

## INTRODUCTION

Salt Lake City commissioned Dan Jones & Associates, a full-service public opinion and market research firm located in Salt Lake City, Utah, to conduct and compile a survey of 200 city residents and 100 county residents.

## RESEARCH OBJECTIVES

- Discover if residents know where the drinking water for the Wasatch Front originates
- Measure concern among respondents about the future and quality of the watersheds
- Determine which factors pose the most serious threat to area watersheds
- Measure satisfaction with the quality of residential drinking water in the city and the county
- Solicit city residents' ratings for the quality of service they receive from Salt Lake City Public Utilities
- Identify where respondents get their information about water conservation
- Measure the likelihood of city and county residents attending free classes on a variety of topics related to water conservation

## PROCEDURES

Dan Jones & Associates developed the questionnaire with direction from Tom Ward, Watershed Manager; Stephanie Duer, Water Conservationist; and Florence Reynolds, Water Quality and Treatment Administrator. To meet the research objectives, 203 city residents and 110 county residents were interviewed July 16-28, 2003 during evening hours. Prior to implementation, the client approved the questionnaire. The survey instrument was thoroughly pretested on individuals selected at random from the sample universe (households in Salt Lake County and within the boundaries of Salt Lake City). The client also approved any changes made to the questionnaire as a result of the pretest.

## **SAMPLE**

Dan Jones & Associates utilized a random systematic sampling procedure, giving each residence within the sample universe an equal opportunity of being selected for an interview. Only those age 18 and older were allowed to participate in the survey. The margin of error for this study is  $\pm 7.0\%$  for city residents,  $\pm 10.0\%$  for county residents, and increases for subgroups.

## **FIELDWORK**

Dan Jones & Associates employs professional, experienced interviewers who have worked on numerous surveys to date and proven to be reliable, thorough, and able to develop excellent rapport with respondents. Interviewers were cautioned to limit interaction with respondents concerning the individual responses to the questionnaire. To assure accuracy in reciting the questions and in recording the responses, the project director carefully briefed interviewers.

Structured and unstructured questions were used to measure intensity of opinions and to assess the perceptions of respondents. Demographic questions were asked to provide opinions of subgroups.

## **DATA ANALYSIS**

The staff of Dan Jones & Associates prepared statistical results. Each question has a response distribution as well as a series of cross-tabulations or contingency tables which organize responses by various demographic groupings and allows for detection of differences that may exist between the opinions of subgroups.

Appendices include the questionnaire with results, respondent comments, and cross-tabulations.

## EXECUTIVE SUMMARY

*Note: It is important to keep in mind that the sample size for the city is nearly twice as large as the sample for the county. Comparisons made between the two should be considered directional in nature and not statistically significant.*

### Outdoor Activities In/Around the Watershed

Approximately one in eight city (13%) and county residents (15%) report that they never visit the Wasatch Front canyons east of Salt Lake County. It appears that city residents tend to visit the east canyons more frequently than county residents (five or more times a year: 42% for city and 29% for county).

Among those who spend time in the canyons east of Salt Lake County, city respondents indicate that the activities that they participate in are hiking (59%), picnicking (35%), and skiing/snowboarding at resorts (20%). County respondents tend to use the canyons for hiking (39%), picnicking (33%), camping (27%), and sightseeing (21%).

### Wasatch Front Watershed

A plurality of city (41%) and county residents (32%) believe that the drinking water for the Wasatch Front originates in lakes, streams, and reservoirs. Only 4% of city residents and 2% of county residents specifically name watershed as the source of drinking water for the Wasatch Front.

There is widespread agreement from city (94%) and county residents (95%) that it is very important to protect the watersheds that are the source of drinking water along the Wasatch Front. Four out of five city residents (84%) confirm that they are very concerned or somewhat concerned about the future of the watersheds and water quality. In comparison, three-fourths of county residents (77%) say that they are concerned. Many people think that Salt Lake City enforces restrictions in watershed areas to protect drinking water (78% for city and 65% for county).

## **Problems Facing the Watershed**

When presented with a list of potential problems facing the watershed, both city and county residents feel that erosion caused by off-trail use is the most serious problem that has an impact on the health and quality of the watershed areas, indicated by mean scores of 3.97 from city residents and 3.74 from county residents, on a 1-5 scale. Other problems that are considered somewhat serious include: the presence of dogs in watershed areas, swimming in watershed areas, having too many visitors at a time, and camping outside of developed campgrounds, indicated by ratings around 3.50 on the 1-5/not a problem to serious problem scale.

A noticeably higher percentage of city residents (70%) state that they support the expansion of the current wilderness areas along the Wasatch Front compared to county residents (54%).

## **Water Use and Restrictions**

A positive finding for Salt Lake City, the vast majority of city (83%) and county residents (84%) report that they are very satisfied or somewhat satisfied with the quality of their residential drinking water.

There is widespread support for placing mandatory restrictions on water use during shortages or emergencies, with 90% of city residents and 96% of county residents in favor of the proposal. Many people also favor issuing fines to water customers who repeatedly fail to meet water restrictions that are in place (92% strongly/somewhat favor in the city and 94% strongly/somewhat favor in the county).

To conserve even more water, a high percentage of city (87%) and county residents (89%) feel that it would definitely or probably be appropriate for restaurants to only serve water upon request. As another water conservation measure, approximately four out of five city (79%) and county residents (83%) think it is definitely or probably a good idea to have the option of not having the sheets and towels changed daily during their hotel stay (starting with fresh sheets and towels upon their arrival).

## **Water Bills for Salt Lake City Residents**

Three-fourths of city residents (74%) rate the service they receive from Salt Lake City Public Utilities as good or excellent, indicated by a rating of four or five on the 1-5/poor to excellent scale. One in five people (19%) give their public utilities a neutral rating, while just 6% rate them as poor or below average. A majority of city residents report that they read all (30%) or part (30%) of the information that comes with their public utilities bill. A few people would like information about conservation, water availability, and water quality with their water bill.

## **Sources of Information About Water Conservation**

Residents tend to get their information about water conservation from TV (51% for city and 53% for county) and newspaper (48% for city and 52% for county). Sources mentioned less frequently include: radio, brochures, and web site.

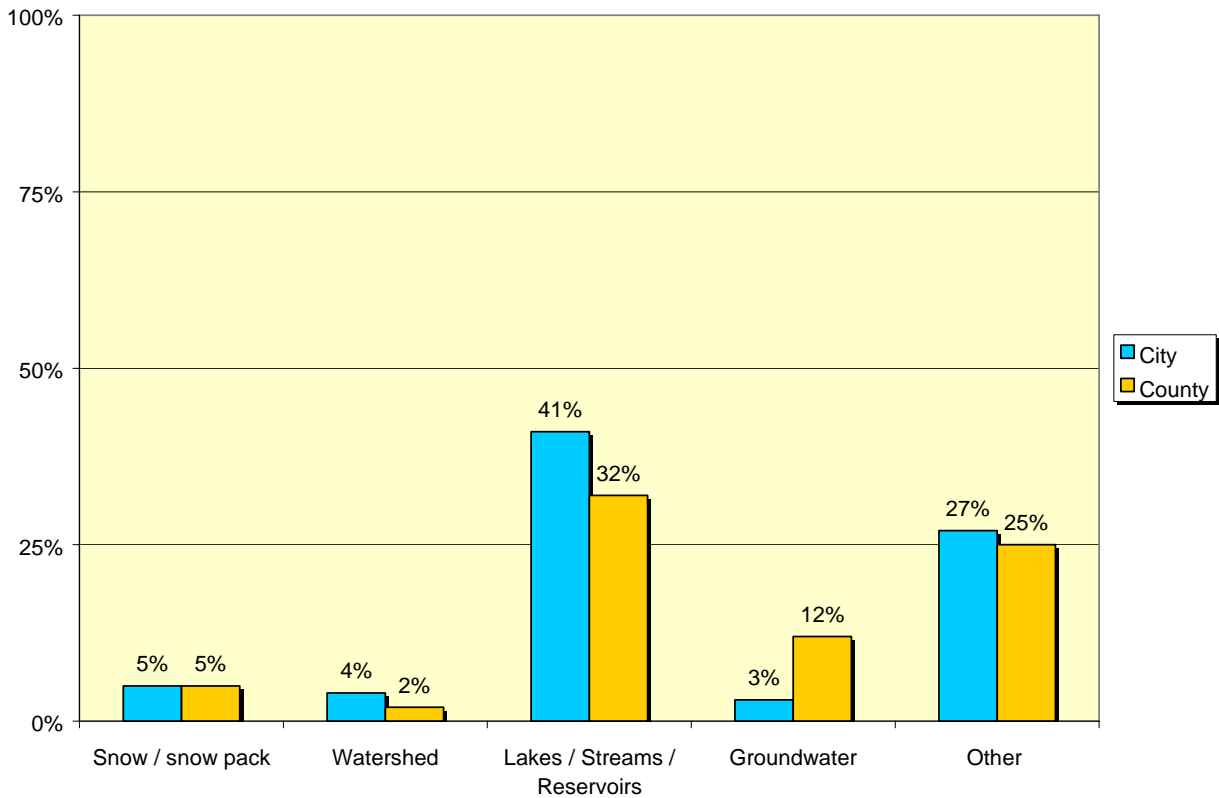
## **Water Conservation Classes**

Seven in ten city residents (71%) confirm that they would be interested in visiting a garden run by the city to learn landscaping and irrigation techniques, while county residents were not asked this question.

City residents appear to be more likely to attend free classes on Xeriscaping (67% very likely or somewhat likely) and landscape design (62% very likely or somewhat likely). Two-thirds of county residents declare that they would be very likely or somewhat likely to attend free classes on efficient watering and irrigation (65%), modifying their watering system (64%), Xeriscaping (64%), and landscape design (63%).

