oil, paint, cleaners. 21.7% are females, 21.4% are males.

The most frequently occurring age group for those who always recycle/dispose of oil, paint, cleaners (24.3%) is 64 years and over.

26% own their own house and 31% have mortgage. 14% had completed a Bachelor degree or higher. 34% are working full time and 16% are working part time.

Respondents who never recycle/dispose of oil, paint, cleaners

33% stated that they never recycle/dispose of oil, paint, cleaners. 15.6% are males, 17.3% are females. The most frequently occurring age group for those who never recycle/ dispose of oil, paint, cleaners (23.7%) is 25-34 years. 26% own their own house and 31% have mortgage. 35% had completed a Bachelor or postgraduate degree. 38% are working full time and 13% are working retired.

When did they start recycling or disposing of used oil, paint and cleaners through council transfer councils?

When asked when they started recycling or disposing of used oil, paint and cleaners through council transfer councils to save water, 54.6% stated they have always engaged in this behaviour for at least more than 16 years.

6.3% mentioned they have been recycling or disposing of used oil, paint and cleaners through council transfer councils for the last 10 years, while 4.9% said they did so since the last 5 years. 6.8% of the respondents engaged in this watersaving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents with different levels of this behaviour. The state with the highest levels of this behaviour was Northern Territory (68.2%).



Frequency of behaviour: recycled, or disposed used oil, paints and cleaners through council transfers



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Always	41.7	42.9	49.2	47.3	43.2	43.3	68.2	42.7	43.2
Often	13.3	9.1	14.4	10.4	9.5	9.6	9.1	15.7	11
Sometimes	8	8.3	6.8	6.3	8.7	9.3	4.5	5.6	8.1
Rarely	4.9	4.8	4.2	5.6	4.2	5.7	0	4.5	4.8
Never	32.2	34.9	25.4	30.4	34.4	32.1	18.2	31.5	32.9

Percentage of respondents who recycled, or disposed used oil, paints and cleaners through council transfers

Consumers (N=150) and water professionals (N=11) were asked to score the behaviour "Recycling or disposing of used oil, paint and cleaners through council transfer stations" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.



Consumers



Current participation (2.67); Adoption impact (3.73); Individual impact (3.60); Physical effort (2.97); Mental effort (2.83); Financial cost (2.80)



Water professionals

Current participation (2.50); Adoption impact (3.90); Individual impact (3.73); Physical effort (3.64); Mental effort (3.55); Financial cost (2.00)

Installed/purchased water efficient taps or aerators

Respondents who installed/purchased water efficient taps/ aerators

37.8% of respondents indicated that they installed/ purchased water efficient taps/aerators. 19.5% are females, 18.3% are males.

The most frequently occurring age group for those who installed/purchased water efficient taps/aerators (26%) is 64 years and over.

34% have a Bachelor degree or higher. 48% own their own home and 39% have a mortgage. 33% are working full time, and 17% part time.

Respondents who did not install/purchase water efficient taps/aerators

14% of respondents indicated that they did not install/ purchase water efficient taps/aerators since these were already in the house when they moved in. There are no gender differences between those who did not engage in this behaviour.

The most frequently occurring age group for those who installed/purchased water efficient taps/aerators (21.1%) is 25-34 years.



Frequency of behaviour: have purchased/installed water efficient taps or aerators

38% have a Bachelor degree or higher. 30% own their home outright and 40% have a mortgage.

41% are working full time and 16% are working part time. 15% were retired and stated they can't afford to install water efficient taps or aerators.

When did they install/purchase water efficient taps or aerators?

When asked when they installed/purchased water efficient taps or aerators to save water, 11.8% stated they have always engaged in this behaviour for at least more than 16 years.

7.8% mentioned they installed/purchased water efficient taps or aerators for the last 10 years, while 12.5% said they did so since the last 5 years. 7.8% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents with different levels of this behaviour. The state with the highest levels of this behaviour was Queensland (41%).



aerators to save water?

