

2012 Residential Telephone Survey about Environmental Utilities

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I. RESIDENTIAL EXECUTIVE SUMMARY (6 PAGES)

OVERALL SATISFACTION WITH ROSEVILLE ENVIRONMENTAL UTILITIES

- Overall satisfaction with the service provided by Environmental Utilities in the past year is at its highest level recorded to date – 72% were "very" satisfied and 25% were "somewhat" satisfied for a total of 97% of residential customers surveyed.
 - The proportion of "top box" ratings in 2012 represents a significant increase over the 64% who said they were "very" satisfied in the 2008 baseline survey.
 - Satisfaction was independent of demographic characteristics, meaning that all types of customers were satisfied.
- More than 8 in 10 respondents rated Environmental Utilities' overall quality and responsive customer service positively (both 86%). Three quarters of those surveyed also rated the availability of programs and services and overall value positively. Price was rated significantly lower, although by still a majority, with 63% giving "good" or "excellent" ratings.
 - Homeowners were more likely than renters to rate the utility positively in terms of overall quality of products and services. All other overall evaluations of Environmental Utilities were independent of demographic characteristics, including household income.
 - Respondents were statistically more satisfied with Environmental Utilities' rates (or prices) in 2012, recuperating from the drop in 2010 (to 54%), and returning to the level found in 2008.
- Additional analyses indicated that the most important aspects in terms of overall satisfaction with Environmental Utilities were <u>value</u>, the <u>overall quality</u> of its products and services, and <u>providing responsive customer service</u>. Any improvements in these should be reflected in improved overall satisfaction ratings.

AWARENESS OF GENERAL PROGRAMS AND SERVICES

- Roseville Environmental Utilities is known for providing water as well as solid, green, and sewer waste services by at least 86% of the residents surveyed. The Integrated Pest Management Program was the least recognized service, with only 27% being aware of it.
 - Overall, awareness of Environmental Utilities' general programs and services was independent of demographic characteristics, with six exceptions.
 - Current awareness of the general programs and services was similar to that of previous surveys, although respondents continue to be less familiar with the stormwater pollution prevention program than in 2008.

EVALUATION OF GENERAL PROGRAMS AND SERVICES

All programs and services were evaluated positively by at least three in four respondents who were familiar with them. Satisfaction was highest for garbage, green waste and residential recycling services and lowest for the integrated pest management program.



- Not surprisingly, homeowners were more likely than renters to give positive ratings for solid waste, green waste, sewer, and residential recycling services. Similar differences were found between respondents living in single-family homes and those in multiple-family dwellings. All other evaluative ratings were independent of respondent demographics.
- Environmental Utilities' general programs and services continue to be rated very positively, including the "one big bin" of recycling (87% positive), which is significantly higher than the 78% found in 2008.

CONTACT WITH ENVIRONMENTAL UTILITIES

- Similar to previous survey years, 19% of all respondents reported calling Environmental Utilities within the past year regarding their water, sewer, or garbage service.
 - Respondents who were younger than 65 years old were more likely than their older counterparts to have reported communicating with the utility.

RATINGS OF CUSTOMER SERVICE

- The vast majority (92%) who had called Environmental Utilities' customer service were satisfied overall and at least eight in ten rated each aspect of customer service positively. The highest ratings were received for responsiveness in handling non-emergency service calls followed by scheduling specific times for service calls.
 - Customer service ratings were independent of respondent demographics and consistent with the results found in the previous survey waves.
- Additional analyses indicated that the most important aspects of customer service were the <u>length of time spent on hold</u> and <u>responsiveness in handling</u> <u>non-emergency service calls.</u>

GARBAGE RECYCLING

- Most respondents were aware of the hand and machine sorting process of recycled items: two thirds (66%) were "very" aware and a further 20% said they were "somewhat" aware of how residential recycling is handled.
 - Awareness of trash sorting and recycling remains at the same level as in 2010, but significantly higher than in 2008.
- The most common recycling drop-off site among respondents seems to be for cardboard recycling – three in four respondents were aware of these sites, and over a half of respondents used them in the last 6 months. Lowest awareness was for the polystyrene foam drop-off sites.
 - Awareness of drop-off site recycling programs varied somewhat by demographic variables.
 - Overall awareness of and participation in each of the six programs discussed remained relatively similar to that of the 2010 survey.

WATER SERVICE

Eight in ten Roseville Utilities water service customers surveyed rated the quality of water supplied to their homes positively (83%).



- Ratings of water quality were independent of demographic characteristics.
- Current positive perceptions of the overall quality of the water service were the same as in 2010, and up significantly from 76% in 2008.
- Similarly, eight in ten customer respondents were aware that the water is fluoridated (81%) and consider fluoridation to be important (79%).
 - Homeowners and those living in single-family homes were significantly more likely to be aware that Roseville's water is fluoridated than renters and those living in multiple-family dwellings.
 - Awareness and ratings of the importance of fluoridated water were independent of all demographic characteristics, including whether or not there were children living in the home.
 - While awareness of fluoridated water remains the same as in 2010, significantly more respondents feel it is "not at all" important today than in 2010 (21% vs. 16%).

WATER EFFICIENCY PROGRAMS AND REBATES

- Overall, no more than half of all respondents were familiar with the water efficiency programs and rebates. The most commonly-known was the <u>washing</u> <u>machine rebates</u>. The smart irrigation timers program had the highest level of participation among respondents.
 - Homeowners and those living in single-family homes were more aware than renters and those living in multi-family dwellings of the washing machine rebates, the Water Wise House Call program, and the Cash for Grass program.
 - Females were more likely than males to have used toilet and washing machine rebates.
 - There was a significant decrease in awareness of washing machine and toilet rebates from 2012 to 2010, going back to the 2008 levels. However, significantly more respondents were aware of the Water Wise House Call program in 2012 than in 2008.
 - The only increase was found in the irrigation efficiency program usage, with twice as many respondents reporting participation this year than in 2010 (12% vs. 6%).
- A third of all respondents water their landscape one to three times per week and at least half check their irrigation system for malfunctions at least monthly (36% and 53%, respectively).
 - Respondents who live in single-family homes and those who are homeowners were more likely than apartment dwellers and renters to check their irrigation systems for malfunctions at least once a month.
 - Respondents who live in homes built before 1992 were more likely to water 1-3 times per week than those residing in newer homes.
 - Frequency in landscape watering and irrigation system testing remained consistent with the 2010 results.
- While the majority of respondents drew a blank as to how to encourage the public to use more of Environmental Utilities' programs, 24% suggested increasing the amount of education, advertising, and available information in order to positively affect program participation.



FOG PROGRAM

- The FOG program was unfamiliar to most respondents only 10% of those surveyed were aware their household cooking fats could be picked up for free.
 - Literally none of the respondents (zero out of the 400 respondent base) had used the FOG program within the last 6 months.
- Although awareness of the FOG program remains low and unchanged from 2010, disposal practices of household fats, oils and grease appear to be shifting to a more desired behavior. Significantly more respondents (39%) reported putting their household FOG in a container before throwing it in the garbage compared with only 5% in 2010 and 6% in 2008. Likewise, 25% reported throwing their FOG directly in the trash, a significant drop from the 59% who said they dispose of their FOG in this way in 2010.

STORMWATER AWARENESS AND TREATMENT

- Almost half (44%) of all respondents were aware that everything that enters storm drains is <u>not</u> treated or filtered. However, more than a third (38%) were misinformed (and thought it was) and 18% did not know.
 - Awareness of the stormdrain process was independent of respondent demographics and very similar to that found in the previous surveys.

ROSEVILLE UTILITY EXPLORATION CENTER

- Four in ten respondents were aware of the City's Utility Exploration Center, half of whom (19%) reported already having been there. The main reasons for visiting included their own curiosity and taking their children.
 - Awareness of the City's Exploration Center was higher among those with at least a four-year college education, while visitation was related to living with children, having newer (1992+) homes, and being 35 to 54 years old.
 - Awareness of and visitation to the Exploration Center was similar to that found in the 2010 survey.

EVALUATION OF EU TODAY NEWSLETTER

- Three in ten (30%) respondents said they have read every edition of EU Today in the last year. However, a similar number (31%) reported reading none of them. The median number of newsletters read is two.
 - Loyal EU Today readers (i.e., those who read every issue) were more likely to be at least 55 years old, be a homeowner, live alone or with one other person, and not in a household with children.
 - The EU Today is read with the same frequency as it was in 2010.

Preference for Communication Channel

Outreach will have its greatest impact when mixed media communications are used as customers vary in the preferred mode to receive information about Environmental Utilities and its programs and services. Six in ten respondents identified printed material via the mail as the best way to communicate with them, such as a bill insert (28%), a separate mailing (24%), or a blurb in the EU



Today newsletter (8%). However, 32% said e-mail was the best way to provide them with information.

- Age, income, living with children and in households of at least three members differentiated those who preferred receiving e-mailed information from those who did not.
- Significantly more respondents said they want to receive e-mail communications in the current year than in 2008, although the increase from 2010 was not found to be statistically significant.

SUGGESTION FOR IMPROVEMENT

Among the 54% of respondents who offered suggestions to improve the service provided by Environmental Utilities, responses included lower prices, provide more information and communication, separate recycling bins, more green waste pick ups, and improve water quality.

RECOMMENDATIONS

Based on the current survey results presented in this report, Aurora Research Group recommends that Environmental Utilities:

- Continue to...
 - satisfy its customer base by maintaining its overall high quality and offering responsive customer service
 - stress the value of what residential customers get for their money,
 - inform and educate its residential customers about EU's programs and services, particularly the Integrated Pest Management program, water conservation programs and rebates, and the FOG program
 - promote the reasons for using recycling drop-off sites and conserving water.
 - shorten the length of time customers are kept on hold when calling EU,
 - educate customers about stormwater pollution, and
 - use printed marketing materials and announcements (inserts, letters, door hangers, etc.), as well as e-mail communications.
- Encourage residents to visit the Exploration Center in a way that appeals to children and their own curiosity.
- Keep rates down and offer money-saving tips.
- Communicate with residential customers in a multi-modal format in order to reach the largest group of customers.
- Share the results of this survey with customers to demonstrate that they are being heard.

