

Water Efficiency Survey

Summary Report

August 31, 2004

VENTURE MARKET RESEARCH CORP.

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Published Under a Separate Electronic Cover (PDF Format)

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SURVEY OBJECTIVES

This research was commissioned by the Capital Regional District (CRD) Water Services Department (hereafter referred to as CRD Water). It is the fourth in a series of surveys since 1997 (1997, 1998 and 1999) by CRD Water to gauge the attitudes of residents in the CRD about water use and water conservation practices.

The 2004 survey is similar to earlier surveys, but in addition has new sections to test attitudes about possible new initiatives to assist in water conservation, as well as investigate where people turn to get information about CRD Water, and finally, gauge residents' satisfaction with water quality.

The specific objectives of the research study were to:

- obtain a sense of residents' views on water use and their perceptions about water efficiency and compare these to the 1997 to 1999 findings;
- identify consumer behaviour and actions with regard to their water use and conservation efforts, and identify any trends or shifts over the 1997 to 2004 time frame;
- determine people's level of awareness about CRD Water Services Department water efficiency initiatives;
- measure the extent to which people use water wise practices;
- measure public awareness and perceptions about what the CRD and CRD Water are doing to ensure high quality water service;
- determine what types of water people most often consume (bottled, tap water, etc.) and compare these habits to 1999 findings;
- seek comments on water service and water management in the CRD;
- obtain people's opinions on water management and water quality issues; and
- compare the findings to those of previous surveys where applicable.

SURVEY HIGHLIGHTS

The current survey was undertaken from June 30 to July 28, 2004. Throughout the report, comparisons are made to the 1999 survey completed by Venture Market Research Corp., and in the main body of the report, comparisons are made to the surveys undertaken over the 1997 to 1999 period where appropriate. The margin of error for a sample size of 431 is at most $\pm 4.7\%$, 19 times out of 20. For statistics based on a smaller number of responses, the margin of error will be larger.

Opinions About the Importance of Water Efficiency

- As in previous surveys, the majority (87%, almost identical to 86% in 1999) of CRD residents said that it is important to use water efficiently in the home for washing clothes, taking showers, etc., including 57% (vs. 59%) who said it is “very important”.
- A total of 85% (up significantly from 75% in 1999) of those participating in the survey believed that it is important to use water efficiently outdoors for watering the lawn, garden, etc., including 61% (up significantly from 51%) who said it is “very important”.

Knowledge and Practice of Water Efficiency

- The majority (86%, vs. 88% in 1999) of people agreed they know how to use water efficiently, both indoors and outdoors, including 50% (down significantly from 59% in 1999) who “strongly agree”. However, it is evident that not all of those who know how to conserve water actually practice water conservation, as a lower proportion (74%, identical to 1999) agreed their household actively practices water efficiency both indoors and outdoors (including 39% who “strongly agree”, vs. 42%).

Household Usage of Water Efficient Fixtures

- Low flow showerheads (67%, vs. 69% in 1999) and faucet aerators (59%, vs. 62%) continue to be the most common water efficient fixtures in use, while 38% (vs. 37% in 1999) of households claim to use a water efficient dishwasher, 36% (vs. 32%) use a toilet modified to use less water, 29% (vs. 25%) use a 6-litre or dual flush toilet, and 23% (vs. 13%) use a front-loading washing machine.

Indoor Water Saving Practices

- The most frequent indoor water saving habit that was “always” practised was to turn off the faucet while shaving, brushing teeth, etc. (75%, up significantly from 68% in 1999), followed by keep drinking water in the fridge (68%, vs. 70%). More than half (52%, vs. 47%) of people claim to “always” consciously take short showers (5 minutes or less), while just over one-third (36%, vs. 31%) “always” flush the toilet infrequently.

Outdoor Water Saving Practices

- Among the 37% of those who water their lawn, nearly all (98%, up significantly from 89% in 1999) do so between 7 p.m. and 10 a.m., including 85% (up significantly from 72%) who “always” water then. (In 1999, this question was asked of those who had a lawn, while in 2004 this question was only asked of those who water their lawn).
- Of the 65% households with a garden, 94% water between 7 p.m. and 10 a.m., including 75% who “always” water during those hours.
- Use of native or drought-tolerant plants when doing landscaping among gardeners has increased significantly from 56% in 1999 to 66% in 2004, including 20% (vs. 21% in 1999) who “always” use these types of plants.
- Among those with a lawn or garden, more than 8 in 10 (81%, vs. 80%) use a spring-loaded nozzle on their hose, including 74% (identical to 1999) who “always” use one.

Perceptions About Water Efficiency Measures

- Nearly 9 in 10 (89%, almost identical to 88% in 1999) survey participants felt it was important that CRD Water encourages people to practice water efficiency, including 70% (vs. 67%) who thought it was “very important”.
- More than 8 in 10 (81%, vs. 78% in 1999) said it was important that CRD Water be able to implement water efficiency measures, including 57% (vs. 53%) who said it was “very important”.

Support for Watering Restrictions and Water Efficiency Options

- Just over three-quarters (76%, vs. 80% in 1999) of CRD residents were aware of the Stage 1 watering restrictions in effect from May 1 to September 30, 2004, including 62% (vs. 65%) who were “very aware”.

- Over 8 in 10 (83%, up significantly from 78% in 1999) of those surveyed were in support of having watering restrictions, including 65% (up significantly from 56%) who “strongly support” watering restrictions.
- About 8 in 10 respondents found the time allotted for outdoor watering restrictions (79%, up significantly from 64% in 1999), the lawn watering restrictions (81%, up significantly from 76%), and requiring water efficient plumbing fixtures in new and renovated homes (82%, vs. 80%) to be acceptable, while a lower proportion of respondents felt that two-tiered rates in the summer (55%, vs. 57%) were acceptable.

Awareness of CRD Water Services Department Water Efficiency Initiatives

- Nearly two-thirds (65%) of the households surveyed had seen, read or heard something about CRD Water in the past year. Half (51%) said that they had seen, read or heard a “news story”, and 15% said an “advertisement”, while 24% said “both (news story and advertisement)”.
- In total, 16% (up significantly from 11% in 1999) of respondents were aware of, or had seen the CRD Water efficiency information booth at trade shows or other events.
- Awareness of the water efficient fixtures rebate program offered by CRD Water stood at 46%, significantly higher than the 19% recorded in 1999.

Interest in Installing Water Efficient Fixtures

- Just over one-third (36%, vs. 38% in 1999) of those who did not already have a 6-litre or dual flush toilet installed in their home were likely to install such a toilet, including 21% (identical to 1999) who were “very likely”.
- Nearly 4 in 10 (37%, vs. 39% in 1999) of respondents who did not have a low flow showerhead were likely to install one in their home, including 24% (vs. 27% in 1999) who were “very likely”.

Awareness of Current Water Management Issues

- Respondents were asked, in an unaided format, to identify where the water supply for Greater Victoria is located. More than 7 in 10 (72%, up significantly from 58% in 1999) said the “Sooke Reservoir/ Sooke”, while 27% (vs. 42%) of those surveyed could not identify the source of Greater Victoria’s water or identified another area.

Sources of Information About CRD Water

- Almost one-third (32%) of residents recalled seeing or reading something published by CRD Water (new for the 2004 survey). What people most often recalled about CRD Water publications included “the expansion of the reservoir” (14%), the “current water level of the reservoir” (10%) and “watering restrictions” (8%).
- If CRD Water wanted to get information to residents, according to respondents, the best way would be through a “letter (not in the water bill)/ flyer/ pamphlet” (50%), followed by in the “Times Colonist” (20%), “in the water bill” (20%), and in a “community newspaper” (14%).
- The main sources where people would first turn to get information about water services are CRD Water or the CRD main office (43%), the CRD website (28%), and their municipal or city hall (20%).

Drinking Water Preferences and Perceptions About Water Quality

- For the first time, respondents were asked about their satisfaction with the quality of water to their home. The majority (83%) of survey participants were satisfied with the quality of piped water, including 52% who were “very satisfied”.
- Slightly more than 4 in 10 (41%) of those polled were aware that CRD Water recently opened its new ultra-violet plant that disinfects all its piped drinking water in the CRD.
- The proportion of households who drink only straight tap water has decreased significantly from 41% in 1999 to 35% in the current survey, while those who drink a combination of tap and bottled or filtered water (33%, vs. 30% in 1999), and those who only drink bottled or filtered water (32%, vs. 28%) both experienced moderate increases.
- Among those who drink either a combination of tap water and bottled or filtered water, or only bottled or filtered water, the most frequent reasons they consider it necessary were “don’t like the taste/ smell of tap water” (35%), “it is cold from the fridge” (14%), and “it is more convenient” (12%).

Interest in Receiving Information About Water Quality

- About 6 in 10 (59%, vs. 63% in 1999) households in the CRD would be interested in receiving information on the quality of their tap water.

SURVEY CONCLUSIONS

The results of the CRD Water Services Department 2004 survey of Capital Regional District households reveal that more than 8 in 10 residents are satisfied with the quality of piped water to their home, and that almost 9 in 10 residents continue to feel it is important to use water efficiently in the home, while the proportion of those who think water efficiency outdoors is important has increased significantly to more than 8 in 10. Further, a similar percentage of residents as in previous surveys stated it is important for CRD Water to encourage consumers to practice water efficiency, and a similar proportion were aware of the Stage 1 watering restrictions in effect, while a significantly higher percentage compared to 1999 were in support of having watering restrictions.

