NEBRASKA RURAL POLL

A Research Report

Water and Climate: Perceptions of Nonmetropolitan Nebraskans

2013 Nebraska Rural Poll Results

Rebecca Vogt
Cheryl Burkhart-Kriesel
Randolph Cantrell
Bradley Lubben

University of Nebraska Lincoln

IANR

Nebraska Rural Poll Research Report 13-3, September 2013.

© graphic used with permission of the designer, Richard Hawkins, Design & Illustration, P.O. Box 21181, Des Moines, IA 50321-0101 Phone: 515.288.4431, FAX: 515.243.1979

All of the research reports detailing Nebraska Rural Poll results are located on the Center's World Wide Web page at http://ruralpoll.unl.edu

Funding for this project was provided by the Cooperative Extension Division of the Institute for Agriculture and Natural Resources, the Agricultural Research Division of the Institute for Agriculture and Natural Resources, and the Department of Agricultural Economics. Additionally, considerable in-kind support and contributions were provided by a number of individuals and organizations associated with the Partnership for Rural Nebraska and the University of Nebraska Rural Futures Institute.

Table of Contents

Executive Summary i

Introduction 1

Water 2

Figure 1. Sources of Household Water Supply 2
Figure 2. Impacts from Last Year's Drought 3
Figure 3. Impacts of the Drought on Farm Production and Business Income for Persons with Occupations in Agriculture 4
Table 1. Extent Factors Will Affect Amount or Cost of Water Available Over the Next Five Years .. 6
Figure 4. Extent Irrigation Will Affect Amount or Cost of Water Available Over the Next Five Years by Region 7
Table 2. Water Use Priorities 8
Figure 5. High Priority Water Uses, 2004 and 2013 9
Figure 6. Priority Ranking of Irrigation by Region 10
Figure 7. Concern about Groundwater Levels in Nebraska 11

Global Climate Change Issues 11

Figure 8. How Well Understand Global Climate Change Issues 11
Figure 9. Believe Global Climate Change is Happening 12
Table 3. Agreement with Statements about Global Climate Change, 2008 and 2013 13
Table 4. Opinions about Global Climate Change, 2013 14
Figure 10. Belief that Human Activity is a Significant Cause of Climate Change by Region 17
Figure 11. Worry about Global Climate Change 18

Conclusion 18

List of Appendix Tables and Figures

Appendix Figure 1. Regions of Nebraska 19

Appendix Table 1. Demographic Profile of Rural Poll Respondents Compared to 2010 Census and 2007 - 2011 Community Survey 5 Year Average for Nebraska 20

Appendix Table 2. Sources of Household Water Supply by Community Size, Region and Individual Attributes 21

Appendix Table 3. Impacts from Last Year's Drought by Community Size, Region and Individual Attributes 22

Appendix Table 4. Extent Factors Will Affect Amount or Cost of Water Available Over the Next Five Years by Community Size, Region and Individual Attributes 27

Appendix Table 5. Water Use Priorities by Community Size, Region and Individual Attributes 32

Appendix Table 6. Concern about Groundwater Levels in Nebraska by Community Size, Region and Individual Attributes 40

Appendix Table 7. How Well Understand Global Climate Change by Community Size, Region and Individual Attributes 41

Appendix Table 8. Perception about Global Climate Change Happening by Community Size, Region and Individual Attributes 42

Appendix Table 9. Opinions about Global Climate Change by Community Size, Region and Individual Attributes 43

Appendix Table 10. Worry about Global Climate Change by Community Size, Region and Individual Attributes 51

Executive Summary

Water has always been an important resource to rural areas. Competing demands for water come from communities, households, agriculture, industry and the environment. After last summer's drought, one of the worst in the state's history, more attention was placed on water issues in the state. The drought also caused increased awareness of global climate change issues. Given these conditions, what impacts did rural Nebraskans experience as a result of last summer's drought? What priority do rural Nebraskans place on various uses of water? Have those priorities changed over time? What do rural Nebraskans think about global climate change? What are their opinions about the causes and effects of global climate change? Have these opinions changed over the past five years? This paper provides a detailed analysis of these questions.

This report details 2,317 responses to the 2013 Nebraska Rural Poll, the eighteenth annual effort to understand rural Nebraskans' perceptions. Respondents were asked a series of questions about water and global climate change. Comparisons are made among different respondent subgroups, that is, comparisons by age, occupation, region, etc. Based on these analyses, some key findings emerged:

- ***At least two-thirds of rural Nebraskans have experienced the following impacts to some extent as a result of last year's drought: loss of wildlife and wildlife habitat (75%), voluntary decrease in water usage (73%), decreased farm production (69%) and wildfires (69%).***

- ***The majority of persons with occupations in agriculture have experienced decreased farm production and loss of business income as a result of last year's drought.*** Eighty-eight percent of persons with occupations in agriculture have experienced decreased farm production to some extent, with 42 percent experiencing this to a great extent. Eighty percent of persons with occupations in agriculture experienced a loss of business income to some extent as a result of the drought.

- ***Most rural Nebraskans rate indoor use in existing homes and agricultural uses (irrigation and livestock) as high priority uses of water.*** Seventy-three percent of rural Nebraskans rate indoor use in existing homes as a high priority. Just over one-half of rural Nebraskans rate use for livestock (56%) and irrigation of crops (51%) as high priority uses of water. Just over two-thirds (68%) of rural Nebraskans say swimming pools for individual homes are not a priority and just under one-half of rural Nebraskans say watering golf courses (48%) and transferring water to other states (45%) are not a priority.

- ***More rural Nebraskans rate use for livestock as a high priority this year as compared to 2004***. Fifty-six percent of rural Nebraskans in 2013 rate use for livestock as a high priority, up from 48 percent in 2004. Two items, indoor use in new housing developments and recreation (such as fishing and boating), show declines in the proportion rating them as a high priority. Twenty-eight percent of rural Nebraskans rate indoor use in new housing developments as a high priority in 2013, compared to 34 percent in 2004. Similarly, 10 percent of rural Nebraskans in 2013 rate recreation such as fishing and boating as a high priority, down from 18 percent in 2004.

- ***Over four in ten rural Nebraskans (43%) are concerned a great deal about groundwater levels in Nebraska.*** Over one-third (36%) are concerned a moderate amount. Only six percent are not at all concerned about groundwater levels and 16 percent are concerned only a little.

- ***Most rural Nebraskans feel they understand global climate change issues fairly well or very well.*** Fifty-one percent of rural Nebraskans feel they understand these issues fairly well and 18 percent feel they understand them very well. Only five percent say they do not understand these issues at all and 20 percent do not understand them very well. Six percent are unsure.

- ***Most rural Nebraskans think global climate change is definitely happening or somewhat happening.*** Forty-eight percent of rural Nebraskans think global climate change is happening somewhat and one-quarter (25%) think it is definitely happening. Thirteen percent say it is definitely not happening and 14 percent answered don't know.

- ***Rural Nebraskans are less likely to believe human activity is a significant cause of climate change this year than they were five years ago and are more likely to think current climate change is due to normal climate patterns.*** Fifty-four percent of rural Nebraskans this year agree with the statement that "human activity, including industry and transportation, is a significant cause of climate change," compared to 65 percent in 2008. And, fewer rural Nebraskans this year agree with the statement "global climate change is something people can control," 41 percent compared to 51 percent in 2008. More rural Nebraskans this year agree that current climate change is due to normal climate patterns as compared to five years ago, 47 percent compared to 37 percent in 2008. Fifty-nine percent of rural Nebraskans this year agree with the statement "increased carbon dioxide and other gases released into the atmosphere will, if unchecked, lead to global climate change," compared to 67 percent five years ago.