	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Yes	38.7	34.3	33.1	38	41	38.8	22.7	31.5	37.8
No, already in the house when I moved in	15.7	12.7	10.2	10.4	15.3	11.4	27.3	13.5	14
No, renting	11.4	13.5	10.2	13.7	16.3	13.6	9.1	19.1	13.3
No, not interested	8.7	9.3	9.3	7.8	7.1	8.1	13.6	12.4	8.5
No, can't afford it	6.2	8.2	9.3	6.1	4.9	8.3	4.5	7.9	6.7
No, not applicable	10.4	11.9	15.3	3.7	9.1	11.6	9.1	4.5	10.9
No, other	8.8	10.2	12.7	10.4	6.3	8.1	13.6	11.2	8.8

Percentage of respondents who have purchased/installed water efficient taps or aerators

Consumers (N=151) and water professionals (N=21) were asked to score the behaviour "Installed/purchased water efficient taps or aerators" against the characteristics below, using a Likerttype scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.



Consumers



Current participation (2.97); Adoption impact (3.52); Individual impact (3.22); Physical effort (2.66); Mental effort (2.59); Financial cost (2.77)

Water professionals



Current participation (3.57); Adoption impact (3.43); Individual impact (3.38); Physical effort (2.71); Mental effort (3.52); Financial cost (2.71)

Installed/purchased dual flush toilet to replace single flush toilet

Respondents who installed/purchased a dual flush toilet to replace a single flush toilet

48.1% of respondents indicated that they installed/ purchased a dual flush toilet to replace a single flush toilet. 25% are females, 23% are males.

The most frequently occurring age group for those who installed/purchased a dual flush toilet to replace a single flush toilet (25.1%) is 64 years and over.

32.6% have a Bachelor degree or higher. 46% own their own home and 37% have a mortgage. 33% are working full time, and 17% part time.

Respondents who did not install/purchase a dual flush toilet to replace a single flush toilet

28.9% of respondents indicated that they did not install/ purchase a dual flush toilet to replace single flush toilet since they were already in the house when they moved in. There are no gender differences between those who did not engage in this behaviour.

The most frequently occurring age group for those who did not install/purchase a dual flush toilet to replace a single flush one since it was already in place (22.8%) is 35-44.



Frequency of behaviour: have purchased/installed dual flush toilet to replace single flush toilet

39% have a Bachelor or postgraduate degree. 27% own their home outright and 39% have a mortgage.

41% are working full time and 17% are working part time. 11% were retired and stated they can't afford to install a dual flush toilet to replace a single flush toilet.

When did they install/purchase dual flush toilet to replace single flush toilet?

When asked when they installed/purchased a dual flush toilet to replace single flush toilet to save water, 24.1% stated they have always engaged in this behaviour for at least more than 16 years.

8% mentioned they have installed/purchased a dual flush toilet to replace single flush toilet for the last 10 years, while 8.8% said they did so since the last 5 years. 6.1% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents with different levels of this behaviour. The state with the highest levels of this behaviour was Western Australia (51.6%).



replace single flush toilet?

	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Yes	46.2	47	44.1	50.9	51.3	51.6	45.5	41.6	48.1
No, already in the house when I moved in	26.9	29.6	23.7	30.1	30.3	29.9	36.4	36	28.9
No, renting	8	8.3	7.6	7.8	7.8	7.3	9.1	7.9	8
No, not interested	4.6	3.6	3.4	2.5	2.8	2.8	4.5	3.4	3.6
No, can't afford it	3.5	3.6	6.8	1.8	1.4	1.6	0	4.5	2.9
No, not applicable	6	5.5	7.6	4.1	4.5	3.9	0	3.4	5.2
No, other	4.7	2.4	6.8	2.8	1.9	2.8	4.5	4.5	3.3

Percentage of respondents who have purchased/installed dual flush toilet to replace single flush toilet

Very low

Medium

Low

High

Very high

Impact and likelihood

Consumers (N=151) and water professionals (N=20) were asked to score the behaviour "Installed/Purchased a dual flush toilet to replace a single flush toilet" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.

