

East Bay Municipal Utility District Residential Customer Opinion Survey 2008

Prepared by:

EMC Research, Inc.
436 14th Street, Suite 820
Oakland, California 94612
(510) 844-0680

Prepared for:



East Bay Municipal Utility District
375 11th Street
Oakland, California 94607-4240

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INTRODUCTION

The East Bay Municipal Utility District (EBMUD) commissioned EMC Research (EMC) to conduct quantitative opinion research in order to evaluate changes in performance measures from the 2004-2007 research and to enhance the findings from that research. The previous research, through surveys and focus groups, found water quality issues to be a driving factor in the public's perception of EBMUD; water quality questions remained in this survey so that perception changes could be monitored. The current survey also broadened the examination of customer awareness of 2007 requests for voluntary water conservation measures and customer willingness to comply with the suite of typical mandatory actions EBMUD has adopted in the past to reduce customer water use.

This report presents current information on customer opinions, compared to the previous research when applicable, on the following topics:

- Levels of concern regarding water issues in the Bay Area
- Job ratings for Bay Area utilities
- Ratings of how well EBMUD carries out its job responsibilities
- Credibility of individuals and organizations that speak out on water issues
- Water usage and conservation
- Identification of water conservation awareness
- Participation in water conservation
- Average daily water use
- Ability to store and deliver a reliable supply of water
- Willingness and actions taken to reduce water use
- Yard or garden care
- Effects of global climate change on water supplies

General recommendations and recommendations for future customer research are presented at the end of the report.

METHODOLOGY

This survey report is based on the results of 1,248 interviews conducted among residents in the East Bay Municipal Utility District service area ages 18 and older. Respondents were selected at random and interviewed by telephone by trained professional interviewers during the weekend and weekday evening hours of February 25 – March 9, 2008. The margin of error for the overall results is $\pm 2.8\%$ at the 95% confidence level. The margin of error for demographic and attitudinal subgroups of the sample is larger and varies depending on the size of the subgroup. The survey is offered in both English and Spanish.

The sample for this random digit dial telephone survey was drawn from zip codes within the EBMUD service area. Respondents living in zip codes served by another water district and who self-identified as having a non-EBMUD provider were excluded from the survey. When applicable, this survey is compared to four previous random digit dial telephone surveys that drew samples in the same methodological manner.

In 2007, 1,200 interviews were conducted between February 5 – 11; the survey had a margin of error for the overall results of $\pm 2.8\%$ at the 95% confidence level. In 2006, 1,201 interviews were conducted between February 9-20; the survey had a margin of error for the overall results of $\pm 2.8\%$ at the 95% confidence level. In 2005, 1,209 interviews were conducted between February 13-20 and the survey had a margin of error for the overall results of $\pm 2.8\%$ at the 95% confidence level. In 2004, 1,555 interviews were conducted, including an over sample of 305 interviews with a customer subset of residents that had called and/or visited an EBMUD office in the previous six months. The 2004 survey was conducted between February 2-12 and had a margin of error for the overall results of $\pm 2.5\%$ at the 95% confidence level.

Between 2004 and 2008, the percentage of respondents expressing a specific opinion may have changed by a few percentage points on several topics. Many of the observed differences are within the overlapping boundaries of the margin of error for two surveys (e.g. at the 95% confidence level, a 2004 finding of 68% support, with a margin of error of ± 2.5 percentage points, has a boundary of 65.5% to 70.5% and a 2005 finding of 64%, with a margin of error of ± 2.8 percentage points, has a boundary of 61.2% to 66.8%). The 2008 survey adds a fifth year of

data point that provides additional clarity in identifying trends. With five years of data we are able to clearly identify consistencies and where there are true changes in opinion.

As data points are added over time, there is an increasing need for a method to clearly identify and track data changes. An index was created to do this; it provides an indexed score for job performance questions that are asked on a scale of excellent, good, only fair, or poor. The index codes “excellent” responses as a 4, “good” responses as a 3, “only fair” responses as a 2, and “poor” responses as a 1. “Don’t know” responses are removed from the index so that it provides an average of the responses only among those who offered a rating. Aside from providing a clear method to identify and track data changes, the index also offers an additional method to compare specific job ratings, and their levels of intensity, within the same time period.

Significance and Intensity

Throughout this report, when findings are mentioned as “significant,” they are statistically significant at the 95% confidence level based on a chi-square analysis test – meaning that when other factors are held constant, the responses of the two populations are different. Additionally, where respondents expressed strongly positive or strongly negative opinions, those findings are characterized as “intense.” This stronger intensity typically indicates that the opinions are more likely to be based on personal experience or extensive information. It also indicates that the opinions are less likely to change.

SUMMARY OF KEY FINDINGS

Overall, there continues to be a high level of satisfaction with the job that East Bay Municipal Utility District (EBMUD) is doing. While the ratings for EBMUD have remained constant, ratings for other utilities have fallen.

As with previous years, EBMUD receives the highest job ratings of all the utilities tested (EBMUD 69% excellent or good / 21% only fair or poor) with a 48 percentage point difference between its positive and negative ratings. Over the last four years, EBMUD's rating has remained high with a 69% positive rating in '08, 70% in '07, 70% in '06, 66% in '05, and 72% in '04. EBMUD also received the highest percentage of "excellent" ratings of all utilities with 17% (17% in '07, 18% in '06, 14% in '05, 17% in '04). The index score for EBMUD is 2.94 on a 4 point scale where 4 is excellent, 3 is good, 2 is only fair and 1 is poor. The index was 2.94 in '07, 2.90 in '06, 2.85 in '05 and 2.94 in '04.

EBMUD's key strengths continue to be service reliability, water quality, and water supply.

With regard to specific responsibilities, EBMUD continues to receive its highest ratings for reliable water service (87% excellent or good, 87% in '07, 86% in '06, 86% in '05, 88% in '04), ensuring quality drinking water (69%, 71% in '07, 69% in '06, 69% in '05, 71% in '04), and ensuring that there is adequate water supply (69%, 72% in '07, 73% in '06, 73% in '05, 78% in '04).

The vast majority of residents have heard something recently about water conservation. About a third of those who have heard something say the message was specific to EBMUD customers.

Seven out of ten (70%) have heard something in the past 6 to 8 months about water conservation. Among those who have heard something, about one-third (32%) recall a message that was specific to EBMUD customers. Awareness has increased dramatically since last year. In 2007, half of all residents (52%) recalled hearing or seeing something recently about water conservation.

There is a disparity between recent customer-reported conservation actions and recent residential water use. Residents overestimate their conservation efforts. Despite the disparity between actual conservation and perceived conservation, residents express a strong willingness to do more to save water.

Of eight water saving measures tested, over 40% of respondents report having already done five. Similar water saving measures were tested in 2007 and 9% reported having already done those. However, water use did not decrease commensurate with this change, despite customer awareness of calls for voluntary water conservation.

Over half of residents say they have already or (in 2008) will install water-flow restrictors in shower heads and faucets (66%), replace toilets with a low-flow model (62%), set irrigation timers to not more than three times per week (59%), replace old washing machines with a water efficient model (58%) and landscape yards with low-water use plants (among those with yards or gardens; 64%).

During a severe drought, residents feel it would be easy for them to take many of the specific steps to conserve water that EBMUD has mandated in prior serious droughts.

More than two-thirds of residents say it would be easy for them to repair water leaks or running toilets within one week of noticing the problem (86%), not use water to clean sidewalks and other hard-surfaced areas (79%), limit the amount of water used during the summer (77%), water outdoors on days specified by EBMUD (among those with yards or gardens; 85%), make sure water does not run off onto patios or sidewalks (among those with yards or gardens; 82%) and not do any planting in the yard or garden (among those with yards or gardens; 71%).

EBMUD is seen as a good environmental or green business.

Nearly half (47%) say EBMUD is doing an excellent or good job at being a good environmental or green business, while 22% say only fair or poor. The positive to negative ratio is better than 2:1. At the extremes, 10% say EBMUD is doing an excellent job and only 3% say EBMUD is doing a poor job.

More residents are using their tap water for drinking water at home.

A majority of residents (51%) say they use their tap water for drinking water at home. This is the highest rate compared to the last three years (45% in '07, 44% in '06 and 47% in '05). Other sources of drinking water at home include filtered water (26%) and bottled water (21%).

EBMUD is a highly credible source of information regarding water issues.

Better than eight out of ten (85%) say EBMUD is a believable source of information regarding water issues. In previous surveys, residents were asked if they trusted EBMUD about water issues. The results have been consistent with 83% saying they trusted EBMUD in 2007, 84% in '06, and 86% in '05.

Residents believe storing and delivering a reliable supply of water is a problem throughout California.

A plurality (48%) believe there is a problem with storing and delivering a reliable supply of water to the EBMUD service area. On a 1-7 scale where one means “not a problem at all” and seven means “severe and critical problem”, 48% gave a rating 5, 6 or 7. The mean score on the 7-point scale is 4.39. Compared to other parts of the state, residents believe the problem is much worse elsewhere. The mean score for Southern California is 5.74, the mean score for all of California is 5.11 and the mean score for the Bay Area is 4.60.

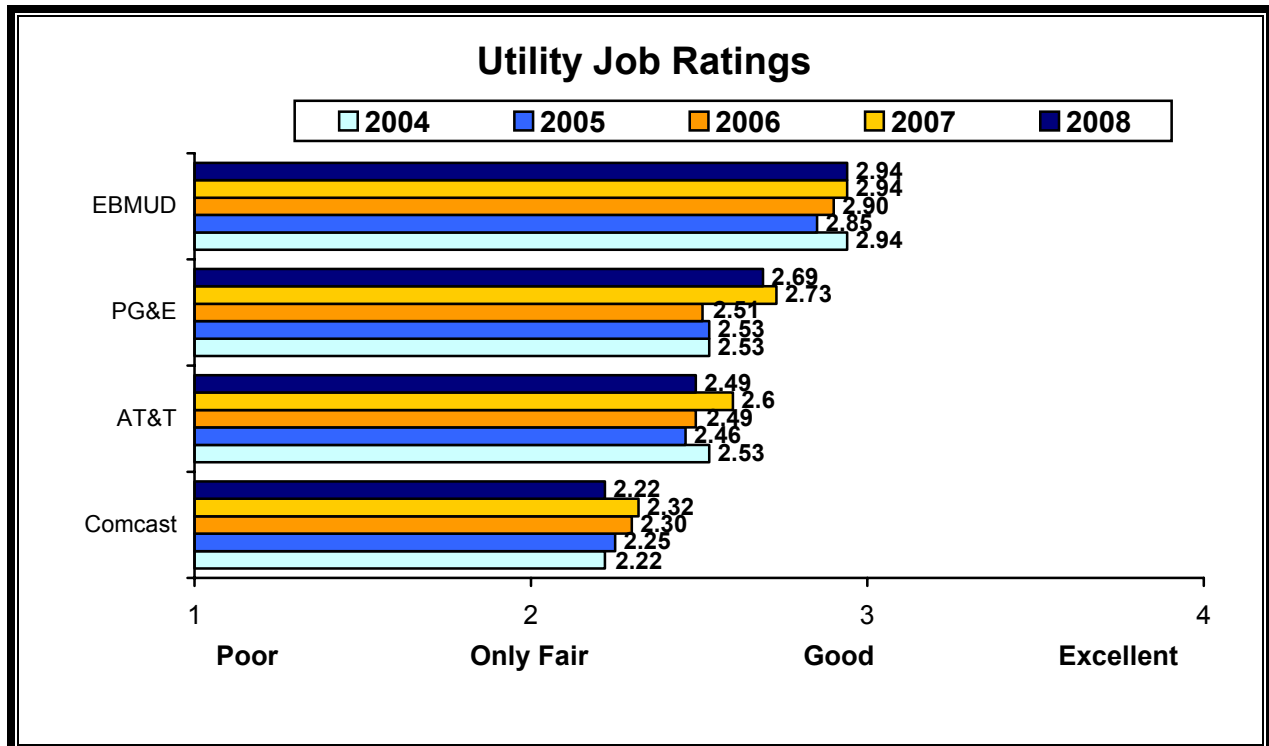
Factors That Negatively Affect EBMUD's Job Rating

- Negative perception of the quality of their tap water for drinking.
- Concern about water availability during a drought.
- Concern about protecting the San Francisco Bay.
- Negative perception of EBMUD's work ensuring the quality of drinking water.
- Negative perception of EBMUD's work ensuring the reliability of water supply.
- Negative perception of EBMUD being a poor green or environmental business.
- Negative perception of EBMUD's response to customer service problems.
- Negative perception of EBMUD's customer service hours.
- Negative perception of EBMUD's website.
- Perceived lack of credibility when it comes to providing information on water issues.

DETAILED FINDINGS

Utility Job Ratings

The positive job rating for EBMUD continues to be highest of all the utilities tested. With an index score of 2.94, nearly seven-in-ten (69%) rate EBMUD positively and 21% rate it negatively.



- The index score assigns numerical values to the ratings such that “poor” is 1, “only fair” is 2, “good” is 3, “excellent” is 4, and those unable to provide a rating are removed from the calculation.
- A positive job rating is the combined percentage rating the overall job the utility is doing as either “excellent” or “good.” A negative job rating is the combined percentage rating the utility either “only fair” or “poor.”
- EBMUD’s positive job rating does not have strong intensity (17% rate it “excellent”) but it is of a higher intensity than the job ratings of all other utilities tested.

- EBMUD's positive (excellent / good) to negative (only fair / poor) job rating ratio is 3.29:1. The ratio was 3.50:1 in '07, 2.92:1 in '06 and 2.75:1 in '05 and 3.60:1 in '04.
- The ratio of those rating EBMUD as "excellent" (17%) to the small segment that rates the utility as "poor" (2%) is 8.50:1, this matches the intensity in 2007. In comparison, this ratio of intensity was 6:00:1 in '06, 4.67:1 in '05 and 5.67:1 in '04.
- Residents that have a higher positive job rating tend to be residents that live east of the hills (78% positive), retirees (77% positive), households that earn over \$75,000 per year (75%), home owners (74% positive), residents over 55 years old (74% positive), white (74% positive) and those that have heard something about water conservation recently (74% positive).
- Regionally, residents living in Ward 2 (78%) give EBMUD the highest positive job rating. Residents living in Ward 5 (64%) and Ward 6 (63%) give EBMUD a lower rating than the overall population. The difference between the overall population and residents living in Ward 1 (72%), Ward 7 (70%), Ward 3 (68%) and Ward 4 (68%) is statistically insignificant.
- Among those giving EBMUD a negative job rating, 55% rate the quality of their tap water a highest concern and 59% rate having enough water available in a major drought a highest concern.
- Among those giving EBMUD a negative job rating, 56% also negatively rate the job that EBMUD is doing in preparing for the effects of climate change on future water supplies, 55% also negatively rate the job EBMUD is doing protecting water supplies against natural disaster, 54% negatively rate the job EBMUD is doing with ensuring the quality of water we drink, 53% negatively rate the job EBMUD is doing treating waster water before it is discharged into the Bay and 52% negatively rate the job EBMUD is doing with encouraging customers to conserve.
- Nearly six out of ten (58%, 67% in '07, 67% in '06) of those unable to rate EBMUD are not homeowners. Among renters, nearly seven out of ten (70%) of those unable to rate EBMUD are those whose landlords pay the water bills.

- Differences also exist in the perception of water storage and delivery. Using a scale of one to seven where one means not a problem at all and seven means a severe and critical problem, residents rated how severe a problem the EBMUD service area has in delivering and storing a reliable supply of water. Those giving EBMUD a positive overall rating believe there is less of a problem when it comes to delivering and storing water than who give EBMUD a negative overall rating. Among those giving a positive rating to EBMUD, 13% rate the problem as a 7 with a mean score of 4.31. Among those giving a negative overall rating to EBMUD, 19% rate the problem as a 7 with a mean score of 4.66.
- While there is a difference between EBMUD's credibility among those who rate EBMUD positively and its credibility among those who rate EBMUD negatively, EBMUD is still highly credible among those who rate EBMUD negatively. Overall, 85% say EBMUD is believable when it comes to water issues. Among those who give EBMUD a positive rating, 88% say EBMUD is believable and among those who give EBMUD a negative rating, 79% say EBMUD is believable.
- The overall rating for EBMUD is also related to household drinking water. Among those who rate EBMUD positively, 19% say they use bottled water at home while 28% of those who rate EBMUD negatively use bottled water home. Among residents that give EBMUD a positive rating, most (55%) use tap water for their drinking water at home. For those who give EBMUD a negative rating, less than half (42%) say they use tap water for drinking water.

Demographic differences in EBMUD's overall job rating have varied from previous years.