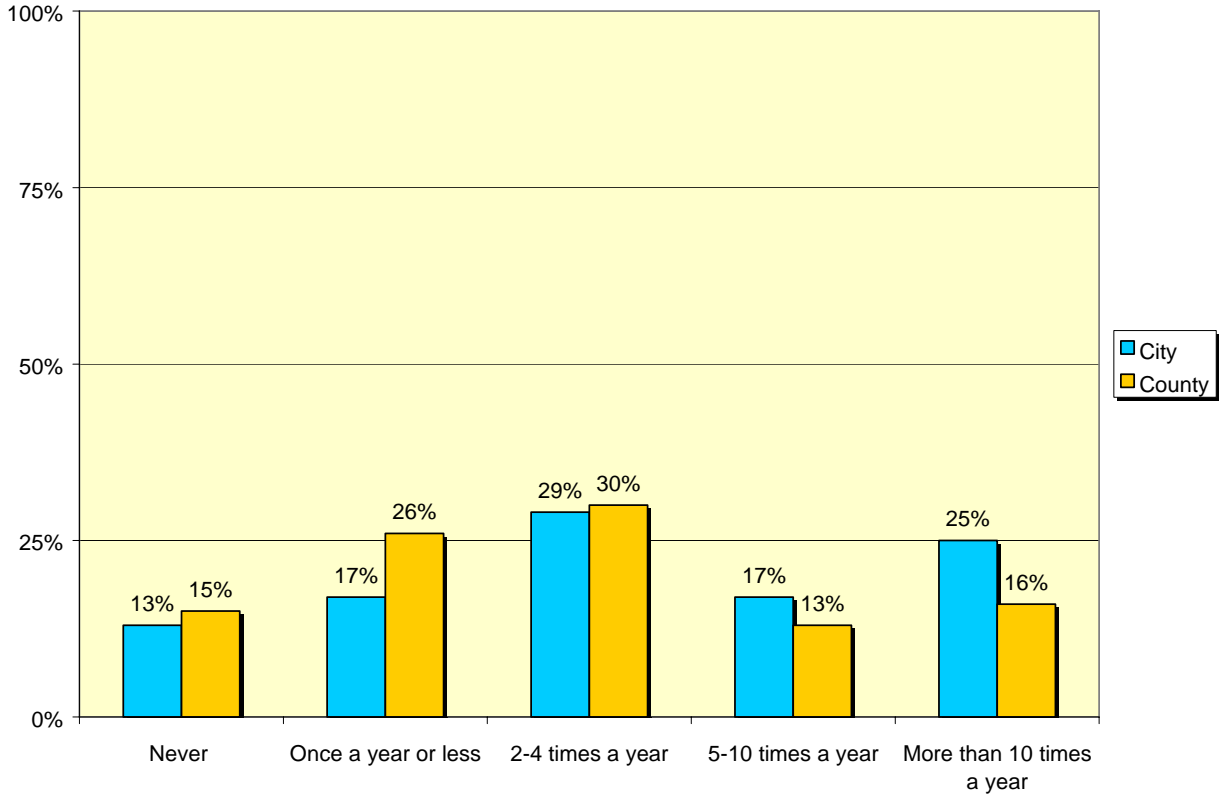
## DETAILED ANALYSIS

- Question 1.     What is your ZIP Code?**
- Question 2.     Are you a resident of Salt Lake City?**
- Question 3.     Do you know where the water that supplies the drinking water along the Wasatch Front originates? (Unaided, percent mentioned)**



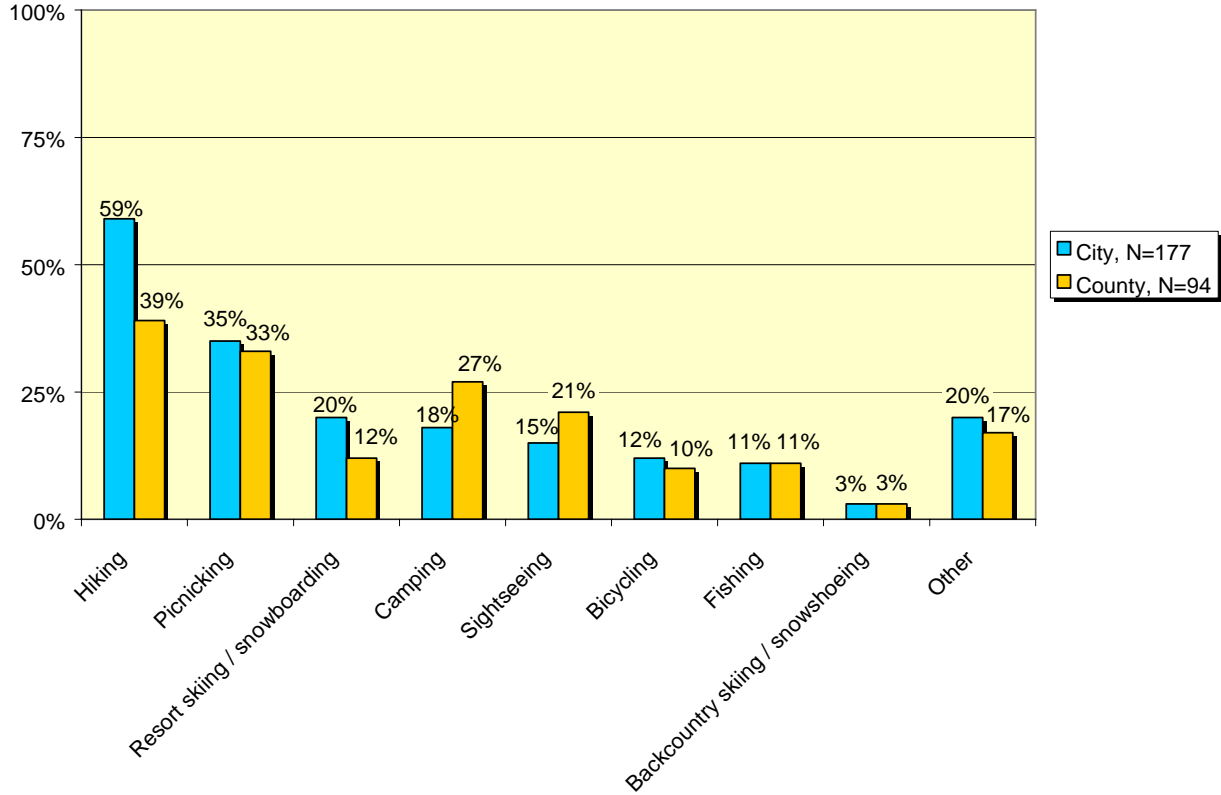
A plurality of city (41%) and county residents (32%) mention lakes, streams, and reservoirs as the source of drinking water along the Wasatch Front. Fewer people think that the drinking water for the Wasatch Front comes from ground water, the snow pack, or the watershed. A significant percentage of people mention “other” sources such as the mountains and the canyons. A complete list of other responses is available on Page B1 of Appendix B.

**Question 8. How often do you spend time in the Wasatch Front canyons east of Salt Lake County? (City Creek, Parleys, Red Butte, Millcreek, Emigration, Big Cottonwood, Little Cottonwood)**



At least one in eight city (13%) and county residents (15%) declare that they never spend time in the canyons east of Salt Lake County. At the other end of the spectrum, a slightly higher percentage of city residents (25%) report that they visit Salt Lake County’s canyons more than ten times a year compared to the percentage of county residents (16%) who visit the canyons that often. A plurality from both areas (29% in the city and 30% in the county) report that they spend time in the canyons two to four times a year. A slightly higher percentage of county residents (26%) than city residents (17%) estimate that they visit the canyons on Salt Lake County’s eastside once a year or less. Some respondents say that they spend time in the canyons east of Salt Lake County five to ten times per year (17% for city and 13% for county).

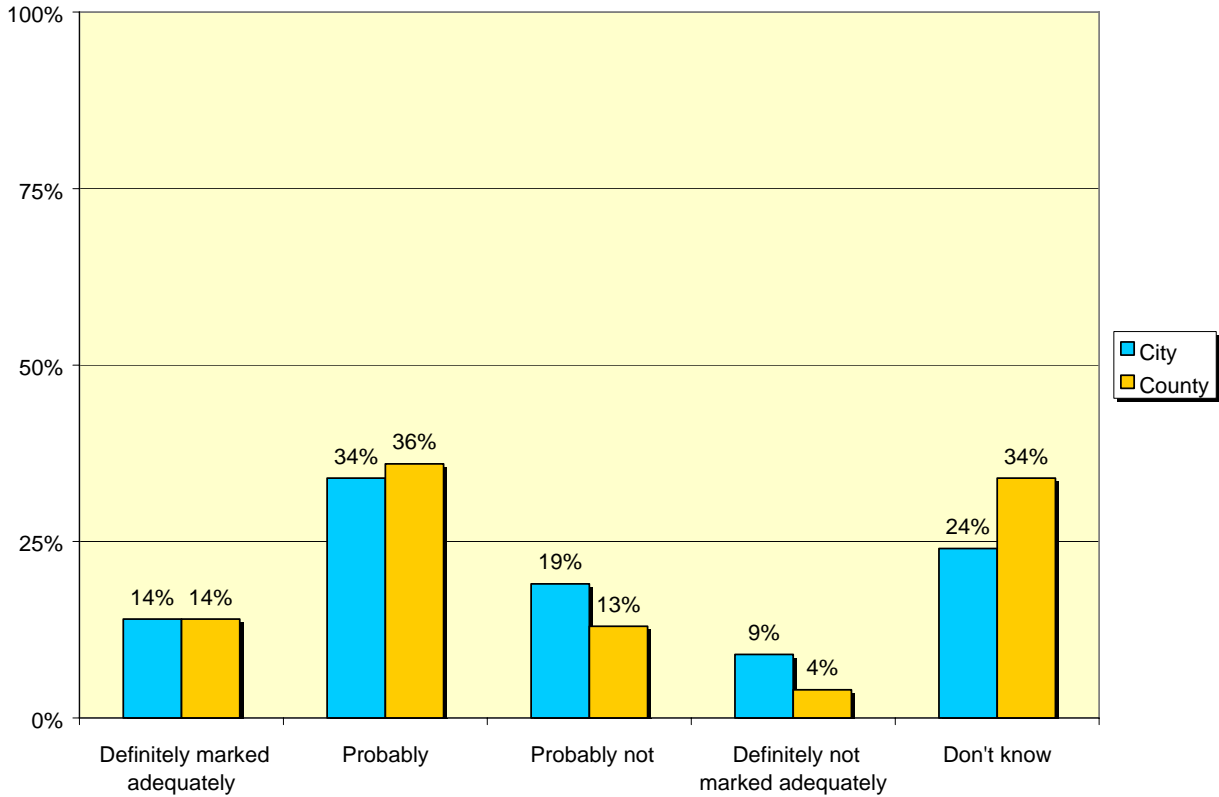
**Questions 9-17. What activities do you participate in when you spend time in the Wasatch Front canyons (designated above)? (Percent mentioned)**



Among those who spend time in the canyons east of Salt Lake County at least once a year, the most popular activities appear to be hiking, picnicking, skiing and snowboarding, as well as camping. Other activities that city and county residents participate in when they visit the canyons are sightseeing, bicycling, fishing, and to a lesser extent, backcountry skiing and snowshoeing. Approximately one in five respondents from each area mention other outdoor activities such as boating, walking their dog, climbing, and golfing. A complete list of other responses is available on Page B2 of Appendix B.