- ***Fewer rural Nebraskans this year believe that global climate change requires immediate action by the government as compared to five years ago.*** Just over one-third (38%) of rural Nebraskans in 2013 agree with the statement "global climate change requires immediate action by the government," compared to 53 percent in 2008. And more rural Nebraskans this year agree that too much fuss is made about global climate change compared to five years ago, 36 percent and 30 percent respectively.

- ***Most rural Nebraskans think change is required to solve global climate change.*** Six in ten rural Nebraskans (60%) agree or strongly agree that "we will need to do something in my lifetime to deal with the adverse effects of global climate change." Seventeen percent disagree or strongly disagree with the statement and just under one-quarter (23%) neither agree nor disagree. One-half of rural Nebraskans (50%) think we need to do something right now to deal with the adverse effects of global climate change. Twenty-one percent disagree or strongly disagree with that statement and 28 percent neither agree nor disagree.

- ***One-half of rural Nebraskans are somewhat or very worried about global climate change***. Forty-two percent of rural Nebraskans are somewhat worried and eight percent are very worried about global climate change. One-third (33%) are not very worried and 17 percent are not at all worried.

Introduction

Water has always been an important resource to rural areas. Competing demands for water come from communities, households, agriculture, industry and the environment. After last summer's drought, one of the worst in the state's history, more attention was placed on water issues in the state. The drought also caused increased awareness of global climate change issues.

Given these conditions, what impacts did rural Nebraskans experience as a result of last summer's drought? What priority do rural Nebraskans place on various uses of water? Have those priorities changed over time? What do rural Nebraskans think about global climate change? What are their opinions about the causes and effects of global climate change? Have these opinions changed over the past five years? This paper provides a detailed analysis of these questions.

This report details 2,317 responses to the 2013 Nebraska Rural Poll, the eighteenth annual effort to understand rural Nebraskans' perceptions. Respondents were asked a series of questions about water and global climate change.

Methodology and Respondent Profile

This study is based on 2,317 responses from Nebraskans living in the 84 non-metropolitan counties in the state.[1] A self-administered questionnaire was mailed in March and April to 6,320 randomly selected households.

1 In the spring of 2013, the Grand Island area (Hall, Hamilton, Howard and Merrick Counties) was designated a metropolitan area. The mailing list for this survey was already purchased prior to this designation so those four counties were included in our sample and in the data presented here.

Metropolitan counties not included in the sample were Cass, Dakota, Dixon, Douglas, Lancaster, Sarpy, Saunders, Seward and Washington. The 14-page questionnaire included questions pertaining to well-being, community, health care, water, climate and taxes. This paper reports only results from the water and climate sections of the survey.

A 37% response rate was achieved using the total design method (Dillman, 1978). The sequence of steps used follow:

1. A pre-notification letter was sent requesting participation in the study.
2. The questionnaire was mailed with an informal letter signed by the project director approximately seven days later.
3. A reminder postcard was sent to the entire sample approximately seven days after the questionnaire had been sent.
4. Those who had not yet responded within approximately 14 days of the original mailing were sent a replacement questionnaire.

Appendix Table 1 shows demographic data from this year's study and previous rural polls, as well as similar data based on the entire nonmetropolitan population of Nebraska (using the latest available data from the 2010 U.S. Census and the 2007 - 2011 American Community Survey). As can be seen from the table, there are some marked differences between some of the demographic variables in our sample compared to the Census data. Thus, we suggest the reader use caution in generalizing our data to all rural Nebraska. However, given the random sampling frame used for this survey, the acceptable percentage of responses, and the large number of respondents, we feel the data provide useful insights into opinions of rural Nebraskans on the various issues presented in this report. The margin of error for this study is plus or minus two percent.

Since younger residents have typically been under-represented by survey respondents and older residents have been over-represented, weights were used to adjust the sample to match the age distribution in the nonmetropolitan counties in Nebraska (using U.S. Census figures from 2010).

The average age of respondents is 51 years. Seventy percent are married (Appendix Table 1) and 68 percent live within the city limits of a town or village. On average, respondents have lived in Nebraska 43 years and have lived in their current community 28 years. Fifty-two percent are living in or near towns or villages with populations less than 5,000. Ninety-six percent have attained at least a high school diploma.

Thirty-five percent of the respondents report their 2012 approximate household income from all sources, before taxes, as below $40,000. Fifty percent report incomes over $50,000.

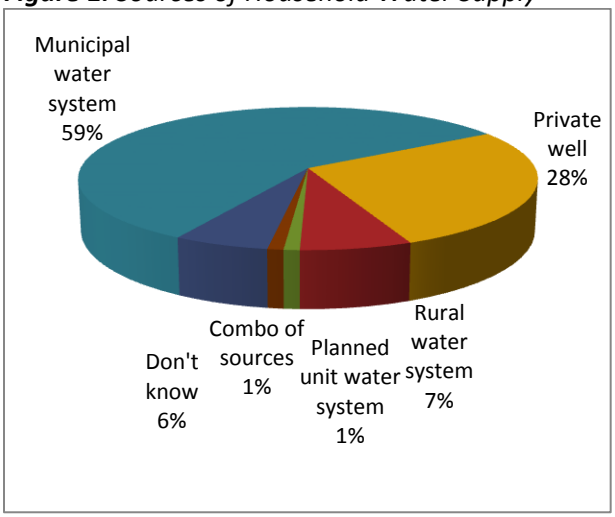
Seventy-four percent were employed in 2012 on a full-time, part-time, or seasonal basis. Eighteen percent are retired. Twenty-nine percent of those employed reported working in a management, professional, or education occupation. Fifteen percent indicated they were employed in agriculture.

Water

First, respondents were asked about the source of their household water supply. Most rural Nebraskans (59%) get their household water from a municipal water system (Figure 1). Over one-quarter (28%) of rural Nebraskans get their household water from a private well.

The sources of household water supply are analyzed by community size, region and various individual attributes (Appendix Table 2). Many differences emerge.

Figure 1. *Sources of Household Water Supply*



Persons living in or near smaller communities are more likely than persons living in or near larger communities to get their household water supply from a private well. Almost one-half (46%) of persons living in or near communities with populations less than 1,000 get their household water from a private well, compared to 15 percent of persons living in or near communities with populations of 10,000 or more.

Residents of the North Central region are more likely than residents of other regions of the state to get their household water supply from a private well (see Appendix Figure 1 for the counties included in each region). Just over one-third (34%) of North Central residents get their household water from a private well, compared to 22 percent of residents of the Southeast region.

Other groups most likely to get their household water supply from a private well include: persons with higher household incomes, persons age 50 to 64, males, persons with lower education levels, married persons and persons with occupations in agriculture.

Next, respondents were asked what impacts

they have experienced as a result of last summer's drought. At least two-thirds of rural Nebraskans have experienced the following items to some extent as a result of last year's drought: loss of wildlife and wildlife habitat (75%), voluntary decrease in water usage (73%), decreased farm production (69%) and wildfires (69%) (Figure 2).