Consumers



Current participation (3.55); Adoption impact (3.62); Individual impact (3.49); Physical effort (3.04); Mental effort (2.82); Financial cost (3.10)

Water professionals



Current participation (3.75); Adoption impact (3.95); Individual impact (3.90); Physical effort (3.37); Mental effort (2.95); Financial cost (3.55)

Installed/purchased a low flow shower head

Respondents who installed/purchased a low flow shower head

51.1% of respondents indicated that they installed/purchased a low flow shower head. 26.3% are females, 24.8% are males.

The most frequently occurring age group for those who installed/purchased a low flow shower head (24.9%) is 64 years and over.

33% have a Bachelor degree or higher. 46% own their own home and 37% have a mortgage. 32% are working full time, and 18% part time.

Respondents who did not install/purchase a low flow shower head

14.6% of respondents indicated that they did not install/ purchase a low flow shower head since they were already in the house when they moved in. There are no gender differences between those who did not engage in this behaviour.

The most frequently occurring age group for those who did not install/purchase a low flow shower head (23.2%) is 35-44 years.



Frequency of behaviour: have purchased/installed a low flow shower head

38% have a Bachelor or postgraduate degree. 22% own their home outright and 38% have a mortgage.

40% are working full time and 16% are working part time. 9% were retired and stated they can't afford to install/purchase a low flow shower head.

When did they install/purchase a low flow shower head?

When asked when they installed/purchased a low flow shower head to save water, 8.9% stated they have always engaged in this behaviour for more than 16 years.

7.5% mentioned they have installed/purchased a low flow shower head for the last 10 years, while 13.1% said they did so since the last 5 years. 8.2% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents who have purchased/installed this water saving device. The state with the highest levels of this behaviour was South Australia (56.2%).



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Yes	48.3	54.2	47.5	56.2	53.3	48.8	40.9	37.1	51.1
No, already in the house when I moved in	15.5	13.2	13.6	11.4	16.7	13	13.6	16.9	14.6
No, renting	8.8	8.7	7.6	11.6	12.5	10.8	9.1	13.5	9.9
No, not interested	10.8	10.2	9.3	8.9	6.9	9.1	22.7	19.1	9.7
No, can't afford it	2.8	2.1	4.2	0.5	1.6	3.7	0	3.4	2.3
No, not applicable	7.4	6.2	11	5.1	5.6	8.5	4.5	2.2	6.7
No, other	6.5	5.4	6.8	6.3	3.5	6.1	9.1	7.9	5.6

Percentage of respondents who have purchased/installed a low flow shower head

Very low

Medium

Low

High

Very high

Impact and likelihood

Consumers (N=151) and water professionals (N=19) were asked to score the behaviour "Installed/Purchased a low flow shower head" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.

Consumers



Current participation (3.32); Adoption impact (3.63); Individual impact (3.57); Physical effort (2.52); Mental effort (2.46); Financial cost (2.62)

Water professionals



Current participation (3.95); Adoption impact (3.84); Individual impact (3.84); Physical effort (2.68); Mental effort (2.53); Financial cost (2.32)

Installed/purchased a frontloader instead of a top-loader washing machine

Respondents who installed/purchased a front-loader instead of a top-loader washing machine

36.8% of respondents indicated that they installed/ purchased a front-loader instead of a top-loader washing machine. 19.1% are females, 17.7% are males.

The most frequently occurring age group for those who installed/purchased a front-loader instead of a top-loader washing machine (22%) is 35-44 years.

39% have a Bachelor degree or higher. 33% own their own home and 41% have a mortgage. 33% are working full time, and 16% part time.

Respondents who did not install/purchase a front-loader instead of a top-loader washing machine

18.5% of respondents indicated that they did not install/ purchase a front-loader instead of a top-loader washing machine since they were already in the house when they moved in. There are no gender differences between those who did not engage in this behaviour.

The most frequently occurring age group for those who did not install/purchase a front-loader instead of a top-loader washing machine (30.4%) is 25-34 years.



Frequency of behaviour: have purchased/installed a front-loader instead of a top-loader washing machine 52% have a Bachelor or postgraduate degree. 25% own their home outright and 41% have a mortgage.

48% are working full time and 19% are working part time. 19% were retired and stated they can't afford to install a frontloader instead of a top-loader machine.