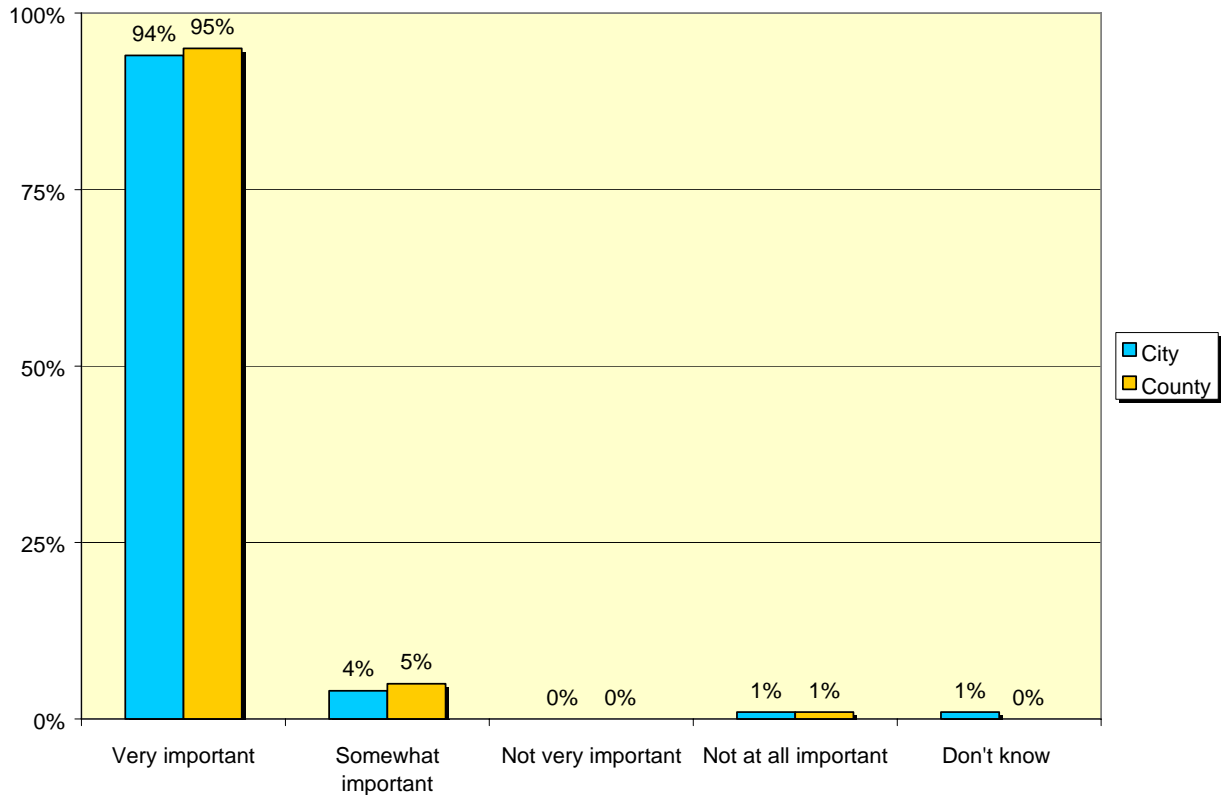
**Question 18. In your opinion, would you say the trails along the Wasatch Front are adequately marked with watershed education and protection information?**



Approximately one-half of city (48%) and county (50%) residents think that the trails along the Wasatch Front are definitely or probably adequately marked with watershed protection information. On the other hand, over one-quarter of city residents (28%) and one in six county residents (17%) feel that Wasatch Front trails definitely are not or probably are not adequately marked with watershed education and protection information. Moderate percentages from both areas (24% for city and 34% for county) acknowledge that they don't know if the trails along the Wasatch Front are adequately marked with watershed information.

As you may know, a watershed is the area from which water drains into streams, lakes, and rivers—some of which represent a significant source of supply for our drinking water.

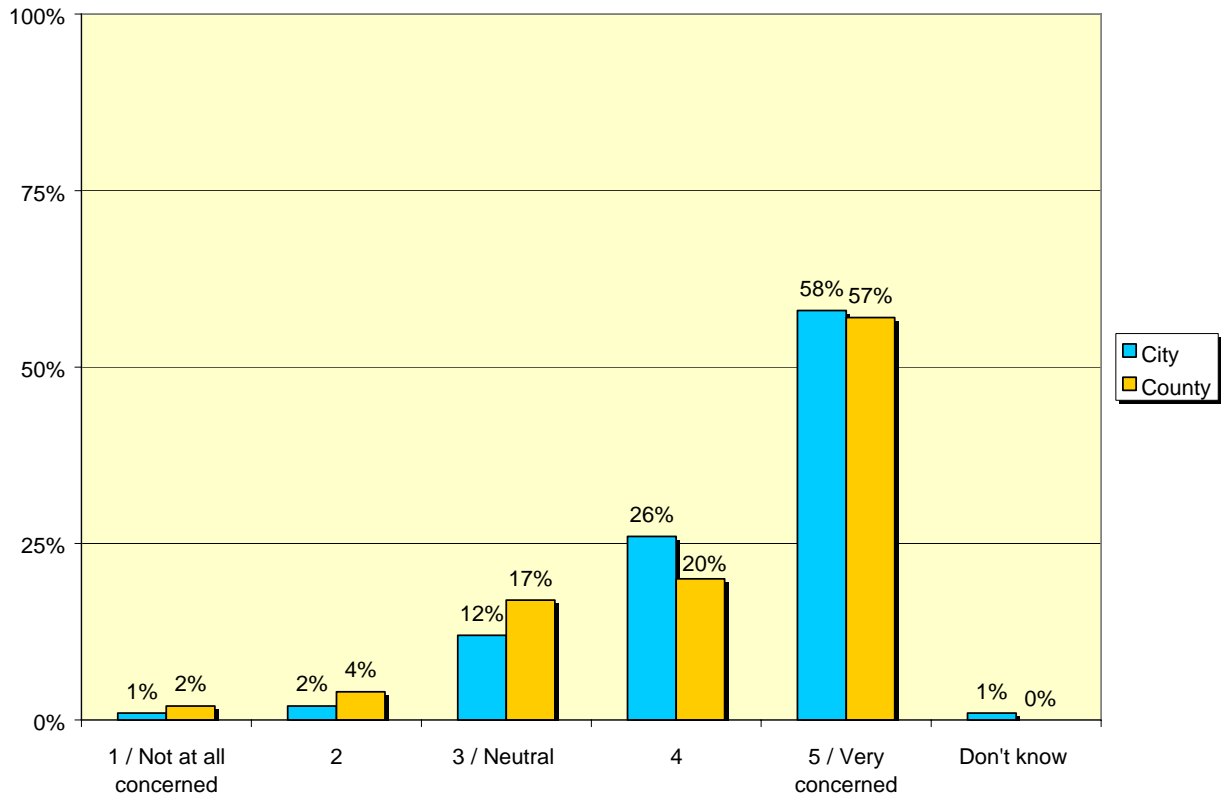
**Question 19. How important is it to protect the watersheds that are the source of the drinking water along the Wasatch Front?**



An overwhelming majority of respondents in the city (94%) and county (95%) maintain that it is very important to protect the watersheds along the Wasatch Front, while a few people think that is somewhat important to protect the watersheds (4% for city and 5% for county). A mere 1% of respondents from both areas claim that it is not at all important to protect the watershed areas that are the source of drinking water along the Wasatch Front.

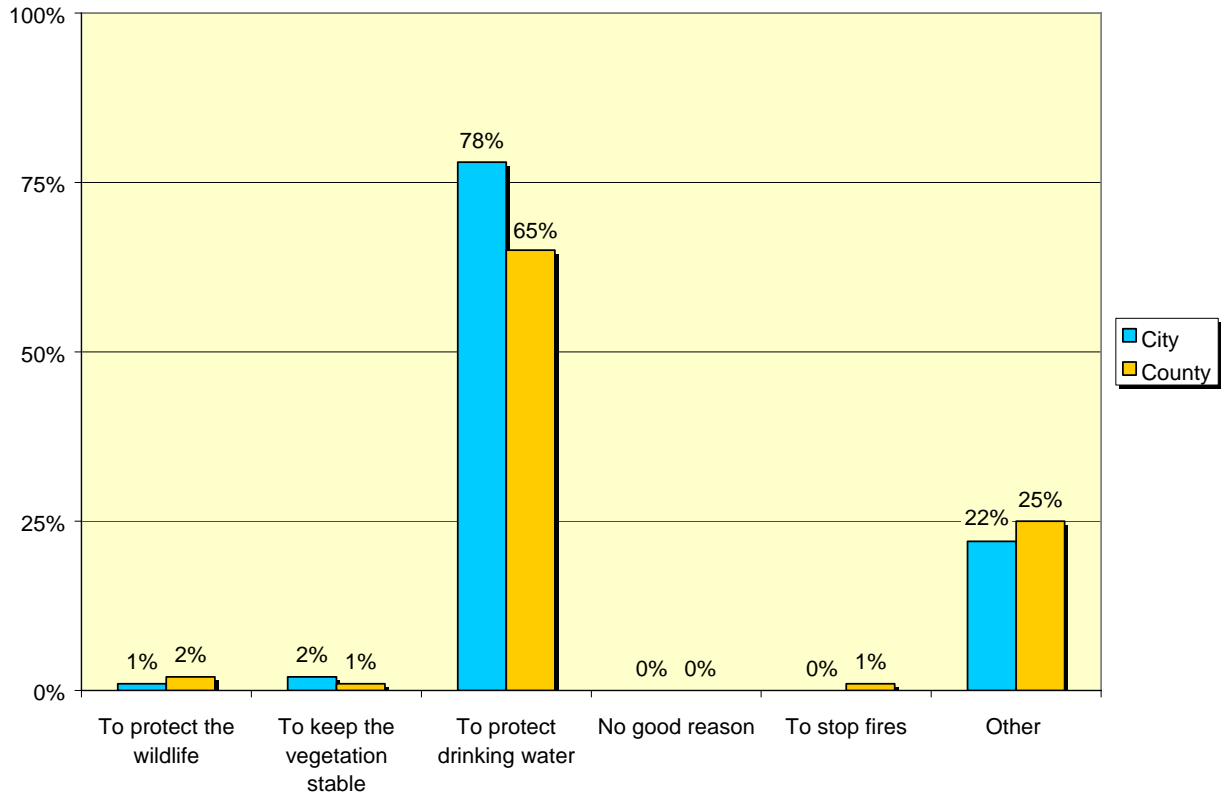
**Question 20. How concerned are you about the future of our watersheds and water quality? Please use a 1 – 5 scale where one means you are *not at all concerned* and five means you are *very concerned*.**