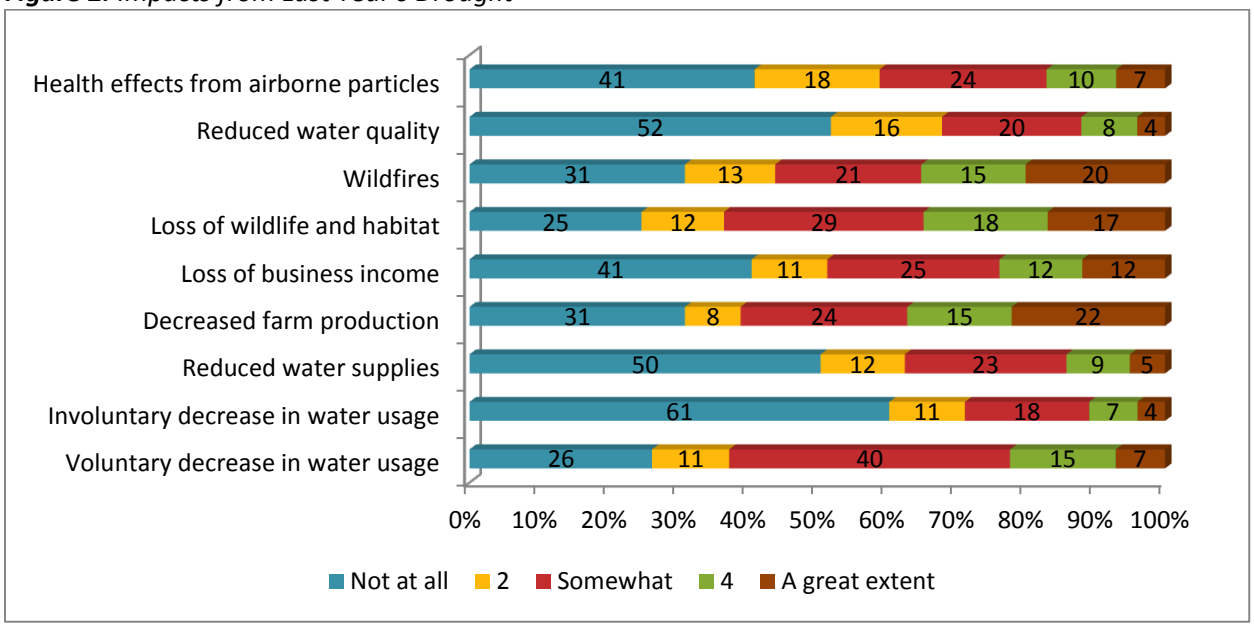
The impacts experienced as a result of last summer's drought differ by community size, region and various individual attributes (Appendix Table 3). Persons living in or near smaller communities are more likely than persons living in or near larger communities to have experienced a voluntary decrease in water usage to a large extent as a result of last summer's drought. Eleven percent of persons living in or near communities with populations less than 500 have experienced a voluntary decrease in water usage to a large extent, compared to five percent of persons living in or near communities with populations of 10,000 or more.

Females are more likely than males to say they have experienced a voluntary decrease in water usage. Persons with occupations classified as other and persons with healthcare support or public safety occupations are the occupation groups most likely to have voluntarily decreased their water use.

Just over one-half (51%) of the persons with occupations in agriculture have experienced an involuntary decrease in water usage (i.e., watering bans) to some extent as a result of last summer's drought. Other groups most likely to have experienced an involuntary decrease in water usage include: persons living in or near smaller communities, persons with lower household incomes, older persons, persons with lower education levels and persons who are divorced or separated.

Most of the persons with occupations in agriculture have experienced reduced water supplies as a result of last summer's drought. Sixty-four percent of persons with occupations in agriculture have experienced reduced water supplies to some extent, compared to 38 percent of persons with occupations in construction, installation or maintenance.

Figure 2. *Impacts from Last Year's Drought*

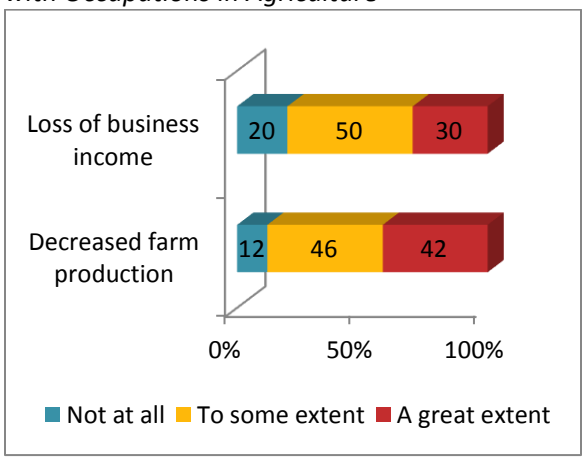


Most of the persons living in or near smaller communities have experienced reduced water supplies as a result of last year's drought. Almost two-thirds (65%) of persons living in or near communities with populations ranging from 500 to 999 have experienced reduced water supplies to some extent, compared to 40 percent of persons living in or near communities with populations of 10,000 or more.

Other groups most likely to have experienced reduced water supplies as a result of last summer's drought include older persons and persons with lower education levels.

The majority of persons with occupations in agriculture have experienced decreased farm production as a result of last year's drought. Eighty-eight percent of persons with occupations in agriculture have experienced decreased farm production to some extent, with 42 percent experiencing this to a great extent (Figure 3).

Figure 3. *Impacts of the Drought on Farm Production and Business Income for Persons with Occupations in Agriculture*



Other groups most likely to have experienced decreased farm production include: persons living in or near smaller communities, Panhandle residents and residents of the Northeast region.

The majority of persons with occupations in agriculture have experienced loss of business income as a result of last year's drought. Eighty percent of persons with occupations in agriculture experienced a loss of business income to some extent as a result of the drought (Figure 3).

Persons living in or near smaller communities are more likely than persons living in or near larger communities to experience a loss of business income as a result of the drought. At least two-thirds of persons living in or near communities with populations under 10,000 have experienced a loss of business income to some extent, compared to 48 percent of persons living in or near communities with populations of 10,000 or more.

Other groups most likely to have experienced a loss of business income as a result of last summer's drought include: residents of the Northeast region, older persons and widowed persons.

Residents of the North Central region are more likely than persons living in other regions of the state to have experienced a loss of wildlife and wildlife habitat as a result of last summer's drought. Eighty-two percent of North Central residents experienced a loss of wildlife and wildlife habitat, compared to 71 percent of residents of the South Central region.

Other groups most likely to have experienced a loss of wildlife and wildlife habitat include: persons living in or near smaller communities, older persons, males, married persons, persons who are divorced or separated and persons with occupations in agriculture.

Residents of the Panhandle and North Central

regions are more likely than residents of other regions of the state to have experienced wildfires as a result of last summer's drought. Over 80 percent of residents of these two regions experienced wildfires to some extent, compared to 61 percent of the residents of both the Northeast and Southeast regions.

Other groups most likely to have experienced wildfires as a result of last summer's drought include: persons living in or near smaller communities, males, persons with lower education levels and persons with occupations in construction, installation or maintenance.

Residents of the Panhandle are more likely than residents of other regions of the state to have experienced reduced water quality as a result of last summer's drought. Fifty-nine percent of Panhandle residents experienced reduced water quality to some extent, compared to 43 percent of residents of the South Central region.

Other groups most likely to have experienced reduced water quality as a result of last summer's drought include: persons living in or near smaller communities, persons with lower household incomes, persons with lower education levels and persons with food service or personal care occupations.

The groups most likely to have experienced health effects from airborne particles as a result of last year's drought include: Panhandle residents, residents of the North Central region, persons with lower household incomes, older persons, persons with lower education levels and widowed persons.

Next, respondents were asked to what extent various factors are likely to affect the amount or cost of water available to them over the next five years. One-quarter of rural Nebraskans believe water use by irrigation will affect to a great extent the amount or cost of water available to them over the next five years (Table 1). Twenty percent of rural Nebraskans expect the increased probability of drought due to cyclical weather variations to affect to a great extent the amount or cost of water available to them five years from now. At least two in ten rural Nebraskans don't know how each of the factors will affect the amount or cost of water available to them over the next five years.

These opinions are examined by community size, region and various individual attributes (Appendix Table 4). Many differences emerge.