When did they install/purchase a front-loader instead of a top-loader washing machine?

When asked when they installed/purchased a front-loader instead of a top-loader washing machine to save water, 8.6% stated they have always engaged in this behaviour for at least more than 16 years.

5.4% mentioned they have installed/purchased a frontloader instead of a top-loader washing machine for the last 10 years, while 10.9% said they did so since the last 5 years. 10% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents who have purchased/installed this water saving device. The state with the highest levels of this behaviour was South Australia (49.9%).



top-loader washing machine

	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Yes	32.8	37.3	33.1	49.9	38.3	38.2	31.8	33.7	36.8
No, already in the house when I moved in	4.9	5.3	6.8	2.3	3.2	5.3	0	11.2	4.6
No, renting	4.3	5.6	3.4	4.8	5.5	4.5	4.5	6.7	4.9
No, not interested	20.3	17.1	17.8	13.2	19	17.7	36.4	21.3	18.5
No, can't afford it	10.1	10.1	9.3	8.4	11.1	11.6	0	12.4	10.3
No, not applicable	13.4	11.6	11.9	9.9	9.6	12.6	4.4	4.5	11.6
No, other	14.1	13	17.8	11.6	13.3	10.2	22.7	10.1	13.2

Percentage of respondents who have purchased/installed a front-loader instead of a top-loader washing machine

Consumers (N=151) and water professionals (N=20) were asked to score the behaviour "Installed/Purchased a frontloader instead of a top-loader washing machine" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.

Very low High Low Very high Medium

Consumers



Current participation (3.21); Adoption impact (3.61); Individual impact (3.49); Physical effort (2.64); Mental effort (2.79); Financial cost (3.57)

Water professionals



Current participation (3.40); Adoption impact (3.75); Individual impact (3.80); Physical effort (2.58); Mental effort (2.95); Financial cost (3.65)

Installed/purchased a grey water system

Respondents who installed/purchased a grey water system

8.8% of respondents indicated that they installed/purchased a grey water system. 4.9% are females, 3.9% are males.

The most frequently occurring age group for those who installed/purchased a grey water system (19.7%) is 35-44 years.

35% have a Bachelor degree or higher. 45% own their own home and 44% have a mortgage. 39% are working full time, and 18% part time.

Respondents who did not install/purchase a grey water system

29.6% of respondents indicated that they did not install/ purchase a grey water system. There are no gender differences between those who did not engage in this behaviour.

The most frequently occurring age group for those who did not install a grey water system since it is not applicable to them (22.6%) is 64 years and over.



Frequency of behaviour: have purchased/installed a grey water system

43% have a Bachelor or postgraduate degree. 27% own their home outright and 51% have a mortgage.

47% are working full time and 18% are working part time. 16% were retired and stated they can't afford to install a grey water system.

When did they install/purchase a grey water system?

When asked when they installed/purchased a grey water system to save water, 19.9% stated they have always engaged in this behaviour for at least more than 16 years.

6.8% mentioned they have installed/purchased a grey water system for the last 10 years, while 10.3% said they did so since the last 5 years. 6.6% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents who have purchased/installed this water saving device. The state with the highest levels of this behaviour was Northern Territory (18.2%).



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Yes	7	9.5	5.1	10.9	11.1	7.1	18.2	10.1	8.8
No, already in the house when I moved in	4.6	4.2	5.9	3	5.4	2.6	4.5	1.1	4.4
No, renting	13.9	14.3	14.4	16.2	18.7	15	18.2	18	15.4
No, not interested	13.9	13.9	12.7	10.6	12.8	10.4	13.6	15.7	13.1
No, can't afford it	11.9	16.9	9.3	9.9	10.2	16.9	0	15.7	13
No, not applicable	30.4	26.9	34.7	34.2	29.2	31.1	18.2	20.2	29.6
No, other	18.2	14.1	17.8	15.2	12.5	16.9	27.3	19.1	15.8

Percentage of respondents who have purchased/installed a grey water system

Consumers (N=151) and water professionals (N=20) were asked to score the behaviour "Installed/purchased a grey water system" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.