Interestingly, although more than 8 in 10 people support having water restrictions, and almost 9 in 10 agreed they know how to use water efficiently both indoors and outdoors, a lower proportion, about three-quarters, agreed they actively practice water efficiency. As well, the proportion who actively practice water efficiency has remained constant with the level recorded in 1999. Despite these findings, the use of almost all water efficient fixtures considered in the survey has increased moderately, while the use of front-loading washing machines has more than doubled since 1997. In addition, there have been consistent increases in the proportion of households who “always” turn the faucet off when it is not in use, while significantly more people reported taking short showers in 2004 than in 1997. Importantly, the vast majority of individuals who water their lawn “always” do so between 7 p.m. and 10 a.m., while three quarters of those with a flower or vegetable garden “always” water during those hours. These results suggest that CRD Water has been effective in reaching water consumers and educating them about water wise practices.

Another finding of the survey is that while more than 8 in 10 residents were satisfied with the quality of the piped water to their home, there was a significant decrease in the amount of residents who drink only straight tap water. The most common reason consumers gave as to why they consider it necessary to drink bottled or filtered water was that they did not like the taste or smell of tap water, while the next most often cited reasons had to do with convenience of other forms of water. Given that less than half of the residents in the CRD are aware that CRD Water recently opened its new ultra-violet disinfection plant, while around 6 in 10 indicated an interest in receiving water quality information, it is suggested that CRD Water consider sending residents information about water quality, and in particular, how the new plant has enhanced water quality in the CRD.

I. METHODOLOGY

Survey Design and Sample Selection

The survey design consisted of telephone interviews with a random sample of 431 respondents within the Capital Regional District - excluding the Salt Spring Island. Survey participants were screened to ensure that they were from residences (excluding commercial and institutional users), 18 years of age or older, residing at a residence serviced by CRD Water, familiar with water consumption and conservation measures of the household, and a person who is a decision-maker within the household. For the purposes of analysis, water distribution customers were combined into the following areas: Victoria and Esquimalt, Saanich, Oak Bay, Saanich Peninsula (including Central Saanich, North Saanich and Sidney), Western Communities (including View Royal, Metchosin, Colwood, Langford and portions of the Juan de Fuca Electoral Area), and Sooke. The total percentages appearing in the tables have been statistically weighted to ensure that each municipality proportionally reflects the CRD population, while the age has also been weighted to match the age distribution of the population within each respective municipality.

The margin of error for a sample size of 431 is at most $\pm 4.7\%$, 19 times out of 20. For statistics based on a smaller number of responses, the margin of error will be larger. This is an important consideration when interpreting the cross-tabulated results in Appendix A. To assist the reader, the margin of error associated with different samples and percentages are provided in Table 1 below.

| Table 1: Statistical Margins of Error for Selected Percentages | | | | | | | | | |
|---|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Sample Proportion | Sample Size (n) and Margin of Error (\pm) Using a 95% Level of Confidence | | | | | | | | |
| | n=50 | n=100 | n=150 | n=200 | n=250 | n=300 | n=350 | n=400 | n=450 |
| 10% | 8.3% | 5.9% | 4.8% | 4.2% | 3.7% | 3.4% | 3.1% | 2.9% | 2.8% |
| 20% | 11.1% | 7.8% | 6.4% | 5.5% | 5.0% | 4.5% | 4.2% | 3.9% | 3.7% |
| 30% | 12.7% | 9.0% | 7.3% | 6.4% | 5.7% | 5.2% | 4.8% | 4.5% | 4.2% |
| 40% | 13.6% | 9.6% | 7.8% | 6.8% | 6.1% | 5.5% | 5.1% | 4.8% | 4.5% |
| 50% | 13.9% | 9.8% | 8.0% | 6.9% | 6.2% | 5.7% | 5.2% | 4.9% | 4.6% |
| 60% | 13.6% | 9.6% | 7.8% | 6.8% | 6.1% | 5.5% | 5.1% | 4.8% | 4.5% |
| 70% | 12.7% | 9.0% | 7.3% | 6.4% | 5.7% | 5.2% | 4.8% | 4.5% | 4.2% |
| 80% | 11.1% | 7.8% | 6.4% | 5.5% | 5.0% | 4.5% | 4.2% | 3.9% | 3.7% |
| 90% | 8.3% | 5.9% | 4.8% | 4.2% | 3.7% | 3.4% | 3.1% | 2.9% | 2.8% |

Questionnaire Design and Pre-testing

The questionnaire was modified and updated by Venture Market Research in consultation with Ms. Deborah Walker, Demand Management Coordinator of the CRD Water Services Department. The survey instrument was pre-tested before commencing the full survey.

Interviewing Process

Supervised interviewing took place at the Venture Market Research interviewing facility in Victoria. The interviews were undertaken by telephone during the period June 30 to July 28, 2004. The average time to complete each interview was 18.05 minutes, not including time to screen and make contact with a respondent. Of all households contacted where someone was reached, 26.8% completed the full survey.

The questionnaires were completed using a computer-assisted telephone interviewing (CATI) procedure. Data were automatically entered into the computer as each interview progressed, and an audit of the data was carried out to ensure accuracy. Coding for the open-ended questions was based upon all of the completed interviews. Analysis of the responses was undertaken using a comprehensive statistical software package.

Data Analysis and Reporting of the Results

The questionnaire included a number of skip patterns, and thus the number of respondents may vary from one question to another. It is important to note the changing number of respondents to each question when consulting the detailed tabulations provided in Appendix A. Calculations of total percentages may vary by $\pm 2\%$ due to rounding percentages to the nearest whole percentage. When average ratings are calculated, "don't know/ refused" responses are excluded from the calculations.

Finally, it is important for the reader to note that a number of questions in the survey asked people to provide comments that were recorded by the interviewers. The majority of these questions allowed for multiple responses, and thus the total of the percentages for these may exceed 100%.

II. SAMPLE CHARACTERISTICS

The demographic profile of survey participants for the 1997 through 2004 surveys is summarized in Table 2.

| Table 2: Sample Characteristics* | | | | |
|---|-------------|-------------|-------------|-------------|
| Demographic | 1997 | 1998 | 1999 | 2004 |
| Water Distribution Customer | | | | |
| Victoria and Esquimalt | N/A | N/A | 29% | 30% |
| Saanich | N/A | N/A | 34% | 34% |
| Saanich Peninsula | N/A | N/A | 11% | 12% |
| Western Communities | N/A | N/A | 15% | 15% |
| Sooke | N/A | N/A | 4% | 3% |
| Oak Bay | N/A | N/A | 6% | 6% |
| Age | | | | |
| 18 to 34 | 25% | 26% | 25% | 27% |
| 35 to 54 | 45% | 41% | 42% | 39% |
| 55 and over | 31% | 33% | 33% | 35% |
| Household Income | | | | |
| Less than \$50,000 | N/A | N/A | N/A | 41% |
| \$50,000 or more | N/A | N/A | N/A | 59% |
| Gender | | | | |
| Male | 43% | 44% | 47% | 48% |
| Female | 57% | 56% | 54% | 52% |
| Household Size | | | | |
| 1 person | 19% | 19% | 19% | 20% |
| 2 persons | 35% | 34% | 36% | 33% |
| 3 persons | 15% | 18% | 17% | 20% |
| 4 or 5 persons | 26% | 24% | 24% | 23% |
| 6 or more persons | 5% | 5% | 4% | 4% |

* Excludes "don't know/ refused" responses

Water Distribution Customers

The municipality of residence was aggregated into six water distribution customer areas based upon how residents purchase their water, as follows:

- Victoria and Esquimalt (129 respondents);
- Saanich (146);
- Saanich Peninsula [Central Saanich, North Saanich and Sidney] (52);
- Juan de Fuca [View Royal, Metchosin, Colwood, Langford, Sooke and portions of the Juan de Fuca Electoral Area] (78); and
- Oak Bay (26).

Age of Respondent

Consistent with the CRD population, most (39%) survey participants were aged 35 to 54, while 35% were aged 55 and over, and 27% were aged 18 to 34.

Household Income

Nearly 6 in 10 (59%) reported household income of \$50,000 or more, while the balance had an income below \$50,000.

Gender

Slightly greater than half (52%) of the survey sample were female, while the balance of respondents were male.

Household Size

Just 20% of respondents live in single-person households, while 33% live in two-person households, 20% have three people in their household, and 27% have four or more people.

Level of Education

Half (50%) of respondents are university graduates (including 12% with a post graduate degree), while 20% are college/ technical/ apprenticeship graduates, 24% graduated high school, and 5% did not complete high school.

Type of Dwelling

Most (65%) reported that they live in a single-detached family dwelling, while 20% live in an apartment, 8% live in a semi-detached dwelling such as a duplex or triplex, 5% live in a townhouse/ row housing, and 2% live in a trailer/ mobile/ manufactured home.

Payment for Water Use

About two-thirds (68%) of survey participants personally pay for their water. At 40%, residents of Victoria and Esquimalt were the least likely to personally pay for their water use, compared to the next lowest of 76% each for Saanich Peninsula and Oak Bay, and the highest of 95% of those residing in Sooke.

Municipality of Residence

The survey results have been weighted to reflect the CRD population, to ensure that 34% of the sample is represented by Saanich residents, followed by 24% in the City of Victoria, 7% in Langford, 6% in Esquimalt, 6% in Oak Bay, 5% in Central Saanich, 5% in Colwood, 4% in Sidney, 3% in each of North Saanich and Sooke, 2% in View Royal, and finally 1% in Metchosin.

III. WATER EFFICIENCY OPINIONS AND PRACTICES

In the first section of the survey, participants were questioned about the importance they place on water efficiency, knowledge and participation in water conservation, as well as their knowledge of who provides the water service to their home. A summary of their responses follow.