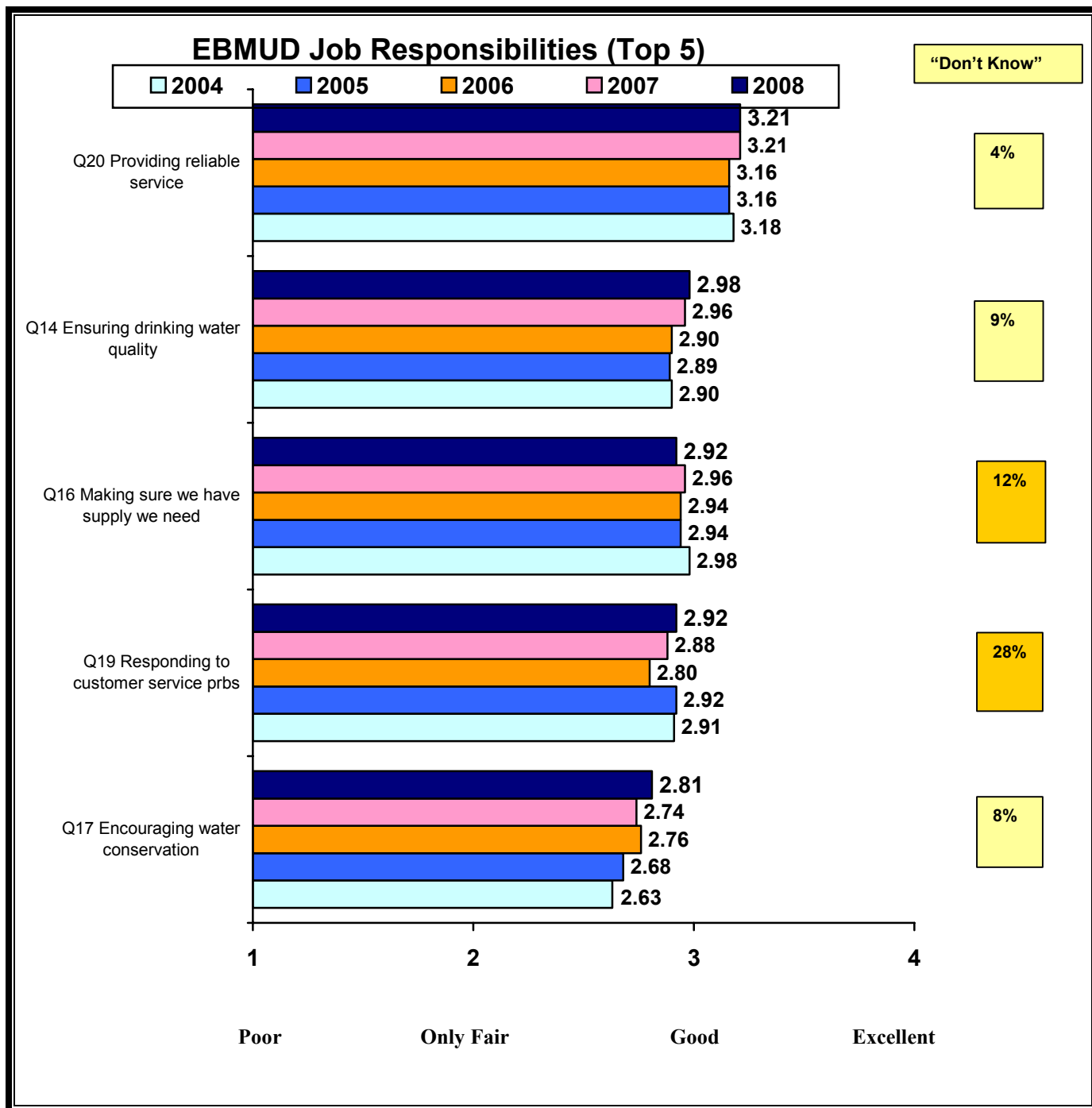
- EBMUD's index score among residents living East of the Hills is higher than those living West of the Hills. (East: 3.06, 2.95 in '07, 3.01 in '06 / West: 2.91, 2.94 in '07, 2.88 in '06)
- EBMUD's index score is highest among residents living in Ward 2 (3.06). The rating difference among residents living in Ward 1 (2.95), Ward 3 (2.95) and Ward 4 (2.97) Ward 7 (2.88) compared to the overall population (2.94) is statistically insignificant. Ratings among residents in Ward 5 (2.85) and Ward 6 (2.84) are significantly lower than the overall population.
- There is little difference between men and women. Women are slightly more likely than men to give EBMUD a higher rating. Men provide EBMUD with an index score of 2.89 (2.99 in '07, 2.97 in '06 and 2.88 in '05) and women with a 2.97 (2.89 in '07, 2.84 in '06, 2.83 in '05); 67% of men and 70% of women rate EBMUD's job as "excellent" or "good."
- Those who report using mostly bottled water for drinking water at home give a lower rating to EBMUD (2.78, 2.75 in '07) than those who report using filtered (2.89, 2.91 in '07) and those who report using tap (3.02, 3.07 in '07).
- Homeowners continue to rate EBMUD more positively (2.98, 3.03 in '07, 2.97 in '06, 2.91 in '04) compared to renters (2.84, 2.79 in '07, 2.79 in '06, 2.74 in '04).
- Residents of single family homes rate EBMUD more positively (2.95) than residents in multiunit buildings (2.88).
- Households that pay their own water bills assign higher ratings (2.97) than households whose landlords pay the water bill (2.84).
- Older residents continue to provide EBMUD with an overall job rating that is more positive than younger residents' rating; those younger than age 50 gave EBMUD a rating of 2.85 (2.89 in '07) while those age 50 and older gave a 3.04 (3.01 in '07) rating.

- College graduates continue to rate EBMUD more positively than non-college graduates (2.96 vs. 2.87). In '07 the college graduate and non-college graduate ratings were 3.01 vs. 2.86, '06 (2.95 vs. 2.84) and '05 (2.90 vs. 2.79).
- Caucasians remain the group providing the highest ratings of EBMUD (3.04, 3.04 in '07, 3.01 in '06) compared to 2.76 from African Americans (2.67 in '07, 2.79 in '06), 2.83 from Latinos (2.89 in '07, 2.77 in '06), and 2.73 from Asians (2.98 in '07, 2.61 in '06).
- Higher income households earning over \$75,000 per year give a higher rating of EBMUD (3.01) compared to lower income households. Households that earn between \$50,000 and \$75,000 gave an average rating of 2.95, households that earn between \$35,000 and \$50,000 gave a 2.88 rating and households that earn under \$35,000 gave a 2.73 rating.

EBMUD Responsibilities

EBMUD continues to receive its highest job ratings for reliable water service, quality drinking water and water supply.

Using a scale of excellent, good, only fair or poor, please rate the job you think the East Bay Municipal Utility District is doing on each of the following responsibilities:

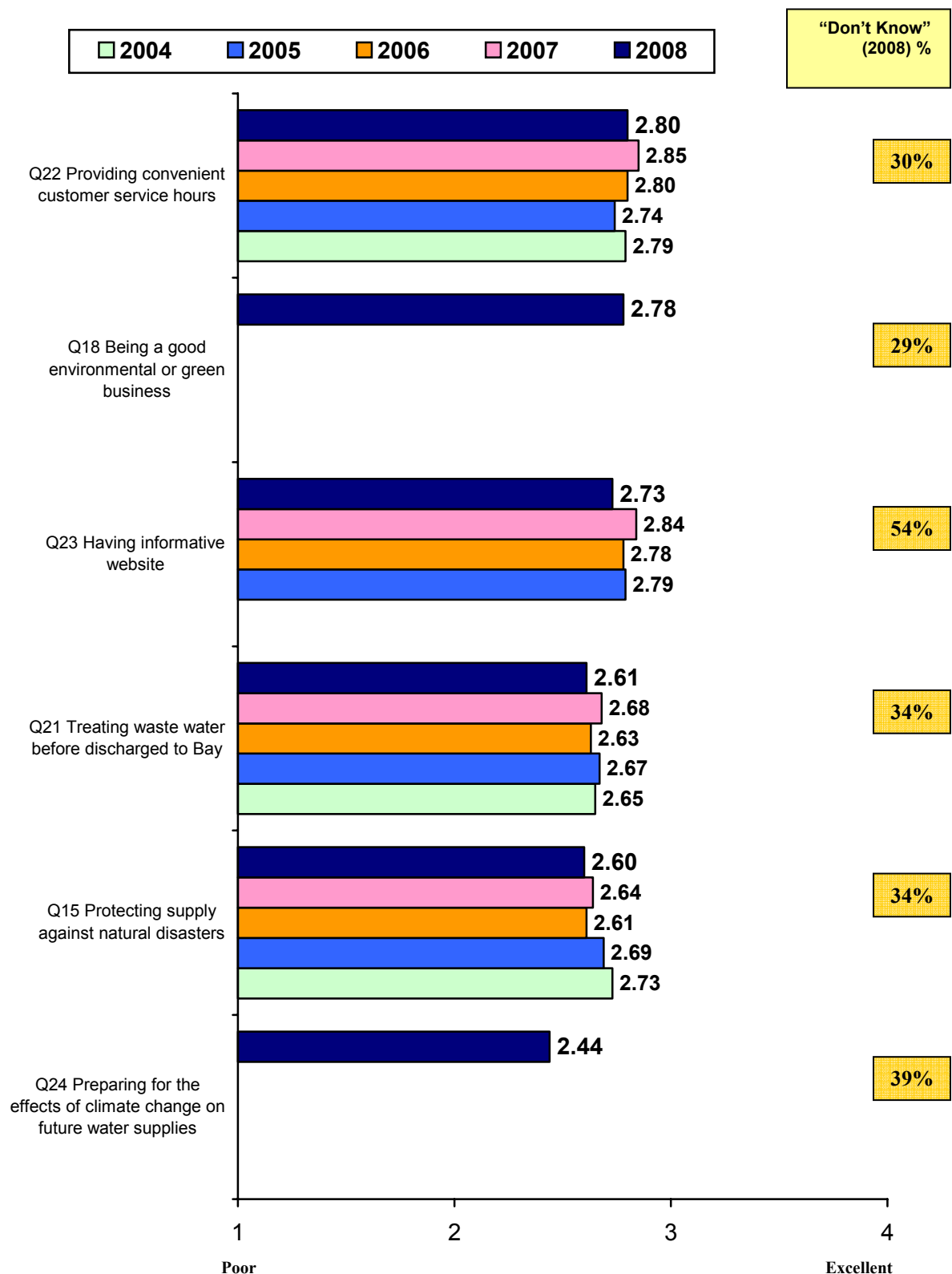


- Ten out of eleven EBMUD responsibilities tested in the survey had a job rating above 2.60 and one (preparing for climate change impacts on water supply) had a lower rating at 2.44, among respondents providing a rating.
- Two ratings show high intensity: providing reliable water service (32% rate as excellent) and ensuring quality drinking water (25% rate as excellent). No other responsibility received an excellent rating above twenty percent.
- Wide majorities continue to rate EBMUD positively for providing reliable water service (87% positive, 87% in '07, 86% in '06, 86% in '05 and 88% in '04), ensuring we have the water supply needed (69% positive, 72% in '07, 73% in '06, 73% in '05 and 78% in '04), and ensuring the quality of drinking water (69% positive, 71% in '07, 70% in '06, 69% in '05 and 71% in '04).
 - Those living East of the Hills continue to be more positive in their ratings (3.32, 3.27 in '07, 3.26 in '06) regarding EBMUD's provision of reliable water service than those West of the Hills (3.19, 3.20 in '07, 3.14 in '06). Males, homeowners, college graduates, Caucasians, residents of single family homes and higher income households are also more positive in their ratings of this responsibility.
 - Those living East of the Hills are more positive in their ratings (3.12) regarding the job EBMUD is doing with ensuring the quality of water we drink than those West of the Hills (2.95). Males, homeowners, college graduates, Caucasians, residents of single family homes, residents over 55 years old and higher income households are also more positive in their ratings of this responsibility.

- As with previous years, there is not a statistically significant difference between those living East of the Hills (2.95) and those living West of the Hills (2.91) when it comes to rating the job EBMUD is doing with making sure we have the water supply we need. Single family residents, households with higher incomes and Asians tend to give a higher rating.
- Residents living in Ward 2 (3.13) give EBMUD the highest rating for ensuring the quality of drinking water. Wards 5 (2.86) and 6 (2.86) give the lowest rating. The differences between the overall population and Wards 4 (2.99), 3 (2.97), 1 (2.96), and 7 (2.94) are statistically insignificant.
- When it comes to rating the job EBMUD is doing making sure we have the water supply we need, the differences between the overall population and individual wards are statistically insignificant.
- Residents living in Ward 2 (3.31) give EBMUD the highest rating for providing reliable water service. Wards 5 (3.11) and 6 (3.09) give the lowest rating. The differences between the overall population and Wards 4 (3.24), 7 (3.24), 3 (3.19) and 1 (3.17) are statistically insignificant.
- Ratings of EBMUD's response to customer service problems have increased since last year and have returned to their '04 / '05 level. Residents that give a lower rating of EBMUD's response to customer service problems include those living West of the Hills, residents of Ward 5, men, renters, residents in multiunit buildings, residents under 35 and households earning less than \$50,000 per year.
- Ratings of the job EBMUD is doing encouraging customers to conserve water has increased to its highest level since 2005. Homeowners, residents in single family homes, residents older than 55 and households that earn over \$75,000 per year tend to give higher ratings.

Further demographic details and comparisons to past data, specific to the responsibilities, are listed later in this report.

EBMUD Job Responsibilities, Continued



- While most job ratings remained similar to those from '07, a statistically significant decrease over time is seen in ratings for having an informative website.
- More than half of EBMUD responsibilities tested had a significant amount of respondents that reported they were unable to rate EBMUD on that specific job. Jobs that were given a “don’t know” rating by over one-fifth of respondents include: having an informative and useful web site (54% don’t know), preparing for the effects of climate change on future water supplies (39%), treating wastewater before it is discharged into the Bay (34%), protecting the water supply from natural disasters such as earthquakes (34%), providing convenient customer service hours (27%), being a good or environmental or green business (29%) and responding to customer service problems like interruptions in water service or low pressure (27%).

The only rating not above 2.60 is EBMUD’s rating for preparing for the effects of climate change on future water supplies. About two-fifths (39%) did not give a rating. Residents are equally split between their positive and negative rating (30% positive vs. 30% negative). The key difference is at the extreme ends of the scale: 5% said EBMUD is doing an excellent job while 9% said EBMUD is doing a poor job.

- Other job responsibilities with more than one-fourth of residents giving a negative (only fair or poor) rating include encouraging customers to conserve water (28%, of which 8% poor), protecting the water supply against natural disaster such as earthquakes (26%, of which 9% poor) and treating waste water before it is discharged into the Bay (25%, of which 8% poor).
 - Although respondents are more critical of the above EBMUD job responsibilities, all of the negative ratings continue to lack intensity.

As seen in the past data, those who report that their landlord pays the water bill are generally more likely to negatively rate EBMUD’s job responsibilities than those who report that the household pays the EBMUD water bill. The highest rated job, providing reliable water service, is the highest rated job for both groups (3.26 rating from households who pay the EBMUD bill, 3.06 rating among those whose landlord pays); similarly, the lowest rated job, EBMUD’s

preparing for the effects of climate change on future water supplies, is the lowest rated among both groups (2.48 rating from households who pay an EBMUD bill, 2.32 rating among those whose landlord pays).

- When examining the difference in indices over time, statistically significant changes are seen in encouraging customers to conserve water, protecting the water supply against natural disasters and having a useful and informative website.
 - Since 2004, there has been a statistically significant increase in the rating of EBMUD's job of encouraging water conservation.
 - Since 2004, there has been a statistically significant decrease in the rating of EBMUD's job of protecting the water supply against natural disasters such as earthquakes.
 - Since 2007, there has been a statistically significant decrease in the rating of EBMUD's job of having an informative and useful website.

As seen in the previous surveys, there remain demographic commonalities when examining the demographic groups that rate EBMUD negatively for its job responsibilities. Those living West of the Hills, renters, those living in multiunit buildings, those whose landlord pays the water bill, non-Caucasian ethnic groups, those with household incomes less than \$50K, those between the ages of 18-49 (particularly the 18-34 group), and those that have not graduated from college are the groups more likely to give a lower rating of EBMUD's job responsibilities.

Below are the 11 job responsibilities tested in this survey and the demographic sub-groups that are more likely to give EBMUD a lower rating based on the current survey's data.

Ensuring the quality of the water we drink (Overall score: 2.98, up from 2.96 in '07)

- Live West of the Hills (2.95)
- Residents living in Ward 5 (2.86) and Ward 6 (2.86)
- Women (2.95)
- Have a negative overall opinion of EBMUD (2.31)
- Have not heard anything recently about water conservation (2.79)
- Not college graduates (2.84)
- Renters (2.84)
- Landlord pays the water bill (2.77)
- Residents of multiunit buildings (2.83)
- Under 50 (2.91)
- African American (2.74)
 - Though African American residents rate this negatively overall, African American females are especially likely to do so (2.65)
 - Although younger residents under 50 rate this negatively overall, older African American residents are more likely to do so (2.65)
- Latino (2.77)
 - Though Latino residents rate this negatively overall, Latino females are especially likely to do so (2.72)
 - Although younger residents under 50 rate this negatively overall, older Latino residents are more likely to do so (2.56)
- Asian (2.84)
 - Though Asian residents rate this negatively overall, Asian females are especially likely to do so (2.78)
 - Although renters rate this negatively overall, Asian homeowners are especially likely to do so (2.74)
- Households earning less than \$35,000 per year (2.66) and households earning \$35K-\$50K (2.88)
- Took the survey in Spanish (2.82)
- Those who report using mostly bottled water for drinking water at home (2.67)

Protecting the water supply against natural disasters such as earthquakes (Overall score: 2.60, down from 2.64 in '07)

- Live West of the Hills (2.56)
- Have not heard anything about water conservation recently (2.43)
- Renters (2.48)
- Landlord pays the water bill (2.35)
- Residents of multiunit buildings (2.43)
- African American (2.48)
- Household income of less than \$35,000 per year (2.31)
- Those who report using mostly bottled water for drinking water at home (2.48)

Making sure we have the water supply we need (Overall score: 2.92, down from 2.96 in '07)

- Have not heard anything recently about water conservation (2.83)
- Households earning less than \$35,000 per year (2.80)
- Residents of a multiunit building (2.85)

Encouraging customers to conserve water (Overall score: 2.81, up from 2.74 in '07)

- Have not heard anything about water conservation recently (2.50)
- Renters (2.68)
- Landlord pays the water bill (2.59)
- Residents of multiunit buildings (2.66)
- Under 35 years old (2.70)
- Asian (2.50)
- Household income of less than \$35,000 per year (2.62)
- Those who report using mostly bottled water for drinking water at home (2.68)
- Those who report using mostly filtered water for drinking water at home (2.70)

Responding to customer service problems like interruptions in water service or low pressure (Overall score: 2.92, up from 2.88 in '07)

- Live West of the Hills (2.90)
- Residents living in Ward 5 (2.81)
- Have not heard anything recently about water conservation (2.77)
- Not college graduates (2.80)
- Renters (2.82)
- Landlord pays the water bill (2.77)
- Residents of a multiunit building (2.84)
- Under 35 years old (2.83)
- Latino (2.68)
- Asian (2.71)
- Households that earn under \$50,000 per year (2.85)
- Those who report using mostly bottled water for drinking water at home (2.76)
- Those who took the survey in Spanish (2.77)

Providing reliable water service (Overall score: 3.21, same rating of 3.21 in '07)

- Live West of the Hills (3.19)
- Residents living in Ward 5 (3.11) and Ward 6 (3.09)
- Have not heard anything recently about water conservation (3.07)
- Not college graduates (3.07)
- Renters (3.08)
- Landlord pays the water bill (3.06)
- Residents of multiunit building (3.13)
- African American (2.99)
- Latino (2.96)
- Households earning less than \$35,000 per year (3.03) and households earning between \$35K and \$50K (3.09)
- Those who report using mostly bottled water for drinking water at home (2.98)
- Those who took the survey in Spanish (2.90)

Treating waste water before it is discharged into the Bay (Overall score: 2.61, down from 2.68 in '06)

- Live West of the Hills (2.56)
- Residents living in Ward 5 (2.51) and Ward 6 (2.51)
- Women (2.56)
- Have not heard anything recently about water conservation (2.37)
- Not college graduates (2.51)
- Renters (2.45)
- Landlord pays the water bill (2.50)
- Residents of a multiunit building (2.50)
- Age 35-54 (2.54)
- African American (2.50)
- Latino (2.56)
- Asian (2.24)
- Households earning less than \$35,000 per year (2.18) and households earning between \$35K and \$50K (2.52)
- Those who report using mostly bottled water for drinking water at home (2.46)
- Those who report using mostly filtered water for drinking water at home (2.49)
- Those who took the survey in Spanish (2.55)

Providing convenient customer service hours (Overall score: 2.80, down from 2.85 in '07)

- Live West of the Hills (2.76)
- Have not heard anything recently about water conservation (2.65)
- Renters (2.72)
- Landlord pays the water bill (2.68)
- Under 35 years old (2.72)
- African American (2.67)
- Asian (2.71)
- Households earning between \$35K and \$50K per year (2.68)

Having an informative and useful web site (Overall score: 2.73, down from 2.84 in '07)

- Live East of the Hills (2.62)
- Residents living in Ward 2 (2.60)
- Have not heard anything recently about water conservation (2.50)
- College graduates (2.65)
- Residents of multiunit buildings (2.63)
- Asian (2.61)
- Households earning less than \$35,000 per year (2.63) and households earning between \$50K and \$75K (2.61)

Being a good environmental or green business (Overall score: 2.78)

- Have not heard anything recently about water conservation (2.62)
- Age 35-54 (2.67)
- African American (2.67)
- Asian (2.59)
- Those who report using mostly bottled water for drinking water at home (2.61)

Preparing for the effects of climate change on future water supplies (Overall score: 2.44)

- Live West of the Hills (2.41)
- Have not heard anything recently about water conservation (2.34)
- Landlord pays the water bill (2.32)
- Residents of multiunit buildings (2.37)
- African American (2.33)
- Asian (2.28)
- Household income between \$35K and \$50K per year (2.38)
- Those who report using mostly bottled water for drinking water at home (2.37)
- Those who report using mostly filtered water for drinking water at home (2.33)

There are statistically significant differences in the job and water quality ratings among those who rate EBMUD positively and among those who rate it negatively.