Consumers



Current participation (2.26); Adoption impact (3.62); Individual impact (3.46); Physical effort (3.48); Mental effort (3.40); Financial cost (3.67)

Water professionals



Current participation (1.55); Adoption impact (3.45); Individual impact (3.55); Physical effort (3.85); Mental effort (3.90); Financial cost (3.80)

Installed/purchased a water efficient dishwasher

Respondents who installed/purchased a water efficient dishwasher

32.4% of respondents indicated that they installed/ purchased a water efficient dishwasher. 17% are females, 15.4% are males.

The most frequently occurring age group for those who installed/purchased a water efficient dishwasher (24.4%) is 64 years and over.

38% have a Bachelor degree or higher. 45% own their own home and 45% have a mortgage. 36% are working full time, and 18% part time.

Respondents who did not install/purchase a water efficient dishwasher

11.3% of respondents indicated that they did not install/ purchase a water efficient dishwasher since they were already in the house when they moved in. There are no gender differences between those who did not engage in this behaviour.

The most frequently occurring age group for those who did not install/purchase a water efficient



Frequency of behaviour: have purchased/installed a water-efficient dishwasher

dishwasher (23.3%) since it was already in the house when they moved in is 25-34 years. 27% own their home outright and 45% have a mortgage.

43% have a Bachelor or postgraduate degree. 48% are working full time and 17% are working part time. 10% were retired and stated they can't afford to install/purchase a water efficient dishwasher.

When did they install/purchase a water efficient dishwasher?

When asked when they installed/purchased a water efficient dishwasher to save water, 8% stated they have always engaged in this behaviour for at least more than 16 years.

5.9% mentioned they have installed/purchased a water efficient dishwasher for the last 10 years, while 11.2% said they did so since the last 5 years. 10.9% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents who have purchased/installed this water saving device. The state with the highest levels of this behaviour was Northern Territory (36.4%). The average scores are reported below.



dishwasher

	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Yes	31.5	33.7	19.5	33.9	32.5	32.5	36.4	36	32.4
No, already in the house when I moved in	11.7	12.5	8.5	9.4	12.5	6.5	9.1	12.4	11.3
No, renting	7.1	9	8.5	9.1	10.3	9.1	4.5	13.5	8.7
No, not interested	7.5	6.2	8.5	6.6	5.1	7.5	18.2	2.2	6.6
No, can't afford it	4.8	6.1	3.4	3.5	3.8	4.5	0	5.6	4.8
No, not applicable	31	27.4	40.7	32.9	30.7	34.3	22.7	20.2	30.5
No, other	6.3	8.1	11	4.6	5.1	5.5	9.1	10.1	5.8

Percentage of respondents who have purchased/installed a waterefficient dishwasher

Consumers (N=151) and water professionals (N=20) were asked to were asked to score the behaviour "Installed/ purchased a water efficient dishwasher" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high.



Consumers



Current participation (3.30); Adoption impact (3.56); Individual impact (3.40); Physical effort (2.62); Mental effort (2.78); Financial cost (3.55)

Water professionals



Current participation (3.21); Adoption impact (3.25); Individual impact (3.30); Physical effort (2.65); Mental effort (2.95); Financial cost (3.50)

Installed/purchased a cover for your outdoor pool

Respondents who installed/purchased a cover for their outdoor pool

7.1% of respondents indicated that they installed/purchased a cover for their outdoor pool. 3.6% are females, 3.4% are males.

The most frequently occurring age group for those who installed/purchased a cover for their outdoor pool (22.6%) is 35-44 years. 35% have a Bachelor degree or higher. 38% own their own home and 52% have a mortgage. 42% are working full time, and 20% part time.

Respondents who did not install/purchase a cover for their outdoor pool

70.4% of respondents indicated that they did not install/ purchase a cover for their outdoor pool since it was not applicable in their context. 34.6% are males, 35.7% are females.

The most frequently occurring age group for those who did not install/purchase a cover for their outdoor pool since it was not applicable (21.2%) is 64 years and over. 34% have a Bachelor degree or postgraduate degree. 34% own their



Frequency of behaviour: have purchased/installed a cover for their outdoor pool

home outright and 42% have a mortgage.