**Mean scores: (City: 4.38) (County: 4.27)**



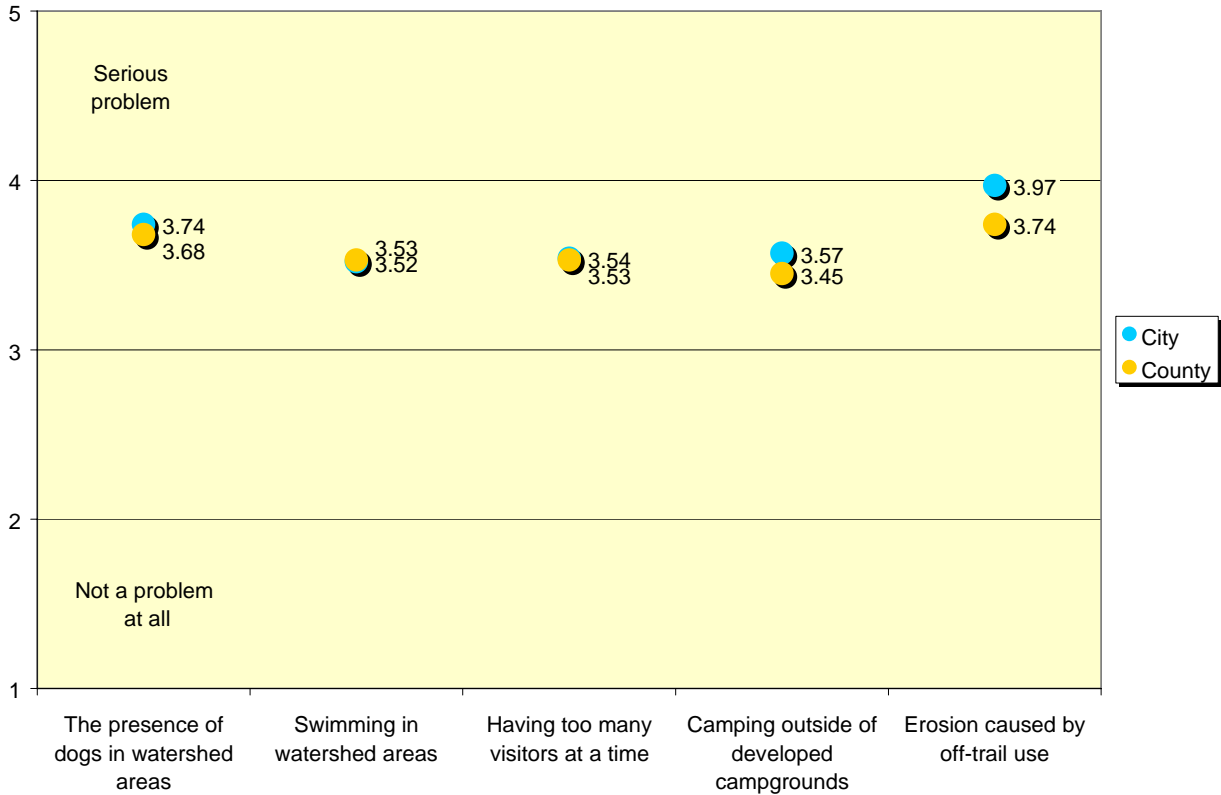
A majority of city (84%) and county residents (77%) declare that they are very concerned or somewhat concerned about the future of the watersheds and water quality, indicated by ratings of four and five on the 1-5 scale. On the other hand, only 3% of city residents and 6% of county residents admit that they are not at all concerned or not very concerned about the future of our watersheds or water quality. Some people (12% in the city and 17% in the county) reveal that they are neither very concerned nor not at all concerned about the watershed, giving the neutral rating of three on the 1-5 scale.

**Questions 21-26. As you may know, Salt Lake City enforces restrictions in watershed areas. To your knowledge, what are the reasons for the restrictions? (Unaided, percent mentioned)**



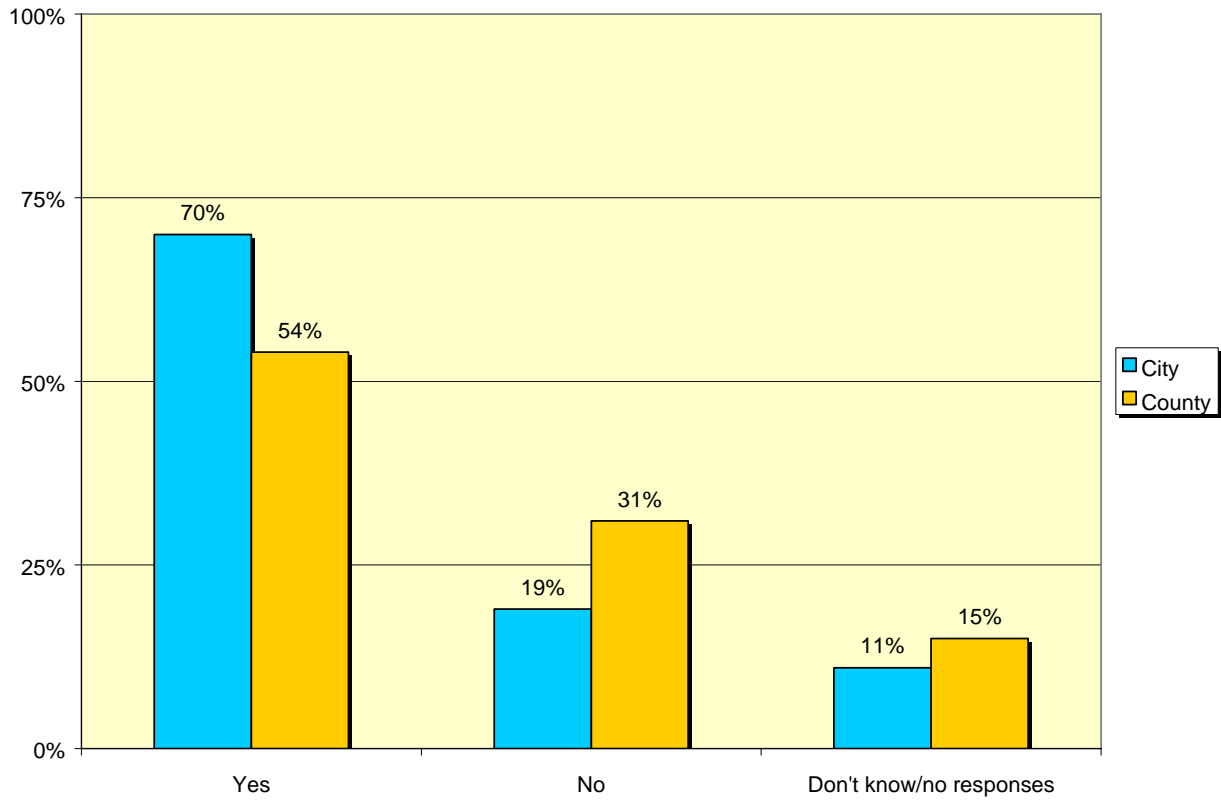
Three-fourths of city residents (78%) and two-thirds of county residents (65%) believe that the reason why Salt Lake City enforces restrictions in watershed areas is to protect drinking water. Small percentages think that Salt Lake City enforces restrictions in the watershed areas to protect the wildlife, to keep the vegetation stable, and to stop fires. Approximately one-fourth of respondents from both areas mention other reasons why Salt Lake City enforces restrictions in watershed areas such as the drought, to conserve water, and to prevent erosion. A complete list of other reasons is available on Pages B3 and B4 of Appendix B.

