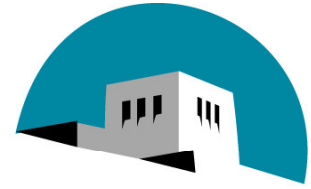


Supporting Document H-7

Attitudes and Preferences of Residents of the Middle Rio Grande Water Planning Region Regarding Water Issues

Prepared by the Institute for Public Policy at the University of New Mexico

June 2000



The University of New Mexico

UNM Institute for Public Policy

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**Summary Report
to the Action Committee
of the Middle Rio Grande Water Assembly
and the Middle Rio Grande Council of Governments**

UNM Institute for Public Policy
The University of New Mexico
Albuquerque, New Mexico
June 2000

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Introduction

Background and Purposes of the Survey

The University of New Mexico Institute for Public Policy (IPP) conducted its most recent semiannual statewide *Public Opinion Profile* survey of New Mexico residents between March 21 and May 15, 2000. The major focus of the survey was water issues. The Action Committee (AC) of the Middle Rio Grande Water Assembly (WA), recognizing that the survey could be a vehicle for accomplishing one of its own objectives, agreed in December 1999 to participate in the IPP's survey. The Middle Rio Grande (MRG) Council of Governments, the WA's partner in the regional water planning process, contracted with the IPP to administer the survey to an "oversample" of residents of the MRG water planning region, in addition to its statewide sample. This was thought necessary in order to obtain a large enough sample of the adult population of the region to permit statistical analysis of responses from subgroups within the entire sample. Funding for the oversample and additional design and analysis efforts came from regional water planning funds appropriated by the New Mexico legislature to the Interstate Stream Commission.

IPP staff worked with a team representing the Action Committee (AC) of the Water Assembly, who provided advice in constructing the survey instrument to ensure the inclusion of questions of concern and relevance to the regional water planning process. The team consisted of Mary Murnane and Frank Robinson (co-chairs, Alternatives Working Group), Frank Titus (El Grupo Tecnico), Sterling Grogan (vice-chair of the AC), and Jim Gross (MRG Council of Governments). The team also solicited ideas for questions from other members of the AC through the MRG water planners' "listserv."

Survey Method and Sample Sizes

The data discussed in this report come from telephone interviews with respondents from two randomly drawn samples of New Mexico households, one statewide, and one consisting only of residents living within the MRG water planning region. The statewide sample consists of 1391 individuals; it includes 589 respondents who live in the MRG region. The second sample is a randomly selected "oversample" of 567 residents of the MRG region. Combining the responses of MRG residents from both the statewide sample and the oversample ($n = 589 + 567$) yields a total of 1156 respondents. Excluding MRG residents from the statewide sample leaves a "rest of state" sample size of 802. A number of tables in this report compare the responses of the two groups. (The margin of sampling error for the MRG sample is roughly +/- 3%, and for the "Rest of state" about +/- 4%.)

To help assure that the samples of respondents participating in the survey were as representative as possible of the populations of interest to us, the IPP used a combination of random digit dialing, random respondent selection within households, and a customized database that records call attempts and schedules interviews. Up to ten call attempts were made to any given number (once that number had been randomly drawn from our two phone files), in an effort to ensure a high response rate. We managed to achieve a response rate of 58% for the statewide sample and 57.5% for the MRG sample, well above the industry average for this type of survey. (For a fuller discussion of the meaning of response rates, see Appendix C.)

What this Report Contains

This report presents the most significant survey results, cross-tabulated to compare MRG responses with the “Rest of state” (ROS) responses. Where there are significant differences, the report also compares urban, suburban, and rural responses within the MRG region. One simplification we usually employ in the analyses discussed in the text is to exclude “don’t know / no answer” (DK/NA) responses. Usually, fewer than one in twenty respondents (5%) spontaneously give what amounts to a DK/NA response, and the survey results are usually easier to interpret when the DK/NAs are set aside. This is particularly true when comparing the average (or mean) responses to a series of questions. However, in some cases DK/NA responses may be more frequent. When a large percentage of respondents are unable (or choose not) to answer a question, that fact may be important as an indicator about the public’s level of awareness about an issue. In such cases, we do report and discuss those responses. For readers interested in the DK/NA responses for every question, Appendix A to this report, “Question Wording, Response Frequencies and Descriptive Statistics” provides those data.

To simplify the presentation of survey results, this report relies extensively on means, frequencies, cross-tabulations, and other simple, descriptive, and associational statistics. Underlying these straightforward presentations, however, are slightly more advanced statistical techniques, such as correlation and regression, which provide significance tests of the differences between the results for different sub-samples. Thus, when we refer to a difference in percentages or mean values as being “significant,” we mean that it is literally “statistically significant.” Where differences *may* be important but either the difference is not large enough to be statistically significant or the sub-sample is too small to allow us to generalize from their responses, we refer to the difference as “nominal.”

This summary report is divided into the following sections, which generally follow the order of the questions in the survey. Section 1 deals with respondents’ “Initial views about water and the environment.” Section 2 reports on respondents’ “Knowledge and perceptions about water issues,” ranked in order of their importance to respondents within in the MRG region. Section 3 discusses our findings about respondents’ “Values in relation to water,” ranking various possible uses of water in order of the “value you personally place on that use.” The fourth and final section covers a range of “Policy preferences” on a variety of issues, from preservation of the bosque, to rules for behavior during a drought, to Indian water rights, instream flow, and water rights transfers.

Following the body of the report is Appendix A, which provides the wording of all the water-related questions and the demographic questions used in this analysis. Appendix A also shows the response frequencies and in many cases descriptive statistics for each question broken out into “MRG region,” “Rest of state” and “Statewide” sample categories. Appendix B reports

on and summarizes actual verbatim responses to Question 92 on drought-related behavior changes. Appendix C provides a technical summary on response rates for this survey. Appendix D is a map showing distribution of responses by Zip Code. Finally, the IPP is providing a release data set in electronic format to the MRGWA and the MRGCOG to enable them to perform additional analyses of the survey data.

This report provides an introduction to the survey data. It tries to show what may be possible in the way of further exploration and use of the data by MRG water planners and others. It is offered in the hope that such additional analyses and explorations will take place, that the data will be used in public forums to stimulate further dialogue, and that the water planning process will be enhanced by the use of these findings.

Section 1: Initial views about water and the environment

The water issues portion of the survey began with a series of ten statements (randomly ordered) expressing a variety of opinions about New Mexico’s water situation, with which we asked respondents to indicate their disagreement or agreement on a seven-point scale. The statements dealt with environmental and economic values, perceptions about the importance of planning and management, the question of water scarcity in New Mexico, and people’s sense of their own efficacy in participating in decisions about how water should be used. Table 1.1 displays the mean and median responses to these ten statements in order of MRG respondents’ level of agreement, seven meaning strongly agree and one meaning strongly disagree.

Despite their proximity to the Rio Grande, its tributaries, and the Rio Grande bosque, residents of the MRG region reported spending no more time (if anything, a bit less) “on or along any of the rivers or streams of New Mexico” than did residents of the rest of the state. Less than half of MRG residents reported doing so even once during the past year, while less than a quarter did so six or more times. (See Appendix A, Question 49.) Nonetheless, MRG residents expressed their strongest agreement with the statement, “Keeping water in rivers to provide a green corridor and protect habitat for wildlife and vegetation is important.” Though they and the “Rest of state” (ROS) respondents both assigned median scores of seven to this statement (meaning that over half of both groups expressed the strongest possible agreement), the average MRG response was significantly higher than that of the ROS.

MRG residents expressed their second highest level of agreement with the statement, “It’s important for New Mexicans to come to agreement soon on a plan for managing our water to avoid increasing conflict over water in the future.” On this, they and the ROS were almost exactly in agreement. Again over half of both samples said they “agree strongly” with the statement. Respondents in both samples tended to disagree with the idea that “Even if we can’t come to an agreement on how to manage water in New Mexico, things will work out all right.” (Though both groups gave this a median score of three, the mean score for the MRG group is significantly lower than for the ROS.)

		<u>MRG</u>	<u>Rest of state</u>
# 53. Keeping water in rivers to provide a green corridor and protect habitat for wildlife and vegetation is important.	Mean	6.01	5.86
	Median	7	7
# 58. It's important for New Mexicans to come to an agreement soon on a plan for managing our water to avoid increasing conflict over water in the future.	Mean	5.86	5.88
	Median	7	7
# 55. We shouldn't put farmers out of business just so cities can grow.	Mean	5.50	5.52
	Median	7	7
# 52. The lack of water will severely limit population growth and economic development in New Mexico over the next 50 years.	Mean	5.02	5.28
	Median	5	6
# 57. If we keep pumping water from underground at the rate we're doing it now, we will deprive our children and grandchildren of the quality of life we've had.	Mean	4.90	4.81
	Median	5	5
# 54. To manage our water so there will be enough for all important uses will require all of us to use less and pay more.	Mean	4.41	4.40
	Median	5	5
# 59. What I've heard about water issues is so complicated that people like me really can't have much say about how to manage it well.	Mean	3.24	3.56
	Median	3	3
# 51. If we want to improve our standard of living in New Mexico, we must use our water in ways that help our economy, even if the environment has to suffer.	Mean	3.20	3.39
	Median	3	3
# 56. Farmers waste a lot of water irrigating their fields.	Mean	3.09	3.16
	Median	3	3
# 60. Even if we can't come to an agreement on how to manage water in New Mexico, things will work out all right.	Mean	3.08	3.32
	Median	3	3

Table 1.1: Mean and median levels of agreement with general statements of opinion about New Mexico's water situation [Scale: 1 (strongly disagree) to 7 (strongly agree)]

MRG and ROS respondents were also in accord regarding farming and farmers, with over half of each group expressing strong agreement with the statement that “We shouldn't put farmers out of business just so cities can grow.” Both groups also expressed similar levels of disagreement (mild) with the idea that “Farmers waste a lot of water irrigating their fields,” though the ROS put this at the bottom of their list.

There is somewhat less consensus about the idea that “[t]he lack of water will severely limit population growth and economic development in New Mexico over the next 50 years.” Though the mean responses of the MRG and ROS samples indicated that both groups “somewhat

agree” with this statement, there is a significant degree of difference in the extent of that agreement (as is evident from the median response). MRG residents were less likely to view water as a limiting factor than the ROS. However, MRG residents were also significantly more inclined than the ROS to *disagree* with the statement, “If we want to improve our standard of living... we must use our water in ways that help our economy, even if the environment has to suffer.”

The statement, “If we keep pumping water from underground at the rate we’re doing it now, we will deprive our children and grandchildren of the quality of life we’ve had” elicited the highest “DK/NA” response (5%) of any in this series. Though the median response was 5 (agree somewhat), significant neutral responses plus the DK/NAs suggest considerable uncertainty (or perhaps “rational ignorance”) among the public, both within the MRG region and in the ROS, about the rate at which groundwater is being mined and its implications for the future.

Two statements generated the greatest ambivalence among respondents in both the MRG and ROS groups.¹ To the statement, “To manage our water so there will be enough for all important uses will require all of us to use less and pay more,” the mean and median responses landed slightly on the “agree” side of neutral. (The wording of the question may cause the reader to wonder whether respondents’ diffidence is caused by the words “use less” or “pay more.” Responses to subsequent questions reported below will help to clarify the matter.)

In general, respondents disagreed slightly with the statement “What I’ve heard about water issues is so complicated that people like me really can’t have much say about how to manage it.” Variance in the responses was wide, however, indicating that a substantial proportion of respondents agreed with the statement. The MRG respondents were significantly more likely to disagree than were the ROS. Responses are highly correlated (inversely) with level of education – i.e., respondents with the least formal education tended to agree, while higher levels of education are associated with increasing disagreement. Respondents who identified themselves as Hispanic or American Indian were also significantly more likely than white non-Hispanics to agree.

There were no significant differences between the mean responses of urban, suburban and rural residents of the MRG region to any of the questions in this series.

¹ Within this series of questions, the responses showed the widest variance and standard deviations.

Section 2: Knowledge and perceptions about water issues

We began this section of the survey with a general question: “Using a scale from zero to ten where zero is not at all important and ten is extremely important, how important, overall, do you consider water issues in New Mexico to be?” The median response for the MRG sample was eight, and that of the ROS was nine. The difference in mean scores is significant. The frequency distribution for both groups is shown in Figure 2.1. At this general level, water issues are felt to be rather important, but more so by the ROS than by MRG residents.