35% are working full time and 17% are working part time. 7% were retired and stated they can't afford to install/purchase a cover for their outdoor pool.

When did they install/purchase a cover for their outdoor pool?

When asked when they installed/purchased a cover for their outdoor pool to save water, 9.8% stated they have always engaged in this behaviour for at least more than 16 years.

10.9% mentioned they have installed/purchased a cover for their outdoor pool for the last 10 years, while 9.8% said they did so since the last 5 years. 12.3% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents who have purchased/installed this water saving device. The state with the highest levels of this behaviour was Western Australia (12.8%).



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Yes	5.9	6.6	1.7	7.8	7.1	12.8	9.1	7.9	7.1
No, already in the house when I moved in	3	1.5	.8	1	1.6	2.2	0	5.6	2.1
No, renting	5.5	6.3	4.2	8.4	6.3	6.5	4.5	4.5	6.1
No, not interested	6.4	3.5	5.1	2	5.9	3	9.1	3.4	4.9
No, can't afford it	3.5	2.4	3.4	1.5	4.3	3.3	4.5	3.4	3.2
No, not applicable	68.4	74.3	79.7	73.2	68.2	68.1	59.1	69.7	70.4
No, other	7.4	5.4	5.1	6.1	6.5	4.1	13.6	5.6	6.2

Percentage of respondents who have purchased/installed a cover for their outdoor pool

Consumers (N=151) and water professionals (N=20) were asked to score the behaviour "Installed/purchased a cover for your outdoor pool" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.



Consumers



Current participation (2.79); Adoption impact (3.17); Individual impact (3.01); Physical effort (2.59); Mental effort (2.30); Financial cost (2.95)

Water professionals



Current participation (2.56); Adoption impact (2.72); Individual impact (2.95); Physical effort (3.11); Mental effort (2.89); Financial cost (3.68)

Installed/purchased rainwater tank (plumbed into home)

Respondents who installed/purchased a rainwater tank (plumbed into their home)

11.2% of respondents indicated that they installed/purchased a rainwater tank (plumbed into their home). 6% are females, 5.2% are males.

The most frequently occurring age group for those who installed/purchased a rainwater tank (plumbed into their home) (19.7%) is 64 years and over.

33% have a Bachelor degree or higher. 47% own their own home and 41% have a mortgage. 37%. are working full time, and 17% part time.

Respondents who did not install/purchase a rainwater tank (plumbed into their home)

27% of respondents indicated that they did not install/ purchase a rainwater tank (plumbed into their home) since it was not applicable. There are no gender differences between those who did not engage in this behaviour.

The most frequently occurring age group for those who did not install/purchase a rainwater tank (plumbed into their home) (26.2%) is 25-34 years.



Frequency of behaviour: have purchased/installed rainwater tank plumbed into home

40% have a Bachelor or postgraduate degree. 23% own their home outright and 50% have a mortgage.

45% are working full time and 15% are working part time. 16% were retired and stated they can't afford to install/purchase a rainwater tank (plumbed into their home).

When did they install/purchase a rainwater tank (plumbed into their home)?

When asked when they installed/purchased a rainwater tank (plumbed into their home) to save water, 19.9% stated they have always engaged in this behaviour for at least more than 16 years.

6.6% mentioned they installed/purchased a rainwater tank (plumbed into their home) for the last 10 years, while 10.1% said they did so since the last 5 years. 7.8% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents who have purchased/installed this water saving device. The state with the highest levels of this behaviour was South Australia (18.5%).



home

	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Yes	9.4	10.6	8.7	18.5	14.5	7.2	18.2	8.1	11.2
No, already in the house when I moved in	5.1	6.6	3.5	6.9	7.2	1.3	4.5	3.5	5.6
No, renting	13.5	15.6	16.5	16.7	17.1	14.6	18.2	17.6	15.2
No, not interested	11.1	10.5	12.2	8.2	9.2	9.7	13.6	17.6	10.4
No, can't afford it	15.7	19.9	15.7	11.1	14.5	23.3	0	14.1	16.7
No, not applicable	30.3	23.1	27.8	24.9	25.5	30	27.3	27.1	27
No, other	15	13.6	15.7	13.8	12	14	18.2	11.8	13.9

Percentage of respondents who have purchased/installed rainwater tank plumbed into home

Consumers (N=151) and water professionals (N=20) were asked to score the behaviour "Installed/purchased rainwater tank (plumbed into home e.g. to the toilet and laundry)" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.



