# City of San Diego Water Purification Demonstration Project

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# 2011 Public Opinion Poll Report

The City sub-sample of the 2011 Public Opinion Poll Report can be found on the following pages. The appendix is not included in this document, but it can be found at <a href="http://www.sandiego.gov/water/waterreuse/demo/links.shtml">http://www.sandiego.gov/water/waterreuse/demo/links.shtml</a>.



### SAN DIEGO COUNTY WATER AUTHORITY: 2011 PUBLIC OPINION POLL REPORT

CITY OF SAN DIEGO SUB-SAMPLE (n = 403)

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#### **Executive Summary**

The San Diego County Water Authority has conducted a public opinion survey within its service area in San Diego County in order to measure the region's opinion regarding various water related issues. Rea & Parker Research was selected to be the lead consultant for this 2011 Public Opinion Poll. Rea & Parker Research also conducted surveys for the Water Authority in 2000, 2003, 2004, 2005, 2006, 2008, and 2009. A portion of this public opinion poll, as in 2004, was specifically geared to residents within the City of San Diego. This 2011 study established the following as its primary objectives:

- the level of public concern about cost of water and rising rates
- tolerance for additional rate increases to support reliability projects
- drivers for recent reductions in water use
- likelihood for regional water use to "rebound"
- progress toward Strategic Plan objectives

The purpose of this report is to present the results of the San Diego County Water Authority 2011 Public Opinion Poll specifically for residents located within the City of San Diego.

The San Diego City portion of the survey was conducted by a random telephone sample of 403 respondents, which equates to a margin of error +/-4.9 percent @ 95 percent confidence. The sample included 45 residents who were only cell phone users (do not use land-line telephone). All participants were at least 18 years old and had lived in San Diego County at least one year.

Respondents are predominantly White (53 percent), with 28 percent Hispanic/Latino, 8 percent African-American/Black, 7 percent Asian/Pacific Islander, and 4 percent American Indian/Native American and Mixed Ethnicities. Residents earn a median household income of \$52,200 per year (23 percent earning \$100,000 or more and another 23 percent earning under \$25,000). They have a median age of 48 years and have lived in the County for a median of 22 years.

Among respondents, 45 percent possess a Bachelor's Degree or more, with 27 percent having a High School education or less. The zip codes most represented in the survey are as follows: 92105 (7 percent), 92114, 92129, 92154 (6 percent each), 92115, and 92128 (5 percent each). Home ownership percentage is 62 percent, with a mean of 3.02 persons per household.

#### **Survey Findings**

The 2011 Public Opinion Poll focused on five essential topics. It sought to identify and analyze, in particular,

- the level of public concern about cost of water and rising rates
- tolerance for additional rate increases to support reliability projects
- drivers for recent reductions in water use
- likelihood for regional water use to "rebound"
- progress toward Strategic Plan objectives

As such, this report has been divided into six essential information components as follows:

- Opinions about Local Issues
- Value and Cost of Water
- Water Reliability, Diversification, and Rate Tolerance

- Attitudes about Water Conservation,
- Opinions about the Use of Recycled Water
- Attitudes about the Local Agricultural Industry and Water

#### **Opinions about Local Issues**

- Residents identified the most important issues in the City of San Diego as the Economy and Jobs (29 percent), Financial Problems in Government including high taxes (17 percent), and the Quality and Cost of Education (9 percent), followed by Gasoline Prices and Water Supply and Quality (each 7 percent). This focus on jobs and government financial problems is not surprising since, during this past year, there has been considerable, sustained attention devoted to the fiscal stress of local and state governments as well as the economy as a whole.
- Water Supply and Quality rose modestly in importance from 3 percent in 2004 to its current level of 7 percent.

#### Value and Cost of Water

- Water is seen as a relatively good value for the amount of money paid compared to other utilities such as gas and electric.
- Among all respondents, 31 percent viewed gas and electric service as the best value, followed by water at 23 percent. Among all City respondents, except those who do not pay their own water bill, water (26 percent) was rated as even a closer second to gas and electric (27 percent) in terms of value.
- Despite considering water to be a relatively high value utility, over one-half of the residents (52 percent) feel that the cost of water is too expensive.
- Over three-fifths are either very concerned or somewhat concerned about the increasing price of water.
- In order to minimize this high cost, residents are willing to consider replacing their lawn area with low water plants (27 percent) and collecting water from showers and reusing the grey water for other household uses (21 percent).

#### Water Reliability, Diversification, and Rate Tolerance

#### **Water Reliability**

- Among residents of City of San Diego, almost four-fifths (78 percent) find that
  the current supply of water is either very reliable or somewhat reliable. This
  positive attitude regarding water supply reliability represents a substantial
  increase from the results of the 2004 survey where 66 percent of the residents
  found the water supply to be very reliable or somewhat reliable.
- Residents feel that water supply reliability is largely staying the same (48 percent) and nearly one-fourth (24 percent) feel that it is improving.
- Residents indicate that the most critical thing can be done to ensure a safe and reliable water supply for San Diego County residents and businesses is conservation (25 percent) -- "voluntary conservation" (14 percent) and

- mandatory conservation (11 percent) followed by recycling (22 percent), and seawater desalination (13 percent).
- Regarding conservation, the current survey represents a 10 percent increase over the 2004 results (from 15 percent to 25 percent).
- Recycled water has grown in prominence as a critical issue during the current survey period doubling from 11 percent in 2004 to 22 percent in 2011.
- While still a critical issue, desalinated water sustained a moderate decline in importance from 17 percent in 2004 to 13 percent in the current survey.

#### **Diversification Plan and Rate Tolerance**

- Four-fifths of San Diego City residents are in support of the San Diego County Water Authority's Diversification Plan that is intended to ensure the reliability of the County's water supply.
- Residents indicate that recycled water (28 percent) and seawater desalination (25 percent) are the two most important parts of the Plan.
- There is a near equal split in opinion about the necessity of water rate increases that may be necessary to pay for projects that are designed to improve water supply reliability, with 45 percent doubting that all the water projects are necessary and 44 percent feeling that increases in water rates are necessary to fund these projects that will maintain reliability of the water supply.
- As such, 43 percent of residents are willing to pay more per month for the Plan that is intended to ensure the reliability of the County's water supply. The median increase that respondents are willing to pay is \$15 per month.

#### **Water Conservation**

#### Water Use in Past Year

- Water conservation is a significant component in San Diego County's water supply plans. Over one-fourth of respondents reported that their household water usage has decreased during the past year largely as a result of less outdoor watering (31 percent), taking shorter showers and not allowing the water to run unnecessarily (16 percent each).
- Among those who reduced their water usage, more than one-third were motivated to do so because of cost and household budgetary reasons, with another 14 percent sensitive to rising water rates. Almost one-third is conserving because it is "the right thing to do."
- The vast majority of those who have decreased their water usage in the past year (82 percent) indicated that their reduced water usage is permanent.
- Requests made by water agencies to residents in an effort to motivate them to conserve water have been successful nearly three-fifths of respondents indicate that these requests have positively influenced them.
- Three-fourths of respondents think that using tiered water rates as a means to convince people to use water wisely is appropriate.

#### Water Use in the Future

- If current water restrictions are lifted, over four fifths of all respondents would continue to comply with these restrictions primarily because they feel it is a reasonable and proper ethic (49 percent of all respondents).
- It is most encouraging that when water agencies no longer take an active role in restricting water use, all respondents indicate that they are not likely to increase their water use to a great extent (20 percent). On the other hand, a less cool and less wet year would lead to more than half (52 percent) of the respondents returning to a higher usage than they incurred during the past year.

#### Water Conservation as a Civic Responsibility

Residents compared water conservation with other civic responsibilities. Voting
in public elections, not littering or polluting, and recycling used materials are
seen as more of one's civic responsibility than conserving water. Water
conservation is seen as more of a civic responsibility than serving on a jury.

#### **Opinions about the Use of Recycled Water**

#### **Recycled Water**

- Support for the use of recycled water to supplement drinking and household water supplies is strong.
- Two-thirds of respondents believe that it is possible to further treat water used for irrigation to make the water pure and safe for drinking.
- Nearly one half of the respondents (47 percent) think that drinking water already
  contains recycled water. These respondents think that drinking water already
  contains recycled water because they heard news stories, the smell and taste of
  the water is bad, or they can see recycling plants and assume that they are being
  used for drinking water.
- Over two-thirds of respondents either strongly favor or somewhat favor advanced treated recycled water as an addition to the supply of drinking water a dramatic increase over the results of the 2004 survey where only 26 percent of respondents indicated a favorable rating.
- It is noteworthy that that over one-half of those who were originally not strongly in favor of using recycled water for drinking purposes would find it acceptable as a drinking water supply supplement if it received advanced treatment and if certain other safety measures were assured. This is an increase of about 15 percent over the approximately 35 percent who changed their mind in 2004 as a result of these additional considerations.

#### City of San Diego Water Purification Demonstration Project

• Four-fifths (80 percent) of San Diego City residents have not heard about the City of San Diego Water Purification Demonstration Project. Among these residents 11 percent have heard about the Project and know that it involves recycled water for drinking and household use.

• When the Project was explained to the respondents, they expressed strong support – over three-fourths indicating a favorable rating.

#### **Attitudes about the Local Agricultural Industry and Water**

- San Diego City residents have shown substantial support for their agricultural community nearly four-fifths feel that local farmers and agriculture are very important to the local economy.
- Residents further feel, to a large extent (84 percent) that reduced water rates for the agricultural industry should be maintained.

#### **Introduction and Methodology**

The San Diego County Water Authority has, over the years, conducted a public opinion survey within its service area in San Diego County in order to measure public opinion regarding water issues. Rea & Parker Research was selected to be the lead consultant for this 2011 Public Opinion Poll. Rea & Parker Research, in association with Flagship Research, also conducted public opinion polls for the Water Authority in 2000, 2003, 2004, 2005, 2006, and 2009 and two water conservation surveys in 2008 to test the effectiveness of conservation messages. This continuity of survey administration greatly facilitates the tracking of responses from year-to-year, including the consistency of wording and interviewing that adds to the statistical reliability of such comparisons.

The City of San Diego requested that the sample include about 400 respondents specifically residing within the boundaries of the City. It was also requested by the City of San Diego that specific questions pertaining only to City residents be included in the survey. This same request was made in 2004 by the City of San Diego. Accordingly, Rea & Parker Research has compared 2004 survey data with the results of the current survey where questions were the same or nearly the same.

The purpose of this report is to present the results of the San Diego County Water Authority 2011 Public Opinion Poll for respondents located within the City of San Diego.

The 2011 Public Opinion Poll focused on five essential topics. It sought to identify and analyze, in particular,

- the level of public concern about cost of water and rising rates
- tolerance for additional rate increases to support reliability projects
- drivers for recent reductions in water use
- likelihood for regional water use to "rebound"
- progress toward Strategic Plan objectives

As such, this report has been divided into six essential information components as follows:

- Opinions about Local Issues
- Value and Cost of Water
- Water Reliability, Diversification, and Rate Tolerance
- Attitudes about Water Conservation,
- Opinions about the Use of Recycled Water including the City of San Diego Water Purification Demonstration Project
- · Attitudes about the Local Agricultural Industry and Water

#### Sample

The 2011 Public Opinion Poll was conducted during late March and early April, 2011 by a random telephone sample of 403 respondents located within the City of San Diego. The random sample was

selected by random digit dialing from the zip codes contained within the City of San Diego. This sample yields a margin of error of +/- 4.9 percent @ 95 percent confidence. The sample includes 45 residents who are only cell phone users (do not use land-line telephone). All participants were at least 18 years old and had lived in San Diego County at least one year. It is important to note that the sample of 403 is a subset of the larger sample of 821 representing the entire San Diego Water Authority service area.

The margin of error for this survey represents the widest interval that occurs when the survey question represents an approximate 50%-50% proportion of the sample. When it is not 50 percent-50 percent, the interval is somewhat smaller. For example, in the survey findings that follow, 75 percent of respondent households believe that using tiered water rates as a means to convince people to use water wisely is appropriate. This means that there is a 95 percent chance that the true proportion of the total population within the City of San Diego who believe tiered water rates are appropriate is between 70.1 percent and 79.9 percent (75 percent +/- 4.9 percent).

#### **Survey Instrument**

The survey instrument contained 52 questions, including 69 individual survey items (variables). The survey instrument was administered in both English and Spanish. A copy of the survey is attached in the Appendix. A total of 65 respondents (16.0 percent) elected to respond in Spanish. The number of respondents who wished to take the survey in Spanish in the current survey is considerably higher than in 2004 when 7 percent preferred to respond to the survey in Spanish. The Cooperation Rate (Complete/Known Eligibles + Proportionate Share of Refusals) for the survey was 79.6 percent. Mean survey administration time was 22 minutes per respondent.

#### **Respondent Characteristics**

**Table 1** presents certain demographic characteristics of the survey respondents and also provides the 2004 characteristics for comparative purposes. In 2011, over one-half of the respondents are White (53 percent), with 28 percent Hispanic/Latino, 8 percent African-American/Black, 7 percent Asian/Pacific Islander, and 4 percent American Indian/Native American and Mixed Ethnicities. Residents earn a median household income of \$52,200 per year (23 percent earning \$100,000 or more and another 23 percent earning under \$25,000). They have a median age of 48 years and have lived in the County for a median of 22 years. Among respondents, 45 percent possess a Bachelor's Degree or more, with 27 percent having a High School education or less. The zip codes most represented in the survey are as follows: 92105 (7 percent), 92114, 92129, 92154 (6 percent each), 92115, and 92128 (5 percent each). Home ownership percentage is 62 percent, with a mean of 3.02 persons per household. Among White

and Asian respondents, 72 percent are homeowners; Black/African-American homeowners are 45 percent; and Hispanics/Latinos have 40 percent homeowners.

Table 1 City of San Diego Survey Respondent Demographics		
Demographic Characteristic	2011	2004
<u>Gender</u>		
Male	45%	51%
Female	55%	49%
Median Age (Years)	48	47
Median Number of Years Lived in Community	22	22
Highest Grade/Level of School Completed		
High School or Less	27%	16%
Some College	28%	32%
Bachelor's Degree	28%	25%
Some Graduate School	17%	27%
Ethnicity		
White	53%	63%
Latino/Hispanic	28%	17%
African-American/Black	8%	7%
Asian/Pacific Islander	7%	9%
Native American/Mixed	4%	4%
Median Household Income	\$52,200	\$57,700
Home Ownership Percentage	62%	70%
Type of Housing		
Single Family Detached	60%	
Condominium	18%	
Apartment	20%	
Mobile Home	2%	
Mean Number of Persons per Household	3.02	2.75
Major Residential Zip Codes		
92105	7%	5%
92114	6%	
92129	6%	6%
92154	6%	5%
92115	5%	6%
92128	5%	
Pay Own Water Bill	72%	69%
Preferred Language—Spanish	16%	7%

Differences between the current 2011 survey respondents and the respondents from the 2004 survey are as follows:

- 2011 survey respondents have completed less higher education than respondents in 2004.
- 2011 respondents are less represented by Whites and more represented by Hispanics/Latinos than the respondents in 2004, representing the increasing size of the Hispanic/Latino population and a greater willingness to participate.

- The percentage of homeowners (62 percent) is generally lower than in 2004—reflecting the growth in Hispanic/Latino participation and current home ownership/foreclosure problems. Yet, a somewhat larger proportion of households pay their own water bill (72 percent) than in 2004 instead of having it paid by a landlord or homeowners association, for example.
- The number of persons per household has increased to above 3 persons

#### **Survey Findings**

Each section of the report will begin with a very brief abstract, or summary of highlights within the ensuing section, in order to orient the reader to what is to follow. Charts have been prepared for each section that depict the survey results for the 2011 survey and for the 2004 where questions have been repeated and can be directly compared. Each section will include a discussion of the findings from the 2011 survey, with key comparisons drawn regarding results from 2004. Detailed statistical frequency distributions are contained in the Appendix.

Lastly, subgroup analyses for different age groups, various levels of education, gender, home ownership/rental status, household size, residential tenure in the community, different income categories, and water bill payers/non-payers and ethnicity of residents of the City of San Diego will be presented in a succinct, bulleted format when statistical significance and relevance warrants such treatment.

#### **Opinions about Local Issues**

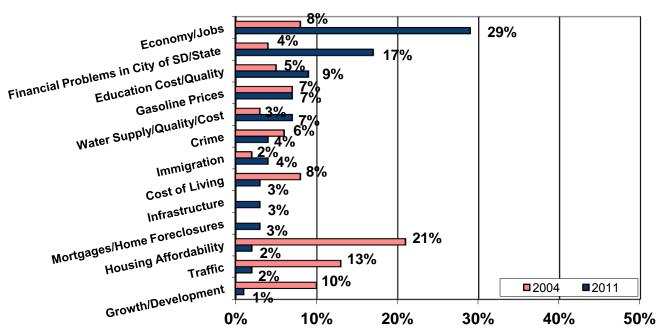
<u>SUMMARY</u>: Residents identified the most important issues in the City of San Diego as the Economy and Jobs (29 percent), Financial Problems in Government including high taxes (17 percent), and the Quality and Cost of Education (9 percent), followed by Gasoline Prices and Water Supply and Quality (each 7 percent).

Chart 1 shows that the most important current issues identified by residents of the City of San Diego are the Economy and Jobs (29 percent), Financial Problems in the City of San Diego and the State including high taxes (17 percent), and the Quality and Cost of Education (9 percent), followed by Gasoline Prices and Water Supply and Quality (each 7 percent). This focus on jobs and government financial problems is not surprising, since, during this past year, there has been considerable attention devoted to the fiscal stress of local and state governments as well as problems in the economy as a whole. Water Supply and Quality rose in importance from 3 percent in 2004 to its current level of 7 percent.

In 2004, respondents indicated that the most important issues were housing affordability (21 percent) traffic (13 percent), and growth and development (10 percent). Other responses that did not receive

enough mention to merit an individual listing in the chart can be viewed in the Appendix, where the full listing of responses is displayed.

Chart 1
Most Important Issues Facing City of San Diego
Residents



#### Value and Cost of Water

<u>Summary:</u> Water is seen as a relatively good value for the amount of money paid compared to other utilities such as gas and electric. Among all respondents, 31 percent viewed gas and electric service as the best value, followed by water at 23 percent. Among all City respondents, except those who do not pay their own water bill, water (26 percent) was rated as even a closer second to gas and electric (27 percent) in terms of value. Despite the high value attributed to water, however, over one-half of the residents feel that the cost of water is too expensive.

Relative Value of Water and Other Utilities: Residents were asked their opinion regarding the utility that provides them with the best value for the money paid. Chart 2 shows the survey results for all residents in the City of San Diego. Among all respondents, 31 percent viewed gas and electric service as the best value, followed by water at 23 percent. Among all City respondents, except those who do not

pay their own water bill (Chart 3), water (26 percent) was rated as even a closer second to gas and electric (27 percent).

It should be noted that **Charts 2 and 3** show two percentages for each utility -- one percentage represents the utility of first choice among the respondents and the second percentage represents a composite weighting that takes the first, second, and third rankings for each utility into account. For example, in **Chart 3**, it is shown that residents rated gas and electric (27 percent first choice; 27 percent weighted choice) as the utility with the best value for the amount of money paid and water (26 percent first choice; 23 percent weighted choice) as the second best value.

The following subgroups are more likely to believe that water is a good value for the money paid:

- Older residents (75 years of age and older 33 percent versus under 75 years of age 21 percent).
- Residents of single family homes (27 percent) and mobile homes (25 percent) versus residents of apartments (15 percent).
- Those who prefer to communicate in Spanish (33 percent) versus those who prefer English (21 percent).
- Residents who pay their own water bill (26 percent) versus those whose landlord pays their water bill (14 percent).

The following subgroups are more likely to believe that gas and electric is a good value for the money paid:

- Younger residents (18 24 years of age 60 percent versus 25 years of age and older 29 percent).
- Residents of condominiums (30 percent) and single family homes (25 percent) versus residents of apartments (49 percent) and mobile homes (50 percent).
- Those who prefer to communicate in Spanish (41 percent) versus those who prefer English (29 percent).
- Homeowners whose water bill is paid by the landlord (47 percent) versus homeowners who pay their own water bill (27 percent).

Cost of Water: Chart 4 demonstrates that, despite its high degree of valuation, more than one-half (52 percent) of respondents feel that the cost of water is too expensive and another 42 percent feel that the cost is fair and reasonable. Chart 5 reports the level of resident concern regarding the prospect of continued increases in water rates. This concern was measured on a 5-point scale, where 1 = not at all concerned to 5 = very concerned. Over three fifths (61 percent) recorded ratings of very concerned (48 percent) and somewhat concerned (13 percent). The mean rating is 3.73 is indicative of a higher level of concern and this is consistent with the relatively high percentage of respondents who feel the cost of water is too expensive.

**Chart 2 Best Values Among Utilities** 

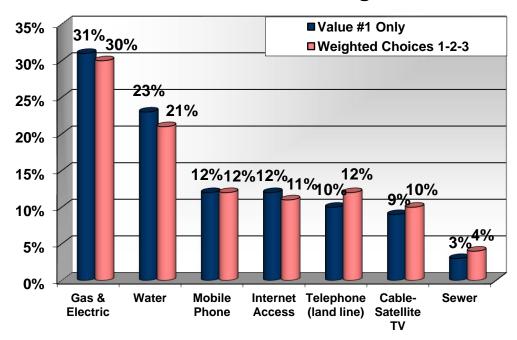
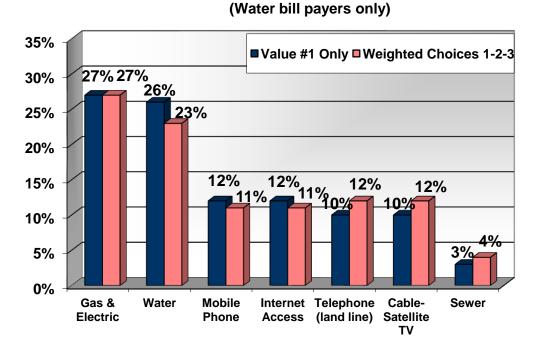
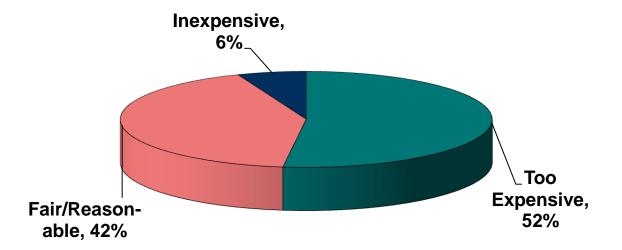


Chart 3
Best Values Among Utilities



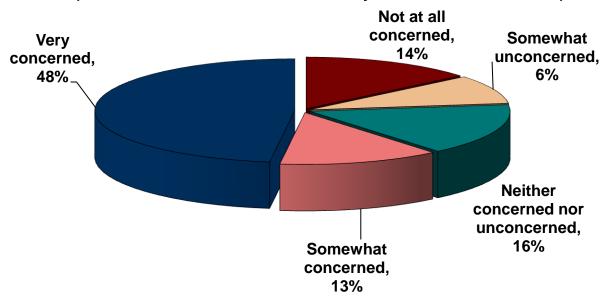
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Chart 4 **Cost of Water** 



**Chart 5 Concern About Continued Increases in Water Rates** 

(scale: 1=not at all concerned.....5=very concerned--mean = 3.73)



May, 2011

The following subgroups believe that the cost of water is too expensive:

- African-Americans (57 percent) versus Whites (46 percent), Asians (48 percent), and Latinos (51 percent).
- Residents of apartments (51 percent) and single family homes (48 percent) as opposed to residents of mobile homes (22 percent).
- Spanish speaking respondents (57 percent) versus English speaking residents (45 percent).
- Household members who pay their own water bill (51 percent) as opposed to the residents whose landlord pays the water bill (41 percent).

The following groups differ regarding their level of concern about the prospect of continued increases in water rates. The differences are expressed in terms of mean scores that are based on a scale of 1 to 5, where 1 = not at all concerned, 2 = somewhat unconcerned, 3 = neither concerned nor unconcerned, 4 = somewhat concerned, and 5 = very concerned.

- African-Americans (mean of 4.20) and Whites (mean of 3.81) are more concerned about water rate increases than are Latinos (3.42).
- Smaller household sizes are more concerned about water rate increases than are larger households (2 persons per household mean of 3.99 and 3 person households mean of 3.89 versus 5 person households mean of 3.31).

In order to minimize increases in water rates, 27 percent indicated that they were willing to replace their lawn area with low water plants; another 21 percent were willing to collect grey water from showers and reuse the water for other household uses. Beyond these two actions, residents expressed further interest in replacing grass with artificial turf (16 percent) and making use of high-efficiency irrigation systems (15 percent) (**Chart 6**).

The following subgroups are more likely to replace their lawn area with low water plants as the one thing they would do in order to minimize increases in water rates.

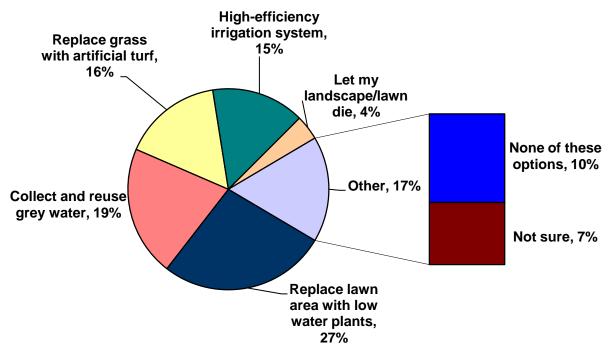
• Latino residents (31 percent) and White residents (28 percent) versus African-Americans (13 percent) and Asians (17 percent).

The following subgroups are more likely to collect water from other household uses and reuse the water as the one thing they would do in order to minimize increases in water rates:

• Asian residents (28 percent) and Latino residents (26 percent) versus African-Americans (17 percent) and Whites (18 percent).

• Spanish speaking residents (29 percent) versus English speaking residents (19 percent).

Chart 6
Willingness to Undertake the Following in Order to Minimize Increases in Water Rates



Water Reliability, Diversification and Rate Tolerance

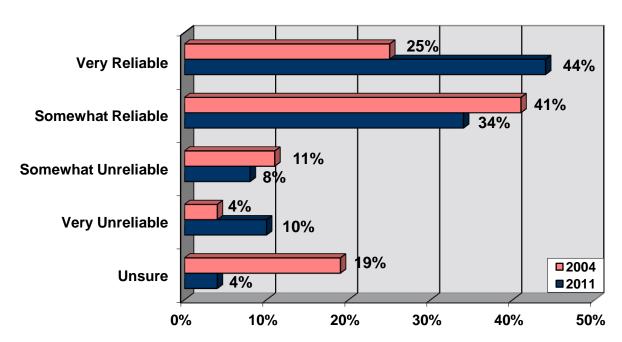
SUMMARY: Among residents of the City of San Diego, nearly four-fifths find that the current supply of water is either very reliable or somewhat reliable. This positive attitude toward water supply reliability represents a substantial increase from the results of the 2004 survey where 59 percent of the residents found the water supply to be very reliable or somewhat reliable. Residents indicate that the most critical thing that can be done to ensure a safe and reliable water supply for San Diego County residents and businesses is conservation followed by water recycling and water desalination.

Four-fifths of the residents are in support of the San Diego County Water Authority's Diversification Plan that is intended to ensure the reliability of the County's water supply. There is a near equal split in opinion about the necessity of water rate increases to pay for projects designed to improve water supply reliability. More than 40 percent of residents are willing to pay more per month for the Plan. The median increase that respondents are willing to pay is \$15 per month.

<u>Water Reliability</u>: Chart 7 shows that among residents of the City of San Diego, nearly four-fifths (78 percent) find that the current supply of water is either very reliable (44 percent) or somewhat reliable (34 percent). This positive attitude toward water supply reliability represents a substantial increase from the

results of the 2004 survey where 59 percent of the residents found the water supply to be very reliable or somewhat reliable.





**Chart 8** shows that confidence in the water supply is generally stable (48 percent feel that water supply reliability is staying the same) or improving (24 percent). Approximately one-fifth (22 percent) of the residents believe that the water supply reliability is worsening.