Those who rate EBMUD positively also give EBMUD a higher rating on individual EBMUD job responsibilities than those who rate EBMUD negatively. A significant difference is found in last year's research as well. For example, a significant difference is found in the job rating of EBMUD ensuring the quality of drinking water. Those who rate the overall job of EBMUD positively give EBMUD a rating of 3.17 (3.14 in '07) in ensuring the quality of the water they drink; those who rate the overall job of EBMUD negatively give this job a rating of 2.31 (2.42 in '07).

EBMUD Job Responsibilities by EBMUD Overall Rating

	Overall EBMUD rating		Net difference
	Positive	Negative	
Ensuring the quality of the water we drink	3.17	2.31	0.86
Treating waste water before it is discharged into the Bay	2.81	2.04	0.77
Protecting the water supply against natural disasters	2.78	2.02	0.76
Responding to customer service problems	3.07	2.39	0.68
Preparing for the effects of climate change on future water supplies	2.61	1.96	0.64
Providing convenient customer service hours	2.96	2.32	0.63
Having an informative and useful website	2.88	2.27	0.62
Making sure we have the water supply we need	3.06	2.45	0.61
Being a good environmental or green business	2.92	2.31	0.60
Providing reliable water service	3.35	2.78	0.57
Encouraging customers to conserve water	2.94	2.41	0.53

In addition, the rating of EBMUD's responsibility in making sure residents have the water supply they need also shows a significant difference. Those who negatively rate EBMUD's overall job performance give a lower rating on making sure residents have the water supply they need, giving EBMUD a rating of 2.45 (2.54 in '07), compared to 3.06 (3.10 in '07) for those who give EBMUD a positive rating overall. Among those who gave EBMUD a positive rating, residents gave EBMUD a higher rating for providing reliable water service (3.35, 3.34 in '07) compared to those who gave EBMUD a negative rating (2.78, 2.81 in '07).

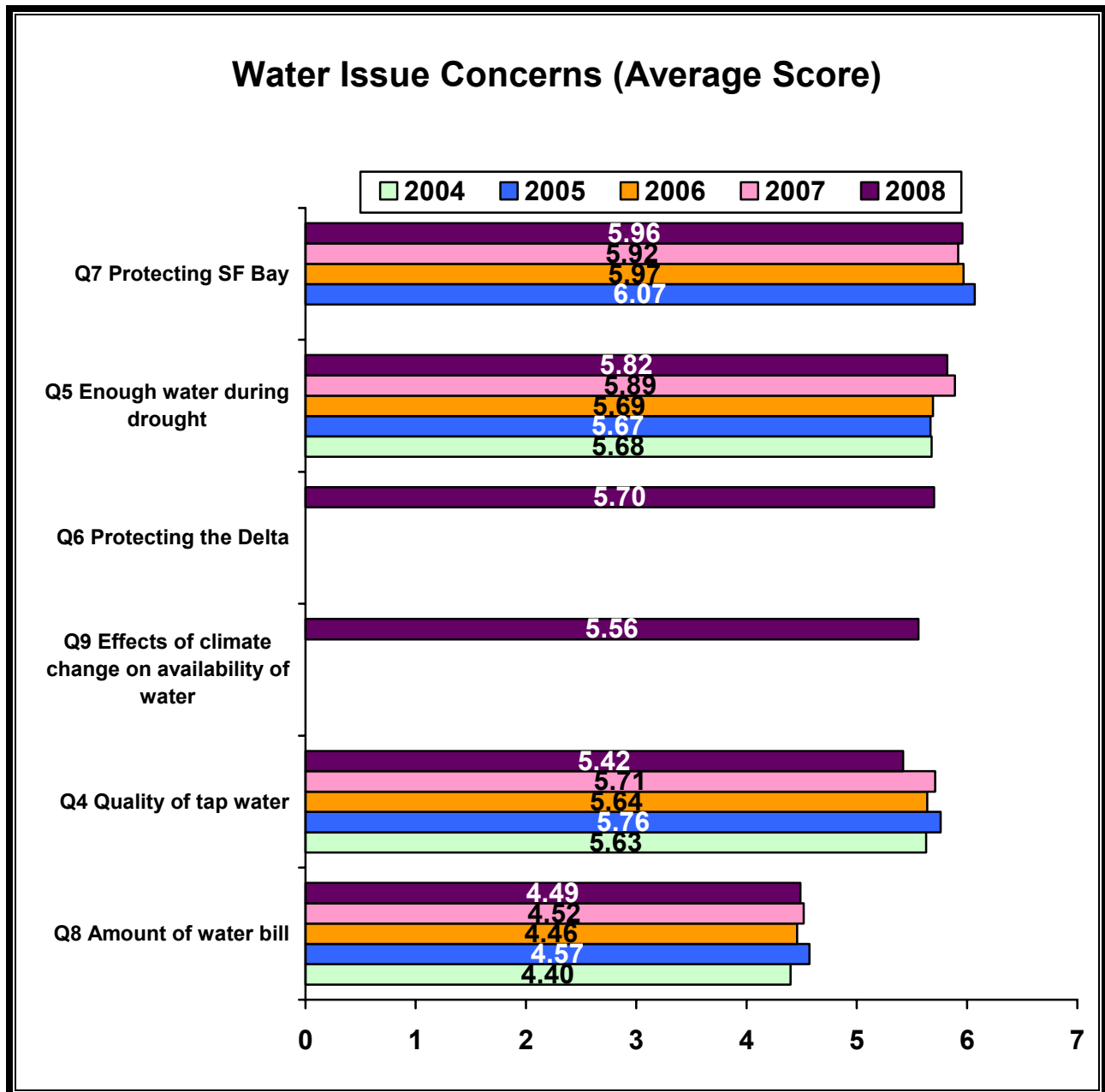
Similarly, those giving a negative overall rating to EBMUD also give lower ratings to EBMUD's work of protecting the water supply against natural disasters. Those who negatively rate EBMUD's overall job performance give a rating of 2.02 (2.22 in '07), compared to 2.78 (2.78 in '07) among those who give EBMUD a positive rating overall. Among those who gave EBMUD a positive rating, residents gave EBMUD a higher rating for preparing for the effects of climate change on future water supplies (2.61) compared to those who gave EBMUD a negative rating (1.96). This is the first year residents were asked about preparing for the effects of climate change.

Ratings of EBMUD's customer services also show a statistically significant difference between those who positively rate EBMUD and those who negatively rate EBMUD. Among those positively rating EBMUD overall, EBMUD's job rating of providing convenient customer service hours (2.96, 2.99 in '07) is higher than those who negatively rate EBMUD overall (2.32, 2.39 in '07). The job EBMUD does responding to customer service problems like interruptions in water service or low pressure is rated at 3.07 (3.06 in '07) among those positively rating EBMUD overall, and it is given a rating of 2.39 (2.37 in '07) among those negatively rating EBMUD overall. Among those positively rating EBMUD overall, EBMUD's job rating of having an informative and useful website (2.88, 2.96 in '07) is higher than those who negatively rate EBMUD overall (2.27, 2.49 in '07).

Regarding EBMUD's responsibilities dealing with pollution and the environment, differences are again seen in the ratings of these responsibilities among those who positively rate EBMUD overall and among those who negatively rate EBMUD overall. The job EBMUD does treating wastewater before it is discharged into the Bay is rated 2.81 (2.85 in '07) among those giving EBMUD a positive rating while it is rated at 2.04 (2.14 in '07) among those who give EBMUD a negative rating. Similarly, the job EBMUD does being a good green or environmental business is rated at 2.92 among those positively rating EBMUD overall, and it is given a rating of 2.31 among those negatively rating EBMUD overall. This is the first year residents were asked to rate the job EBMUD is doing being a good green or environmental business. The ratings also differ among these groups when asked to rate the job EBMUD is doing in encouraging customers to conserve water; those who positively rate the overall job of EBMUD give this responsibility a 2.94 (2.86 in '07), while a 2.41 (2.39 in '07) rating is given by those who negatively rate the overall job of EBMUD.

Water Issue Concerns

Overall, protecting the San Francisco Bay remains a top concern for EBMUD customers. In addition to protection of San Francisco Bay, residents are also concerned with protecting the Delta. Residents also cite their concern for the effects of climate change on the availability of water. Residents' concern with the quality of their tap water has fallen significantly and they are only moderately concerned about the amount of their water bill.



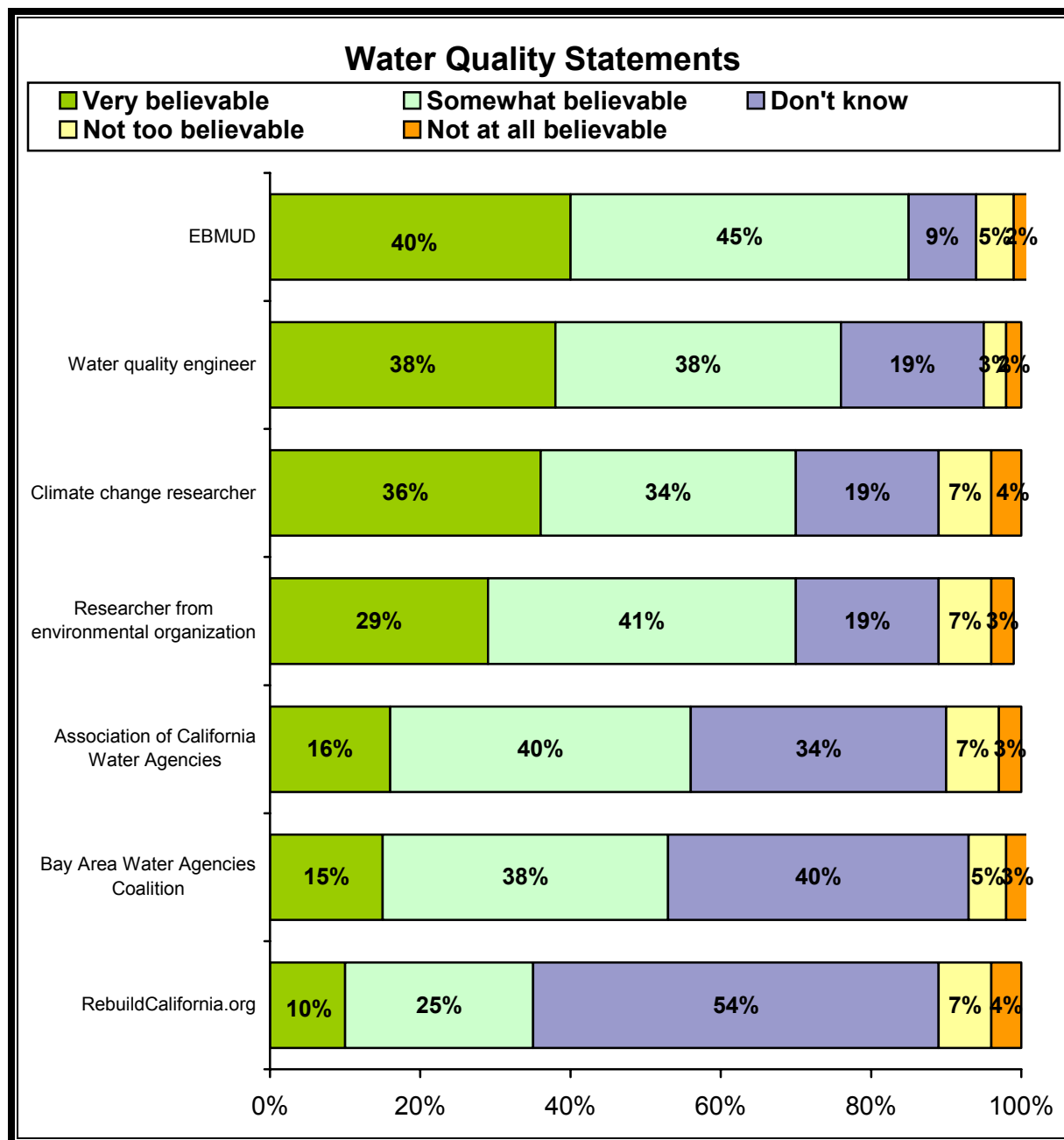
- *Respondents rate their level of concern using a 7-point scale with 1 being “not at all concerned” and a 7 being the “highest concern.”*
- More than half of customers give a rating of 7 to protecting the San Francisco Bay (53%, 54% in '07) and having enough water available in a major drought (54%, 57% in '07). The intensity of concern has fallen significantly for the quality of tap water (50%, 57% in '07). Concern over the amount of your water bill (24%, 26% in '06) has remained statistically unchanged. Residents are also highly concerned with protecting the Delta (42% rate 7) and the effects of climate change on the availability of water (46% rate 7).
- The average tap water quality rating is the only rating that changed significantly this year. Residents are much less concerned about the quality of their tap water this year than last. The number of respondents rating it a seven has fallen to its lowest level since 2004 (50%, 57% in '07, 54% in '06, 59% in '05, 54% in '04).
 - Those who live West of the Hills and residents of Ward 7, renters, residents whose landlord pays the water bill, residents that live in multiunit buildings, those age 35-54, African Americans, Asian Americans, residents that drink bottled water, residents that drink filtered water and those that took the survey in Spanish are significantly more concerned about the quality of their tap water.
- Protecting the San Francisco Bay and protecting the Delta remain very important to residents. Protecting San Francisco Bay is consistently the highest concern year after year.
 - Generally, those who live West of the Hills, those who have heard something about water conservation recently, residents of multiunit buildings, residents age 35-54 and residents whose annual household income is less than \$50K are significantly more concerned about protecting the San Francisco Bay and the Delta.
 - Residents of Wards 4 and 5 are more concerned about protecting the Delta.

- Additionally, residents of Ward 1, women, the college educated and those whose landlord pays the water bill are significantly more concerned with protecting the Bay.
- Concern for having enough water during a drought continues to be high (Mean: 5.82, 5.89 in '07, 5.69 in '06, 5.68 in '05, 5.67 in '04) and intense (54% rate it of highest concern, 57% in '07, 50% in '06, 50% in '05, 51% in '04) relative to previous years.
 - Those who live West of the Hills (particularly residents in Wards 5 and 6), women, those who have heard something about water conservation recently, those who have no college education, homeowners, residents of multiunit buildings, African Americans, Latinos and households with an annual income under \$50K rate having enough water available during a major drought as a higher concern.
- The water bill amount remains the lowest ranked concern of all water related issues tested by a significant margin. Roughly a quarter (24%) continue to rate the issue a 7, (26% did so in '07, 23% did so in '06, 26% did so in '05 and 24% did so in '04).
 - Residents living in Wards 3, 5, 6 and 7, women, those who have not heard anything recently about water conservation, those who have not graduated from college, households that pay their own water bill, residents of single family homes, under 35 years old, African Americans, Asian Americans, Latinos, households with incomes between \$35K and \$50K and those who took the survey in Spanish are more likely to rate the amount of their water bill as an issue of higher concern.

- Residents are very concerned about the effects of climate change on the availability of water. Three-quarters (76%) rate it a 5, 6 or 7.
 - Those living in Wards 3, 4 and 6, women, those who have less than a college education, renters, those whose landlord pays the water bill, residents of multiunit buildings, under 35 years old, African Americans, Latinos and households with an annual income between \$35K and \$50K are more likely to rate the effects of climate change an issue of higher concern.

Credibility of Sources for Water Issues

EBMUD is extremely well trusted by its customers regarding water issues with 85% of residents saying EBMUD is a believable source of information about water issues. Of the 85%, 40% say EBMUD is very believable and 45% say somewhat believable. EBMUD receives the highest credibility rating among all individuals and organizations tested.