People living in or near smaller communities are more likely than persons living in or near larger communities to say increased probability of drought due to cyclical weather variations will affect the amount or cost of water available to them over the next five years. Seventy-two percent of persons living in or near communities with populations less than 1,000 think this item will affect the amount or cost of water available to them, compared to 66 percent of persons living in or near communities with populations of 10,000 or more.

Other groups most likely to say increased probability of drought due to cyclical weather variations will affect the amount or cost of water available to them over the next five years include: residents of the Northeast region, persons with higher household incomes, persons age 50 to 64, persons with at least some college education, persons with occupations in agriculture and persons with management, professional or education occupations.

Residents of the North Central region are the regional group *least* likely to think the increased probability of drought due to global climate

Table 1. *Extent Factors Will Affect Amount or Cost of Water Available Over the Next Five Years*

	Don't know	*Not at all*	*2*	*Somewhat*	*4*	*A great extent*
Use of available water for agricultural irrigation	22%	5%	7%	20%	22%	25%
Increased probability of drought due to cyclical weather variations	26	5	7	25	17	20
Use of available water for livestock production	22	9	10	24	20	16
Water demands of large urban centers	30	10	8	19	18	15
Increased probability of drought due to global climate change	26	17	11	22	13	12
Activities in other states	34	7	9	24	16	10
Recreational water use	24	13	13	26	14	10
Use of available water by business and industry	27	9	12	27	16	9
Residential use of available water	21	12	12	32	15	8

change will affect the amount or cost of water available to them over the next five years. Fifty percent of North Central region residents believe this, compared to at least 58 percent of the residents of other regions of the state.

The groups most likely to say increased probability of drought due to global climate change will affect the amount or cost of water available to them over the next five years include: persons with higher household incomes, persons age 30 to 64, persons with at least some college education and persons with management, professional or education occupations.

Residents of the Northeast region are more likely than residents of other regions of the state to say residential use of water will affect the amount or cost of water available to them over the next five years. Seventy-two percent of residents of the Northeast region share this opinion, compared to 59 percent of residents of the North Central region.

Other groups most likely to think residential use of water will affect the amount or cost of water available to them over the next five years include: persons living in or near the larger communities; persons with higher household incomes; persons age 30 to 64; persons with higher education levels; persons with management, professional or education occupations; and persons with healthcare support or public safety occupations.

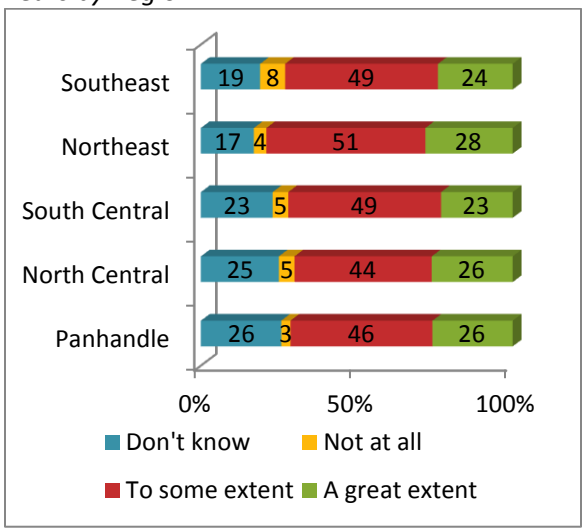
Residents of both the Northeast and Southeast regions of the state are more likely than residents of other regions of the state to think that use of water by business and industry will affect the amount or cost of water available to them over the next five years. Sixty-seven percent of the residents of these two regions have this opinion, compared to 61 percent of residents of the North Central region.

The other groups most likely to believe water use by business and industry will affect the amount or cost of water available to them over the next five years include: persons living in or near larger communities, persons with higher household incomes, persons age 40 to 64,

persons with higher education levels and persons with management, professional or education occupations.

Residents of the Northeast region are more likely than residents of other regions to think agricultural irrigation will affect the amount or cost of water available to them over the next five years. Seventy-nine percent of Northeast region residents think irrigation will affect the amount or cost of water available to them, compared to 70 percent of the residents of the North Central region (Figure 4).

Figure 4. *Extent Irrigation Will Affect Amount or Cost of Water Available Over the Next Five Years by Region*



The other groups most likely to think irrigation will affect the amount or cost of water available to them over the next five years include: persons living in or near smaller communities, persons with higher household incomes, persons age 30 to 64, persons with higher education levels and persons with occupations in agriculture.

The groups most likely to think use of water for livestock production will affect the amount or cost of water available to them over the next five years include: persons living in or near smaller communities, residents of the Northeast region, persons with higher household incomes, persons age 40 to 64, persons with higher education levels, persons with occupations in agriculture and persons with management, professional or education occupations.

Residents of the Southeast region, residents of the South Central region, persons with higher household incomes, persons age 30 to 64, persons with higher education levels and persons with management, professional or education occupations are the groups most likely to think activities in other states will affect the amount or cost of water available to them over the next five years.

The groups most likely to say recreational water use will affect the amount or cost of water available to them over the next five years include: persons with higher household incomes, persons age 50 to 64, persons with higher education levels and persons with occupations in agriculture.

Residents of the Northeast region are more likely than residents of other regions of the state to think water demands of large urban centers will affect the amount or cost of water available to them over the next five years. Sixty-four percent of residents of the Northeast region have this opinion, compared to 57 percent of Panhandle residents.

The other groups most likely to think water demands of large urban centers will affect the amount or cost of water available to them over the next five years include: persons with higher household incomes, persons age 50 to 64, persons with higher education levels and persons with occupations in agriculture.

Next, respondents were asked the priority they would give for various uses of water. Most rural

Nebraskans rate indoor use in existing homes and agricultural uses (irrigation and livestock) as high priority uses of water (Table 2). Just over two-thirds (68%) of rural Nebraskans say swimming pools for individual homes is not a priority and just under one-half of rural Nebraskans say watering golf courses (48%) and transferring water to other states (45%) is not a priority.

This question was also asked in 2004. The ranking of these items, based on the proportion rating each a high priority, is essentially unchanged between the two years. A few items, though, had larger changes in the proportion rating them a high priority. More rural Nebraskans rate use for livestock as a high priority this year as compared to 2004. Fifty-six percent of rural Nebraskans in 2013 rate use for livestock as a high priority, up from 48 percent in 2004 (Figure 5). Two items, indoor use in new housing developments and recreation (such as fishing and boating), show declines in the proportion rating them as a high priority. Twenty-eight percent of rural Nebraskans rate indoor use in new housing developments as a high priority in 2013, compared to 34 percent in 2004. Similarly, 10 percent of rural Nebraskans in 2013 rate recreation such as fishing and boating as a high priority, down from 18 percent in 2004.