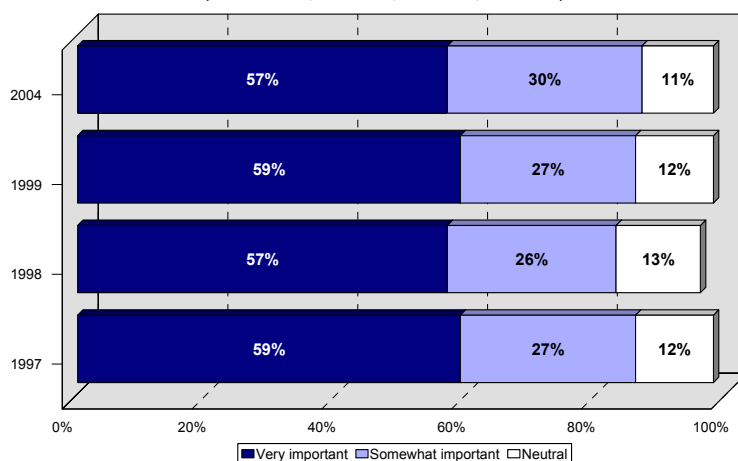
A. Opinions About the Importance of Water Efficiency

Almost 9 in 10 survey participants thought it was important to use water efficiently in the home.

As in previous surveys, the majority (87%, almost identical to 86% in 1999) of people said that it is important to use water efficiently in the home for washing clothes, taking showers, etc., including 57% (vs. 59%) who said it is “very important” - see Figure 1 for year over year results.

Figure 1: Importance of Water Efficiency in the Home

(n = 431 in 2004, 510 in 1999, 511 in 1998, 509 in 1997)



- Respondents aged 55 and over were the most likely to say water efficiency in the home is “very important” to them (67%), significantly higher than 57% of those aged 35 to 54, and 45% of those aged 18 to 34.
- Among those with household income of less than \$50,000, 69% believed it is “very important” to use water efficiently in the home, significantly greater than 51% of those with higher income.
- A greater proportion of females thought water efficiency in the home is important (91%), compared to males (82%).
- Saanich Peninsula and Victoria and Esquimalt residents were the most likely to rate indoor water efficiency as at least “somewhat important” (at 93% and 91%, respectively), while those living in the Western Communities and Oak Bay were the least likely (at 81% and 69%, respectively).

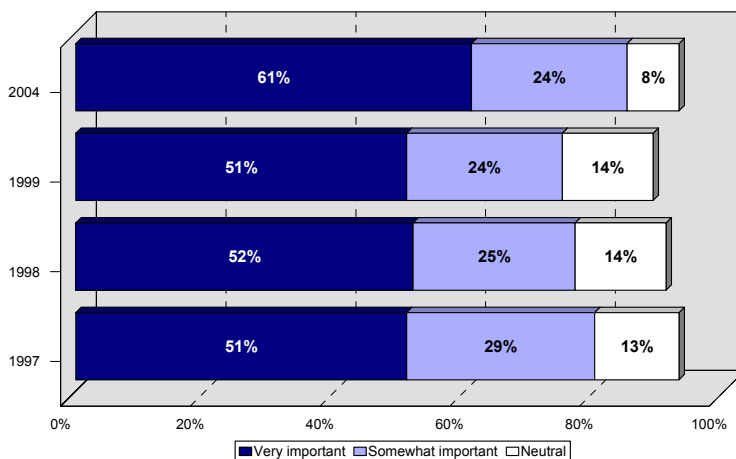
The degree of importance that people place on outdoor water efficiency increased significantly in 2004 over previous surveys.

More than 8 in 10 (85%, up significantly from 75% in 1999) of people surveyed believed that it is important to use water efficiently outdoors for watering the lawn, garden, etc., including 61% (up significantly from 51%) who said it is “very important” - see Figure 2.

- Those aged 35 and over were significantly more likely to feel that use of water efficiently outdoors is “very important” (66%), compared to those aged 18 to 34 (47%).
- Females said that outdoor water efficiency is “very important” (67%) significantly more often than males (55%).
- Sooke residents attach more importance to outdoor water efficiency as 94% said it was important, while Oak Bay residents expressed the lowest at 74%.

Figure 2: Importance of Water Efficiency Outdoors

(n = 431 in 2004, 510 in 1999, 511 in 1998, 509 in 1997)



B. Knowledge and Practice of Water Efficiency

Knowledge about how to use water efficiently has remained high and virtually unchanged since 1997, while the practice of using water efficiently has increased marginally.

As shown in Table 3, the majority (86%, vs. 88% in 1999) of people in the CRD agreed they know how to use water efficiently both indoors and outdoors, including 50% (down significantly from 59%) who “strongly agree”. However, it is evident that not all of those who know how to conserve water actually practice water conservation, as a lower proportion (74%, identical to 1999) agreed their household actively practices water efficiency both indoors and outdoors (including 39% who “strongly agree”, vs. 42%).

Table 3: Knowledge and Practice of Water Efficiency

(n = 431 in 2004, 510 in 1999, 511 in 1998*, 509 in 1997*)

| Level of Agreement | Know How to Use Water Efficiently | | | | Actively Practice Water Efficiency | | | |
|--------------------|-----------------------------------|------|------|------|------------------------------------|------|------|------|
| | 1997 | 1998 | 1999 | 2004 | 1997 | 1998 | 1999 | 2004 |
| Strongly agree | 89% | 87% | 59% | 50% | 71% | 67% | 42% | 39% |
| Somewhat agree | | | 29% | 36% | | | 32% | 35% |
| Neutral | 9% | 11% | 10% | 11% | 21% | 24% | 20% | 21% |
| Somewhat disagree | 2% | 3% | 1% | 2% | 8% | 9% | 5% | 3% |
| Strongly disagree | | | 1% | 1% | | | 2% | 0% |

* In 1997 and 1998 “strongly” and “somewhat” were combined by the firm undertaking the survey.

- Knowledge of how to use water efficiently varied by age, as those aged 55 and over expressed higher agreement (93%), compared to those aged 18 to 54 (83%).
- As with the knowledge of water efficiency, agreement that their household practices water efficiency was much higher among people aged 55 and over (83%), compared to those aged 18 to 54 (70%).

For the first time, residents were asked who provides the water service or piped water to their home. One-quarter (25%) identified “CRD Water”, while 19% said “City of Victoria”, 19% said “Saanich”, 20% did not know, and no other response was given by more than 3% of those surveyed.

Table 4: Identification of Water Service Provider

| Service Provider | Total | Water Distribution Customer | | | | | |
|------------------|-------|-----------------------------|---------|-------------------|---------------------|-------|---------|
| | | Victoria and Esquimalt | Saanich | Saanich Peninsula | Western Communities | Sooke | Oak Bay |
| CRD Water | 25% | 18% | 23% | 14% | 53% | 56% | 20% |
| City of Victoria | 19% | 52% | 5% | 0% | 5% | 13% | 0% |
| Saanich | 19% | 0% | 55% | 0% | 0% | 0% | 0% |
| Oak Bay | 3% | 0% | 0% | 0% | 0% | 0% | 56% |
| North Saanich | 2% | 0% | 1% | 17% | 0% | 0% | 0% |
| Sidney | 2% | 0% | 0% | 17% | 0% | 0% | 0% |
| Central Saanich | 2% | 0% | 0% | 18% | 0% | 0% | 0% |
| Sooke | 2% | 1% | 1% | 0% | 2% | 23% | 0% |
| Langford | 1% | 0% | 0% | 0% | 10% | 0% | 0% |
| Esquimalt | 1% | 5% | 0% | 0% | 0% | 0% | 0% |
| Other | 1% | 1% | 3% | 0% | 0% | 0% | 0% |
| Don't know | 20% | 24% | 13% | 34% | 21% | 8% | 24% |

IV. USE OF WATER EFFICIENT FIXTURES AND WATER USE PRACTICES

Peoples' use of water efficient fixtures and their indoor and outdoor water efficiency practices formed an important part of the survey. What follows is a summary of these practices, including trends over the period 1997 to 2004.

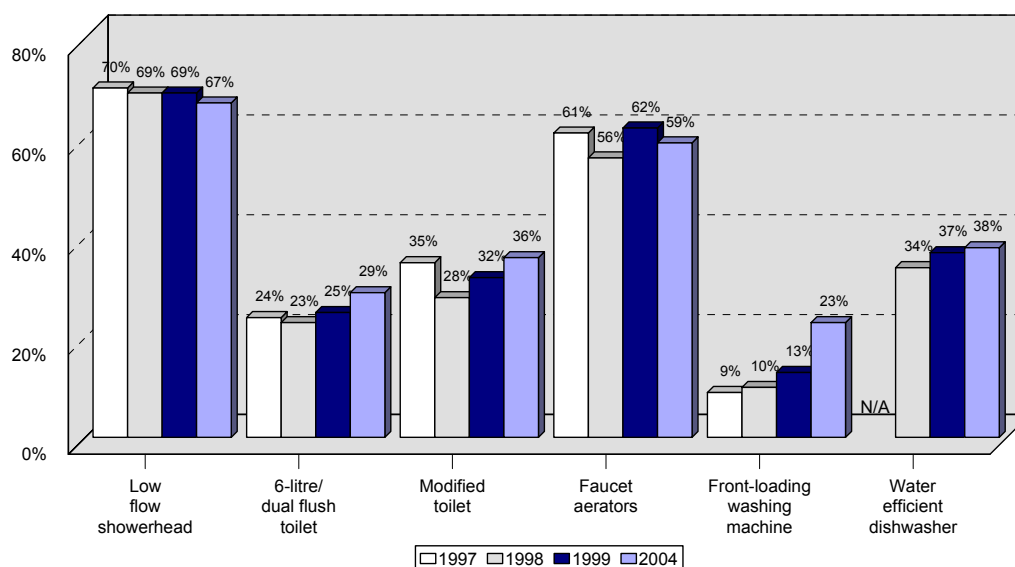
A. Household Usage of Water Efficient Fixtures

The use of front-loading washing machines has more than doubled since 1997, and water efficient dishwashers, toilets modified to use less water, and 6-litre/ dual flush toilets have all experienced marginal usage increases from 1997 to 2004.