**Questions 27-31. Now I'd like to read a list of factors that may have an impact on the health and quality of our watershed areas. For each one please tell me how serious of a problem you consider the factor to be on a 1-5 scale where one means it is *not a problem at all* and five means it is a *serious problem*?**



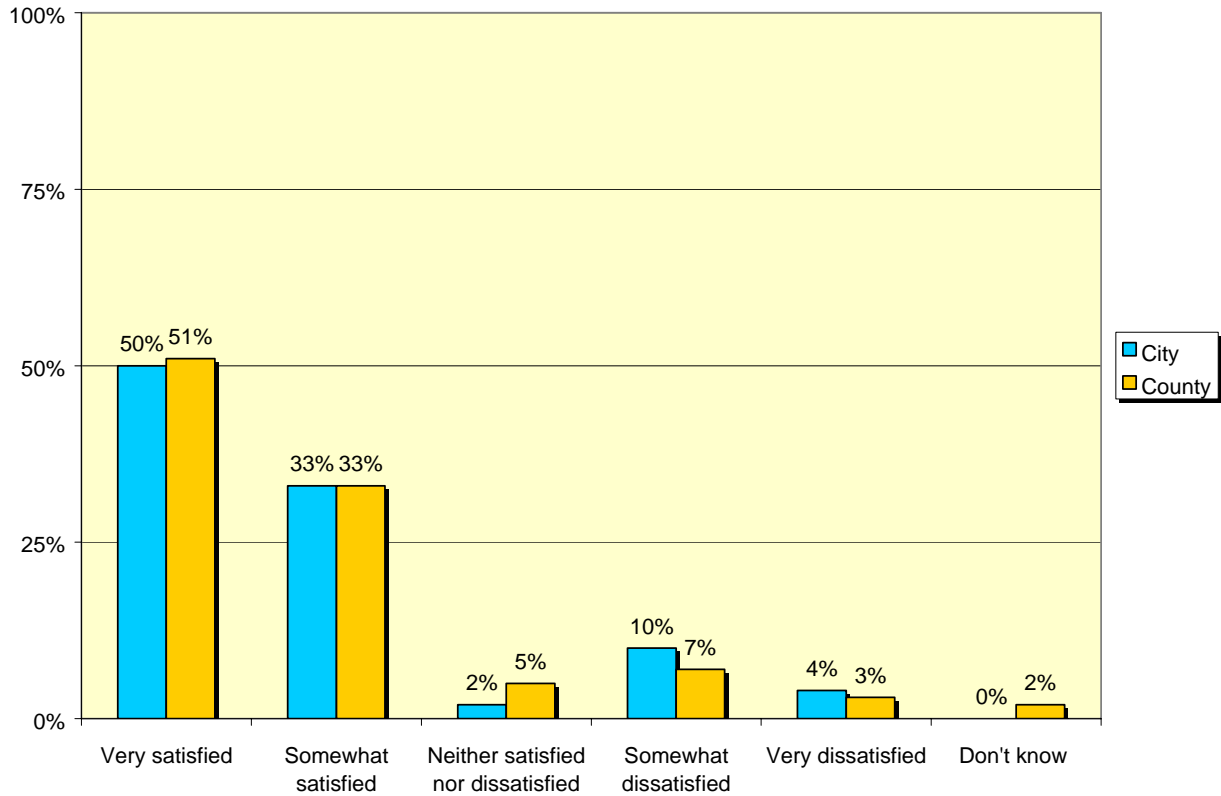
Residents from both areas indicate that the most serious problem facing the health and quality of the watershed areas is erosion caused by off-trail use, given the ratings of 3.97 from city residents and 3.74 from county residents. All other areas are considered somewhat of a problem in protecting the integrity of the watersheds, indicated by mean scores around 3.50 on the 1-5 scale. Although not depicted in the graph above, it is worth mentioning that the percentage of *don't know* responses is very low for each factor (5% or less). Please refer to Appendix A for a full distribution of responses.

**Question 32. Do you support the expansion of the current wilderness areas along the Wasatch Front?**



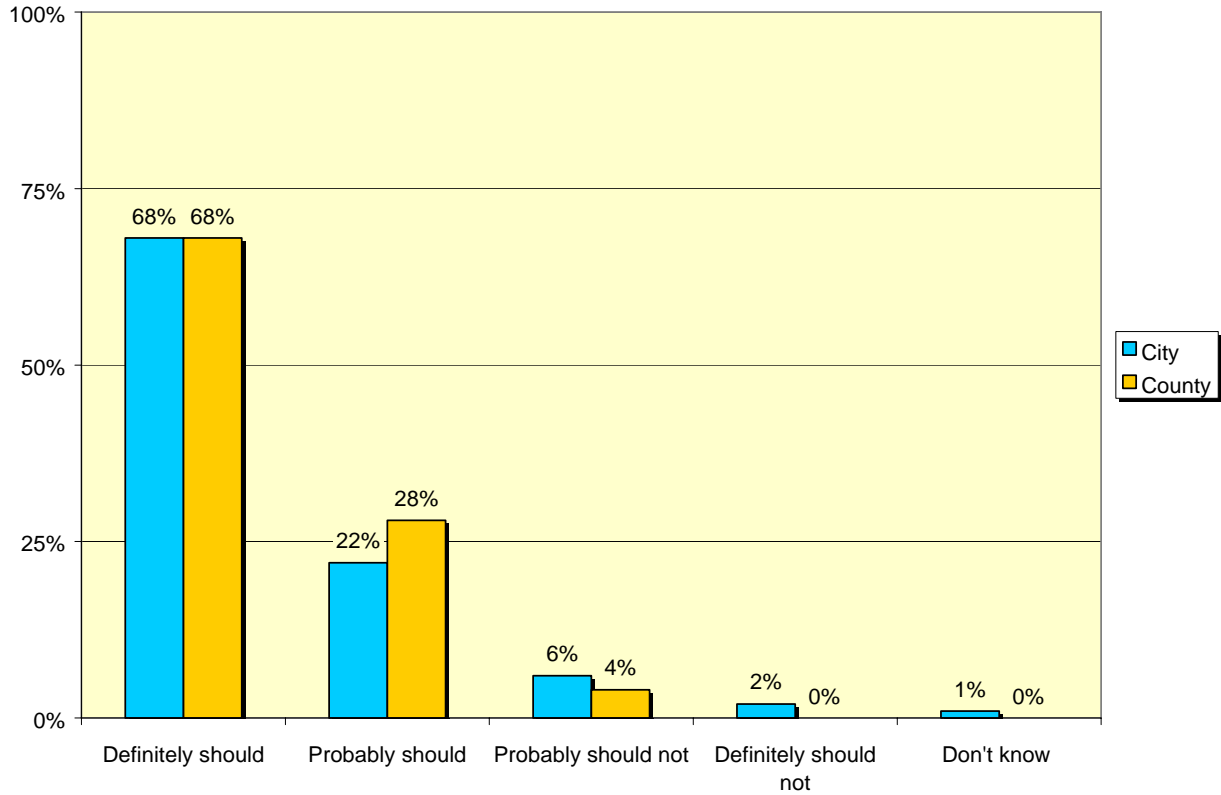
Seven in ten city residents (70%) and just over one-half of county residents (54%) declare that they support the expansion of the current wilderness areas along the Wasatch Front. On the other hand, one-fifth of city residents (19%) and one-third of county residents (31%) maintain that they oppose expansion of the Wasatch Front's current wilderness areas. Some interviewees (11% for city and 15% for county) acknowledge that they don't know how they feel about the issue.

**Question 33. Overall, how satisfied are you with the quality of your residential drinking water?**



A high percentage of city (83%) and county residents (84%) proclaim that they are very satisfied or somewhat satisfied with the quality of their residential drinking water. On the other hand, one in seven city residents (14%) and one in ten county residents (10%) maintain that they are very dissatisfied or somewhat dissatisfied with the quality of the drinking water in their home. Smaller percentages (2% for the city and 5% for the county) confirm that they are neither satisfied nor dissatisfied with their drinking water.

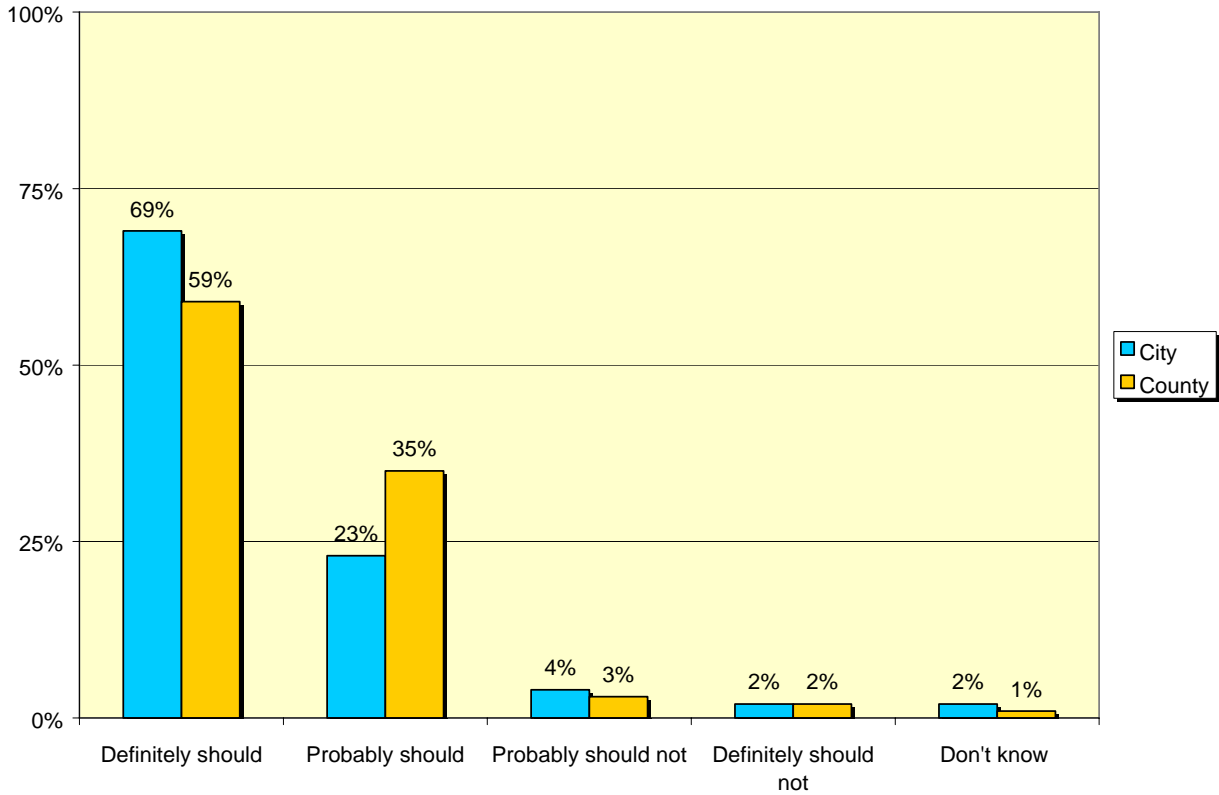
**Question 34. In your opinion, should there be mandatory restrictions on water use during water shortages or water emergencies?**



There is widespread consensus that there definitely or probably should be mandatory restrictions on water use during shortages, with nine in ten city residents (90%) and most county residents (96%) agreeing with the proposal. A small percentage of people (8% in the city and 4% in the county) think that there definitely should not or probably should not be water restrictions during shortages or emergencies.