Consumers



Current participation (2.42); Adoption impact (3.67); Individual impact (3.63); Physical effort (3.68); Mental effort (3.57); Financial cost (3.88)

Water professionals



Current participation (2.20); Adoption impact (3.74); Individual impact (3.84); Physical effort (3.35); Mental effort (3.80); Financial cost (4.45)

Installed/purchased rainwater tank (not plumbed into home)

Respondents who installed/purchased a rainwater tank (not plumbed into their home)

19.8% of respondents indicated that they installed/ purchased a rainwater tank (not plumbed into their home). 10.6% are females, 9.6% are males.

The most frequently occurring age group for those who installed/purchased a rainwater tank (not plumbed into their home) (24.8%) is 64 years and over.

45% are working full time and 20% are working part time. 16% are retired and stated they can't afford to install/ purchase a rainwater tank (not plumbed into their home).

32% have a Bachelor degree or higher. 51% own their own home and 38% have a mortgage. 33% are working full time, and 16% part time.

Respondents who did not install/purchase a rainwater tank (not plumbed into their home)

5.8% of respondents indicated that they did not install/ purchase a rainwater tank (not plumbed into their home) since it was already in the house when they moved in. 3.3% are males, 2.5% are females,



Frequency of behaviour: have purchased/installed a rainwater tank (not plumbed into home)

The most frequently occurring age group for those who did not install/purchase a rainwater tank (not plumbed into their home) since it was already in the house when they moved in (25.3%) is 25-34 years. 40% have a Bachelor or postgraduate degree. 21% own their home outright and 48% have a mortgage.

When did they install/purchase a rainwater tank (not plumbed into their home)?

When asked when they installed/purchased a rainwater tank (not plumbed into their home) to save water, 11.9% stated they have always engaged in this behaviour for at least more than 16 years.

8.2% mentioned they installed/purchased a rainwater tank (not plumbed into their home) for the last 10 years, while 13.2% said they did so since the last 5 years. 5.5% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents who have purchased/installed this water saving device. The state with the highest levels of this behaviour was South Australia (33.1%).



into home)?

	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Yes	14.8	21.7	11.3	33.1	25.9	13.3	9.1	14.1	19.8
No, already in the house when I moved in	6	5.8	5.2	10.8	5.4	1.7	0	9.4	5.8
No, renting	12.9	14.5	15.7	13	16.5	14.6	18.2	17.6	14.3
No, not interested	8.9	8.8	13	7.1	7.4	9.5	9.1	10.6	8.7
No, can't afford it	13	15.1	9.6	6.3	9.2	19.7	0	15.3	12.8
No, not applicable	31.4	23.3	30.4	18.5	25.4	30.4	36.4	22.4	27
No, other	12.9	10.7	14.8	11.1	10.2	10.8	27.3	10.6	11.6

Percentage of respondents who have purchased/installed a rainwater tank (not plumbed into home)

High

Very high

Very low

Medium

Low

Impact and likelihood

Consumers (N=151) and water professionals (N=20) were asked to score the behaviour "Installed/purchased rainwater tank (not plumbed into home e.g. only used for outdoor use)" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.

Consumers



Current participation (2.77); Adoption impact (3.63); Individual impact (3.50); Physical effort (3.54); Mental effort (3.45); Financial cost (3.74)



Water professionals

Current participation (2.95); Adoption impact (3.75); Individual impact (3.80); Physical effort (3.25); Mental effort (3.35); Financial cost (4.15)

Replaced lawn with droughtresistant grasses

Respondents who replaces lawn with drought-resistant grasses to save water

17.5% of respondents indicated that they replaced their lawn with drought-resistant grasses. 8.8% are females.