Figure 3 displays the use of water efficient fixtures among CRD residents from 1997 to 2004. Low flow showerheads (67%, vs. 69% in 1999) and faucet aerators (59%, vs. 62%) continue to be the most common water efficient fixtures in use among those specifically enquired about.

Figure 3: Use of Water Efficient Fixtures

(n = 431 in 2004, 510 in 1999, 511 in 1998, 509 in 1997)



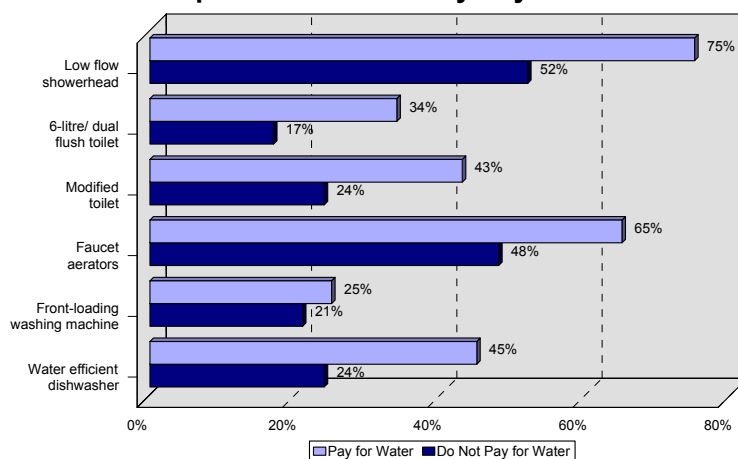
- Use of low flow showerheads decreased, though not significantly, between 1997 and 2004 from 70% to 67%. In the current survey, low flow showerheads were most often used by those residing in Sooke (87%) and Saanich (76%), while the lowest incidence of use was among the Western Communities (66%) and Victoria and Esquimalt (53%) residents.

- Although the use of faucet aerators varied from survey to survey, there have not been any significant changes between 1997 and 2004. In 2004, a much greater proportion of those aged 35 and over (63%) reported having faucet aerators, compared to those aged 18 to 34 (49%). Among the water distribution areas, use of faucet aerators was fairly consistent, ranging from a high of 64% in Saanich, to 54% in Victoria and Esquimalt.
- Use of water efficient dishwashers increased marginally from 34% in 1998 to 38% in 2004. In the current survey, households with an income of \$50,000 or higher were more likely to have a water efficient dishwasher (45%), than those with a lower income (29%). Use of water efficient dishwashers is highest among Sooke (56%) and Saanich Peninsula (47%) residents, and lowest among those living in the Western Communities (40%) and in Victoria and Esquimalt (23%).
- After declining significantly in 1998 (from 35% in 1997 to 28%), use of toilets modified to use less water increased in 1999 (32%) and 2004 (36%). For the 2004 survey, use of a modified toilet was most common among those aged 55 and over (44%), higher than the 37% of those aged 35 to 54, and significantly greater than respondents aged 18 to 34 (25%). About half of Sooke (51%) and Saanich Peninsula (48%) residents had a modified toilet, while just 27% of both Victoria and Esquimalt, and the Western Communities residents had one.
- 6-litre or dual flush toilets have become more commonplace in recent years, with usage increasing in 2004 (29%) over 1999 (25%). In 2004, households with income of at least \$50,000 more often had one of these fixtures installed in their home (35%), compared to lower income households (19%). Respondents living in the Western Communities most often had a 6-litre or dual flush toilet (37%), followed by 36% for both Saanich Peninsula and Oak Bay residents, while lowest use was by those living in Victoria and Esquimalt (20%), and Sooke (15%).
- Front-loading washing machines were the least used among all the fixtures enquired about in the survey; however, between 1997 and 2004 their use has more than doubled to 23%. For 2004, there were no significant differences by the demographics examined.

Water efficient fixtures are found more often in households that personally pay for their water use directly.

As illustrated in Figure 4, households who personally pay for their water are significantly more likely to have water efficient fixtures. A front-loading washing machine was the only fixture for which there was not a significant difference by whether or not people personally pay for their water.

Figure 4: Use of Water Efficient Fixtures by Whether or Not Respondents Personally Pay for their Water



Only 3% of all those surveyed stated they use water efficient fixtures other than those specifically examined in the survey.

B. Indoor Water Saving Practices

There has been a significant increase since the 1997 survey in the proportion of people who report they “always” consciously take short showers and turn off the faucet when not in use.

The most frequent indoor water saving habit that was “always” practised was to turn off the faucet while shaving, brushing teeth, etc. (75%), followed by keep drinking water in the fridge (68%).

With the “always” and “sometimes” categories combined, the top response to indoor water saving practices was turn off the faucet while shaving, brushing teeth, etc. (93%), followed by consciously take short showers (5 minutes or less) (89%), while about three-quarters each said keep drinking water in the fridge (77%) and flush the toilet infrequently (75%) - see Table 5.

Table 5: Indoor Water Saving Practices
(n = 431 in 2004, 510 in 1999, 511 in 1998, 509 in 1997)

| Frequency | Take Short Showers | | | | Infrequent Toilet Flushing | | | | Turn Faucet Off When Not in Use | | | | Keep Drinking Water in the Fridge | | | |
|------------|--------------------|------|------|------|----------------------------|------|------|------|---------------------------------|------|------|------|-----------------------------------|------|------|------|
| | 1997 | 1998 | 1999 | 2004 | 1997 | 1998 | 1999 | 2004 | 1997 | 1998 | 1999 | 2004 | 1997 | 1998 | 1999 | 2004 |
| Always | 41% | 44% | 47% | 52% | 38% | 28% | 31% | 36% | 63% | 64% | 68% | 75% | 72% | 64% | 70% | 68% |
| Sometimes | 38% | 38% | 38% | 37% | 37% | 42% | 38% | 39% | 24% | 22% | 21% | 18% | 8% | 9% | 8% | 9% |
| Never | 17% | 17% | 8% | 10% | 25% | 30% | 32% | 24% | 13% | 14% | 12% | 6% | 19% | 26% | 20% | 21% |
| Don't know | 4% | 1% | 8% | 1% | 0% | 0% | 0% | 1% | 0% | 0% | 0% | 1% | 1% | 1% | 2% | 2% |

- Three-quarters (75%, up significantly from 68% in 1999) of individuals claim that they “always” turn off the faucet while shaving, brushing teeth, etc. The frequency of this behaviour has consistently increased since the 1997 survey.
- Approximately 7 in 10 (68%, vs. 70% in 1999) “always” keep drinking water in the fridge, similar to 1997.
- The proportion of people who say they “always” consciously take short showers (5 minutes or less) has increased significantly from 41% in 1997 to 52% in 2004. For the 2004 survey results, the likelihood of “always” taking short showers increased with age, from 28% of those aged 18 to 34 to 53% of those between 35 and 54 years of age, and 69% of those 55 years of age and over.
- Over one-third (36%, up from 31% in 1999) of respondents said they “always” flush the toilet infrequently, similar to the level reported in 1997 (38%). In 2004, 40% of those aged 35 and over said they “always” flush the toilet infrequently, versus 23% of those aged 18 to 34.

About 1 in 5 (21%, similar to 20% in 1999) practised indoor water efficiency measures in addition to those already mentioned. The most frequent included (multiple responses permitted):

- “Use minimal amount of water required” (7%);
- “Use household water for plants” (4%); and
- “Use washer and dishwasher for full loads only” (4%).

C. Outdoor Water Saving Practices

A total of 85% of households who water their lawn and 75% of households who have a flower or vegetable garden “always” water between 7 p.m. and 10 a.m.

Almost 7 in 10 (68%, up significantly from 59% in 1999) respondents said that their household has a lawn that it looks after, while 65% (vs. 62%) have a flower or vegetable garden.

- Consistent with the 1999 survey, Victoria and Esquimalt residents were much less likely to have a lawn or garden than the other areas. Half (50%, vs. 35% in 1999) of those living in Victoria and Esquimalt have a lawn, while the next lowest was 64% (vs. 60%) for the Saanich Peninsula. Similarly, 48% (vs. 43%) of Victoria and Esquimalt residents have a flower or vegetable garden, compared to 67% (vs. 77%) of those from the Western Communities.
- Nearly 9 in 10 (86%) of those people who personally pay for their water have a lawn, significantly higher than the 32% of those who do not directly pay for their water. Likewise, the proportion of those who have a garden and personally pay for their water is significantly higher (77%) compared to those who do not pay for their water (41%).

Among those who have a lawn, 55% (or 37% of all CRD residents) water it (this question was asked for the first time in 2004), while 31% (or 21% of all CRD residents) have an underground sprinkling system.

- The proportion of all CRD households interviewed that water their lawn ranges from a high of 69% in Oak Bay, to a low of 21% in Victoria and Esquimalt.
- More than 4 in 10 (42%) of all Oak Bay respondents say that they have an underground sprinkling system, compared to just 6% of those from Victoria and Esquimalt. Underground sprinkling systems are more common in households with income of at least \$50,000 (26%), compared to those with lower income (15%). A total of 76% of those who have an underground sprinkling system water their lawn, compared with 45% who don't have a system.

For those who look after a flower or vegetable garden, 18% (or 12% of all CRD residents) claim to have a micro drip irrigation system.

- Possession of a micro drip irrigation system was more common among all residents with household income of at least \$50,000 (17%), compared to those with lower income (4%).

As seen in Table 6, among those residents who water their lawn, nearly all (98%, up significantly from 89% in 1999) do so between 7 p.m. and 10 a.m., including 85% (up significantly from 72%) who “always” water during this time. (In 1999, the times for watering were between 7 p.m. and 9 a.m., as well, in 1999 this question was asked of those who had a lawn, while in 2004 this question was only asked of those who water their lawn). Most (94%, identical to 1999) people with a garden also water between 7 p.m. and 10 a.m., including 75% (vs. 69%) who “always” water during those hours.