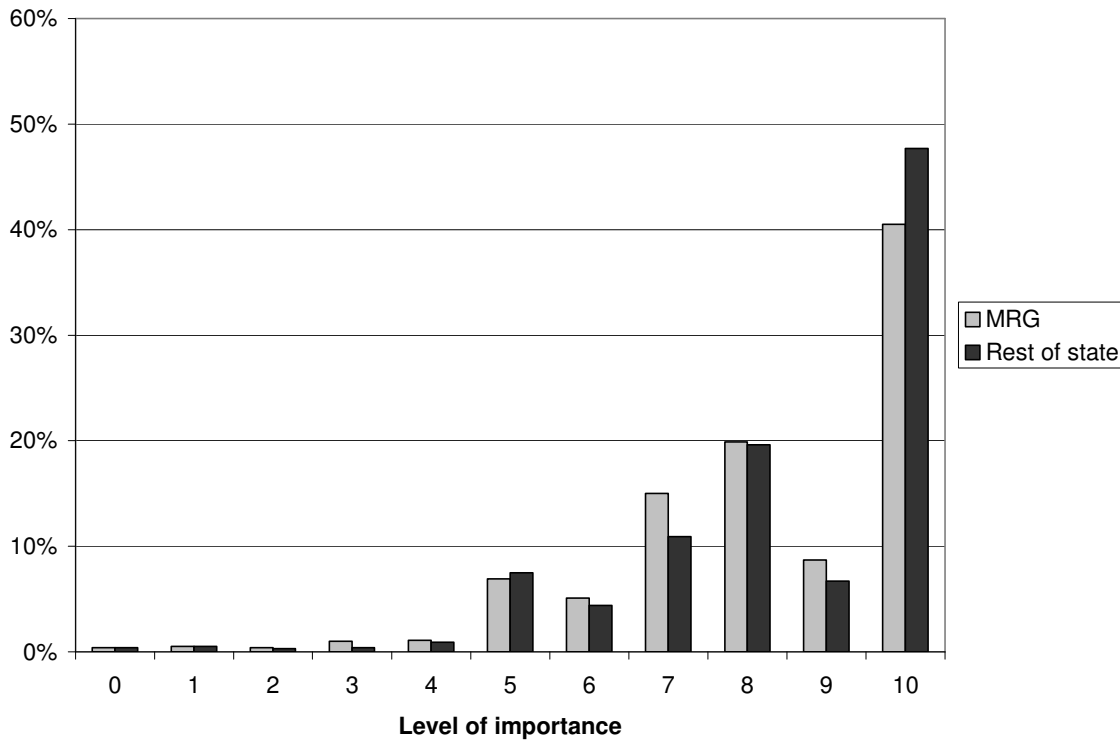


Figure 2.1: Distribution of responses – How important are water issues in New Mexico? [Scale: 0 (not at all important) to 10 (extremely important)]

To pinpoint what it is about water that people find important, we asked respondents to use a one-to-seven scale, where one means not an important problem and seven means an extremely important problem, to rate seven potential water issues. The results, again displayed in order of decreasing mean scores, are shown in Table 2.1 below.

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		<u>MRG</u>	<u>Rest of state</u>
# 63. The quality of the water that my family and I drink and bathe in.	Mean	6.19	6.09
	Median	7	7
# 67. Having enough water in our rivers to protect endangered fish and to keep the trees, vegetation, and other wildlife along the riverbanks healthy.	Mean	5.80	5.74
	Median	6	6
# 64. The rate at which we are using up the underground water supply.	Mean	5.67	5.67
	Median	6	6
# 69. Whether population and economic growth are out of balance with the limited water resources of the state.	Mean	5.14	5.23
	Median	5	5
# 65. Whether New Mexico can meet its legal obligations to deliver water to Texas and Mexico, and still have enough water to meet the needs of New Mexicans.	Mean	4.96	4.98
	Median	5	5
# 68. Making enough water available to attract and keep high-tech industries that offer good-paying jobs in the region.	Mean	4.88	4.97
	Median	5	5
# 66. Whether there is enough water to maintain residential lawns and gardens.	Mean	4.14	4.27
	Median	4	5

Table 2.1: Perceptions of the importance of seven potential water issues – mean and median scores [Scale: 1 (not an important problem) to 7 (an extremely important problem)]

The rank order in which respondents viewed these issues as problems is the same for the MRG and ROS groups. Not surprisingly, water quality – a public health consideration – is at the top of both lists. “Having enough water in our rivers” for environmental purposes ranks second. The next three ranked issues (Q. #64, 69 and 65) are more abstract or technical, and all generated high DK/NA responses (near or above 5% and up to 8% for the ROS sample). Of the three, the underground water supply issue is the most concrete and its importance is rated highest. “Whether population and economic growth are out of balance with water supply” seems the most abstract question in the series. It received the highest rate of DK/NA responses.

Whether New Mexico can meet its compact and treaty obligations and still provide enough water for its own citizens’ needs (#65) is obviously a technical question, and likely to be beyond the experience of many (if not most) New Mexicans. Yet it is ranked slightly ahead of the use of water to attract “good-paying jobs in the region.” Although the jobs issue (#68) is ranked relatively low among responses to this series of questions, it still stands above the midpoint (four) in terms of importance.² “Whether there is enough water to maintain residential lawns and gardens” was ranked last in importance among these issues in both the MRG and ROS.

² In this instance, mean ratings given by Hispanics and non-Hispanic whites show statistically significant differences. The average Hispanic score on the “jobs” issue (#68) was 5.17, while for white non-Hispanics it was 4.78. But Hispanics also rated habitat protection (#67) higher (6.08) than did white non-Hispanics (5.66).

Finally in this section, we asked respondents how well they believed these issues were “being managed.” On a one to seven scale, where one meant “very poor” and seven “very good,” we asked respondents to “rate the job that the government agencies in charge of water are doing.” Fully eight percent of MRG and nine percent of ROS respondents gave “DK/NA” answers. Among those that did answer the question, the median response for both groups was a neutral four. It seems likely that a substantial proportion of New Mexico residents have little idea who manages water in the state or how it is managed.

Again, we found no significant differences in mean scores for this series when we compared those who said they live in an urban, suburban, or rural setting.

Section 3: Values in relation to water

The previous series of questions dealt with “water issues,” rather than how people might actually choose to use water. In this section of the survey we asked respondents to make implicit choices among competing demands for a limited supply of water by rating the importance of various uses. The wording of the set up question was as follows:

As you probably know, there are many competing demands for the water found underground and in New Mexico’s rivers, lakes, and streams. These demands come from cities, households, agriculture, industry, and from the environment. I will read you a list of possible uses of water. Using a scale from **zero** to **ten** where **zero means that you do not care whether water is available for that use** and **ten means that you want to be sure that water is available for that use**, please rate the value you personally place on each of the following uses of water.

Table 3.1 summarizes the data. As with earlier sections, we have displayed the results in decreasing order of mean responses on the zero-to-ten scale, so that the most valued uses (as ranked for the MRG sample) are shown first. Thirteen possible water uses were listed. Twelve of them were read to respondents in random order. Question #84 (preserving the bosque) was read last, as a lead-in to the next question. The mean responses divide rather neatly into three “tiers,” separated in the table by horizontal lines. The top tier consists of water uses with mean values of greater than 7.5. In the middle tier are uses valued from the mid-point of the scale, five, up to seven. The bottom tier includes all uses with mean rankings below five.

The responses are remarkably consistent with those shown in Table 2.1. Indoor use in existing homes, not surprisingly, received top ranking, with a median score of nine. By contrast, watering existing yards and landscaping (#77) is tenth on the list for both samples (heading the lowest tier). It appears in this instance that the public may have been making a distinction between what it considered “needs” and “wants.” Second, for MRG residents, was preserving the bosque. Though the median score for the ROS is the same (eight), the ROS placed irrigation for farms (#72) above bosque preservation. However, both ranked two environmental uses (#84 and 82) among the top four. All of these uses received a median score of eight from both MRG and ROS residents.

Indoor water use in new housing developments (#78) ranked fifth, topping the middle tier, but like its counterpart for existing outdoor uses, both groups assigned low values to using water for new yards and landscaping (#79). The ROS respondents in both instances gave statistically significant higher mean ratings to both than did MRG residents. They also placed significantly higher value on recreation.

Urban-rural splits began to surface in this section, as well. Rural residents *within the MRG region* placed higher value on use of water in existing homes than did urban residents, but significantly lower value on its use in *new* yards and landscaping. Rural residents in the region also put significantly higher value than urbanites on preserving the bosque and on providing food and refuge for wildlife. (Suburban residents’ scores fell in between, somewhat closer to those of urban dwellers than rural residents.) This finding is somewhat counterintuitive, in view of the common perception that “environmentalists” tend to be “city folks.” These differences all but disappeared, however, when we examined urban/suburban/rural splits among the ROS sample.

Residence – either in or out of the MRG region, or rural vs. urban within the region – seems to have had little effect in terms of how people value either parks or cultural uses of water.

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		<u>MRG</u>	<u>Rest of state</u>
# 76. Indoor use in existing homes	Mean	8.17	8.32
	Median	9	9
# 84. Preserving the native cottonwood forest and vegetation along river banks known as the bosque, that creates habitat for a variety of different animal species	Mean	7.69	7.50
	Median	8	8
# 72. Irrigation for farms	Mean	7.59	7.99
	Median	8	8
# 82. Providing food and refuge for fish, birds and other animals	Mean	7.54	7.56
	Median	8	8
# 78. Indoor use in new housing developments	Mean	6.62	6.94
	Median	7	7
# 83. Cultural and religious uses in some villages and pueblos	Mean	6.38	6.34
	Median	7	6
# 74. Recreation, such as fishing and rafting	Mean	6.14	6.40
	Median	6	6
# 81. Community parks and sports fields	Mean	5.66	5.52
	Median	5	5
# 75. New industrial uses, such as manufacturing processes	Mean	5.29	5.41
	Median	5	5
# 77. Watering existing yards and landscaping	Mean	4.40	4.57
	Median	5	5
# 79. Use for yards and landscaping in new developments	Mean	3.82	4.14
	Median	4	4
# 73. Watering golf courses	Mean	3.18	2.93
	Median	3	2
# 80. Swimming pools for individual homes	Mean	2.68	2.58
	Median	2	2

Table 3.1: Values assigned to various uses of water [Scale: 0 (don't care whether water is available for that use) to 10 (want to be sure water is available for that use)]

Section 4: Policy preferences

Questions dealing with a variety of policy choices form the last part of the survey. What actions would people be likely to take, if given responsibility, or would they favor, as citizens? The questions covered a range of policy issues. Although survey question design necessarily simplifies the range of choices available, we attempted to craft questions in a way that would encourage respondents to think about the nature of the values they would bring to the decision in question.

Use of the Middle Rio Grande

The first question in this set (# 85) dealt with the Middle Rio Grande.

The Middle Rio Grande valley is a 160 mile stretch of river that runs from Cochiti Dam about 35 miles north of Albuquerque to Elephant Butte Lake in Socorro County. In this valley the bosque is changing. As more water is taken from the river, cottonwoods and other native vegetation have difficulty surviving and are being replaced by non-native vegetation like salt cedar and Russian olive. Some people believe that the bosque is a valuable environmental resource that is being lost because more water is being taken from the river for use in households, farms, public parks, and businesses. Other people believe that it is more valuable to use this water to create jobs and promote economic growth than to protect the bosque. If you had to decide how to manage this stretch of the Rio Grande, would you:

Four choices were offered. The response frequencies for MRG residents and the ROS are shown graphically in Figure 4.1. (The chart ignores a small DK/NA response.)

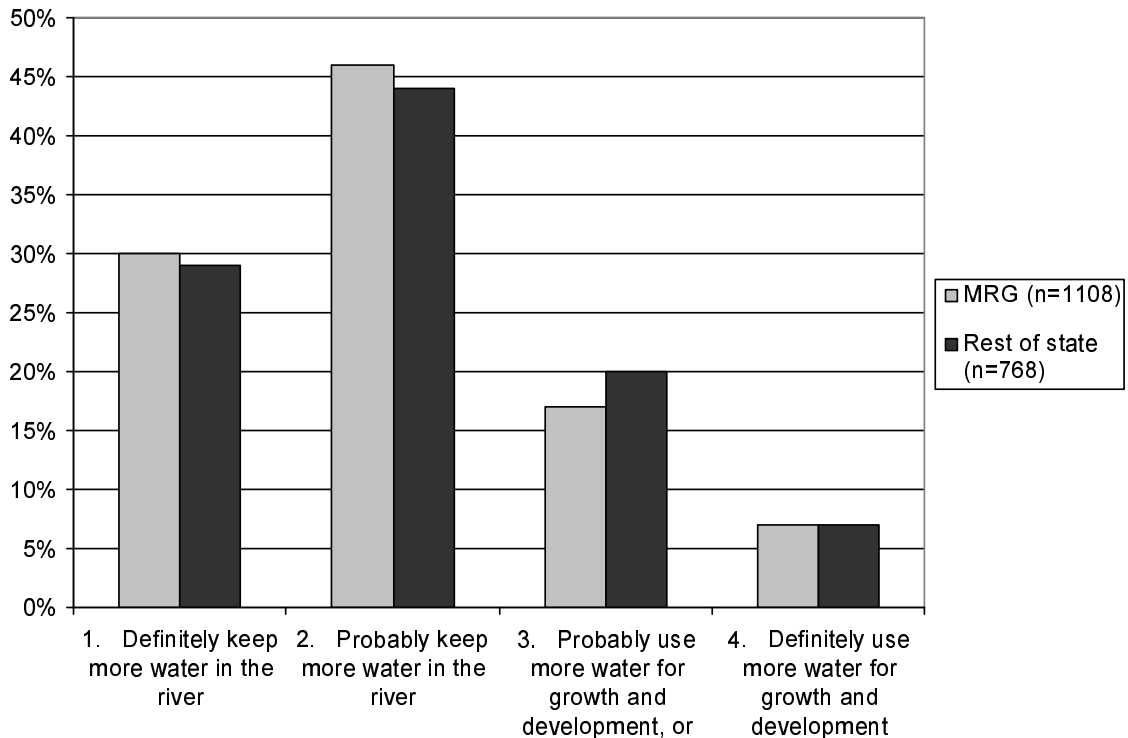


Figure 4.1: How would you manage the Middle Rio Grande?

Differences between the MRG and ROS responses are not significant. When we looked at the responses of urban, suburban, and rural residents *in the MRG region*, we again discovered a statistically significant difference between urban and rural respondents and a nominal difference between suburban and rural respondents, with rural residents more likely to favor keeping water in the river. (Again, there are no significant differences within the ROS sample.)