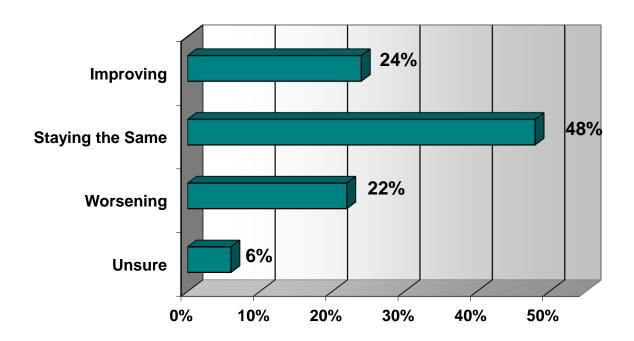
The following groups are less sure that reliability is improving:

- Residents who prefer to communicate in Spanish (37 percent) versus those who prefer to communicate in English (21 percent).
- Residents with one year of graduate school or more education (39 percent) versus those who have a bachelor's degree or less education (19 percent).
- White residents (27 percent0 versus Black residents (3 percent).

When respondents were asked what they think is the most critical thing that can be done to ensure a safe and reliable water supply for San Diego County residents and businesses, 25 percent indicated some form of conservation – either voluntary (14 percent) or mandatory (11 percent). This represents a 10 percent increase from the 2004 survey where 15 percent of respondents, at that time, indicated that conservation

(mandatory and voluntary conservation was not specified) was the most critical thing that would ensure the reliability of the water supply. In the current survey, "recycled water" (22 percent) followed conservation as a critical thing that would ensure water reliability – doubling the response to recycled water in the 2004 survey. Desalination, which was high on the list in 2004 at 17 percent, fell to some extent in the current survey to 13 percent (**Chart 9**).

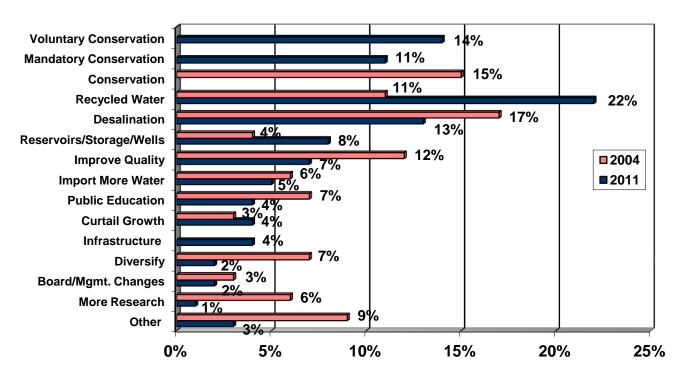
Chart 8
Water Supply Reliability Improving/Worsening



The following subgroups are more likely to think that mandatory conservation is the single most critical thing that can be done to ensure a safe and reliable water supply for San Diego County residents and businesses:

- African-American residents and Hispanic residents (each 17 percent) versus White residents (7 percent).
- Shorter term residents of the County as opposed to longer term residents (1 5 years 22 percent versus 6 years or more 9 percent).
- Renters (15 percent) versus homeowners (9 percent).

Chart 9
Most Critical Thing that Can be Done to Ensure Safe and Reliable Water Supply for San Diego County



The following subgroups are more likely to think that voluntary conservation is the single most critical thing that can be done to ensure a safe and reliable water supply for San Diego County residents and businesses:

- Residents of condominiums (17 percent) versus residents of apartments and single family homes (12 percent each).
- Spanish speaking residents (18 percent) versus English speaking residents (13 percent).
- Whites (15 percent) and Latinos (14 percent) versus African-Americans (6 percent).

The following subgroups are more likely to think that water recycling is the single most critical thing that can be done to ensure a safe and reliable water supply for San Diego County residents and businesses:

- Spanish speaking residents (41 percent) versus English speaking residents (18 percent).
- Latinos (36 percent) versus Whites (18 percent) and African-Americans (17 percent).
- Residents of apartments (35 percent) versus residents of single family homes (21 percent) and condominiums (17 percent).

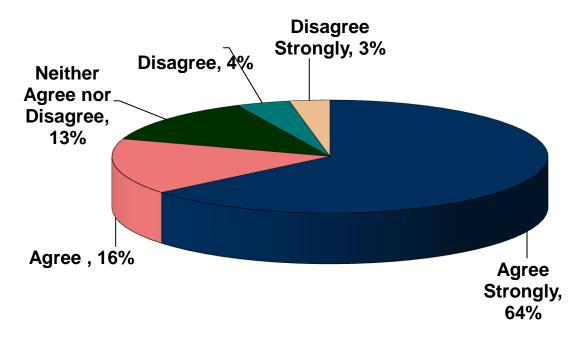
• Renters (27 percent) versus homeowners (9 percent).

The following subgroups are more likely to think that desalination is the single most critical thing that can be done to ensure a safe and reliable supply for San Diego County residents:

- Homeowners (16 percent) versus renters (8 percent).
- Longer term residents of the County as opposed to shorter term residents (26 or more years 19 percent versus 25 years or less 9 percent).
- Residents of condominiums (20 percent) versus residents of apartments (5 percent).
- White residents (16 percent) versus African-American and Latino residents (6 percent each).

**Diversification Plan and Rate Tolerance: Chart 10** shows that four-fifths (80 percent) of City of San Diego residents are in support of the San Diego County Water Authority's Diversification Plan with ratings of strongly agree (64 percent) and agree (16 percent). The mean rating of 1.66 (based on a scale of 1 to 5, where 1 = strongly agree and 5 = strongly disagree) underscores this high level of support for the Diversification Plan. Residents indicate that the most important part of the Diversification Plan is recycled water (28 percent) followed by seawater desalination (25 percent) (**Chart 11**).

Chart 10
Opinion about Diversification Plan
(scale: 1= Agree Strongly..5= Disgaree Strongly---mean = 1.66)



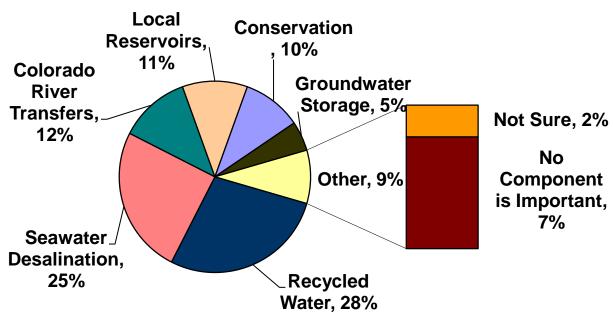
The following subgroups are more likely to believe that seawater desalination is the most important part of the diversification plan:

- Residents with more education as opposed to those with less education (bachelor's degree or more 31 percent versus less than a bachelor's degree 20 percent).
- Males (34 percent) versus females (18 percent).
- English speaking residents (27 percent) versus Spanish speaking residents (12 percent).

The following subgroups are more likely to believe that recycled water is the most important part of the Diversification Plan:

- Residents with less education as opposed to those with more education (high school or less 45 percent versus 1 year of college or more 22 percent).
- Spanish speaking residents (55 percent) versus English speaking residents (23 percent).





**Chart 12** shows that among the 43 percent of residents who are willing to pay more per month for diversification and ultimately water supply reliability, 26 percent of them (11 percent of the total population) are willing to pay an additional \$6 to \$10 per month and 21 percent (9 percent of the total

population) are willing to pay an additional \$11 to \$20 per month. The median increase that respondents indicate a willingness to pay is \$15 per month.

 Larger household sizes are willing to pay more than smaller household sizes to support diversification.

**Chart 13** shows that there is a near equal split in opinion about the necessity of water rate increases to pay for projects designed to improve water supply reliability, with 45 percent feeling that water rates are too high and doubt that these water projects are necessary and 44 percent feeling that increases in water rates are necessary to maintain reliability of the water supply.

- Residents who prefer to communicate in Spanish (64 percent) are more likely to oppose water rate increases than those who prefer English (42 percent).
- Individuals who rent their home tend to oppose water rate increases more so than do those who own their homes (rent 53 percent versus own 42 percent).
- Respondents who have lived in the County for less than 40 years (50 percent) are more likely to oppose water rate increases than those who have lived in the County for more than 40 years (32 percent).

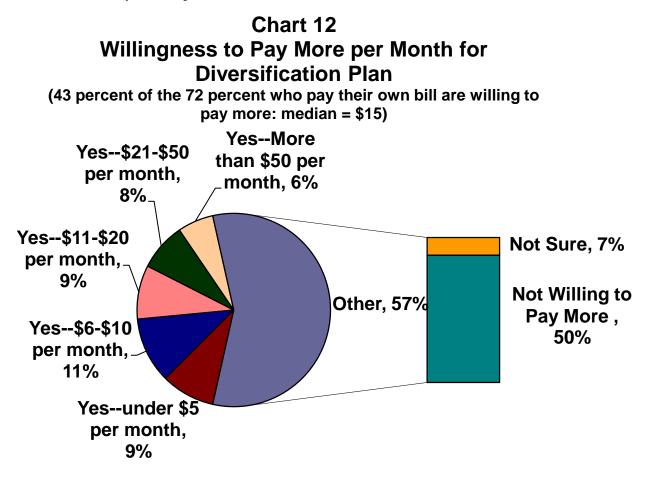
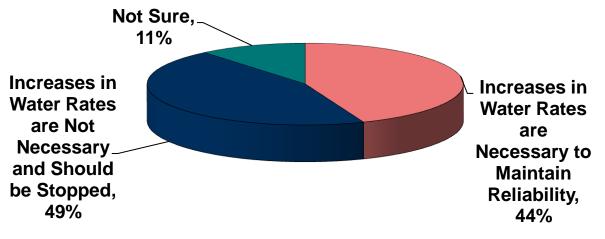


Chart 13
Support for Increased Water Rates to Pay for Projects to Improve Reliability

(among 72 percent who pay their own bills)



#### **Attitudes about Water Conservation**

SUMMARY: Water conservation is a significant component in San Diego County's water supply plans. Over one-fourth of respondents reported that their household water usage has decreased during the past year largely as a result of less outdoor watering, taking shorter showers and not letting the water run unnecessarily. Among those who reduced their water usage, almost one-half were motivated to do so for financial reasons ("we are watching our budget" = 35 percent and "rising water rates" = 14 percent). Another one-third (31 percent) felt that conservation is the "right thing to do". The vast majority—over four-fifths—indicated that their reduced water usage is permanent.

It is most encouraging that when water agencies no longer take an active role in restricting water use, respondents who have reduced their water usage during the past year indicate that they are not likely to increase their water use (20 percent). On the other hand, a less cool and less wet year would lead to more than half (52 percent) of those who have reduced their water use during the past year returning to higher usage. Among all respondents, whether they have reduced their use in past year or not, if water restrictions are lifted, over four-fifths would continue to comply with these restrictions primarily because they feel it is a reasonable and proper ethic or residents have learned to live with less water.

Requests made by water agencies to residents in an effort to motivate them to conserve water have been successful – nearly three-fifths of respondents indicate that these requests have strongly influenced them. Three-fourths (75 percent) of respondents think that using tiered water rates as a means to convince people to use water wisely is appropriate.

Residents compared water conservation with other civic responsibilities. Voting in public elections, not littering or polluting, and recycling used materials are seen as more of one's civic responsibility

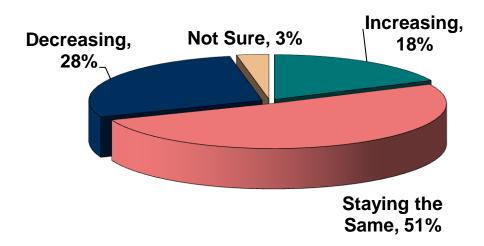
than conserving water. Water conservation is seen as more of a civic responsibility than serving on a jury.

<u>Water Use in the Past Year:</u> Chart 14 shows that over one-fourth of respondents (28 percent) indicated that their household water usage has decreased over the past year. Among those who indicated that their household water usage has decreased, nearly one-third (31 percent) indicated that they did less watering outdoors. Others indicated that they take shorter showers and they do not allow the water to run unnecessarily (16 percent each) (Chart 15).

The following subgroups are more likely to indicate that their household water use has decreased over the past year:

- Whites (32 percent) and Hispanics (29 percent) versus African-Americans (10 percent).
- Residents with higher income levels as opposed to those with lower income levels (\$75,000 or more 38 percent versus under \$75,000 27 percent).
- Residents who pay their own water bills (33 percent) versus residents whose landlords or homeowners association pays the water bill (18 percent).
- Larger household sizes as opposed to smaller household sizes (6 or more persons per household – 45 percent—versus 1 person per household and 2 persons per household – 7 percent each.

Chart 14
Water Use Increasing or Decreasing Past Year



The following subgroups tend to reduce their water usage by using less water outdoors:

- Homeowners who pay their own water bill (36 percent) versus homeowners whose landlord pays their water bill (6 percent).
- Residents of single family homes (40 percent) versus residents of apartments (8 percent) and condominiums (7 percent).
- Residents who prefer to communicate in English (35 percent) versus those who prefer Spanish (12 percent).
- Homeowners (40 percent) versus those who rent their homes (12 percent).

The following subgroups tend to reduce their water usage by taking shorter showers:

- Residents of apartments and mobile homes (33 percent each) versus residents of single family homes (12 percent) and condominiums (21 percent).
- Residents who prefer to communicate in Spanish (41 percent) versus those who prefer English (12 percent).
- Renters (38 percent) versus those who own their home (8 percent).

The following subgroups tend to reduce their water usage by not allowing the water to run unnecessarily:

- Residents whose landlord pays the water bill (47 percent) versus residents who pay their own water bill (10 percent).
- Renters (19 percent) versus those who own their own home (13 percent).

# Chart 15 Major Step by Household to Reduce Water Use in Past 6 Months

(among 28 percent of households that indicated decreasing water usage)

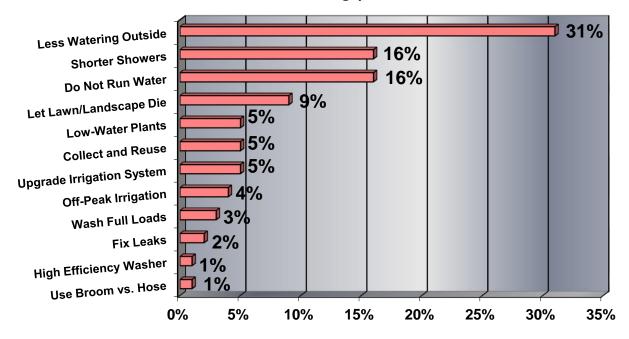


Chart 16 indicates that among those who indicated that their household water usage has declined, nearly one-third (35 percent) were motivated to reduce water usage through their interest in saving money plus 14 percent who indicated an awareness of increasing water rates. Another 31 percent felt that reducing water usage is the "right thing to do." Among those who indicated that their household water usage has declined, a large majority (82 percent) think that their reduced use of water is permanent while 15 percent think their reduction is temporary (Chart 17).

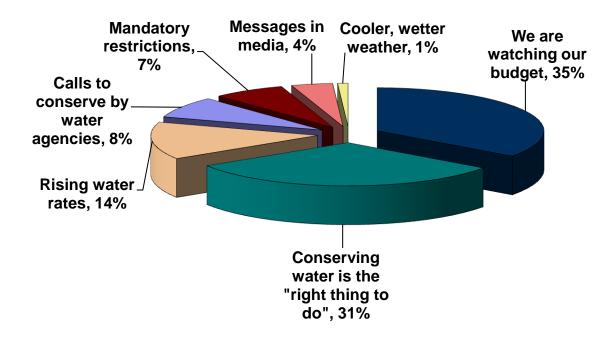
The following subgroup is motivated to reduce its household water usage because it is "the right thing".

• Residents whose landlord pays their water bill (67 percent) versus residents who pay their own water bill (26 percent).

The following subgroup is particularly motivated to reduce their household water usage because they are trying to save money:

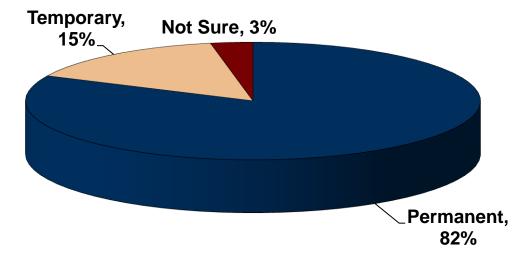
• Residents who pay their own water bill (40 percent) versus residents whose landlord pays their water bill (7 percent).

Chart 16
Primary Motivation for Water Use Reduction
(among 28 percent of households that have reduced water use in past year)



# Chart 17 Is Reduced Use Permanent?

(among 28 percent of households that indicate reduced water usage in past year)



**Chart 18** reports the impact that, among all respondents, requests for increased voluntary conservation made by water agencies have had on residents' water use. Nearly three-fifths of respondents (58 percent) indicate that these requests have a great deal of influence (40 percent) or a good amount of influence (18 percent). On a scale of 1 to 5, where 1 = a great deal of influence and 5 = no influence at all, the mean rating measuring the impact of these calls is 2.36, indicating that these call messages are working relatively well. **Chart 19** shows that three-fourths (75 percent) think that water agencies' use of tiered water rates as a means to convince people to use water wisely is appropriate.

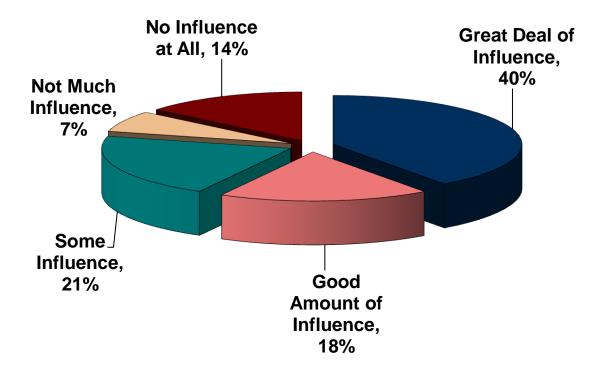
The following groups differ with regard to the impact they feel water agencies have in motivating people to pursue voluntary conservation. The differences are expressed in terms of mean scores that are based on a scale of 1 to 5, where 1 = a great deal of influence, 2 = a good amount of influence, 3 = a some influence, 4 = a not much influence, and 5 = a no influence at all.

- Residents with a higher level of education are less influenced by water agency calls than are residents with a lower level of education (1 year of graduate school or more mean of 2.85 versus less than a bachelor's degree mean of 2.21).
- Larger household sizes tend to be influenced by agency calls more so than smaller household sizes (4 persons per household mean of 2.04 and 5 persons per household mean of 2.19 versus 1-to-3 person households mean of 2.75 for both 1 and 2 person households and 3 person households mean of 2.58).
- Homeowners (mean of 2.30) are more likely to be influenced by agency calls than are renters (mean of 2.45).

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# Chart 18 Influence of Requests for Voluntary Conservation from Water Agencies

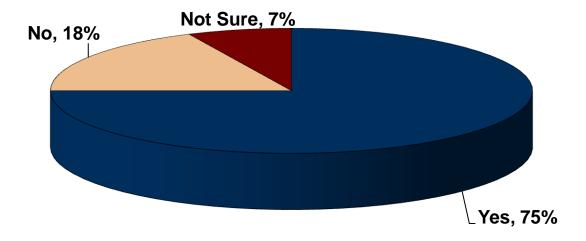
(Scale: 1=Great Deal of Influence..5=No Influence at All---mean = 2.36)



The following subgroups tend to favor using tiered water rates as a means of convincing people to use water wisely.

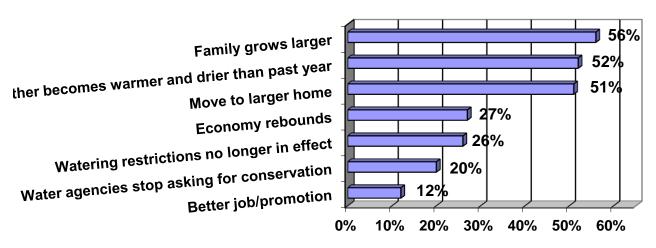
- Lower income residents as opposed to higher income residents (under \$50,000 83 percent versus \$50,000 and over -68 percent).
- Renters (81 percent) versus homeowners (70 percent).

Chart 19
Appropriateness of Tiered Water Rates to
Encourage
Using Water Wisely



Water Use in the Future: Respondents were asked to indicate if they will or might increase their water usage if various conditions and situations were to prevail. Among the findings reported in Chart 20, it is most encouraging that when water agencies no longer take an active role in restricting water use, respondents indicate, to a great extent, that they are not likely to increase their water usage (20 percent). Similarly, when water agencies stop asking for residents to practice conservation there is no surge in water use expected (26 percent). On the other hand, a less cool and less wet year would lead to more than one half (52 percent) of the respondents returning to higher usage. Understandably, as family size grows larger, respondents indicate that they will increase water usage (56 percent) and, similarly, respondents are likely to increase water use when they move to a larger home (51 percent). When the economy rebounds (27 percent) or the respondent obtains a better job or a job promotion (12 percent), residents indicate that they are not likely to increase their water usage to a great extent.

Chart 20
Conditions Under Which Respondents Would
Increase Water Use



The following subgroups are more inclined to increase their water usage when the weather becomes warmer and drier:

- Asians (76 percent) and African-Americans (73 percent) versus whites (44 percent).
- Residents who indicate that their reduced use of water is temporary (65 percent) as opposed to permanent (55 percent).

The following subgroups are more likely to increase their water usage when the economy rebounds:

- Residents with less education as opposed to residents with more education (less than a bachelor's degree 34 percent versus bachelor's degree or more education 17 percent).
- Asian residents (48 percent) and Latino residents (41 percent) versus White residents (16 percent).
- Spanish speaking residents (45 percent) versus English speaking residents (23 percent).
- Residents who indicate that their reduced water use is temporary (41 percent) as opposed to permanent (17 percent).

The following subgroups are more likely to increase their water usage when their family grows in size:

- Younger residents as opposed to older residents (18 24 years of age 88 percent versus 25 years of age and over 55 percent).
- Asian residents (83 percent) versus White residents (50 percent).
- Larger household sizes as opposed to smaller household sizes (3 or more persons per household 69 percent versus 1 and 2 persons per household 59 percent).

- Shorter term residents of the County as opposed to longer term residents (15 years and under 70 percent versus 16 years and over 47 percent).
- Residents who believe that their reduced water use is temporary (71 percent) as opposed to permanent (50 percent).

The following subgroups are more likely to increase their water usage when they get a better job or promotion:

- Homeowners whose landlord pays their water bill (18 percent) versus homeowners who pay their own water bill (10 percent).
- Younger residents as opposed to older residents (18- 24 years of age 41 percent versus 25 years of age and over 11 percent).
- Spanish speaking residents (25 percent) versus English speaking residents (10 percent).
- Residents who believe that their reduced water use is temporary (18 percent) as opposed to permanent (10 percent).

The following subgroups are more likely to increase their water usage when watering restrictions are no longer in effect:

- Younger residents as opposed to older residents (18- 24 years of age 59 percent versus 25 years of age and over 24 percent).
- Residents with less education as opposed to those with more education (bachelor's degree or less 28 percent versus 1 year of graduate school or more 15 percent).
- Asian residents (48 percent) versus White residents (17 percent).
- Residents who believe that their reduced use of water is temporary (35 percent) as opposed to permanent (23 percent).

The following groups are more likely to increase their water usage when they move to a larger home:

- Younger residents as opposed to older residents (34 years of age and under 64 percent versus 35 years of age and over 47 percent).
- Asian residents (72 percent) versus White residents (45 percent).
- Residents of condominiums (67 percent) versus residents of mobile homes (44 percent) and single family homes (43 percent).
- Renters (60 percent) versus homeowners (45 percent).
- Residents who believe that their reduced use of water is temporary (65 percent) as opposed to permanent (47 percent).

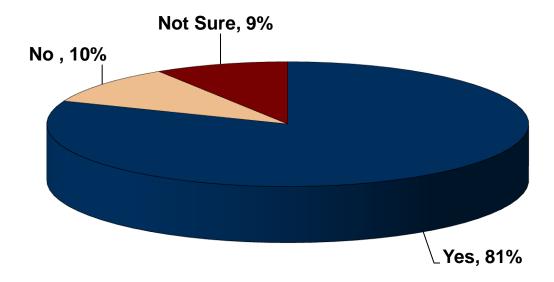
The following subgroup is more likely to increase their water usage when agencies stop asking them to conserve water:

• Less educated (bachelor's degree or less − 22 percent) versus 1 year of graduate school or more − 10 percent).

According to **Chart 21**, if mandatory water restrictions are lifted, over four-fifths (81 percent) of all survey respondents (whether or not they have reduced their usage in the past year) would continue to

comply with these restrictions, and 9 percent are unsure. The main reasons cited by respondents for continuing to comply with water restrictions once they have been lifted are presented in **Chart 22**. The dominant response is that saving and conserving water is a reasonable and proper ethic (49 percent of the 81 percent so inclined = 40 percent of all respondents. The second highest response is that residents have learned to live with less water (24 percent of 81 percent = 19 percent of all respondents). **Chart 23** shows that there are three main reasons why residents will not continue to observe restrictions once they are lifted. These residents indicate that they need more water for their landscape, lawn, and garden (26 percent) and they provide the rationale that if restrictions are not mandatory, then conservation must not be necessary and they generally want to use more water (each 22 percent).

Chart 21
Continue to Observe Restrictions Even if Lifted?



# Chart 22 Reasons for Continuing to Conserve after Restrictions Lifted

(among 81 percent who indicated that they would continue to observe restrictions)

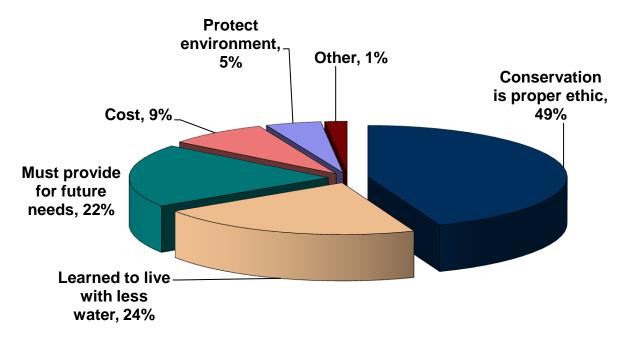
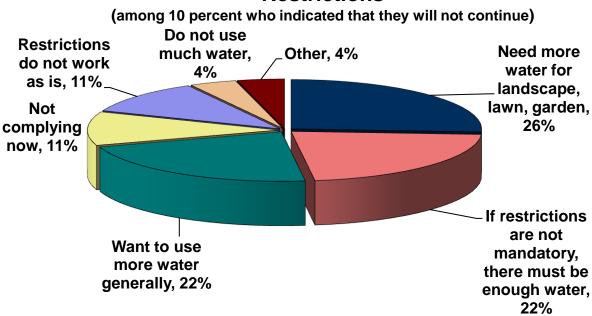


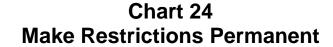
Chart 23
Reasons to Not Continue Observing
Restrictions

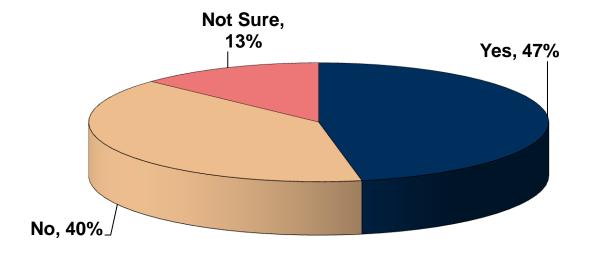


**Chart 24** shows that nearly one-half (47 percent) of respondents think that water use restrictions should be made permanent in San Diego County regardless of the current year's water supply conditions; 40 percent do not think restrictions should be made permanent and 13 percent are unsure.

The following subgroups think that water use restrictions should be made permanent in San Diego County regardless of the current years' water supply conditions:

- Residents with less education as opposed to those with a higher level of education (less than a bachelor's degree – 54 percent versus a bachelor's degree or more or more – 41 percent).
- Lower income residents (under \$25,000 68 percent versus \$25,000 and above 41 percent).
- Residents who prefer to communicate in Spanish (66 percent) versus residents who prefer English (44 percent).