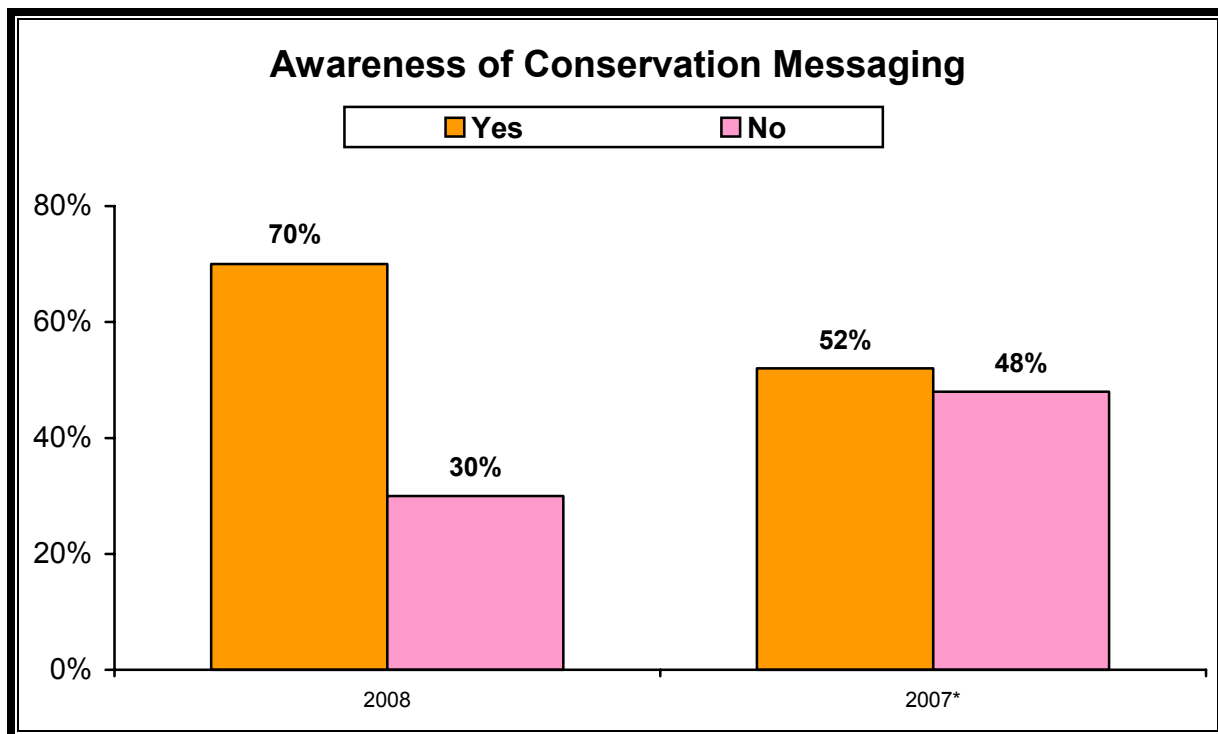
- Over eight out of ten (85%) residents say that EBMUD is a believable source of information about water issues and slightly fewer than eight out of ten (76%) residents say that information from a water quality engineer is believable. With a credibility rating of 85%, it may be difficult to significantly increase this rating. There are some demographic differences between those who rate EBMUD's credibility above 85% and below 85%. Although some groups give EBMUD a lower credibility rating, that rating remains higher than other individuals and organizations.
- Residents that give EBMUD an overall negative rating generally give EBMUD a negative rating for other job responsibilities. This holds true when it comes to EBMUD's credibility, but 79% of those that give EBMUD a negative rating still find EBMUD a believable source of information when it comes to water issues.
- There is little difference geographically between those living East of the Hills (86% believable) and those living West of the Hills (84% believable). The credibility of a water quality engineer is identical between the two regions (76% East of Hills, 76% West of Hills).
- Awareness of water conservation outreach does play a role in EBMUD's credibility. Among those that have heard something recently about water conservation, 88% say EBMUD is believable and among those that have not heard anything recently, 77% say EBMUD is believable when it comes to speaking out on water issues.
- The higher educated with some college education or more find EBMUD more believable (87%) than those without a college education (78%).
- Homeowners find EBMUD more believable (88%) than renters (79%).
- Households that pay their own water bill say EBMUD is more believable (87%) than those whose landlord pays the water bill (77%).
- Residents of single family (87%) homes find EBMUD more credible when it comes to water issues than residents of multiunit buildings (79%).

- African Americans and Latinos give EBMUD lower credibility ratings (80%) than Caucasians (86%) and Asians (85%).
- Residents at different income levels tend to trust EBMUD about water issues to different degrees. More specifically, the trend shows increased income level parallel with increased trust. Residents making <\$35K (81% believable) and those making \$35K-\$50K (80% believable) are less likely to trust EBMUD about water issues than those making \$50K-\$75K (85% believable) and those making >\$75K (91% believable).
- Those who mostly use tap water for drinking water at home are most likely to believe information from EBMUD (86%) followed by those who mostly use filtered water (83%) and then those who use bottled water (82%).
- Residents who took the survey in Spanish give EBMUD the lowest credibility rating with 74% saying EBMUD is a credible source of information. More English speaking survey respondents (86%) say EBMUD is a believable source.
- The level of believability is roughly the same across age groups. Those under age 35 (84%), those age 35 to 54 (86%), and those age 55 and older (84%) say they find EBMUD a believable source of water issue information.

Water Conservation and Water Use

Seven out of ten (70%) recall seeing or hearing something about water conservation in the last 6 to 8 months. This is up significantly from last year when just over half (52%) recalled seeing or hearing something recently.

Do you recall seeing or hearing anything about water conservation in the last 6 to 8 months??



**In 2007, worded as "Have you heard anything recently about water conservation?"*

The vast majority of residents recall hearing something about water conservation in the last 6 to 8 months. This is up significantly since last year. Among those that recall something about water conservation, about one-third (32%) say the message was specific to EBMUD customers. About two-thirds (64%) recall a general message about water conservation.

What do you remember about the water conservation message?

	Heard something about conservation	Specific to EBMUD customers	General message about conservation
Voluntary water conservation	56%	62%	53%
Water shortage in California	4%	2%	5%
Voluntary water conservation of 15%	3%	3%	3%
Conservation from May to October	3%	4%	3%
Drought threats	3%	1%	4%
Lack of rainfall	2%	1%	4%
Check plumbing for leaks	2%	3%	2%
Water lawn once every 3 days	2%	3%	1%
Other	8%	7%	9%
Don't know/Don't remember	16%	15%	15%

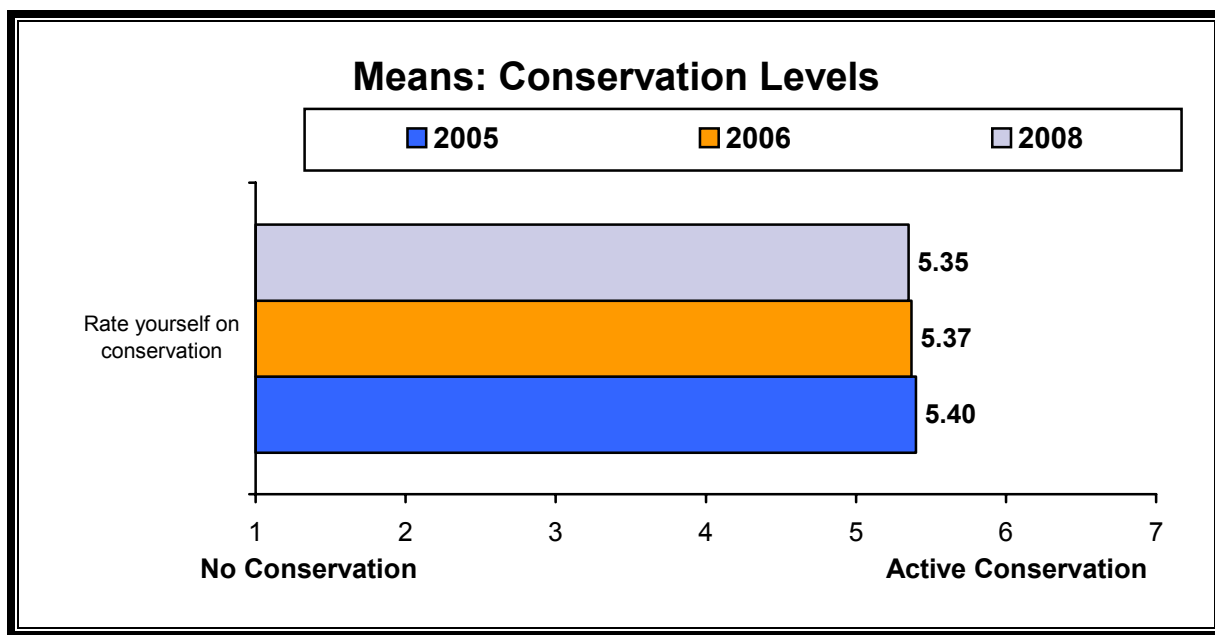
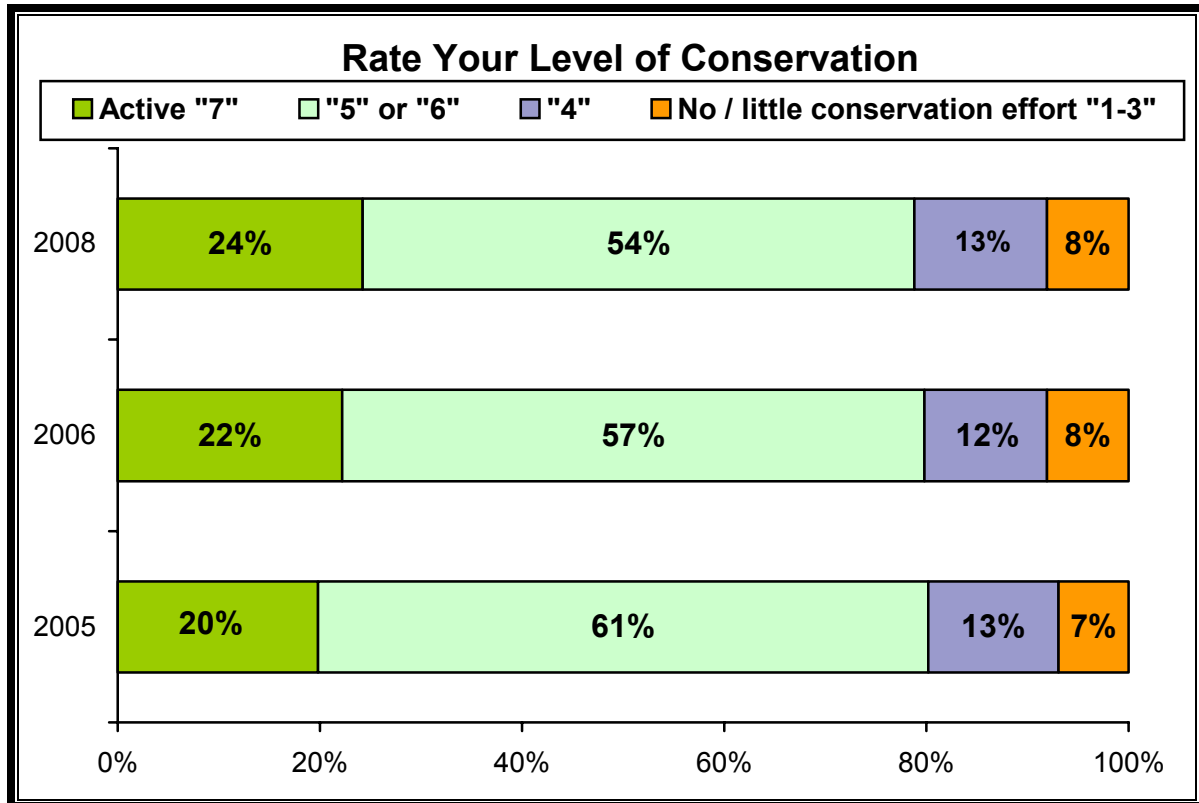
Where did you see or hear the conservation information?

	Heard something about conservation	Specific to EBMUD customers	General message about conservation
Television	37%	18%	47%
Newspaper	23%	15%	27%
EBMUD water quality report in the mail	12%	26%	4%
Radio	12%	9%	13%
Brochure/Pamphlet	7%	14%	4%
Bill insert/newsletter	4%	9%	1%
Billboard	4%	8%	2%
Community/business group new or email	3%	3%	3%
Word of mouth	3%	3%	3%
Other/Don't know	10%	11%	9%

- Residents that live East and West of the Hill have high rates of recall, but residents East of the Hills recall conservation messages at a higher rate (74% East of the Hills, 69% West of the Hills).
- Looking at the regional differences among EBMUD wards, Ward 2 (76%) had heard more than any other Ward about water conservation messages.
- Households with an annual income over \$75K are more likely to have heard something about water conservation (78%). Lower income households have lower rates of recall than the overall population. Two thirds of households (67%) with an income between \$35K and \$75K have heard something and just under third thirds of households (64%) with an income under \$35K have heard something about water conservation.

- Water conservation recall is slightly higher among Caucasian (73%) and Latino (72%) residents. Rates of recall are significantly lower among African American (61%) and Asian (52%) residents.
- Nearly three-quarters (74%) of residents 55 and over recall hearing something recently about water conservation. Younger residents under 35 recall water conservation messages at a lower rate (63%) and those age 35-54 roughly match the overall population (71%).
- Homeowners (76%) and residents who receive their water bill from EBMUD (73%) are more likely to have seen or heard something recently about water conservation than their counterparts, renters (60%) and those whose landlord pays the water bill (59%).
- Respondents having graduated from college tend to be more aware of water conservation messaging than those without a college education. While 71% of graduates have seen or heard something recently about water conservation, only 66% of non-graduates have.
- Those who took the survey in Spanish (66%) are less likely than those who took it in English (70%) to acknowledge having seen or heard anything recently about water conservation.
- Consistent with the increase in rates of recall, the rating of the job EBMUD is doing encouraging customers to conserve has also increased from 2007 (2.74) to 2008 (2.81). Those who recall something about water conservation give EBMUD a score of 2.93 for encouraging customers to conserve. Those who have not heard something give EBMUD a score of 2.50.
- The overall rating for EBMUD is higher among those that recall something about water conservation (74% positive rating) compared to those who have not heard (56% positive rating).

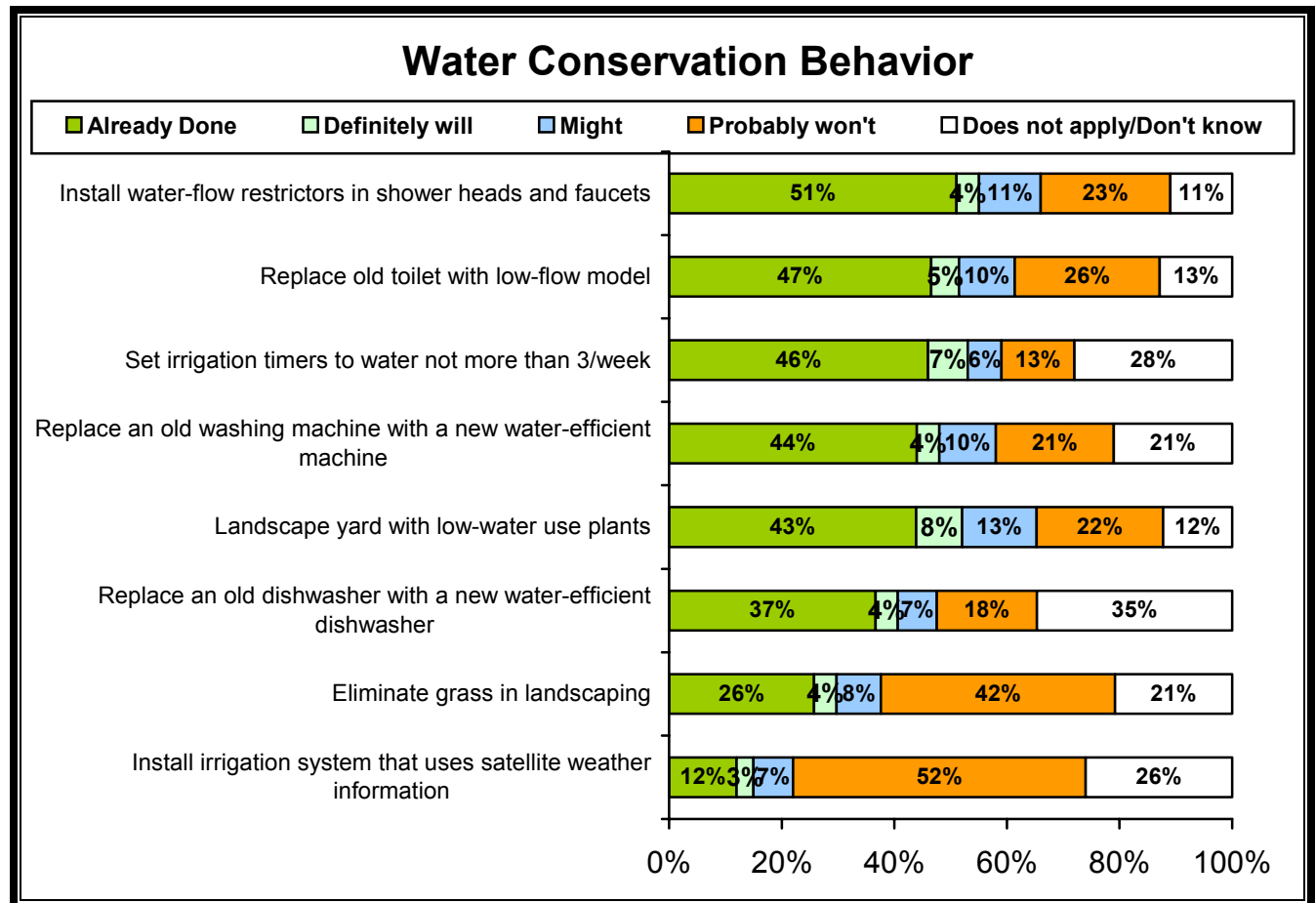
On a scale from 1 to 7 where “1” is making no effort to use water efficiently and “7” is an active commitment to water conservation, almost half (45% rate themselves as a 7 or 6) of all customers think of themselves as “active” water conservers today (45% did so in '06, 48% did so in '05).



*Conservation level was not asked in 2007.