These conclusions are based on a telephone survey of a representative sample of City of Roseville residents conducted in October 2012. A total of 400 interviews were conducted via a computer-assisted telephone interviewing (CATI) system, with a dual frame sample of landline and cell phone RDD numbers. The average survey took 15 minutes. A plurality of respondents were: females who were familiar with the utility bill



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(and service) who have lived in Roseville for less than 20 years, and own and live in a single-family home built before 1992. They hold a college degree, have access to the Internet from a home computer, are at least 45 years of age, live alone or with other adults (no children) and have an annual household income of at least \$50,000.

II. PROJECT BACKGROUND & STUDY DESIGN

RESEARCH OBJECTIVES

The City of Roseville Environmental Utilities Department (City) provides residents of Roseville with water, wastewater, and garbage service. It also offers recycling, water service and water efficiency programs, and stormwater management. Aurora Research Group conducted a statistically valid telephone survey of its residential utility customers in order to measure and gain insight into the perceived quality and value of its programs and services.

The specific objectives for assessing current services and programs included:

- Assessment of the overall quality of service provided by Environmental Utilities;
- Assessment of the perceived quality of specific programs and services offered;
- Measurement of the value of the utility service; and
- Determine the awareness of and participation in current programs.

Additional objectives addressed **communications issues**:

- Identify effective ways of communicating with residential customers; and
- Assess current communication tools.

In addition, the City wanted to include questions to address **other issues:**

- Assess public awareness of stormwater pollution;
- Determine the awareness and importance of water fluoridation,
- Evaluate customer service, and
- Determine the awareness and use of the City's Utility Exploration Center.

RESEARCH METHODOLOGY

In previous years, telephone interviews were conducted with samples of residents, using Random Digit Dialing (RDD) procedures in which a computer generates phone numbers from known landline area codes and prefixes. Up to now, these samples only included landline numbers and not cell phone numbers. However, the potential for coverage bias stemming from the growth of the cell phone-only population has led to the development of dual frame, random digit dial (RDD) surveying, an approach which was adopted this year. In this type of dual frame design, the traditional sample from the landline RDD frame is supplemented with an independent sample from the banks of numbers designated for cellular phones.¹

Aurora Research Group conducted a telephone survey with a sample of 400 City residents, proportionally representative of the population in general, 354 of which were conducted on landlines from a random-digit-dial (RDD) sample and 46 of which were conducted via a cell phone sample. Respondents were screened so that only an adult over the age of 18 years who was the household member familiar with the utility bill and not an employee of the City of Roseville was interviewed.

Augmenting the landline sample with a cell phone sample will better represent the population as a whole; despite the fact that the survey industry is still addressing and has not reached conclusions on some of the research, weighting, and analytic issues inherent in such dual-frame sampling designs.



The previous questionnaire was used as a draft, and minor revisions were made, mostly deleting questions that were no longer relevant. A few minor wording changes were made for clarification purposes (and such changes are noted within the report); however, most questions were left untouched in order to provide the ability to track the results. Upon City approval, it was programmed into a CATI (Computer Assisted Telephone Interviewing) system.

The following table summarizes the methodology and sample specifications.

Table 1

Design Issue	Specification
Methodology	Telephone survey using CATI software
Population	Roseville Environmental Utilities' residential customers
Sample size	400 completed interviews - 354 RDD-sample telephone surveys - 46 cell phone random sample
Sampling error	+/- 4.9% (95% confidence level)
Length of interview	15 minutes (average)
Screening criteria	 Identify Roseville Environmental Utilities as service provider Be the adult (18+) most familiar with utility service and bill in the household Not be a City of Roseville employee
Pretest date	October 18, 2012
Field dates	October 20- November 5, 2012

METHODS OF ANALYSIS

Responses were analyzed using univariate, bivariate, and multivariate statistical techniques. Frequency counts and percentages were calculated for all variables. Unless otherwise noted, frequency percentages reported in this document represent adjusted frequencies, meaning that percentages have been adjusted to account for missing values (refusal to answer questions by qualified respondents) or branching (skipping of a question because the respondent was not qualified to respond). Differences among groups of respondents or among survey years were determined through chi-square analyses and tests of proportion.

Using the current survey results, demographic differences that were found to be statistically significant are discussed throughout the report in the section called Group Differences. Where appropriate, multiple regression analysis was used to determine key factors contributing to satisfaction.

CAVEAT

The sole purpose of this report is to provide a collection, categorization and summarization of survey data. Aurora Research Group intends neither to endorse nor to criticize the City of Roseville, Roseville Environmental Utilities, its policies, services, or staff. Environmental Utilities shall be solely responsible for any modifications, revisions, or further disclosure/distribution of this report.

III. RESIDENTIAL CUSTOMER SURVEY RESULTS

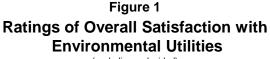
The survey results are presented in the following format. Within each section (and sections will be organized by topic and not necessarily according to the chronological order of the questionnaire), basic descriptive results will first be presented. Next, any notable demographic² differences or relationships will be reported. Important statistical contributors to overall satisfaction with Environmental Utilities as well as any key areas for improvement will also be discussed, when appropriate. Finally, when appropriate, results from the Roseville Environmental Utilities 2008 and 2010 Residential Customer Surveys³ will be included for comparison purposes.

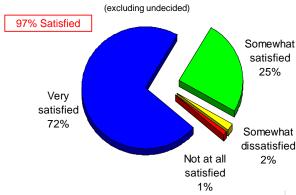
OVERALL SATISFACTION WITH ROSEVILLE ENVIRONMENTAL UTILITIES

Current Results

Overall satisfaction with the service provided by Environmental Utilities in the past year continues to be very high – 72% were "very" satisfied and 25% were "somewhat" satisfied for a total of 97% of respondents.

Using a four-point scale, respondents were asked to rate their overall satisfaction with the service provided by Environmental Utilities during the past year. Results indicate that 72% were "very" satisfied and a further 25% were "somewhat" satisfied, while only 3% percent gave responses of dissatisfaction. In other words, there was a combined total of 97% satisfaction with Environmental Utilities this past year among the residential customers who were surveyed.





Demographic variables included gender, home owner or renter, type of home, year home was built (pre-1992 vs. 1992 to 2011), age, education, children in home, household members, and income.

Information for comparisons was taken from the reports of the Roseville Environmental Utilities 2008 and 2010 Residential Customer Satisfaction Surveys, conducted by Aurora Research Group in March 2008 and October 2010, respectively.



Group Differences

2 Overall satisfaction with Environmental Utilities during the past year was independent of demographic characteristics.

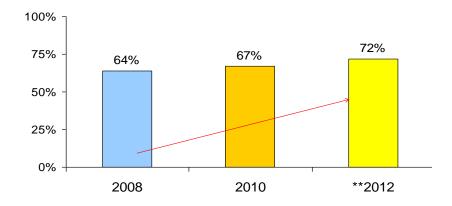
Chi-square analyses indicated that there were no significant demographic differences that distinguished those who gave "excellent" ratings from those who gave lower ratings for the service provided by Environmental Utilities during this past year.

Year-to-Year Differences

The 72% of "very satisfied" ratings for overall satisfaction with Environmental Utilities in 2012 was significantly higher than the 64% found in the 2008 baseline survey.

The top box (or "very satisfied") ratings were compared by survey year. The current results marked the highest level since the survey began (64% in 2008, 67% in 2010, and 72% in 2012), and represented a statistically significant increase over the baseline survey year.

Figure 2
By Survey Year:
Excellent Overall Satisfaction Ratings
(excluding undecided responses)



^{**} indicates a significant difference between survey years



OVERALL EVALUATIONS OF ENVIRONMENTAL UTILITIES

Current Results

• 4 More than 8 in 10 respondents rated overall quality and responsive customer service positively (both 86%). Three quarters of those surveyed also rated the availability of programs and services and overall value positively. Price was rated significantly lower, with 63% giving "good" or "excellent" ratings.

Respondents were asked to rate Environmental Utilities in terms of value, price, quality, responsive customer service, and the availability of different programs and services. Similar to previous survey years, a higher proportion of undecided responses was found for responsive customer service (23% said they did not know) and the availability of programs and services (18%). The following table provides the percent of undecided responses by question for each survey year.

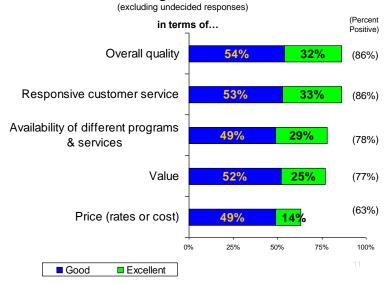
Table 2

UNDECIDED IN TERMS OF		PERCENT OF UNDECIDED RESPONSES		
	2012	2010	2008	
Responsive customer service	23%	17%	24%	
Availability of different programs and services	18%	16%	16%	
Price (rates or cost)	7%	5%	5%	
Overall value, that is, what you get for what you pay	4%	2%	2%	
Overall quality	3%	3%	3%	

The undecided responses were excluded and the percentages were recalculated.

The positive (good + excellent) results of the overall ratings are shown in the next chart, Overall quality and responsive customer service both received 86% positive ratings, with about half who said they were "good" and about 33% who said they were "excellent." Significantly fewer, but still the majority of respondents, positively rated the availability of different programs and services (78% "good" or "excellent") and value (77%). The lowest ratings were given for price. They were significantly lower than all other ratings: only slightly more than half (63%) rated Environmental Utilities' rates either "good" or "excellent."

Figure 3
Positive Overall Ratings of Environmental Utilities



Group Differences

Homeowners were more likely than renters to rate the utility positively in terms of the overall quality of products and services. All other overall evaluations of Environmental Utilities were independent of demographic characteristics, including household income.

Chi-square analyses were run to see whether or not overall evaluations varied by respondent demographics. Responses were first dichotomized into negative ("poor plus fair") ratings versus positive ("good plus excellent") ones. With only one exception, no significant differences attributable to gender, age, education, income, presence of children in the home, type of dwelling, or age of house were found.