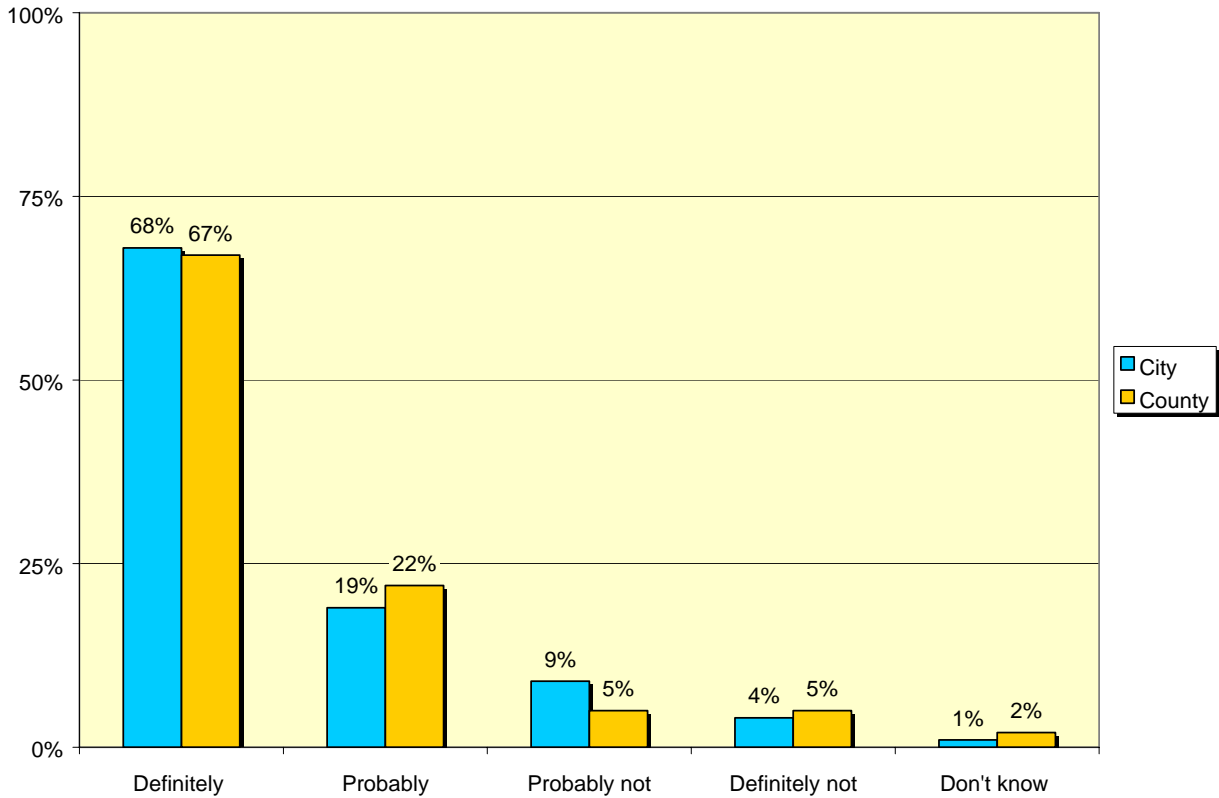


**Question 35. If mandatory water restrictions are in place, should water customers who repeatedly fail to meet those restrictions be fined?**



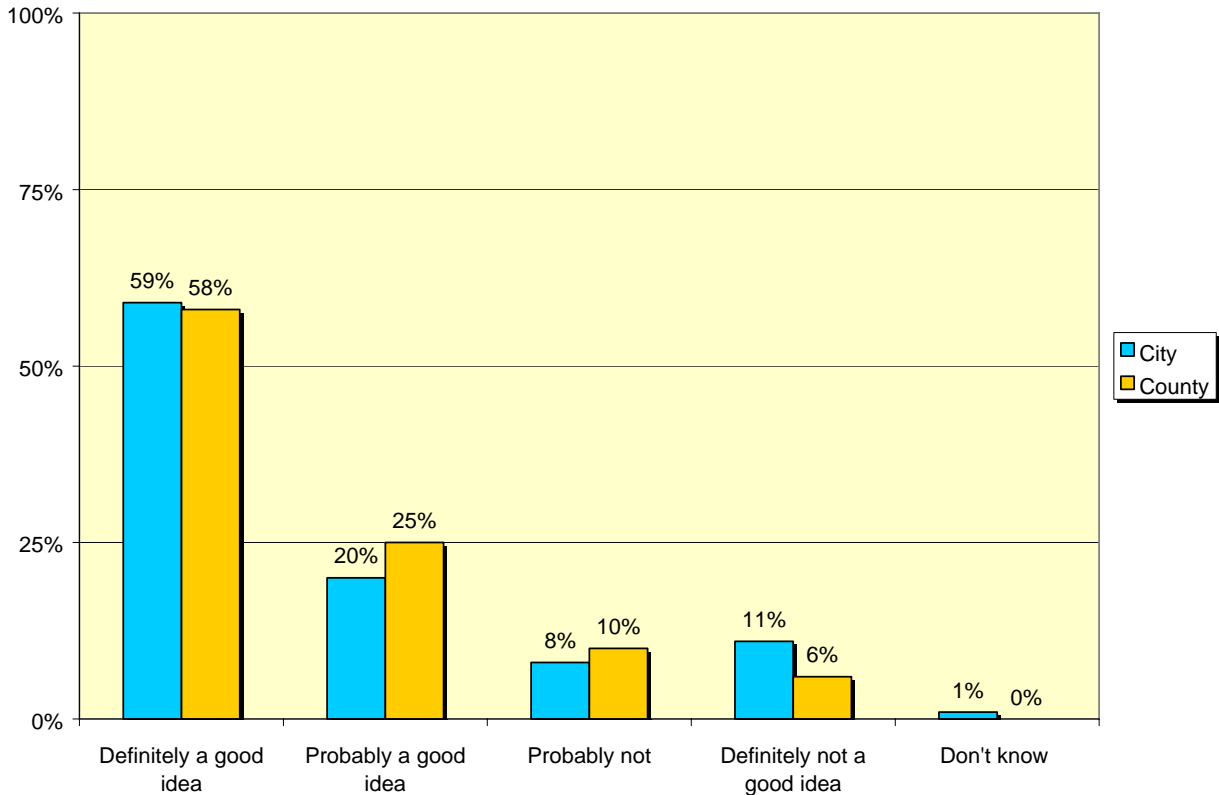
Nine in ten residents in both areas declare that water customers who repeatedly fail to meet water restrictions definitely or probably should be fined (city: 92% and county: 94%), although a higher percentage of city residents say that violators *definitely should* be fined. Only 6% of city residents and 5% of county residents believe that people who do not follow mandatory water restrictions definitely should not or probably should not be fined. Small percentages admit that they don't know how they feel about fining those who repeatedly fail to meet water restrictions.

**Question 36. Do you feel it would be appropriate for restaurants to only serve water upon request as a water saving measure?**



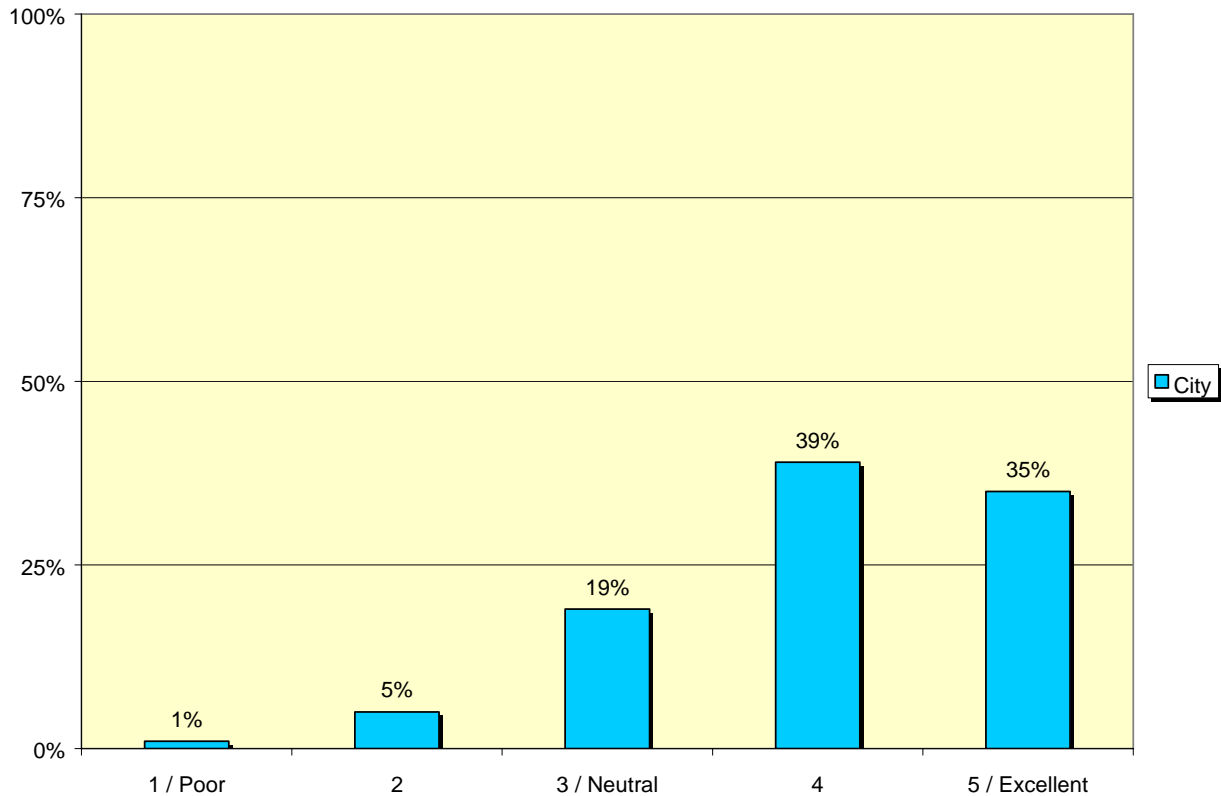
The vast majority of city (87%) and county residents (89%) feel that it definitely or probably would be appropriate for restaurants to only serve water upon request. Approximately one in eight city residents (13%) and one in ten county residents (10%) think that restaurants should serve water to customers even if they do not request it.