Water Conservation as a Civic Responsibility: Chart 25 shows the extent to which respondents feel that certain activities are regarded as their civic responsibility. The chart further indicates whether these activities are more or less of a civic responsibility than is conserving water. It is noteworthy that, among the civic activities mentioned, the one that has the highest indication of being a civic responsibility is recycling used materials (84 percent). Respondents accorded serving on a jury the lowest level of civic

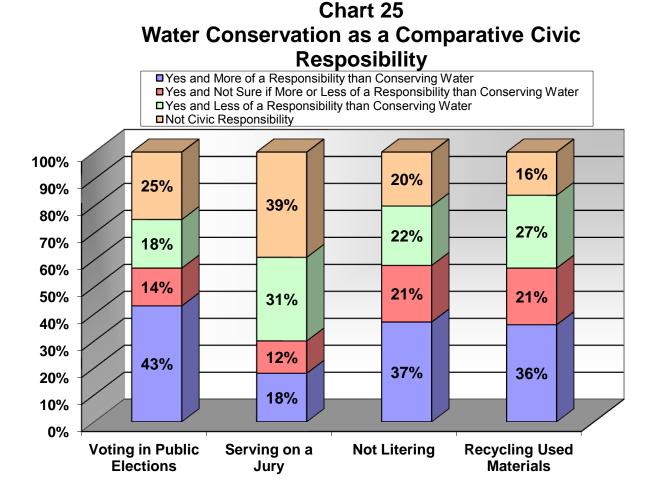
responsibility (61 percent). Voting in public elections, not littering or polluting, and recycling used materials are seen as more of a civic responsibility than conserving water. Water conservation is seen as more of a civic responsibility than serving on a jury.

The following subgroup is somewhat more inclined to feel that preventing pollution and not littering is less of a civic responsibility than conserving water:

• English speaking residents (30 percent) versus Spanish speaking residents (15 percent).

The following subgroup is somewhat more inclined to feel that recycling used materials is more of a civic responsibility than conserving water:

• Spanish speaking residents (65 percent) versus English speaking residents (39 percent).



#### **Recycled Water**

SUMMARY: Support for the use of recycled water to supplement drinking and household water supply is strong. Two-thirds of respondents believe that it is possible to further treat water used for irrigation to make the water pure and safe for drinking. Over two-thirds of respondents either strongly favor or somewhat favor advanced treated recycled water as an addition to the supply of drinking water.

It is noteworthy that that over one-half of those who were originally not strongly in favor of using recycled water for drinking purposes would find it acceptable if the water received advanced treatment and if certain other safety measures assured. This is an increase of about 15 percent over the approximately 35 percent who similarly changed their mind in 2004 as a result of this additional information.

Four-fifths (80 percent) of San Diego City residents have not heard about the City of San Diego Water Purification Demonstration Project. Among these residents, 11 percent have heard about the Project and know that it involves recycled water for drinking and household use. When the Project was explained to them, residents expressed strong support – over three-fourths indicating a favorable rating.

<u>Recycled Water for Drinking and Household Use</u>: Chart 26 shows that two-thirds (67 percent) of respondents believe that it is possible to further treat recycled water used for irrigation to make the water pure and safe for drinking.

Chart 26

Possible to Further Treat Recycled Water Used for Irrigation to Make It Pure and Safe for Drinking 67% 70% 60% 50% 40% 20% 30% 13% 20% 10% 0% Yes **Not Sure** No

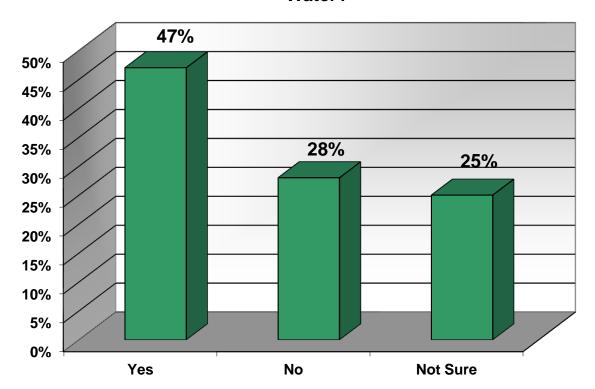
San Diego County Water Authority/City of San Diego 2011 Public Opinion Poll Report

The following groups tend to believe more strongly that it is possible to further treat recycled water used for irrigation to make water pure and safe for drinking:

- Residents whose landlord pays the water bill (74 percent) versus homeowners who pay their own water bill (66 percent).
- Respondents who rent their home (75 percent) versus those who own their home (62 percent).

Chart 27 indicates that just under one-half of the respondents (47 percent) believe that drinking water already contains recycled water. Among the 47 percent of respondents who think that drinking water contains recycled water, three primary reasons are provided to explain why they feel this way. Respondents hear that water is recycled from news stories (21 percent), water tastes and smells bad (19 percent), and respondents see signs, recycling plants and know that such technology is available—the combination of which leads them to believe that it is being implemented already (14 percent) (Chart 28).

Chart 27
Believe that Drinking Water Already Contains Recycled
Water?

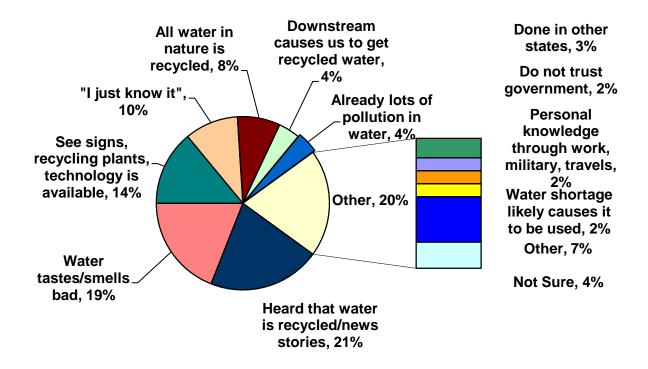


The following group tends to think that drinking water already contains recycled water:

• Residents whose landlord pays the water bill (53 percent) versus residents who pay their own water bill (47 percent).

Chart 28
Reasons for Belief that Drinking Water
Already Contains Recycled Water

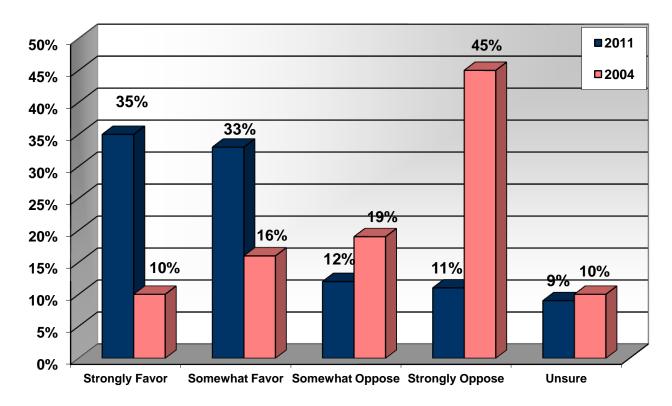
(among 47 percent who think that drinking water contains recycyled water)



Respondents were asked whether or not they would favor using advanced treated recycled water as an addition to the supply of drinking water and that such advanced techniques include ultra-filtration, reverse osmosis, and advanced oxidation. (Explanations of these processes were provided upon request). **Chart 29** indicates that over two-thirds (68 percent) of the respondents either strongly favor (35 percent) or somewhat favor (33 percent) advanced treated recycled water as an addition to the supply of drinking water. It is important to note that this represents a dramatic increase in support for advanced treatment over the 2004 survey where only 26 percent of the respondents either strongly favored or somewhat favored advanced treated recycled water.

Chart 29
Opinion About Using Advanced Treated Recycled
Water as an Addition to Drinking Water Supply

(scale 1 = Strongly Favor..5 = Strongly Oppose--mean = 1.99)



The following groups differ regarding their opinion about using advanced techniques to treat recycled water so that it can serve as an addition to the drinking water supply. The differences are expressed in terms of mean scores that are based on a scale, where 1 = strongly favor, 2 = somewhat favor, 3 = somewhat oppose, and 4 = strongly oppose.

- Younger residents are more in favor of advanced water recycling techniques than are older residents (35-44 years of age mean of 1.76 versus 65-74 mean of 2.20).
- Asians (mean of 1.83), Latinos (mean of 1.91), and Whites (mean of 1.98) are more inclined to favor advanced recycling techniques than are African-Americans (mean of 2.63).

Respondents, who did not already **strongly favor** the use of recycled water as an addition to the drinking water supply, were asked if they would accept recycled water for drinking purposes if it were subject to such advanced treatment and if they learned the following facts about recycled water (**Charts 30 - 32**).

The percentages reflect <u>only</u> those customers who formerly did not strongly favor the use of recycled water as an addition to the drinking supply but who changed their minds upon learning that:

- California drinking water standards are very strict and recycled drinking water would exceed those standards (54 percent); This represents a substantial increase from the results of the 2004 survey where an affirmative response of 38 percent was recorded (**Chart 30**).
- Recycled drinking water is used in other U.S. communities (50 percent); again, this represents a large (17 percent) increase over the 2004 survey result (**Chart 31**).
- Recycled drinking water could supply up to 10 percent of local supply (51 percent-only 30 percent were influenced by this statement in 2004--Chart 32).

Chart 30
Likelihood of Accepting Recycled Water
to Supplement Drinking Water if Respondent
Learned of Very Strict California Drinking Water
Standards

(asked of 65 percent who were somewhat or less in favor of using recycled water for drinking)

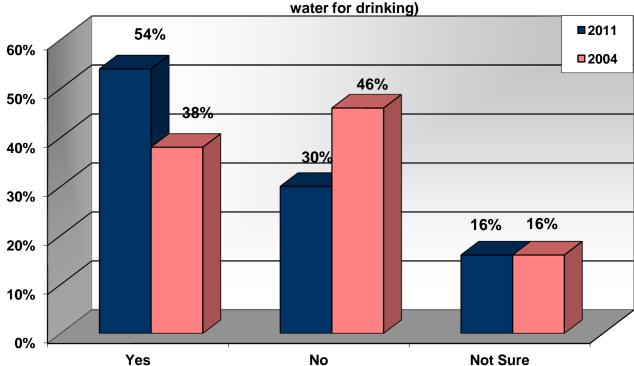
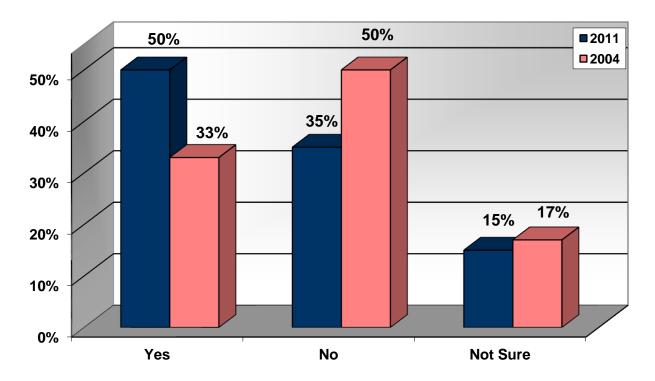


Chart 31

Likelihood of Accepting Recycled Water
to Supplement Drinking Water if Respondent Learned that
Other Communites Use Recycled Water as a Supplement
(asked of 65 percent who were somewhat or less in favor of using recycled)



These findings show that over one-half of those who were originally not strongly in favor of using recycled water for drinking purposes would find it acceptable if it received advanced treatment and if certain other safety measures were assured. This is an increase of about 15 percent over the approximately 35 percent who changed their mind in 2004.

**Table 2** shows that movement toward being more in favor of the use of recycled water for drinking water purposes differs, as would be expected, depending upon the degree to which the respondent was initially opposed or in favor of using recycled water for this purpose in the first place. Omitting all of those who were strongly in favor to begin with, it can be seen that the more in favor a respondent was initially, the easier it is for this information to sway his or her opinion. Among those who were previously somewhat in favor of recycled water being added to the drinking water supply, 67-72 percent are influenced by this information to be more in favor of this use of recycled water. It is striking that 34-45 percent of those

who were formerly unsure are so moved by this added information to favor the use of recycled water for drinking purposes.

Chart 32
Likelihood of Accepting Recycled Water to
Supplement Drinking Water if Respondent Learned
that Recycled Water Could Supply up to 10 Percent of
Local Drinking Water

(asked of 65 percent who were somewhat or less in favor of using recycled water for drinking)

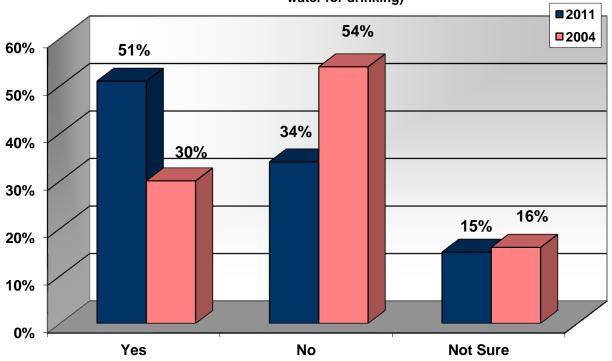
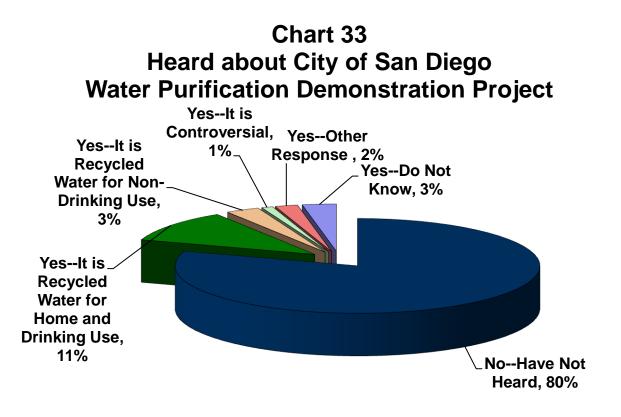


Table 2							
Shift in Opinion Using Recycled Water							
(Percentages Represent Respondents Now Likely to Accept Recycled Water for Drinking Water Purposes)							
	Formerly	Formerly	Formerly	Don't			
	Somewhat in	Somewhat	Strongly	Know/			
	Favor	Opposed	Opposed	Unsure			
California drinking water standards are very strict and recycled drinking water would exceed those standards	72%	48%	16%	40%			
Recycled drinking water is used in other U.S. communities	65%	50%	18%	34%			
Recycled drinking water could supply up to 10 percent of local supply	67%	38%	21%	45%			

The following subgroup is especially influenced by the knowledge that recycled water could supply as much as 10 percent of our local drinking water supplies:

• Residents whose landlord pays the water bill (59 percent) versus residents who pay their own water bill (48 percent).

<u>City of San Diego Water Purification Demonstration Project</u>: Chart 33 shows that 80 percent of San Diego City residents have not heard of the City of San Diego Water Purification Demonstration Project. Among the 20 percent who have heard about this project, 11 percent know that it involves recycled water for drinking and household purposes and 3 percent believe that the project involves recycled water for a purpose other than household and drinking use.



Respondents were subsequently informed about the nature and purpose of the Water Purification Demonstration Project. When so informed, residents expressed substantial support for the Project. **Chart 34** shows that 77 percent of residents either strongly favor (37 percent) or somewhat favor (40

46

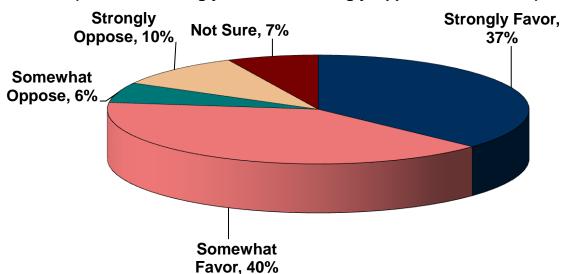
percent) the goals of the Project. This response represents strong approval for the use of recycled water for drinking purposes.

The following subgroups are less likely to have heard about the San Diego City Water Purification Demonstration Project:

- Residents whose landlord pays the water bill (88 percent) versus residents who pay their own water bill (78 percent).
- Renters (87 percent) versus homeowners (76 percent).

# Chart 34 Opinion about Water Purification Demonstration Project

(scale: 1 = Strongly Favor..4 = Strongly Oppose--mean = 1.87)



#### Attitudes about the Local Agricultural Industry and Water

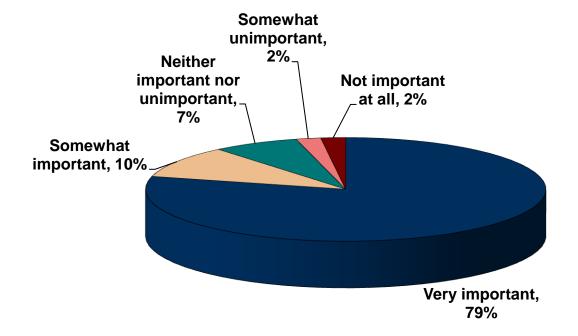
SUMMARY: San Diego City residents have shown substantial support for their local agricultural community – over four-fifths feel that local farmers and agriculture are very important to the local economy. They further feel that reduced water rates for the agricultural industry should be maintained.

Chart 35 shows that nearly four-fifths (79 percent) of respondents feel that local farmers and agriculture are very important to the local economy. On a scale of 1 to 5, where 1 = very important and 5 = not

important at all, the mean importance rating is 1.37. This represents a substantial indication of the region's support for its agricultural community.

## Chart 35 Importance of Local Farmers and Agriculture to San Diego Economy

(scale: 1 = Very important..5 = Not at all important--mean = 1.37)



This positive attitude toward farmers and agriculture is further corroborated in **Chart 36** which shows that 84 percent of respondents feel that reduced water prices for farmers and agriculture should be maintained.

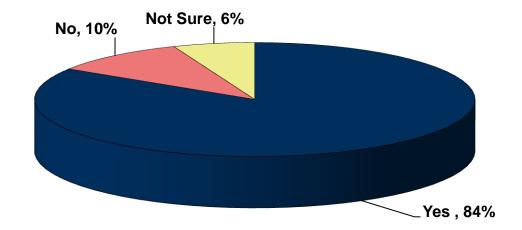
The following groups are more likely to think that reduced water prices for farmers should be maintained:

- Those who prefer to communicate in English are more likely to favor the maintenance of reduced water prices for farmers than are those who prefer Spanish (English speaking 87 percent; Spanish speaking 72 percent).
- Residents of single family homes and condominiums (87 percent each) versus residents of apartments (76 percent) and mobile homes (78 percent).
- Residents who own their homes (88 percent) versus those who rent their homes (81 percent).

The following groups differ regarding how important they think farmers and agriculture are to the San Diego economy. The differences are expressed in terms of mean scores that are based on a scale where 1 = very important to 5 = not important at all.

- Latinos (mean of 1.18) regard farmers and agriculture as being more important to the San Diego economy than do Whites (mean of 1.47) and Asians (mean of 1.57).
- Residents with one year of graduate work or more (mean of 1.20) attach more importance to farmers and agriculture than do those with a high school education or less (mean of 1.61).

Chart 36
Maintain Reduced Water Rates for Farmers and Agriculture



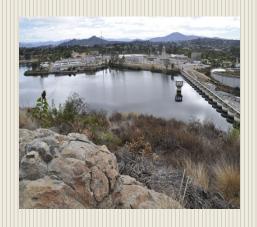
### 2012 Public Opinion Poll Report

The City sub-sample of the 2012 Public Opinion Poll Report can be found on the following pages. The appendix is not included in this document, but it can be found at <a href="http://www.sandiego.gov/water/waterreuse/demo/links.shtml">http://www.sandiego.gov/water/waterreuse/demo/links.shtml</a>.



## San Diego County Water Authority 2012 Public Opinion Poll Report City of San Diego Sample Subset





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August 16, 2012

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#### **Executive Summary**

The San Diego County Water Authority has conducted a public opinion survey within its service area in San Diego County in order to measure the region's opinion regarding various water related issues. Rea & Parker Research was selected to be the lead consultant for this 2012 Public Opinion Poll. Rea & Parker Research also conducted surveys for the Water Authority in 2000, 2003, 2004, 2005, 2006, 2008, and 2009, and 2011. A portion of this public opinion poll, as in 2004 and 2011, was specifically geared to residents within the City of San Diego, in particular concerning the City of San Diego Water Purification Demonstration Project. This 2012 study has established the following as its primary objectives:

- Identify the level of public concern about cost of water and rising rates
- Assess the tolerance for additional rate increases to support desalination
- Identify major drivers for recent reductions in water use
- Determine factors that might increase the likelihood for regional water use to "rebound"
- Recycled water and the City of San Diego Water Purification Demonstration Project

This continuity of survey administration greatly facilitates the tracking of responses from year-to-year, including the consistency of wording and interviewing that adds to the statistical reliability of such comparisons.

The purpose of this report is to present the results of the San Diego County Water Authority 2012 Public Opinion Poll specifically for residents located within the City of San Diego.

The San Diego City portion of the survey was conducted by a random telephone sample of 400 respondents, which equates to a margin of error +/-4.9 percent @ 95 percent confidence. The sample included 74 residents who were only cell phone users (do not use land-line telephone). All participants were at least 18 years old and had lived in San Diego County at least one year.

Respondents are predominantly White (61 percent), with 21 percent Hispanic/Latino, 11 percent African-American/Black, 5 percent Asian/Pacific Islander, and 2 percent American Indian/Native American and Mixed Ethnicities. Residents earn a median household income of \$57,700 per year (24 percent earning \$100,000 or more and 12 percent earning under \$25,000). They have a median age of 54 years and have lived in the County for a median of 27 years.

Among respondents, 61 percent possess a Bachelor's Degree or more, with 12 percent having a High School education or less. The zip codes most represented in the survey are as follows – each with 5 percent-to -6 percent of the respondents: 92104, 92105, 92110, 92115, 92116, 92117, 92128, and 92154. Home ownership percentage is 66 percent, with a mean of 2.90 persons per household.

#### **Survey Findings**

The 2012 Public Opinion Poll focused on six essential topics. It sought to identify and analyze, in particular,

- Identify the level of public concern about cost of water and rising rates
- Assess the confidence and trust in the regional water supply

- Evaluate progress made toward water conservation
- Assess the importance of desalination to the reliability of the water supply
- Evaluate progress made toward Strategic Plan objectives
- Water recycling

As such, this report has been divided into seven sections, as follows:

- Opinions about Local Issues
- Relative Value of Water and Other Utilities
- Water Reliability and Plans to Diversify Water Sources
- Seawater Desalination
- Attitudes about Water Conservation
- Opinions about the Use of Recycled Water (including attitudes about the City of San Diego Water Purification Demonstration Project)
- Water Rates

#### **Opinions about Local Issues**

- Residents identified the most important issues in San Diego County as the Economy and Jobs (36 percent), Financial Problems in Government including high taxes (19 percent), the Quality and Cost of Education (10 percent) followed by Water Supply Quality and Cost (9 percent) and Infrastructure (5 percent). The high level of concern regarding the condition of the economy was also found in the 2011 survey. The top two issues are not surprising since, during the past few years, there has been considerable, sustained attention devoted to the fiscal stress of local and state governments as well as the problems in the economy as a whole.
- One third of respondents (33 percent) are aware that the San Diego County Water Authority has filed a lawsuit alleging that the Metropolitan Water District is overcharging San Diego County ratepayers for the cost of transporting imported water to San Diego.

#### **Relative Value of Water and Other Utilities**

- Water is seen as a good value for the amount of money paid compared to other utilities; however, water has fallen relative to gas and electric as a good value since 2011.
- When asked to indicate the best value among utilities, 37 percent indicate that gas and electric is the best value and 16 percent rank water as such.
- Among all respondents, when first, second and third choices are weighted, 29
  percent view gas and electric as the best value among utilities, with water second
  at 17 percent.

#### Water Reliability and Plans to Diversify Water Sources

#### Water Reliability

- Among residents of the City of San Diego, nearly four-fifths find that the current supply of water is either very reliable (37 percent) or somewhat reliable (42 percent) and can be consistently relied upon to meet the region's needs. This positive attitude toward water supply reliability is highly consistent with the results of the 2011 survey. Both the 2011 and 2012 survey years represent a clear enhancement in the perception of water supply reliability from the results of the 2004 survey.
- However, respondents are expressing a decreasing level of confidence in how they perceive the trend in the water supply (improving, worsening, or staying the same). Just over one-tenth (13 percent) of residents feel that water supply reliability is improving a decrease of 11 percent from the 24 percent level recorded in 2011, and 27 percent see the supply as worsening—a 5 percent increase over 2011.
- Nearly three-fifths of respondents (59 percent) have trust in the ability of local water agencies to provide clean, safe, water for their customers.
- Almost one-third (32 percent) of respondents have either a great deal of trust (7 percent) or a good amount of trust (25 percent) in the ability of local water agencies to obtain water at reasonable prices.
- Nearly one-half of the respondents (49 percent) are aware of efforts by the San Diego County Water Authority to make the water supply more reliable. Respondents identified the following efforts as particularly noteworthy in this regard: water transfers and water importation from the Colorado River and the Imperial Valley (19 percent), improvement of the infrastructure (17 percent), and seawater/ocean water desalination (11 percent).
- The most critical things that can be done to ensure a safe and reliable water supply for San Diego County residents and businesses are to improve the quality of the water (19 percent), pursue seawater desalination (13 percent) and improve infrastructure (10 percent).

#### **Diversification Plan**

- Over one third of respondents indicate that the most important part of the Water Authority's Diversification Plan is seawater desalination (34 percent) followed by recycled water (21 percent), and the development of local reservoirs (18 percent). Seawater desalination continues to be regarded as the most important component of the Diversification Plan in the view of the respondents. Recycling has declined since 2011 in its importance as a component of the Diversification Plan. Local reservoirs have gained substantial ground.
- Three-fifths (60 percent) of residents are in support of the San Diego County Water Authority's Diversification Plan with ratings of strongly agree (40 percent) and agree (20 percent). This represents a decline in support of the Diversification

Plan from the results of the 2011 survey where 80 percent either strongly agreed or agreed that the Diversification Plan would improve water supply reliability.

#### **Seawater Desalination**

- Over four-fifths (82 percent) of respondents feel that seawater desalination is important to the reliability of the water supply (53 percent -- very important and 29 percent -- somewhat important).
- Respondents are most favorably influenced toward desalination by the following message: "Desalinated water is a drought-proof local supply of water," which is followed very closely by "Desalinated water reduces the San Diego region's dependence on supplies from the Metropolitan Water District" and by "Desalination will reduce the region's demand for supplies of imported water from Northern California and the Colorado River." The least influential message is as follows: "Desalinated water is competitive with the cost of developing other new sources of water supplies."
- Nearly two-thirds (66 percent) expressed a willingness to pay something more per month to add seawater desalination to the water supply. Among this 66 percent, 57 percent indicated that they would pay \$5 or more additionally per month.
- Among those who indicated a precise amount, the average (mean) additional amount they are willing to pay is \$13 per month.

#### **Attitudes about Water Conservation**

#### Water Use in Past Year

- Water conservation is a significant component in San Diego County's water supply plans. Over one-fourth of respondents (26 percent) indicated that their household water usage has decreased over the past year. This represents a decline of 2 percent among those who indicated that they decreased their water usage in 2011 (28 percent). This decline is offset, however, by a 4 percent decline in those indicating that their usage had increased.
- Among those who indicated that their household water usage has declined, nearly one-half (48 percent) feel that reducing water usage is the "right thing to do." In 2011, a somewhat smaller (but still substantial) percentage was motivated to reduce water usage because it is the "right thing to do" (31 percent).
- Over one-fourth (27 percent) were motivated to reduce water usage because they are watching their budget and this represents a slight decline since 2011 when 35 percent were so motivated by budgetary concerns to reduce their water usage.
- The vast majority—almost 90 percent—indicated that their reduced water usage is permanent and this is consistent with the 2011 finding.