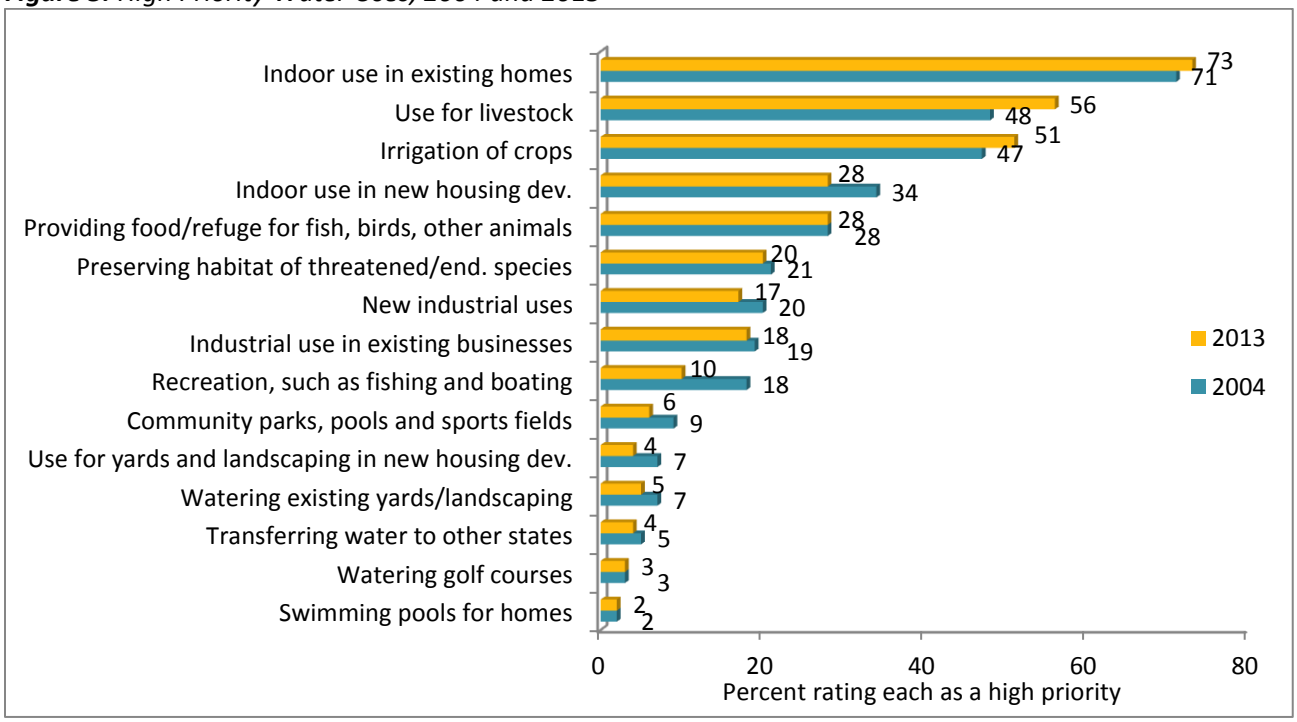
The priorities given to these uses differ by community size, region and various individual attributes (Appendix Table 5). The groups most likely to rate indoor use in existing homes as a high priority includes: persons with higher household incomes, persons age 40 to 64, persons with higher education levels and persons with management, professional or education occupations. When comparing the responses to this item by region, residents of the Panhandle are the group *least* likely to rate this item as a high priority.

Residents of the North Central region are more likely than residents of other regions of the state to rate providing food and refuge for fish, birds and other animals as a high priority use.

Table 2. *Water Use Priorities*

	Not a priority	*Low priority*	*Medium priority*	*High priority*
Indoor use in existing homes	2%	5%	20%	73%
Use for livestock (drinking and waste management)	4	5	35	56
Irrigation of agricultural/horticultural crops	5	9	36	51
Indoor use in new housing developments	11	23	39	28
Providing food and refuge for fish, birds and other animals	6	19	48	28
Preserving the habitat of threatened and endangered species	13	30	37	20
New industrial uses (manufacturing & other processing)	8	27	48	17
Industrial use in existing businesses	7	22	53	18
Recreation, such as fishing and boating	17	44	29	10
Community parks, pools and sports fields	18	47	30	6
Watering existing yards and landscaping	26	45	24	5
Use for yards and landscaping in new housing developments	28	45	23	4
Transferring water to other states	45	38	13	4
Watering golf courses	48	37	12	3
Swimming pools for individual homes	68	25	5	2

Figure 5. *High Priority Water Uses, 2004 and 2013*



One-third (33%) of North Central residents rate this use as a high priority, compared to 20 percent of the residents of the Southeast region. The other groups most likely to rate this use as a high priority include: persons living in or near larger communities, persons with lower household incomes, persons with lower education levels and persons with food service or personal care occupations.

Residents of the North Central region are more likely than residents of other regions of the state to rate use for livestock as a high priority. Sixty-two percent of North Central residents rate use for livestock as a high priority, compared to 53 percent of residents of the South Central region. Other groups most likely to rate use for livestock as a high priority include: persons with lower household incomes, persons with lower education levels and persons with occupations in agriculture.

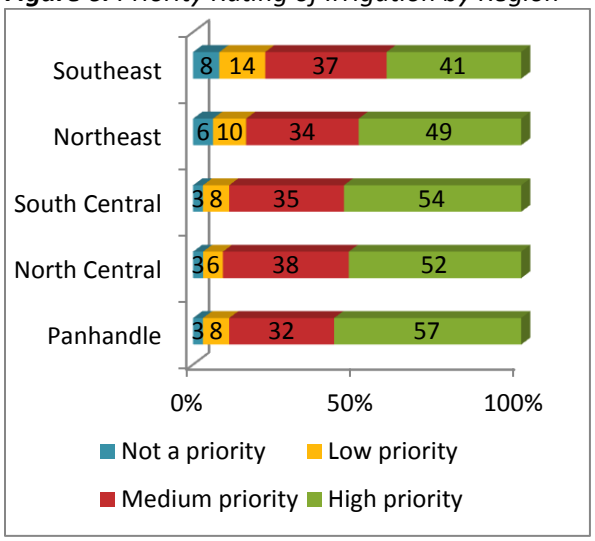
Persons with food service and personal care occupations and persons with lower household incomes are the groups most likely to rate recreation as a high priority use of water.

Panhandle residents are more likely than residents of other regions of the state to rate irrigation of crops as a high priority. Fifty-seven percent of Panhandle residents rate irrigation as a high priority, compared to 41 percent of residents of the Southeast region (Figure 6). Other groups most likely to rate irrigation as a high priority include: persons living in or near the smallest communities, persons with higher household incomes, younger persons, persons with higher education levels and persons with occupations in agriculture.

Older persons, persons with lower education levels and persons with occupations in production, transportation and warehousing are the groups most likely to rate use for yards and landscaping in new housing developments as a high priority.

Older persons, persons with food service or

Figure 6. *Priority Rating of Irrigation by Region*



personal care occupations, and persons with healthcare support or public safety occupations are the groups most likely to rate transferring water to other states for their use as a high priority.

The groups most likely to rate community parks, pools and sports fields as a high priority include residents of the Southeast region and persons with production, transportation and warehousing occupations.

Persons with production, transportation and warehousing occupations are more likely than persons with different occupations to rate industrial use in existing businesses as a high priority. Twenty-nine percent of persons with these types of occupations rate industrial use in existing businesses as a high priority, compared to 12 percent of persons with food service or personal care occupations. Other groups most likely to rate this use as a high priority include: persons living in or near larger communities, residents of the South Central region, residents of the Northeast region, persons with lower household incomes, and both the oldest and youngest respondents.

Younger persons are more likely than older persons to rate preserving the habitat of threatened and endangered species as a high priority. Thirty percent of persons age 19 to 29 rate this use as a high priority, compared to 15 percent of persons age 65 and older. Other groups most likely to rate preserving the habitat of threatened and endangered species as a high priority include: persons living in or near larger communities; persons with lower household incomes; persons with construction, installation or maintenance occupations; and persons with food service or personal care occupations.