The one difference that emerged involved home ownership: homeowners were more likely than renters to rate the utility positively in terms of the overall quality of products and services (92% vs. 81%).

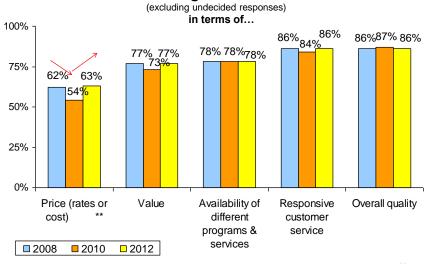
Year-to-Year Differences

Respondents were more satisfied with Environmental Utilities' rates or prices in 2012, recuperating from the drop in 2010 and returning to the level found in 2008. Positive ratings for overall satisfaction, responsive customer service, overall value, overall quality, and the availability of

programs and services were consistent with the results found in both 2010 and 2008 survey years.

Chi-square analyses indicated <u>only one</u> significant difference by survey year in the overall ratings. The level of current satisfaction with price increased significantly over the 2010 level, mirroring the baseline results found in the 2008 survey. The majority of respondents were satisfied with the other aspects (overall quality, responsive customer service, the availability of different programs and services, and value) as shown in the following graph.

Figure 4
By Survey Year:
Positive Overall Ratings of Environmental Utilities



^{**} indicates a significant difference between survey years

Key Drivers of Overall Satisfaction

Additional analyses indicated that the most important aspects in terms of overall satisfaction with Environmental Utilities were <u>value</u>, the <u>overall</u> <u>quality of its products and services</u>, and <u>providing responsive customer</u> <u>service</u>. Any improvements in these should be reflected in improved overall satisfaction ratings.

In order to gain insight in to what are the most **important** aspects (i.e. value, price, quality, responsive customer service, or the availability of different programs and services) to customers, we can statistically analyze them by ranking them in terms of how they relate to overall satisfaction with



Environmental Utilities. In this instance, a series of multiple regression analyses⁴ were run. Results indicated that those residential customers⁵ who were more satisfied with Environmental Utilities overall were also more likely to rate <u>value</u>, <u>overall quality</u>, and <u>providing responsive customer service</u>, positively. Similarly, those less satisfied overall with Environmental Utilities were more likely to rate <u>value</u>, <u>overall quality</u>, and <u>providing responsive customer service</u>, negatively. In other words, the results of these further analyses indicate that any improvements to the <u>perceived value of what customers get for what they pay</u>, <u>overall quality</u>, or to <u>providing responsive customer service</u> should also result in increases in terms of overall satisfaction with Environmental Utilities.

AWARENESS OF GENERAL PROGRAMS AND SERVICES

As in previous surveys, respondents were asked about eleven general programs provided by Environmental Utilities. Awareness of each was assessed through a series of rating questions, using a four-point scale. If a respondent was not familiar with a service, he or she was asked to say so. [Awareness of more specific programs (i.e. types of drop-off sites, types of rebates, online auditing, etc.) will be addressed in later sections of this report.]

Current Results

Environmental Utilities is known for providing water as well as solid, green, and sewer waste services. The Integrated Pest Management Program was the least recognized service (only 27% were aware).

The next chart highlights the proportion of respondents who were aware and unaware of (or undecided about) the services provided. It can be seen that practically all respondents were aware that Environmental Utilities offers water service (97%) and the solid waste or garbage service (97%). More than three quarters of the respondents were aware of the bi-weekly green waste pick-up (88%), wastewater or sewer service (86%), self-service recycling drop-off sites (82%), and the residential "one big bin" recycling program (77%). At least half of the residents surveyed were aware of Environmental Utilities' programs for water recycling for irrigation of street landscapes and golf courses (54%), water efficiency (53%), stormwater pollution prevention (52%) and home pickup of hazardous or electronic waste (50%).

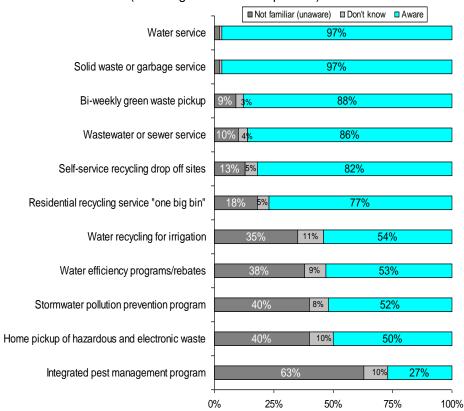
It was necessary to run separate regression analyses, including and excluding Q20 (responsive customer service) and Q60 (availability of different programs and services) because of the high percentage of undecided/don't know responses (23% and 18%, respectively) to these questions.

This statistical analysis requires responses to every service aspect and necessarily excludes from the analysis any respondents who answered "undecided/don't know" to any question. Results are therefore is based on only a subset of the population interviewed (i.e. 284 respondents in some instances) and should be treated with some caution.

Figure 5

Percent Aware that Environmental Utilities Provided this Service

(including undecided responses)



Another perspective is the converse of these results – that is, the percentage of respondents who were unaware (presented in dark grey) or unsure (light grey) that Environmental Utilities provided each service. In other words, "unawareness" was highest for Environmental Utilities' efforts to promote the use of less toxic alternatives to eliminate pests, with three in four respondents saying they were either unaware of (63%) or undecided about (10%) the integrated pest management program.

Group Differences

• 9 Overall, awareness of Environmental Utilities' general programs and services was independent of demographic characteristics, with six exceptions.

Chi-square analyses were run to see whether or not awareness of the general programs and services provided by Environmental Utilities varied by respondent demographics. Of the 99 analyses that were run (11 programs x 9 demographic characteristics), only seven demographic features showed significant differences.



Overall, there were <u>no</u> differences for gender, age, household size, and education. The six significant differences to emerge indicated that:

- **Homeowners** (as opposed to renters) were more aware of the:
 - solid waste or garbage service (97% vs. 87%) and
 - green waste pick up service (93% vs. 66%).
- Surveyed residents with higher income levels seemed to be more aware
 of the green waste pick up program (\$75,000 plus, 95% vs. less than
 \$75,000, 55%).
- Those in **homes newer than 1992** were more likely than those in older homes to be aware of water recycling for irrigation (66% vs. 50%).
- Respondents living in single-family homes (SFH) were more likely than apartment dwellers to be aware of the:
 - bi-weekly green waste pick-up service (93% vs. 42%) and
 - solid waste or garbage service (99% vs. 86%).

Year to Year Results

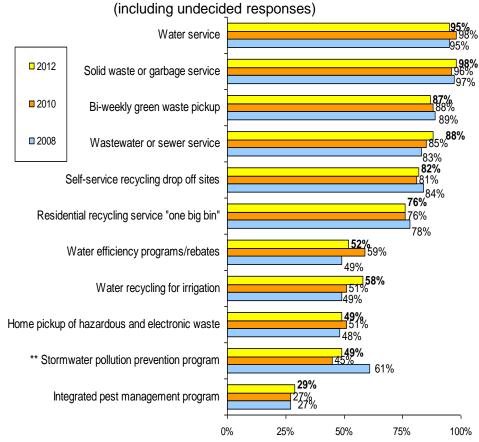
• 10 Overall, current awareness of the general programs and services offered by Environmental Utilities was similar to that in previous surveys, although respondents continue to be less familiar with the stormwater pollution prevention program than in 2008.

Further analyses were conducted in order to see whether or not awareness of the general programs and services varied by survey year. The results of chi-square analyses indicated that, in general, the 2012 results were very similar to previous results, with one exception. As shown in the next chart, while the current results are similar to the 2010 survey, respondents were significantly less likely to be familiar with the stormwater pollution prevention program this year than in 2008. (However, these results should be treated with caution as the program name was revised in the last two surveys.⁶)

⁶ In 2008, the survey asked respondents to evaluate the Stormwater Management Program, and in 2010 and 2012 the name was revised to read the Stormwater Pollution Prevention Program. Additionally, in 2008 and 2010, respondents evaluated Water Conservation Programs and Rebates, which was revised to read Water Efficiency Programs and Rebates in 2012.

Figure 6

By Survey Year: Awareness of Services Provided



^{**} indicates a significant difference among survey years

EVALUATION OF GENERAL PROGRAMS AND SERVICES

Current Results

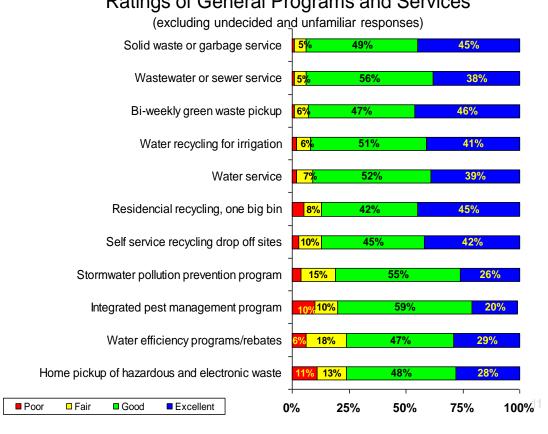
11 All programs and services were evaluated positively by at least three in four respondents who were familiar with them. Satisfaction was highest for garbage, green waste, and residential recycling services and lowest for the integrated pest management program.

Those who were familiar with Environmental Utilities' general programs and services were asked to evaluate each one, using a poor, fair, good, or excellent scale. Those unfamiliar with the service and those who were undecided were eliminated from these analyses, and the percentages were recalculated. These

results, based on fewer than 400 respondents, are shown in the next chart. First of all, results were quite positive – at least three in four respondents familiar with the general programs and services provided by Environmental Utilities gave positive ratings for each program or service. Garbage and sewer services topped the chart with 94% positive. This was followed by bi-weekly green waste pick-up, recycling water for irrigation, and water service, all of which were at least 90% positive.