#### **Water Use in the Future**

- It is most encouraging that when water agencies no longer take an active role in restricting water use, respondents who have reduced their water usage during the past year indicate that they are not likely to increase their water use to a great extent (22 percent would increase). When the economy rebounds, only 18 percent anticipate increasing their water usage.
- On the other hand, a less cool and less wet year would lead to nearly three-fifths (57 percent) of those who have reduced their water use during the past year returning to higher usage. These views about higher water in the future parallel the views of the 2011 survey respondents.

#### Water Conservation as a Civic Responsibility

- Virtually all of the respondents (95 percent) think that it is their civic responsibility to use water as efficiently as possible.
- In the current survey period as well as in 2011, respondents regard water conservation as a greater civic responsibility than serving on a jury. For voting in public elections and not littering/not polluting, water conservation is seen as less of a civic responsibility. Water conservation and recycling used materials are closer to equality as civic responsibilities.

#### **Opinions about Recycled Water**

- Over 7 in 10 respondents (71 percent) believe that it is possible to further treat recycled water previously used for irrigation to make the water pure and safe for drinking. This represents a slight increase over the 2011 survey finding where two-thirds (67 percent) felt that it is possible to further treat recycled water for drinking purposes.
- Nearly three fifths of the respondents (56 percent) believe that drinking water already contains recycled water. This reflects a clear upward movement in the percentage of those who hold this belief 47 percent in 2011.
- Three primary reasons are provided to explain why respondents feel that drinking water already contains recycled water. Respondents feel they hear that water is recycled from news stories (19 percent), they "just know it" (includes hunches and common sense) (17 percent), and water tastes and smells bad (16 percent). In 2011, hearing about recycled water from news stories was also the most dominant reason (21 percent). The reason "just know it" increased in importance by 7 percent from the 10 percent reported in 2011.
- Nearly three-fourths (73 percent) of the respondents either strongly favor (36 percent) or somewhat favor (37 percent) advanced treated recycled water as an addition to the supply of drinking water. This represents an increase in support for advanced treatment over the 2011 survey where 68 percent of the respondents either strongly favored or somewhat favored advanced treated recycled water. Interest in using such advanced techniques has increased substantially since 2004.

• Among the 20 percent who have heard about the Water Purification Demonstration Project, 6 percent know that it involves recycled water for drinking and household purposes – a decline of 5 percent from the 11 percent who correctly identified the purpose of the project in 2011. When respondents were informed about the Project, they expressed substantial support for the Project – over three-fourths either strongly favoring the project or somewhat favoring it. This level of support parallels the support indicated in the 2011 survey.

#### **Water Rates**

- Over two-fifths (45 percent) of respondents feel that the cost of water is too expensive and another 54 percent feel that the cost is fair and reasonable. This represents a decline from the 2011 survey period among those who feel the cost of water is too expensive -- in 2011, 52 percent indicated water was too expensive. This result points to a trend toward an enhanced understanding of and tolerance for the cost of water.
- The dominant causes that residents indicate for increases in water rates are more water being consumed by customers (20 percent) and less rain in San Diego (18 percent)—both of which are not correct.
- Three-fifths of respondents (60 percent) feel that increases in water rates are necessary to maintain reliability of the water supply while well over one-third of the respondents (36 percent) feel that increased water rates are not necessary and should be stopped. This reaffirms the shift from the 2011 survey results toward an understanding of and a tolerance for water rate increases. In the 2011 survey, there was a near equal split in opinion about the necessity of water rate increases to pay for projects designed to improve water supply reliability.
- Despite their seeming understanding of increasing water rates, almost two-thirds (65 percent) indicate that they very concerned (41 percent) or somewhat concerned (24 percent) about the prospect of continued increases in water rates. This level of concern is consistent with the results of the 2011 survey where 61 percent were either very concerned or somewhat concerned about continued increases in water rates.

#### **Introduction and Methodology**

The San Diego County Water Authority has, over the years, conducted a public opinion survey within its service area in San Diego County in order to measure public opinion regarding water issues. Rea & Parker Research was selected to be the lead consultant for this 2012 Public Opinion Poll. Rea & Parker Research, in association with Flagship Research, also conducted public opinion polls for the Water Authority in 2000, 2003, 2004, 2005, 2006, 2009, and 2011 and two water conservation surveys in 2008 to test the effectiveness of conservation messages. This continuity of survey administration greatly facilitates the tracking of responses from year-to-year, including the consistency of wording and interviewing that adds to the statistical reliability of such comparisons.

The City of San Diego requested that the sample include about 400 respondents specifically residing within the boundaries of the City. It was also requested by the City of San Diego that specific questions pertaining only to City residents be included in the survey. These same questions were specifically directed at issues pertaining to the City of San Diego Water Purification Demonstration Project. This same process of additional questions for the City of San Diego sub-sample was followed in 2004 and in 2011. Accordingly, Rea & Parker Research has compared 2004 and 2011 survey data with the results of the current survey where questions were the same or nearly the same.

The purpose of this report is to present the results of the San Diego County Water Authority 2012 Public Opinion Poll for respondents located within the City of San Diego.

The primary objectives of the 2012 research are as follows:

- Identify the level of public concern about cost of water and rising rates
- Assess the confidence and trust in the regional water supply
- Evaluate progress made toward water conservation
- Assess the importance of desalination to the reliability of the water supply
- Evaluate progress made toward Strategic Plan objectives
- Identify knowledge and opinions about the Water Purification Demonstration Project (City sub-sample only)

As such, this report has been divided into seven essential information components as follows:

- Opinions about Local Issues
- Relative Value of Water and Other Utilities
- Water Reliability and Plans to Diversify Water Sources
- Seawater Desalination

- Attitudes about Water Conservation
- Opinions about the Use of Recycled Water (including attitudes about the City of San Diego Water Purification Demonstration Project)
- Water Rates

#### Sample

The 2012 Public Opinion Poll was conducted between July 9 and July 25, 2012, including a random telephone sample of 400 respondents located within the City of San Diego. The random sample was selected by random digit dialing from the zip codes contained within the City of San Diego. This sample yields a margin of error of +/- 4.9 percent @ 95 percent confidence. The sample includes 74 residents who are only cell phone users (do not use land-line telephone). All participants were at least 18 years old and had lived in San Diego County at least one year. It is important to note that the sample of 400 is a subset of the larger sample of 816 representing the entire San Diego Water Authority service area.

The margin of error for this survey represents the widest interval that occurs when the survey question represents an approximate 50%-50% proportion of the sample. When it is not 50 percent-50 percent, the interval is somewhat smaller. For example, in the survey findings that follow, 49 percent of respondent households indicate that they are aware of efforts by the San Diego County Water Authority to make the supply of water even more reliable. This means that there is a 95 percent chance that the true proportion of the total population of the Water Authority's service area who have this awareness is between 44.1 percent and 53.9 percent (49 percent +/- 4.9 percent).

#### **Survey Instrument**

The survey instrument contained 41 questions, including 69 individual survey items (variables). The survey instrument was administered in both English and Spanish. A copy of the survey is attached in the Appendix. A total of 18 respondents (4.5 percent) elected to respond in Spanish

#### **Respondent Characteristics**

**Table 1** presents certain demographic characteristics of the survey respondents and also provides the 2011 characteristics for comparative purposes. In 2012, respondents are predominantly White (61 percent), with 21 percent Hispanic/Latino, 11 percent African-American/Black, 5 percent Asian/Pacific Islander, and 2 percent American Indian/Native American and Mixed Ethnicities. Residents earn a

median household income of \$57,700 per year (24 percent earning \$100,000 or more and 12 percent earning under \$25,000). They have a median age of 54 years and have lived in the County for a median of 27 years. Among respondents, 61 percent possess a Bachelor's Degree or more, with 12 percent having a High School education or less. The zip codes most represented in the survey are as follows – each with 5.0-6.0 percent of the respondents: 92104, 92105, 92110, 92115, 92116, 92117, 92128, and 92154.

Table 1				
City of San Diego Survey Respondent Demographics				
Demographic Characteristic	2012	2011		
<u>Gender</u>				
Male	57%	45%		
Female	43%	55%		
Median Age (Years)	54	48		
Median Number of Years Lived in Community	27	22		
Highest Grade/Level of School Completed				
High School or Less	12%	27%		
Some College	27%	28%		
Bachelor's Degree	36%	28%		
Some Graduate School	25%	17%		
<b>Ethnicity</b>				
White	61%	53%		
Latino/Hispanic	21%	28%		
African-American/Black	11%	8%		
Asian/Pacific Islander	5%	<b>7%</b>		
Native American/Mixed	2%	4%		
Median Household Income	\$57,700	\$52,200		
Home Ownership Percentage	66%	62%		
Type of Housing				
Single Family Detached	69%	60%		
Condominium	15%	18%		
Apartment	15%	20%		
Mobile Home	1%	2%		
Mean Number of Persons per Household	2.90	3.02		
Pay Own Water Bill	68%	72%		

The home ownership percentage is 66 percent, with a mean of 2.90 persons per household. Among White and Asian respondents, 74 percent are homeowners. This is consistent with the 2011 homeownership rate for Whites and Asians of 72 percent. Black/African-American homeowners have

increased from 45 percent in 2011 to 54 percent in the current survey and the homeownership rate for Hispanics/Latinos has also increased to 54 percent from their 2011 homeownership rate of 40 percent.

Other differences between the current 2012 survey respondents and the respondents from previous years are as follows:

- The 2012 survey respondents have completed more higher education than respondents in 2011.
- The 2012 respondents are more represented by Whites and less represented by Hispanics/Latinos than the respondents in the 2011 survey.
- The percentage of homeowners (70 percent) is higher than in 2011, as is the percentage of single-family residence dwellers.
- Respondents in 2012 are somewhat older in 2012 than they were in 2011 (2012 median of 54 years of age versus 2011 median of 48 years of age) and have resided in County for a longer term (27 years in 2012 versus 22 years in 2011).
- A smaller percentage of respondents pay their own water bills in 2012 than in 2011.

#### **Survey Findings**

Each section of the report will begin with a very brief abstract, or summary of highlights within the ensuing section, in order to orient the reader to what is to follow. Charts have been prepared for each section that depict the survey results for the 2012 survey and for the 2011 and 2004 surveys where questions are repeated and results can be directly compared. Each section will include a discussion of the survey periods. Detailed statistical frequency distributions and a full listing of verbatim open-ended responses are contained in the Appendix along with the survey instrument for reference.

Lastly, subgroup analyses for different age groups, various levels of education, gender, home ownership/rental status, household size, residential tenure in the community, different income categories, cell phone only/land line users, and water bill payers/non-payers and ethnicity of residents of the City will be presented in a succinct, bulleted format when statistical significance and relevance warrants such treatment.

#### **Opinions about Local Issues**

<u>SUMMARY</u>: Residents identified the most important issues is San Diego County as the Economy and Jobs, Financial Problems in Government including high taxes, and the Quality and Cost of Education. The high level of concern regarding the condition of the economy was also found in the 2011 survey. The first two ranked issues are not surprising since, during the past few years, there has been considerable, sustained attention devoted to the fiscal stress of local and state governments

as well as the economy as a whole. The concern for the quality and cost of education as well as the quality and supply of water are similar in 2012 and 2011.

One-third of respondents are aware that the San Diego County Water Authority has filed a lawsuit alleging that the Metropolitan Water District is overcharging San Diego County ratepayers for the cost of transporting water to San Diego.

Chart 1 shows that the most important current issues identified by residents of the City of San Diego are the Economy and Jobs (36 percent), Financial/Political Problems in Government including high taxes (19 percent), and the Quality and Cost of Education (10 percent), followed by the Quality and Cost of Water (9 percent) and Infrastructure (5 percent). The high level of concern regarding the condition of the economy, found in the 2011 survey, is repeated in the current survey. Respondents report that governmental financial problems also remain at the high level of concern found in the 2011 survey results. In fact, this concern for the general economy and fiscal problems in government has increased to some extent in the current survey. This is not surprising since, during the past few years, there has been considerable attention devoted to the fiscal stress of local and state governments as well as problems in the economy as a whole. The concern for the quality and cost of education as well as the cost, quality and supply of water are similar in 2012 and 2011.

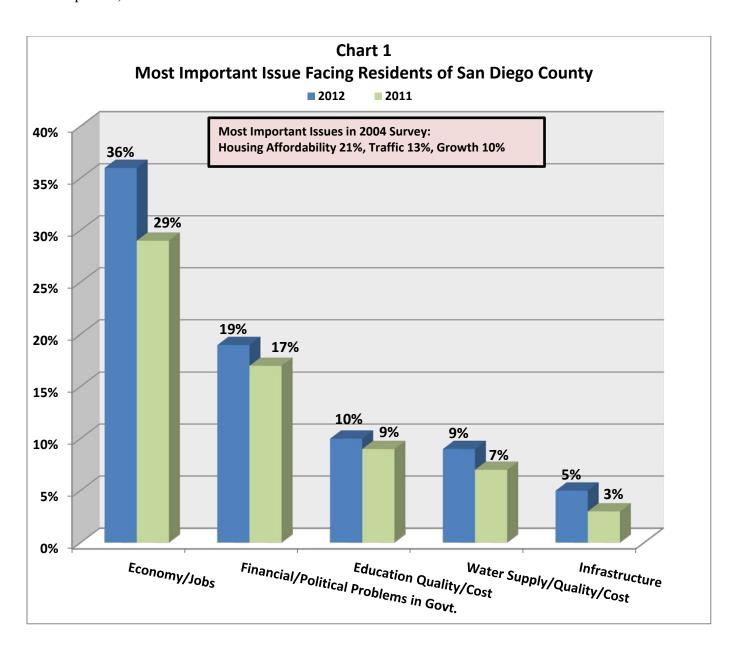
In 2004, respondents indicated that the most important issues were housing affordability (21 percent) traffic (13 percent), and growth and development (10 percent). Other responses that did not receive enough mention to merit an individual listing in the chart can be viewed in the Appendix, where the full listing of responses is displayed.

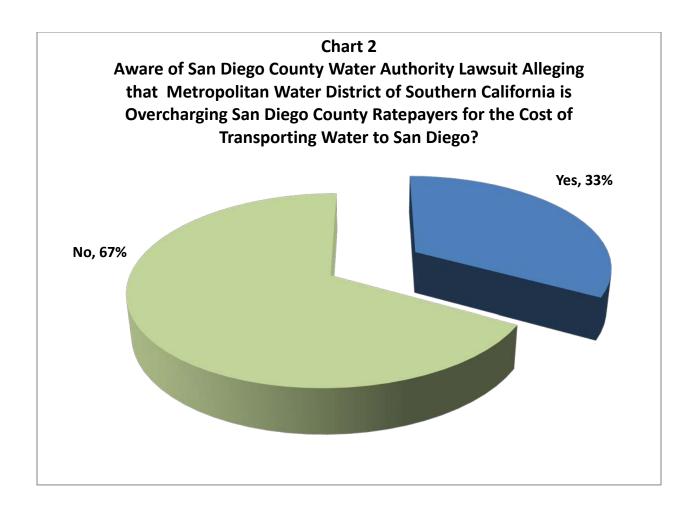
Respondents were asked whether they are aware that the San Diego County Water Authority has filed a lawsuit against the Metropolitan Water District of Southern California for overcharging San Diego County taxpayers for the cost of transporting imported water to San Diego. **Chart 2** shows one-third of City respondents (33 percent) are aware of this lawsuit.

The following groups are more likely to be aware that the San Diego County Water Authority has filed a lawsuit alleging that the Metropolitan Water District is overcharging San Diego County ratepayers for the cost of transporting imported water:

- Males (39 percent) versus females (26 percent).
- Residents who pay their own water bill (37 percent) as opposed to those whose water bill is paid by someone else such as a landlord (26 percent).

- Homeowners (39 percent) versus renters (24 percent).
- Asians (47 percent) and Whites (37 percent) versus Blacks/African-Americans (27 percent) and Hispanics/Latinos (21 percent).
- Residents who are 65 years of age and over (54 percent) versus residents who are 44 years of age and under (18 percent).
- Longer term residents of the County (45 or more years 49 percent versus 20 years or less 23 percent).





#### **Relative Value of Water and Other Utilities**

<u>Summary:</u> Water is seen as a relatively good value for the amount of money paid in comparison to other utilities, such as gas and electric service and phone service. However, water has fallen relative to gas and electric as a good value since 2011. When asked to indicate the best value among utilities, 37 percent indicate that gas and electric is the best value and 16 percent rank water as such. Among all respondents, when the data are weighted for the utilities of first choice, second choice, and third choice, 29 percent view gas and electric service as the best value, followed by water at 17 percent.

Residents were asked their opinion regarding the utility that provides them with the best value for the money paid. **Chart 3** shows the survey results for all City of San Diego respondents. Water is seen as a relatively good value for the amount of money paid in comparison to other utilities, including gas and electric service, phone service, and Internet access, among others. When asked to indicate the best value among utilities, 37 percent indicate that gas and electric is the best value and 16 percent rank water as such. Among all respondents, when the data are weighted for the utilities of first choice, second choice,

and third choice, 29 percent view gas and electric service as the best value, followed by water at 17 percent. In 2011, respondents also considered gas and electric as the best relative value (30 percent); however, it is noteworthy that the relative value of water fell by 4 percent (from 21 percent in 2011 to 17 percent in 2012).

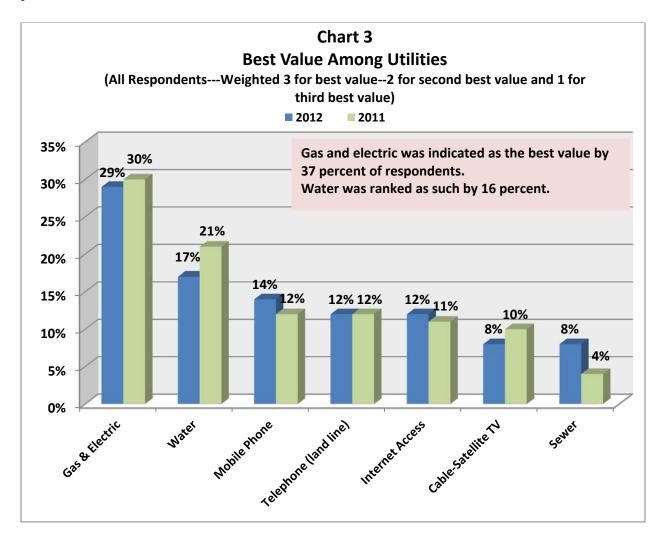
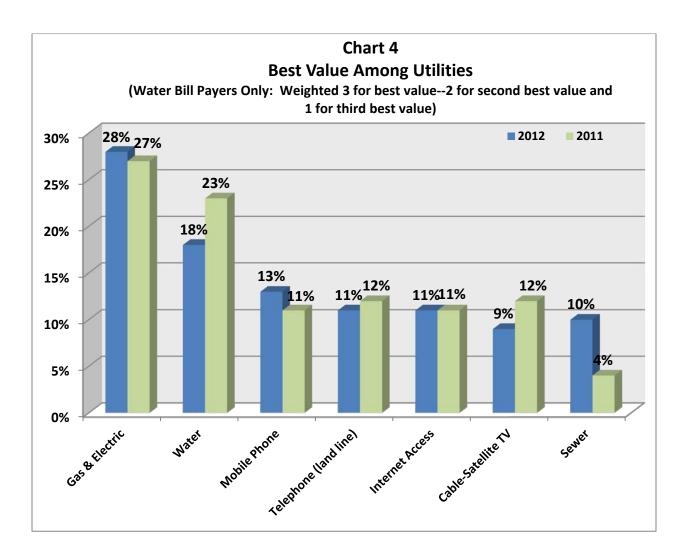


Chart 4 shows how certain respondents view the relative value of utilities by including only those who pay their own water bill. This exclusion attempts to control for those who do not pay their own water bills (thereby causing their assessment of value to be less relevant than those who do pay their own bills). As a result of this screen, the relative value of gas and electric decreases by 1 percent (from 29 percent to 28 percent) and the relative value of water increases by 1 percent (from 17 percent to 18 percent). It should be noted that trash collection is not included in the analysis because residents of the City of San Diego do not pay directly for trash collection.

• Those who pay their own water bill (18 percent) tend to choose water as the best value among various utilities more so than do those whose water bills are paid by their landlord or homeowners' association, for example (12 percent).



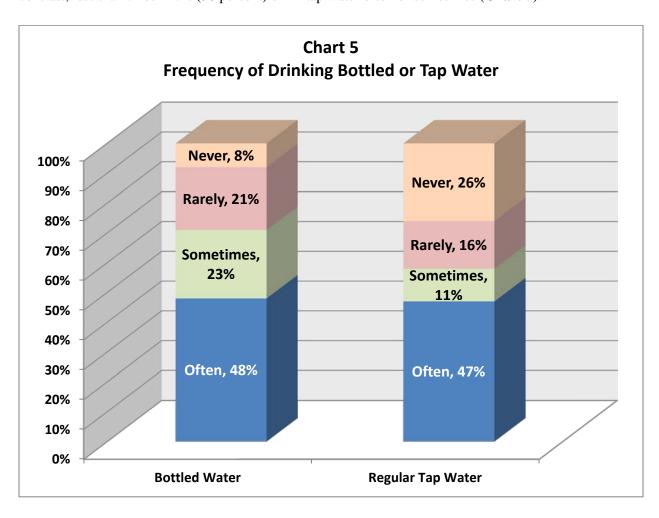
#### Water Reliability and Plans to Diversify Water Sources

SUMMARY: Among City of San Diego residents, more than three-fourths find that the current supply of water is either very reliable or somewhat reliable and can be consistently relied upon to meet the region's needs. This positive attitude toward water supply reliability is highly consistent with the results of the 2011 survey. Both the 2011 and 2012 survey years represent a clear increase in the perception of water supply reliability from the results of the 2004 survey. However, respondents are expressing a decreasing level of confidence in how they perceive the trend in the water supply.

Nearly three-fifths of respondents have trust in the ability of local water agencies to provide clean, safe, water for their customers. Almost one-third of respondents have either a great deal of trust or a good amount of trust in the ability of local water agencies to obtain water at reasonable prices.

Respondents identified the following efforts as particularly noteworthy on the part of the Water Authority in ensuring a safe and reliable water supply: water transfers and water importation from the Colorado River and the Imperial Valley, improved infrastructure, and seawater/ocean water desalination. One third of respondents indicate that the most important part of the Water Authority's Diversification Plan is seawater desalination followed by recycled water and the development of local reservoirs. Three-fifths of residents are in support of the San Diego County Water Authority's Diversification Plan. This represents a decline in support of the Diversification Plan from the results of the 2011 survey.

<u>Water Reliability</u>: Respondents tend to drink bottled water more frequently than they do tap water. More than seven in ten respondents (71 percent) either drink bottled water often or sometimes. By contrast, less than three-fifths (58 percent) drink tap water often or sometimes (**Chart 5**).



The following groups are more likely to drink bottled water often than are complementary groups:

- Residents with less education (less than a bachelor's degree 57 percent versus bachelor's degree or more education 42 percent).
- Blacks/African-Americans (68 percent) and Hispanics/Latinos (60 percent) versus Whites (40 percent).
- Larger households (3 or more persons 52 percent versus households of 1-2 persons 43 percent).

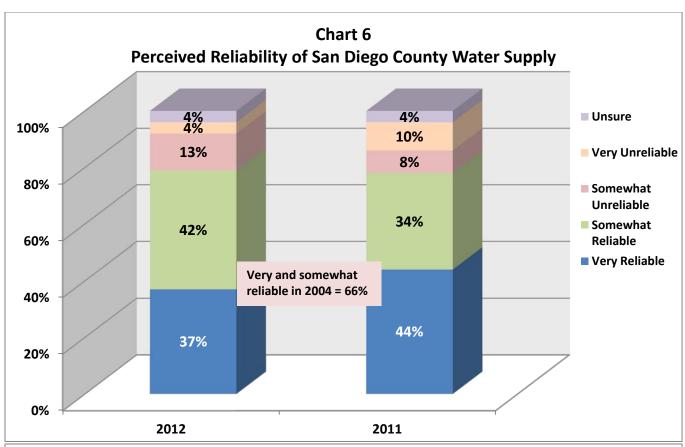
The following groups are more likely to drink tap water often than are complementary groups:

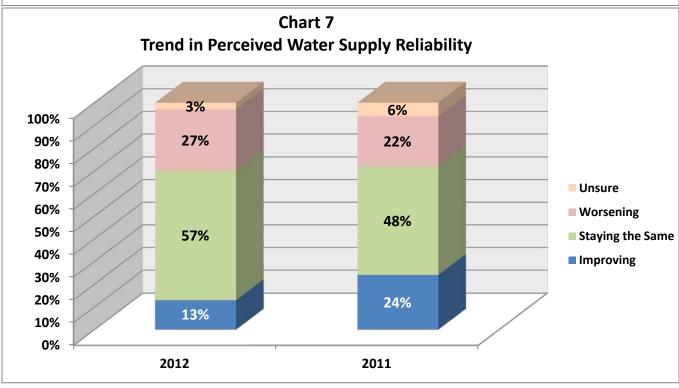
- Males (54 percent) versus females (39 percent).
- Homeowners (53 percent) versus renters (37 percent).
- In terms of ethnicity, Whites (56 percent) versus Hispanics/Latinos (38 percent), Blacks/African/Americans (32 percent), and Asians (26 percent).

Chart 6 demonstrates that there is confidence in the water supply to meet the region's needs while Chart 7 shows that a relatively small percentage of the population feels that this reliability is improving. Chart 6 shows that among residents of the City of San Diego, nearly four fifths (79 percent) find that the current supply of water is either very reliable (37 percent) or somewhat reliable (42 percent) and can be consistently depended upon to meet the region's needs. Under one-fifth (17 percent) find the water supply to be very or somewhat unreliable. This positive attitude toward water supply reliability is highly consistent with the results of the 2011 survey. In both the current survey and in the 2011 survey, confidence in the reliability of the water supply is higher than reported in the 2004 survey where 66 percent perceived the water supply to be either very or somewhat reliable.

• Younger and middle-aged residents (18-54 years of age) think that the water supply is very reliable (45 percent) more so than do older residents (55 years of age and older—30 percent).

Chart 7 demonstrates that respondents are expressing a decreasing level of confidence in the perceived reliability of the water supply – whether the supply is improving, worsening, or staying the same. Just over one-tenth (13 percent) of City residents feel that the trend in water supply reliability is improving – a decrease of 11 percent from the 24 percent level recorded in 2011. There is also a small increase among those who feel that the trend in the reliability of the water supply is worsening (22 percent in 2011 to 27 percent in 2012).





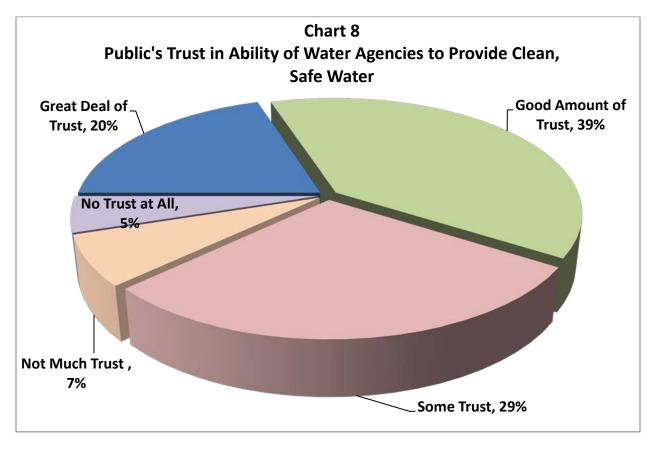
The following groups of respondents are more likely to think that the reliability of the County's water supply is worsening than do their complementary groups:

- Those who pay their own water bill (34 percent) versus those who do not (15 percent).
- Homeowners (33 percent) versus renters (20 percent).
- Long-term residents of more than 20 years (34 percent) see a worsening supply more so than do those who have resided in the County for 20 years or less (19 percent).

**Chart 8** shows that nearly three-fifths of City respondents (59 percent) have a substantial amount of trust in the ability of local water agencies to provide clean, safe, water for its customers (20 percent a great deal of trust and 39 percent a good amount of trust). Only 12 percent expressed a lack of trust – not much trust (7 percent) and no trust at all (5 percent).