Regulating water use

We asked two questions regarding attitudes toward establishing water policies with respect to development and paying for water use, using a scale from one (strongly disagree) to seven (strongly agree). The mean responses for the MRG and ROS are shown in Table 4.1. There are essentially no differences between the two groups, nor among urban, suburban, and rural residents, to the question (# 87) about whether approval of residential or business development should be contingent on “demonstrating that a long term supply of water is available.” More than half of all respondents agreed strongly with this statement. On the issue of whether all water use “should be metered” to assure that people pay “for the amount of water they use” (Q. # 88) there were also no significant differences, while the level of agreement was slightly less emphatic.

		<u>MRG</u>	<u>Rest of state</u>
# 87. Approval of new housing or business developments should depend on demonstrating that a long-term water supply is available.	Mean	5.72	5.75
	Median	7	7
# 88. All water use should be metered to ensure that people with wells, irrigation ditches, or other sources of water are paying for the amount of water they use.	Mean	5.47	5.39
	Median	6	6

Table 4.1: Level of agreement with two methods of regulating access to water [Scale: 1 (strongly disagree) to 7 (strongly agree)]

Drought

We asked respondents (Q. # 89) how likely they thought it is that “New Mexico is entering into a lengthy period of drought, such as occurred in the 1950s,” using a scale from one (very unlikely) to seven (very likely). Most New Mexicans (70% of the statewide sample) said that they believe there is a better than even chance that a lengthy period of drought is starting. People in the MRG region appear slightly more skeptical on the issue than are people in the state as a whole; only 65% believed a drought is more likely than not. The median response on a seven-point scale (where seven means strongly agree) was six for the ROS and five for the MRG sample.

However, this translates into very little difference in terms of what people said they are willing to do (Q. # 94-100) to conserve water in case of a drought. Using a scale from zero (definitely would *not* take the action) to ten (definitely would do so), Table 4.2 shows that MRG residents said they would be more likely to xeriscape than would the ROS. Suburban and rural respondents, on the other hand, were statistically more likely to say that they would “reuse water from bathing, laundry or washing dishes for outdoor use.”

		<u>MRG</u>	<u>Rest of state</u>
# 99. Replace grass with drought-tolerant plants for landscaping	Mean	8.07	7.77
	Median	10	9
# 95. Eliminate washing your car	Mean	7.97	8.14
	Median	10	10
# 94. Greatly reduce or eliminate outdoor watering	Mean	7.93	8.06
	Median	9	9
# 100. Install low-flow toilets and water fixtures in your home	Mean	7.93	8.12
	Median	10	10
# 98. Reuse water from bathing, laundry, or washing dishes for outdoor use	Mean	7.09	7.33
	Median	8	9
# 97. Flush your toilet less often	Mean	6.53	6.79
	Median	7	8
# 96. Take fewer baths or showers	Mean	5.87	6.10
	Median	6	7

Table 4.2: Reported willingness to take specific actions to save water in a drought [Scale: 0 (definitely would not take the action) to 10 (definitely would take the action)]

When asked about support for measures local governments might take “to get their citizens to save water” (Q. # 102-105), MRG and ROS residents were equally amenable to requiring limits on water use and setting rates so that “the biggest users pay the highest rates.” The only proposition drawing significant opposition was an across-the-board policy raising the “price of water for all households and businesses.” Table 4.3 shows the means and medians.

		<u>MRG</u>	<u>Rest of state</u>
# 102. Encourage voluntary efforts to save water	Mean	6.59	6.52
	Median	7	7
# 105. Require limits on water use, such as watering only at certain hours or on certain days	Mean	6.39	6.32
	Median	7	7
# 104. Set water rates so that the biggest users pay the highest rates	Mean	5.95	5.60
	Median	7	7
# 103. Raise the price of water for all households and businesses	Mean	4.02	3.94
	Median	4	4

Table 4.3: Acceptance of local government measures to get citizens to save water [Scale: 1 (strongly oppose) to 7 (strongly support)]

With regard to an across-the-board rate increase, MRG and ROS respondents generally responded similarly, as shown in Figure 4.2. The distribution of responses is quite “lumpy.” We found a significant body of strong opposition, along with some tepid support and a smaller body of strong support. This suggests that, though difficult, policy makers might have a reasonable chance of convincing citizens of the utility of raising water prices – e.g., to pay for measures necessary to assure a long-term supply of water. (The median response for both samples is a neutral four.)

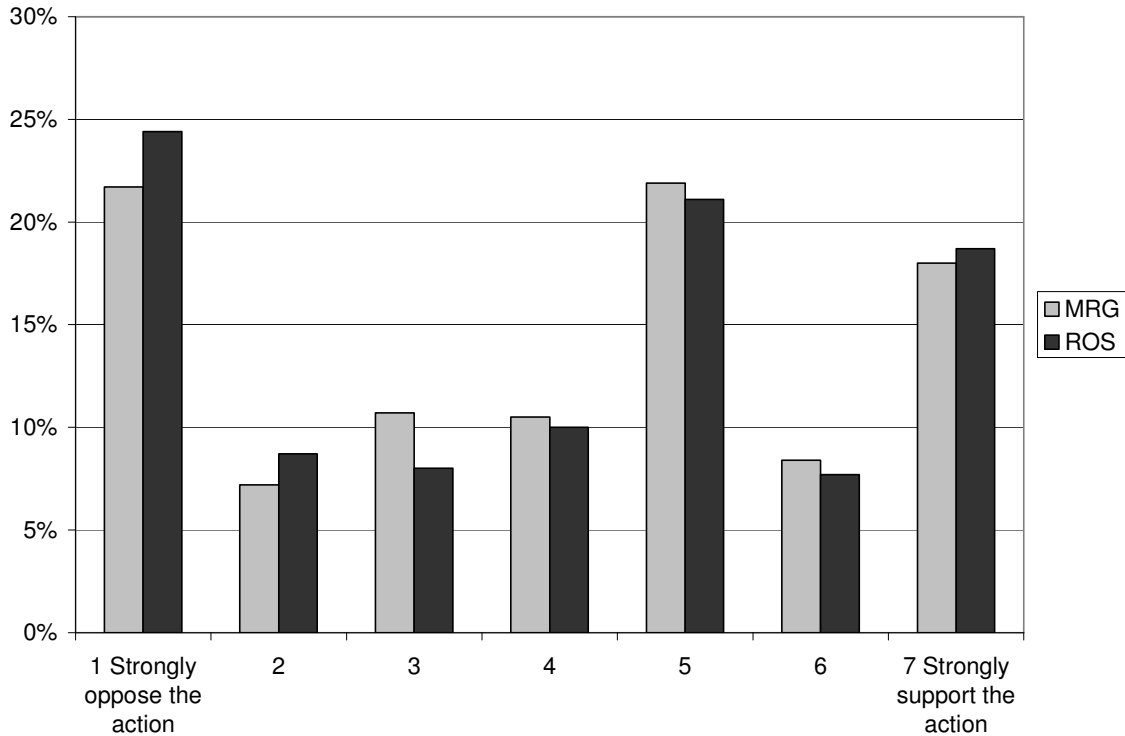


Figure 4.2: Response distribution to local government action to “raise the price of water for all households and businesses”

Indian water rights

We attempted in this survey to gauge respondents’ views concerning the legal claims for Indian tribes’ priority water rights in the development of water management plans for New Mexico (Q. # 106). Though the state has no jurisdiction over tribes’ water rights, our intent was to assess the extent to which the public believes that planners should take those rights into account in the planning process.

The question we asked was this:

Long before Europeans came to what is now New Mexico, Indian tribes and Pueblos founded communities along the Rio Grande and other streams and used water for agricultural and other purposes. Recognizing this history, the United States has promised to protect tribes’ and Pueblos’ rights to enough water to meet their current and future needs for economic development. With this in mind, please tell me which of the following statements best represents your view about how Indian water rights should be treated in developing water management plans for New Mexico?

Table 4.4 shows the responses. When DK/NA responses are set aside, 19% of MRG respondents and 21% of the ROS respondents said, “Planners should consider Indian water rights first, before those of other users,” while large majorities would have planners “treat Indian and non-Indian rights the same.” This sentiment is consistent with earlier IPP findings indicating New Mexicans’ respect for tribal sovereignty, and may provide a basis for optimism about possibilities for

cooperation between the Pueblos and non-Indian interests in developing workable institutional arrangements for water management.

	<u>MRG</u>	<u>Rest of state</u>
DK/NA	2.1%	2.6%
Planners should consider Indian water rights first, before those of other users.	18.4%	20.7%
Planners should treat Indian and non-Indian water rights the same.	75.8%	73.8%
Planners should consider non-Indian water rights first, before those of Indian tribes.	3.6%	2.8%

Table 4.4: Consideration of Indian water rights in water planning in New Mexico

In-stream Flow

We asked a set of three questions about “in-stream flow.” The first (# 107) began with a discussion of potential effects of river desiccation:

The use of river water for agricultural, industrial, and residential purposes takes water out of the river channel. In dry years, taking water from the river can reduce its flow to very low levels, even drying up some stretches. This may severely reduce populations of some kinds of fish. The low water levels may also harm the streamside wetlands and woodlands, reducing the habitat for birds and animals. In addition, low water levels can reduce recreational and cultural uses of the river. Using a scale from **zero** to **ten** where **zero means not at all important** and **ten means extremely important**, how important do you think it is to keep more water in New Mexico’s rivers and streams in dry years?

The question wording purposely omitted mention either of offsetting benefits of taking water from a river or of endangered species. We found that New Mexicans placed relatively high value (a mean score of 7.6 on a scale of 0 to 10) on keeping water in rivers for fish and to maintain riparian areas, preserving habitat for wildlife along riverbanks. We also discovered (Table 4.5) that there was essentially no difference overall between MRG and ROS residents on this issue. However, the mean score for rural residents was significantly higher than that of urbanites within the MRG region.

	<u>MRG</u>	<u>Rest of state</u>
Mean	7.58	7.54
Median	8	8

Table 4.5: Mean and median scores for “keep[ing] more water in NM rivers and streams” [scale: 0 (not at all important) to 10 (extremely important)]

Next, we told respondents (Q. # 108):

Federal law requires protecting the critical habitat of endangered species. For fish, this requires maintaining a minimum flow of water in rivers. In New Mexico, endangered species of fish are found in a number of major rivers, including the Gila, the Pecos, the Rio Grande, and the San Juan. Currently, six species of fish are listed as endangered in New Mexico, and another five

species are listed as threatened. The silvery minnow is a small fish found in the Middle Rio Grande that is currently listed as an endangered species.

Then we asked respondents whether they had previously been aware that any species of fish in New Mexico had been listed as endangered or threatened. Two-thirds of MRG residents and 57% of the ROS respondents said they had been aware of that fact.

Finally, we asked (Q. # 109), “Does this information affect your opinion about the importance of keeping more water in New Mexico's rivers in dry years?” If the respondent said, “Yes,” we asked, “Do you think it is more or less important than you previously stated?” As Table 4.6 shows, a majority of both groups said that they were unaffected by the additional information. However, 40% of both groups said that the information affected their opinion positively, causing them to believe it was “more important” than they had previously stated.

	<u>MRG</u>	<u>Rest of state</u>
DK/NA	6.1%	4.2%
1 Less important	2.3%	2.1%
2 Does not affect opinion at all	51.6%	54.0%
3 More important	40.0%	39.6%

Table 4.6: Effect of supplying information on endangered/threatened status of fish species

Water right marketing and transfers

The final set of policy-preference questions dealt with water marketing and its implications for economic development and for rural communities in New Mexico. We first provided (Q. # 110) brief background information on the origin of water rights and asked how much respondents knew about “the idea of buying and selling rights to water.”

Historically, many New Mexicans acquired rights to a certain amount of surface water by diverting it from streams to irrigate fields. Farmers used the water for their families and livestock, and to grow crops. Today many of these water rights are for sale, and growing cities and industries are interested in buying them to put to use elsewhere. We are interested in how much you know about the idea of buying and selling rights to water. Would you say that you know a lot, some, just a little, or nothing about this issue?

Over two-thirds of MRG residents and three-fifths of the ROS said they knew nothing or “very little” about the concept.

We then provided additional information (Q. # 111) about water right priority and about the use value of holding senior rights and the possibility of market value if those rights were to be transferred.

New Mexico water law says that water rights are based on when the original holder of the rights first put the water to beneficial use. At times, there may be more rights than there is actual water. When there is a drought, the oldest or senior rights have priority. This means that those with junior rights may not use water unless those with senior rights first get the amount they are entitled to. That can make owning senior rights very valuable and buying them very expensive.

Next, we asked respondents whether they opposed or supported the idea of buying and selling water rights, using a one-to-seven scale. A summary of the response frequencies is shown in

Table 4.7. (The DK/NA response was quite high – around six percent for both MRG and ROS respondents.)

	<u>MRG</u>	<u>Rest of state</u>
DK/NA	6%	6%
1 – 3 (Oppose)	54%	46%
4 (Neutral)	13%	11%
5 – 7 (Support)	27%	37%

Table 4.7: Initial opposition and support for “the idea” of buying and selling water rights

Fully one-third of the MRG sample and 28% of the ROS sample said they “strongly oppose” the idea. Twenty-seven percent of the MRG and 37% of the ROS supported the idea to some extent. The median score for the MRG was three (somewhat oppose) and for the ROS it was four (neutral). The difference in means between the two samples is significant.

Finally (Q. # 112) we posed a hypothetical situation involving the transfer of a farmer’s water rights to ten acres of land to a point far away from the point of origin, and stated:

Some people argue that this could be very helpful to people in the city or to a business that purchased those rights, because it would allow the rights to be transferred to places and uses where their economic value would be greater. Others argue that those 10 acres of land could never be irrigated again, and that transfers of this sort would lead to the eventual disappearance of farming communities and a way of life that is part of New Mexico’s culture and heritage.