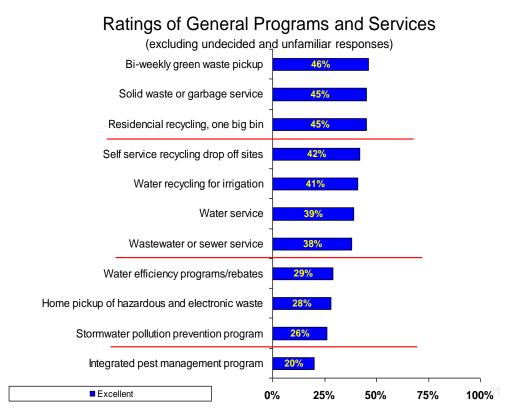
Figure 7

Ratings of General Programs and Services



With such high positive ratings across the board, we took a look at just the "excellent" ratings or top box results to see if any services stood out, as shown in the next graph. It can be seen that, while the <u>green waste pick up</u> and <u>garbage services</u> still fall in the top tier, <u>residential recycling</u> moves up into the top three and sewer service moves down the list out of the top five. At the other end of the list, the integrated pest management program landed at the bottom, only receiving 20% "excellent" ratings.

Figure 8



Group Differences

Not surprisingly, homeowners were more likely than renters to rate Environmental Utilities positively for its solid waste, green waste, sewer, and residential recycling services. Similar differences were found between respondents living in single-family homes and those in multiple-family dwellings. All other evaluative ratings were independent of respondent demographics.

Chi-square analyses were run to see whether or not ratings of the general programs and services varied by respondent demographics. Responses were first dichotomized into "poor plus fair" ratings vs. "good plus excellent." Ratings of water service, stormwater pollution prevention, water efficiency programs, water recycling, self-service recycling drop-off site services, integrated pest management program and home pick-up of hazardous and electronic waste were independent of respondent demographic characteristics.





Not surprisingly, **homeowner respondents** were more likely than renters to give "good" or "excellent" ratings to Environmental Utilities for the services related to:

- waste water or sewer (96% vs. 85%),
- garbage service (95% vs. 86%),
- residential recycling (89% vs. 76%), and
- green waste pick up (95% vs. 80%).

Similarly, **respondents living in single-family homes** were more likely than those living in apartments, townhouses, or condos to positively rate:

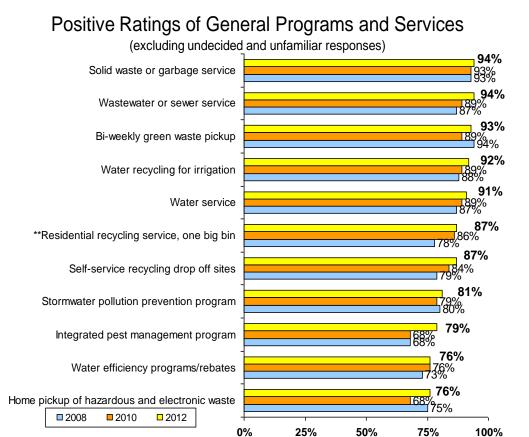
- solid waste or garbage service (95% vs. 81%),
- waste water or sewer service (95% vs. 82%), and
- residential recycling service (88% vs. 68%).

Year to Year Results

• 13 Environmental Utilities' general programs and services continue to be rated very positively since 2008, including the "one big bin" of recycling, which had a similar proportion of positive ratings (87%) in comparison with the 2010 results (86%), and was significantly higher than the 78% found in the 2008 survey.

Chi-square analyses were run to identify any statistically significant differences in the level of positive ratings by survey year. In general, the 2012 results were very similar to the 2010 results. This also includes the positive ratings for the "one big bin of recycling." The current results (87% positive) are identical to the 2010 results (86%), which represents a jump from the percentage of respondents who were satisfied with the residential recycling service in 2008 (78%).

Figure 9



^{**} indicates a significant difference between survey years

EVALUATIONS OF CUSTOMER SERVICE

Contact with Environmental Utilities

Current Results

• 14 Nineteen percent of all respondents reported calling Environmental Utilities within the past year regarding their water, sewer, or garbage service.

All respondents were asked about contacting Environmental Utilities and 19% said they had called the utility regarding their water, sewer or garbage service within the past year. Eight in ten respondents (81%) reported no contact with the utility.



Group Differences

• 15 Respondents who were younger than 65 years old were more likely than their older counterparts to have reported communicating with the utility. Results were independent of all other respondent demographic characteristics.

Additional chi-square analyses were conducted to develop a profile of respondents who reported calling Environmental Utilities. The only significant difference was age: respondents under 65 years old (25%) were more likely than those older than 65 (8%). In other words, results indicated that those who contacted the utility were just as likely as those who had not to be male (or female), live in a single-family home (or an apartment), have a high school (or college) degree, etc.

Year-to-Year Differences

• 16 The rate of contacting Environmental Utilities among residential respondents remains consistent at about two in ten people surveyed.

The results of additional chi-square analyses indicated that in all three survey years, approximately one in five respondents had made contact with the utility regarding their water, sewer or garbage service (19% in 2012, and 21% in 2010 and 2008).

Ratings of Customer Service

Current Results

17 The vast majority (92%) who had called Environmental Utilities' customer service were satisfied overall.

Respondents who had contacted the utility were asked additional questions about their customer service experience, using a four-point scale. First, in terms of overall satisfaction, nearly half of those who contacted the utility (49%) gave "excellent" ratings and a further 43% gave "good" ratings for a total of 92% positive ratings. The remaining 8% rated the utility's customer service negatively, with 5% saying it was "poor."

Excellent 49%

Figure 10

Overall Satisfaction with

Customer Service

(excluding undecided and refusal responses)

43%

Fair
3%

Poor
5%

• 18 At least eight in ten respondents who had called Environmental Utilities rated each aspect of customer service positively. The highest ratings were for responsiveness in handling non-emergency service calls followed by scheduling specific times for service calls.

Respondents were asked to rate four aspects of customer service: responsiveness in handling non-emergency service calls, the length of time spent on hold, the ease of navigating the phone system, and the ability to schedule specific times for service appointments. Once again, focusing first on the percent of undecided responses by question, as shown in the next table, the ability to schedule specific times for service appointments received a high level of undecided responses: one in five (20%).

Table 3

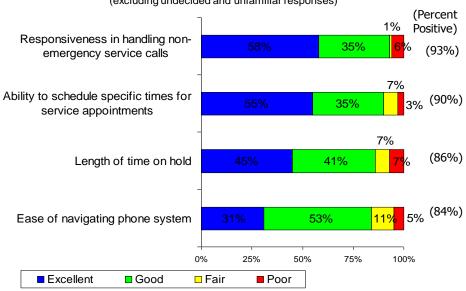
UNDECIDED IN TERMS OF	PERCENT OF UNDECIDED RESPONSES	
Length of time spent on hold	5%	
Responsiveness in handling non-emergency service calls	5%	
Ease of navigating the phone system	1%	
Ability to schedule specific times for service appointments	20%	

These undecided responses were excluded and the percentages were recalculated. First, among those who contacted the Utility, the vast majority (at least 84%) rated each aspect as "good" or "excellent." Responsiveness in handling non-emergency service calls was rated the highest (93% positive) followed by the ability to schedule specific times for service appointments (90%). Slightly fewer who had called customer service gave favorable evaluations for

the length of time on hold (84%) and the ease of navigating the phone system in order to reach the appropriate Environmental Utilities representative (84%).

Figure 11

Ratings of Customer Service
(excluding undecided and unfamiliar responses)



Group Differences

19 Customer service ratings were independent of respondent demographics.

A series of chi-square analyses were run in order to identify any demographic characteristics that distinguished those who rated the various aspects of customer service positively from those who rated them negatively. Of the 45 analyses ran (9 demographics x 5 customer service variables), none were found to be statistically significant.

Key Drivers of Customer Service

20 Additional analyses indicated that the most important aspects of customer service were the <u>length of time spent on hold</u> and <u>responsiveness in</u> <u>handling non-emergency service calls.</u>

Similar to the analyses run on overall satisfaction, additional analyses were conducted to understand which aspects of customer services are the most **important** to customers. Results of a series of multiple regression analyses indicated that those residential customers⁷ who had called the utility and were

This statistical analysis requires responses to every customer service aspect and necessarily excludes from the analysis any respondents who answered "undecided/don't know" to any question. Results are therefore based on only a subset of the population interviewed (i.e. 51 respondents) and should be treated with some caution.



more satisfied with Environmental Utilities' overall customer service were also more likely to rate the length of time spent on hold and responsiveness in handling non-emergency service calls positively. Similarly, those less satisfied overall with Environmental Utilities' customer service were more likely to rate these two aspects of customer service negatively. In other words, the results of these further analyses indicate that any improvements in the length of time customers have to spend on hold when calling the utility or to responsiveness in handling non-emergency service calls should also result in increases in terms of overall satisfaction with customer service.

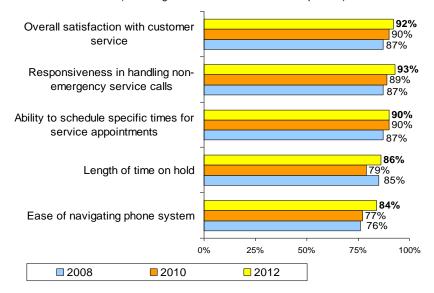
Year to Year Results

21 Current customer service ratings were consistent with the results found in the previous survey waves.

Chi–square analyses were conducted to compare the customer service ratings (excluding the undecided responses) by survey year. Although there were some small variances in the percentages of positive ratings, the differences were not found to be statistically significant.

Figure 12

Ratings of Customer Service (excluding undecided and unfamiliar responses)



SPECIFIC PROGRAMS AND SERVICES

Garbage Recycling

Current Results

22 Most respondents were aware of the hand and machine sorting process of recycled items: two thirds (66%) were "very" aware and a further 20% said they were "somewhat" aware of how residential recycling is handled.

This next section addressed specific programs and services, beginning with recycling. First, respondents were asked:

"How aware are you that Environmental Utilities hand and machine sorts the aluminum cans, plastic containers, and glass bottles from residents' regular trash and sends them to recyclers to be reused instead of sending all the trash directly to the landfill? Would you say not at all aware, somewhat aware, or very aware?"

As shown in the next graph, two thirds of respondents (66%) acknowledged being "very" aware that their trash was sorted and recycled. A further 20% were "somewhat" aware, and 14% said they were not at all aware.