Regarding trusting local water agencies to deliver clean, safe water to their customers, the following groups indicate a good or great deal of trust in contrast to their counterparts:

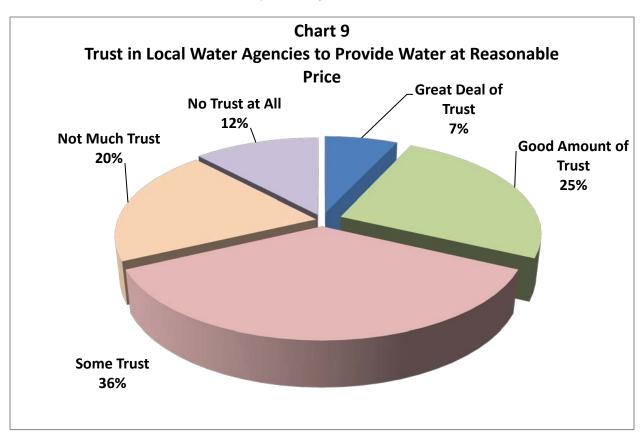
- High income residents (\$150,000 and more) –83 percent versus those earning less than \$150,000—58 percent.
- Those who characterize their consumption of regular tap water as "often" (69 percent) indicate a good or great deal of trust in contrast to those who never use it (40 percent).



**Chart 9** indicates that 32 percent of respondents have either a great deal of trust (7 percent) or a good amount of trust (25 percent) in the ability of local water agencies to obtain water at reasonable prices. About one-third (32 percent) lack trust in the ability of local water agencies to provide water at reasonable prices – not much trust (20 percent) and no trust at all (12 percent).

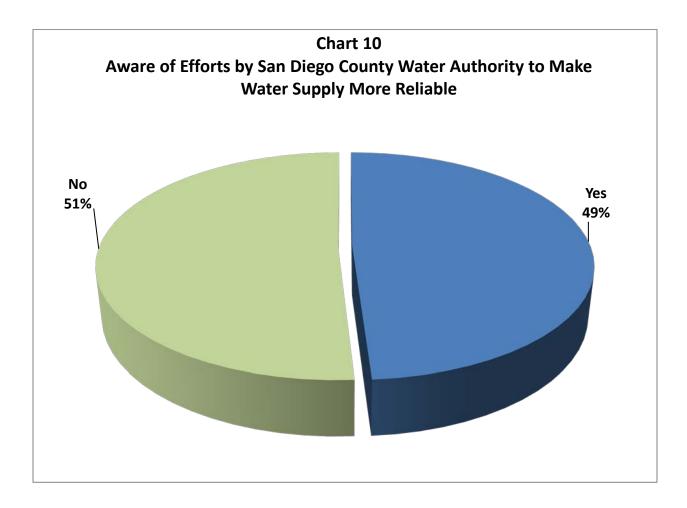
Trust in local water agencies to provide clean, safe water at reasonable prices also shows interesting differences among these groups of respondents:

- Asians (53 percent) show a great or good deal more trust that water prices will be reasonable than do Hispanics/Latinos (22 percent), Whites (31 percent) or Blacks/African-Americans (35 percent).
- Those who do not pay their own bills have a good or great deal of trust that water prices will be reasonable (42 percent) more so than do those who are responsible for making these payments (27 percent).
- Renters indicate a good or great deal of trust (35 percent) more so than do homeowners (29 percent).
- Younger residents indicate a good or great deal of trust (age 18-44 -- 44 percent) more so than do those residents 45 years of age or older (24 percent).
  - O Using means, the mean age of residents with a great or good deal of trust in the reasonableness of prices is 46.6 years of age in contrast to those with not much or no trust at all (mean = 56.5 years of age)

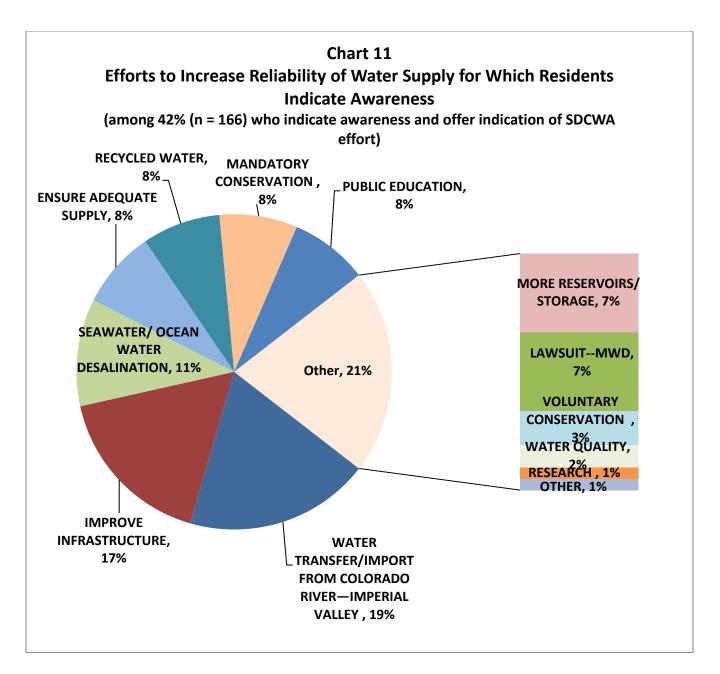


Nearly one-half of the respondents (49 percent) are aware of efforts by the San Diego County Water Authority to make the water supply more reliable (**Chart 10**).

• Frequent tap water consumers (often use = 58 percent) tend to be aware of efforts by the San Diego County Water Authority to make the water supply more reliable more so than those who sometimes, rarely or never drink tap water (40 percent).



Respondents, who indicated their awareness of such efforts, were asked to identify one of these efforts. Nearly one-fifth (19 percent) mentioned water transfer and water importation from the Colorado River and the Imperial Valley, another 17 percent mentioned improvement of infrastructure, and 11 percent indicated seawater/ocean water desalination. Other efforts mentioned by the respondents are public education, ensuring an adequate supply of water, recycled water, and mandatory conservation (each 8 percent) (Chart 11).



When asked which one thing the respondents were aware of, differences among groups again were in evidence.

- Men indicated desalination (14 percent) more so than did women (6 percent).
- Men also named water transfers from the Colorado River (21 percent), infrastructure (19 percent) reservoirs (9 percent), and the MWD lawsuit (8 percent) more so than did women (14 percent, 12 percent, 1 percent and 4 percent, respectively)
- Women, on the other hand, listed public education (15 percent), mandatory conservation (14 percent) and voluntary conservation (10 percent) more so than did men (5 percent, 6 percent and 1 percent, respectively).

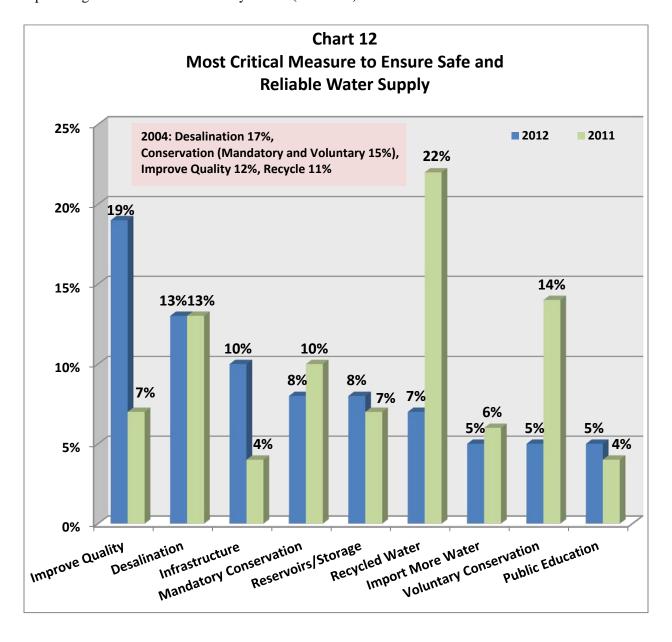
- Homeowners indicated water transfers (22 percent), infrastructure (19 percent), the MWD lawsuit (10 percent) and reservoirs (8 percent) more so than did renters (11 percent, 13 percent, 0 percent and 4 percent, respectively).
- Renters listed mandatory conservation (15 percent), recycling (13 percent), and voluntary conservation (7 percent) more than did homeowners (5 percent, 6 percent, and 3 percent, respectively).
- There were a substantial number of differences by ethnicity as follows:
  - o Whites were highest among ethnic groups in mentioning water transfers (22 percent) and the MWD lawsuit (10 percent).
  - o Blacks/African-Americans were highest for mandatory conservation (25 percent), public education (25 percent) and recycling (17 percent).
  - o Hispanics/Latinos were highest for infrastructure (25 percent).
  - o Asians were highest for desalination (29 percent) and reservoirs (14 percent).
- Larger households of 5 or more persons mentioned water transfers (39 percent), voluntary conservation (22 percent), mandatory conservation (17 percent), and public education (17 percent) more so than did households with 4 or fewer residents.
- Smaller households of 3 or less mentioned desalination (16 percent), recycled water (12 percent) and the MWD lawsuit (8 percent).

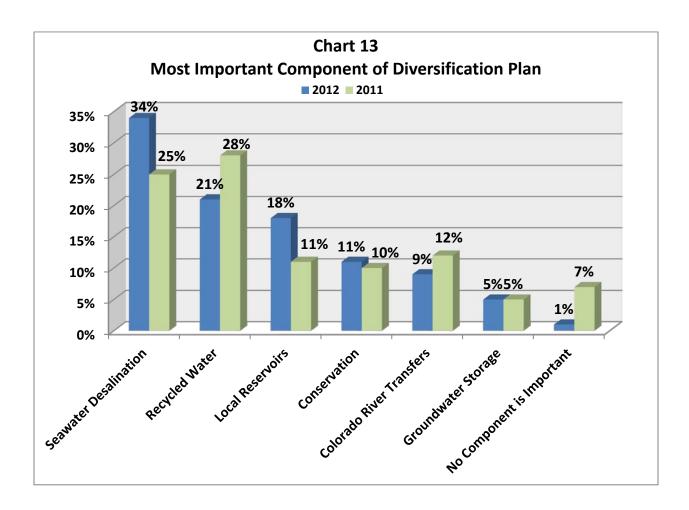
When respondents were asked what they think is the most critical thing that can be done to ensure a safe and reliable water supply for San Diego County residents and businesses, 19 percent indicated that the Water Authority could improve the quality of the water. This response was followed by seawater desalination (13 percent) and infrastructure improvement (10 percent). Since the 2011 survey, water quality and infrastructure issues have increased in importance as critical measures to ensure a safe and reliable water supply. Conservation (both mandatory and voluntary combined) has declined in importance to 13 percent – a decline of 11 percent since the 2011 survey. The 2012 results represent a return to the 2004 level when only 15 percent of City respondents regarded conservation as important to safeguard the water supply. Recycled water has lost ground as a critical issue during the current survey period, falling to 7 percent from the 2011 high of 22 percent. Desalinated water remains steady as a critical issue in all three survey periods – 2012, 2011, and 2004 (Chart 12).

• Those who never drink regular tap water think that improving water quality is the most critical thing that the Water Authority can do (33 percent for those who never drink tap water versus 14 percent for those who drink tap water rarely, sometimes or often).

<u>Diversification Plan:</u> Over one third of respondents indicate that the most important part of the Water Authority's Diversification Plan is seawater desalination (34 percent) followed by recycled water (21 percent), and the development of local reservoirs (18 percent). Seawater desalination remains the most important component of the Diversification Plan in the view of the respondents. In fact, those who

support desalination increased by 9 percent since 2011 when 25 percent felt that desalination was the most important component of the Diversification Plan. Respondents indicate that recycled water has a declining level of importance as a component of the Diversification plan (28 percent in 2011 versus 21 percent in 2012). Local reservoirs have gained substantial ground increasing from 11 percent in 2011 – a 7 percent gain over the current survey results (**Chart 13**).



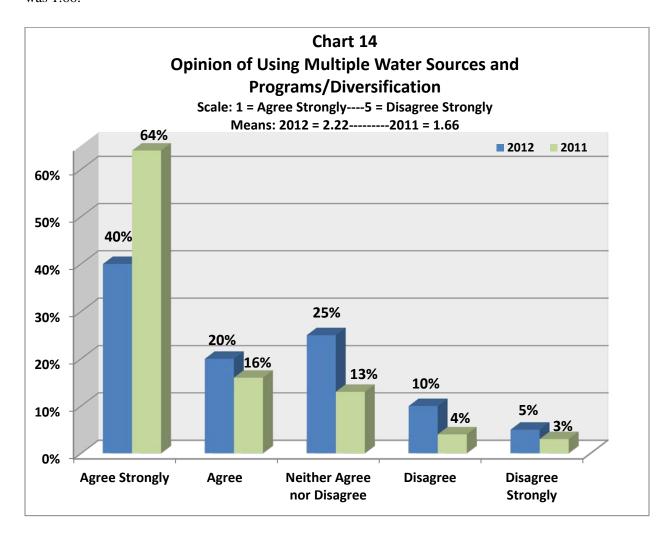


Differences exist among groups pertaining to the most important components of the Water Authority's Diversification Plan.

- Households of 4 or more persons are stronger in their indicated importance of expanding local reservoirs (25 percent) and water transfers (11 percent) versus households of 3 or less (15 percent and 8 percent, respectively).
- Smaller households of 3 or less consider recycled water (21 percent) and conservation (12 percent) to be more important than do larger households (16 percent and 9 percent)

Chart 14 shows that three-fifths (60 percent) of residents are in support of the San Diego County Water Authority's Diversification Plan with ratings of strongly agree (40 percent) and agree (20 percent). This represents substantial decline in support of the Diversification Plan from the results of the 2011 survey where 80 percent either strongly agreed or agreed that the Diversification Plan would improve water

supply reliability. The mean rating of 2.22 (based on a scale of 1 to 5, where 1 = strongly agree and 5 = strongly disagree) confirms this declining level of support from the 2011 finding where the mean rating was 1.66.



Significant differences among groups regarding agreement or disagreement with the Diversification Plan are as follows:

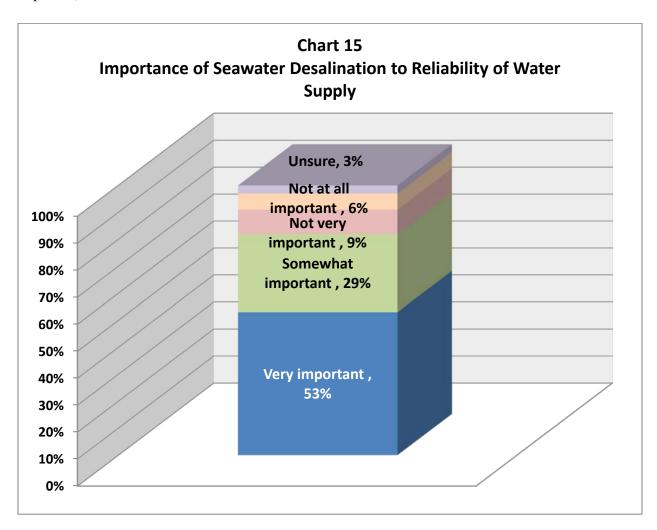
- One the 1-5 scale, there is greater agreement among more educated residents (mean of 2.06 for those with one year or more of graduate school) versus among those with a high school diploma or less (2.72).
- Income is lower by approximately \$30,000 among those who disagree strongly with the Diversification Plan compared to all other agreement or disagreement categories.

## **Seawater Desalination**

<u>SUMMARY</u>: Over four-fifths of respondents feel that seawater desalination is important to the reliability of the region's water supply. Respondents are most favorably influenced toward desalination by the following message: "Desalinated water is a drought-proof local supply of water." The least influential message is as follows: "Desalinated water is competitive with the cost of developing other new sources of water supplies."

Nearly two-thirds expressed a willingness to pay something more per month to add seawater desalination to the water supply—almost three-fifths indicating \$5 or more. In 2011, less than half indicated a willingness to pay \$5 for a more general benefit of increased water supply reliability. Among those who indicated a precise amount, the mean additional amount they are willing to pay is \$13 per month and the median amount is \$10.

**Chart 15** demonstrates that over four-fifths (82 percent) of respondents feel that seawater desalination is important to the reliability of the Water Supply (53 percent -- very important and 29 percent -- somewhat important).



• Males think that desalination is more important than do females--59 percent of men think that desalination is very important in contrast to 44 percent of women.

Five statements were read to the respondents regarding desalination. After each statement, respondents were asked how influenced they were by these statements. The response was based on a scale of 1 to 5, with 1 being very favorably influenced toward desalination and 5 being not favorably influenced at all. The most influential statements were "Desalinated water is a drought-proof local supply of water" (mean of 1.95), "Desalinated water reduces the San Diego region's dependence on supplies from the Metropolitan Water District" (mean of 1.99), and "Desalination will reduce the region's demand for supplies of imported water from Northern California and the Colorado River" (mean of 2.05). The least influential statement is "Desalinated water is competitive with the cost of developing other new sources of water supplies" (mean of 2.55). In all statements except the least influential one, about two-thirds of respondents (range of 67 to 69 percent) indicated that they were either very influenced or somewhat influenced by the statement. In the least influential statement, only 46 percent were either very influenced or somewhat influenced (Chart 16).

In testing these messages about desalination, a number of differences among the groups became evident:

- Men are more favorably influenced by the messages about desalination being drought-proof (61 percent very favorably influenced versus 43 percent for women). Men are also more favorably influenced by the message about desalination reducing the region's dependence on imported water (53 percent very favorably influenced for men versus 42 percent for women) and by the message about desalination reducing dependence upon MWD (55 percent for men versus 43 percent for women).
- Spanish language survey respondents are very or somewhat favorably influenced by the message about the cost of desalination (80 percent) more so than are those who took the survey in English (50 percent).
- Interestingly, cost registers more strongly with those who do not pay for their own water usage (63 percent very or somewhat favorably influenced) versus those who do pay their own bill (46 percent).
- The message about desalination reducing the dependence on MWD carries more weight with those residents who use only their cell phones (74 percent very or somewhat favorably influenced) versus those who use land line telephones at least some of the time (64 percent).

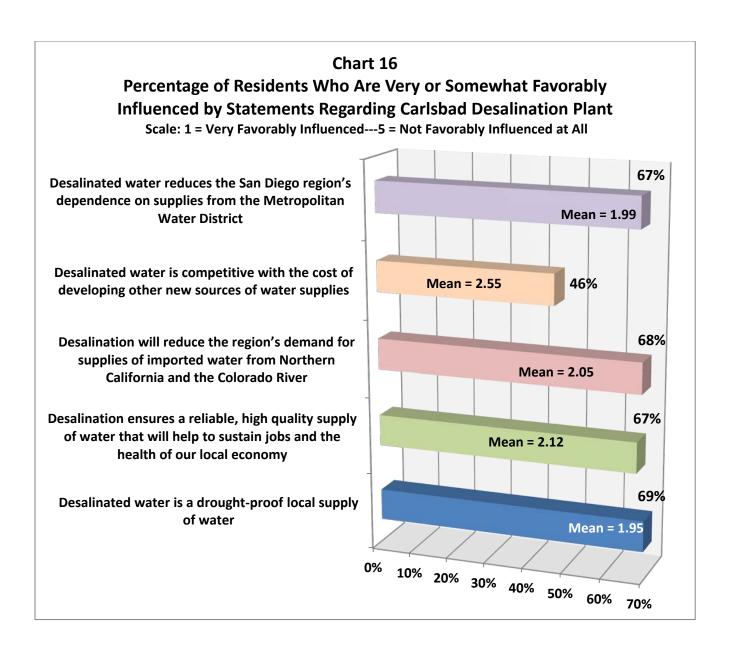
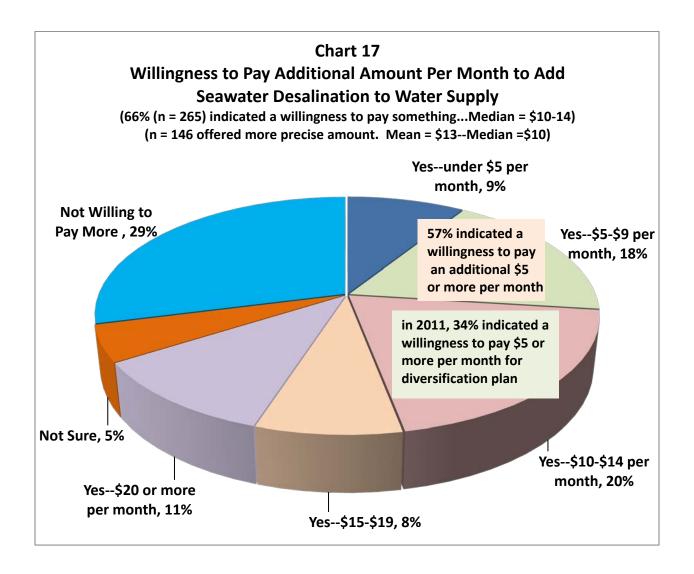


Chart 17 shows that nearly two-thirds (66 percent) expressed a willingness to pay something more per month to add seawater desalination to the water supply. Nearly three-fifths (57 percent) are willing to pay an additional \$5 or more per month. Among those who indicated a precise amount, the mean additional amount they are willing to pay is \$13 per month and the median amount is \$10.

Significant differences among groups regarding willingness to pay an additional amount for desalination are as follows:

- Whites are willing to pay an additional mean amount of \$15 per month and Hispanics/Latinos and Asians are both willing to pay \$10.
- Single person households are willing to pay \$9 per month and 3 or more person households are willing to pay \$12, but 2-person households expressed a willingness to pay \$17 per month.



## **Attitudes about Water Conservation**

SUMMARY: Water conservation is a significant component in San Diego County's water supply plans. One-fourth of respondents indicated that their household water usage has decreased over the past year. This represents a small decline from those who indicated that they decreased their water usage in 2011 but is offset by a similar decline among those whose use has increased. Among those who indicated that their household water usage has declined, nearly one-half did so because they feel that reducing water usage is the "right thing to do." In 2011, a somewhat smaller (but still substantial) percentage was motivated to reduce water usage because it is the "right thing to do." Over one-fourth (27 percent) were motivated to reduce water usage because they are watching their budget and this represents a decline of 8 percent since 2011 when 35 percent were so motivated by budgetary concerns to reduce their water usage. The vast majority—almost 90 percent—indicated that their reduced water usage is permanent and this is consistent with the 2011 finding.

It is most encouraging that when water agencies no longer take an active role in restricting water use, respondents who have reduced their water usage during the past year indicate that they are not likely to increase their water use (approximately one-fifth will increase usage). On the other hand, a less cool and less wet year would lead to nearly three-fifths of those who have reduced their water use during the past year returning to higher usage. Under most conditions and circumstances, these views about higher water usage in the future parallel the views of the 2011 survey respondents.

Virtually all of the respondents (95 percent) think that it is their civic responsibility to use water as efficiently as possible. In the current survey period as well in 2011, respondents regard water conservation as a greater civic responsibility than serving on a jury. In the current survey as well as in 2011, water conservation is close to the same level as recycling used materials in terms of perceived civic responsibilities. Voting in public elections and not littering/not polluting are strongly regarded as higher civic obligations than water conservation.

<u>Water Use: Past Year</u> Chart 18 shows that over one-fourth of respondents (26 percent) indicated that their household water usage has decreased over the past year. This represents a small decline of 2 percent among those who indicated that they decreased their water usage in 2011 (28 percent). However, there is also a decline of 4 percent since 2011 among those who indicate that their water usage increased (18 percent in 2011 to 14 percent in 2012). These differences are reconciled by those who indicated that their water usage has remained the same (59 percent in 2012 versus 48 percent in 2011).

Change in water usage during the past year is further informed by the following differences among groups of residents:

- Cell-only users indicate that 10 percent of them have increased their water usage during the past year in contrast to 15 percent of land line users.
- Women have increased water usage (19 percent) more so than have men (10 percent).

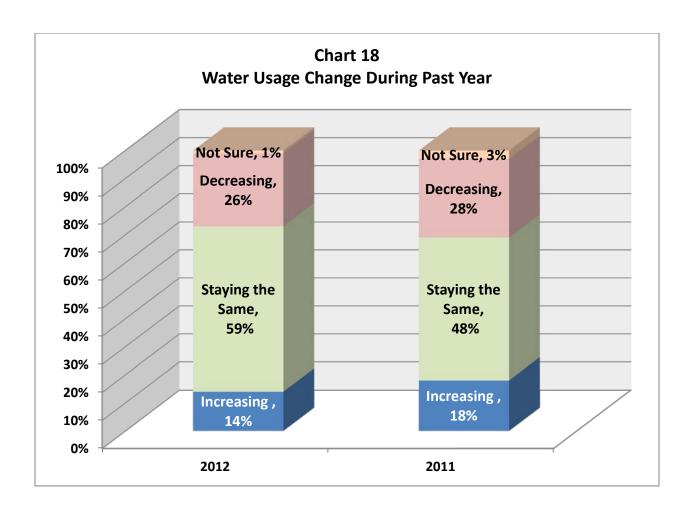
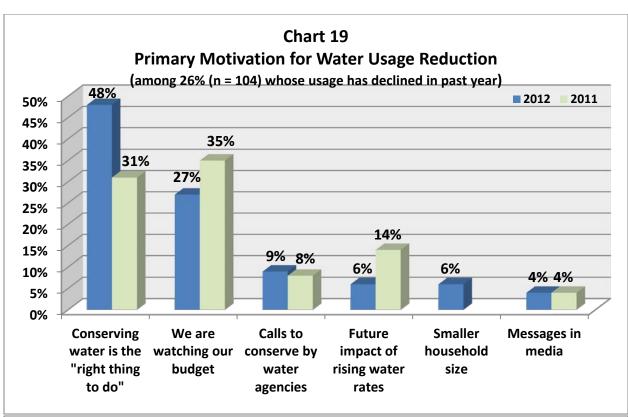
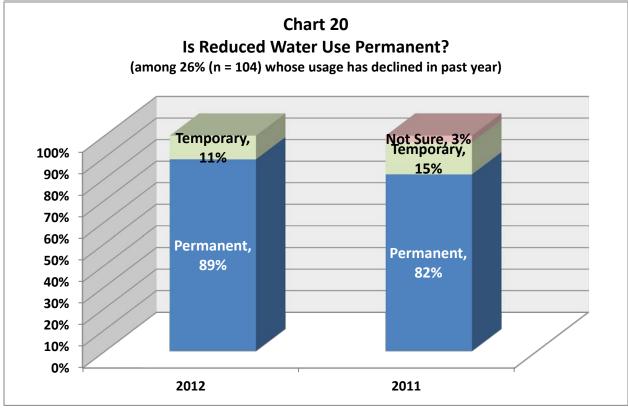


Chart 19 indicates that, among those who indicated that their household water usage has declined, nearly one-half (48 percent) – a dominant plurality-- feel that reducing water usage is the "right thing to do." In 2011, a somewhat smaller (but still substantial) percentage was motivated to reduce water usage because it is the "right thing to do" (31 percent). Over one-fourth (27 percent) were motivated to reduce water usage because they are watching their budget and this represents a decline of 8 percent since 2011 when 35 percent were so motivated by budgetary concerns to reduce their water usage. Among those who indicated that their household water usage has declined, a considerable majority (89 percent) thinks that their reduced use of water is permanent (Chart 20). This finding is consistent with the result of the 2011 survey – 82 percent believed their reduction in water use to be permanent.

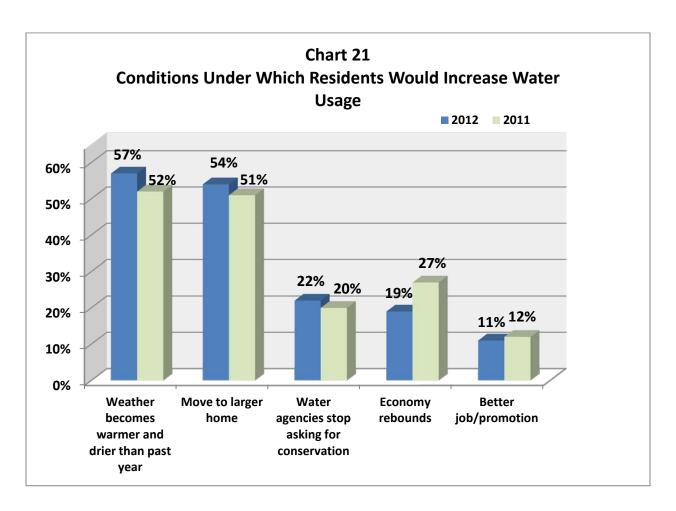




Permanent reductions in water use are indicated more by the following groups:

- College degree or more (95 percent) versus less than a college degree (78 percent).
- Those who often or sometimes drink tap water (95 percent) versus rarely or never drink tap water (78 percent).