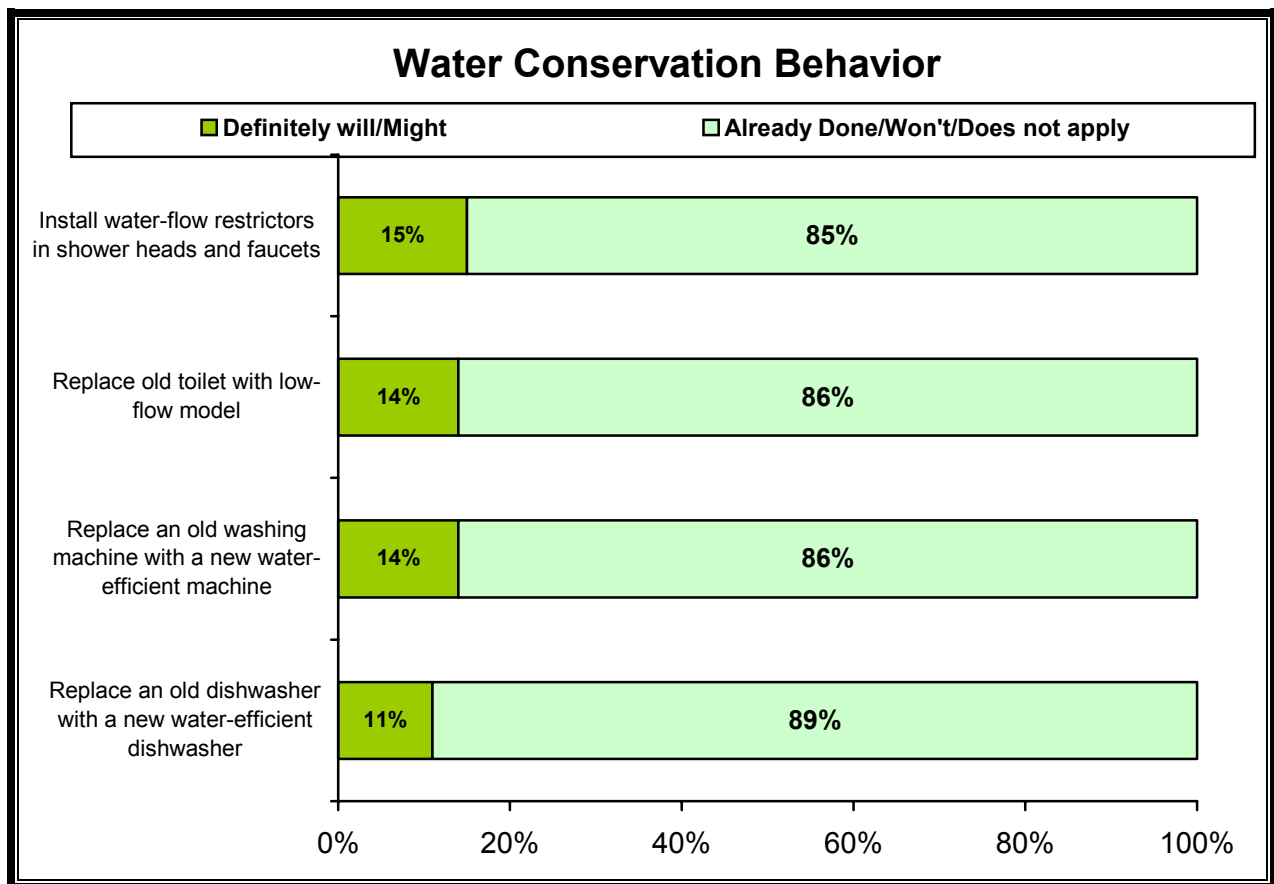
- Nearly eight out of ten (78%, 80% in '06, 81% in '05) of all residents rate their conservation level as at least a “5” on a scale of 1 to 7 where seven is making an active commitment to water conservation and one is making no effort to use water efficiently.
- The reported commitment to conservation on both sides of the Hills remains statistically unchanged from 2006. Conservation ratings among those West of the Hills (5.38, 5.41 in '06, 5.40 in '05) is significantly higher when compared to those East of the Hills (5.20, 5.18 in '06, 5.38 in '05).
- Residents in Ward 6 (5.50), Ward 5 (5.48) and Ward 1 (5.45) rate their levels of conservation higher than the overall population.
- Women (5.48, 5.43 in '06, 5.51 in '05) continue to rate their level of conservation higher than men (5.20, 5.32 in '06, 5.27 in '05).
- Residents that have heard or seen something about water conservation in the last 6 to 8 months (5.45) rate their level of conservation higher than those that have not heard (5.11).
- Latinos (5.73), African Americans (5.45) and Asians (5.43) are more likely to rate themselves higher on their level of conservation compared to Caucasians (5.23).
- Lower income residents tend to rate themselves lower (4.76) on their current efforts to conserve than higher income residents. Households with an income of \$35K-\$50K give themselves a rating of 5.46, households with an income of \$50K-\$75K give themselves a rating of 5.35 and households with an income over \$75K give themselves a rating of 5.31.
- Older customers give a higher self-rating on their conservation; those over 55 rate themselves the highest (5.58) followed by those 35-44 (5.33) and those 18-34 (5.04).

Residents report having already taken several steps to reduce their water use. 40% of residents report having already done five of the eight steps tested. Similar water-saving measures were tested in 2007 and 9% reported having already done those. There appears to be some confusion surrounding the specifics when it comes to water conservation.

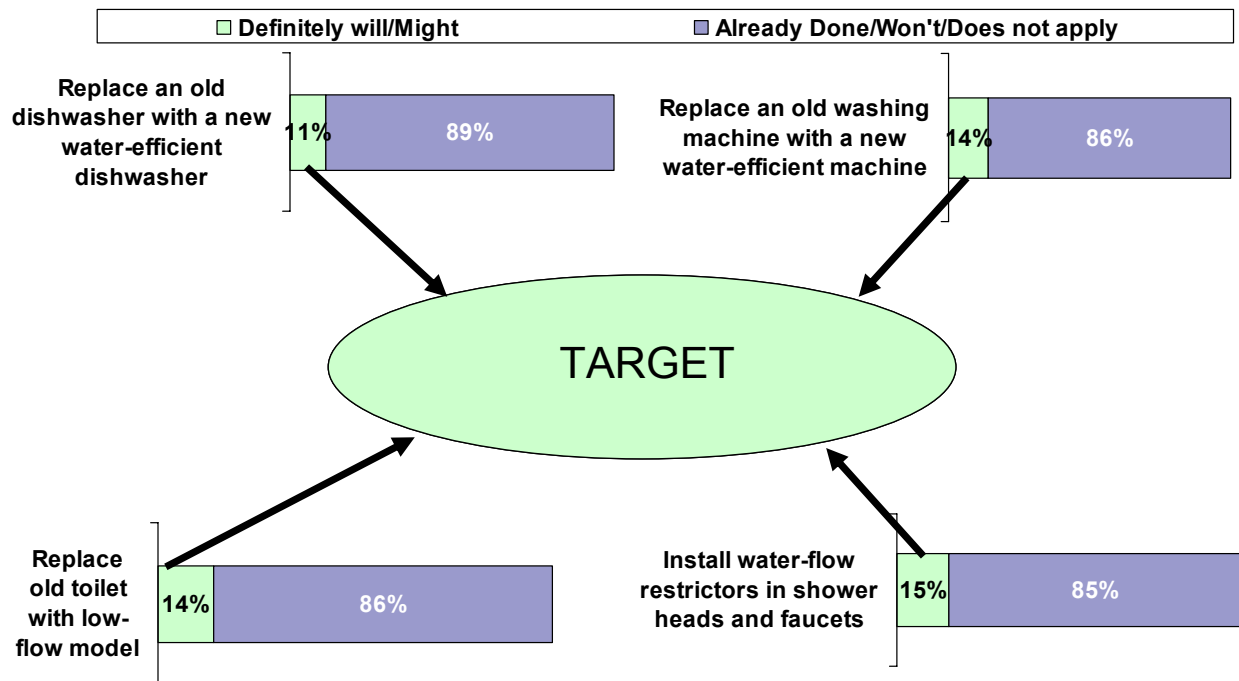


- More than 40% of residents say they have already installed water-flow restrictors in shower heads and faucets, replaced old toilets with low-flow models, set irrigation timers to water not more than 3/week, replaced an old washing machine with a new water-efficient machine and landscaped their yard with low-water use plants.
- In 2007, residents were asked similar questions about water conservation behavior and 9% reported having installed low-flow toilets and other water efficient appliances and installed flow restrictors and faucet aerators.

- The change in response rates follows the first request for voluntary conservation in more than a decade. However, water demand did not drop as significantly as the customer-reported activity suggests. The discrepancy in the data suggests some confusion over what residents believe they are doing and what they are actually doing. The questions also were worded slightly differently from last year to this year.
 - In 2008, residents were asked if they will or if they have already done any of the following:
 - Replace an old toilet with a new lower-flow model
 - Replace an old dishwasher with a new water-efficient dishwasher
 - Replace an old washing machine with a new water-efficient machine
 - Install water-flow restrictors in shower heads and faucets
 - In 2007, residents were asked if they are willing to or have already done any of the following:
 - Install low-flow toilets and other water-efficient appliances
 - Install flow-restricting shower heads and faucet aerators, which restrict the flow of water from faucets
- A segmentation was developed to identify demographic groups that show a higher willingness to take action and purchase water saving products. The four products tested are low flow toilets, water efficient dishwashers, water efficient washing machines and water flow-restrictors in shower heads and faucets.



- Residents that report a willingness to purchase and install these products are combined to form the target group.

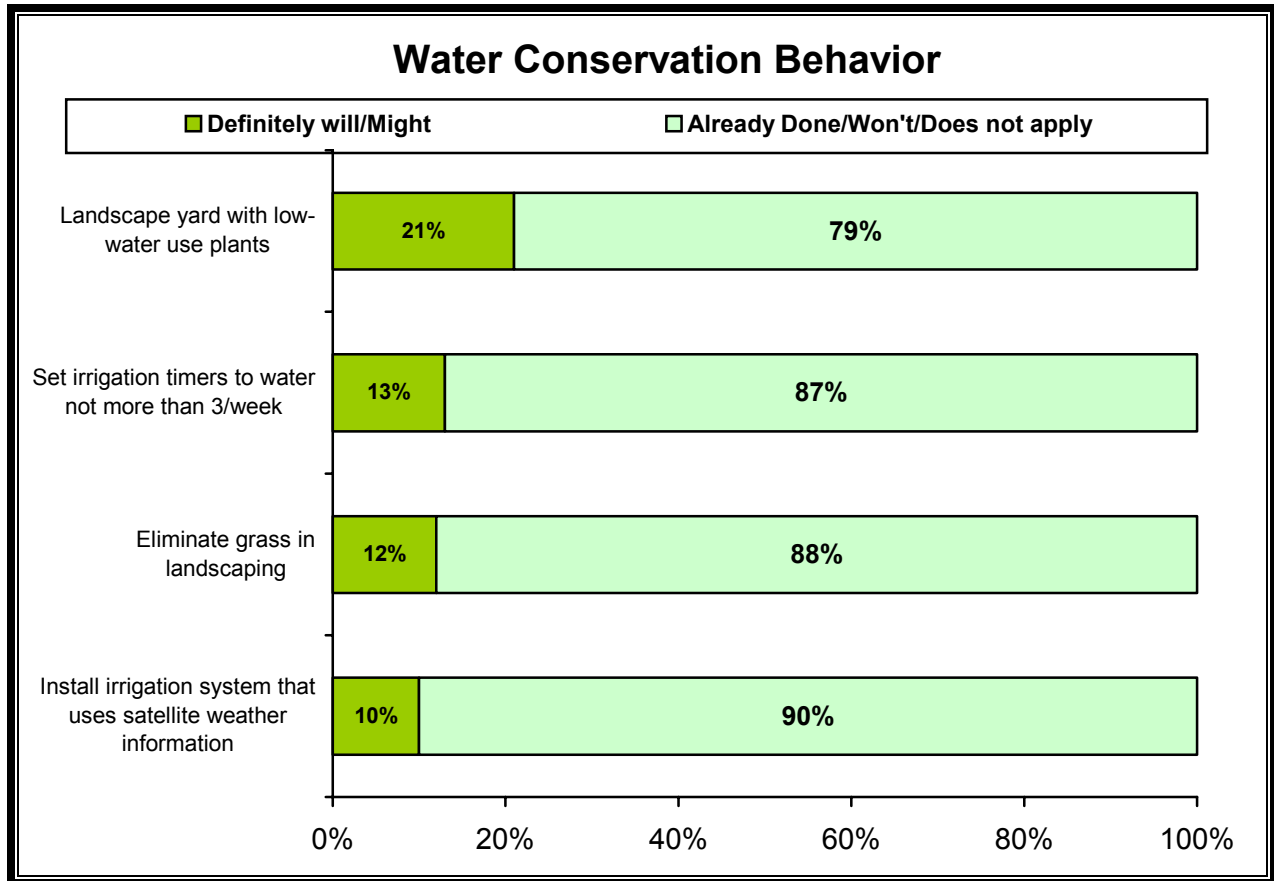


- If a resident is willing to undertake at least one of the four water saving measures, they become part of the target. The target group makes up 36% of the population, meaning 36% of the population said they are willing to purchase at least one of the four products.
- Demographic groups that show a willingness to purchase and install water conservation products include:
 - Residents living in Ward 3
 - Households that earn \$35K-\$50K per year
 - Homeowners
 - Residents of single family homes
 - Younger (<35 years old)
 - Latino
 - African American
 - Larger households (3 or more people in the household)
 - Women

- Below are the 4 water conservation products tested and the demographic sub-groups that show a stronger willingness to undertake these actions
- Replace an old toilet with a new lower-flow model (15% definitely or might do)
 - Residents living in Ward 3 and Ward 6
 - Home owners
 - Household pays the water bill
 - African American
 - Latino
 - Under 54 years old
 - Annual household income under \$35K
 - Those taking the survey in Spanish
 - Women
- Replace an old dishwasher with a new water-efficient dishwasher (11% definitely or might do)
 - Residents living in Ward 2
 - Heard something about water conservation recently
 - Less than a college education
 - Homeowners
 - Household pays the water bill
 - Residents of single family homes
 - Latino
 - Under 35 years old
 - Annual household income over \$75K
 - Those taking the survey in Spanish
 - Women

- Replace an old washing machine with a new water-efficient machine (14% definitely or might do)
 - Less than a college education
 - Homeowners
 - Household pays the water bill
 - Residents of single family homes
 - Latino
 - Annual household income between \$35K and \$50K
 - Those taking the survey in Spanish
 - Women
- Install water-flow restrictors in shower heads and faucets (15% definitely or might do)
 - Residents living in Ward 3 and Ward 6
 - Have not heard anything about water conservation recently
 - Less than a college education
 - Renters
 - Residents of single family homes
 - African American
 - Latino
 - Under 35 years old
 - Annual household income between \$35K and \$50K
 - Spanish speakers
 - Women

- A similar segmentation was developed for residents with a yard and 38% of those with a yard said they are willing to do at least one of the following four things to conserve water.



- Demographic groups that show a higher willingness to conserve water with their landscaping include:
 - Residents living in Ward 5, Ward 6, and Ward 7
 - Have not heard anything about water conservation recently
 - Less than a college education
 - Latino
 - Asian
 - Under 54 years old
 - Annual household income between \$50K and \$75K

- Below are the four water conserving activities tested among those with a yard or garden and the demographic sub-groups that show a stronger willingness to undertake these actions.
- Landscape your yard or garden using only low-water use plants and flowers (among residents with a yard or garden, 21% definitely or might do)
 - Residents living in Ward 5
 - Less than a college education
 - Renters
 - Latino
 - Under 54 years old
 - Annual household income between \$50K and \$75K
- Eliminate grass in your landscaping (among residents with a yard or garden, 12% definitely or might do)
 - Residents living in Ward 6
 - Have not heard anything recently about water conservation
 - Homeowners
 - African American
 - Under 35 years old
 - Annual household income between \$50K and \$75K
- Install an irrigation system in your yard or garden that uses satellite weather information so it only waters when it's needed (among residents with a yard or garden, 10% definitely or might do)
 - Latino
 - Under 35 years old
 - Annual household income over \$75K

- Set timers on your irrigation system to water not more than 3 times a week for only short periods (among residents with a yard or garden, 13% definitely or might do)
 - Residents living in Ward 7
 - Less than a college education
 - Renters
 - Under 35 years old
 - Annual household income over \$75K

Taking shorter showers and less outdoor watering are the most commonly mentioned changes to household water use if a serious drought were to occur.

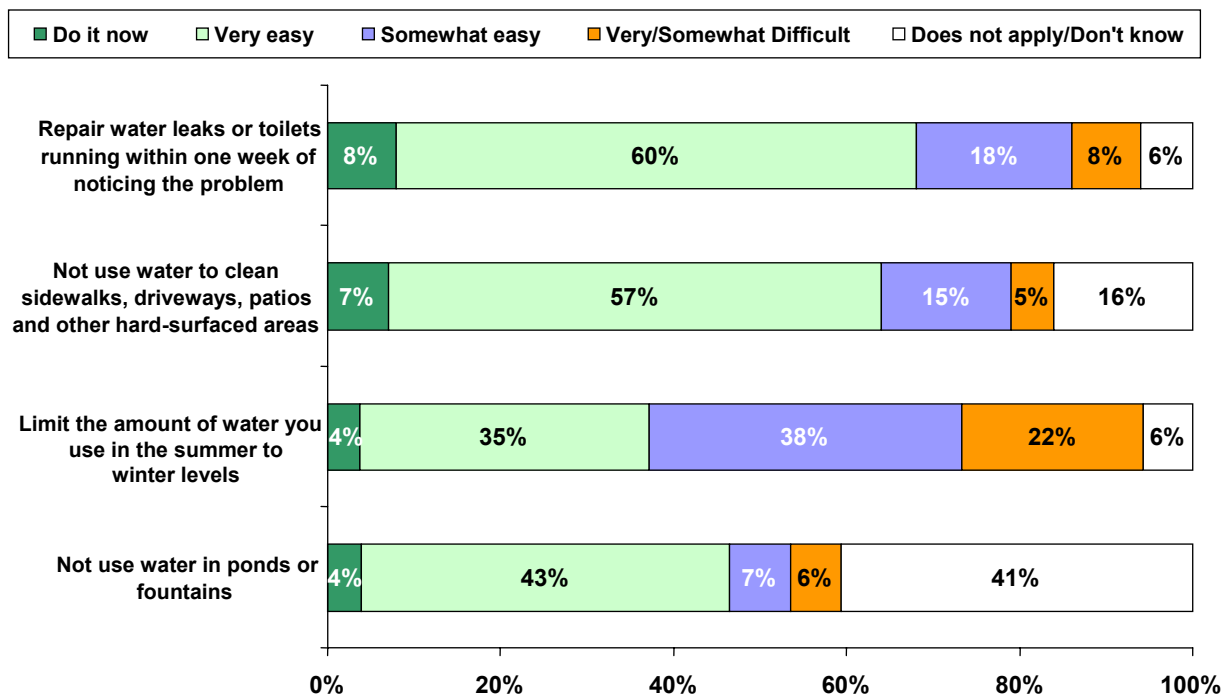
If there was a serious drought in our area that required mandatory water rationing, what is the one thing that you would be likely to do that could significantly decrease the amount of water you use?