Awareness that Trash is Sorted
and Recycled
(excluding undecided responses)

Very aware,
66%

Somewhat aware, 20%

Not at all aware, 14%

Figure 13
Awareness that Trash is Sorted

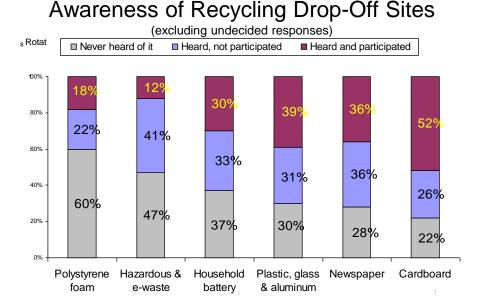
• 23 The most common drop-off site among respondents seems to be for cardboard recycling – three in four respondents were aware of these sites, and over a half of respondents used them in the last 6 months. Awareness was lowest for the polystyrene foam drop-off sites.

Respondents were asked if they had heard of several recycling programs and, if so, whether or not they had used each within the past 6 months. As presented in the next graph, seven in ten respondents were aware of the cardboard (78%),



newspaper (72%), and plastic, glass & aluminum sites (70%). Over half (52%) of all respondents had used cardboard drop-off sites within the past six months. Conversely, six in ten respondents (60%) had never heard of the polystyrene foam drop-off sites and about half (47%) were unaware of the home pick up of hazardous and electronic waste pick up service.

Figure 14



Group Differences

24 Awareness of drop-off site recycling programs varied somewhat by demographic variables.

Results were dichotomized according to whether or not respondents were aware of the recycling programs (regardless of whether or not they had used the service in the previous six months) and a series of chi-square analyses were run to determine if there were any characteristics that distinguished those who were aware of the services from those who had never heard of them. Various results emerged. Awareness of the plastic, glass and aluminum California redemptions drop-off sites and the hazardous and electronic waste home pick up service were independent of respondent demographics.

However, respondents who were aware of the **household battery drop-off** were more likely to:

be female than male (69% vs. 57%).

Awareness of **cardboard drop-off sites** was higher among respondents who were more likely to:

- be a homeowner than a renter (80% vs. 66%),



- live in single family houses than other types of dwellings (80% vs. 53%),
 and
- reside in a household of three of more members (85% vs. 74%).

Respondents who were aware of the **expanded polystyrene foam drop-off sites** were more likely to:

- be a homeowner than a renter (44% vs. 24%).

Those aware of the **newspaper sites** were more likely to:

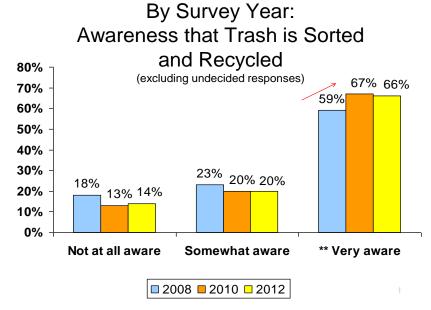
live in a single-family home than an apartment or other type of multiple-family dwelling (74% vs. 51%).

Year-to-Year Differences

25 Awareness of trash sorting and recycling remained at two thirds of respondents, representing significantly more respondents than in 2008.

Figure 15

As shown in the next chart, the 66% of respondents who said they were "very" aware of the fact that trash is sorted and recycled at the City of Roseville is almost identical to last survey's results (67%), yet both years were significantly more than the 59% who reported being "very" aware in 2008.



^{**} indicates a significant difference between survey years

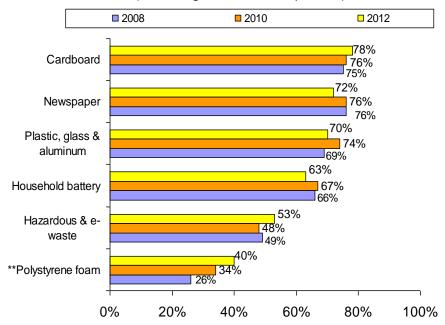


26 Overall awareness of and participation in each of the six programs discussed remained relatively similar to that of the 2010 survey.

Results for each of the various recycling drop-of site services were compared by survey year. Overall awareness of each of the six programs was similar to the 2010 survey results. The jump in <u>awareness</u> of recycling program for expanded polystyrene foam drop-off sites from 2008 to 2012 was found to be statistically significant, although the 2012 level is the same as it was in 2010.

Figure 16
By Survey Year:
Awareness of Recycling Drop-Off Sites

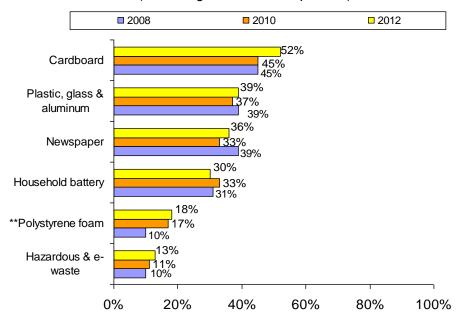
(excluding undecided responses)



<u>Participation</u> in each of the six programs was similar to the 2010 survey results. The jump in use of recycling program for expanded polystyrene foam drop-off sites from 2008 to 2012 was found to be statistically significant, although the 2012 level is the same as it was in 2010. The 6-point increase in the current usage of the cardboard drop-off sites over the 2010 level, while impressive, was not found to be statistically significant.

By Survey Year:
Usage of Recycling Drop-Off Sites

(excluding undecided responses)



Water Service

Current Results

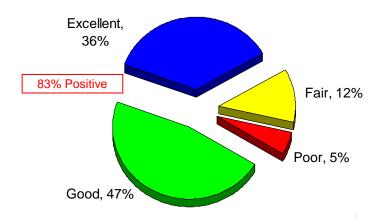
• 27 Eight in ten Roseville Utilities water service customers surveyed rated the quality of water supplied to their homes as "good" (47%) or "excellent" (36%).

In the screening questions, all respondents were asked if Roseville Utilities provides water service to their house. Three percent said no and, therefore, were not asked the questions in this section.

Respondents who receive water service from Roseville Utilities were asked to rate the quality of water supplied to their homes, specifically in terms of taste, clarity, smell, and pressure. Results indicated that a third (36%) of respondents rated water quality as "excellent" and almost half (47%) rated it "good" for a total of 83% positive ratings. Only 5% rated their water quality as "poor."

Figure 18
Overall Quality of Water Supplied to Home

(excludes don't know responses)



28 Eight in ten respondents who receive their water service from the City were aware that the water is fluoridated (81%) and feel that it is important (79%).

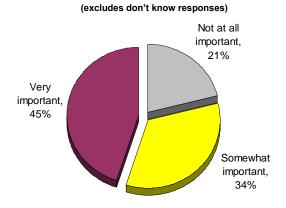
The next two questions dealt with fluoridation. First, respondents were read an informational paragraph:

"Fluoride is added to municipal water supplies to improve the dental health of the consumers. Roseville has been providing fluoridated water since the 1950's and continues to do so as required by its operations permit from the State of California. Did you know that the water provided to your home by the City of Roseville is fluoridated?"

Eight in ten (81%) of all respondents were aware that the water provided by the City of Roseville is fluoridated. Nineteen percent (19%) were not.

Respondents then were asked to rate the importance of having the water fluoridated, using the scale of not at all, somewhat or very important. As shown in the next chart, 45% felt it is "very" important and a further 34% said it is "somewhat" important for a total of 79%% who consider water fluoridation to be important. Two in ten (21%) respondents said it was "not at all" important.

Figure 19
Importance of Fluoridated Water



Group Differences

29 Awareness of water fluoridation varied by respondent demographics: homeowners and those living in single-family homes were significantly more likely to be aware than renters and those living in multiple-family dwellings.

The results of additional analyses indicated that those who were **aware of the City of Roseville's fluoridated water** were more likely to:

- own their home (83% vs. rent it, 67%), and
- live in a single-family home (83% vs. a multiple-family dwelling, 62%).
- 30 Ratings of water quality and the importance of fluoridated water were independent of demographic characteristics.

When chi-square analyses were run on the importance of having the water fluoridated, there were no significant differences found between those who felt it was "very" important and those who considered it to be of less importance. In other words, males were just as likely as females, older respondents were just as likely as younger ones, homeowners were just as likely as renters, etc. to say that it was "very" important.

Similar analyses were run to determine whether or not demographic characteristics influenced the ratings of water quality. None of those differences were found to be significant.

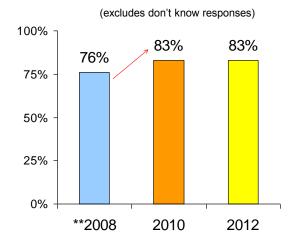


Year-to-Year Differences

31 Current positive perceptions of the overall quality of the water service supplied by Roseville Utilities are the same as in 2010, and up significantly from 76% in 2008.

Year-to-year analyses indicated that respondents remain positive about the Roseville Utilities water service, reporting the same level in 2012 as in 2010. It can be seen in the next chart that the positive ratings (good + excellent) increased by seven points from 76% in the 2008 baseline measurement to 83% in the 2010 results, which remains steady in 2012.

Figure 20
By Survey Year: Positive Ratings of Overall
Quality of Water Supplied to Home



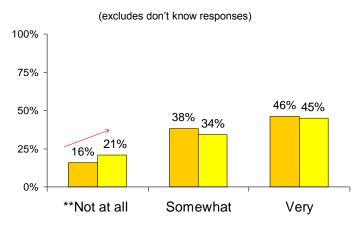
** indicates a significant difference between survey years

• 32 While awareness of fluoridated water remains at 19% among respondents who get their water from the City of Roseville (both in 2010 and 2012), significantly more respondents feel it is "not at all" important now than in 2010 (21% vs. 16%, respectively).

Additional year-to-year analyses were conducted on the questions pertaining to water fluoridation. Results indicated that the awareness level of fluoridated water is identical in 2012 and 2010: both 19%.