<u>Water Use in the Future</u>: Respondents were asked to indicate if they will or might increase their water usage if various conditions and situations were to prevail. Among the findings reported in **Chart 21**, it is most encouraging that when water agencies stop asking for residents to practice conservation there is no surge in water use expected (22 percent). On the other hand, a less cool and less wet year would lead to nearly three-fifths (57 percent) of the respondents returning to higher usage.



Understandably, when families move to a larger home, respondents indicate that they will increase water usage (54 percent). When the economy rebounds (19 percent) or the respondent obtains a better job or a job promotion (11 percent), residents indicate that they are not likely to increase their water usage. These various projections on the part of the current respondents parallel those that were made in 2011except in the area of an economic rebound. In this case, there is a decline of 8 percent from the 27 percent in 2011 who indicated they would use more water as the economy improves.

The following subgroups are more inclined to increase their water usage when the weather becomes warmer and drier:

- Women are more inclined to increase their usage if the weather turns warmer and drier (65 percent versus 52 percent for men).
- More frequent drinkers of bottled water are also more inclined to increase their water usage if the weather becomes warmer and drier—65 percent of those who drink bottled water often versus 46 percent of those who drink bottled water rarely or never.

The following subgroups are more likely to increase their water usage when the economy rebounds:

- Women (26 percent) more than will men (15 percent)
- Renters more than will homeowners (28 percent versus 15 percent).
- Those residents with one year of college or less (28 percent) plan to increase their water usage more so than do those with a college degree or more (14 percent).
- Blacks/African-Americans (33 percent) and Hispanics/Latinos (28 percent) indicate that they are more likely to increase their usage in a recovering economy than are Whites (15 percent) and Asians (17 percent).
- Incomes of under \$25,000 per year (36 percent) versus \$25,000 and less than \$75,000 (24 percent) and \$75,000 or more (12 percent)
  - o Mean income among those who plan to increase their usage in a rebounding economy is \$67,000 annually in contrast to \$85,000 among those who do not think that they will increase usage.
- Ages 44 and under (27 percent) versus those residents who are 45 years of age or more (15 percent).

If water agencies were to stop asking their customers to conserve, the following groups would be more likely to increase their water usage:

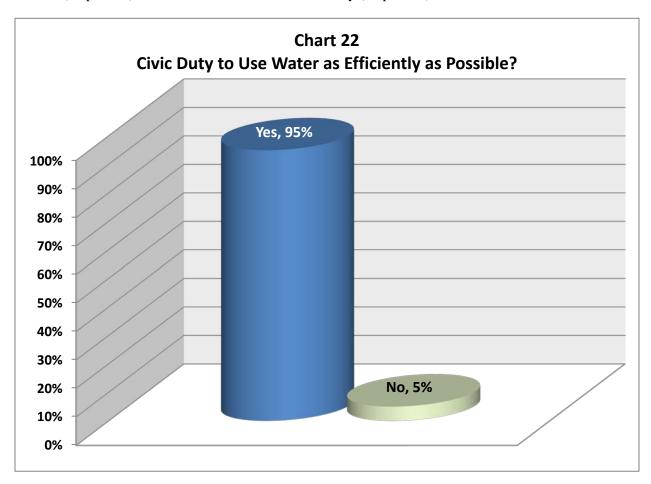
• Women (28 percent) in contrast to men (19 percent)

The other three possible events—a larger home, better job, or larger family are personal events in contrast to those above and share many similarities. In particular, renters, apartment and condominium dwellers, those who do not pay their own water bills, residents 18-44 years of age, and non-Whites all indicate that,

if these events were to happen in their lives, their consumption of water is more likely to increase than if these events were to occur to other residents of the City of San Diego.

<u>Water Conservation as a Civic Responsibility</u>: Chart 22 shows that virtually all of the respondents (95 percent) think that it is their civic responsibility to use water as efficiently as possible.

• Those who never drink bottled water think of water conservation as less of a civic responsibility (85 percent) than those who drink it at least rarely (96 percent).



Voting is seen as a civic responsibility differently by the following groups:

- Residents 45 years of age or older demonstrate a 95 percent rate for voting being a civic responsibility in contrast to those under 45 years of age (86 percent).
- Whites (95 percent) and Asians (100 percent) are more inclined toward voting being a civic responsibility than are Hispanics/Latinos (88 percent) or Blacks/African-Americans (85 percent).

Regarding jury duty as a civic responsibility,

• Whites (91 percent) and Asians (90 percent) more than Hispanics/Latinos (84 percent) and Blacks/African-Americans (76 percent).

Not Polluting and Not Littering are seen as a civic responsibility by:

- Those who drink bottled water often (99 percent) in contrast to those who never drink bottled water (91 percent).
- Residents 25 years of age and older (98 percent) versus those 18-24 years of age (82 percent).
  - o Those who see not littering or polluting as a civic responsibility average 10 years of age older than those who do not see these as civic responsibilities.

Water conservation is seen as more of a civic responsibility than voting by:

- Ages 18-44 (49 percent) versus ages 45 or more (29 percent).
- Renters (47 percent) more than owners (31 percent).
- Those who do not pay for their own water (45 percent) versus those who do (33 percent).

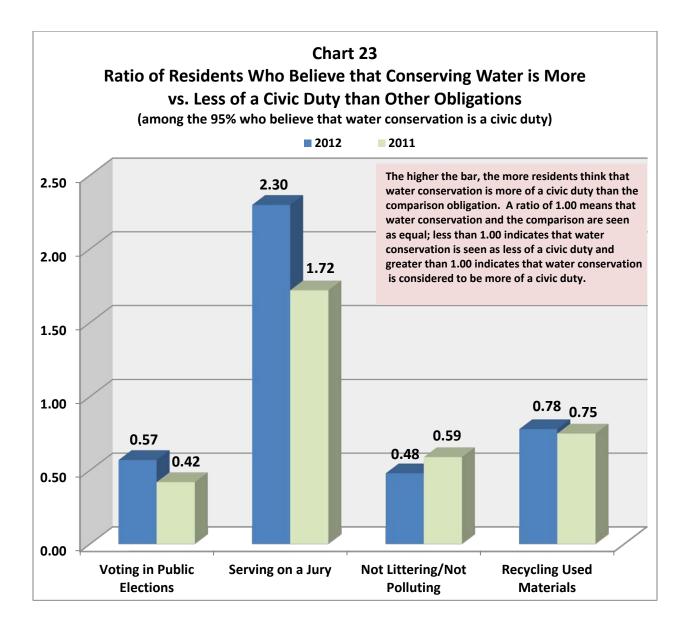
Chart 23 demonstrates how respondents feel about water conservation compared to other civic obligations. The comparison between water conservation and each of the other civic obligations is measured in terms of a ratio that measures those who feel that water conservation is more of a responsibility than these other civic obligations versus those who feel that water conservation is less of a civic responsibility. A ratio of 1.00 means that water conservation and the obligation with which it is being compared are equal in terms of how respondents perceive their civic responsibilities. A ratio of less than 1.00 indicates that water conservation is viewed as less of a civic responsibility than the comparison obligation and a ratio of greater than 1.00 means that water conservation is considered to be more of a civic duty that the obligation with which it is compared. In the current survey period as well in 2011, respondents regard water conservation as a greater civic responsibility than serving on a jury. In the current survey as well as in 2011, water conservation is closer to the same level as recycling used materials in terms of perceived civic responsibilities. Voting in public elections and not littering/not polluting are strongly regarded as higher civic obligations than water conservation.

Water conservation is seen as more of a civic responsibility than jury duty by:

• Ages 18-44 (81 percent) versus ages 45 or more (62 percent).

Water conservation is also seen as more of a civic responsibility than not littering or polluting by:

- Those who earn more than \$50,000 annually (39 percent) versus those who earn less than \$50,000 (18 percent).
- Those who pay their own water bills (37 percent) versus those who do not (25 percent).



## **Opinions about the Use of Recycled Water**

SUMMARY: Over 7 in 10 respondents believe that it is possible to further treat recycled water that has been used for irrigation to make the water pure and safe for drinking. This represents a slight increase over the 2011 survey finding where two-thirds felt that it is possible to further treat recycled water for drinking purposes.

Nearly three-fifths of the respondents (56 percent) believe that drinking water already contains recycled water. This reflects a clear upward movement in the percentage of those who hold this belief – 47 percent in 2011. Three primary reasons are provided to explain why they feel this way. Respondents think that they hear from news stories that water is recycled, they "just know it" (includes hunches and common sense) and water tastes and smells bad.

Nearly three-fourths (73 percent) of the respondents either strongly favor or somewhat favor advanced treated recycled water as an addition to the supply of drinking water. This represents a slight increase in support for advanced treatment over the 2011 survey where 68 percent of the City respondents either strongly favored or somewhat favored advanced treated recycled water.

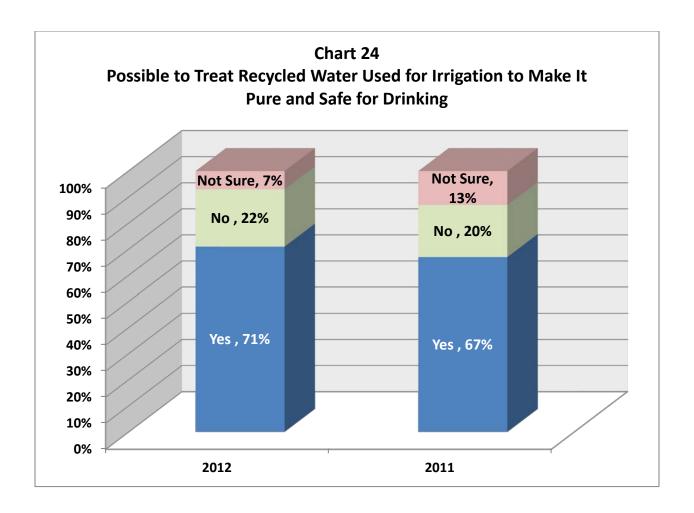
These findings show that approximately 70 percent of those who were originally not strongly in favor of using recycled water for drinking purposes would find it acceptable if recycled water received advanced treatment and if certain other safety measures were assured. This is an increase of about 20 percent over the approximately 50 percent who changed their mind in 2011.

Among the 20 percent who have heard about the Water Purification Demonstration Project, 6 percent know that it involves recycled water for drinking and household purposes – a decline of 5 percent from the 11 percent who correctly identified the purpose of the project in 2011. When respondents were informed about the Project, they expressed substantial support for the Project – over three-fourths either strongly favoring the project or somewhat favoring it. This level of support parallels the support indicated in the 2011 survey.

**Chart 24** shows that over 7 in 10 respondents (71 percent) believe that it is possible to further treat recycled water used for irrigation to make the water pure and safe for drinking. This represents a slight increase over the 2011 survey finding where two-thirds (67 percent) felt that it is possible to further treat recycled water for drinking purposes.

Groups that view the possibility of making recycled water pure and safe for drinking differently from one another are:

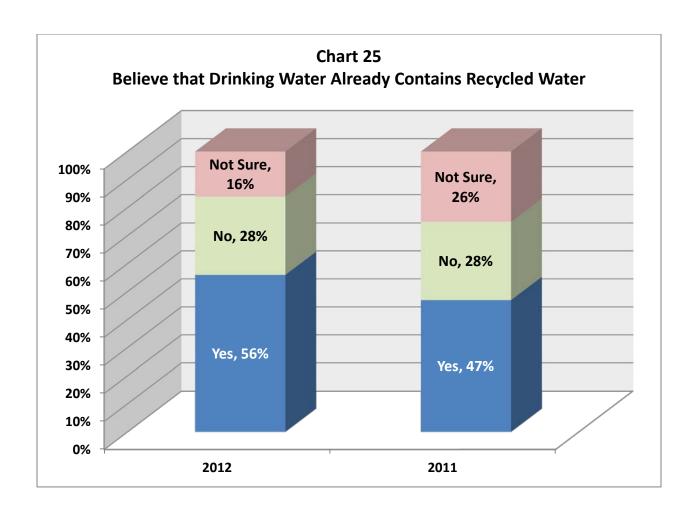
- People who often or sometimes drink tap water are more optimistic than those who drink tap water less frequently. Those who drink tap water often or sometimes are 83 percent in belief that recycled water can be made pure and safe. Those who drink tap water rarely or never drink tap water are at 67 percent.
- Cell-phone only users are more positive (88 percent) than are land line telephone users (74 percent).



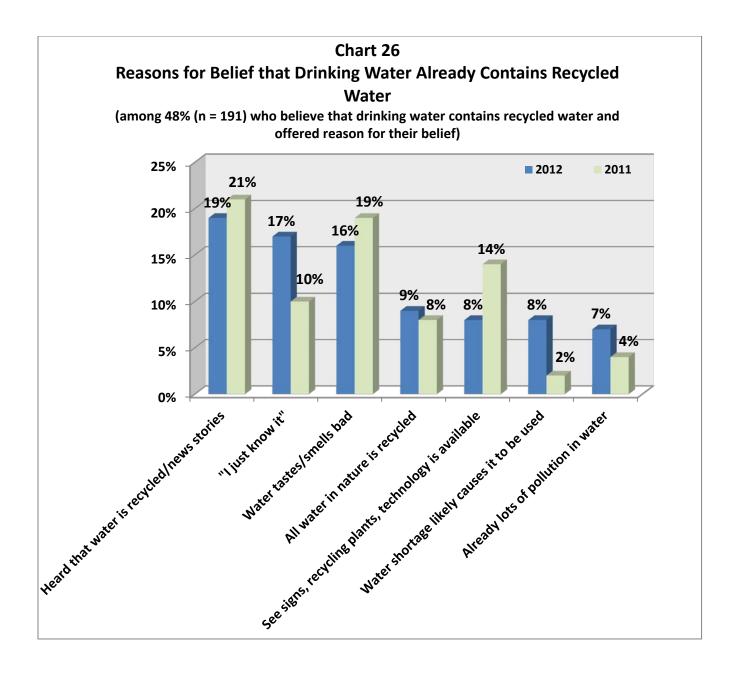
**Chart 25** indicates that nearly three-fifths of the respondents (56 percent) believe that drinking water already contains recycled water. This reflects a clear upward movement in the percentage of those who hold this belief – 47 percent in 2011.

Several differences exist among groups related to their opinion as to whether or not drinking water already contains recycled water. The groups with the highest percentages indicating that drinking water already contains recycled water are as follows:

- Those who do not pay their own water bill (76 percent) versus those who do pay their own bill (63 percent).
- Renters (77 percent) versus homeowners (62 percent).
- Younger residents--ages 18-34 (79 percent) in contrast to 65 years of age or older (49 percent).
- Residents of San Diego County for 30 years or less (74 percent) versus residents of 31 years or more (57 percent).

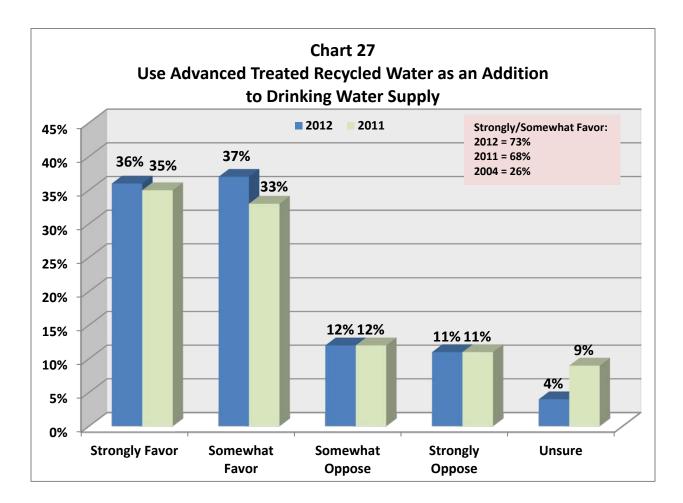


Among the 56 percent of respondents who think that drinking water contains recycled water, three primary reasons are provided to explain why they feel this way. Respondents think that they hear from news stories that water is recycled (19 percent), they "just know it" (includes hunches and common sense) (17 percent), and water tastes and smells bad (16 percent). In 2011, hearing about recycled water from news stories was also the most dominant reason (21 percent). The reason "just know it" increased in importance by 7 percent from the 10 percent reported in 2011. The perception that the water tastes or smells bad and the indication that all water in nature is recycled are given similar importance in both survey years as reasons for believing that drinking water already contains recycled water. Thinking that they see recycling plants and available technology (14 percent) was a dominant reason in 2011 but a much less important reason in 2012 (8 percent). The reasons associated with water shortages and water pollution have grown in importance since the 2011 survey (Chart 26).



Respondents were asked whether or not they would favor using advanced treated recycled water as an addition to the supply of drinking water and that such advanced techniques include ultra-filtration, reverse osmosis, and advanced oxidation. (upon request, one of these three advanced techniques would be explained to the respondent, but only 10 respondents asked). Chart 27 indicates that nearly three-fourths (73 percent) of the respondents either strongly favor (36 percent) or somewhat favor (37 percent) advanced treated recycled water as an addition to the supply of drinking water. It is important to note that this represents a slight increase in support for advanced treatment over the 2011 survey where 68 percent

of the City respondents either strongly favored or somewhat favored advanced treated recycled water. It is particularly noteworthy that interest in using such advanced techniques has increased substantially since the 2004 survey when only 26 percent either strongly favored or somewhat favored such advanced treatment of recycled water.

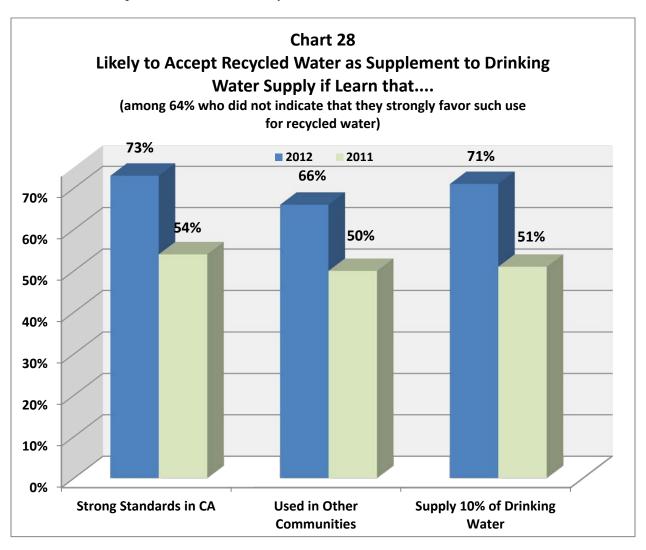


More strongly in favor of supplementing drinking water supplies with advanced treated recycled water are:

- Asians (68 percent strongly favor) versus all other groups—Blacks/African-Americans (49 percent, Whites (35 percent) and Hispanics/Latinos (30 percent).
- Drinkers of regular tap water often, sometimes or rarely (40 percent) versus those who never drink tap water (29 percent).

Respondents who did not already **strongly favor** the use of recycled water as an addition to the drinking water supply were asked if they would accept recycled water for drinking purposes if it were subject to such advanced treatment and if they learned certain facts about recycled water (**Chart 28**). The percentages reflect <u>only</u> those customers who formerly did not strongly favor the use of recycled water as an addition to the drinking supply but who changed their minds upon learning that:

- California drinking water standards are very strict and recycled drinking water would exceed those standards (73 percent). This represents a substantial increase from the results of the 2011 survey where an affirmative response of 56 percent was recorded.
- Recycled drinking water is used in other U.S. communities (66 percent); again, this represents a substantial (16 percent) increase over the 2011 survey result.
- Recycled drinking water could supply up to 10 percent of local supply (71 percent)--only 51 percent were influenced by this statement in 2011.



These findings show that approximately 70 percent of those who were originally not strongly in favor of using recycled water for drinking purposes, would find it acceptable if recycled water received advanced treatment and if certain other safety measures were assured. This is an increase of about 20 percent over the approximately 50 percent who changed their mind in 2011.

The message about California's strict drinking water standards carries more weight with the following groups:

- Higher income residents (mean income for those who are now more likely to support recycled water as an addition to drinking water is \$87,400 versus those who are not similarly influenced -- \$56,700).
- Larger households of 3 or more persons (80 percent) versus 1-2 person households (66 percent).
- Single family dwellers (76 percent) as opposed to those who live in apartments (61 percent).

The message about the use of recycled water in other U.S. communities is influential to

• Those who earn \$75,000 or more annually (83 percent) versus those who earn less than \$75,000 (62 percent).

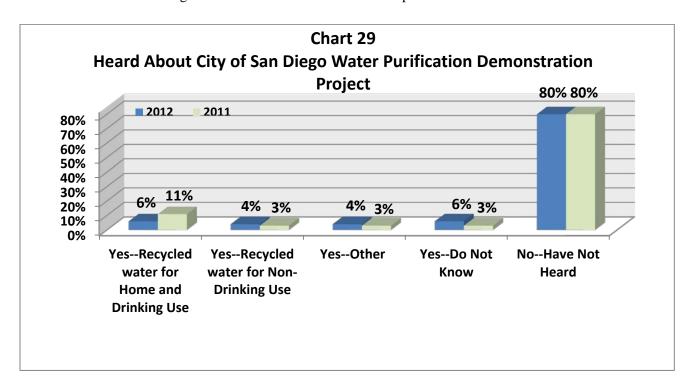
The message about the use of recycled water to supply 10 percent of our drinking water supply is influential to

- Those who often, sometimes or rarely drink regular tap water (77 percent) versus those who never drink regular tap water (61 percent).
- Residents of San Diego County for 10 years or less (85 percent) versus those who have resided in the County for 11 or more years (69 percent).

**Table 2** shows that movement toward being more in favor of the use of recycled water for drinking water purposes differs, as would be expected, depending upon the degree to which the respondent was initially opposed or in favor of using recycled water for this purpose in the first place. Omitting all of those who were strongly in favor to begin with, it can be seen that the more in favor a respondent was initially, the easier it is for this information to sway his or her opinion. Among those who were previously somewhat in favor of recycled water being added to the drinking water supply, 83-to-90 percent are influenced by this information to be more in favor of this use of recycled water -- a stronger response than in 2011 where 65-to-72 percent shifted their opinion. In the current survey, 58-to-75 percent of those who are somewhat opposed can be positively influenced to accept recycled water for drinking purposes – again a stronger response than found in 2011 (38-to-50 percent).

Table 2 Shift in Opinion Using Recycled Water (Percentages Represent Respondents Now Likely to Accept Recycled Water for Drinking Water Purposes)				
(Percentages Represent Respondents Now Likely to A	Formerly	Formerly	Formerly	Don't
	Somewhat	Somewhat	Strongly	Know/
	in Favor	Opposed	Opposed	Unsure
California drinking water standards are very strict and recycled drinking water would exceed those standards	89%	75%	12%	78%
Recycled drinking water is used in other U.S. communities	83%	58%	12%	72%
Recycled drinking water could supply up to 10 percent of local supply	90%	60%	12%	78%

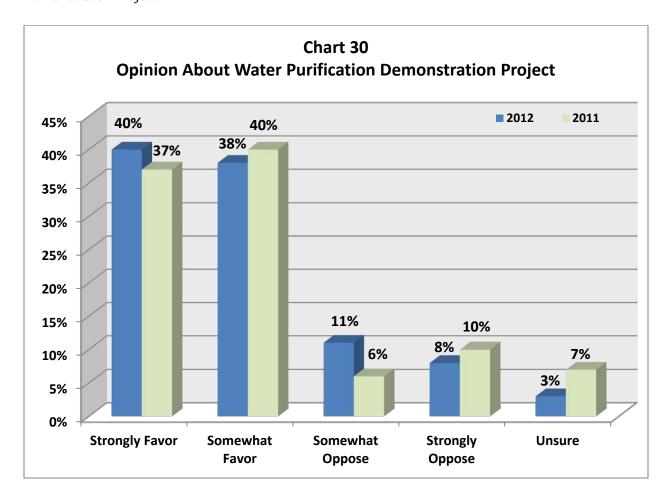
<u>City of San Diego Water Purification Demonstration Project</u>: Chart 29 shows that 80 percent of San Diego City residents have not heard of the City of San Diego Water Purification Demonstration Project. This is precisely consistent with the results of the 2011 survey. In the current survey, among the 20 percent who have heard about this project, 6 percent know that it involves recycled water for drinking and household purposes – a decline of 5 percent from the 11 percent who correctly identified the purpose of the project in 2011. In 2012, 4 percent believe that the project involves recycled water for a purpose other than household and drinking use and this is consistent with the 3 percent who believed this in 2011.



Knowledge of the Water Purification Demonstration Project is highest among:

- Ages 55 and older (32 percent) versus those 54 years of age and younger (13 percent).
- Land line telephone users (23 percent) versus those who use only cell phones (10 percent).

Respondents were subsequently informed about the nature and purpose of the Water Purification Demonstration Project. When so informed, residents expressed substantial support for the Project. **Chart 30** shows that 78 percent of residents either strongly favor (40 percent) or somewhat favor (38 percent) the goals of the Project. This response represents strong approval for the use of recycled water for drinking purposes and precisely parallels the high level of support in 2011 for the Water Purification Demonstration Project.



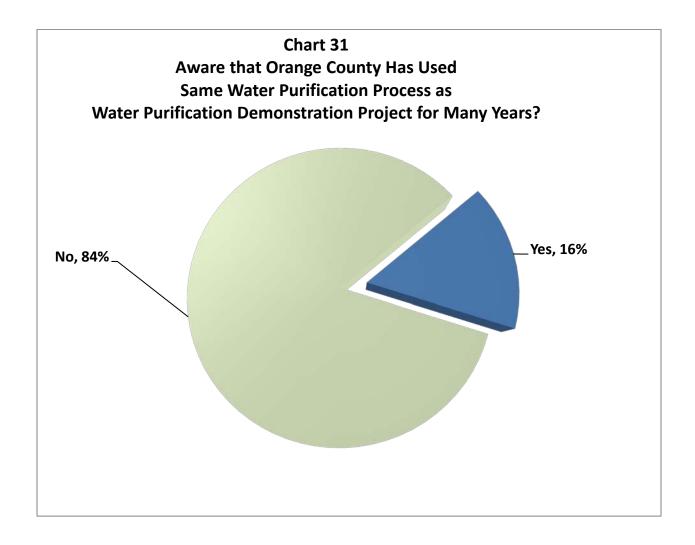
Groups that strongly or somewhat favor the Water Purification Demonstration Project are:

• Asians (58 percent) versus Blacks/African-Americans (23 percent). Whites (44 percent) and Hispanics/Latinos (38 percent) are close to the overall average percentage.

• Those who often or sometimes drink tap water (84 percent) versus those who rarely or never drink tap water (75 percent).

**Chart 31** shows that 16 percent of the City of San Diego respondents are aware that Orange County has used the same water purification process as the City of San Diego's Water Purification Demonstration Project for many years.

• Awareness that Orange County has used the same water purification process for several years is highest among those who often, sometimes or rarely drink tap water (18 percent) in contrast to those who never drink tap water (9 percent).



## **Water Rates**

Over two-fifths (45 percent) of respondents feel that the cost of water is too expensive. This represents a decline from the 2011 survey period among those who feel the cost of water is too expensive -- in 2011, 52 percent indicated water was too expensive. This result points to a trend toward an enhanced understanding of and tolerance for the cost of water. The dominant causes for increases in water rates are seen by residents as more water being consumed by customers and less rain in San Diego—neither of which is correct.