**Question 37. And along the same lines... during a multiple day hotel or motel stay...starting with fresh sheets and towels, how would you feel about the option to not have the sheets and towels changed daily in an effort to conserve water? Do you think it is a good idea or not?**



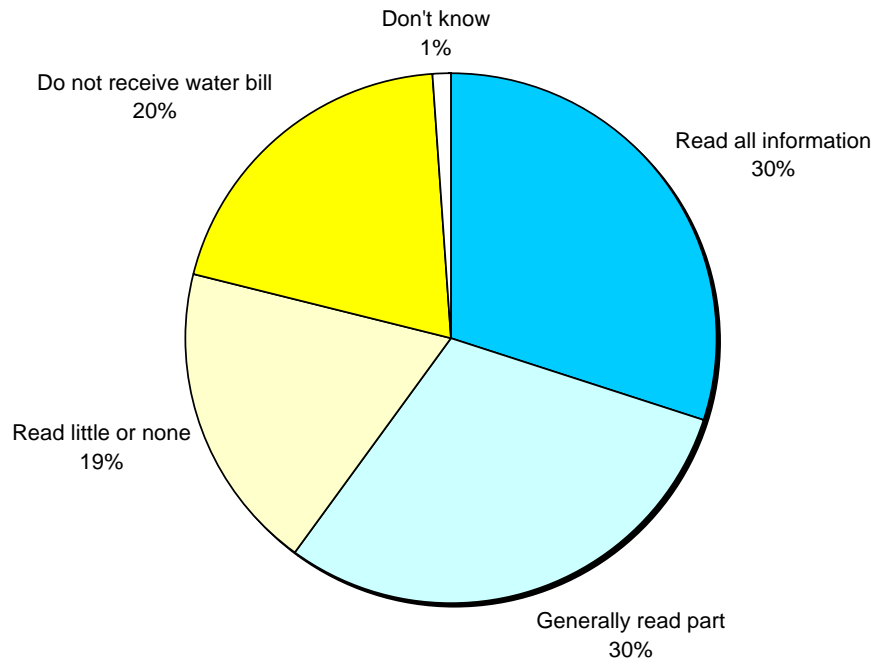
Four in five respondents from both areas (79% for city and 83% for county) report that they think not changing the sheets and towels on a daily basis during their hotel or motel stay is definitely or probably a good idea. One in five city residents (19%) and one in six county residents (16%) think that it definitely or probably is not a good idea to have the option of not having sheets and towels changed daily during their hotel or motel stay.

**Question 38. [City residents only] Overall, how would you rate the service you receive from Salt Lake City Public Utilities? Please use a 1-5 scale with one meaning the service is *poor* and five meaning the service is *excellent*. (Mean score: 4.03)**



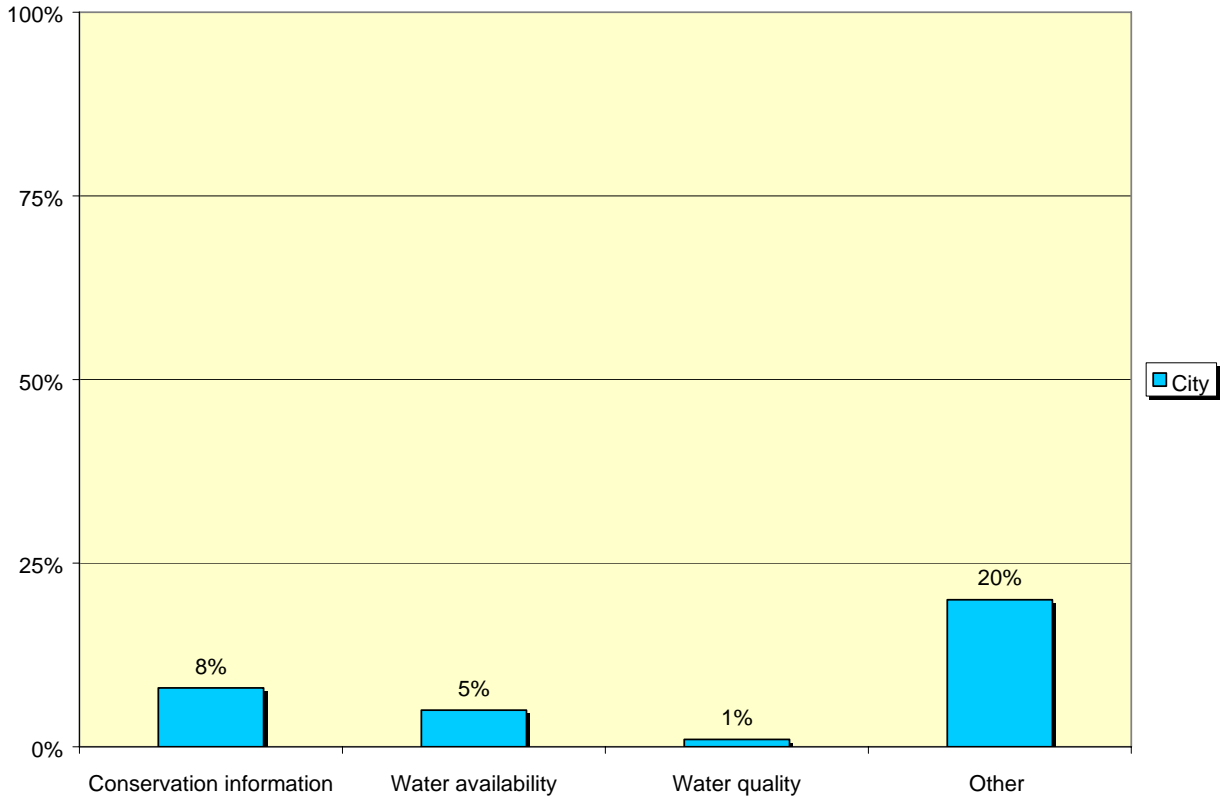
Three-fourths of city residents (74%) rate the service they receive from Salt Lake City Public Utilities as good or excellent, indicated by a rating of four or five on the 1-5 scale. One in five people (19%) give neutral ratings to Salt Lake City Public Utilities. Only 6% of those interviewed give poor ratings to the service they receive from Salt Lake City Public Utilities, indicated by a rating of one or two.

**Question 39. [City residents only] How often would you say you read the information that comes with your public utilities bill?**



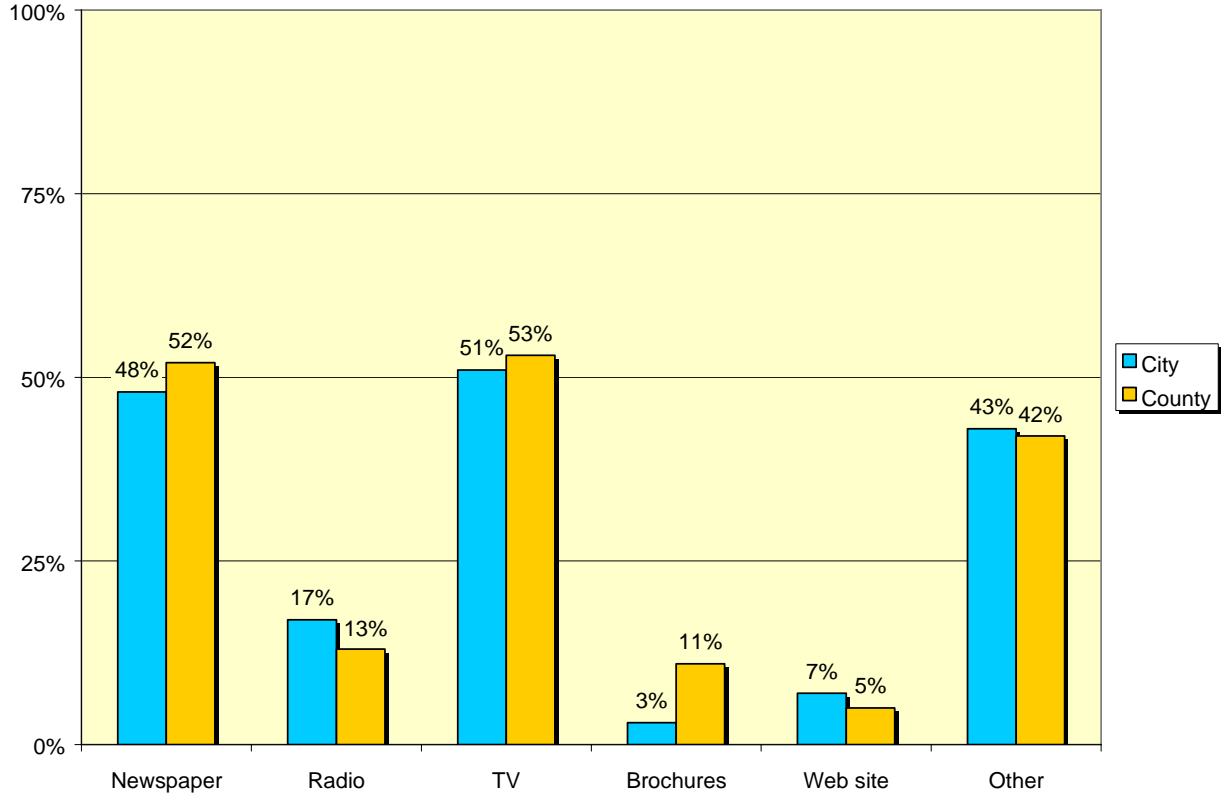
Among city residents, three in five people (60%) claim that they either read all the information or generally read part of the information that comes with their public utilities bill. One in five respondents (19%) maintain that they read little or none of the information that comes with their public utilities bill. Another one-fifth of those polled (20%) state that they do not receive the water bill.