However, as shown in the next chart, significantly more respondents felt it was "not at all" important that the water be fluoridated in 2012 than in 2010 (when the question was added to the survey). The City may want to take a closer look at this program after the 2014 survey if the negative ratings continue to increase.

Figure 21
By Survey Year: Importance that the
Water if Fluoridated



Water Efficiency Programs and Rebates

Current Results

32 Overall, no more than half of all respondents were familiar with the water efficiency programs and rebates. The most common one was <u>washing</u> <u>machine rebates</u>. The <u>smart irrigation timers</u> program had the highest level of participation among respondents.

Respondents were asked if they were aware of specific water efficiency programs and rebates offered by Environmental Utilities. If so, a follow-up question asked whether or not they had ever used the program or rebate. Results indicate that <u>washing machine rebates</u> was the program with which respondents were most familiar: half of those surveyed (50%) were familiar with them but had never used these rebates. However, all the programs mentioned were unfamiliar to at least 50% of all respondents, with the highest percentage noted for toilet rebates (65%). A new question was added in 2012 that asked about awareness and use of smart irrigation timers. Its awareness was similar to that of the other programs mentioned.

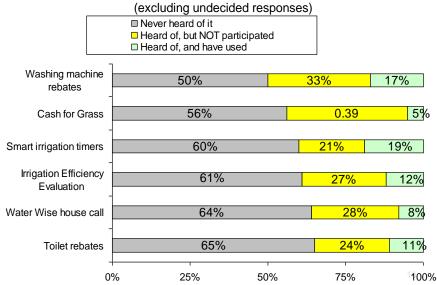
In terms of having taken advantage of these programs, use among all respondents ranged from a low of 5% for Cash for Grass to a high of 21% for smart irrigation timers. The following chart shows both awareness and usage.



Figure 22

Awareness of and Use of Water Conservation

Programs and Rebates

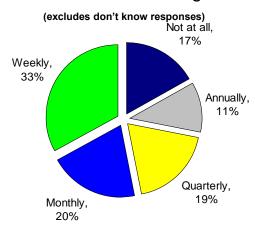


33 Among all respondents, a third water their landscape one to three times per week and at least half check their irrigation system for malfunctions at least monthly (36% and 53%, respectively).

Respondents were asked to estimate the number of times (per week) that they water their landscape during the summer months. The 9% of undecided responses were excluded and the percentages were recalculated. About one in five (23%) said they water every day (or seven times a week), while a third (36%) said they water every other day or less (1-3 times per week).

A follow up question asked about the frequency of inspecting the irrigation system for malfunctions. Nearly a third (33%) said they check their system weekly. About one in five do so monthly (20%) and a similar proportion test their irrigation system quarterly (19%). Eleven percent reported checking their irrigation system annually and 17% said they do not check their system at all.

Figure 23
Frequency of Checking the Irrigation
System for Malfunctions during the Season

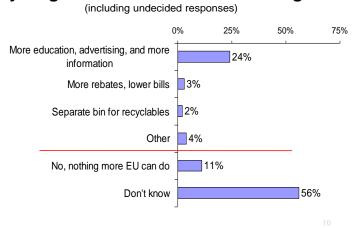


Suggestions for Encouraging Greater Use of Recycling and Water Efficiency Programs

While the majority of respondents drew a blank as to how to encourage the public to use more of Environmental Utilities' programs, 24% suggested increasing the amount of education, advertising, and available information in order to positively affect program participation.

Respondents were asked to identify what Environmental Utilities could do to encourage them to use its recycling and water efficiency programs more frequently. Verbatim responses were entered, and later coded for classification purposes, and results can be seen in the next chart. Overall, the majority had no suggestions (11%) or were undecided (56%).

Figure 24
Suggestions for Encouraging Greater Use of Recycling and Water Conservation Programs





Those who made suggestions were most likely to identify the lack of awareness and the need for more information and program visibility as the problem, which could be addressed through education and advertising. A few representative comments from this category have been given to provide the reader with a flavor of the suggestions:

- "Educate my husband more because I'm the only one that does it.
- "Education and free programs. Easy recycling. Once a month for special pick ups. Make user friendly. Incentive for building compost boxes, and offer a class to build a box, etc."
- "Information education and family programs, presentation to school children K-12 add a display to library."
- "Let me know."
- "Make us more aware of what they are and how to take advantage of them."
- "Put in with the bill, a notice, so you are more aware of it."
- "Send more information to my home. Clear, short, and direct information".
- "Send out a simple flyer, not a whole page full of information."
- "They could come out and talk to us, talk to my husband who does the water system."

Group Differences

35 Homeowners and those living in single-family homes were more aware than renters and those living in multi-family dwellings of the washing machine rebates, the Water Wise House Call program, and the Cash for Grass program.

Similar to what was done for recycling services, results were dichotomized according to whether or not respondents were aware of the water efficiency programs (regardless of whether they had used them). A series of chi-square analyses were run to determine if there were any characteristics that distinguished those who were aware of the programs and rebates from those who had never heard of them. Results indicated that:

Respondents who were aware of washing machine rebates were more likely to:

- be homeowners (54%) than renters (36%),
- be female (58%) than male (43%), and
- live in a single-family home (53%) than in a multi-family type of dwelling (19%).

Respondents who were aware of the **Water Wise House Call program** were more likely to

- own their home (40%) than rent it (20%), and
- live in a single-family home (39%) than an apartment or condo (8%).



Respondents who had heard of the Cash for Grass program were more likely to

- live in a single-family home (47%) than in another type of dwelling (17%) and
- own their home (49%) than rent it (23%).

Respondents who were aware of the **Irrigation Efficiency Evaluation Program** were more likely to:

- live in a single-family home (41%) than an apartment, townhouse or other type of dwelling (14%).
- 36 In terms of water efficiency program participation, females were more likely than males to have used toilet and washing machine rebates.

Similarly, additional chi square analyses were run to determine if the use of the water efficiency program varied by demographic variables. Overall, participation was independent of demographic variables with three exceptions:

Respondents who reported using **toilet rebates** were more likely to:

- live in older homes (pre-1992, 20%) than those in newer dwellings (7%), and
- be female (14%) than male (6%).

Those who reported using washing machine rebates were more likely to:

- be female (24%) than male (10%).
- ❖ 37 Respondents who live in single-family homes and those who are homeowners were more likely than apartment dwellers and renters to check their irrigation systems for malfunctions at least once a month. Respondents who lived in homes built before 1992 were more likely to water 1-3 times per week than those in newer homes.

Those who ensure that their irrigation system is working properly at least once a month were more likely to:

- live in a single-family home (56%) than an apartment or townhome (9%) and
- be a homeowner (55%) than a renter (39%).

In terms of the **frequency of landscape watering** in summer months, respondents who watered less – one to three times a week – were more likely to:

live in older homes (pre-1992, 48%) than in newer homes (27%).



Year-to-Year Differences

Significantly more respondents were aware of the Water Wise House Call program in 2012 than in 2008. Conversely, there was a significant drop in awareness of washing machine and toilet rebates from 2012 to 2010, going back to the levels found in 2008.

Additional analyses were conducted to compare year-to-year results for awareness and use. The first graph compares the level of awareness of each program among respondents, i.e., those who said they had "heard of the program" regardless of use. Significantly fewer people said they had "heard" of the toilet and washing machine rebate programs, indicating a drop in awareness back to the 2008 levels. While more respondents were aware of the Water Wise House Calls program in 2012 than 2010, the difference was not found to be significant; however, the results of both of the recent survey years are statistically higher than the 2008 results. There were no differences found for awareness of the Cash for Grass or Irrigation Efficiency programs.

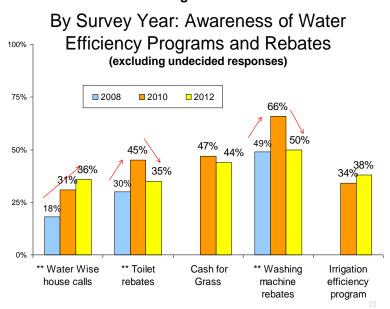


Figure 25

39 Twice as many respondents reported participating in the irrigation efficiency program this year than in 2010 (12% vs. 6%).

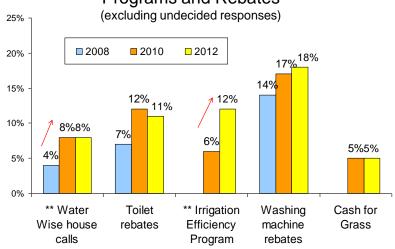
The year-by-year results of the five water conservation programs are shown in the following chart. The level of reported usage for the irrigation efficiency program doubled in 2012 from 2010, jumping significantly from 6% to 12%. Usage of the washing machine rebates, Water Wise House Calls, toilet rebates and Cash for Grass remained fairly stable when compared with the 2010 results.

^{**} indicates a significant difference between survey years

Figure 26

By Survey Year: Use of Water Conservation

Programs and Rebates



^{**} indicates a significant difference between survey years

40 Frequency in landscape watering and irrigation system testing remained consistent with the 2010 results.

The results of additional analyses showed no statistically significant differences by survey year as to the rate at which respondents water their lawns and landscapes as well as for how often they check their irrigation systems

FOG Program

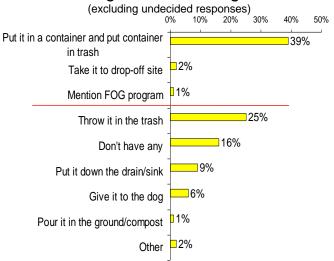
Current Results

41 Four in ten respondents properly dispose of their household's cooking fats, oils, and grease. They put it in a sealed container and then into the trash, take it to the drop-off site, or specifically mentioned the FOG program.

A series of questions asked about household disposal practices of fats, oils, and grease (FOG) and awareness of the FOG program. First, respondents were asked how they typically dispose of these types of household waste in an openended format. Responses are presented in the next chart. Four in ten respondents reported they correctly handle the disposal of this type of waste by putting it in a separate container first before putting it in the trash (39%). Two percent (2%) said they take it directly to the drop-off site. Only 1% mentioned the FOG program. A third of those surveyed practiced the undesired behaviors of

simply tossing it in the trash (25%) or pouring it down the drain (9%). Six percent feed it to their dogs and 2% bury it in the ground outside. Sixteen percent reported no usage of any fats, oils or grease or no leftovers to dispose.