Use of native or drought-tolerant plants when doing landscaping among gardeners has increased significantly (66%, up significantly from 56% in 1999). Among those with a lawn or garden, 81% (similar to 80%) use a spring-loaded nozzle on their hose.

Table 6: Outdoor Water Use Practices

| Frequency | Water Lawn 7 p.m. to 10 a.m. | | Water Garden 7 p.m. to 10 a.m. | | Use Drought- Tolerant Plants | | Use Spring-loaded Nozzle | |
|-------------------|---------------------------------|---------------------|-----------------------------------|--------------------|---------------------------------|--------------------|-----------------------------|--------------------|
| | 1999 (n = 302)* | 2004 (n = 160)** | 1999 (n = 314)* | 2004 (n = 281)* | 1999 (n = 314)* | 2004 (n = 281)* | 1999 (n = 369)* | 2004 (n = 342)* |
| Always | 72% | 85% | 69% | 75% | 21% | 20% | 74% | 74% |
| Sometimes | 17% | 13% | 25% | 19% | 35% | 46% | 6% | 7% |
| Never | 10% | 2% | 4% | 5% | 27% | 24% | 15% | 16% |
| Don't know | 2% | 0% | 2% | 1% | 17% | 10% | 5% | 4% |

* n-values correspond to the number of respondents who had a lawn or garden

** n-value corresponds to the number of respondents who water their lawn

- Nearly all (99%) of those who have an underground sprinkling system water their lawn between 7 p.m. and 10 a.m., similar to the 97% who do not have an underground sprinkling system. However, the proportion who “always” water during these times is significantly higher for those who have a system, compared to those who do not (94%, vs. 78%, respectively).
- Use of a spring-loaded nozzle was highest among people residing in the Western Communities (94%), followed by 86% of those in Sooke, while lowest use was reported by those living on the Saanich Peninsula (65%), and in Victoria and Esquimalt (72%).

Of the 79% of respondents who had a lawn or a flower/ vegetable garden that their household looks after, 28% said they practice methods of outdoor water efficiency other than those specifically mentioned. Among individuals with a lawn or garden, the water efficiency methods most often cited included (multiple responses permitted):

- “Collecting rainwater/ rain barrel” (7%);
- “Hand/ site specific watering” (7%);
- “Use household water for garden” (5%);
- “Automatic/ timed sprinkling system” (2%); and
- “Mulching of garden” (2%).

Among the people who water their lawn, over 1 in 5 (21%) said their household has become more water efficient in the last 12 months with respect to watering their lawn before 10 a.m. or after 7 p.m. The proportion of residents who said that they had increased their water efficiency with respect to lawn watering ranged from a high of 38% for residents of Oak Bay, to 0% in Sooke.

Of those who have a flower or vegetable garden, 24% have become more water efficient within the last 12 months with respect to watering their garden before 10 a.m. or after 7 p.m. Nearly 4 in 10 Sooke (39%) and Oak Bay (37%) had started to use water more efficiently in their garden, while the least change in behaviour occurred in Victoria and Esquimalt (18%), and on the Saanich Peninsula (11%).

Almost 3 in 10 (29%) gardeners have started to use native or drought-tolerant plants within the last 12 months. People in Sooke were the most likely to have started using these types of plants (57%), followed by residents in Victoria and Esquimalt (36%), while lowest use was reported by those living on the Saanich Peninsula (22%) and in the Western Communities (20%).

A total of 17% of those who use a spring-loaded nozzle on their hose have become more water efficient in this respect within the last 12 months. Respondents with household income below \$50,000 more often started to use a spring-loaded nozzle (28%), compared to those with higher income (14%). Among individuals aged 18 to 34, 25% reported they began using a spring-loaded nozzle, versus 13% of those aged 35 and over.

V. WATER EFFICIENCY MEASURES AND RESTRICTIONS

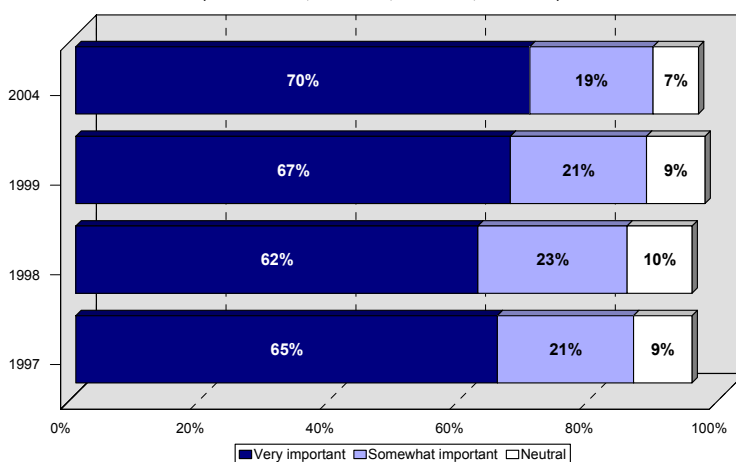
The level of importance people place on water efficiency measures, support for watering restrictions and CRD Water efficiency initiatives were important areas covered in the survey. An overview of the residents' opinions on these issues follows.

A. Perceptions About Water Efficiency Measures

Nearly 9 in 10 (89%, almost identical to 88% in 1999) survey participants felt it was important that CRD Water encourages people to practice water efficiency, including 70% (vs. 67% in 1999) who thought it was "very important" - see Figure 5. The importance people place on CRD Water encouraging people to use water efficiently has not changed significantly since the 1997 survey.

Figure 5: Importance of CRD Water to Encourage Practising Water Efficiency

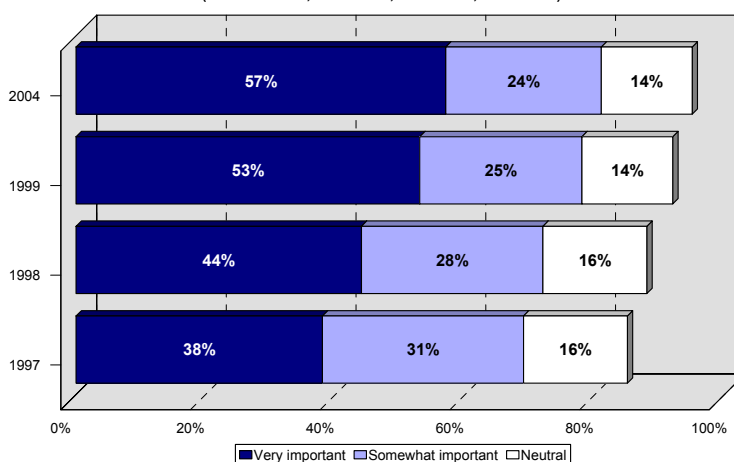
(n = 431 in 2004, 510 in 1999, 511 in 1998, 509 in 1997)



Over 8 in 10 (81%, vs. 78% in 1999) of those polled said it was important that CRD Water be able to implement water efficiency measures, including 57% (vs. 53% in 1999) who said it was "very important" - see Figure 6. The importance of implementing water efficiency measures has increased in each survey since 1997, resulting in a significantly higher level of importance.

Figure 6: Importance of CRD Water's Ability to Implement Water Efficiency Measures

(n = 431 in 2004, 510 in 1999, 511 in 1998, 509 in 1997)



- The level of importance that CRD Water be able to implement water efficiency measures was highest on the Saanich Peninsula (88%) and in Saanich (85%), while lowest importance was reported by those living in Oak Bay (76%), Victoria and Esquimalt (74%), and Sooke (66%).

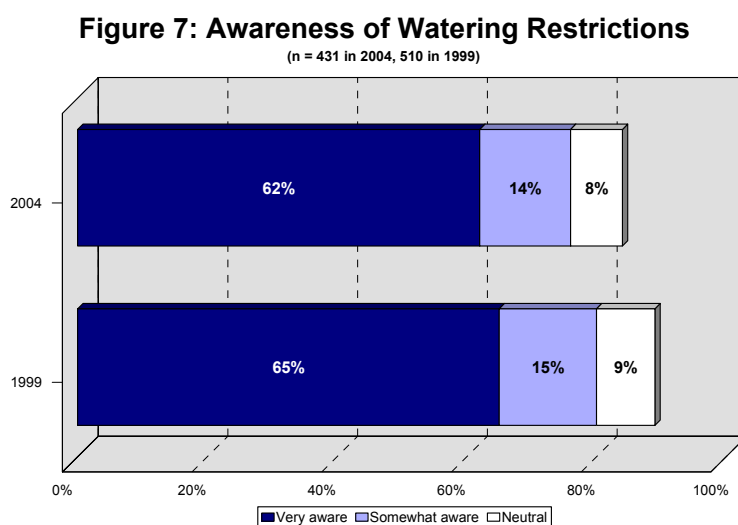
B. Support for Watering Restrictions and Water Efficiency Options

Approximately three-quarters of survey participants were aware of the watering restrictions, while more than 8 in 10 were in support of the restrictions.

The questions dealing with the awareness of and support for watering restrictions were altered in this year's survey to reflect the current restrictions. In the 1999 survey, watering was allowed between 4 a.m. and 9 a.m., and 7 p.m. and 10 p.m., whereas in the 2004 survey the morning time was extended to 10 a.m.