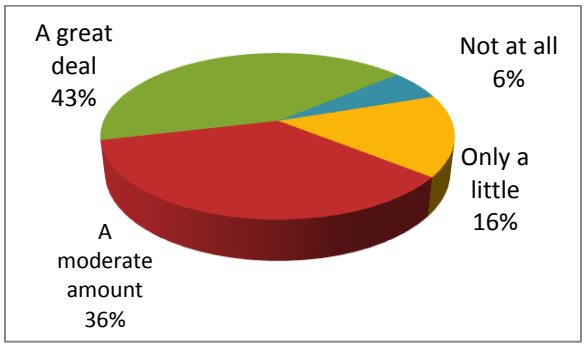
Persons living in or near larger communities are more likely than persons living in or near smaller communities to rate indoor use in new housing developments as a high priority. Thirty-two percent of persons living in or near communities with populations of 10,000 or more rate this use as a high priority, compared to approximately 25 percent of persons living in or near communities with populations under 10,000. The other groups most likely to rate indoor use in new housing developments as a high priority include: persons with higher household incomes, persons age 40 to 64, and persons with production, transportation or warehousing occupations.

The groups most likely to rate new industrial uses as a high priority include: persons living in or near larger communities, residents of the South Central region, residents of the Northeast region, persons with higher household incomes, persons with lower education levels and persons with production, transportation or warehousing occupations.

Persons with lower household incomes are more likely than persons with higher incomes to rate watering existing yards and landscaping as a high priority.

Finally, respondents were asked how concerned they are about groundwater levels in Nebraska. Over four in ten rural Nebraskans are concerned a great deal about groundwater levels in Nebraska (Figure 7). Over one-third (36%) are concerned a moderate amount. Only six percent are not at all concerned about groundwater levels and 16 percent are concerned only a little.

Figure 7. *Concern about Groundwater Levels in Nebraska*



Levels of concern differ by community size, region and various individual attributes (Appendix Table 6). Approximately one-half of residents of both the Panhandle and North Central regions are concerned a great deal about groundwater levels in the state. Approximately 49 percent of the residents of these two regions are concerned a great deal about groundwater levels, compared to 37 percent of residents of the South Central region of the state.

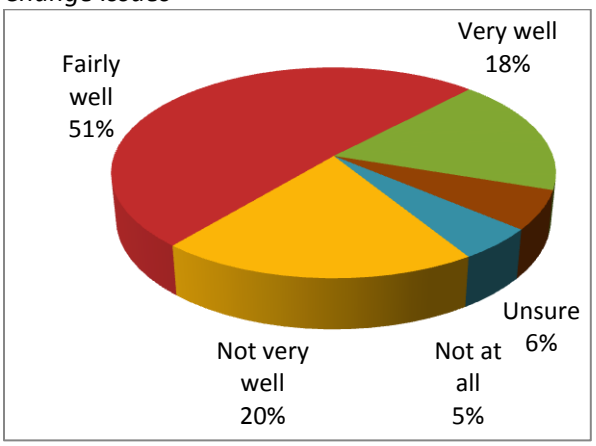
One-half of the persons with occupations in agriculture are concerned a great deal about groundwater levels in Nebraska. Fifty percent of persons with occupations in agriculture are concerned a great deal, compared to 29 percent of the persons with occupations classified as other.

The other groups most likely to be concerned a great deal about groundwater levels in Nebraska include: persons living in or near smaller communities, persons with lower household incomes, older persons, widowed persons and persons with lower education levels.

Global Climate Change Issues

Respondents were also asked a series of questions about global climate change. First, they were asked how well they feel they understand global climate change issues. Most rural Nebraskans feel they understand global climate change issues fairly well or very well. Fifty-one percent of rural Nebraskans feel they understand these issues fairly well and 18 percent feel they understand them very well (Figure 8). Only five percent say they do not understand these issues at all and 20 percent do not understand them very well. Six percent are unsure.

Figure 8. *How Well Understand Global Climate Change Issues*



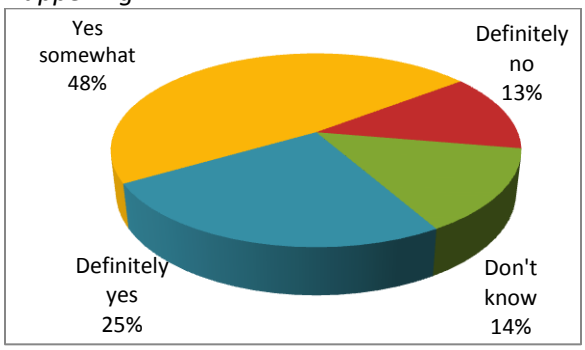
These perceptions are examined by community size, region and various individual attributes (Appendix Table 7). Many differences emerge.

Persons with occupations in agriculture are more likely than persons with different occupations to say they understand global climate change issues very well. Twenty-three percent of persons with occupations in

agriculture feel they understand the issues very well. The other groups most likely to feel they understand global climate change issues very well include: persons living in or near the smallest communities, persons age 50 to 64, males and persons with higher education levels.

Most rural Nebraskans think global climate change is definitely happening or somewhat happening. Forty-eight percent of rural Nebraskans think global climate change is happening somewhat and one-quarter (25%) think it is definitely happening (Figure 9). Thirteen percent say it is definitely not happening and 14 percent answered don't know.

Figure 9. *Believe Global Climate Change is Happening*



These perceptions differ by community size and various individual attributes (Appendix Table 8). Younger persons are more likely than older persons to believe global climate change is definitely happening. Thirty percent of persons age 19 to 29 believe global climate change is definitely happening, compared to 22 percent of persons age 65 and older.

Other groups most likely to believe global climate change is definitely happening include: persons living in or near the largest communities, persons with lower household incomes, females, persons who have never married and persons with food service or personal care occupations.

Respondents were next given a set of statements about global climate change and were asked the extent to which they agree or disagree with each. Most of these statements were also included in the 2008 Nebraska Rural Poll. The proportions agreeing with each statement in both years are included in Table 3.

Rural Nebraskans are less likely to believe human activity is a significant cause of climate change this year than they were five years ago and are more likely to think current climate change is due to normal climate patterns. Fifty-four percent of rural Nebraskans this year agree with the statement that "human activity, including industry and transportation, is a significant cause of climate change," compared to 65 percent in 2008. And, fewer rural Nebraskans this year agree with the statement "global climate change is something people can control," 41 percent compared to 51 percent in 2008. More rural Nebraskans this year agree that current climate change is due to normal climate patterns as compared to five years ago, 47 percent compared to 37 percent in 2008. Fifty-nine percent of rural Nebraskans this year agree with the statement "increased carbon dioxide and other gases released into the atmosphere will, if unchecked, lead to global climate change," compared to 67 percent five years ago.

Fewer rural Nebraskans this year believe we will have to change our lifestyles to reduce energy consumption as compared to five years ago and fewer rural Nebraskans think it is their responsibility to help reduce the impacts of global climate change. Seventy percent of rural Nebraskans this year agree with the statement "we will have to change our lifestyles to reduce energy consumption," compared to 84 percent in 2008. And, 59 percent in 2013 agree with the statement "it is my responsibility to help reduce the impacts of global climate change," compared to 70 percent in 2008.

Table 3. *Agreement with Statements about Global Climate Change, 2008 and 2013*

	2008	***2013***
Increased carbon dioxide and other gases released into the atmosphere will, if unchecked, lead to global climate change.	67%	59%
Firms and government researchers will develop new technologies to solve the problem.	42	33
We will have to change our lifestyles to reduce energy consumption.	84	70
We will learn to live with and adapt to a changing climate.	73	72
Global climate change is a problem but the U.S. won't do anything about it.	21	21
We will do nothing since global climate change is not a problem.	11	15
Human activity, including industry and transportation, is a significant cause of climate change.	65	54
Global climate change requires immediate action by the government.	53	38
It is my responsibility to help reduce the impacts of global climate change.	70	59
Global climate change is something people can control.	51	41
Too much fuss is made about global climate change.	30	36
Current climate change is due to normal climate patterns.	37	47
Agriculture is a major contributor of greenhouse gases.	17	15

Fewer rural Nebraskans this year believe that global climate change requires immediate action by the government as compared to five years ago. Just over one-third (38%) of rural Nebraskans in 2013 agree with the statement "global climate change requires immediate action by the government," compared to 53 percent in 2008. And more rural Nebraskans this year agree that too much fuss is made about global climate change compared to five years ago, 36 percent and 30 percent respectively.