Figure 27
How households typically dispose of cooking fats, oils, and grease

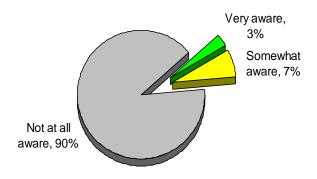


42 The FOG program is unfamiliar to most respondents – only 10% of those surveyed were aware their household cooking fats could be picked up for free. Literally none of the respondents (zero out of the 400 respondent base) had used the FOG program within the last 6 months.

Respondents were next asked whether or not they had heard of the FOG program, described as one "which picks up cooking fats, oils, and grease at your door step for free?" Results indicated that the only one in ten (10%) of respondents were either "somewhat" (7%) or "very" (3%) aware of this grease removal program. In other words, most respondents were unaware (90%). Those who were aware of the FOG program were then asked if they had used it in the last six months. All responded negatively.

Figure 28

Awareness of FOG Program



Group Differences

43 Awareness of the FOG program was independent of demographic characteristics.

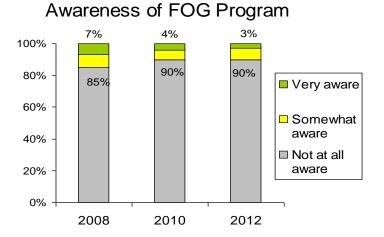
When chi-square analyses were run on the awareness of the FOG program, there were no significant differences found for any demographic characteristics.

Year-to-Year Differences

44 Although awareness of the FOG program remains low and unchanged from 2010, disposal practices of household fats, oils and grease appear to be shifting to a more desired behavior. Significantly more respondents (39%) reported putting their household FOG in a container before throwing it in the garbage compared with only 5% in 2010 and 6% in 2008. Likewise, there was a significant drop in the number of respondents who threw their FOG directly in the trash, from the 59% in 2010 to 25% in 2012.

Awareness of the FOG program by survey year is presented in the next graph. It can be seen that awareness has remained consistent over the survey years. Any differences noted were not found to be statistically significant.

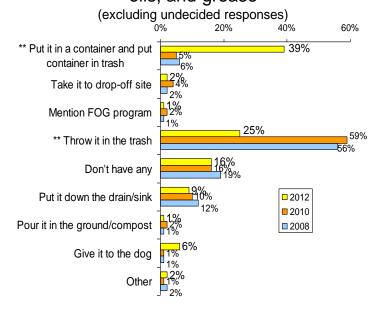
Figure 29



Further analysis compared the reported FOG disposal behaviors of the current survey with those from the previous two surveys. As shown in the next chart, a major shift has occurred as significantly more respondents reported putting their FOG in a container before putting it in the trash (39% in 2012 vs. 5% in 2010). This was offset by a decrease in those that said they simply throw it in the trash (25% in 2012 vs. 59% in 2010). However, the percentage who mentioned the FOG program specifically or said they take it to the drop-off site remained the same.

Figure 30

How households typically dispose of cooking fats, oils, and grease





Stormwater Awareness and Treatment

Current Results

45 Almost half (44%) of all respondents were aware that everything that enters storm drains is <u>not</u> treated or filtered. However, more than a third (38%) were misinformed (and thought it was treated) and 18% did not know.

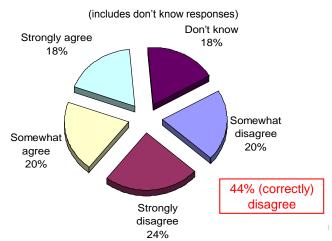
Awareness of whether or not stormwater is treated was assessed by asking respondents to agree or disagree with the following statement:

"Everything that enters storm drains is treated and filtered to remove pollution."

First of all, about one in five respondents (18%) simply "did not know." The combined percentage of respondents who disagreed (and were therefore correct) was 44%: 20% "somewhat" disagreed and a further 24% "strongly" disagreed with the statement. The combined percentage of respondents who agreed (and were therefore wrong) was 38%.

Figure 31

Everything that enters storm drains is treated and filtered to remove pollution



Group Differences

46 Awareness of the stormdrain process was independent of respondent demographics.

The responses were dichotomized into agree and disagree, the undecided responses were removed, and chi-square analyses were run to determine any differences in awareness of the lack of stormwater treatment by demographic groups. None of the 9 demographic variables emerged as significant. In other words, older respondents were just as likely as younger, high school educated were just as likely as college educated, males were just as likely as females, etc. to believe (or not) that what goes down the storm drain is treated and filtered.



Year-to-Year Differences

47 Awareness of stormwater treatment was very similar to that from previous surveys.

The current results of stormwater treatment awareness were similar to the results from the previous surveys: 44% in 2012, 49% in 2010, and 49% in 2008 disagreed with the statement they heard, indicating their knowledge of the stormwater treatment process.

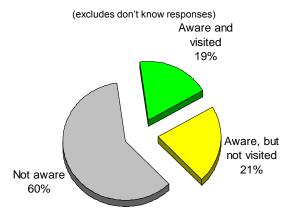
ROSEVILLE UTILITY EXPLORATION CENTER

Current Results

48 Four in ten respondents were aware of the City's Utility Exploration Center, half of whom (19%) reported already having been there.

Respondents were asked if they had heard of a learning center focused on educating visitors about energy efficiency, renewable technology, water conservation and recycling in a fun, engaging way, called the Utility Exploration Center. One in five respondents (19%) was aware of the Center and had already visited it. A very similar percentage (21%) reported having heard of it but had not been there yet, for a total of 40% who were aware of the Utility Exploration Center. The remaining 60% said they did not know it existed.

Figure 32
Awareness of City's
Utilities Exploration Center



49 One in two respondents who visited the City's Utility Exploration Center did it out of their own curiosity (26%) or with children (24%).

The respondents who visited the Center were asked to identify the main reason for their visit. Half went to see what the center had to offer, either with children (24%) or out of their own curiosity (26%). Twenty percent said the center's proximity to the library drew them in. All reasons for going to the Center are listed in the following table.

Table 4

MAIN REASON FOR VISITING THE CITY'S UTILITY EXPLORATION CENTER	PERCENT OF THOSE WHO VISITED
Curiosity	26%
Took children or grandchildren	24%
It's located next to the library.	20%
On a school or scouts fieldtrip	8%
Took a class there	5%
Green Day (Energy Conservation) Fair	3%
Other (10 responses)	14%

Group Differences

• 50 Awareness of the City's Exploration Center was higher among those with at least a four-year college education, while visitation was related to living with children, having newer (1992+) homes, and being 35 to 54 years old.

Chi-square analyses were run to determine any characteristics that distinguished those who were aware of the exploration center from those who were not. Results indicated that those who were **aware of the City's Utility Exploration Center** were more likely to:

- hold (at least) a 4-year college degree (48% vs. not, 29%).

Similarly, respondents who **visited the Center** were more likely to:

- reside with children (30% vs. not, 15%),
- live in a home built since 1992 (26% vs. in an older home, 11%), and
- be between 35 and 54 years old (27% vs. 55+, 14%).

Year-to-Year Differences

51 Awareness of and visitation to the Exploration Center was similar to that found in the previous 2010 survey results.

The current results of the awareness of and the visitation to the Exploration Center were practically the same as they were in 2010, when the question was added. Any slight differences in the percentages were not found to be statistically significant.

COMMUNICATION

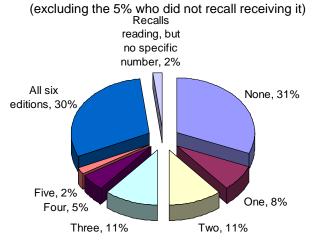
Evaluation of EU Today Newsletter

Current Results

• 52 Three in ten (30%) respondents said they have read every edition of EU Today in the last year. However, a similar number (31%) reported reading none of them. The median number of newsletters read is two.

As in previous surveys, respondents were asked about EU Today, Environmental Utilities' newsletter that is sent to customers every other month with the utility bill. When respondents were asked: "Of the six newsletters that were sent to your home in the past 12 months, about how many did you read?" responses ranged from none (0) to all six. Five percent said they did not recall receiving the newsletter. Among those who did, the median⁸ number of newsletters read was two. The next graph shows⁹ the largest groups either reading none (35%) or all six (26%).

Figure 33
Frequency of Reading the EU Today
in the last 12 months



Group Differences

53 Loyal EU Today readers (i.e., those who read every issue) were more likely to be at least 55 years old, be a homeowner, live alone or with one other person, and not in a household with children.

⁸ The median represents the 50th percentile, with half of the responses falling above this number and half falling below it.

⁹ Percentages reported exclude the 5% who said they did not recall ever receiving a newsletter.



Additional analyses indicated that those who **read every edition** of EU Today were more likely to:

- live in a one- or two-person household (34% vs. with at least two others, 17%),
- be a homeowner (30% vs. a renter, 11%),
- not live with children (30% vs. with children, 15%) and
- be at <u>least 55 years of age</u> (37%) than be younger (13%).

Year-to-Year Differences

❖ 54 The EU Today is read with the same frequency now as it was in 2010.

Further chi-squared analysis indicated that the percentage of loyal readers has fluctuated a little (28% in 2008, 31% in 2010, and 26% in 2012); however, these differences were not found to be statistically significant. Similarly, the proportion of respondents who reported not reading any editions of EU remained fairly consistent (32% in 2008 and 2010 to 36% in 2012). Additionally, the current mean number of newsletters read (2) is the same as it was in the 2010 survey.

Preference for Communication Channel

Current Results

Outreach will its greatest impact and reach the broadest group of Roseville residents if Environmental Utilities uses a mixed media approach to communication in order to provide customers with information about its programs and services. Six in ten respondents identified printed material via the mail as the best way to communicate with them, such as a bill insert (28%), a separate mailing (24%), or a blurb in the EU Today newsletter (8%). However, 32% also said e-mail was the best way to provide them with information.