Then we asked, “Using the scale from one to seven where one is strongly oppose and seven is strongly support, how do you feel about the transfer of water rights away from the areas where they were originally established?” In this anecdotal instance, the results were more strongly opposed to such a transfer than was the case for the more general question. Table 4.8 summarizes the distribution of responses for the MRG and ROS.

	<u>MRG</u>	<u>Rest of state</u>
DK/NA	3%	3%
1 – 3 (Oppose)	63%	65%
4 (Neutral)	12%	8%
5 – 7 (Support)	22%	24%

Table 4.8: Response to hypothetical situation involving water right transfer away from the community of origin

It is instructive to compare Tables 4.7 and 4.8. Though both groups shifted toward opposition given the hypothetical situation described in Q. 112, the greatest movement was in the ROS, from a sizeable minority opposed to water right marketing in general to almost two-thirds opposed in the specific instance described. (Forty-six percent of ROS respondents are “strongly opposed.” See Appendix A.)

Appendix A

Public Opinion Profile 40 – New Mexico Water Issues (March-May 2000) Question Wording, Response Frequencies and Descriptive Statistics

The following tables summarize all data collected for the water portion of the survey, including data on demographic questions that may be used as independent variables. Such factors may be associated with or help to explain differences in responses to the questions asked about water issues. The data come from two samples. The statewide sample (right hand column in the tables below) consists of a total of 1391 individuals, randomly drawn from around New Mexico. It includes 589 respondents who live within the Middle Rio Grande water planning region. The second sample is a randomly selected “oversample” of 567 residents of the MRG region. The “MRG” column below combines the responses of MRG residents from both the statewide sample and the oversample: $n = 589 + 567 = 1156$. The “Rest of state” column consists of 802 respondents in the statewide sample who do not live within the MRG water planning region. The number of respondents varies by question as some questions are not appropriate for all respondents and some respondents dropped out of the survey. Thus, the number of respondents asked each question is indicated for each question, as is the percentage of respondents who did not respond (“Don’t Know/No Answer” or “DK/NA”). Column percentages may not total 100 because of rounding error.

Question # 2. First, I would like to ask you a couple of background questions. What is the highest level of education you have completed?

	MRG (n=1156)	Rest of state (n=802)	Statewide (n=1391)
DK/NA	.1%	.1%	.1%
1 Elementary or some high school	4.3%	7.5%	6.0%
2 High school graduate/GED	23.1%	26.3%	24.8%
3 Trade or vocational certification	1.9%	1.5%	1.7%
4 Some college/Associates degree	31.8%	32.8%	32.5%
5 College graduate, or	23.4%	20.4%	21.4%
6 Post-grad degree	15.3%	11.4%	13.6%

Question # 3. How old are you?

	MRG (n=1156)	Rest of state (n=801)	Statewide (n=1390)
DK/NA	1.0%	.6%	1/0%
Mean	46.4	45.8	45.8
Standard Deviation	16.6	16.5	16.3
Median	45.5	44	45
Minimum	18	18	18
Maximum	90	89	89

Question # 4. As part of the survey, I am required to ask: are you male or female?

	MRG (n=1156)	Rest of state (n=802)	Statewide (n=1391)
DK/NA	.1%	.1%	.1%
0 Female	58.6%	59.8%	59.3%
1 Male	41.3%	40.0%	40.6%

[Note: Question # 5 is an IPP internal diagnostic tool and will not be reported here.]

Question # 6. What county do you live in?

	MRG (n=1156)	Rest of state (n=802)	Statewide (n=1391)
DK/NA	0.1%	0.1%	0.1%
1 Bernalillo	79.9%		33.4%
2 Catron		0.6%	0.4%
3 Chavez		7.4%	4.2%
4 Cibola		2.0%	1.2%
5 Colfax		1.9%	1.1%
6 Curry		3.6%	2.1%
7 De Baca		0.1%	0.1%
8 Dona Ana		16.6%	9.6%
9 Eddy		5.4%	3.1%
10 Grant		3.1%	1.8%
11 Guadalupe		0.4%	0.2%
12 Harding		0.1%	0.1%
13 Hidalgo		0.5%	0.3%
14 Lea		3.7%	2.2%
15 Lincoln		3.4%	1.9%
16 Los Alamos		2.2%	1.3%
17 Luna		1.2%	0.7%
18 McKinley		2.0%	1.2%
19 Mora		0.4%	0.2%
20 Otero		6.5%	3.7%
21 Quay		1.1%	0.7%
22 Rio Arriba		2.9%	1.7%
23 Roosevelt		3.2%	1.9%
24 Sandoval	12.3%		4.8%
25 San Juan		8.5%	4.9%
26 San Miguel		2.9%	1.7%
27 Santa Fe		11.3%	6.5%
28 Sierra		1.5%	0.9%
29 Socorro		1.6%	0.9%
30 Taos		3.9%	2.2%
31 Torrence		1.6%	0.9%
32 Union		0.23%	0.1%
33 Valencia	7.8%		4.2%

Question # 7. What is the Zip Code at your residence?

[Note: Not reported here. For distribution of responses by Zip Code and county, see attached map, Appendix D.]

Question # 8. Which of the following towns or communities do you live closest to: Tijeras, Chilili, Escobosa, Miera, or Yrisarri?

[Note: This question was used in conjunction with Zip Code information to exclude Bernalillo County residents living outside of the MRG water planning region from the oversample.]

Appendix A

Question # 9. Which of the following towns or communities do you live closest to: Counselors or Cuba?

[Note: This question was used in conjunction with Zip Code information to exclude Sandoval County residents living outside of the MRG water planning region from the oversample.]

Question # 10. Do you live in what people call "the Valley"? [Note: This question was asked only of residents of the MRG water planning region.]

	MRG (n=1137)	Rest of state (n=0)	Statewide (n=581)
DK/NA	3.7%	N/A	3.6%
0 No	76.0%	N/A	75.0%
1 Yes	20.3%	N/A	21.3%

[Note: Questions # 11 through # 37 were standard IPP Public Opinion Profile questions unrelated to the water issue, and are not reported here.]

Question # 38. Now I'm going to ask you some questions about where you live. First, do you consider yourself to be living in an urban, suburban, or rural setting?

	MRG (n=1156)	Rest of state (n=800)	Statewide (n=1389)
DK/NA	4.2%	5.0%	4.4%
1 Urban	44.2%	24.9%	32.3%
2 Suburban	32.8%	19.2%	25.5%
3 Rural	18.9%	50.9%	37.9%

Question # 39. Do you own or rent your home?

	MRG (n=1155)	Rest of state (n=799)	Statewide (n=1388)
DK/NA	1.6%	2.3%	1.8%
0 Rent	24.8%	20.2%	22.3%
1 Own	73.6%	77.6%	75.9%

Question # 40. Do you live in an apartment, attached unit like a duplex, or a single family home?

	MRG (n=1155)	Rest of state (n=799)	Statewide (n=1388)
DK/NA	1.0%	.6%	.8%
1 Apartment	11.9%	5.3%	8.1%
2 Attached unit / duplex	5.5%	6.1%	5.9%
3 Single family home	81.6%	88.0%	85.2%

[A "mobile home" counts as a "single-family home"]

SKIPS from Q40
IF q40<2 SKIP TO: 43

Question # 41. I would now like to know how much land is attached to your home. Is it:

	MRG (n=1007)	Rest of state (n=751)	Statewide (n=1264)
DK/NA	2.6%	3.2%	2.9%
1 A regular city lot	57.7%	40.7%	47.6%
2 Larger than a city lot and up to one-half acre	19.9%	16.2%	17.6%
3 More than one-half acre up to one acre	9.7%	12.2%	11.2%
4 More than one acre but not more than 5 acres	8.2%	16.2%	13.0%
5 More than 5 acres but not more than 10 acres	1.1%	3.5%	2.6%
6 More than 10 acres but not more than 40 acres	0.5%	3.2%	2.1%
7 40 acres or more	0.3%	4.7%	2.9%

Question # 42. Do you have a lawn that requires watering?

	MRG (n=1007)	Rest of state (n=750)	Statewide (n=1263)
DK/NA	.4%	.3%	.2%
0 No	34.6%	33.7%	34.5%
1 Yes	65.0%	66.0%	65.2%

Question # 43. What is your primary source of water for domestic use? Is it

	MRG (n=1157)	Rest of state (n=797)	Statewide (n=1385)
DK/NA	1.6%	.9%	1.2%
1 City utility	77.9%	56.0%	64.3%
2 Community system	8.9%	19.2%	15.2%
3 Well	9.9%	20.9%	16.6%
4 Other	1.6%	3.3%	2.7%

SKIPS from Q43

IF q43 ≠ 3 SKIP TO: 46

Question #44. Has the quality of your water gotten better, worse, or stayed about the same over the past five years?

	MRG (n=114)	Rest of state (n=165)	Statewide (n=230)
DK/NA	1.8%	4.2%	3.5%
1 Worse	8.8%	10.3%	8.7%
2 Stayed about the same	79.8%	81.2%	82.2%
3 Better	9.6%	4.2%	5.7%

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Question # 45. Has the water table in your area risen, fallen, or stayed about the same in the past five years?

	MRG (n=114)	Rest of state (n=165)	Statewide (n=230)
DK/NA	20.2%	13.9%	17.0%
1 Fallen	26.3%	37.6%	32.6%
2 Stayed about the same	48.2%	47.3%	48.3%
3 Risen	5.2%	1.2%	2.2%

Question # 46. Other than a lawn, do you irrigate any land?

[IF YES]: Is the source of the water from an acequia, an irrigation or conservancy district ditch system, a well, or a community water utility?

	MRG (n=1154)	Rest of state (n=797)	Statewide (n=1385)
DK/NA	.6%	.4%	.4%
0 No [do not irrigate]	90.4%	87.5%	88.6%
1 Acequia	0.8%	2.5%	1.9%
2 Irrigation/conservancy district	2.2%	4.6%	3.5%
3 Well	1.4%	2.3%	2.1%
4 Community water utility	4.7%	2.8%	3.5%

SKIPS from Q46
IF q46<1 SKIP TO: 49

Question # 47. Is any part of your irrigation water used to grow crops?

[IF YES]: Are those crops grown for your household or sold to others?

	MRG (n=104)	Rest of state (n=97)	Statewide (n=153)
DK/NA	2.9%	0%	1.3%
0 No	49.0%	33.0%	37.9%
1 Household consumption	44.2%	47.4%	47.7%
2 Sold to others	1.0%	15.5%	9.8%
3 Both	2.9%	4.1%	3.3%

SKIPS from Q47
IF q47<2 SKIP TO: 49

Question # 48. Is farming or ranching your primary occupation?

	MRG (n=4)	Rest of state (n=19)	Statewide (n=20)
DK/NA	0%	5.0%	5.0%
0 No	100.0%	52.6%	55.0%
1 Yes	0.0%	42.1%	40.0%

Question # 49. In the past year, have you spent time on or along any of the rivers or streams in New Mexico?

[IF YES]: How many times did you engage in recreational activities, such as boating or rafting; fishing; walking or hiking; or camping on or along New Mexico's rivers and streams in the past year?

[Note: Respondents reported a specific number of times. We have coded these into the categories displayed in this table.]

	MRG (n=1154)	Rest of state (n=797)	Statewide (n=1385)
DK/NA	1.6%	3.1%	2.7%
0 No	51.7%	49.2%	49.7%
1 One to five times	23.0%	21.8%	22.7%
2 Six to 12 times	12.3%	11.5%	11.6%
3 Thirteen to 24 times (up to twice a month)	5.2%	4.8%	5.1%
4 Twenty-five to 52 times (up to weekly)	3.9%	6.8%	5.7%
5 More often than weekly	2.3%	2.8%	2.5%

Question # 50. Using a scale from **one** to **seven** where **one means you strongly disagree** and **seven means you strongly agree**, please tell me how you feel about the following statements:

[Note: The order of the next 10 questions was randomized. Following the response frequencies, descriptive statistics are given for these questions, and the responses are shown in order of their decreasing means for the MRG region.]

51. If we want to improve our standard of living in New Mexico, we must use our water in ways that help our economy, even if the environment has to suffer.

	MRG (n=1146)	Rest of state (n=793)	Statewide (n=1377)
DK/NA	2.6%	3.2%	2.8%
1 Strongly disagree	28.0%	26.7%	27.8%
2	15.2%	12.4%	13.6%
3	14.3%	14.2%	14.0%
4	12.0%	12.4%	12.3%
5	13.6%	14.4%	13.8%
6	5.3%	4.8%	4.9%
7 Strongly agree	9.0%	12.0%	10.8%

52. The lack of water will severely limit population growth and economic development in New Mexico over the next 50 years.