Take shorter showers	30%
Less or stop watering lawn and landscaping	25%
Cut down on water use	9%
Recycle grey water	8%
Fewer laundry loads	6%
Cut down on using the dish washer	4%
Change landscape/artificial grass	3%
Replace/fix plumbing appliances that leak	3%
Use bottled water	2%
Cut down on car washing	2%
Drain the pool	1%
Make a well	0%
No answer	1%
Other	5%
Don't know	1%

- Most say making such a change in their water use during a drought would be easy for their family, with 39% saying very easy and 40% saying somewhat easy. One-fifth say it would be difficult for their family to change their behavior during a drought with 5% saying somewhat difficult and 15% saying very difficult.

Residents say it would be easy for them to conserve water by promptly repairing leaks and running toilets and not using water to clean hard surfaced areas. More residents consider limiting summer water use to winter levels difficult. For those who have yards, watering outdoors on specific days, not planting during a drought and making sure water does not run off onto areas that do not need watering would be easy to do. For most residents, filling swimming pools, ponds and decorative fountains does not apply.

If there was a serious drought, would it be easy or difficult for you to...



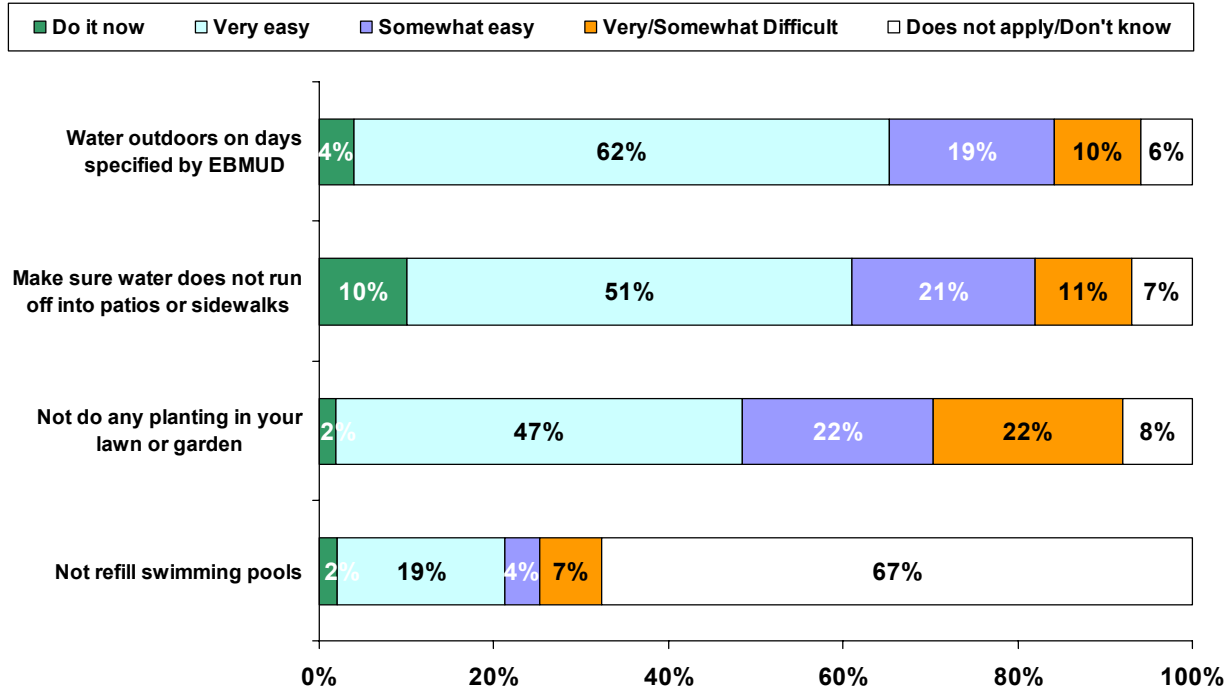
- A target segmentation was developed using the conservation behavior questions. Residents who find it difficult to conserve water during a drought provide a target for conservation outreach. If a resident reported at least one of four are difficult, he or she falls into the target group.

- The target group makes up 33% of the overall population. The 33% is comprised of 26% that say it would be difficult to do one of the four, 5% that say it would be difficult to do two of four, 1% that said it would be difficult to do three of four and less than 0.5% said it would be difficult to do all four.
- Demographic groups that are more likely to say it would be difficult to conserve water during a drought include:
 - Residents that live in Ward 2
 - Have heard something recently about water conservation
 - College educated
 - Homeowners
 - Households that pay their own water bill
 - Residents of single family homes
 - Caucasian
 - Older than 55 years old
 - Annual household income over \$75K
 - Have a yard or garden
 - Male
- Below are the four water conserving activities during a drought and the demographic sub-groups that say it would be difficult to undertake these actions.

- Limit the amount of water you use in the summer to the amount that you use in the winter (22% say it would be difficult).
 - Residents living in Ward 2
 - Have heard something about water conservation recently
 - College educated
 - Homeowners
 - Households that pay their own water bill
 - Residents of single family homes
 - Caucasian
 - Over 55 years old
 - Annual household income over \$75K
 - Have a yard or garden
 - Male
- Not use water in decorative ponds and fountains (6% say it would be difficult).
 - Have not heard something about water conservation recently
 - Less than a college education
 - Renters
 - Landlord pays the water bill
 - Residents of multiunit buildings
 - African American
 - Asian
 - Under 35 years old
 - Annual household income between \$35K and \$50K
 - Male

- Not use any water to clean sidewalks, driveways, patios, and other hard-surfaced areas (5% say it would be difficult).
 - Residents living in Ward 5, Ward 6 and Ward 7
 - Have not heard something about water conservation recently
 - Less than a college education
 - Renters
 - Household pays their own water bill
 - African American
 - Asian
 - Latino
 - Under 35 years old
 - Male
- Repair water leaks or toilet running within one week of noticing the problem (8% say it would be difficult).
 - Residents living in Ward 5 and Ward 6
 - Have not heard something about water conservation recently
 - Less than a college education
 - Renters
 - African American
 - Latino
 - Under 35 years old
 - Annual household income between \$35K and \$50K

For those with a yard or garden, would it be easy or difficult for you to...



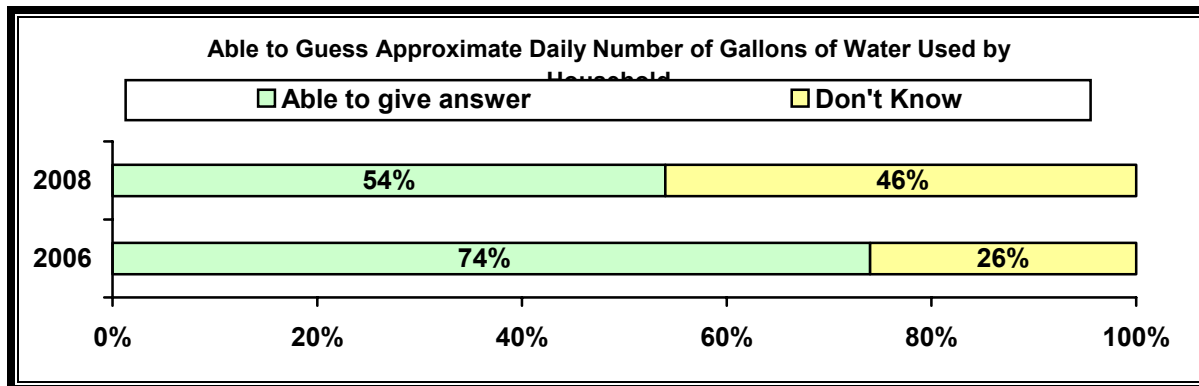
A similar segmentation was applied for those with a yard or garden. Of those with a yard or garden, 36% say at least one of four would be difficult. The 36% is comprised of 25% that said one of four would be difficult, 9% said two of four would be difficult, 2% said three of four would be difficult and less than 0.5% said four of four would be difficult.

- Demographic groups with a yard or garden that are more likely to say it would be difficult to conserve water during a drought include:
 - Residents that live in Ward 2
 - Have not heard anything recently about water conservation
 - College educated
 - Homeowners
 - Caucasian
 - Annual household income over \$75K

- Below are the four water conserving activities with a yard or garden and the demographic sub-groups that say it would be difficult to undertake these actions.
- Not refill swimming pools (7% say it would be difficult).
 - Residents living in Ward 2 and Ward 6
 - College educated
 - African American
 - Annual household income over \$75K
- Not do any planting in your lawn or garden (22% say it would be difficult).
 - Residents living in Ward 2
 - College educated
 - Caucasian
- Only water outdoors on days and times that are specified or allowed by East Bay MUD (10% say it would be difficult).
 - Residents living in Ward 2
 - Have not heard anything recently about water conservation
 - Latino
 - Under 35 years old
 - Annual household income over \$75K
- Make sure your watering outside does not allow any water to run off into patios, sidewalks or other areas that don't need watering (11% say it would be difficult).
 - Residents living in Ward 2
 - Have not heard anything recently about water conservation
 - College educated
 - Annual household income over \$50K

Nearly half (42%) are unable to provide an approximation for how many gallons of water their household uses, on average, each day. This is up significantly from 2006, when one-quarter (26%) was unable to provide an approximation. As with 2006, among those who do approximate, their estimation is low.

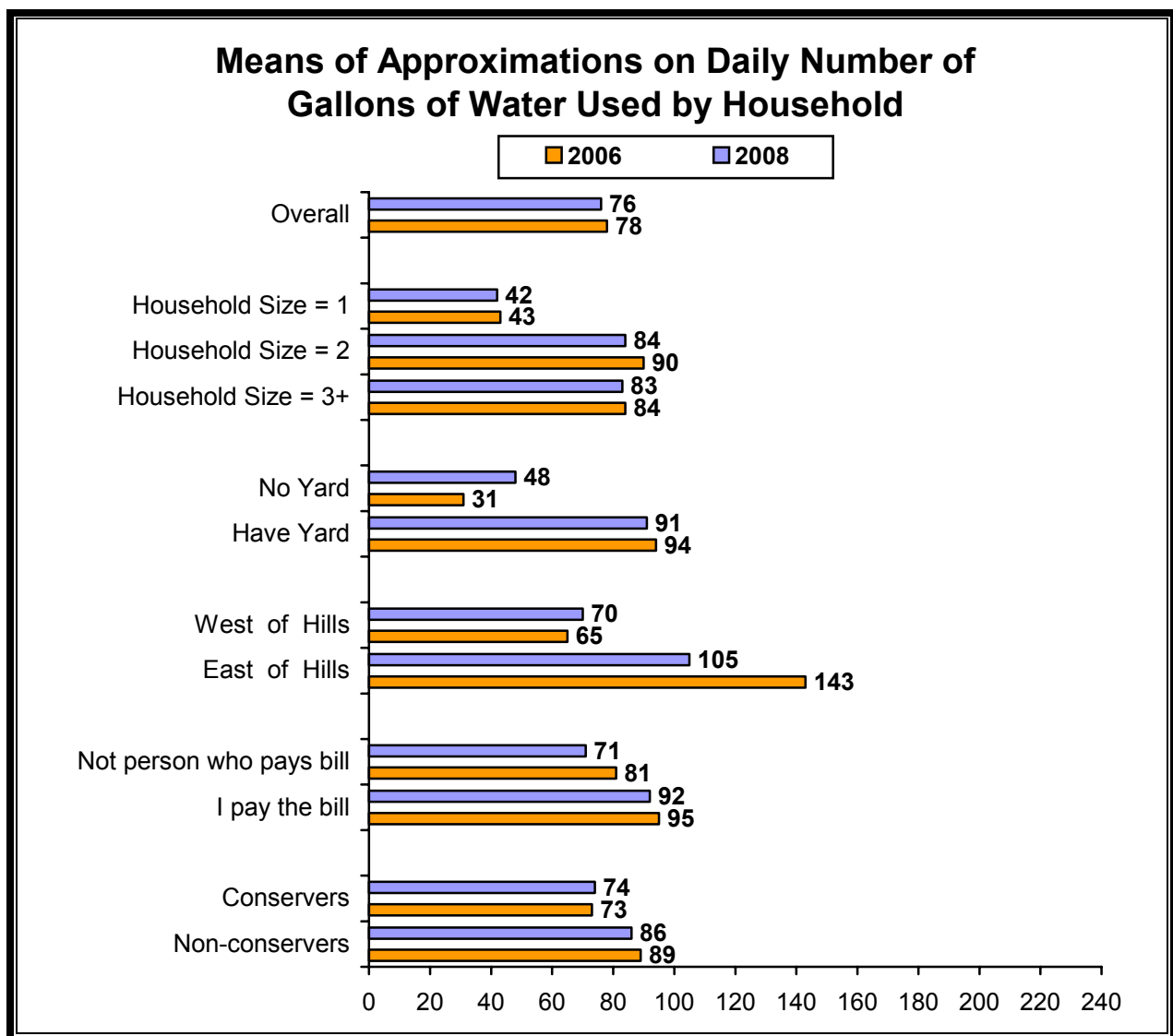
*Using your best guess, approximately how many gallons of water does your household use, on average, every day?**



*Was not asked in 2007

- Men were more likely to provide an answer than women with 38% of men reporting they were not able to guess an approximate daily number of gallons of water used by their household while 53% of women said they were not able to provide such an estimate.
- Homeowners were more likely to report that they were not able to approximate the daily number of gallons of water used by their household (49%) than renters (40%).
- Younger residents are more likely to provide a guess regarding the approximate daily number of gallons used by their household; 42% of those 18-34 say they do not know, 46% of those 35-54 say the same and 49% of those 55 and over say they cannot approximate this.
- Asian residents make up the highest percentage of those who cannot estimate their water usage (53%) followed by Latino (49%), Caucasian (46%) and African American (41%).

- A higher percentage of households that pay their own water bill are unable to estimate their water usage (48%) than households whose landlord pays the water bill (39%).
- English speaking respondents were more likely to provide an answer than Spanish speaking respondents with 45% of English speaking respondents reporting they were not able to guess an approximate daily number of gallons of water used by their household while 61% of Spanish speaking respondents said they were not able to provide an estimate.



*Was not asked in 2007

The means were calculated by excluding respondents unable to estimate their average daily household water use and by excluding the outliers of respondents who estimated over 1000 gallons of water per day; these outlying respondents composed less than 0.5% of the respondents able to provide an approximation.

There is a large discrepancy between perceived use and actual use. According to EBMUD data, the actual average of gallons used per day by a household size of one is 100, by a household size of two is 200 and by a household size of three or more about 300. While all household sizes are significantly (statistically) lower in their estimates of average gallons of household water use daily, those in a household size of two (84) are nearly identical in their estimate to those in a household size of three or more (83) while those in a single person household are significantly lower in their estimate (42).

This same discrepancy between perceived use and actual use is seen among both those living East of the Hills and those living West of the Hills. According to EBMUD data, the actual average of gallons used per day by household in those living East of the Hills is 525 (their average perceived usage is 105) and by those living West of the Hills is 290 (their average perceived usage is 70).

These results show that many EBMUD customers are unable to guess how many gallons of water are used by their household daily, and among those that are able to approximate, the perceived use is significantly lower than actual use. Below are demographic sub-groups that have significant differences, compared to their counterparts, in their perceived average daily household water usage.

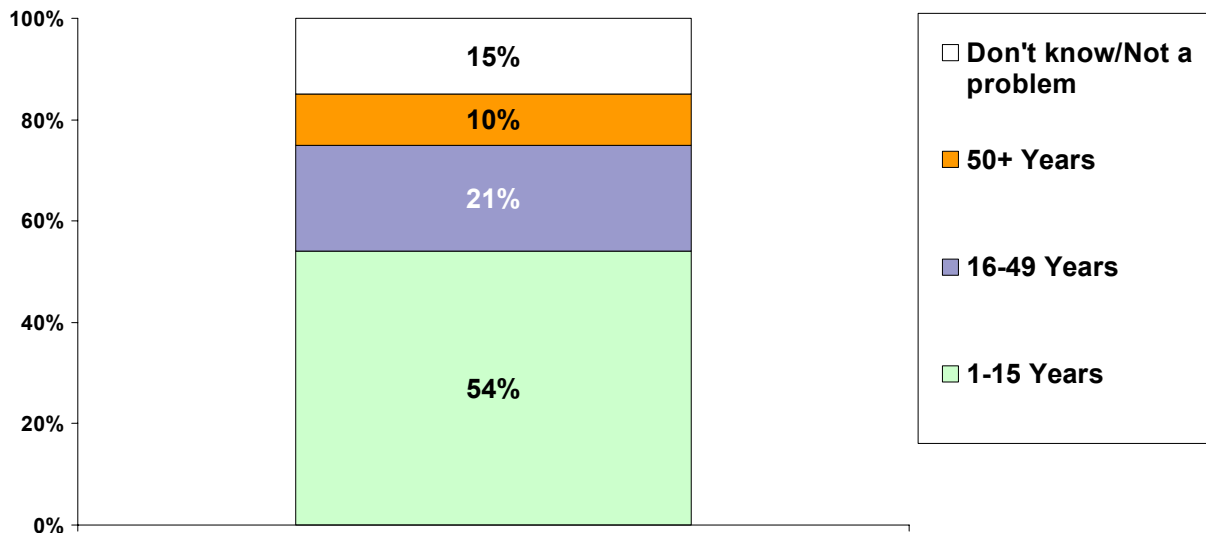
- Residents West of Hills report lower water usage by household (70 gallons per day) than residents East of this Hills (105 gallons per day).
- Residents living in Ward 2 report the highest water usage (109 gallons per day) and residents living in Ward 5 report the lowest water usage (61 gallons per day).
- Men perceive more average daily water usage by their household than women with men giving an average guess of 83 gallons and women of 69 gallons.