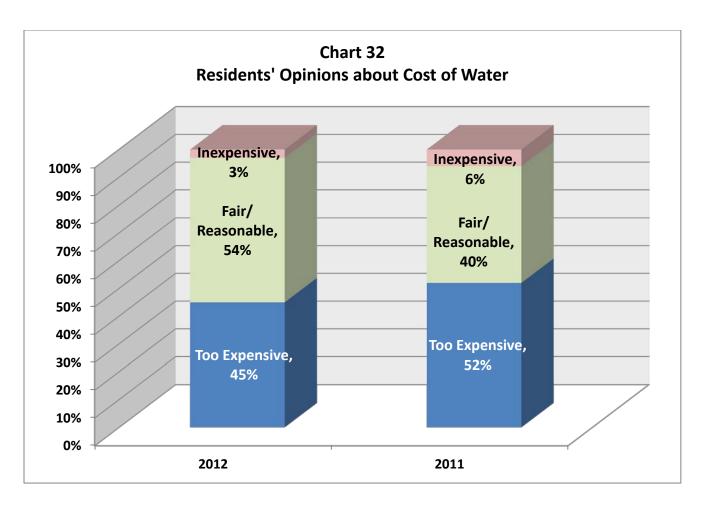
Over three-fifths of respondents feel that increases in water rates are necessary to maintain reliability of the water supply while one-third of the respondents feel that increased water rates are not necessary and should be stopped. This represents a distinct shift from the 2011 survey results toward an understanding and a tolerance of water rate increases. In the 2011 survey, there was a near equal split in opinion about the necessity of water rate increases to pay for projects designed to improve water supply reliability.

However, despite this seeming acceptance of water rates, almost two-thirds indicated that they were very concerned or somewhat concerned about continued increases in these rates. This level of concern is consistent with the results of the 2011 survey.

Chart 32 demonstrates that, despite its high degree of valuation discussed earlier in this report, over twofifths (45 percent) of respondents feel that the cost of water is too expensive. This represents a decline from the 2011 survey period among those who feel the cost of water is too expensive -- in 2011, 52 percent indicated water was too expensive. In the current survey, another 54 percent feel that the cost is fair and reasonable. This represents a 14 percent increase from 2011 to 2012 regarding those who feel that the cost of water is fair and reasonable. There is a clear trend toward an understanding of and/or a tolerance of the cost of water.

The following groups are more likely to feel that the cost of water is too expensive:

- Residents who have lived in the County for 10 years or more (48 percent) as opposed to those who have been in the County for less than 10 years (32 percent).
- Homeowners (47 percent) as opposed to renters (40 percent).
- Residents with a lower income residents who earn less than \$75,000 feel that the cost of water is too expensive (46 percent) versus those who earn \$100,000 or more (34 percent).
- Those who drink bottled water often (52 percent) versus those who never drink bottled water (25 percent).
- In the reverse, those who never drink tap water find water to be more expensive (58 percent) than do those who drink tap water often, sometimes or rarely (40 percent).

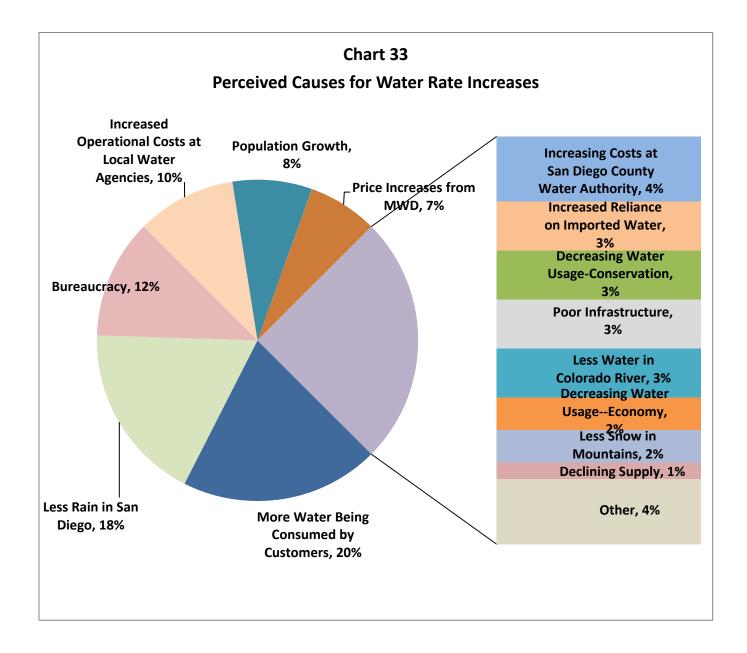


The perceived causes for water rate increases are shown in **Chart 33**. The dominant causes in the view of the respondents are more water being consumed by customers (20 percent) and less rain in San Diego (18 percent)—neither of which are correct as primary causes. Bureaucracy (12 percent) and increased operational costs at local water agencies (10 percent) follow in the order of importance.

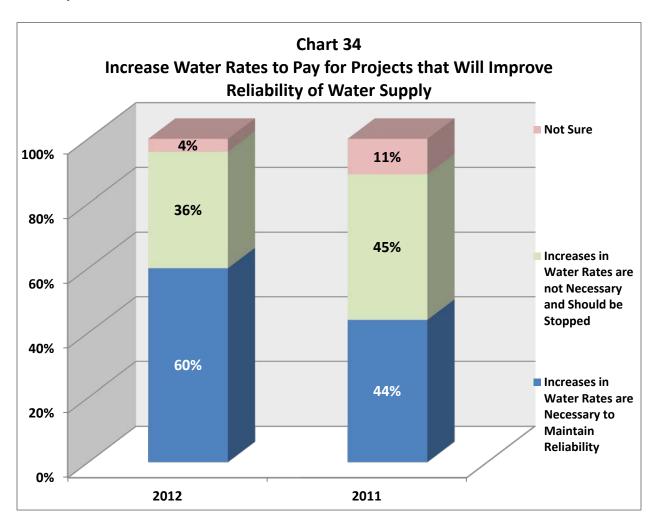
There are significant differences among groups regarding the biggest causes of water rate increases:

- Homeowners and Renters differ on the following perceived causes:
  - Bureaucracy (owners 17 percent—renters 9 percent)
  - Increased operating costs at local water agencies (owners 11 percent—renters 5 percent).
  - Price increases from MWD (owners 9 percent—renters 3 percent)
  - More water being used by customers (renters 25 percent—owners 18 percent)
  - Population growth (renters 11 percent—owners 6 percent)
  - Decreased usage due to conservation (renters 7 percent—owners 2 percent)
- Older residents consider the following as bigger causes of water rate increases:
  - Increased costs at San Diego County Water Authority (61 years of age)
  - Price increases from MWD (59 years of age)

- Bureaucracy (57 years of age)
- Less water in Colorado River (55 years of age)
- Reliance on imported water (54 years of age)
- Younger residents consider the following as bigger causes of water rate increases:
  - Economy (41 years of age)
  - More water used by customers (44 years of age)
  - Low/Declining water supply (47 years of age)
  - Less water used because of conservation (47 years of age)
  - Less rain in San Diego (48 years of age)



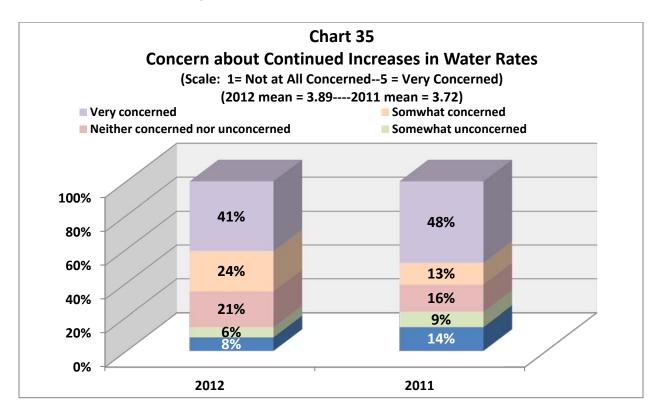
Two hypothetical arguments were put forth about whether or not increased water rates are necessary to maintain an adequate water supply. One argument was that "Mr. Smith says that increases in water rates are necessary to maintain reliability of the water supply" and the other was that "Ms. Jones says that increasing water rates are not necessary and should be stopped." Three-fifths of respondents (60 percent) feel that increases in water rates are necessary to maintain reliability of the water supply (Mr. Smith's argument) while well over one-third of the respondents (36 percent) feel that increased water rates are not necessary and should be stopped (Ms. Jones' argument) (Chart 34). This represents a distinct shift from the 2011 survey results and again reaffirms the trend that the population is expressing a greater tolerance for and acceptance of water rate increases. In the 2011 survey, the there was a near equal split in opinion about the necessity of water rate increases to pay for projects designed to improve water supply reliability.



The following groups are more likely to think that water rate increases are necessary to maintain the reliability of the water supply:

- Shorter term residents of the County (less than 10 years 78 percent versus 10 years or more 57 percent).
- Residents with incomes of \$75,000 or more (72 percent) versus those with incomes below \$75,000 (56 percent)
- Residents with at least one year of post-graduate education (74 percent) in contrast to college degree or less (59 percent)
- Those who often, sometimes or rarely drink tap water (68 percent) versus those who never drink tap water (46 percent)

Chart 35 reports the level of resident concern regarding the prospect of continued increases in water rates. This concern was measured on a 5-point scale, where 1 = not at all concerned to 5 = very concerned. Three fifths (65 percent) recorded ratings of very concerned (41 percent) and somewhat concerned (24 percent) despite their seeming acceptance of higher rates. The mean rating is 3.9, which represents a high level of concern. This level of concern is consistent with the results of the 2011 survey where 61 percent were either very concerned or somewhat concerned about continued increases in water rates and where the mean rating was 3.7.



The following groups are either very concerned or somewhat concerned about increases in water rates:

- Homeowners (71 percent) versus renters (51 percent).
- Residents of single family homes (73 percent) versus those who are apartment dwellers (35 percent).
- Longer term residents of 31 years or more exhibit the greatest level of concern about increases in water rates (very or somewhat concerned = 73 percent versus 30 years or less = 59 percent).
- Households that pay for their water (71 percent) versus households that do not pay for water (51 percent).

# 2010 San Diego State University Research Study Executive Summary

## Executive Summary

# **Water Purification Demonstration Project: A Community Study**

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# Community-Based Service Learning Project

Every semester at San Diego State University, students enrolled in Journalism 581, Public Relations Research Methods, conduct a community-based service learning project for organizations on the SDSU campus or a non-corporate client in the larger community. The purpose of community-based service learning projects is to provide students with hands-on experience conducting a full-scale research project while providing a product of benefit to the sponsoring organization. The sponsoring client provides a stipend through the SDSU Research Foundation to provide logistical and material support for the project. Past clients have included Birch Aquarium, Scripps Healthcare, the San Diego County Water Authority, and Sharp Mesa Vista. These projects have been conducted for 30 years.

# The Community Study

The City of San Diego Public Utilities Department contacted SDSU to see if the Water Purification Demonstration Project would serve as a useful focus for a community-based service learning project for the public relations research methods course. After discussing the parameters of the study, it was agreed in July, 2010 that the Water Purification Demonstration Project would serve as a useful focus for the class project.

## Research Questions and Information Needs

In discussions with the Community Outreach Specialist of the Public Utilities Department, a number of research questions and information needs were identified. How much do San Diegans know about the water supply for the city? Do San Diegans know how much of our potable water is imported from outside the county? What do San Diegans know about water purification in general and about the Water Purification Demonstration Project specifically? What is the relationship between knowledge about water purification and opinions about the Water Purification Demonstration Project? How do demographics (e.g., age, income,

ethnicity, and gender) influence what San Diegans know and how they feel about water purification.

### Research Methodology

One goal of the course is to show students how to combine qualitative research methods (e.g., focus groups, depth interviews, participant observation) with quantitative research methods (e.g., telephone and online surveys) to provide better information to client organizations. Therefore, students conducted face-to-face depth interviews with a dimensional sampling of San Diegans, as well as telephone interviews with San Diegans, using random digit dialing (RDD). RDD ensures that both listed and unlisted numbers are included in the sample.

### Methods: Depth Interviews

In the fall semester, 2010, 63 students were enrolled in the public relations research methods This included course. undergraduates and 11 graduate students. The class was divided into 11 self-selected "consulting groups." Each consulting group constructed a depth interview guide (DIG), which is a series of semi-structured open-ended probes similar to the probes used in focus group studies. The instructor reviewed and edited each DIG. Student consulting groups then used the edited version of the DIG to conduct 45- to 60-minute face-to-face interviews with San Diegans. Each DIG was unique to the consulting group that developed it. However, all DIGs focused on a set of information needs articulated by the client organization. These included: (1) to determine awareness of the need to develop local, reliable water sources, (2) to determine awareness of the Water Purification Demonstration Project, (3) to determine the level of understanding of the advanced purification process (3-step process), (4) to determine the level of awareness of the fact that San Diego's regular drinking water supply already contains recycled water, (5) to learn about the concerns that San Diegans have about using purified recycled water (which might include safety or quality), (6) to learn about attitudes towards the addition of purified recycled water to local reservoirs if a fullscale project of reservoir augmentation were to be approved by the city council, and (7) to explore the linkage between knowledge and opinions about water purification.

### Findings: Depth Interviews

From the 63 depth interviews conducted in October, 2010, the following tentative results emerged. First, San Diegans are woefully uninformed about sources of potable water in the City of San Diego and increasing limitations on imported water supplies.

Second, San Diegans were quite unfamiliar with the terminology that "insiders" (e.g., Public Utilities Department) use to discuss water quality and supply. One participant, for example, defined potable water as water one uses to water household plants. More complex terminology, such as reverse osmosis, microfiltration, ultraviolet treatment, and peroxide treatment, was not comprehensible for the vast majority of people interviewed. Very few of the depth interview participants had heard anything about the Water Purification Demonstration Project. Third, a number of participants said that they disliked the taste of tap water in San Diego, including people who had never actually consumed San Diego tap water. This information was used by the research consulting groups to develop drafts of telephone questionnaires, based on revised information needs provided by the client organization.

### Methods: Telephone Survey

Based on the information gleaned from the depth interviews, 11 draft questionnaires were prepared by the student consulting groups. The professor reviewed the questionnaires generated by the students and constructed a master questionnaire from student input. The master questionnaire (length=10 minutes) was then vetted to the client organization and revised. Graduate students in the class then conducted a pilot test of the questionnaire. Minor technical problems with flow and vocabulary were identified during the pilot test. These problems were corrected and the questionnaire was duplicated on paper. The questionnaire was also converted to a Web-based questionnaire (using Survey Monkey, a commercial online survey vendor). A list of random digit telephone numbers for the City of San Diego was purchased from Scientific Telephone Surveys, a vendor in Orange County. In November, 2010, students dialed 11,414 telephone numbers. To qualify, respondents were required to be (1) 18 or older and (2) residents of the City of San Diego. The questionnaire was also translated into Spanish and back translated to ensure accuracy. Students who were sufficiently bilingual were referred to households where an initial contact indicated that the residents were Spanish speaking only. After eliminating disconnects, business and government numbers, households with language barriers, and no answers after at three attempts, the original sample was reduced to a valid sample of 5,478. Of those, the response rate was 11%, the refusal rate was 22%, and the noncontact rate was 67%. A total of 626 eligible respondents were interviewed; the margin of error (95% confidence interval) is +/- 4 percentage points. The data was entered into an Excel database from Survey Monkey, which was used by students as an input tool. These data were then uploaded into a data file compatible with the Statistical Package for the Social Sciences (SPSS), Version 18 for Macintosh. In general, older people and women are more likely to respond to telephone interviews. Therefore, the professor weighted the data file to match the City of San Diego with regard to gender and age, based on known population distributions from the U.S. Bureau of the Census. Thus, the sample matches the population of San Diego with regard to age and gender.

### Findings: Demographics From Telephone Survey

Regarding gender, the sample was 51% male; average age was 43.8 years (median=40.3 years). Average income was \$96,880 (median=\$75,000). Regarding education, fewer than 16% had earned a high school diploma or less. Another 31% had attended some college or earned a 2-year or technical degree. About 31% had earned a 4-year degree. Nearly 22% had attended graduate school or had earned an advanced degree. Regarding ethnicity, 62% reported that they were white/Caucasian, 18% indicated that they were Hispanic or Latino, 85 reported that they were Asian American and another 8% reported that they were African American. Only 2% reported that they were Native American and 1% reported that they were Hawaiian or Pacific islanders. Average length of residency was 24.8 years (median=21.0 years). About 83% were registered to vote. Democrats outnumbered Republicans 31% to 24%, with 15% reporting that they were independents. The balance of the sample was affiliated with minor parties, declined to answer the question, or were not registered to vote.

### Findings: Awareness of WPDP

According to the survey, 78% of respondents had not heard of the Water Purification Demonstration Project (WPDP). Of those who had heard of the WPDP, 8% said that the WPDP had something to do with converting wastewater to drinking water. About 9% mentioned "toilet to tap" explicitly. The remaining 5% who said that they had heard of the WPDP said they could not recall what they had heard.

### Findings: Opinions About the WPDP

Respondents were read a brief, 47-word description of the WPDP. Then they were asked their opinion of the Project, based on the description and/or any prior knowledge they had about it. About 63% of respondents said they favored the Project, either somewhat or strongly.

Findings: Linkage Between Knowledge and Opinion Based on the depth interviews, the research class hypothesized that opinions of the WPDP might be linked to the level of knowledge about the Project: The more knowledgeable a San Diegan becomes about the Project, the more favorably they will view the Project. This is a basic theory of information processing, applied to a specific case. Respondents were read four brief information modules related to water purification. These information modules dealt with (1) the purity of water generated by the WPDP treatment process, (2) a brief description of the 3-step water purification process, (3) the utilization of similar technology in other communities (e.g., Orange County), and (4) the current utilization of recycled water in San Diego from communities upstream. Consistent with the class hypothesis, greater knowledge of water purification tended to correlate with more favorable views of water purification.

### Trusted Sources of Information

From the depth interviews, the research class learned that a number of participants were distrustful of sources of information about water supply and especially water quality. One goal of the study was to determine the types of information sources that San Diegans trust with regard to water quality and safety. About 67% of respondents indicated that they would trust "a great deal" a "scientist who is a water quality expert." About 33% said they would trust a health department official "a great deal."

### Stakeholder Interviews (Spring 2010-Spring 2011)



# WATER PURIFICATION DEMONSTRATION PROJECT STAKEHOLDER INTERVIEWS (SPRING 2010-SPRING 2011)

#### STAKEHOLDER INTERVIEWS COMPLETED: 105

- American Consulting Council/ Simon Wong Engineering
- American Society of Landscape Architects
- Asia Media, Inc.
- Asian Business Association
- Bayview Baptist Church
- Bethel Baptist Church
- Black American Political Action Committee
- Blacks in Government
- California Curl and Monitor (San Diego Monitor)
- Care View Medical Group
- Casa Familiar
- Catfish Club of San Diego
- Central Commercial District Revitalization Corp.
- Chicano Federation
- City Heights Community Planning Group
- Clean TECH San Diego
- Coalition of Neighborhood Councils
- El Latino Newspaper
- Fairmount Park Association
- Faith Chapel Church of God in Christ
- Filipino Press
- Filipino-American Chamber of Commerce
- Food and Beverage Association San Diego
- Fountain of Life Church of God in Christ
- General Dynamics NASSCO
- Geocon, Inc.
- Golden Hill Community Development Corp.
- Greater Skyline Hills Neighborhood Council
- Green Chamber of San Diego County
- Homefront San Diego
- House of Metamorphosis
- Jackie Robinson Family YMCA
- Jamacha Neighborhood Council
- Japan Society of San Diego & Tijuana
- Japanese American Citizens League
- Japanese Friendship Garden

- Kaiser of San Diego
- Korean Chamber of Commerce
- La Prensa Newspaper
- La Raza Lawyers
- Lao Community Culture Center
- Local Initiatives Support Corporation
- MAAC Project
- Mabuhay Alliance
- Macedonia Baptist Church
- MANA de San Diego
- Mt. Carmel Church
- Mt. Erie Baptist Church Pastors on Point
- Mt. Zion Baptist Church
- Neighborhood House Association
- New Life Baptist Church
- New Paradise Baptist Church
- Nu-Way Christian Ministry
- Otay Mesa Chamber of Commerce
- Pilgrim Progressive Baptist Church
- Qualcomm
- Ridgeview Neighborhood Council
- San Diego and Imperial Counties Labor Council
- San Diego Asian Film Foundation
- San Diego Association of Realtors
- San Diego Building Industry Association
- San Diego Chinese Historical Museum
- San Diego Convention & Visitors Bureau (CONVIS)
- San Diego County Building and Construction Trades Council
- San Diego County Community College District
- San Diego County Farm Bureau
- San Diego County Hispanic Chamber of Commerce
- San Diego County Hotel-Motel Association
- San Diego County Medical Society
- San Diego County NAACP
- San Diego County Veterinary Medical Association
- San Diego Oceans Foundation



# WATER PURIFICATION DEMONSTRATION PROJECT STAKEHOLDER INTERVIEWS (SPRING 2010-SPRING 2011)

- San Diego PTA Unified Council
- San Diego Regional Economic Development Corp.
- San Diego State University
- San Diego Travel Association
- San Diego Unified School District
- San Diego Vietnamese Federation
- San Ysidro Business Association
- San Ysidro Chamber of Commerce
- San Ysidro Health Center
- Scripps Health
- Sempra Energy
- Sierra Club
- South Bay Community Services
- South County Economic Development Council
- Southeastern Economic Development Corp
- St Rita's Catholic Parish
- St. Charles Church
- St. Stephen's Church of God in Christ
- The Greater San Diego Business Association
- The Nature Conservancy
- The San Diego Foundation
- The San Diego Junior Chamber JAYCEES
- The Star News
- Tieng Nuoc Toi Radio, KSON 97.3
- Union of Pan Asian Communities
- United States Green Building Council
- United States Navy League, San Diego Council
- Urban League of San Diego County
- Vietnamese Community Association
- Vietnamese Lions Club
- Volunteer San Diego
- World Trade Center San Diego
- YMCA of San Diego County

### **Water Purification Demonstration Project**

### **Stakeholder Interview Summary Report**

#### **Issues Covered in Interviews**

- Level of awareness of water supply issues
- Opinions about need for additional water supplies
- Level of awareness of existing water recycling programs
- Concerns about existing water recycling programs
- Familiarity with indirect potable reuse, reservoir augmentation, or the Water Purification
   Demonstration Project
- Reasons for support/opposition to indirect potable reuse
- Level of confidence in the City's ability to operate a reservoir augmentation project
- Sources for water-related information
- Methods of communicating with stakeholder groups

#### **Summary of Feedback Received**

#### Water supply

Most of the participants interviewed had a general understanding about the sources of San Diego's water supply. A few interviewees were unsure or requested more information about the source of San Diego's water supply. Many individuals were aware that around 80 percent of San Diego's drinking water supply comes from imported sources and that San Diego has limited local water sources. There was also a general awareness about water supply challenges, such as drought, pumping restrictions, and cost increases. While the understanding of local sources and distribution ranged from basic to very technical, few were uninformed or had no understanding of where their water comes from.

#### The need for more water

While opinions varied on how to produce or sustain more water in San Diego, most of those interviewed agreed that San Diego needs more water for the future. Options suggested included conservation, desalination, recycled water distribution system expansion, grey water or other natural systems, and indirect potable reuse. None of the participants thought that the status quo was acceptable and all agreed that something has to be done to increase the amount of water available to San Diegans in the future. Controlling population growth was seen as an alternative solution to developing more water sources. A few did not have enough information to comment on the need for water.

#### Awareness of recycled water

Most of those interviewed were familiar with the recycled water distribution system, but several respondents had limited or no knowledge of it. Of those familiar with the system, most only identified it as "purple pipe." Some lacked an understanding of the water quality and/or treatment of recycled water. Nonetheless, water recycling was viewed by many as necessary in San Diego. A common question was whether the recycled water distribution system can be expanded.

#### Concerns about the use of recycled water

Water quality and public health or safety, were the top concerns reported by interviewees about both the current and future uses of recycled water. The cost of potable and recycled water was a concern to some of the groups, in particular industrial groups that rely on affordable water to support business and industrial growth. Nevertheless, concerns about cost were primarily deemed irrelevant if the demand for water exceeds San Diego's supply.

Prior knowledge of indirect potable reuse, advanced water treatment or reservoir augmentation Many of those interviewed had some prior knowledge of indirect potable reuse (IPR) or reservoir augmentation. Participants typically referred to the project as the "Toilet to Tap" project at some point during the interview. While a few participants understood that the moniker is misleading, many participants only had an understanding of the project as "Toilet to Tap." This illustrates the public identity issues and challenges with the project. Also, while a few of the participants were aware of other IPR projects like the Orange County Groundwater Replenishment System, very few participants had a clear understanding of the water purification process or advanced treatment technology.

#### Support using recycled water for reservoir augmentation as an option

Most stakeholders personally supported reservoir augmentation and the Demonstration Project, but would require more information or would need authorization from their organizational board to formalize their support. A few participants said they are advocates of the project and would be willing to sign a letter of support. Of those that said they did not support the project, most cited concerns about safety. Several people, whether they supported the project or not, also stated a desire to see more data related to the project. Others said they would only approve of potable reuse as a last resort if the City had no other water supply options available.

Confidence in the City's ability to provide safe drinking water through reservoir augmentation. The majority of participants reported medium to high confidence in the City's ability to provide safe drinking water through reservoir augmentation. Some rated their confidence as low, claiming concerns about project budgeting, water rates, response times in case of a problem with the water, human error, and City leadership. On the other hand, many participants responded that the City has provided safe drinking water with the current treatment technology, so they do not doubt the City can continue to provide safe drinking water in the future.

#### Trusted sources of information on water related issues

A variety of sources were cited by participants when asked where they receive information about water related issues. Newsletters and online media were common sources of information. Other sources of information such as newspapers, radio, trade journals, and word of mouth were mentioned by participants. The San Diego County Water Authority and other water agencies were also cited by some as a source of information. There was a frustration among many with what they perceived as inconsistency in the information or lack of information about water in San Diego.

Many of the participants said the Water Authority and the City of San Diego were the most trusted sources for information on water issues, although a few people expressed that the Water Authority and the City were the sources they would be least likely to trust. Nongovernmental organizations, water experts, community leaders and the media were also listed by some as their most trusted sources.

#### Information requested by respondents and methods of communication

Most participants requested facts and data from the studies associated with the Demonstration Project including the limnology study, environmental impacts, water quality, job creation, and costs related to both the Demonstration Project and a possible full-scale project. Participants also wanted information on how the cost of reservoir augmentation compares to other water supply options, such as desalination, expanding the recycled water distribution system and continuing to import water. Other requests included information on timelines, health and safety issues, and which areas in the City would receive purified water. Organization leaders also wanted general and simplified information to share with their members who may not be well versed on water issues.

When asked to suggest methods of communicating with stakeholder groups, most organizations interviewed said that they have a website and newsletter and would be happy to share information about the project in some format to their constituents. Also, many participants requested a project presentation or facility tour. Some participants suggested community events and conferences to highlight the project.

### AWP Facility Tour Feedback Analysis

The AWP Facility tour feedback analysis can be found in Appendix H, Section 3 – Community Outreach and Tours.