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	MRG (n=1141)	Rest of state (n=793)	Statewide (n=1377)
DK/NA	3.6%	4.4%	4.1%
1 Strongly disagree	6.6%	7.2%	6.8%
2	6.2%	3.5%	4.5%
3	9.8%	7.3%	8.7%
4	10.6%	9.7%	10.3%
5	18.0%	16.0%	16.6%
6	12.6%	12.7%	12.7%
7 Strongly agree	32.5%	39.1%	36.4%

53. Keeping water in rivers to provide a green corridor and protect habitat for wildlife and vegetation is important.

	MRG (n=1141)	Rest of state (n=793)	Statewide (n=1377)
DK/NA	0.8%	0.6%	0.7%
1 Strongly disagree	2.8%	5.2%	4.3%
2	1.8%	1.6%	2.0%
3	3.7%	4.8%	4.6%
4	5.8%	5.8%	5.3%
5	11.6%	13.3%	13.1%
6	17.2%	11.3%	13.9%
7 Strongly agree	56.3%	57.3%	56.3%

54. To manage our water so there will be enough for all important uses will require all of us to use less and pay more.

	MRG (n=1143)	Rest of state (n=793)	Statewide (n=1376)
DK/NA	2.0%	3.2%	2.3%
1 Strongly disagree	15.4%	15.0%	15.6%
2	7.0%	7.1%	7.1%
3	9.9%	11.3%	11.0%
4	12.2%	11.3%	12.3%
5	19.5%	19.0%	18.4%
6	11.0%	8.6%	9.4%
7 Strongly agree	23.0%	24.3%	23.9%

55. We shouldn't put farmers out of business just so cities can grow.

	MRG (n=1148)	Rest of state (n=791)	Statewide (n=1376)
DK/NA	2.2%	1.3%	1.7%
1 Strongly disagree	11.6%	13.8%	12.7%
2	2.7%	2.0%	1.9%
3	3.0%	2.9%	2.9%
4	5.4%	4.2%	5.3%
5	10.8%	9.4%	9.7%
6	14.2%	10.2%	12.1%
7 Strongly agree	50.2%	56.1%	53.6%

56. Farmers waste a lot of water irrigating their fields.

	MRG (n=1149)	Rest of state (n=791)	Statewide (n=1377)
DK/NA	7.3%	5.6%	5.7%
1 Strongly disagree	28.6%	31.1%	30.2%
2	16.1%	13.9%	15.2%
3	13.8%	12.6%	13.4%
4	8.8%	8.7%	8.5%
5	11.7%	12.4%	12.6%
6	5.7%	4.7%	4.6%
7 Strongly agree	8.2%	11.0%	9.9%

57. If we keep pumping water from underground at the rate we're doing it now, we will deprive our children and grandchildren of the quality of life we've had.

	MRG (n=1145)	Rest of state (n=792)	Statewide (n=1376)
DK/NA	5.0%	4.8%	4.9%
1 Strongly disagree	7.8%	10.4%	9.3%
2	6.7%	6.4%	6.3%
3	10.7%	9.3%	10.0%
4	10.7%	10.4%	10.8%
5	15.7%	18.3%	17.3%
6	12.1%	9.3%	9.6%
7 Strongly agree	31.3%	31.1%	31.6%

58. It's important for New Mexicans to come to an agreement soon on a plan for managing our water to avoid increasing conflict over water in the future.

	MRG (n=1143)	Rest of state (n=792)	Statewide (n=1376)
DK/NA	1.7%	1.6%	1.4%
1 Strongly disagree	3.7%	5.6%	4.8%
2	1.8%	1.1%	1.6%
3	4.7%	4.3%	4.5%
4	7.0%	5.9%	7.0%
5	12.7%	12.6%	12.9%
6	15.7%	11.2%	12.6%
7 Strongly agree	52.7%	57.6%	55.2%

59. What I've heard about water issues is so complicated that people like me really can't have much say about how to manage it well.

	MRG (n=1148)	Rest of state (n=792)	Statewide (n=1377)
DK/NA	1.7%	2.3%	2.0%
1 Strongly disagree	30.7%	27.9%	28.6%
2	15.2%	11.6%	14.1%
3	12.8%	11.7%	11.4%
4	9.6%	10.7%	10.6%
5	11.8%	12.9%	12.6%
6	5.9%	5.3%	5.1%
7 Strongly agree	12.4%	17.6%	15.7%

60. Even if we can't come to an agreement on how to manage water in New Mexico, things will work out all right.

	MRG	Rest of state	Statewide
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	(n=1145)	(n=791)	(n=1375)
DK/NA	1.7%	1.4%	1.2%
1 Strongly disagree	29.4%	27.9%	29.0%
2	16.1%	13.5%	14.6%
3	16.1%	14.3%	14.5%
4	10.7%	12.9%	11.9%
5	11.6%	13.4%	13.6%
6	5.1%	4.6%	4.5%
7 Strongly agree	8.6%	12.0%	10.7%

Descriptive statistics, Q. #51-60

	Statistic	MRG	Rest of state	Statewide
# 53. Keeping water in rivers to provide a green corridor and protect habitat for wildlife and vegetation is important.	Mean Median	6.01 7	5.86 7	5.89 7
# 58. It's important for New Mexicans to come to an agreement soon on a plan for managing our water to avoid increasing conflict over water in the future.	Mean Median	5.86 7	5.88 7	5.84 7
# 55. We shouldn't put farmers out of business just so cities can grow.	Mean Median	5.50 7	5.52 7	5.52 7
# 52. The lack of water will severely limit population growth and economic development in New Mexico over the next 50 years.	Mean Median	5.02 5	5.28 6	5.16 6
# 57. If we keep pumping water from underground at the rate we're doing it now, we will deprive our children and grandchildren of the quality of life we've had.	Mean Median	4.90 5	4.81 5	4.85 5
# 54. To manage our water so there will be enough for all important uses will require all of us to use less and pay more.	Mean Median	4.41 5	4.40 5	4.38 5
# 59. What I've heard about water issues is so complicated that people like me really can't have much say about how to manage it well.	Mean Median	3.24 3	3.56 3	3.43 3
# 51. If we want to improve our standard of living in New Mexico, we must use our water in ways that help our economy, even if the environment has to suffer.	Mean Median	3.20 3	3.39 3	3.29 3
# 56. Farmers waste a lot of water irrigating their fields.	Mean Median	3.09 3	3.16 3	3.12 3
# 60. Even if we can't come to an agreement on how to manage water in New Mexico, things will work out all right.	Mean Median	3.08 3	3.32 3	3.23 3

Question # 61 Page # 61

Using a scale from **zero** to **ten** where **zero is not at all important** and **ten is extremely important**, how important, overall, do you consider water issues in New Mexico to be?

	MRG (n=1137)	Rest of state (n=790)	Statewide (n=1369)

DK/NA	0.7%	0.8%	0.7%
0 Not at all important	0.4%	0.4%	0.4%
1	0.5%	0.5%	0.5%
2	0.4%	0.3%	0.4%
3	1.0%	0.4%	0.7%
4	1.1%	0.9%	1.2%
5	6.9%	7.5%	7.6%
6	5.1%	4.4%	4.5%
7	15.0%	10.9%	13.5%
8	19.9%	19.6%	18.7%
9	8.7%	6.7%	7.5%
10 Extremely important	40.5%	47.7%	44.3%

Descriptive statistics, Q. #61

	MRG (n=1137)	Rest of state (n=790)	Statewide (n=1369)
Mean	8.26	8.47	8.33
Standard Deviation	1.92	1.91	1.95
Median	8	9	9

Question # 62. Now I would like to ask you about some specific water issues. Please rate each issue on a scale from **one to seven** where **one means not an important problem** and **seven means an extremely important problem**.

[Note: The order of the next 7 questions was randomized. Following the response frequencies, descriptive statistics are given for these questions, and the responses are shown in order of their decreasing means for the MRG region.]

63. The quality of the water that my family and I drink and bathe in.

	MRG (n=1129)	Rest of state (n=786)	Statewide (n=1361)
DK/NA	0.5%	0.6%	0.5%
1 Not an important problem	2.2%	4.3%	3.3%
2	1.7%	2.0%	1.6%
3	2.7%	2.4%	2.8%
4	3.8%	3.7%	3.7%
5	11.4%	10.6%	11.1%
6	14.0%	12.2%	13.2%
7 An extremely important problem	63.6%	64.1%	63.8%

64. The rate at which we are using up the underground water supply.

	MRG (n=1130)	Rest of state (n=787)	Statewide (n=1361)
DK/NA	4.8%	7.8%	6.1%
1 Not an important problem	2.0%	2.3%	2.3%
2	2.1%	1.5%	1.9%
3	4.8%	4.7%	4.8%
4	9.2%	8.5%	9.3%
5	19.3%	22.2%	20.6%
6	18.4%	12.5%	14.8%
7 An extremely important problem	39.4%	40.5%	40.3%

65. Whether New Mexico can meet its legal obligations to deliver water to Texas and Mexico, and still have enough water to meet the needs of New Mexicans.

	MRG	Rest of state	Statewide

Appendix A

	(n=1131)	(n=785)	(n=1363)
DK/NA	6.5%	6.6%	6.4
1 Not an important problem	8.6%	10.4%	10.2
2	4.8%	5.7%	5.8
3	8.2%	7.1%	7.6
4	10.5%	8.7%	9.8
5	17.9%	16.2%	16.1
6	14.9%	10.3%	12.7
7 An extremely important problem	28.4%	34.9%	31.5

66. Whether there is enough water to maintain residential lawns and gardens.

	MRG (n=1131)	Rest of state (n=785)	Statewide (n=1363)
DK/NA	2.0%	2.2%	2.1%
1 Not an important problem	11.0%	10.4%	10.9%
2	11.1%	10.2%	10.4%
3	15.0%	16.3%	16.0%
4	15.5%	11.7%	13.2%
5	22.5%	22.7%	22.6%
6	8.0%	8.0%	8.1%
7 An extremely important problem	15.0%	18.6%	16.7%

67. Having enough water in our rivers to protect endangered fish and to keep the trees, vegetation, and other wildlife along the riverbanks healthy.

	MRG (n=1128)	Rest of state (n=786)	Statewide (n=1361)
DK/NA	0.9%	1.0%	1.1%
1 Not an important problem	2.0%	3.4%	2.9%
2	2.0%	1.7%	2.1%
3	5.8%	5.1%	5.2%
4	6.7%	8.9%	8.9%
5	17.1%	16.2%	16.2%
6	19.3%	16.4%	18.0%
7 An extremely important problem	46.2%	47.3%	45.7%

68. Making enough water available to attract and keep high-tech industries that offer good-paying jobs in the region.

	MRG (n=1128)	Rest of state (n=786)	Statewide (n=1361)
DK/NA	1.9%	2.9%	2.3%
1 Not an important problem	6.7%	6.0%	6.5%
2	5.0%	4.7%	4.8%
3	8.9%	7.4%	7.9%
4	14.1%	14.1%	13.8%
5	25.2%	26.0%	26.5%
6	14.2%	14.4%	13.4%
7 An extremely important problem	23.9%	24.6%	24.9%

69. Whether population and economic growth are out of balance with the limited water resources of the state.

	MRG (n=1131)	Rest of state (n=787)	Statewide (n=1365)

DK/NA	5.0%	8.1%	6.6%
1 Not an important problem	4.1%	4.2%	4.8%
2	3.2%	1.5%	2.3%
3	8.0%	5.0%	6.6%
4	11.6%	13.3%	12.9%
5	26.3%	26.7%	25.6%
6	16.5%	12.2%	14.2%
7 An extremely important problem	25.3%	28.0%	27.0%

Descriptive statistics, Q. #63-69

	Statistic	MRG	Rest of state	Statewide
# 63. The quality of the water that my family and I drink and bathe in.	Mean	6.19	6.09	6.14
	Median	7	7	7
# 67. Having enough water in our rivers to protect endangered fish and to keep the trees, vegetation, and other wildlife along the riverbanks healthy.	Mean	5.80	5.74	5.73
	Median	6	6	6
# 64. The rate at which we are using up the underground water supply.	Mean	5.67	5.67	5.66
	Median	6	6	6
# 69. Whether population and economic growth are out of balance with the limited water resources of the state.	Mean	5.14	5.23	4.93
	Median	5	5	5
# 65. Whether New Mexico can meet its legal obligations to deliver water to Texas and Mexico, and still have enough water to meet the needs of New Mexicans.	Mean	4.96	4.98	4.92
	Median	5	5	5
# 68. Making enough water available to attract and keep high-tech industries that offer good-paying jobs in the region.	Mean	4.88	4.97	4.93
	Median	5	5	5
# 66. Whether there is enough water to maintain residential lawns and gardens.	Mean	4.14	4.27	4.20
	Median	4	5	4

Question # 70. Now, think about how these issues are being managed. Using a scale from **one** to **seven** where **one** is **very poor** and **seven** is **very good**, how would you rate the job that the government agencies in charge of managing water are doing?

	MRG (n=1123)	Rest of state (n=769)	Statewide (n=1352)
DK/NA	8.0%	9.1%	9.0%
1 Very poor	8.8%	9.1%	9.2%
2	6.3%	9.5%	8.0%
3	18.1%	13.7%	15.7%
4	20.4%	19.0%	18.9%
5	27.8%	26.8%	27.7%
6	6.7%	6.2%	6.4%
7 Very good	3.9%	6.5%	5.2%

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Descriptive statistics, Q. # 70

	MRG (n=1123)	Rest of state (n=779)	Statewide (n=1352)
Mean	3.96	3.99	3.96
Standard Deviation	1.52	1.64	1.59
Median	4	4	4

Question # 71. As you probably know, there are many competing demands for the water found underground and in New Mexico's rivers, lakes, and streams. These demands come from cities, households, agriculture, industry, and from the environment. I will read you a list of possible uses of water. Using a scale from **zero** to **ten** where **zero means that you do not care whether water is available for that use** and **ten means that you want to be sure that water is available for that use**, please rate the value you personally place on each of the following uses of water.

[Note: The order of the next 12 questions was randomized. (Question 84 was left at the end of the series as a lead-in to Question 85.) Following the response frequencies, descriptive statistics are given for these questions, and the responses are shown in order of their decreasing means for the MRG region.]