- Those that have heard something about water conservation say their household uses approximately 89 gallons of water per day compared to those who have not heard anything about water conservation recently (49 gallons per day).
- College graduates estimate higher household water use with an average daily household water use approximation at 80 gallons compared with non-college graduates who estimate their use at 68 gallons.
- Homeowners report using more water per day on average (97 gallons) than renters (46 gallons).
- Households that pay their own water bill estimate higher water usage (87 gallons of water per day) than households whose landlord pays the water bill (45 gallons).
- Those with higher levels of income guess higher levels of average daily household water use; those with household incomes less than \$35K provide an average estimate of 60 gallons, those with household incomes of \$50K to \$75K estimate their daily usage at 72 gallons and households with incomes of \$75K or more give an average of 103 gallons.
- Non-Caucasians provided lower estimates of their average daily household water use than did Caucasians; Caucasians estimated 87 gallons of water used on a daily average by their household while African Americans (50), Latinos (61) and Asians (71) gave much lower estimates.
- Spanish speakers give a lower estimate (59) than do English speakers (77) on their estimated number of average daily gallons of water used by the household.
- Younger residents also provide lower estimates than older residents; those under 35 years of age guess their household's average daily water use to be around 51 gallons, those 35-54 estimate it at 90, and those 55 and over at 81 gallons.

Global Climate Change

Most residents believe global climate change will affect water supplies in the near term. More than half (54%) say global climate change will become a serious problem for local water supplies in less than 15 years.

How many years from now do you think global climate change will become a serious problem for our local water supply?



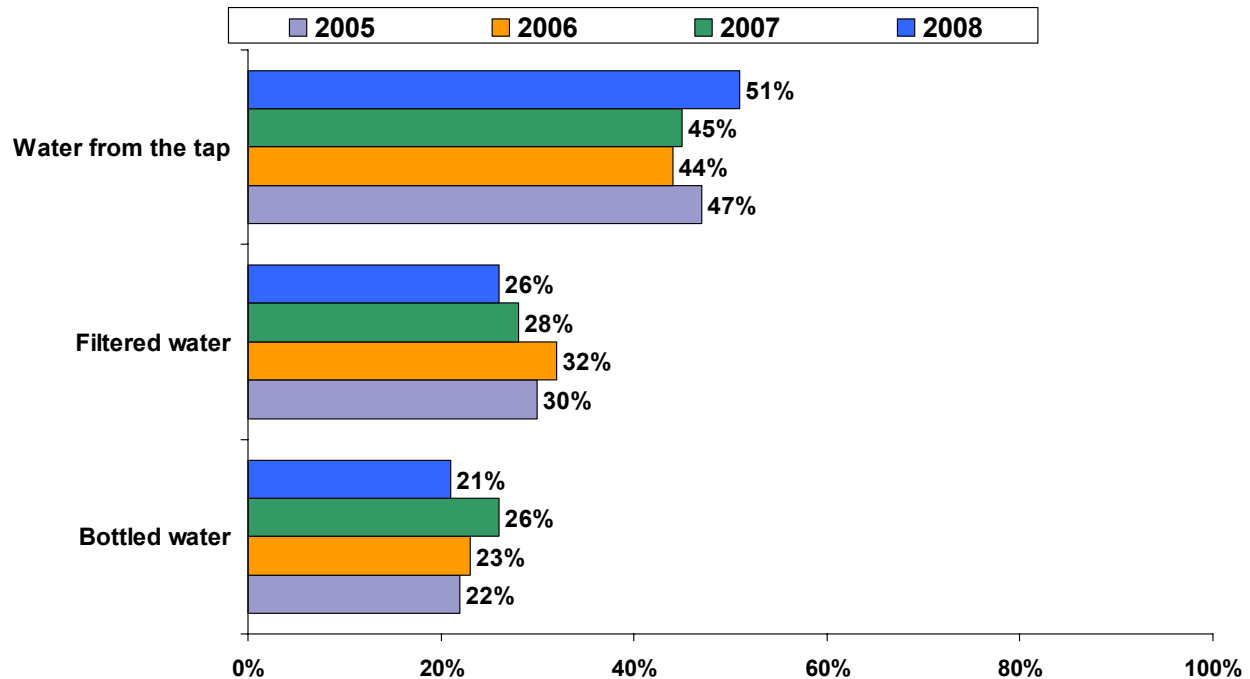
- More residents West of the Hills (56%), particularly residents in Ward 4 (60%), believe global climate change will become a serious problem within the next 15 years than residents East of the Hills (42%).
- While majorities of both men and women say global climate change will affect water supplies in the near term, more women (56%) than men (51%) believe this.
- More renters (59%) believe in the near term problem of global climate change than homeowners (50%).
- Three out of five (60%) of multiunit building residents say global climate change will affect water supplies within 15 years. Just over half (52%) of single family residents say global climate change will affect water supplies within 15 years.

- More residents under 50 (56%) say global climate change is a near term problem than residents over 50 (51%).
- Majorities of African American (59%), Latino (57%), Asian (54%) and Caucasian (52%) residents believe global climate change will affect water supplies within 15 years.
- Households with an annual income between \$50K and \$75K (60%) are most likely to say global climate change will be serious problem within 15 years.

Drinking Water at Home

Residents report an increase in drinking tap water at home. Drinking tap water is at its highest level since 2005. Drinking filtered water and bottled water are at their lowest level since 2005.

For drinking water in your home, do you mostly use:



- Residents that report drinking tap water at home are least concerned about the quality of their tap water. On a one to seven scale where one means not at all concerned and seven means very concerned, tap water drinkers' average rating is 5.18. Filtered water drinkers' average rating is 5.52 and bottled water drinkers have the highest average rating of 5.88.
- Households with annual incomes over \$50K (55%) are more likely to drink tap water at their home than households with incomes under \$35K (48%) and between \$35K and \$50K (45%).
- Residents East of the Hills (57%), particularly residents in Ward 2 (57%), drink more tap water than residents West of the Hills (50%).

- College educated (55%) residents report drinking more tap water than those with less than a college education (42%).
- Older residents drink more tap water than younger residents. Among residents 55 and over, three out of five (62%) say they drink tap water at home. Among residents 35-54, 49% say they drink tap water at home. Among residents under 35, 39% drink tap water and 36% drink filtered water.
- More Caucasian residents (59%) report drinking tap water at home.
- Among African American residents 45% report drinking tap water and 38% report drinking bottled water.
- Among Latino residents 34% report drinking tap water, 36% report drinking filtered water and 31% report drinking bottled water.
- Among Asian residents, 31% report drinking tap water, 42% report drinking filtered water and 27% report drinking bottled water.

Television Series

PBS and local cable channels have been running a series on water issues hosted by Huell Howser. One in ten (11%) recall seeing the television show. Among those that recall seeing the show, most recall a show about water conservation (30% of those who recall seeing the show).

- Other topics include:
 - California water supply problems (of those that have seen the show, 9% recall a show on this topic)
 - Taking care of our habitat/pollution (7%)
 - Global warming (5%)
 - Drought resistant landscaping (2%)
 - Water storage/delivery system (2%)
 - Conserving energy (1%)
 - Manage water runoff (1%)
 - Filtering water (1%)
- Residents that have seen the show give EBMUD a higher positive rating on individual job responsibilities than those that have not seen the show. Those that have not seen the show have a higher “don’t know” rating for each EBMUD job responsibility.
- Residents that have seen the show are more likely to have received information about water conservation, believe climate change will impact water supplies in the short-term, pay their own water bill, and be Latino and older than 50.
- More residents living in Ward 7 report having seen the show than in any other ward.

GENERAL RECOMMENDATIONS

Based on the tracking data from 2004 through 2008, the East Bay Municipal Utility District remains well thought of by the residential customers it serves. EBMUD's rating is largely driven by perceptions of water quality and service reliability. EBMUD continues to be a highly credible source of information about water issues.

Much of the research this year focused on water use, conservation and outreach. Residents drastically underestimate the amount of water used. Residents may not check or may not know where to check for their household's water use. Displaying the average daily water use more prominently on a customer's water bill may help to increase water use awareness. Continued tracking of perceived water use will provide useful information in comparing perception to reality.

Most residents recall hearing or seeing something about water conservation, but their recollection lacks specifics. Residents remember only a general message about water conservation. Residents say they are very willing to take steps to conserve water and many report taking a variety of steps to save water. EBMUD may need to convince residents that they need to do more to conserve water, since almost half report that they already take most of the steps EBMUD urges for conservation. To encourage higher retention of the specific goals customers are asked to achieve, EBMUD should continue to provide residents specific and simple ways in which households can save water, experimenting with different ways of stating and delivering the message and higher frequency of messaging.

Compared to previous research, an extraordinarily high percentage of residents say they have taken several steps to save water. Residents are most likely over-reporting their water conservation efforts. EBMUD could experiment with programs that provide residents with ways to check if their shower heads and faucets have water flow restrictors, if their appliances are newer, water-efficient machines or if their toilet is indeed a low flow model.

Residents continue to be concerned about protecting the San Francisco Bay. Treating waste water before it is discharged into the Bay is among the lower rated job responsibilities, so EBMUD should continue to look for low-cost and high-visibility opportunities to remind the community of its pollution prevention work.

RECOMMENDATIONS FOR FUTURE RESEARCH

With five years of data, we can now identify ratings and concerns among EBMUD customers that have remained consistent over time. In future years we would recommend shortening the tracking portion of the survey to a smaller set of questions that can enable continued monitoring of key areas of performance. These can be coupled with in-depth focus on emerging issues or current topics of immediate importance. The trend tracking change could reduce the survey length by approximately 40-50%.

Water conservation has been a topic of focus throughout the past five years, and EMC recommends that the findings from that research be combined with EBMUD water use data and census tract data to test targeted audience marketing of conservation services. Because of recent dry conditions and the potential risk of drought, this targeting could be very helpful in promoting compliance with customer conservation targets, whether voluntary or mandatory, in the future.

Global climate change is among the top environmental concerns and its impact on water will continue to grow in importance. The majority of EBMUD customers believe global climate change will become a serious problem in the near term. As part of a longer term communications effort regarding water supply and water conservation, we recommend using research to gain a deeper understanding of how to enhance customer awareness about climate change and water, and how to use customer concern about climate change as a water conservation incentive. Quantitative values questions could help to identify those segments of the population most willing to make significant water use changes based on this factor. Focus groups could be used to evaluate the effectiveness of different communication messages and tools related to this approach.

TRACKING RECOMMENDATIONS

EMC recommends that EBMUD continue annual tracking on a few key questions from previous research surveys to track attitudinal and opinion change. For accurate tracking of each question, the responses must use identical scales, measure opinions among the same type of respondents (i.e. residents in the district that are at least 18 years of age), and use the same question wording.

Overall Job Rating

The overall job EBMUD is doing

The percentages rating the overall job EBMUD is doing as “excellent” or “good”

EBMUD’s overall job rating compared to Comcast, Pacific Gas & Electric, and AT&T

Mission Statement

Providing reliable water service

Ensuring the quality of water

Ensuring an adequate supply of water

The percentages rating the job EBMUD is doing at providing reliable water service, ensuring the quality of water and ensuring an adequate water supply as “excellent” or “good”

Water Conservation Efforts

The overall job EBMUD is doing at encouraging customers to conserve water

The percentages saying EBMUD is doing an “excellent” or “good” job of encouraging customers to conserve water

Recall of water conservation outreach

The percentage of residents that recall hearing or seeing something about water conservation and the specific messages

Environmental Issues

The overall job EBMUD is doing at treating waste water before it is discharged into the Bay

The percentages saying EBMUD is doing an “excellent” or “good” job of treating waste water

The effects of global climate change and the role of EBMUD

The percentages saying EBMUD is doing an “excellent” or “good” job of preparing for the effects of global climate change and the seriousness of global climate change

The percentages of residents that are concerned about global climate change



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EMCresearch.com

Survey of: East Bay Municipal Utility District Customers
Conducted for: EBMUD
February 25 – March 9, 2008
n=1248; MoE \pm 2.8%
EMC 08-3807

Where applicable, results compared to previous surveys of EBMUD customers:

February 5-11, 2007
n=1,200, MoE \pm 2.8%
EMC #07-3630

February 9-20, 2006
n=1,201, MoE \pm 2.8%
EMC #06-3432

February 13-20, 2005
n=1,209, MoE \pm 2.8%
EMC #05-3235

February 2-12, 2004
n=1,555, MoE \pm 2.5%
EMC #04-2913

Hello, my name is _____, and I work for EMC Research Company. I'm conducting a survey to find out how people in the East Bay feel about some local issues facing them. We are not trying to sell anything. Your responses are completely confidential.

	<u>2/04</u>	<u>2/05</u>	<u>2/06</u>	<u>2/07</u>	<u>2/08</u>
SEX					
Male	48%	48%	48%	50%	47%
Female	52%	52%	52%	50%	53%
LANGUAGE					
English	-	-	94	92	94
Spanish	-	-	6	9	6

- For this survey, I need to speak to the person living in the household who is 18 years of age or older and has the next birthday. Would that be you?
Yes → CONTINUE 100
No → Ask for person living in household that is 18 or older with next birthday (Repeat intro if needed)
- What is your zip code? (Terminate if zip code is not included in service area list)

3.	Do you receive your water bill from the East Bay Municipal Utility District, known as East Bay MUD, or from a different water provider?								
	EBMUD → CONTINUE	75	75	71	74	74			
	Other provider → (Terminate if Q2 = 94506, 94523, 94541, 94542, 94552, 94583, 94596, or 94598)	3	3	4	3	4			
	(Landlord pays water bill) → CONTINUE	19	19	18	15	14			
	(Don't Know) → CONTINUE	4	4	7	8	7			

Next, please tell me how concerned you are about each of the following issues. Use a scale of 1 to 7, where 1 means you are not at all concerned and seven means you are very concerned.

(RANDOMIZE Q4-Q9)

1	2	3	4	5	6	7		8	
Not at all concerned				Highest concern				(DK)	Mean

On a scale from one to seven, with one being not at all concerned and seven being very concerned, how concerned are you about ... (repeat as needed)

4.	The quality of your tap water;								
'04	8	5	3	5	11	13	54	0	5.63
'05	7	5	3	5	11	11	59	1	5.76
'06	9	4	3	4	11	15	54	0	5.64
'07	9	3	4	4	10	13	57	0	5.71
'08	11	5	3	4	13	14	50	0	5.42
5.	Having enough water available in a major drought;								
'04	5	3	6	6	15	14	51	0	5.68
'05	4	3	6	8	16	13	50	0	5.67
'06	5	3	4	8	19	12	50	0	5.69
'07	5	2	4	6	12	13	57	1	5.89
'08	5	2	4	6	14	14	54	1	5.82
6.	Protecting the Delta;								
'08	4	2	4	7	17	17	42	6	5.70

	1	2	3	4	5	6	7	8	
	Not at all concerned				Highest concern			(DK)	Mean
7.	Protecting the San Francisco Bay; ¹								
'05	2	1	2	6	15	17	56	0	6.07
'06	3	1	2	7	16	18	52	1	5.97
'07	4	2	3	6	14	17	54	1	5.92
'08	4	1	3	6	16	17	53	1	5.96
8.	The amount of your water bill;								
'04	15	7	11	12	17	8	24	6	4.40
'05	13	7	11	11	17	9	26	6	4.57
'06	15	6	9	12	18	11	23	6	4.46
'07	15	5	10	10	18	9	26	8	4.52
'08	14	6	9	11	16	9	24	11	4.49
9.	The effects of climate change on the availability of water;								
'08	6	3	6	7	16	14	46	2	5.56
(END RANDOMIZE)									

¹ Worded "Protecting the Bay" in '05

Using a scale of excellent, good, only fair or poor, please rate the overall job each of the following is doing?

(RANDOMIZE Q10-Q13)

	<u>Excellent</u>	<u>Good</u>	<u>Only Fair</u>	<u>Poor</u>	<u>(Don't Know)</u>	<u>(Not my Service Provider)</u>
10. The East Bay Municipal Utility District						
'04	17	55	17	3	8	1
'05	14	52	21	3	9	1
'06	18	52	21	3	7	0
'07	17	53	18	2	10	1
'08	17	52	19	2	9	1
11. The Pacific Gas and Electric Company						
'04	11	44	30	14	2	0
'05	11	43	31	13	2	0
'06	12	40	31	14	2	1
'07	14	50	25	7	4	0
'08	14	47	27	8	4	0
12. AT&T ^{II}						
'04	9	43	31	11	4	3
'05	9	38	34	12	4	3
'06	9	39	30	12	6	4
'07	10	44	28	10	7	1
'08	9	38	32	11	8	2
13. Comcast						
'04	6	24	25	19	15	12
'05	6	26	25	19	12	12
'06	6	28	26	16	15	10
'07	7	27	25	16	18	7
'08	6	23	24	20	18	8

(END RANDOMIZE)

^{II} Worded "SBC Pacific Bell" in '04 and '05; Worded as "AT&T, formerly known as SBC" in '06 and '07

Using a scale of excellent, good, only fair or poor, please rate the job you think the East Bay Municipal Utility District is doing on each of the following responsibilities:

Is the East Bay Municipal Utility District doing an excellent, good, only fair or poor job
(RANDOMIZE Q14-Q24)

	<u>Excellent</u>	<u>Good</u>	<u>Only Fair</u>	<u>Poor</u>	<u>(Don't Know)</u>	<u>(Not Their Job)</u>
14. Ensuring the quality of the water we drink;						
'04	20	51	20	5	4	-
'05	19	50	19	5	7	-
'06	21	48	19	6	7	-
'07	21	50	16	5	8	-
'08	25	44	17	5	9	0
15. Protecting the water supply against natural disasters such as earthquakes;						
'04	9	45	20	5	21	0
'05	8	42	22	5	24	0
'06	9	36	22	8	25	0
'07	8	35	20	6	30	0
'08	9	31	17	9	34	0
16. Making sure we have the water supply we need;						
'04	17	61	15	2	6	0
'05	16	57	17	2	8	0
'06	19	54	18	3	6	0
'07	19	53	16	3	10	0
'08	16	53	15	4	12	0
17. Encouraging customers to conserve water;						
'04	13	45	28	11	3	-
'05	16	45	25	11	4	0
'06	20	43	24	10	4	-
'07	16	47	23	8	6	0
'08	19	43	20	8	8	0
18. Being a good environmental or green business;						
'08	10	37	19	3	29	0

	<u>Excellent</u>	<u>Good</u>	<u>Only Fair</u>	<u>Poor</u>	<u>(Don't Know)</u>	<u>(Not Their Job)</u>
19. Responding to customer service problems like interruptions in water service or low pressure;						
'04	15	47	15	4	20	0
'05	15	44	15	3	23	-
'06	13	43	18	6	20	0
'07	15	39	16	4	27	0
'08	15	39	14	4	28	1
20. Providing reliable water service;						
'04	30	58	10	1	2	-
'05	29	57	10	1	3	-
'06	30	56	12	1	2	-
'07	31	56	9	1	3	-
'08	32	55	9	1	4	0
21. Treating waste water before it is discharged into the Bay;						
'04	8	38	23	6	25	-
'05	9	37	20	6	27	0
'06	9	38	18	9	26	0
'07	9	32	17	7	35	0
'08	9	31	17	8	34	1
22. Providing convenient customer service hours;						
'04	8	51	18	3	19	-
'05	8	47	20	4	21	-
'06	11	47	19	4	19	0
'07	10	45	15	4	27	-
'08	10	39	18	3	30	0
23. Having an informative and useful web site;						
'05	6	28	13	2	52	0
'06	8	28	14	2	47	0
'07	7	27	10	2	54	0
'08	6	24	12	3	54	1
24. Preparing for the effects of climate change on future water supplies;						
'08	5	25	21	9	39	1
(END RANDOMIZE)						

I'm going to read you a list of persons and organizations that speak out about water issues. For each one, please tell me if you would find that person or organization very believable, somewhat believable, not too believable or not at all believable on water issues.