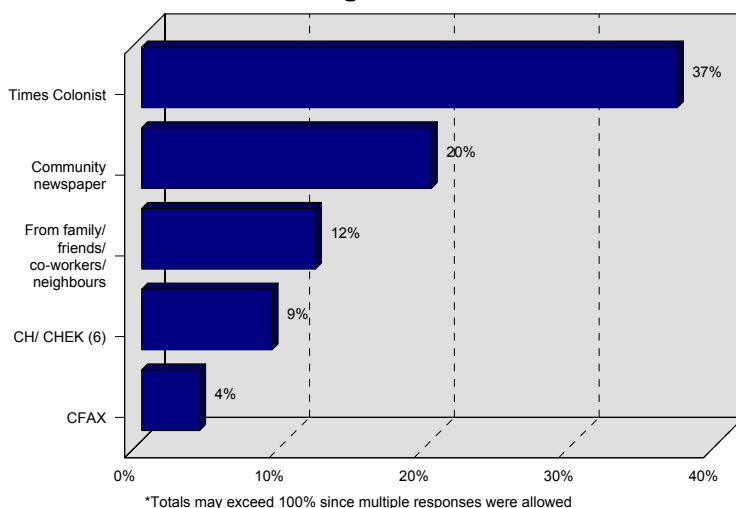
As shown in Figure 7, just over three-quarters (76%, vs. 80% in 1999) of households were aware of the Stage 1 watering restrictions in effect from May 1 to September 30 of 2004, including 62% (vs. 65% in 1999) who were "very aware".

- Awareness of the watering restrictions was highest in Sooke (100%), the Western Communities (84%) and Oak Bay (82%), while it was lowest in Saanich (72%) and on the Saanich Peninsula (64%).
- A significantly lower proportion of those aged 18 to 34 (54%, including 46% who were "very aware"), were aware of the watering restrictions, compared to those aged 35 and over (83%, including 68% who were "very aware").
- Not surprisingly, a significantly greater proportion of those who personally pay for their water were aware of the watering restrictions (83%, including 69% who were "very aware") compared to those who do not pay for their water directly (61%, including 48% who were "very aware").



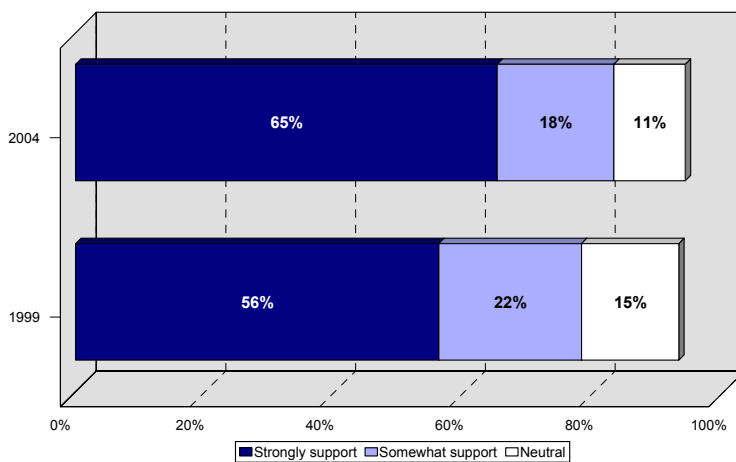
New for the 2004 survey, those who said that they were at least “somewhat aware” of the watering restrictions in effect in the CRD were asked where they heard or read about them. As seen in Figure 8, the most common source was the “Times Colonist”, followed by a “community newspaper”.

Figure 8: Sources of Information about Watering Restrictions*



Over 8 in 10 (83%, up significantly from 78% in 1999) of residents were in support of having watering restrictions, including 65% (up significantly from 56%) who “strongly support” watering restrictions - see Figure 9.

Figure 9: Support for Watering Restrictions
(n = 431 in 2004, 510 in 1999)



- Support for watering restrictions was highest among those residing in Sooke (100%), Victoria and Esquimalt (88%), and the Western Communities (86%), while lowest support was given by respondents residing in Saanich (77%) and Oak Bay (64%).
- Among the households who personally pay for their water, 79% support the watering restrictions (including 62% who said “strongly support”), whereas 89% of those who do not pay for their water directly support the restrictions (including 71% who said “strongly support”).
- Significantly more often, females “strongly support” the water restrictions (70%), compared to males (58%).

The survey also included questions about the acceptability of various water efficiency options. Compared to the 1999 survey, residents felt the various options were at least as acceptable in 2004, if not more so. As in the 1999 survey, two-tiered rates for summer water use were less widely accepted (55%, vs. 57%) than the other water efficiency options examined - see Table 7.

Table 7: Acceptability of Various Water Efficiency Options
(n = 431 in 2004, 510 in 1999, 511 in 1998*, 509 in 1997*)

| Level of Acceptance | Time Allotted for Water Restrictions | | | | Two-tiered Summer Water Rates | | | | Require Efficient Plumbing Fixtures | | | | Lawn Watering Restrictions | | | |
|-----------------------|--------------------------------------|------|------|------|-------------------------------|------|------|------|-------------------------------------|------|------|------|----------------------------|------|------|------|
| | 1997 | 1998 | 1999 | 2004 | 1997 | 1998 | 1999 | 2004 | 1997 | 1998 | 1999 | 2004 | 1997 | 1998 | 1999 | 2004 |
| Very acceptable | N/A | N/A | 49% | 60% | 41% | 61% | 39% | 35% | 82% | 76% | 61% | 61% | 78% | 79% | 56% | 57% |
| Somewhat acceptable | N/A | N/A | 15% | 19% | | | 18% | 20% | | | 19% | 21% | | | 20% | 24% |
| Neutral | N/A | N/A | 16% | 10% | 19% | 14% | 17% | 22% | 9% | 12% | 11% | 10% | 13% | 10% | 18% | 12% |
| Not too acceptable | N/A | N/A | 6% | 2% | | | 6% | 4% | | | 3% | 3% | | | 3% | 2% |
| Not at all acceptable | N/A | N/A | 9% | 4% | 39% | 21% | 14% | 13% | 8% | 10% | 5% | 4% | 8% | 9% | 2% | 4% |
| Don't know | N/A | N/A | 6% | 4% | 2% | 5% | 5% | 6% | 1% | 2% | 1% | 2% | 1% | 2% | 1% | 2% |

* In 1997 and 1998 “very” and “somewhat” were combined by the firm undertaking the survey.

- The time allotted for outdoor watering restrictions was found to be at least “somewhat acceptable” to about 8 in 10 (79%, up significantly from 64% in 1999) people, including 60% (up significantly from 49%) who found it to be “very acceptable”. Responses varied by age, as those aged 35 to 54 reported the highest level of acceptance at 82%, followed by 79% of those aged 18 to 34, and 74% of those aged 55 and over. The lowest acceptability (57%) was recorded by respondents from Oak Bay.
- While there was a significant increase in the acceptability of two-tiered summer water rates between 1997 and 1998, opinion was constant between 1998 and 2004. In the current survey, 55% (vs. 57% in 1999) of respondents felt that two-tiered rates in the summer were at least “somewhat acceptable”, including 35% (vs. 39%) who said “very acceptable”.
- Opinions on requiring water efficient plumbing fixtures in new and renovated homes have been quite consistent across the four surveys. In 2004, 82% (vs. 80% in 1999) of respondents thought this option was at least “somewhat acceptable”, including 61% (identical to the previous survey) who felt it was “very acceptable”.

- In 2004, about 8 in 10 (81%, up significantly from 76% in 1999) people felt the restrictions on lawn watering were at least “somewhat acceptable”, including 57% (nearly identical to 56% in 1999) who said they were “very acceptable”. Sooke (95%) and Victoria and Esquimalt (88%) residents gave a much higher acceptance rating than the average for the rest of the regions (78%).
- Respondents who do not directly pay for their water significantly more often thought lawn watering restrictions were acceptable (87%), compared to those who personally pay for their water (78%). Survey participants with an underground sprinkling system were equally likely (79%) as those without underground sprinklers (82%) to feel that lawn watering restrictions were acceptable.

When given the opportunity, more than 4 in 10 (44%) provided suggestions or comments regarding watering restrictions. Responses included (multiple responses permitted):

- “Educate the public/ raise awareness of water issues” (7%);
- “Need more enforcement of watering restrictions” (5%);
- “Watering times/ days should be more flexible” (5%);
- “Offer more incentives to install water efficient appliances” (3%);
- “Government/ business should have same restrictions” (3%);
- “I like the water restrictions” (2%);
- “Should be restrictions on washing vehicles” (2%);
- “Water usage should be up to the individual” (2%);
- “Use economic incentives, such as water meters (2%); and
- “Prefer no watering of lawns” (2%).

VI. WATER EFFICIENCY INITIATIVE AWARENESS AND INTEREST IN EFFICIENT FIXTURES

People were questioned about their awareness of information and programs developed by CRD Water, as well as their interest in installing water efficient fixtures. Their responses are below.

A. Awareness of CRD Water Services Department Water Efficiency Initiatives

Approximately two-thirds of people had seen, read or heard something about CRD Water in the past year, and the most often cited sources for this information were the Times Colonist and community newspapers.

New for the 2004 survey, respondents were asked whether they had seen, read or heard something about CRD Water in the past year, and if so, in what format (either a news story or an advertisement) and where. Nearly two-thirds (65%) had seen, read or heard something about CRD Water in the past year. Half (51%) said what they had seen, read or heard was a “news story”, and 15% said it was an “advertisement”, while 24% said it was “both (news story and advertisement)”.

- Individuals from households with income of at least \$50,000 had significantly more often seen something about CRD Water (73%), compared to those with a lower income (60%).
- Among those who personally pay for their water, 71% had seen, read or heard something about CRD Water, significantly higher than 54% of those who do not directly pay for water.
- Just half (49%) of individuals aged 18 to 34 had seen, read or heard something about CRD Water, significantly lower than 74% of those between 35 to 54 years of age, and 67% of those 55 years of age and over. Respondents in the youngest age category were more likely to have seen, read or heard an advertisement than the other age groups, while those aged 35 and over were more likely to have seen, read or heard a news story.

The most often cited sources for a news story were the “Times Colonist” (56%), a “community newspaper” (23%), “CH/ CHEK (6)” (22%), and “CFAX” (6%), while no other source was mentioned by more than 4% of those polled.

The “Times Colonist” was the most often mentioned source for an advertisement (51%), followed by a “community newspaper” (26%), “CFAX” (5%), and “The New VI (12)” (4%), while no other source was reported by more than 2%.