### Outreach Metrics Report (March 1, 2010-December 31, 2012)

	Goal	Status	2010	Q1 2011	Q2 2011	Q3 2011	Q4 2011	Q1 2012	Q2 2012	Q3 2012	Q4 2012	Total
Research												
Stakeholders interviewed:			99	4	2	N/A	N/A	N/A	N/A	N/A	N/A	105
· Environmental group leaders	5 interviews	Met goal	5	0	0	N/A	N/A	N/A	N/A	N/A	N/A	5
· Multi-cultural groups/orgs	45 interviews	Exceeded	60	0	0	N/A	N/A	N/A	N/A	N/A	N/A	60
		goal										
· Business associations	5 interviews	Exceeded	5	1	1	N/A	N/A	N/A	N/A	N/A	N/A	7
		goal										
· Faith-based organizations	5 interviews	Exceeded	16	0	0	N/A	N/A	N/A	N/A	N/A	N/A	16
		goal										
· Senior/service advocacy groups	3 interviews	Exceeded	3	0	0	N/A	N/A	N/A	N/A	N/A	N/A	3
		goal										
Materials and Tools												
Project newsletters	3/year	Met goal	1	1	1	0	1	1	0	1	1	7
E-updates to key stakeholders	Bi-monthly average	Met goal	1	1	1	1	3	1	0	1	1	10
Project website updates	As needed	As needed	17	7	7	24	16	25	13	5	9	123
	,		_	_								
Website visits/month	N/A	Tracked	3,414	1,587	1,476	2,847	607*	2,326	1,820	2,275	2,438	19,070
		website visits										visits
Information Pales and Indian	000/		0.1	4.60	401	60	_	400	400		20	4.056
Information/interest cards collected	80%		81	162	104	68	2	402	198	11	28	1,056
from groups												

	Notes
Research	
Stakeholders interviewed:	105 stakeholder interviews were conducted. Stakeholder interviews ended in early 2011.
· Environmental group leaders	In addition to these groups, stakeholder interviews have been conducted with federal elected officials, Native American tribes, utility agencies and a number of
· Multi-cultural groups/orgs	organizations in the fields of agriculture, real estate/construction, health care, military, education, and hospitality.
	For the federal elected officials, M. Steirer met with the staff for senators Boxer and Feinstein and representatives Davis, Bilbray and Filner on Sept. 15 & 16,
· Business associations	2010.
· Faith-based organizations	
· Senior/service advocacy groups	
Materials and Tools	
Project newsletters	Published and distributed newsletters on November 29, 2012; July 26, 2012; Jan. 19, 2012; Nov. 1, 2011; June 30, 2011; March 31, 2011; and December 20,
	2010. Distribute newsletter through website, email blasts, and making printed copiesavailable at tours, presentations, events, and other opportunities as
	needed.
E-updates to key stakeholders	Distributed e-updates on Dec. 14, 2012 (holiday e-card; 3,867 contacts); Aug. 7, 2012 (CBS8 coverage; 3,751 contacts); Feb. 10, 2012 (NYT coverage; 2,525
	contacts); Dec. 15, 2011 (holiday e-card; 2,236 contacts); Dec. 9, 2011 (social media update; 2,228 contacts); Nov. 7, 2011 (10 News coverage; 2364 contacts);
	July 18, 2011 (AWP Facility tour invitation; 1,740 contacts); May 31, 2011 (1,209 contacts); February 28, 2011 (808 contacts); and November 23, 2010.
Project website updates	Updated on a regular basis, including project materials, links & resources, news & publications, public involvement information, site layout, tour dates, etc.
	Between October and December 2012, updated the public involvement and media articles pages.
Website visits/month	December 2012: 702; November 2012: 717; October 2012: 1,019; September 2012: 754; August 2012: 752; July 2012: 769; June 2012: 517; May 2012: 595; April
	2012: 708; March 2012: 690; February 2012: 817; January 2012: 819; December 2011: 448; November 2011: N/A (Due to City software licensing, web stats did
	not track November); October 2011: 159 (Due to City software licensing, web stats only tracked Oct. 1-9); September 2011: 774; August 2011: 1,173; July 2011:
	1,180; June 2011: 497; May 2011: 447; April 2011: 532; March 2011: 597; February 2011: 467; January 2011: 523; December 2010: 458 visits; November 2010:
	728 visits; October 2010: 638 visits; September 2010: 714 visits; August 2010: 876 visits
Information/interest cards collected	Between October and December 2012, collected 28 cards from community events and speakers bureau presentation. Prior to October 2012, received interest
from groups	cards from speakers bureau presentations, stakeholder interviews, community events, facility tours, EIS, SDSU research class and other outreach.

	Goal	Status	2010	Q1 2011	Q2 2011	Q3 2011	Q4 2011	Q1 2012	Q2 2012	Q3 2012	Q4 2012	Total
Brief city council district offices	N/A	Briefed mayor and 7 councilmemb ers.	8	2	1	4	1	3	0	3	2	24 tours/ briefings
Informational items distributed at presentations and stakeholder interviews	1 to each attendee	Distributed informational items	1,397	~300	~350	~480	~120	~190	~170	~140	~350	~3,497
Virtual AWP Facility tour DVDs distributed	N/A	Distributed DVDs and video	N/A	N/A	N/A	N/A	10	~40	0	0	0	~62
Community Outreach and Tours												
Present to chambers of commerce throughout the region	80%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Present to city boards and commissions	100%	Regularly updated NR&C and IROC	7	3	2	2	2	2	2	2	2	24

Notes
Briefed new councilmembers from districts 5 and 7 in November 2012. In August 2012, provided tours to Councilmember-elect Mark Kersey and staff from Councilmember Alvarez's office. In July 2012, provided tour to staff from Councilmember DeMaio's office. In February 2012, provided AWP Facility tour for CD 4 and 6 Councilmembers and staff. CD 4 posted tour photos on district website. In January 2012, provided AWP Facility tour for CD 7 Councilmember and staff. In December 2011, provided tour of the AWP Facility for CD 4 staff. Provided tours of the AWP Facility for Mayor Sanders and Councilmembers from CD 1, 2, 3, and 8. Briefed CD 8 councilmember in June 2011 in preparation for his speaking role at media day at the AWP Facility. M. Steirer briefed new council members in CD 6 and 8 in January 2011 and provided them with outreach materials and data for their council district. Contacted all council district offices in July 2010 and on the mayor's docket briefing on July 22, 2010.
Fact sheet, FAQ, and info cards were made available to each presentation attendee. (Speakers bureau flier, project newsletter, tour flier, speaker's bio and
evaluation form were given only to the point of contact for presentations.)
Prior to June 2012, distributed DVDs to OzWater'12 Conference; University of New South Wales/national demonstration education and engagement program;
Brisbane water officials; the offices of Senator Vargas; Senator Kehoe; Senator Wyland; Assemblymember Garrick; Assemblymember Hueso; Assemblymember Fletcher; members present during the March 20, 2012, hearing of the Assembly Water, Parks, and Wildlife Committee; San Diego City Councilmembers, Mayor and library PIO; and SDCWA board members. Posted on website, intranet, CityTV and YouTube.
Present to chambers upon request.
Currently plan to meet with NR&C and IROC. Between October and December 2012, provided updates to IROC Outreach and Communications Subcommittee in October and December 2012.  Previously, provided updates to NR&C in September, July, May, April and March 2012; October, September, August, May, April, March, and February 2011; and December, October, September, June, April, March, and February 2010. Updated IROC Public Outreach, Education & Customer Service Subcommittee in March 2012 and October 2011. Provided update to IROC E&T Subcommittee in January 2011.

	Goal	Status	2010	Q1 2011	Q2 2011	Q3 2011	Q4 2011	Q1 2012	Q2 2012	Q3 2012	Q4 2012	Total
Community events	1/council district/	Participated	2	5	8	3	4	4	13	2	1	42
	year	in all council										
		districts.										
Orange County Groundwater	As needed; up to	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Replenishment System & West	4/year	IN/A	IN/A	IN/ A	IV/A	IN/A	IN/A	IN/A	IN/A	N/A	IN/A	IN/A
Basin tours												
Urban Water Cycle tours	As needed	Conducted	N/A	6	11	0	N/A	N/A	N/A	N/A	N/A	17
, , , , , , , , , , , , , , , , , , , ,	1 10 1100000	tours		· ·			,		,,,,	,	,	_,
Advanced Water Purification Facility	6/month	Exceeded	N/A	N/A	9	79	36	32	34	27	26	243
tours		goal		,								

	Notes
Community events	Hosted informational booths at numerous community events and engaged a number of booth visitors in discussing the project and signing interest cards. The number of overall event attendees and visitors engaged by project staff are listed below. Between October and December 2012, participated in the Filipino-American Festival (11,500 attendees; 259 booth visitors). Prior to July 2012, participated in the San Diego Horticultural Society meeting (300 attendees; 50 booth visitors); Mira Mesa Town Council Street Fair (3,000 attendees; 150 booth visitors); Juneteenth Celebration (2000 attendees; 68 booth visitors); Allied Gardens SpringFest (15,000 attendees; 175 booth visitors); Scripps Ranch Community Fair (2500 attendees; 120 booth visitors); Fiesta de los Penasquitos (18,000 attendees; 77 booth visitors); Clairemont Garden Tour & Expo (600 attendees; 20 booth visitors); Logan Heights Library Earth Day Event (71 attendees; 20 booth visitors); BD Biosciences Earth Day Fair (150-200 attendees; 26 booth visitors); Take Your Sons and Daughters to Work Day (250 attendees; 45 booth visitors); Scripps Research Institute Employee Fair (2000 attendees; 25 booth visitors); City of San Diego Celebrate the Earth (1,000 attendees; 12 booth visitors); EarthFair (60000 attendees; 196 booth visitors); Linda Vista Multicultural Festival (20000 attendees; 368 booth visitors); Qualcomm Earth Day Event (2,000 attendees; 182 booth visitors); the SDSA High Tech Fair (3,000 attendees; 700 booth visitors); Greater San Diego Science and Engineering Fair (750 fair participants; over 100 judges); San Diego Science Festival Expo Day (27,000 attendees; 740 booth visitors); and Rolando Street Fair (8,000 attendees; 79 booth visitors); the Girl Scouts World of Water Workshop (120 attendees; 49 booth visitors), Serra Mesa Community Fair (5,000 attendees; 140 booth visitors), Wesley Methodist Church Health Fair (300 attendees overall, 65 booth visitors), Filamerest (12,000 attendees overall, 339 booth visitors); Politifest (500 attendees), Sally R
Orange County Groundwater Replenishment System & West Basin tours	Scheduled upon request. GWRS tour brochures and sign-up forms are provided at AWP Facility tours.
Urban Water Cycle tours	47 guests visited Point Loma Wastewater Treatment Plant and 25 guests visited Alvarado Water Treatment Plant between January and June 2011. Urban Water Cycle tours ended prior to AWP Facility tours.
Advanced Water Purification Facility	Hosted 243 tours for a total of 3,244 guests. Between October and December 2012, hosted 26 tours for 462 guests, including members of the general public as
tours	well as California-Nevada AWWA Conference guests, water experts from Spain, Public Utilities Department staff, UCSD Medical School students, San Jose Silicon Valley Chamber of Commerce members, middle and high school students, SDSU students, Sustainable Scripps Ranch members, CARCD conference attendees, and California Department of Public Health staff. Entire list of tours available in tour database. Tour feedback available in feedback database.

	Goal	Status	2010	Q1 2011	Q2 2011	Q3 2011	Q4 2011	Q1 2012	Q2 2012	Q3 2012	Q4 2012	Total
Open house training for tour guides	1 prior to opening	Exceeded	N/A	N/A	2	N/A	N/A	N/A	N/A	N/A	N/A	2
		goal										
Social Media, Conferences and Awa	rds											
Present at water industry trade	1/year	Exceeded	3	2	2	3	4	3	9	4	3	33
show/conferences		goal										
Add/update contact database	Monthly or as	Updated as	833 new	640 new	185 new	477 new	390 new	536 new	998 new	81 new	100 new	3,890
Add) apaate contact database	needed	new contacts	contacts	contacts		contacts						
	liceaca	arrive	contacts									
		arrive										
Presentations to all water and	All that may get IPR	100% of	19	0	0	0	1	0	8	0	0	24
wastewater agency boards	water	agencies										
Presentations to all cities in the	100%	N/A	10	0	0	0	0	0	0	0	0	10 cities
county that would receive water												
from the AWPF.												
Social media monitoring:	N/A	In progress										
Posts/tweets			0	2		35						
Comments/Mentions			0	0		8	11	34				87
Retweets			0	0	0	2	2	20	6	13	11	54

	Notes
Open house training for tour guides	Katz & Associates conducted a presentation skills training for tour guides on June 23, 2011. L. Macpherson held a training meeting on June 2, 2011, to review
	tour guide script and tour set-up.
Social Media, Conferences and Awa	
Present at water industry trade show/conferences	Developed and submitted abstracts for upcoming conferences. Between October and December 2012, presented at the California Lake Management Society conference in San Diego in October 2012 and presented at the CA-NV AWWA conference in San Diego in October 2012 (two different presentations). Prior to this quarter, presented at the 2012 Annual WateReuse Symposium in Florida in September 2012 (two different presentations), both CA-NV AWWA Desalination Committee Workshops in Foster City and Fountain Valley in August 2012, WateReuse Association webinar in June 2012, WESTCAS conference in June 2012, AWWA ACE 12 in Dallas in June 2012 (three different presentations), WateReuse Reuse & Desalination Research Conference in San Diego in June 2012 (three different presentations), Ozwater'12 in May 2012, WateReuse California conference in Sacramento in March 2012 (presented and hosted a poster display), ASCE Region 9 Annual California Infrastructure Symposium in Sacramento in February 2012, 2011 Potable Reuse Conference in November 2011 in Florida (three different presentations), WEFTEC 11 conference in October 2011 in Los Angeles, ACWA Continuing Legal Education workshop in September 2011 in San Diego, WateReuse Symposium in September 2011 in Phoenix (two different presentations), AWWA ACE 2011 in June 2011 in Washington, D.C. (two different presentations), WateReuse California Annual Conference in March 2010 in Denver, AWWA ACE 2010 in June 2010, and WateReuse California annual conference in March 2010 (presented and staffed an exhibit).
Add/update contact database	Added 100 contacts between October and December 2012. The total number of contacts is 3,890.
Presentations to all water and	Invited SDCWA Board of Directors and all member agency GMs, board members and chief engineers to a tour of the AWP Facility in May 2012. Representatives
wastewater agency boards	from 13 agencies attended. Presented to the CWA board in December 2011. Presented to Olivenhain Municipal Water District on Nov. 17, 2010. Presented to the SDCWA board meeting on Aug. 26, 2010. The 36-member Water Authority board represents 24 agencies. Presented to the SDCWA member agency GM meeting on Aug. 17, 2010.
Presentations to all cities in the	Made a full presentation to Metro JPA on Dec. 2, 2010. Cities of Chula Vista, Coronado, Del Mar, El Cajon, Imperial Beach, La Mesa, Lemon Grove, National City,
county that would receive water	Poway, and San Diego were present. County of San Diego, Otay Water District, Metro TAC and IROC were also present. M. Steirer presented briefly to Metro JPA
from the AWPF.	on Aug. 5, 2010.
Social media monitoring:	PIOs and staff monitor the project Facebook and Twitter sites. Between October and December, the City posted 83 wall updates to Facebook and 66 tweets to
Posts/tweets	Twitter. The public posted 1 comment on Facebook and 4 mentions and 11 retweets on Twitter about the Demonstration Project. In total, the project has made
Comments/Mentions	916 posts or tweets. The public has posted 87 comments or mentions on Facebook and Twitter and 54 retweets on Twitter.
Retweets	

	Goal	Status	2010	Q1 2011	Q2 2011	Q3 2011	Q4 2011	Q1 2012	Q2 2012	Q3 2012	Q4 2012	Total
Awards earned	N/A	Earned local and national awards.	0	0	0	1	0	1	0	1	1	4
Media Outreach												
Media contact database: create and update	N/A	N/A	82	81	81	81	81	87	87	87	240	270 contacts
Post news articles on project website	Update monthly	Ongoing	20	3	3	10	8	11 posted; 13 pending		1	1	83 posted
News releases	3/year	Exceeded goal	N/A	N/A	1	2	2	9	1	3	2	20 releases
Project briefings with editorial staff  – community and special interest newspapers	80%	N/A	N/A	N/A	N/A	4	0	1	0	1	0	6
Project briefings with editorial staff  – daily papers	100%	Met goal	N/A	N/A	4	3	0	3	0	0	0	9
Template article to community and special interest papers	50% publication rate	Met goal	N/A	N/A	N/A	10	1	7	1	1	0	20 covered

	Notes
Awards earned	Recognized in December 2012 by ACWA as a Best in Blue 2012 finalist for achieving communications excellence. Received the 2012 WateReuse Association Small Project of the Year award in September 2012. Project Director Marsi Steirer received the 2012 WateReuse California Recycled Water Advocate of the Year award in March 2012. Received the 2011 WateReuse Association Public Education Program of the Year award in September 2011.
Media Outreach	
Media contact database: create and	Have 270 media contacts in all.
update	
Post news articles on project	Posted 86 related media clips on the project's News and Publications Page. Between October and December 2012, posted KPBS (San Diego seeks a swifter
website	current for water recycling).
News releases	Between October and December 2012, distributed news releases to SDSU and Scripps Ranch for inclusion in their newsletters. Covered in Scripps Ranch
	Newsletter in December. Prior to October 2012, distributed news release regarding WateReuse Association award, Drinking Water Week and the tour open
	house in May 2012. Pitched story and provided news releases about tour visits to 13 community papers. Distributed releases in July and September 2011 to
	entire distribution list. Mayor's Office distributed advisory about AWP Facility opening in June 2011.
	Since 2010, met and/or spoke with reporters from San Diego Monitor, Mission Valley News, Tieng Nuoc Toi Radio (Vietnamese radio), Filipino Press, Epoch
<ul> <li>community and special interest</li> </ul>	Times and GrokSurf blog. [Some of these briefings overlap with the AWPF reporter tour metric.]
newspapers	
Project briefings with editorial staff	Since 2010, met and/or spoke with reporters from San Diego Union-Tribune, New York Times and the Atlantic/Wall Street Journal. Previously met and/or spoke
– daily papers	with reporters and editors from San Diego Union-Tribune (twice), North County Times, Voice of San Diego, KPBS (twice), and New York Times. [Some of these
	briefings overlap with the AWPF reporter tour metric.]
Template article to community and special interest papers	Prior to October 2012, distributed template article about the AWP Facility to San Diego Horticultural Society and covered in August 2012 newsletter. Distributed template article about preliminary testing and monitoring results to WateReuse Association's San Diego chapter and covered in May 2012 newsletter. Distributed updated template article about AWP Facility to 82 publications in February 2012. Scoop San Diego/Mission Valley News, ecoBLOGic, WateReuse Association, Alpine Community Network newsletter, Beach and Bay Press, and My Clean Water Act covered the Demonstration Project based on the template article. In March 2012, provided AWP Facility template article to Councilmembers Zapf and Young to include in their newsletters. Council President Young covered the Demonstration Project in his newsletter. US Mayor covered the AWP Facility in December 2011 based on the updated project template article distributed in November 2011. Distributed original template article about the project opening in July 2011 to media list, trade journals and stakeholder newsletters. Mission Times Courier, the Mission Valley News, the La Jolla Light and sister papers, the Emerald News, the San Diego Metro, SCAP Monthly Update, Desalination & Water Reuse, WateReuse Association, WaterTechOnline.com, ACWA News, and AWWA Streamlines covered the AWP Facility based on the template article.

	Goal	Status	2010	Q1 2011	Q2 2011	Q3 2011	Q4 2011	Q1 2012	Q2 2012	Q3 2012	Q4 2012	Total
Advertise AWPF tours in community	N/A	N/A	N/A	N/A	1	6	0	0	1	1	0	9
and ethnic papers												
Story ideas to science and environmental reporters (print, radio and television), as well as to reporters who write about more general issues	3/year	Exceeded goal	1	2	3	0	1	2	0	2	1	12
AWPF tour for all science and environmental reporters (print, radio and television), as well as to reporters who write about more general issues	100% attend	N/A	N/A	N/A	1	5	0	3	1	2	1	13
Project articles in stakeholder publications or websites	4/year	Have not met goal	0	0	0	3	0	3	0	0	0	4
PSA production for city cable channel	3 over project life	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Speakers Bureau												
Presentation skills training for all members	N/A	N/A	3	0	1	0	0	1	0	0	0	5
Include presentation contact information on all materials and website	N/A	Included on all info.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Information/Interest cards distributed to members of groups having presentation	100%	100%	59	9	12	13	4	5	7	10	13	132

ween July and September 2012, advertised AWP Facility tours in the VOSD Monthly magazine. Prior to July 2012, advertised AWP Facility tours on the Voice can Diego website and emails (June 2012), and in We Chinese in America (August 2011), Filipino Press (August 2011), La Prensa (July 2011), El Latino (July 1), San Diego Monitor (July 2011), Giving Back Magazine (July 2011), and Voice and Viewpoint (June 2011).  Triked with reporters to develop "Changing Public Perceptions" (OpFlow, December 2012), "You are Drinking What?" (Wall Street Journal, August 24, 2012), ade in the Water" segment (KFMB, August 6, 2012), "As 'Yuck Factor' Subsides, Treated Wastewater Flows From Taps" (New York Times, Feb, 10, 2012) and
ade in the Water" segment (KFMB, August 6, 2012), "As 'Yuck Factor' Subsides, Treated Wastewater Flows From Taps" (New York Times, Feb, 10, 2012) and
here toilet-to-tap fears circle the drain" (San Diego Union-Tribune, Jan. 21). Prior to January 2012, worked with reporters to develop "Future of Water on play" (US Mayor, Dec. 19, 2011), "Will Mayor sip purified sewage?" (Voice of San Diego, June 30, 2011), "Wastewater getting new life across county" (UT, y 15, 2011), "San Diego launches landmark water project" (UT, June 30, 2011), "From Toilets to Tap" (USA Today, March 3, 2011), "The yuck factor: Get over (UT, Jan. 23, 2011), and "New Source of Drinking Water Hinges on Pilot Project" (UT, Oct. 11, 2010).
ween October and December 2012, provided AWP Facility tour to Tom Fudge of KPBS (December 10, 2012). Prior to October 2012, provided tours or visits of AWP Facility to KFMB, San Diego Monitor, Voice of San Diego, Mission Valley News, Epoch Times, New York Times (twice – reporter and photographer), pino Press, Tieng Nuoc Toi Radio (Vietnamese radio), and San Diego Union-Tribune (twice). Held a news conference and offered a tour for media, including ence and environmental reporters, on June 30. Local media attended, including Daily Transcript, Voice of San Diego, and television stations (KUSI, KGTV, MB, KNSD and Univision).
tributed updated AWP Facility tour template article to stakeholders in February 2012. San Diego Coastkeeper and I Love a Clean San Diego published articles. tributed facility opening article to stakeholder contacts in July 2011. San Diego Coastkeeper and Equinox Center published articles in their newsletters.
l use virtual tour video footage to develop a PSA.
nducted workshops on June 28, May 25, and May 24, 2010. Held meetings on June 1, 2011 and January 10, 2012, to update speakers bureau staff on AWPF r promotion and presentation slide edits.
uded the following language: For more information, please call (619) 533-7572 or email purewatersd@sandiego.gov.
ds were available to all speakers bureau presentation attendees.
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	Goal	Status	2010 Q	21 2011	Q2 2011	Q3 2011	Q4 2011	Q1 2012	Q2 2012	Q3 2012	Q4 2012	Total
Categorize presentations by council	N/A	Presented in										
district		all districts										
Council District 1			6	1	1	4	1	0	0	1	1	15
Council District 2			11	3	3	3	0	0	0	1	3	23 10
Council District 3			3	1	3	0	0	0	3	0	0	10
Council District 4			3	0	2	2	0	0	2	5	2	16
Council District 5			5	0	0	0	0	0	0	1	3	9
Council District 6			7	1	1	0	2	2	0	0	1	14
Council District 7			10	2	1	0	0	2	0	0	0	14 15
Council District 8			7	1	1	0	0	0	0	0	0	9
Outside City Boundaries			15	2	1	4	1	1	1	3	3	
Total			59	9	12	13	4	5	7	10	13	132
Evaluation forms received from	50%	Received	14	4	9	6	0	2	2	2	2	41
groups having presentations		29%.										
Speaker tracking forms collected	100%	Received 67%.	42	8	11	10	2	3	7	3	0	86
Type of groups that received		Presented to										
presentations:		all types of										
Environmental	80%	identified	3	1	1	0	0	0	0	2	1	8
Multicultural groups/orgs	50%	groups	3	0	2	0	0	0	0	2	0	7
Business associations/BIDs 50%		]	3	0	0	0	0	0	0	0	1	4
Senior/service groups	30 groups	] [	0	0	0	0	0	0	1	0	0	1
Civic/social clubs	80%	] [	3	1	5	5	2	1	1	1	0	19
City planning groups	80%	]	16	2	3	0	0	0	0	2	2	25
Community/recreation councils	80%		17	3	1	3	0	0	4	2	4	34
Religious	N/A		1	0	0	0	0	0	0	0	0	1
Medical	N/A		0	0	0	0	0	0	0	0	0	0
Water Industry	N/A		7	0	0	3	2	1	1	1	2	17
School	N/A	]	1	1	0	1	0	2	0	0	3	8
Government/Internal City N/A			5	1	0	1	0	1	0	0	0	8

	Notes
Categorize presentations by council	Completed 132 presentations, 13 of which were between October and December 2012. Some presentations may be categorized in more than one district.
district	
Council District 1	
Council District 2	
Council District 3	
Council District 4	
Council District 5	
Council District 6	
Council District 7	
Council District 8	
Outside City Boundaries	
Total	
Evaluation forms received from	From the 13 presentations completed between October and December 2012, two evaluation forms were received. 41 forms have been received in all.
groups having presentations	
Speaker tracking forms collected	From the 13 presentations completed between October and December 2012, 0 speaker tracking forms were received. 86 forms have been received in all.
Type of groups that received	132 presentations in all have been completed.
presentations:	
Environmental	
Multicultural groups/orgs	
Business associations/BIDs	
Senior/service groups	
Civic/social clubs	
City planning groups	
Community/recreation councils	
Religious	
Medical	
Water Industry	
School	
Government/Internal City	

	Goal	Status	2010	Q1 2011	Q2 2011	Q3 2011	Q4 2011	Q1 2012	Q2 2012	Q3 2012	Q4 2012	Total
Stakeholder/Partner												
Communications												
American Assembly group outreach	N/A	Completed in	63	63	63	63	63	63	63	63	63	
letter	Tue el cucuele e u	2010		20	0	C1	47	22	26	24		members
Project inquiries received by phone	Track number	Tracked all	2	20	8	61	17	22	26	21	5	182
and e-mail and responded to		calls and										
		emails.										
Internal Department												
Communication												
Post project updates on the public	2/year	Exceeded	N/A	N/A	2	2	2	1	0	1	2	10
utilities section of city employee		goal										
intranet site												
Provide one staff education session	1/year	Exceeded	6	0	0	10	0	3	1	0	4	24
at employee mtgs/training to each		goal										
key division of PUD that has public												
contact												
Article published in Pipeline	1/year	Exceeded	1	1	3	2	1	3	1	0	2	14
		goal										

	Notes
Stakeholder/Partner	
Communications	
American Assembly group outreach	Sent follow-up email in March 2012 to members reminding them to tour the facility or register for a presentation. Invited members to tours of the AWP Facility
letter	in June 2011. Sent outreach letter on Nov. 18, 2010.
Project inquiries received by phone	Does not include those that contacted staff regarding tour reservations.
and e-mail and responded to	
Internal Department	
Communication	
Post project updates on the public	Between October and December 2012, posted the Fall 2012 Pure News and an invitation to tour the AWP Facility on the Public Utilities intranet page. Prior to
utilities section of city employee	October 2012, posted the Summer 2012, Winter 2012, Fall 2011, Summer 2011, Spring 2011, and Winter 2011 Pure News, the video of the virtual AWP Facility
intranet site	tour and an invitation to tour facility on the Public Utilities intranet site.
Provide one staff education session	Between October and December 2012, conducted two AWP Facility tours for EMTS Public Utilities staff in October and two AWP Facility tours for Public Utilities
at employee mtgs/training to each	staff in December 2012. Prior to July 2012, conducted a tour for the Public Utilities Mentorship program in April 2012, conducted 11 City-employee-only tours.
key division of PUD that has public	Presented project at the Engineering and Program Management division meeting in August 2011, the Customer Care Solutions Project Team meeting in January
contact	2011, the Public Utilities Executive Team meeting in September 2010, the Employee Services and Internal Controls division meeting in October 2010, three
	sessions at the Wastewater Fall Classic Annual Training Tailgate in October and November 2010, and the Long-Range Planning & Water Resources division
	meeting in spring 2010.
Article published in Pipeline	WPDP outreach was covered in December, November, April, March, February and January 2012 issues, October, August, July, June, May, April and March 2011
	issues and the December 2010 issue.