(RANDOMIZE Q25-Q31)

	<u>Very believable</u>	<u>Somewhat believable</u>	<u>Not too believable</u>	<u>Not at all believable</u>	<u>(Don't Know)</u>
25. East Bay Municipal Utility District	40	45	5	2	9
26. The Association of California Water Agencies	16	40	7	3	34
27. A researcher from an environmental organization	29	41	7	4	19
28. A water quality engineer	38	38	3	2	19
29. A climate change research scientist	36	34	7	4	19
30. Rebuild California.Org (Rebuild California dot org)	10	25	7	4	54
31. The Bay Area Water Agencies Coalition	15	38	5	3	40

(END RANDOMIZE)

32. Now, on a scale from one to seven where one is making no effort to use water efficiently and a seven is an active commitment to water conservation, where would you place yourself on that scale?^{III}

	1	2	3	4	5	6	7	8	
	No Conservation				Active Conservation			(DK)	Mean
'05	1	2	4	13	33	28	20	0	5.40
'06	1	2	5	12	35	23	22	0	5.37
'08	2	1	5	13	33	21	24	1	5.35

^{III} Was not asked in 2007

33. Using your best guess, approximately how many gallons of water does your household use, on average, every day?^{IV}

(Record numerical value. One response only)

	<u>2/06</u>	<u>2/08</u>
Don't Know	26%	46%
Percentage among those that gave a response (2006: n=885 / 2008: n=421)		
0 - 25	43	41
26 - 50	24	21
51 - 100	16	21
101 - 150	4	5
151 - 200	5	4
201 - 250	1	1
251 - 300	2	2
301 - 400	2	2
401 - 500	2	2
500 +	2	1
2006 Mean^V: 91.91	2006 Median^{VI}: 30	2006
Mode^{VII}: 50, 20		
2008 Mean: 76.34	2008 Median: 40	2008 Mode:
50		

34. Do you recall seeing or hearing anything about water conservation in the last 6 to 8 months?^{VIII}

	<u>2/07</u>	<u>2/08</u>
Yes → continue	53	70
No → skip to Q38	47	29
(Don't know) → skip to Q38	1	1

35. Was that specific to East Bay MUD customers, or was it just a general message about water conservation? (n=894)

	<u>2/08</u>
Specific to EBMUD customers	32
General message	64
(Don't know)	4

^{IV} Was not asked in 2007

^V The average of all given responses

^{VI} Half of the respondents stated a number below this, half stated a number above this

^{VII} The single response most frequently given, in 2006, 50 and 20 were equal in frequency of responses

^{VIII} Worded "Turning to a new topic, do you recall seeing or hearing anything recently about water conservation?" in 2007

36. And what do you remember about that water conservation message? **(ONE RESPONSE ONLY, DO NOT READ PRE-CODED LIST) (n=894)**

	<u>2/08</u>
Voluntary water conservation	56
Water shortage in California	4
Voluntary water conservation of 15%	3
Conservation from May to October	3
Drought threats	3
Lack of rain fall	3
Check plumbing and appliances for leaks	2
Water lawn only every 3 days	2
Global warming	1
Reduce car and driveway washing	1
Snow pack is low	1
Population growth is a concern	0
No answer	0
(Other)	5
(Don't know)	16

37. Where did you see or hear the information? **(DO NOT READ LIST, ALLOW UP TO TWO RESPONSES)**

(2007: n=630 / 2008: n=894)

	<u>2/07</u>	<u>2/08</u>
Television	35	37
Newspaper	25	23
Radio	9	12
EBMUD water quality report in mail	2	12
Brochure/Pamphlet	4	7
Billboard	4	4
Bill insert/newsletter	6	4
Community/Business group news or email	-	3
Word of mouth	2	3
EBMUD website	-	1
School or work	1	1
Letter/postcard in my mail	9	1
Phone call	11	0
Magazine	1	0
Internet	4	-
Chamber News	1	-
Other website	-	2
Other	2	1
(Don't Know)	3	5

(RESUME ASKING EVERYONE)

Now I'd like your thoughts on how severe a problem you think different parts of the state have storing and delivering a reliable supply of water. Using a scale of 1 to 7, where 1 means you think it's not a problem at all and seven means you consider it very severe and critical problem

	1	2	3	4	5	6	7	8	
	Not a problem at all				Very serious problem			(DK)	Mean
38.	All of California								
	4	3	8	14	24	15	26	6	5.11
39.	Southern California								
	4	3	4	5	12	16	44	12	5.74
40.	The Bay Area								
	7	7	11	16	24	14	17	5	4.60
41.	the East Bay MUD service area								
	8	9	10	16	22	12	14	10	4.39

42. I have some additional questions about water use, but to make sure I ask you the right questions, do you have a yard or garden?

	2/04	2/05	2/06	2/07	2/08
Yes	77	76	75	71	69
No	23	24	25	29	31
(Don't Know/Don't Remember)	0	0	0	0	0

I'm going to read you some things households can do to reduce water use. Thinking realistically about you and your family, please tell me if you are definitely planning to do this in your household this year, if you might do it this year, or if you probably won't do it this year. If you've already done it or it doesn't apply please tell me.

(RANDOMIZE Q43-Q50) (IF Q42=2 or 3, DON'T HAVE A YARD OR GARDEN, DO NOT ASK Q47-Q50)

	<u>Definitely will</u>	<u>Might</u>	<u>Probably won't</u>	<u>Already done</u>	<u>Does not apply</u>	<u>(Don't know)</u>
43.	Replace an old toilet with a new lower-flow model;					
	5	10	26	47	11	2
44.	Replace an old dishwasher with a new water-efficient dishwasher					
	4	7	18	37	32	3
45.	Replace an old washing machine with a new water-efficient machine					
	4	10	21	44	19	2

	<u>Definitely will</u>	<u>Might</u>	<u>Probably won't</u>	<u>Already done</u>	<u>Does not apply</u>	<u>(Don't know)</u>
46. Install water-flow restrictors in shower heads and faucets;	4	11	23	51	8	3
47. Landscape your yard or garden using only low-water use plants and flowers (n=902)	8	13	22	43	12	1
48. Eliminate grass in your landscaping; (n=902)	4	8	42	26	20	1
49. Install an irrigation system in your yard or garden that uses satellite weather information so it only waters when it's needed (n=902)	3	7	52	12	22	4
50. Set timers on your irrigation system to water not more than 3 times a week for only short periods. (n=902)	7	6	13	46	26	2

(END RANDOMIZE)

51. If there was a serious drought in our area that required mandatory water rationing, what is the one thing that you would be likely to do that could significantly decrease the amount of water you use? **(ONE RESPONSE)**

	<u>2/08</u>
Take shorter showers	30
Less or stop watering lawn and landscaping	25
Cut down on water use	9
Recycle grey water	8
Fewer laundry loads	6
Cut down on using the dish washer	4
Change landscape/artificial grass	3
Replace/fix plumbing appliances that leak	3
Use bottled water	2
Cut down on car washing	2
Drain the pool	1
Make a well	0
No answer	1
Other	5
Don't know	1

(IF Q51 = NOTHING OR DON'T KNOW, SKIP TO Q53)

52. Would that be a very easy, somewhat easy, somewhat difficult or a very difficult change for you and your family? (n=1091)

	<u>2/08</u>
Very easy	39
Somewhat easy	40
Somewhat difficult	5
Very difficult	15
(Don't Know)	3

(RESUME ASKING EVERYONE)

I'm going to read you some things that could be done to cut back water use if there was a serious drought in our area. For each one, please tell me if it would be very easy, somewhat easy, somewhat difficult or very difficult for you and your family. If you do it now or it does not apply please tell me.

If there was a serious drought, would it be easy or difficult for you to... (is that very or somewhat easy/difficult)

(RANDOMIZE Q53-Q60. If Q42=2 or 3, , SKIP Q57-Q60)

	<u>Very easy</u>	<u>Somewhat easy</u>	<u>Somewhat difficult</u>	<u>Very difficult</u>	<u>Do it now</u>	<u>Does not apply</u>	<u>(Don't know)</u>
53. Limit the amount of water you use in the summer to the amount that you use in the winter.	35	33	4	18	4	3	3
54. Not use water in decorative ponds and fountains.	43	7	1	5	4	40	1
55. Not use any water to clean sidewalks, driveways, patios, and other hard-surfaced areas.	57	15	1	4	7	15	1
56. Repair water leaks or toilet running within one week of noticing the problem.	60	18	2	6	8	5	1
57. Not refill swimming pools. (n=902)	19	4	0	7	2	67	0
58. Not do any planting in your lawn or garden (n=902)	47	22	3	19	2	7	1
59. Only water outdoors on days and times that are specified or allowed by East Bay MUD (n=902)	62	19	2	8	4	4	2
60. Make sure your watering outside does not allow any water to run off into patios, sidewalks or other areas that don't need watering. (n=902)	51	21	1	10	10	7	0

(END RANDOMIZE)

61. On another topic, how many years from now do you think global climate change will become a serious problem for our local water supply? Do you think it will be 1 to 15 years, 16 to 49 years, 50 to 99 years, 100 or more years or do you not think climate change will become a serious problem for water supply?

	<u>2/08</u>
1 to 15 years	54
16 to 49 years	21
50 to 99 years	6
100 or more years	4
Do not think climate change will become a serious problem.	7
(Don't Know)	8

62. California Public Broadcasting Systems and local cable channels have been running a series of shows talking about a wide range of California water issues. These shows are hosted by Mr. Huell (HUE-il) Howser. Have you seen any of these shows?

	<u>2/08</u>
Yes, have seen → ask Q63	11
No. Have not seen → skip to Q64	86
(Don't know/Don't remember) → skip to Q64	3

63. What was the most useful or important information you learned from the show? (**one response**) (n=150)

	<u>2/08</u>
Conserving water	30
California water supply problems	9
Taking care of our habitat/pollution	7
Global warming	5
Drought resistant landscaping	2
Water storage/delivery system	2
Conserving energy	1
Manage water runoff	1
Filtering water	1
Other	9
Nothing	11
Don't know/Don't remember	23

(resume asking everyone)

Now I'd like to ask you a few questions for statistical purposes only. But first,

64. Do you have any particular questions or concerns about water service or East Bay MUD that you would like to share? **(ONE RESPONSE ONLY)**

	<u>2/04</u>	<u>2/05</u>	<u>2/06</u>	<u>2/07</u>	<u>2/08</u>
Don't know/No/Nothing	68	71	71	74	77
Cost/Rates too high	4	2	3	2	4
Good job/Good service	3	5	3	5	2
Concern over water safety/Additives/ Fluoride/Chlorine	3	3	3	2	2
Concerns over lead in pipes	-	1	1	0	2
Good quality water/Taste	1	1	1	0	2
Public need more information/Education about water conservation	2	1	1	2	2
Concern over drought/Availability of enough water	1	0	1	1	2
Maintain water safety/Quality	2	-	-	0	2
Control growth/Overpopulation causing water shortage	1	1	1	0	1
Want more info on construction projects	-	1	1	1	1
Environment issues	-	-	-	-	0
Bay/Delta pollution/Runoff	1	1	1	0	0
Security concerns/Terrorist attack	1	-	1	0	0
Poor quality water/Taste	2	1	0	2	0
I support the use of recycled water	1	-	-	0	0
More dams	-	-	-	-	0
Earthquake issues	-	-	-	-	0
Bad service	-	-	-	-	0
Other	10	10	12	8	2

65. For drinking water in your home do you mostly use: **(READ AND RANDOMIZE CHOICES)?**

	<u>2/05</u>	<u>2/06</u>	<u>2/07</u>	<u>2/08</u>
Bottled water;	22	23	26	21
Filtered water; or	30	32	28	26
Water from the tap	47	44	45	51
(Don't know)	0	0	-	0
(Refused)	0	1	1	1
(Don't drink water)	0	0	0	0

66. What is the last grade you completed in school?

	<u>2/04</u>	<u>2/05</u>	<u>2/06</u>	<u>2/07</u>	<u>2/08</u>
Some grade school	0	0	3	3	3
Some high school	3	3	5	7	7
Graduated High School	15	14	16	13	14
Technical/Vocational	2	2	1	1	2
Some College	23	23	21	18	22
Graduated College	34	31	30	36	34
Graduate/Professional	23	26	24	20	17
(Other)	-	-	-	1	1
(Don't Know/Refused)	0	1	1	2	1

67. In terms of your current job status, are you employed, unemployed but looking for work, retired, a homemaker or a student?

	<u>2/04</u>	<u>2/05</u>	<u>2/06</u>	<u>2/07</u>	<u>2/08</u>
Employed	59	61	57	57	54
Unemployed	8	6	7	6	7
Retired	18	19	19	22	22
Homemaker	5	5	6	7	6
Student	7	6	7	5	7
Other	3	3	3	3	3
(Don't Know)	0	1	1	1	1

68. Do you own or rent your apartment or home?

	<u>2/04</u>	<u>2/05</u>	<u>2/06</u>	<u>2/07</u>	<u>2/08</u>
Own → skip to Q70	60	63	60	60	64
Rent/Buying → ask Q69	39	36	38	37	34
(DK/Refused) → skip to Q70	1	2	2	2	2

69. Does someone in your household pay the water bill, or does the landlord pay the water bill?

(2004: n=602 / 2005: n=447 / 2006: n=453 / 2007: n=449 / 2008: n=352)

	<u>2/04</u>	<u>2/05</u>	<u>2/06</u>	<u>2/07</u>	<u>2/08</u>
Household pays → ask Q70	38	38	37	39	36
Landlord pays → skip Q71	62	58	62	60	64
(Don't Know) → skip Q71	1	4	1	1	0

70. **(ask owners and renters who pay bill)** Are you the person in the household that pays the water bill?

(2004: n=227 / 2005: n=933 / 2006: n=915 / 2007: n=900 / 2008: n=1024)

	<u>2/04</u>	<u>2/05</u>	<u>2/06</u>	<u>2/07</u>	<u>2/08</u>
Yes	74	75	70	76	70
No	26	25	28	24	28
(Don't Know)	-	-	2	0	1

(RESUME ASKING EVERYONE)

71. Do you live in a detached single family residence or a multi-unit building?

	<u>2/04</u>	<u>2/05</u>	<u>2/06</u>	<u>2/07</u>	<u>2/08</u>
Single family	66	67	68	66	69
Multi-unit	62	31	31	31	29
(Other)	2	1	1	2	2
(Don't Know)	0	1	1	2	1

72. Including yourself and any children, how many people live your household?

	<u>2/08</u>
1	16
2	34
3	19
4	18
5 or more	10
(Refused)	2

73. Would you classify yourself as African-American, Latin-American, Asian-American, white or something else:

	<u>2/04</u>	<u>2/05</u>	<u>2/06</u>	<u>2/07</u>	<u>2/08</u>
Afr-Amer/Black	14	14	11	14	14
White	61	60	57	57	57
Hispanic/Latin-Am	8	7	15	14	12
Asian	8	10	8	6	6
(Bi-racial/Multiracial)	3	4	2	2	3
(Other__)	3	2	2	1	4
(Refused)	4	4	4	5	3

74. What is your age? **(READ CODES IF NECESSARY)**

	2/04	2/05	2/06	2/07	2/08
18-24	10	10	11	8	9
25-29	11	9	8	10	8
30-34	11	10	10	8	8
35-39	9	9	10	11	10
40-44	10	9	11	8	9
45-49	11	10	10	11	10
50-54	10	11	10	9	9
55-59	7	8	8	9	9
60-64	5	5	5	7	7
65+	14	16	16	18	18
(Refused)	2	4	3	3	3

75. What city do you live in? (attached code list)

	2/04	2/05	2/06	2/07	2/08
Alameda	6	6	6	5	6
Alamo	1	2	1	2	1
Albany	2	2	1	2	1
Berkeley	9	10	11	10	10
Blackhawk	0	-	-	-	0
Castro Valley	4	5	4	5	4
Crockett	0	1	0	0	0
Danville	4	4	4	3	4
Diablo	0	0	0	0	0
El Cerrito	2	2	1	3	3
El Sobrante	1	2	3	2	2
Emeryville	1	3	2	0	0
Hayward	3	3	4	3	3
Hercules	1	2	2	2	1
Kensington	1	-	-	0	1
Lafayette	2	2	2	2	2
Moraga	1	0	1	1	1
Oakland	29	27	27	28	27
Orinda	1	1	2	2	1
Pinole	1	1	2	2	1
Pleasant Hill	1	1	1	1	1
Richmond	6	6	8	8	7
Rodeo	1	1	1	1	1
San Leandro	7	7	6	8	7
San Lorenzo	2	3	2	2	3
San Pablo	2	3	5	3	3
San Ramon	-	-	2	1	1
Walnut Creek	7	4	5	6	5