72. Irrigation for farms

	MRG (n=1113)	Rest of state (n=769)	Statewide (n=1339)
DK/NA	0.3%	0.7%	0.6%
0 Do not care whether water is available	0.4%	0.4%	0.4%
1	0.9%	1.2%	1.1%
2	0.8%	0.4%	0.5%
3	1.8%	1.3%	1.7%
4	2.2%	2.1%	1.9%
5	9.8%	8.8%	9.1%
6	11.6%	6.6%	8.4%
7	19.7%	16.3%	17.1%
8	16.2%	16.4%	15.3%
9	9.1%	8.1%	8.6%
10 Want to be sure that water is available	27.3%	37.8%	34.2%

73. Watering golf courses

	MRG (n=1112)	Rest of state (n=771)	Statewide (n=1341)
DK/NA	0.2%	0.9%	0.6%
0 Do not care whether water is available	18.8%	21.1%	20.4%
1	14.3%	18.8%	16.9%
2	12.1%	11.0%	11.5%
3	12.6%	10.2%	11.7%
4	9.8%	9.6%	9.2%
5	16.3%	15.4%	15.6%
6	4.9%	3.5%	3.7%
7	4.9%	2.9%	4.0%
8	1.8%	1.9%	2.0%
9	0.5%	0.3%	0.4%
10 Want to be sure that water is available	3.7%	4.3%	4.0%

74. Recreation, such as fishing and rafting

	MRG (n=1114)	Rest of state (n=769)	Statewide (n=1339)
DK/NA	0.3%	0.9%	0.6%
0 Do not care whether water is available	1.6%	1.6%	1.6%
1	1.9%	3.3%	2.8%
2	3.4%	2.2%	2.8%
3	5.8%	5.9%	5.5%
4	8.3%	7.4%	8.5%
5	23.3%	21.8%	22.0%
6	11.2%	9.5%	10.2%
7	15.4%	12.4%	12.9%
8	11.3%	11.2%	11.6%
9	3.8%	2.7%	3.2%
10 Want to be sure that water is available	13.6%	21.2%	18.3%

75. New industrial uses, such as manufacturing processes

	MRG (n=1114)	Rest of state (n=769)	Statewide (n=1339)
DK/NA	1.2%	1.4%	1.3%
0 Do not care whether water is available	3.8%	3.4%	3.7%
1	5.1%	4.0%	4.4%
2	4.2%	5.9%	5.2%
3	9.3%	7.6%	8.0%
4	9.2%	10.7%	11.3%
5	24.7%	23.7%	23.2%
6	11.3%	9.6%	10.0%
7	12.7%	13.3%	12.6%
8	9.2%	9.5%	9.5%
9	2.3%	2.3%	2.5%
10 Want to be sure that water is available	7.1%	8.7%	8.2%

76. Indoor use in existing homes

	MRG (n=1112)	Rest of state (n=770)	Statewide (n=1340)
DK/NA	0.3%	0.8%	0.5%
0 Do not care whether water is available	0.5%	0.0%	0.3%
1	0.5%	1.6%	1.1%
2	0.5%	0.4%	0.4%
3	0.9%	0.9%	0.8%
4	1.9%	1.9%	2.1%
5	7.9%	7.4%	7.5%
6	7.6%	6.0%	6.9%
7	15.5%	12.6%	13.3%
8	13.3%	13.1%	13.5%
9	8.0%	6.1%	6.6%
10 Want to be sure that water is available	43.1%	49.2%	47.0%

Appendix A

77. Watering existing yards and landscaping

	MRG (n=1114)	Rest of state (n=771)	Statewide (n=1341)
DK/NA	0.2%	0.6%	0.5%
0 Do not care whether water is available	6.1%	4.7%	5.1%
1	6.2%	7.8%	6.7%
2	10.0%	10.1%	9.7%
3	14.3%	11.1%	13.3%
4	12.1%	11.9%	12.6%
5	23.8%	24.4%	23.4%
6	8.6%	7.4%	7.8%
7	8.6%	9.7%	9.4%
8	4.8%	5.8%	5.7%
9	1.3%	1.0%	1.1%
10 Want to be sure that water is available	4.0%	5.4%	4.8%

78. Indoor use in new housing developments

	MRG (n=1112)	Rest of state (n=770)	Statewide (n=1340)
DK/NA	0.8%	1.3%	1.1%
0 Do not care whether water is available	2.1%	1.4%	1.8%
1	2.8%	1.7%	1.9%
2	3.2%	2.1%	2.7%
3	4.9%	4.3%	4.3%
4	4.9%	6.1%	5.4%
5	18.6%	17.1%	17.2%
6	8.3%	6.9%	7.2%
7	16.0%	15.1%	15.4%
8	11.6%	12.3%	12.5%
9	4.4%	5.5%	4.9%
10 Want to be sure that water is available	22.9%	26.2%	25.4%

79. Use for yards and landscaping in new developments

	MRG (n=1114)	Rest of state (n=770)	Statewide (n=1340)
DK/NA	0.3%	0.6%	0.5%
0 Do not care whether water is available	8.8%	6.8%	7.6%
1	10.2%	11.2%	10.2%
2	13.6%	12.7%	12.7%
3	14.4%	11.8%	13.9%
4	13.0%	12.9%	13.0%
5	19.4%	19.5%	19.3%
6	6.3%	6.2%	6.1%
7	6.5%	7.7%	7.3%
8	2.9%	3.6%	3.7%
9	1.1%	0.5%	0.6%
10 Want to be sure that water is available	3.6%	6.5%	5.0%

80. Swimming pools for individual homes

	MRG (n=1113)	Rest of state (n=770)	Statewide (n=1340)
DK/NA	0.5%	0.6%	0.5%
0 Do not care whether water is available	19.1%	20.9%	19.6%
1	20.7%	24.2%	22.5%
2	15.4%	15.3%	15.8%
3	13.0%	10.0%	12.0%
4	9.1%	7.1%	7.9%
5	11.3%	11.3%	10.9%
6	3.0%	2.2%	2.2%
7	2.9%	2.6%	2.8%
8	2.0%	0.8%	1.5%
9	0.4%	0.6%	0.5%
10 Want to be sure that water is available	2.5%	4.3%	3.6%

81. Community parks and sports fields

	MRG (n=1113)	Rest of state (n=769)	Statewide (n=1339)
DK/NA	0.5%	0.8%	0.7%
0 Do not care whether water is available	2.5%	2.6%	2.5%
1	2.3%	4.7%	3.7%
2	3.4%	4.8%	4.3%
3	8.4%	7.8%	8.4%
4	9.6%	9.8%	10.1%
5	24.5%	26.3%	25.3%
6	12.8%	11.4%	11.4%
7	15.4%	10.8%	12.8%
8	9.8%	6.2%	7.7%
9	2.5%	2.4%	2.4%
10 Want to be sure that water is available	8.3%	12.4%	10.9%

82. Providing food and refuge for fish, birds and other animals

	MRG (n=1114)	Rest of state (n=771)	Statewide (n=1341)
DK/NA	0.0%	0.6%	0.4%
0 Do not care whether water is available	0.7%	0.4%	0.5%
1	0.9%	1.0%	1.0%
2	0.6%	1.4%	1.1%
3	2.0%	2.5%	2.4%
4	3.2%	3.2%	3.4%
5	12.3%	14.3%	13.1%
6	10.7%	8.2%	9.0%
7	16.4%	14.4%	14.6%
8	16.2%	13.4%	14.5%
9	6.3%	7.3%	7.5%
10 Want to be sure that water is available	30.7%	33.3%	32.7%

Appendix A

83. Cultural and religious uses in some villages and pueblos

	MRG (n=1113)	Rest of state (n=770)	Statewide (n=1340)
DK/NA	2.4%	3.4%	2.5%
0 Do not care whether water is available	2.6%	3.0%	3.0%
1	3.2%	2.7%	2.8%
2	3.3%	3.0%	3.5%
3	4.8%	5.6%	5.2%
4	6.6%	7.5%	7.7%
5	18.4%	16.2%	19.1%
6	8.3%	9.3%	9.0%
7	14.7%	11.2%	12.2%
8	12.7%	9.9%	10.7%
9	4.6%	4.3%	4.5%
10 Want to be sure that water is available	18.4%	20.9%	19.8%

84. Preserving the native cottonwood forest and vegetation along river banks known as the bosque, that creates habitat for a variety of different animal species

	MRG (n=1111)	Rest of state (n=769)	Statewide (n=1339)
DK/NA	0.5	1.0	0.6
0 Do not care whether water is available	0.4	1.0	0.7
1	0.9	1.4	1.3
2	0.8	1.6	1.3
3	2.7	2.2	2.8
4	2.9	3.5	3.4
5	8.7	12.9	10.7
6	10.2	8.8	8.9
7	18.2	13.7	15.0
8	14.2	13.9	14.4
9	8.6	6.4	7.3
10 Want to be sure that water is available	32.0	33.6	33.4

Descriptive statistics, Q. #72-84

	Statistic	MRG	Rest of state	Statewide
# 76. Indoor use in existing homes	Mean	8.17	8.32	8.26
	Median	9	9	9
# 84. Preserving the native cottonwood forest and vegetation along river banks known as the bosque, that creates habitat for a variety of different animal species	Mean	7.69	7.50	7.58
	Median	8	8	8
# 72. Irrigation for farms	Mean	7.59	7.99	7.85
	Median	8	8	8
# 82. Providing food and refuge for fish, birds and other animals	Mean	7.54	7.56	7.58
	Median	8	8	8
# 78. Indoor use in new housing developments	Mean	6.62	6.94	6.86
	Median	7	7	7
# 83. Cultural and religious uses in some villages and pueblos	Mean	6.38	6.34	6.31
	Median	7	6	6
# 74. Recreation, such as fishing and rafting	Mean	6.14	6.40	6.30
	Median	6	6	6
# 81. Community parks and sports fields	Mean	5.66	5.52	5.58
	Median	5	5	5

# 75. New industrial uses, such as manufacturing processes	Mean Median	5.29 5	5.41 5	5.36 5
# 77. Watering existing yards and landscaping	Mean Median	4.40 5	4.57 5	4.51 5
# 79. Use for yards and landscaping in new developments	Mean Median	3.82 4	4.14 4	4.01 4
# 73. Watering golf courses	Mean Median	3.18 3	2.93 2	3.02 3
# 80. Swimming pools for individual homes	Mean Median	2.68 2	2.58 2	2.64 2

Question # 85. The Middle Rio Grande valley is a 160 mile stretch of river that runs from Cochiti Dam about 35 miles north of Albuquerque to Elephant Butte Lake in Socorro County. In this valley the bosque is changing. As more water is taken from the river, cottonwoods and other native vegetation have difficulty surviving and are being replaced by non-native vegetation like salt cedar and Russian olive. Some people believe that the bosque is a valuable environmental resource that is being lost because more water is being taken from the river for use in households, farms, public parks, and businesses. Other people believe that it is more valuable to use this water to create jobs and promote economic growth than to protect the bosque. If you had to decide how to manage this stretch of the Rio Grande, would you:

	MRG (n=1108)	Rest of state (n=768)	Statewide (n=1337)
DK/NA	2.5%	3.1%	2.7%
1. Definitely keep more water in the river	29.2%	28.0%	28.7%
2. Probably keep more water in the river	45.1%	42.3%	42.6%
3. Probably use more water for growth and development, or	16.7%	19.8%	18.6%
4. Definitely use more water for growth and development	6.4%	6.8%	7.3%

Question # 86, Using a scale from **one** to **seven** where **one** means you **strongly disagree** and **seven** means you **strongly agree**, please tell me how much you disagree or agree with the following two statements:

Question # 87. Approval of new housing or business developments should depend on demonstrating that a long-term water supply is available.

	MRG (n=1103)	Rest of state (n=766)	Statewide (n=1331)
DK/NA	0.8	1.8	1.3
1 Strongly disagree	6.1	5.2	5.1
2	2.4	2.2	2.4
3	4.7	6.0	5.9
4	6.5	4.8	5.8
5	12.6	14.4	13.8
6	15.0	12.7	12.5
7 Strongly agree	51.9	52.9	53.0

Appendix A

Descriptive statistics, Q. 87

	MRG (n=1103)	Rest of state (n=766)	Statewide (n=1331)
Mean	5.72	5.75	5.74
Standard Deviation	1.78	1.75	1.75
Median	7	7	7

Question # 88. All water use should be metered to ensure that people with wells, irrigation ditches, or other sources of water are paying for the amount of water they use.

	MRG (n=1101)	Rest of state (n=763)	Statewide (n=1327)
DK/NA	2.5%	1.4%	1.8%
1 Strongly disagree	7.7%	10.1%	9.3%
2	3.8%	4.2%	3.8%
3	5.1%	4.8%	5.1%
4	5.7%	6.7%	6.6%
5	15.6%	13.7%	14.8%
6	14.5%	11.4%	13.1%
7 Strongly agree	45.0%	47.6%	45.3%

Descriptive statistics, Q. #88

	MRG (n=1101)	Rest of state (n=763)	Statewide (n=1327)
Mean	5.47	5.38	5.39
Standard Deviation	1.91	2.05	2.00
Median	6	6	6

Question # 89. Some climate scientists suggest that New Mexico and the Southwest are entering into a lengthy period of drought, such as occurred in the 1950s. Using a scale from **one** to **seven** where **one means that it is very unlikely** and **seven means that it is very likely**, how likely do you think it is that a lengthy period of drought is beginning in New Mexico?

	MRG (n=1100)	Rest of state (n=763)	Statewide (n=1325)
DK/NA	7.3%	5.2%	6.3%
1 Drought is very unlikely	4.3%	3.1%	3.1%
2	2.5%	1.3%	1.8%
3	8.3%	5.6%	7.5%
4	12.9%	11.3%	11.5%
5	26.4%	25.0%	25.1%
6	15.5%	17.4%	16.5%
7 Drought is very likely	22.9%	30.9%	28.2%

Descriptive statistics, Q. #89

	MRG (n=1100)	Rest of state (n=763)	Statewide (n=1325)
Mean	5.08	5.42	5.30
Standard Deviation	1.62	1.52	1.56
Median	5	6	5

Question # 90. Have you lived in New Mexico during a drought?