In total, 16% (up significantly from 11% in 1999) were aware of, or had seen the CRD Water efficiency information booth at trade shows or other events - see Table 8.

- A significantly greater proportion of those aged 35 to 54 had seen the booth (23%), compared to those aged 55 and over (14%), and those 18 to 34 years of age (8%).

CRD Water currently has a water efficient fixtures rebate program whereby \$75 is offered for the installation of 6-litre toilets, dual flush toilets, and low flow showerheads. In previous years of the survey, a \$50 rebate was offered for 6-litre ultra low flow toilets, efficient showerheads and faucet aerators. In 2004, awareness of this program stood at 46%, significantly higher than the 19% recorded in 1999.

- Awareness of the water fixture rebate program increased with age, as 37% of those aged 18 to 34 were aware of it, compared to 46% of those aged 35 to 54, and 55% of those aged 55 and over.

Table 8: Awareness of CRD Water Services Department Water Efficiency Initiatives
(Percentages Refer to “Yes” Responses)

| Year | CRD Water Information Booth | Water Fixture Rebate Program |
|----------------|-----------------------------|------------------------------|
| 2004 (n = 431) | 16% | 46% |
| 1999 (n = 510) | 11% | 19% |
| 1998 (n = 511) | 9% | 24% |
| 1997 (n = 509) | 12% | N/A |

B. Interest in Installing Water Efficient Fixtures

Among those who did not already have the fixtures installed in their home, 36% were likely to install a 6-litre or dual flush toilet, while 37% would install a low flow showerhead.

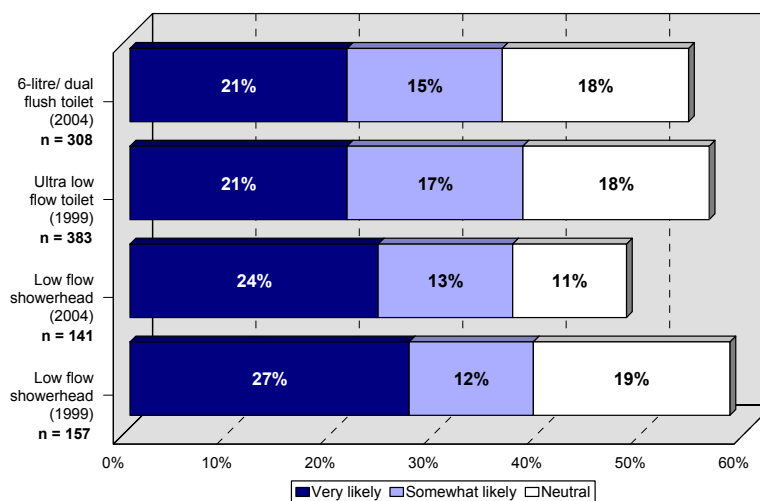
Respondents were asked whether they would be likely to install a 6-litre or dual flush toilet, and/ or low flow showerheads if they could recover the cost of installing these fixtures over a five-year and one-year period, respectively. Only survey participants who did not already have these fixtures in their household were asked these two questions.

As shown in Figure 10, 36% (vs. 38% in 1999) of those who did not already have a 6-litre or dual flush toilet installed in their home were at least “somewhat likely” to install such a toilet (including 21%, identical to 1999, who were “very likely”), while 18% (the same as 1999) were “neutral” and the remainder were either unlikely, did not know or said it was not applicable. (In 1999, people were asked their likelihood of installing an ultra low flow toilet).

- Younger respondents were more likely to install a 6-litre or dual flush toilet, as 45% of those aged 18 to 34 said they would, compared to 38% of those aged 35 to 54, and just over one-quarter (27%) of those aged 55 and over.
- The likelihood of installing a 6-litre or dual flush toilet varied by area. Residents from Sooke (57%) and Saanich (43%) were the most likely, while those indicating the least likelihoods were from the Saanich Peninsula (32%) and the Western Communities (21%).

Nearly 4 in 10 (37%, vs. 39% in 1999) of those who did not have a low flow showerhead were at least “somewhat likely” to install one in their home (including 24%, vs. 27%, who were “very likely”), while 11% were “neutral” (vs. 19%) and the rest were either unlikely, did not know or said it was not applicable. (In 1999, respondents were asked their likelihood of installing a water efficient showerhead).

Figure 10: Likelihood of Installing 6-Litre/ Dual Flush Toilets and Low Flow Showerheads*



*Among those who did not already own the fixture

New for this year’s survey, when asked if they knew of any other incentive programs that CRD Water offers to people who install different types of water efficient fixtures, 94% could not identify any, while 4% said “\$125 smartwash rebate for water efficient washing machines”, 1% said “\$25 towards a rain shut-off device for in-ground sprinkler/ irrigation systems”, and 1% said “\$50 towards a controller for underground sprinklers/ irrigation systems”.

Also new in the 2004 survey, just 5% of households said they were at least “somewhat likely” to install a greywater recycling system in their home to reduce the amount of water their household uses in toilets if the cost of such as system were to fall in the \$5000 to \$6000 range. Nearly 8 in 10 (79%) of those surveyed said they were not likely to install a greywater recycling system, including 67% who were “not at all likely”.

When these people were asked how much a grant or incentive would need to be to make them seriously consider installing such a system, 25% said they would never install such a system. Figure 11 illustrates that of those who would consider installing a system, most would require a grant of at least \$2501-\$3000, with 33% requiring a grant of more than \$4000, while the average amount was \$3269.

Despite the low proportion of residents who would be at least “somewhat likely” to install a greywater recycling system, 54% of all households support requiring new construction to install the systems, including 31% who said “strongly support”.

A total of 12% of those surveyed said they were at least “somewhat likely” to install a rainwater cistern system to recycle water for the garden and other uses if the cost were in the range of \$2500 to \$3500 (new for the 2004 survey).

Seven in 10 (70%) respondents were not likely to install a rainwater cistern system, including 54% who were “not at all likely”. When these people were asked how much of a grant would be necessary to make them consider it, excluding those who said they would never install such a system (38%), most would require a grant of at least \$1501-\$2000, while the average amount required was \$2135 - see Figure 12.

Figure 11: Grant Necessary to Install a Greywater Recycling System*

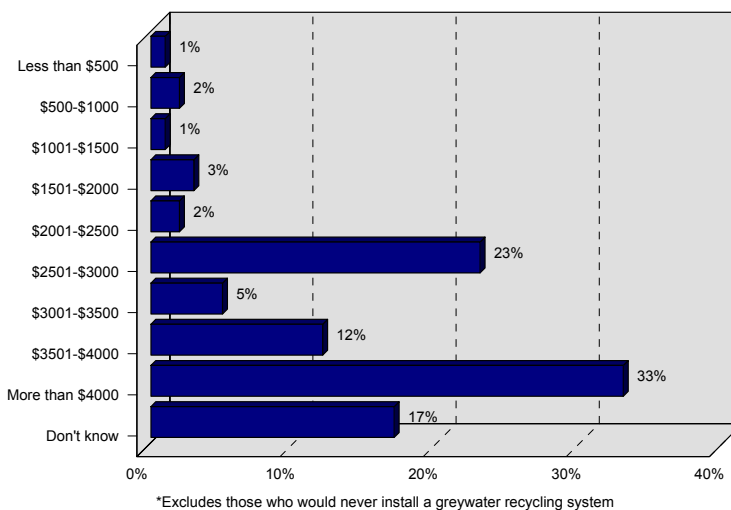
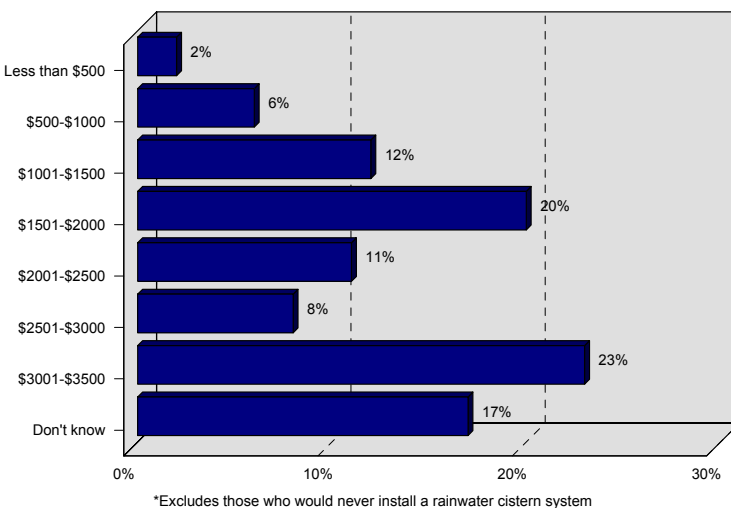


Figure 12: Grant Necessary to Install a Rainwater Cistern System*



VII. WATER MANAGEMENT ISSUES

Water management attitudes have undergone changes since 1997 when the survey was first undertaken. In 2004, the survey was modified to ensure its relevance to current events. What follows is a summary of CRD residents' awareness about water supply and water management issues considered in the survey.

A. Awareness of Current Water Management Issues

Awareness of the location of Greater Victoria's water supply is up significantly compared to the 1999 survey.

When asked, in an unaided format, to identify where the water supply for Greater Victoria is located, over 7 in 10 (72%, up significantly from 58% in 1999) of all those surveyed said the "Sooke Reservoir/ Sooke", and 6% identified another area, while 21% could not identify the source of Greater Victoria's water.

- Residents of the Saanich Peninsula were less likely (60%) to identify the Sooke Reservoir than respondents from other regions (next lowest was Victoria and Esquimalt at 71%), while the most likely were residents from the Western Communities at 82%.
- At 79%, males were more often able to identify the Sooke Reservoir, than female (66%) respondents.
- A significantly greater proportion of respondents aged 35 and over (77%) correctly identified the Sooke Reservoir, compared to those aged 18 to 34 (59%).