Respondents were asked to identify their communication preference in an openended question in order to better understand how residents would like to receive information from Environmental Utilities. The most common response was in an e-mail, with three in ten respondents (32%) citing electronic communication as their communication preference. However, combining those who suggested a bill insert (28%), with those who wanted a separate mailer (24%) and the few (8%) who mentioned including it in the EU newsletter, indicates that 60% of all respondents expressed a desire for a print option. All other options were mentioned by less than 5% of respondents.

Group Differences

56 Age, income, living with children and in a household of at least three members differentiated those who preferred getting information via an email from those who did not.

Additional analyses were run to identify demographic characteristics that differentiated the various types of communication channels. There were several characteristics that identified those who selected e-mail as their preferred method of receiving information. Respondents who **favored e-mail** were significantly more likely to:

- live with children (42% vs. not, 28%),
- live with at least two other people (43% vs. in households with one or two persons, 24%),
- be younger than 65 old (38% vs. 65+, 19%), and
- have household earnings of at least \$100,000 (46% vs. a lower annual income level, 26%).

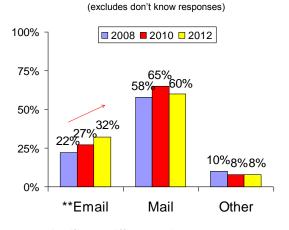
Year-to-Year Differences

• 57 Significantly more respondents said they want to receive e-mail communications now than in 2008, although the increase from 2010 was not found to be statistically significant.

As shown in the next chart, the preference for e-mail has slowly increased since the baseline survey in 2008. Although the current results are <u>not</u> statistically different from the 2010 results, they are from the 2008 results. In other words, significantly more respondents want to have Environmental Utilities information e-mailed to them now than in 2008 (32% vs. 22%).

Figure 34

By Survey Year: Communication Preference



^{**} indicates a significant difference between survey years



SUGGESTION FOR IMPROVEMENT

❖ 58 Among the 54% of the respondents who offered suggestions to improve the service provided by Environmental Utilities, responses included lower prices, provide more information and communication, separate recycling bins, more green waste pick ups, and improve water quality.

Finally, respondents were asked to think of "one thing that Environmental Utilities could do to improve its service." About half (46%) had no suggestions, which included those who were undecided as well as those who said they were happy with their current service. Respondent suggestions were reviewed and categorized. The most common responses were to reduce costs (16%) and increase awareness (14%). A few respondents had comments about water quality (5%). Others requested multiple recycling bins (5%), discussed other recycling issues (2%), and wanted more frequent green waste pick ups (3%). The following comments provide the reader with a sample of what was suggested.

Although the vast majority simply said "lower my rates" or "reduce prices," other **pricing and rebate suggestions** included:

- "Better more enticing rebates."
- "Look at the costs of using the utilities versus the resident's income. They haven't offered nothing new but costs keeps escalating."
- "Lower the bill for the elderly."
- "More solar rebates for people with solar power."
- "They charge a flat rate or tier for water usage and I think I am paying more than I should."

Among those who suggested increased awareness, education and improved communication, comments included:

- "Be more specific about what is available, and keep bombarding us."
- "Better awareness/listings of rebates for different programs and better rates for service."
- "Better communication to help us recycle better."
- "Better customer service and more materials to explain their services. More information about the process of recycling. More information given to newcomers."
- "Communicate more about programs and service, in a e-mail or on the door."
- "Host community forms."
- "I'd probably say find a way to get the word out about the programs and services that were offered. I wasn't aware of the ones that were mentioned but now can look into them and see what I can take advantage of."
- "Just communication."
- "Make me more aware of the cash for grass and water wise house, and FOG."
- "More information."
- "Public awareness."
- "Send e-mails instead of EU Today."



Some respondents wanted better water quality, including the removal of the fluoridation:

- "Could make the water taste better, I don't drink it, it taste like crap."
- "I'm concerned about the drinking water. I want them to do their best to make sure it's safe."
- "Improve water quality."
- "Include a lot of things to clean the water and the service more often than they do."
- "Less chlorine in the drinking water. Can smell chlorine in the water."
- "Need more water pressure."
- "Stop fluoridating the city water supply."
- "The water is too hard and it contains too much calcium. It clogs the pipes. I have heard that a lot of people are having trouble with that."
- "Why is dirt coming in my toilet water?"

There were several comments about the **recycling program**, mainly requests for **separate recycling bins** instead of the "one big bin":

- "Give me another recycle bin, cans, and bottles.
- "Have a much better recycling program. I don't trust the one they have now. I think at least separating would help and make it much easier to recycle."
- "Have separated recycling picked up."
- "Having our own bin for recycling."
- "I don't want to put all my trash in one bin."
- "I would like another bin to put papers and plastic, glass, and aluminum, and styrofoam, too."
- "I would like to make it easier to dispose of things. I am unsure of the way to dispose of them especially electronics."
- "I would love it if I could have them pick up or have a drop-off sites for expired medicines. Have a pick-up date advertised in the paper."
- "More recycling."
- "Provide extra cans for recyclables."
- "Recycle bin for cardboard, newspapers, glass, and plastic."

A few suggestions indicated more frequent green waste pick up:

- "Green Waste in Fall time. More than bi-weekly pick-ups."
- "I would like to see the greenways picked up more often than every other week, especially during the summer months. I pull a lot of leaves and branches off the property."
 - "Increase my green waste pick up to weekly."
- "More green waste pickup frequency during summer and fall."
- "Pick up green waste every week during the fall."
- "Probably pick up the green every week in the Fall."
- "The green pickup could be weekly instead of twice a month. It would be better if it were weekly in the summer months."

A few mentioned other types of recycling that could be increased:

- "Collect paint cans and things like that."
- "Have a collection program compact florescent bulbs."
- "Have collection sites for prescription drugs more often."
- "Make it easier disposal of medications, paint, etc."
- "More availability of CRV Redemption."
- "More dates for the medicine recycle programs."
- "More numbers for database pickups."



- "More regular service for light bulb pickup."
- "Motor Oil Pick-Up service."
- "Offer those pick ups for batteries and electronics and foil, stuff like that a little more often, maybe."
- "Pick up large electronics like TVs, refrigerator, and computers."
- "Reinstate electronic waste pick up at the door."
- "Would be nice for a place to put batteries in the condo complex."

DEMOGRAPHICS

❖ 59 A plurality of respondents were: females who were familiar with the utility bill (and service) who have lived in Roseville for less than 20 years, and own and live in a single-family home built before 1992. They hold a college degree, have access to the Internet from a home computer, are at least 45 years of age, live alone or with other adults (no children) and have an annual household income of at least \$50,000.

Table 5 provides the respondent demographics from the interviews conducted with the 400 Environmental Utilities residential customers in the Fall of 2012.

Table 5

GENDER	PERCENT
Female	55%
Male	45%
Total	100%

Home Ownership	PERCENT
Own	80%
Rent	17%
Live with others	1%
Non-response	2%
Total	100%

COMPUTERS IN HOME WITH INTERNET ACCESS	PERCENT
Yes	89%
No	9%
Non-response	2%
Total	100%



<u>City of Roseville - Roseville Environmental Utilities</u> 2012 Residential Customer Telephone Survey Summary Report of Survey Results ~ December, 2012

TYPE OF HOUSING UNIT	PERCENT
Single-family unit	89%
Townhouse/condo/apartment	9%
Other	2%
Non-response	0%
Total	100%

YEAR HOME WAS BUILT	PERCENT
Pre-1960	5%
1960 – 1979	14%
1980 – 1991	14%
1992 – 1999	23%
2000 – 2006	13%
2007 – 2011	12%
Non-response	8%
Not asked (live in apt/condo)	11%
Total	100%

REPLACED ORIGINAL TOILETS	PERCENT AMONG HOME BUILT PRE- 1992
Yes	71%
No	25%
Don't know	4%
Total	100%

YEARS LIVING IN ROSEVILLE	PERCENT
Less than 5 years	24%
5 – 9 years	15%
10 – 19 years	32%
20 – 29 years	13%
30+ years	14%
Non-response	2%
Total	100%



<u>City of Roseville - Roseville Environmental Utilities</u> 2012 Residential Customer Telephone Survey Summary Report of Survey Results ~ December, 2012

TOTAL NUMBER OF HOUSEHOLD MEMBERS	PERCENT
Live alone	18%
Two people	39%
Three people	17%
Four people	14%
Five or more people	10%
Non-response	2%
Total	100%

LIVE WITH CHILDREN UNDER 18	PERCENT
No	47%
Yes	33%
N/A Live alone or non-response	20%
Total	100%

EDUCATION	PERCENT
High school or less	9%
Some college/trade/ vocational school	25%
Trade/vocational school	6%
College degree	36%
Post-graduate degree	21%
Non-response	3%
Total	100%

Age	PERCENT
18-24	3%
25-34	6%
35-44	16%
45-54	19%
55-64	20%
65 and older	36%
Refused	<1%
Total	100%



2011 ANNUAL HOUSEHOLD INCOME	PERCENT
Under \$15,000	4%
\$15,000 to \$34,999	9%
\$35,000 to \$49,999	11%
\$50,000 to \$34,999	15%
\$75,000 to \$99,999	16%
\$100,000 to \$74,999	27%
Non-response	18%
Total	100%

RECOMMENDATIONS

Based on the current survey results presented in this report, Aurora Research Group recommends that Environmental Utilities:

- Continue to...
 - satisfy its customer base by maintaining its overall high quality and offering responsive customer service
 - stress the value of what residential customers get for their money.
 - inform and educate its residential customers about EU's programs and services, particularly the Integrated Pest Management program, water conservation programs and rebates, and the FOG program
 - promote the reasons for using recycling drop-off sites and conserving water,
 - shorten the length of time customers are kept on hold when calling EU,
 - educate customers about stormwater pollution, and
 - use printed marketing materials and announcements (inserts, letters, door hangers, etc.), as well as e-mail communications.
- Encourage residents to visit the Exploration Center in a way that appeals to children and their own curiosity.
- Keep rates down and offer money-saving tips.
- Communicate with residential customers in a multi-modal format in order to reach the largest group of customers.
- Share the results of this survey with customers to demonstrate that they are being heard.