Fewer rural Nebraskans this year think firms and government researchers will develop new technologies to solve the problem as compared to five years ago. One-third (33%) of rural Nebraskans this year agree with that statement, compared to 42 percent in 2008.

The full results for these statements for 2013 are included in Table 4. Most rural Nebraskans (59%) agree that gases released into the atmosphere unchecked will lead to global climate change. Only 17 percent disagree or strongly disagree with the statement and one-quarter (25%) neither agree nor disagree.

Table 4. *Opinions about Global Climate Change, 2013*

	Strongly Disagree	*Disagree*	*Neither*	*Agree*	*Strongly Agree*
Increased carbon dioxide and other gases released into the atmosphere will, if unchecked, lead to global climate change.	7%	10%	25%	45%	14%
Firms and government researchers will develop new technologies to solve the problem.	8	24	35	31	2
We will have to change our lifestyles to reduce energy consumption.	4	9	17	55	15
We will learn to live with and adapt to a changing climate.	3	7	18	63	10
Global climate change is a problem but the U.S. won't do anything about it.	10	35	35	16	5
We will do nothing since global climate change is not a problem.	16	40	29	10	6
We need to do something right now to deal with the adverse effects of global climate change.	9	12	28	36	14
We will need to do something in my lifetime to deal with the adverse effects of global climate change.	8	9	23	44	16
Human activity, including industry and transportation, is a significant cause of climate change.	9	12	26	41	13
Global climate change requires immediate action by the government.	14	17	32	27	10
It is my responsibility to help reduce the impacts of global climate change.	6	8	26	46	13
Global climate change is something people can control.	11	17	31	35	6
Too much fuss is made about global climate change.	14	24	26	21	15
Current climate change is due to normal climate patterns.	7	19	28	32	15
Agriculture is a major contributor of greenhouse gases.	19	29	37	13	2

Most rural Nebraskans believe that our actions contribute to global climate change. Fifty-four percent of rural Nebraskans agree or strongly agree that "human activity, including industry and transportation, is a significant cause of climate change." Twenty percent disagree or strongly disagree with the statement and 26 percent neither agree nor disagree. However, less than one-half (41%) of rural Nebraskans agree or strongly agree that "global climate change is something people can control." Just over one-quarter (28%) disagree or strongly disagree with that statement and 31 percent neither agree nor disagree.

Most rural Nebraskans believe that we need to make changes in our behaviors to reduce the impacts of global climate change. The majority of rural Nebraskans (70%) agree or strongly agree that "we will have to change our lifestyles to reduce energy consumption." Only 13 percent disagree or strongly disagree with that statement. And, 59 percent agree or strongly agree that "it is my responsibility to help reduce the impacts of global climate change." Fourteen percent disagree or strongly disagree while 26 percent neither agree nor disagree.

Most rural Nebraskans believe we will learn to adapt to a changing climate. Seventy-two percent of rural Nebraskans agree or strongly agree that "we will learn to live with and adapt to a changing climate." Ten percent disagree or strongly disagree with the statement and 18 percent neither agree nor disagree.

Most rural Nebraskans think change is required to solve global climate change. Six in ten rural Nebraskans (60%) agree or strongly agree that "we will need to do something in my lifetime to deal with the adverse effects of global climate change." Seventeen percent disagree or strongly disagree with the statement and just under one-quarter (23%) neither agree nor disagree. Most rural Nebraskans (56%) *disagree or strongly disagree* that "we will do nothing since global climate change is not a problem." Only 15 percent agree or strongly agree and just over one-quarter (29%) neither agree nor disagree with the statement. Forty-five percent of rural Nebraskans disagree or strongly disagree that "global climate change is a problem but the U.S. won't do anything about it." Twenty-one percent agree or strongly agree with the statement and just over one-third (35%) neither agree nor disagree.

One-half of rural Nebraskans (50%) think we need to do something right now to deal with the adverse effects of global climate change. Twenty-one percent disagree or strongly disagree with that statement and 28 percent neither agree nor disagree. However, opinions are split on whether or not immediate action is required by the government. Over one-third (38%) agree or strongly agree that "global climate change requires immediate action by the government." Thirty-one percent disagree or strongly disagree and 32 percent neither agree nor disagree.

Opinions are mixed regarding whether or not too much fuss is made about global climate change. Thirty-eight percent of rural Nebraskans disagree or strongly disagree with the statement "too much fuss is made about global climate change." Thirty-six percent agree or strongly agree with the statement and 26 percent neither agree nor disagree.

Opinions are mixed on whether or not technologies can be developed to solve the problem of global climate change. One-third (33%) of rural Nebraskans agree or strongly agree with the statement "firms and government researchers will develop new technologies to solve the problem." Thirty-two percent disagree or strongly disagree and over one-third (35%) neither agree nor disagree with the statement.

Opinions are mixed on whether or not current climate change is due to normal climate patterns. Just under one-half (47%) of rural Nebraskans agree or strongly agree that "current climate change is due to normal climate patterns." However, one-quarter (25%) disagree or strongly disagree with the statement. Twenty-eight percent neither agree nor disagree.

Just under one-half (48%) of rural Nebraskans disagree or strongly disagree that agriculture is a major contributor of greenhouse gases. Fifteen percent agree or strongly agree with the statement and over one-third (37%) neither agree nor disagree with the statement.

Responses to these questions are analyzed by community size, region and various individual attributes (Appendix Table 9). Many differences are detected.

Persons age 30 to 49 are more likely than both younger and older persons to agree that increased carbon dioxide and other gases released into the atmosphere will, if unchecked, lead to global climate change. The other groups most likely to agree with this statement include: females, persons with higher education levels, persons who have never married, divorced/ separated persons and persons with food service or personal care occupations.

Residents of the South Central region, residents of the Northeast region, persons age 30 to 64, females, divorced/separated persons and persons with healthcare support or public safety occupations are the groups most likely to agree with the statement that we will have to change our lifestyles to reduce energy consumption.

Residents of the Panhandle are more likely than residents of other regions of the state to agree that we will learn to live with and adapt to a changing climate. Seventy-seven percent of Panhandle residents agree with this statement, compared to 69 percent of the residents of the North Central region. The other groups most likely to agree with this statement include: persons living in or near larger communities, males, persons with higher education levels and persons with food service or personal care occupations.

Residents of the Northeast region, residents of the Southeast region, persons with lower household incomes, persons with lower education levels and persons with healthcare support or public safety occupations are the groups most likely to agree that global climate change is a problem but the U.S. won't do anything about it.

Persons living in or near the smallest communities are more likely than persons living in or near larger communities to agree that we will do nothing since global climate change is not a problem. The other groups most likely to agree with this statement include: residents of the Southeast region, older persons, males and persons with lower education levels.