B. Sources of Information About CRD Water

Almost one-third (32%) of people recalled seeing or reading something published by CRD Water.

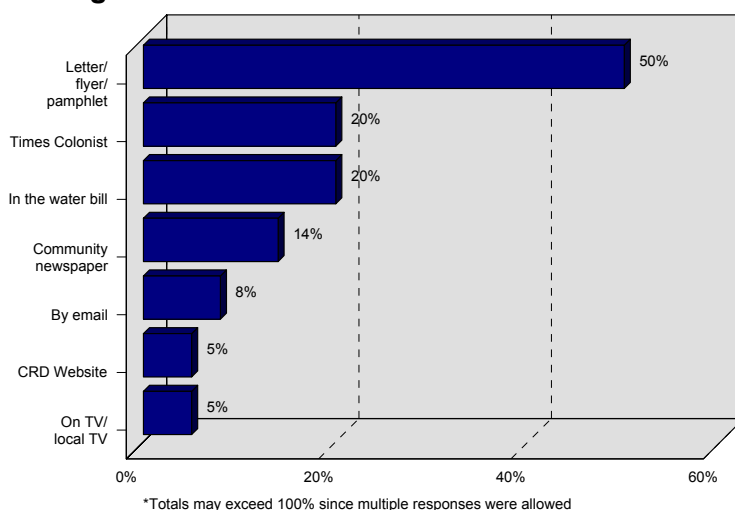
- Individuals from households with an income of at least \$50,000 were significantly more likely to have seen or read something published by CRD Water (37%), compared to those with lower income households (26%).
- Among younger people (aged 18 to 34), 17% recall seeing or reading something published by CRD Water compared to 38% for those aged 35 and over.

Among those who said they had seen or read something published by CRD Water (32%), the most often recalled publications included:

- “The expansion of the reservoir” (14%);
- “Current water level of the reservoir” (10%);
- “Watering restrictions” (8%);
- “Water conservation methods” (3%); and
- “Water efficiency incentive/ rebate programs” (3%).

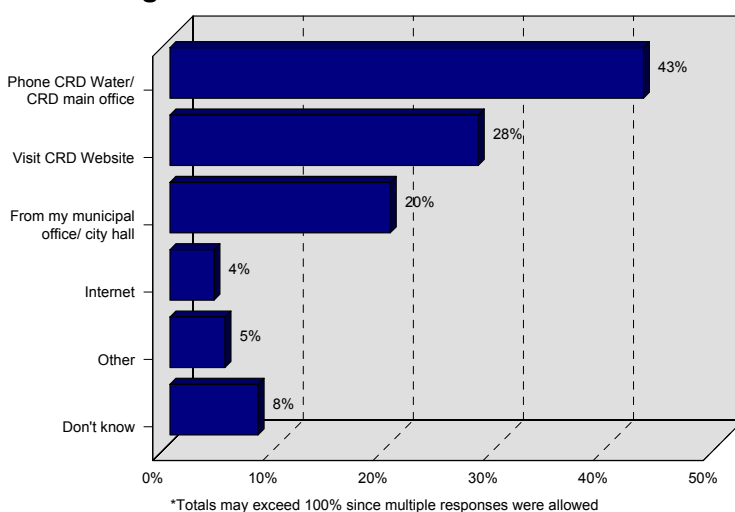
As shown in Figure 13, if CRD Water wanted to get information to residents, the best way to do so would be through a “letter (not in water bill)/ flyer/ pamphlet”, followed by in the “Times Colonist”, “in the water bill”, or in a “community newspaper”.

Figure 13: Best Sources to Provide Information*



The main sources where people would first turn to get information about water services are CRD Water or the CRD main office, the CRD website, and their municipal or city hall - see Figure 14.

Figure 14: Usual Sources of Information*



VIII. WATER CONSUMPTION PRACTICES AND VIEWS ON WATER QUALITY

In the final section of the survey, residents were asked about their satisfaction with the quality of water supplied to their home, as well as their water consumption preferences.

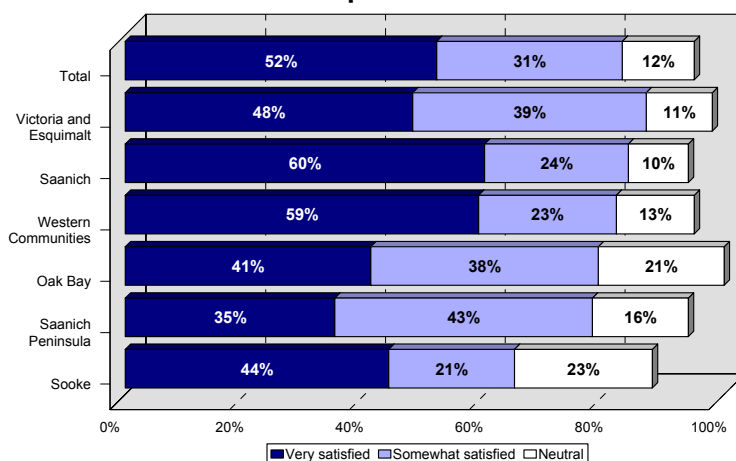
A. Drinking Water Preferences and Perceptions About Water Quality

The vast majority of people were satisfied with the quality of piped water supplied to their home.

For the first time respondents were asked about their satisfaction with the quality of water to their home. The majority (83%) of survey participants were satisfied with the quality of piped water, including 52% who were “very satisfied”.

- As shown in Figure 15, with the exception of the 65% satisfaction rating for those living in Sooke, overall satisfaction with the quality of water was fairly consistent between the water distribution regions. The highest proportion of “very satisfied” responses was received from those living in Saanich (60%) and the Western Communities (59%), while lower ratings were given by those in Oak Bay (41%) and on the Saanich Peninsula (35%).

Figure 15: Satisfaction with the Quality of Piped Water



Just 3% of survey participants were dissatisfied with the quality of water provided to their home. The most common reasons cited among these 17 people for their dissatisfaction were (multiple responses permitted):

- “Don’t like the taste/ chlorine taste” (66%);
- “The water has too many chemicals” (24%);
- “The water is yellow/ dirty” (8%); and
- “Don’t like the smell” (7%).

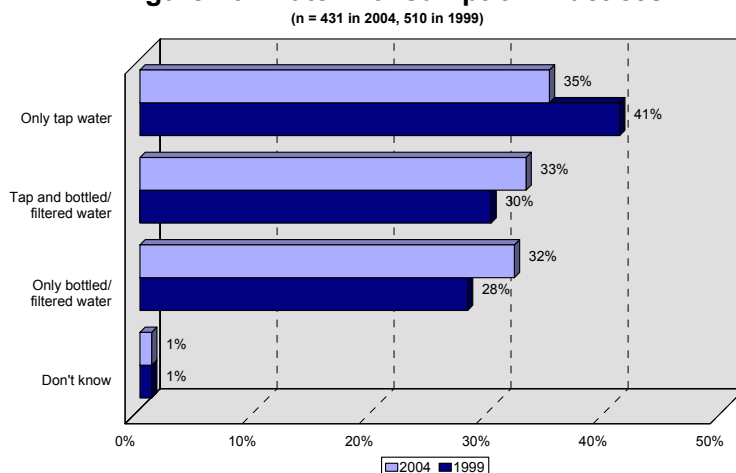
Slightly more than 4 in 10 (41%) were aware that CRD Water recently opened its new ultra-violet plant that disinfects all its piped drinking water in the CRD.

- Awareness of the ultra-violet plant was significantly higher for those from households with an income of \$50,000 or more (48%), compared to those with a lower income (31%).
- Among those surveyed aged 18 to 34, 21% were aware of the new ultra-violet plant, significantly lower than those aged 35 and over (49%).
- Male respondents were significantly more aware of the new ultra-violet plant (49%), than female respondents (34%).
- For those who personally pay for their water, 46% were aware of the new ultra-violet plant, significantly higher than the proportion of those who do not directly pay for their water (32% were aware).

In 2004, a similar proportion of respondents expressed a preference for drinking tap water only, compared to tap and bottled or filtered water, and only bottled or filtered water.

The proportion of people who drink only tap water has decreased significantly from 41% in 1999 to 35% in the current survey, while those who drink a combination of tap and bottled or filtered water, and those who only drink bottled or filtered water both experienced moderate increases. As a result, a similar proportion of individuals now prefer each category of water - see Figure 16.

Figure 16: Water Consumption Practices



- The highest straight tap water use occurred in Victoria and Esquimalt (39%), and Sooke (38%), while use of straight tap water was lowest in Oak Bay (31%) and the Western Communities (28%).
- Consumption of straight tap water increased significantly with age, as just 1 in 5 (20%) of those aged 18 to 34 stated this preference compared to 34% of those aged 35 to 54 and 46% of those aged 55 and over.

The 65% (up significantly from 58% in 1999) of respondents who drink either a combination of tap water and bottled or filtered water, or only bottled or filtered water, were asked why they considered this necessary rather than drinking tap water only. The most frequent responses included:

- “Don’t like the taste/ smell of tap water” (35%);
- “It is cold from the fridge” (14%);
- “It is more convenient” (12%);
- “Don’t want to drink chlorine and other chemicals” (8%);
- “It is more clean and pure than tap water” (7%);
- “Not certain about the contents of tap water” (5%);
- “Doctor’s advice, health reasons, bacteria in tap water” (3%);
- “Just got into the habit of not using tap water” (3%); and
- “Concerned with the quality of water pipes” (2%).

B. Interest in Receiving Information About Water Quality

About 6 in 10 (59%, vs. 63% in 1999) respondents would be interested in receiving information on the quality of their tap water. There were no significant differences by any of the sample demographics examined, although a lower proportion of Oak Bay residents indicated interest (38%) relative to the rest of the sample.