	MRG (n=1099)	Rest of state (n=763)	Statewide (n=1325)
DK/NA	4.9%	3.5%	4.0%
0 No	50.9%	44.4%	46.5%
1 Yes	44.2%	52.0%	49.5%

SKIPS from Q90
IF q90<1 SKIP TO: 93

Question # 91. Did you use water differently during the drought?

	MRG (n=485)	Rest of state (n=397)	Statewide (n=655)
DK/NA	4.9%	4.5%	5.0%
0 No	23.5%	20.4%	20.9%
1 Yes	71.5%	75.1%	74.0%

SKIPS from Q91
IF q91<1 SKIP TO: 93

Question # 92. What did you do that was different from how you use water during non-drought periods?

[Note: Consolidated verbatim responses (up to 250 characters) will be found at Appendix B.]

Question # 93. For the next seven questions we are interested in how likely individuals and families would be to take specific actions to save water in a drought. Using a scale from **zero** to **ten** where **zero means you and your family definitely would not take the action**, and **ten means you and your family definitely would do so**, how likely would you and your family be to take the following actions to save water during a drought?

[Note: The order of the next 7 questions was randomized. Following the response frequencies, descriptive statistics are given for these questions, and the responses are shown in order of their decreasing means for the MRG region.]

94. Greatly reduce or eliminate outdoor watering

	MRG (n=1086)	Rest of state (n=761)	Statewide (n=1316)
DK/NA	0.8%	0.4%	0.6%
0 Definitely would not take this action	1.4%	1.1%	1.3%
1	1.2%	1.8%	1.8%
2	1.5%	1.7%	1.7%
3	2.2%	1.8%	1.7%
4	2.0%	1.8%	1.9%
5	10.1%	9.7%	9.8%
6	4.8%	5.1%	5.0%
7	11.1%	10.0%	11.0%
8	14.4%	11.8%	12.9%
9	9.8%	7.1%	8.8%
10 Definitely would take this action	40.9%	47.6%	43.4%

Appendix A

95. Eliminate washing your car

	MRG (n=1086)	Rest of state (n=761)	Statewide (n=1316)
DK/NA	0.7%	0.8%	0.7%
0 Definitely would not take this action	2.6%	3.5%	3.4%
1	2.5%	1.8%	2.0%
2	1.9%	1.3%	1.3%
3	2.7%	2.1%	2.5%
4	2.9%	2.1%	2.1%
5	7.5%	6.7%	6.8%
6	2.9%	3.7%	3.2%
7	9.4%	8.3%	8.5%
8	8.9%	7.9%	8.7%
9	6.3%	7.0%	6.9%
10 Definitely would take this action	51.7%	54.8%	54.0%

96. Take fewer baths or showers

	MRG (n=1086)	Rest of state (n=760)	Statewide (n=1315)
DK/NA	1.0%	0.5%	0.8%
0 Definitely would not take this action	6.8%	6.8%	6.8%
1	8.4%	7.8%	8.1%
2	6.4%	6.2%	6.4%
3	5.9%	5.7%	5.8%
4	3.9%	3.7%	3.7%
5	12.7%	13.2%	13.3%
6	6.1%	5.1%	5.0%
7	10.9%	8.3%	9.1%
8	11.6%	12.0%	12.4%
9	5.2%	3.3%	4.3%
10 Definitely would take this action	21.1%	27.5%	24.4%

97. Flush your toilet less often

	MRG (n=1087)	Rest of state (n=761)	Statewide (n=1317)
DK/NA	0.7	0.9	0.8
0 Definitely would not take this action	6.6	7.5	7.2
1	7.5	5.5	6.4
2	3.9	3.9	4.0
3	4.3	3.5	3.9
4	3.7	3.0	3.3
5	12.1	10.0	11.4
6	4.2	4.3	3.8
7	8.4	8.5	8.1
8	9.5	11.0	10.1
9	5.4	4.6	5.3
10 Definitely would take this action	33.7	37.1	35.5

98. Reuse water from bathing, laundry, or washing dishes for outdoor use

	MRG (n=1086)	Rest of state (n=761)	Statewide (n=1316)
DK/NA	1.0%	1.0%	1.1%
0 Definitely would not take this action	3.9%	5.8%	5.1%
1	5.5%	5.3%	5.1%
2	2.7%	3.0%	3.0%
3	5.0%	2.6%	3.8%
4	3.1%	2.5%	3.3%
5	10.2%	8.0%	8.7%
6	4.7%	3.7%	3.5%
7	9.8%	9.3%	9.6%
8	9.1%	7.8%	8.4%
9	7.1%	3.8%	5.2%
10 Definitely would take this action	37.9%	47.2%	43.3%

99. Replace grass with drought-tolerant plants for landscaping

	MRG (n=1086)	Rest of state (n=760)	Statewide (n=1315)
DK/NA	2.2%	1.6%	1.6%
0 Definitely would not take this action	2.1%	5.0%	4.0%
1	2.7%	2.5%	2.7%
2	1.2%	2.0%	1.7%
3	2.4%	2.0%	1.7%
4	1.8%	1.4%	1.7%
5	7.7%	7.2%	7.5%
6	3.1%	4.3%	3.7%
7	10.1%	9.7%	10.2%
8	9.0%	10.8%	10.2%
9	7.1%	4.5%	6.0%
10 Definitely would take this action	50.6%	48.9%	48.8%

100. Install low-flow toilets and water fixtures in your home

	MRG (n=1086)	Rest of state (n=760)	Statewide (n=1315)
DK/NA	2.6%	1.7%	1.9%
0 Definitely would not take this action	3.6%	3.6%	3.7%
1	3.3%	2.5%	2.4%
2	1.7%	1.6%	1.6%
3	1.6%	0.9%	1.4%
4	2.3%	1.2%	1.7%
5	5.1%	7.2%	6.2%
6	3.1%	3.8%	3.6%
7	9.6%	9.6%	9.1%
8	8.6%	7.8%	8.0%
9	6.4%	5.1%	5.9%
10 Definitely would take this action	51.1%	55.0%	54.5%

Appendix A

Descriptive statistics, Q. # 94-100

	Statistic	MRG	Rest of state	Statewide
# 99. Replace grass with drought-tolerant plants for landscaping	Mean	8.07	7.77	7.86
	Median	10	9	9
# 95. Eliminate washing your car	Mean	7.97	8.14	8.10
	Median	10	10	10
# 94. Greatly reduce or eliminate outdoor watering	Mean	7.93	8.06	7.96
	Median	9	9	9
# 100. Install low-flow toilets and water fixtures in your home	Mean	7.93	8.12	8.10
	Median	10	10	10
# 98. Reuse water from bathing, laundry, or washing dishes for outdoor use	Mean	7.09	7.33	7.22
	Median	8	9	8
# 97. Flush your toilet less often	Mean	6.53	6.79	6.66
	Median	7	8	8
# 96. Take fewer baths or showers	Mean	5.87	6.10	6.00
	Median	6	7	7

Question # 101. Local governments can take actions in a time of drought to get their citizens to save water . Using a scale from **one** to **seven** where **one means you strongly oppose the action** and **seven means you strongly support it**, how do you feel about the following steps your local government might take to save water during a drought?

[Note: The order of the next 4 questions was randomized. Following the response frequencies, descriptive statistics are given for these questions, and the responses are shown in order of their decreasing means for the MRG region.]

102. Encourage voluntary efforts to save water

	MRG (n=1080)	Rest of state (n=758)	Statewide (n=1310)
DK/NA	0.6%	0.4%	0.5%
1 Strongly oppose the action	1.2%	3.2%	2.4%
2	0.6%	0.7%	0.6%
3	1.3%	0.8%	1.0%
4	1.9%	1.1%	1.5%
5	5.6%	6.7%	6.1%
6	8.2%	5.9%	7.3%
7 Strongly support the action	80.4%	81.3%	80.7%

103. Raise the price of water for all households and businesses

	MRG (n=1081)	Rest of state (n=758)	Statewide (n=1310)
DK/NA	1.4%	1.3%	1.2%
1 Strongly oppose the action	21.7%	24.4%	23.8%
2	7.2%	8.7%	7.9%
3	10.7%	8.0%	8.6%
4	10.5%	10.0%	10.5%
5	21.9%	21.1%	21.1%
6	8.4%	7.7%	8.2%
7 Strongly support the action	18.0%	18.7%	18.8%

104. Set water rates so that the biggest users pay the highest rates

	MRG (n=1081)	Rest of state (n=758)	Statewide (n=1310)
DK/NA	1.5%	1.8%	1.7%
1 Strongly oppose the action	5.5%	8.7%	7.5%
2	1.8%	2.5%	2.4%
3	3.1%	4.2%	3.8%
4	5.0%	5.8%	5.4%
5	11.2%	12.8%	12.3%
6	12.4%	11.5%	11.6%
7 Strongly support the action	59.6%	52.6%	55.3%

105. Require limits on water use, such as watering only at certain hours or on certain days

	MRG (n=1082)	Rest of state (n=758)	Statewide (n=1311)
DK/NA	0.6%	0.7%	0.5%
1 Strongly oppose the action	2.9%	3.4%	3.4%
2	0.7%	1.5%	1.1%
3	1.9%	2.2%	2.4%
4	1.9%	3.3%	2.7%
5	7.2%	6.1%	6.8%
6	11.4%	9.1%	9.7%
7 Strongly support the action	73.4%	73.7%	73.5%

Descriptive statistics, Q. # 102-105

	Statistic	MRG	Rest of state	Statewide
# 102. Encourage voluntary efforts to save water	Mean Median	6.59 7	6.52 7	6.55 7
# 105. Require limits on water use, such as watering only at certain hours or on certain days	Mean Median	6.39 7	6.32 7	6.33 7
# 104. Set water rates so that the biggest users pay the highest rates	Mean Median	5.95 7	5.60 7	5.73 7
# 103. Raise the price of water for all households and businesses	Mean Median	4.02 4	3.94 4	3.98 4

Question # 106. Long before Europeans came to what is now New Mexico, Indian tribes and Pueblos founded communities along the Rio Grande and other streams and used water for agricultural and other purposes. Recognizing this history, the United States has promised to protect tribes' and Pueblos' rights to enough water to meet their current and future needs for economic development. With this in mind, please tell me which of the following statements best represents your view about how Indian water rights should be treated in developing water management plans for New Mexico?

	MRG (n=1079)	Rest of state (n=757)	Statewide (n=1307)
DK/NA	2.1%	2.6%	2.5%
Planners should consider Indian water rights first, before those of other users.	18.4%	20.7%	18.9%
Planners should treat Indian and non-Indian water rights the same.	75.8%	73.8%	75.4%
Planners should consider non-Indian water rights first, before those of Indian tribes.	3.6%	2.8%	3.1%

Appendix A

Question # 107. The use of river water for agricultural, industrial, and residential purposes takes water out of the river channel. In dry years, taking water from the river can reduce its flow to very low levels, even drying up some stretches. This may severely reduce populations of some kinds of fish. The low water levels may also harm the streamside wetlands and woodlands, reducing the habitat for birds and animals. In addition, low water levels can reduce recreational and cultural uses of the river. Using a scale from **zero** to **ten** where **zero means not at all important** and **ten means extremely important**, how important do you think it is to keep more water in New Mexico's rivers and streams in dry years?

	MRG (n=1076)	Rest of state (n=755)	Statewide (n=1303)
DK/NA	1.5%	1.1%	1.4%
0 Not at all important	0.7%	1.2%	1.2%
1	0.9%	0.4%	0.8%
2	1.6%	1.9%	1.8%
3	2.0%	2.9%	2.6%
4	3.2%	3.3%	3.0%
5	13.1%	14.3%	12.8%
6	8.0%	6.8%	7.1%
7	13.0%	13.5%	13.6%
8	16.8%	14.4%	15.4%
9	6.2%	4.3%	4.9%
10 Extremely important	32.9%	35.9%	35.5%

Descriptive statistics, Q. 107

	MRG (n=1076)	Rest of state (n=755)	Statewide (n=1303)
Mean	7.58	7.54	7.58
Standard Deviation	2.33	2.43	2.42
Median	8	8	8

Question # 108. Federal law requires protecting the critical habitat of endangered species. For fish, this requires maintaining a minimum flow of water in rivers. In New Mexico, endangered species of fish are found in a number of major rivers, including the Gila, the Pecos, the Rio Grande, and the San Juan. Currently, six species of fish are listed as endangered in New Mexico, and another five species are listed as threatened. The silvery minnow is a small fish found in the Middle Rio Grande that is currently listed as an endangered species.

Were you previously aware that any species of fish in New Mexico had been listed as endangered or threatened?

	MRG (n=1073)	Rest of state (n=754)	Statewide (n=1301)
DK/NA	2.0%	1.5%	1.9%
0 No	34.4%	41.0%	39.2%
1 Yes	63.7%	57.6%	58.9%

Question # 109. Does this information affect your opinion about the importance of keeping more water in New Mexico's rivers in dry years? [IF YES]: Do you think it is more or less important than you previously stated?

	MRG (n=1070)	Rest of state (n=754)	Statewide (n=1299)
DK/NA	6.1%	4.2%	4.8%
1 Less important	2.3%	2.1%	1.8%
2 Does not affect opinion at all	51.6%	54.0%	54.3%
3 More important	40.0%	39.6%	39.2%

Question # 110. Historically, many New Mexicans acquired rights to a certain amount of surface water by diverting it from streams to irrigate fields. Farmers used the water for their families and livestock, and to grow crops. Today many of these water rights are for sale, and growing cities and industries are interested in buying them to put to use elsewhere. We are interested in how much you know about the idea of buying and selling rights to water. Would you say that you know a lot, some, just a little, or nothing about this issue?