**Questions 40-43. [City residents only] What additional information are you interested in receiving with your water bill? (Unaided, percent mentioned)**



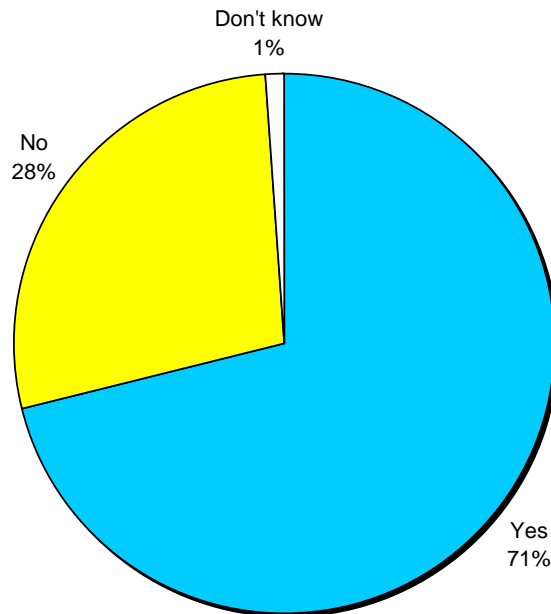
Some city residents report that they are interested in receiving conservation information (8%), water availability (5%), and water quality (1%) with their public utilities bill. One in five people mention “other” information that they are looking for in their public utilities bill such as a year-by-year comparison of usage, information on issues such as fluoridation, and water restrictions. A complete list of “other” responses is available on Pages B5-B6 in Appendix B.

**Questions 44-49. Where do you get your information about water conservation?  
(Unaided, percent mentioned)**



Approximately one-half of respondents in both areas declare that they get their information about water conservation from the newspaper (48% for city and 52% for county) or TV (51% for city and 53% for county). Another source of information for city and county residents is radio (17% for city and 13% for county). Smaller percentages report that brochures or a web site are places where they get their information about water conservation. Two in five people from both groups (43% for city and 42% for county) mention “other” sources of information on water conservation such as magazines, their water bill, from wilderness organizations like the Sierra Club, and word of mouth from friends and family. A complete list of “other” responses is available on Pages B7-B9 in Appendix B.

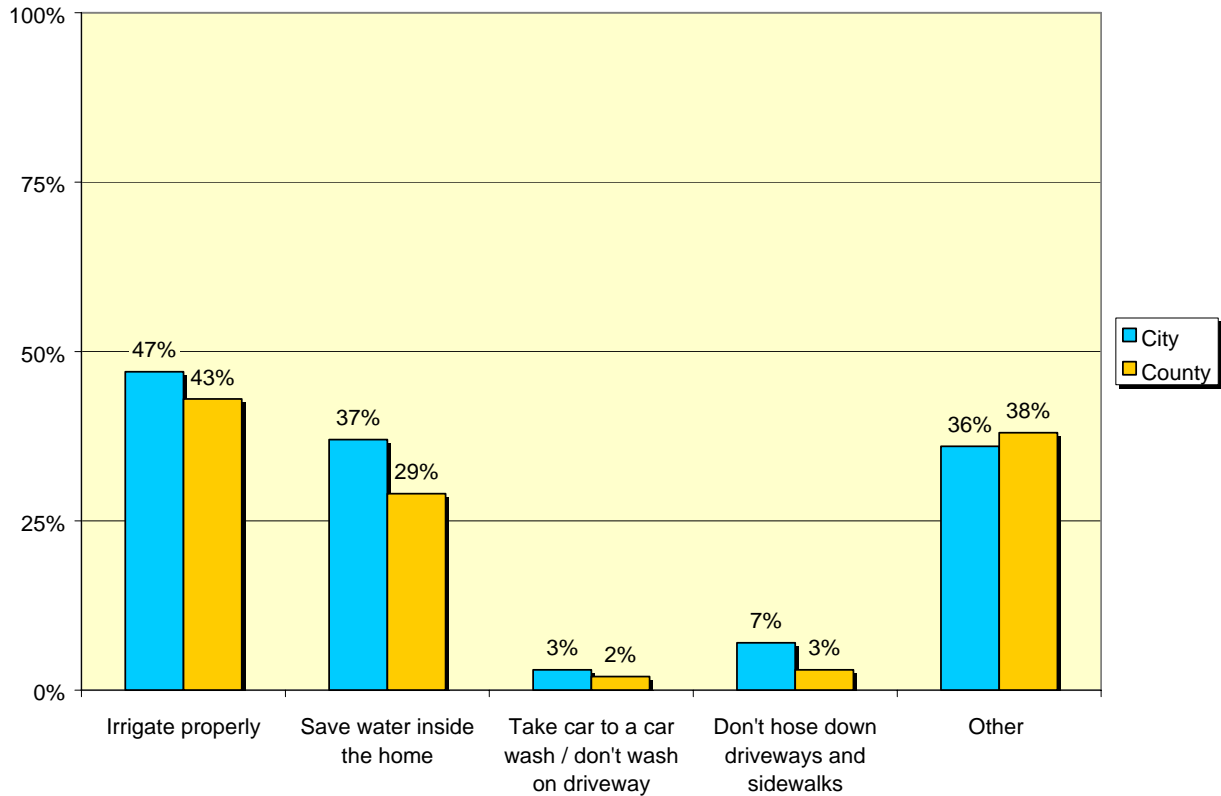
**Question 50. [City residents only] The city is considering installing small demonstration gardens throughout the service areas, would you visit such a garden to learn landscaping and irrigation techniques?**



Seven in ten city residents (71%) claim that they would visit a small demonstration garden to learn landscaping and irrigation techniques. Over one-fourth of city residents (28%) confirm that they would not visit a demonstration garden run by the city to teach landscaping and irrigation techniques.

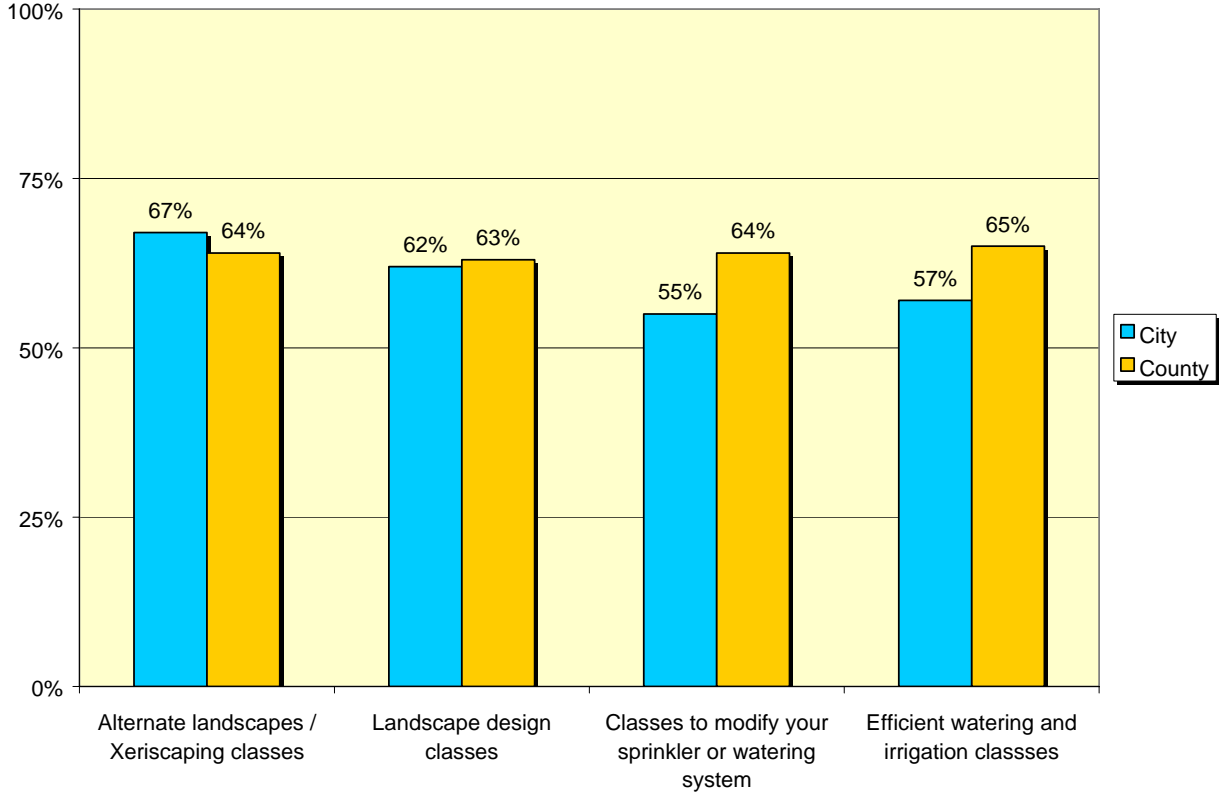


**Questions 51-55. What should you do to save water when there isn't a drought?  
(Unaided, percent mentioned)**



A plurality of city (47%) and county residents (43%) say that they should irrigate properly to save water when there isn't a drought. Over one-third of city residents (37%) and over one-fourth of county residents (29%) state that they should save water inside the home when there isn't a drought. Smaller percentages mention taking their car to a car wash or not washing the car on the driveway, as well as not hosing down driveways and sidewalks. Over one-third of city (36%) and county (38%) residents mention "other" ways that they can save water when there isn't a drought such as be conservative, same as when there is a drought, and use in moderation. A complete list of "other" responses is available on Pages B10-B12 in Appendix B.

**Questions 56-59. How likely would you be to attend the following free classes if they were offered in your area? (*Very likely* and *somewhat likely* responses combined)**



Two-thirds of county residents report that they would be very likely or somewhat likely to attend each of the free classes listed in the graph. City residents indicate that they would be most likely to attend free classes on Xeriscaping (67%) and landscape design classes (62%). Slightly fewer city residents confirm that they would be very likely or somewhat likely to attend free classes on efficient watering and irrigation (57%) and modifying their sprinkler or watering system (55%).