The most frequently occurring age group for those who replaced their lawn with drought-resistant grasses (22%) is 64 years and over.

39% have a Bachelor degree or higher. 45% own their own home and 46% have a mortgage. 39% are working full time, and 17% part time.

Respondents who did not replace their lawn with droughtresistant grasses to save water

11.2% of respondents indicated that they did not replace their lawn with drought-resistant grasses to save water since it was already in place when they moved in. 5.8% are males.

The most frequently occurring age group for those who did not replace their lawn with drought-resistant grasses (20.6%) since it was already in place when they moved in is 64 years and over.



Frequency of behaviour: have replaced lawn with drought-resistant grasses

31% have a Bachelor degree or postgraduate degree. 39% own their home outright and 43% have a mortgage.

38% are working full time and 19% are working part time. 17% were retired and stated they can't afford to replace their lawn with drought-resistant grasses.

When did they replace their lawn with drought-resistant grasses?

When asked when they replaced their lawn with droughtresistant grasses to save water, 12.4% stated they have always engaged in this behaviour for at least more than 16 years.

7.3% mentioned they replaced their lawn with droughtresistant grasses for the last 10 years, while 9% said they did so since the last 5 years. 12.1% of the respondents engaged in this water-saving behaviour for less than a year.

Different uptake across states

The table below shows the percentage of respondents who have purchased/installed this water saving device. The state with the highest levels of this behaviour was South Australia (26.9%).



	NSW	VIC	TAS	SA	QLD	WA	NT	ACT	Total Average
Yes	14.5	18.6	11.7	26.9	16.3	20	15.8	18.3	17.5
No, already in the house when I moved in	12.4	10.7	9.7	9.7	9.2	12.2	21.1	16.9	11.2
No, renting	13.1	14.5	19.4	17.2	22.4	15.6	31.6	12.7	16.2
No, not interested	38.8	35.5	42.7	29.2	33.3	29.9	26.3	35.2	35.1
No, can't afford it	21.2	20.6	16.5	16.9	18.8	22.2	5.3	16.9	20.1

Percentage of respondents who have replaced lawn with drought-resistant grasses

Consumers (N=151) and water professionals (N=20) were asked to were asked to score the behaviour "Installed/ purchased rainwater tank (not plumbed into home e.g. only used for outdoor use)" against the characteristics below, using a Likert-type scale ranging from 1-5, representing very low, low, medium, high, very high. The average scores are reported below.



Consumers



Current participation (2.77); Adoption impact (3.31); Individual impact (3.21); Physical effort (2.77); Mental effort (2.89); Financial cost (2.99)

Water professionals

Current participation (2.20); Adoption impact (3.41); Individual impact (3.35); Physical effort (3.47); Mental effort (3.47); Financial cost (3.59)

The Way Forward

Taking a behaviourist perspective on issues related to water, our first objective was to identify and prioritise behaviours that if undertaken by a large target audience en masse will significantly address water consumption and pollution reduction.

The Behaviour Assessment Database provides an analysis of the prioritised behaviours used in a national survey conducted with 5194 respondents, a resident's survey with 151 (water-saving behaviours) and 150 (pollution reduction behaviours) participants and an additional survey with 22 water professionals working with consumers.

The Behaviour Assessment Database will serve as a point of reference and tracking tool for researchers in the domain, wider CRC contacts and industry partners e.g. government water professionals who work closely or communicate with communities and other consumers. The data analysis and reporting, and data visualisation will be made available to the wider public through industry and researchers' engagement workshops, and through the BehaviourWorks Australia website. It is hoped that the accessing and sharing of data will further collaborations both between disciplines in research, and the industry and generate policy implications for water sensitivity.

This database will also assist in producing a sequenced behavioural road map for the transitioning to water sensitive cities. In future reports, we will seek to sequence these behaviours into a behavioural road map where consideration will be given to the impact and likelihood of behaviours. Although other considerations, such as the perceived similarity between behaviours, will also be included in constructing a behavioural road map, broadly speaking the following diagram represents a sequencing framework which seeks to assist in accelerating a transition to water sensitive cities.

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