	MRG (n=1069)	Rest of state (n=753)	Statewide (n=1298)
DK/NA	.5%	.7%	.6%
0 Know nothing	40.7%	32.8%	35.8%
1 Know just a little	28.4%	28.3%	28.5%
2 Know some	25.3%	28.0%	27.0%
3 Know a lot	5.1%	10.2%	8.1%

Question # 111. New Mexico water law says that water rights are based on when the original holder of the rights first put the water to beneficial use. At times, there may be more rights than there is actual water. When there is a drought, the oldest or senior rights have priority. This means that those with junior rights may not use water unless those with senior rights first get the amount they are entitled to. That can make owning senior rights very valuable and buying them very expensive. Using a scale from **one** to **seven** where **one is strongly oppose** and **seven is strongly support**, how do you feel about the idea of buying and selling water rights?

	MRG (n=1068)	Rest of state (n=752)	Statewide (n=1297)
DK/NA	6.0%	5.7%	5.9%
1 Strongly oppose	33.3%	28.2%	28.9%
2	8.7%	7.4%	8.1%
3	12.4%	10.8%	11.6%
4	12.5%	10.8%	12.4%
5	14.2%	17.0%	15.9%
6	4.8%	6.9%	6.1%
7 Strongly support	8.0%	13.2%	11.2%

Descriptive statistics, Q. # 111

	MRG (n=1068)	Rest of state (n=752)	Statewide (n=1297)
Mean	3.13	3.58	3.44
Standard Deviation	2.02	2.16	2.10
Median	3	4	3

Appendix A

Question # 112. Imagine that a farmer with senior water rights has a ten-acre field and decides not to irrigate it any more but to sell the water rights. In some cases, the right to use that water may be transferred hundreds of miles away from where the farmer originally used it. Some people argue that this could be very helpful to people in the city or to a business that purchased those rights, because it would allow the rights to be transferred to places and uses where their economic value would be greater. Others argue that those 10 acres of land could never be irrigated again, and that transfers of this sort would lead to the eventual disappearance of farming communities and a way of life that is part of New Mexico's culture and heritage. Using the scale from **one** to **seven** where **one is strongly oppose** and **seven is strongly support**, how do you feel about the transfer of water rights away from the areas where they were originally established?

	MRG (n=1064)	Rest of state (n=749)	Statewide (n=1293)
DK/NA	3.2%	2.9%	3.3%
1 Strongly oppose	38.9%	45.7%	41.2%
2	11.7%	11.2%	11.0%
3	12.4%	8.1%	10.4%
4	11.7%	7.7%	10.1%
5	9.1%	11.7%	10.4%
6	5.6%	4.3%	4.9%
7 Strongly support	7.3%	8.3%	8.0%

Descriptive statistics, Q. # 112

	MRG (n=1064)	Rest of state (n=749)	Statewide (n=1293)
Mean	2.86	2.74	2.82
Standard Deviation	1.99	2.06	2.04
Median	2	2	2

Question # 113. Finally, I need some basic background information about you. On average, how many times a week do you watch news on television?

	MRG (n=1064)	Rest of state (n=749)	Statewide (n=1293)
DK/NA	.3%	1.1%	.7%
Mean	6.70	6.80	6.63
Standard Deviation	5.47	5.54	5.23
Median	6	6	6

Question # 114 Page # 114. Including yourself, how many people currently live at your residence?

	MRG (n=1064)	Rest of state (n=749)	Statewide (n=1293)
DK/NA	.4%	0%	.2%
Mean	2.54	2.77	2.67
Standard Deviation	1.36	2.53	2.12
Median	2	2	2

SKIPS from Q114
IF q114:2<2 SKIP TO: 116

Question # 115. How many of those are 18 or older?

	MRG (n=805)	Rest of state (n=600)	Statewide (n=1005)
DK/NA	0%	0%	0%
Mean	2.20	2.24	2.22
Standard Deviation	.820	2.47	1.99
Median	2	2	2

Questions # 116 through # 130 were IPP demographic and research questions unrelated to water issues and will not be reported here.

Question # 131. Do you belong to any environmental organizations or groups?

	MRG (n=1063)	Rest of state (n=746)	Statewide (n=1290)
DK/NA	.6%	.4%	.3%
0 No	86.5%	90.6%	88.7%
1 Yes	12.9%	9.0%	11.0%

Question # 132. From the following options, do you consider yourself to be:

	MRG (n=1062)	Rest of state (n=746)	Statewide (n=1289)
DK/NA	2.0%	1.6%	1.8%
1 White non-Hispanic	62.9%	61.9%	62.2%
2 Asian	1.1%	0.8%	.9%
3 Black	2.3%	1.5%	2.0%
4 Hispanic	23.0%	26.9%	25.7%
5 American Indian	4.0%	3.9%	3.7%
6 Something else	4.0%	3.4%	3.8%

SKIPS from Q132

IF q132=4 SKIP TO: 133

IF q132=5 SKIP TO: 134

IF else SKIP TO: 136

Question # 133. Do you consider yourself to be:

	MRG (n=233)	Rest of state (n=192)	Statewide (n=310)
DK/NA	2.6%	2.0%	2.6%
1 Mexican-American	22.7%	36.4%	32.6%
2 Spanish-American	60.1%	47.4%	52.3%
3 Something else	14.6%	14.1%	12.6%

Question # 134. Do you have a tribal or pueblo affiliation?

	MRG (n=31)	Rest of state (n=22)	Statewide (n=34)
0 No	16.1%	31.8%	29.4%
1 Yes	83.9%	68.2%	70.6%

Appendix A

SKIPS from Q134
 IF q134=1 SKIP TO: 135
 IF else SKIP TO: 136

Question # 135. With what Tribe or Pueblo are you affiliated?

	MRG (n=25)	Rest of state (n=15)
Acoma	0	1
Blackfoot	1	0
Cherokee	2	2
Choctaw	1	1
Cochiti	1	0
Creek	1	0
Hopi	1	0
Isleta	4	0
Jemez	2	0
Laguna	3	1
Mescalero	0	1
Navajo	5	7
San Juan	0	1
Santo Domingo	1	0
Shawnee	1	0
Sioux	1	1
Tlingit	1	0

Question # 136 - # 142. [What was] the gross annual income for your household in 1999...? [Note: Responses are categorized here in increments of \$15,000. Data were collected in \$5,000 increments and can be recoded to that level if desired.]

	MRG (n=1061)	Rest of state (n=746)	Statewide (n=1289)
DK/NA/Refused	17.3%	15.1%	15.4%
1 < \$15,000	9.1%	12.2%	11.0%
2 \$15,000 to \$29,999	15.5%	22.8%	19.9%
3 \$30,000 to \$44,999	16.3%	16.0%	16.6%
4 \$45,000 to \$59,999	13.3%	13.5%	13.0%
5 \$60,000 to \$74,999	12.5%	9.4%	10.8%
6 \$75,000 to \$89,999	5.8%	5.1%	5.7%
7 \$90,000 to \$104,999	3.8%	1.6%	2.4%
8 \$105,000 to \$119,999	2.2%	1.6%	1.6%
9 \$120,000 to \$134,999	.7%	1.1%	.9%
10 \$135,000 to \$149,999	.7%	.3%	.5%
11 \$150,000 to \$164,999	.7%	.1%	.3%
12 \$165,000 to \$179,999	.4%	.3%	.2%
13 \$180,000 to \$194,999	.1%	.1%	.2%
14 \$195,000 to \$209,999	.3%	.1%	.3%
15 \$210,000 to \$224,999	.2%	0%	0%
16 \$225,000 to \$249,999	.3%	.3%	.4%
17 \$250,000 or more	.9%	.4%	.7%

Appendix B

Summary of Verbatim Responses to Q. #92 – “What did you do that was different from how you use water during non-drought periods?”

Of the 486 participants (47%) in the Middle Rio Grande Water and the 397 participants (54%) in the rest of the state who said they have lived in New Mexico during a drought (Q. #90), over three quarters (75% in MRG and 79% in ROS) indicated that they had used water differently during the drought (Q. #91). We asked these 645 respondents to describe the changes they had made and interviewers typed their responses verbatim. The following list is a summary of these responses. Please note that many respondents suggested more than one type of change; thus the same respondent may be represented in more than one category. Following the summary list are 50 representative comments.

356	Reduced water indoors (shorter showers, low flow toilets, etc.)
226	Reduced/stopped watering lawns and gardens.
135	Non-specified water conservation
51	Reduced/stopped washing cars
39	Recycled gray water
29	Followed government water restrictions
21	Saved rain water/captured sink water
13	Used alternative sources of water (well water, bottled water)
9	Always save water, behavior during a drought was no different
5	Did not use water recreationally (e.g. swimming pools)
5	Increased watering of crops
4	Reduced use by government in public places or by businesses
2	Reduced water given to cattle

Representative Comments

A lot more careful. We had to be very conservative.

All types of conservation. Used less, saved more, recycled.

As a farmer you use the water according to the water you are allotted. This is governed by the board of directors of the water department of Quay County. The water comes from the Conchas Dam. The Canadian River is our water supply.

Basically, cut back on everything, including watering yards and stuff, cutting way back, conserving water. We run a lot of water and waste it. I've lived in New Mexico all my life; I know that when you live through a drought you conserve all the time.

Collected rain water, used dish water for watering trees, recycled water from one use to another, like using bath water for watering the trees.

Conservation of water in general.

Conservation on brushing your teeth, showering, method of watering garden.

Cut back on the amount of water we used for bathing and the amount we put on the yard. I would save bath water and use it to water the plants outside. I recycled water any way I could.

Cut down on watering my flowers and we did not plant flowers that year and we saved water from baths for watering trees.

Appendix B

Did not do laundry unless there was a full load, did not plant vegetables, did not leave faucet running when brushing teeth and had special faucet fixtures installed.

Did not garden or have flowers. Monitored how much we were using inside, less water in the tub, loads of laundry washed. Changed to become more economical with water.

Didn't leave faucets running and you didn't water out door during sunshine.

Didn't water the lawn and shrubs as often, installed low flow toilets in three bathrooms, and we didn't take as many showers. My wife cut back on the number of times we washed clothes.

Didn't water the lawn or raise the garden or anything like that. Just necessary use.

Flushed toilet less often, installed low-flow toilets, and watered the lawn less. Didn't do laundry daily and stopped washing the car.

Followed instructions on when to use and not use.

For example: I did not have a dishwasher then, but people who did would wash their dishes by hand. We used a dish pan and the secondary water was used outside and the grass was not watered unless there was secondary water for that use.

Harvest water off the roof. I withhold that water for use during the drought. So reuse shower water. Turn the tap water off while I brush my teeth.

I conserved more, mostly it was with our cattle.

I cut back on water when there was a drought, and I use a normal amount of water when there is not a drought, and I wish Intel would do the same thing.

I cut down water use. I tried to think about how I had to do the cleaning and stuff without using so much water. Even my dishwashing changed.

I do the same thing regardless of the situation that we are in.

I just let my lawn die.

I just took quicker showers and when doing little things like washing dishes or watering plants I tried to use the water more efficiently.

I let my lawn die. Whatever I could do to not waste any water. I used it in the house and not outside, made sure things didn't rot, faucets were fixed, things like that that were in my control.

I listened to what the city officials said about conserving water. And common sense.

I put a brick in my toilet tank, I put out plastic on my patio to water my plants, I didn't let the water run.

I rationed. I followed the plan that the city put in place, watered only at certain hours. I really conserved on my water.

I remember that for water purposes, we cut back on water use. All my brothers and sisters and I took baths together. I just remember my mom cutting back.

I saved a lot of domestic water, reused domestic water, reused gray water, employed perma culture methods.

Appendix B

In Las Vegas they have a few stages, 1,2,3 and what they do here is you don't wash your cars, they closed down the car washes, the Laundromats were only open a few days a week, all restaurants served water only on request, watering lawns and outside.

Just watering yards and things like that, water at night and water sparingly.

Shorter showers. Didn't run water the whole time while washing dishes.

Using less water when showering and bathing. Keeping your lawn green, but not over-watering. I also cut down some of the evergreens and we are xeriscaping.

Very conservative in every way. Used less water. Waste free.

Watered less lawns. Less clothes washing, and washing machines. Used barrels in hopes of rain to water flowers. Took less showers.

We didn't water our lawn, when it rained we scooped the water in pots and pans from the street on to our lawn. Around our town they didn't water the parks. When we showered we washed our hair but we turned the water off and then turned it back on.

We didn't water our lawn. Our water was rationed, we couldn't water our lawns or misuse water. We just had to be careful with the water.

We didn't water the lawn as much. We were careful about taking long shower.

We didn't water the lawn as often.

We didn't water the lawn or flowers. And I remember that the restaurants didn't serve water unless you asked for it.

We didn't water the plants outside, limited showers, and I was very careful about washing clothes.

We used the water from bathing for outside. Take baths with less water. Don't leave the water running while you bathe. Wear your clothes more than once. Wash once a week. Don't water as much. Plant plants that don't require much watering.

We used to recycle the dishwater and use it for irrigation outside. We also would use the city water. The odd addresses would water on odd days and the even addresses would water on even days.

We were careful in watering the lawn, we didn't use the water on the slides in our swimming pool. At night we didn't flush the toilet, we washed clothes with a full load, and took shorter showers.

We were limited on the days we could water our yards.

We were very cautious of how we used it. We just made sure we didn't waste. We would not leave the water running when we brushed our teeth and took quick showers.

We wouldn't flush the toilet as often. Keep water in the fridge rather than running the sink so often. Watered the lawn less often. Did not run the water when we brushed teeth.

Well I don't water the yard as much, I don't waste water when doing laundry, take shorter showers, use paper cups and plates instead of glass.