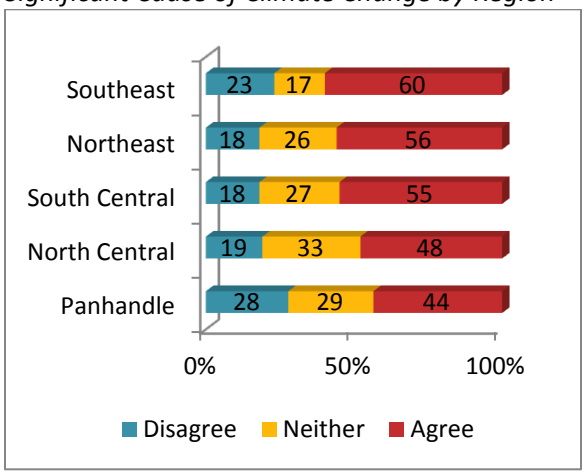
Persons living in or near the largest communities are more likely than persons living in or near smaller communities to agree that we need to do something right now to deal with the adverse effects of global climate change. The other groups most likely to agree with this statement include: persons with lower household incomes, persons age 30 to 39, females, divorced/separated persons, persons who have never married and persons with food service or personal care occupations.

Persons age 30 to 39, females, persons with higher education levels, divorced/separated persons, persons who have never married and persons with healthcare support or public safety occupations are the groups most likely to

agree that we will need to do something in my lifetime to deal with the adverse effects of global climate change.

Residents of the Southeast region are more likely than residents of other regions of the state to agree that human activity is a significant cause of climate change. Sixty percent of Southeast residents agree with this statement, compared to 44 percent of the Panhandle residents (Figure 10).

Figure 10. *Belief that Human Activity is a Significant Cause of Climate Change by Region*



The other groups most likely to agree with this statement include: persons with lower household incomes, females, divorced/ separated persons and persons with food service or personal care occupations.

Persons living in or near the largest communities, residents of the Southeast region, persons with the lowest household incomes, females, persons who have never married and persons with food service or personal care occupations are the groups most likely to agree that global climate change requires immediate action by the government.

Persons age 30 to 39, females, persons with higher education levels and persons with healthcare support or public safety occupations are the groups most likely to agree that it is their responsibility to help reduce the impacts of global climate change.

The groups most likely to agree that global climate change is something people can control include: persons with lower household incomes, divorced/separated persons, persons who have never married, persons with sales or office support occupations and persons with production, transportation or warehousing occupations.

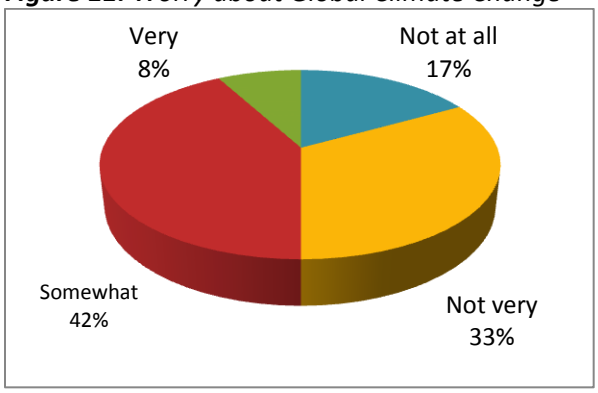
Persons with occupations in agriculture are more likely than persons with different occupations to agree that too much fuss is made about global climate change. The other groups most likely to agree with this statement include: persons living in or near the smallest communities, the oldest respondents, males, married persons and widowed persons.

Persons with occupations in agriculture are more likely than persons with different occupations to agree that current climate change is due to normal climate patterns. The other groups most likely to agree with this statement include: persons living in or near the smallest communities, the oldest respondents, males and widowed persons.

Finally, respondents were asked how worried they are about global climate change. One-half of rural Nebraskans are somewhat or very worried about global climate change, with 42 percent somewhat worried and eight percent are very worried (Figure 11). One-third (33%) are not very worried and 17 percent are not at all worried.

Certain groups are more likely than others to be somewhat or very worried about global climate change: persons with lower household incomes, persons age 40 to 64, females, divorced/ separated persons and persons with food

Figure 11. *Worry about Global Climate Change*



service or personal care occupations (Appendix Table 10).

Conclusion

Many rural Nebraskans have experienced loss of wildlife and wildlife habitat, voluntary decrease in water usage, decreased farm production and wildfires to some extent as a result of last year's drought. The majority of persons with occupations in agriculture have experienced decreased farm production and loss of business income as a result of last year's drought.

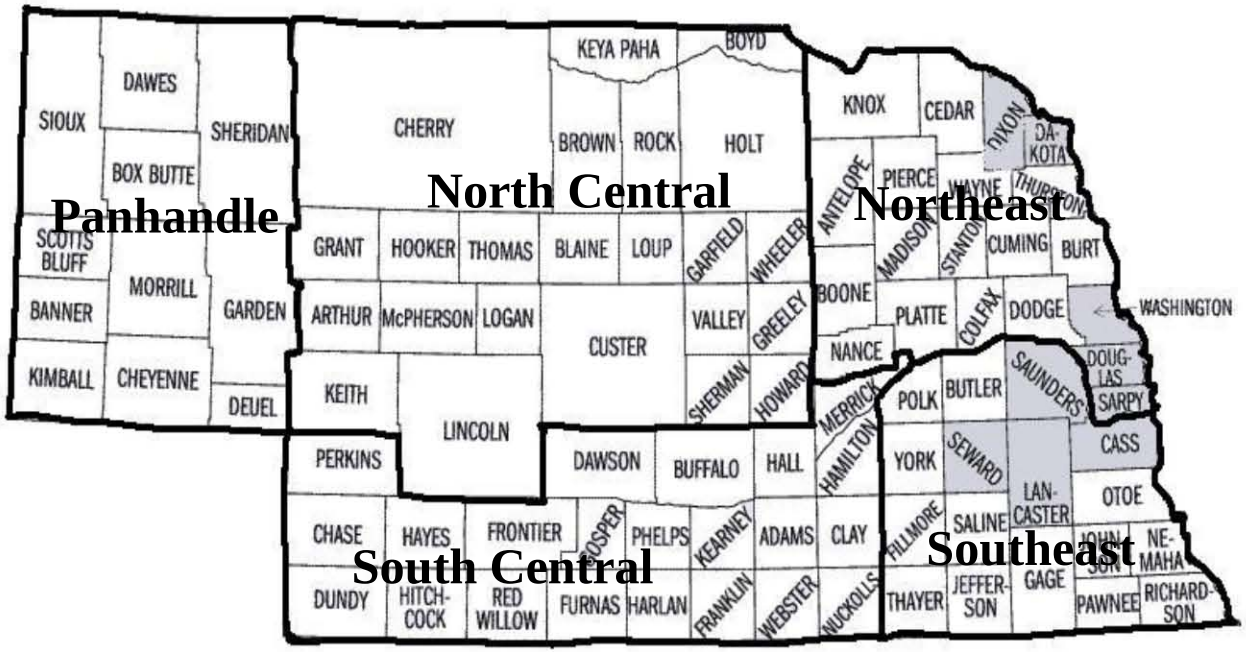
Most rural Nebraskans rate indoor use in existing homes and agricultural uses (irrigation and livestock) as high priority uses of water. Uses of water that were not ranked very high include swimming pools for individual homes, watering golf courses and transferring water to other states. More rural Nebraskans rate use for livestock as a high priority this year as compared to 2004. Two items, indoor use in new housing developments and recreation (such as fishing and boating), show declines in the proportion rating them as a high priority when compared to 2004.

Many rural Nebraskans are concerned a great deal about groundwater levels in Nebraska.

Most rural Nebraskans feel they understand global climate change issues fairly well or very well. And, most rural Nebraskans think global climate change is definitely happening or somewhat happening. However, rural Nebraskans are less likely to believe human activity is a significant cause of climate change this year than they were five years ago and are more likely to think current climate change is due to normal climate patterns. Furthermore, fewer rural Nebraskans this year believe that global climate change requires immediate action by the government as compared to five years ago.

Yet, most rural Nebraskans think change is required to solve global climate change. Most agree that "we will need to do something in my lifetime to deal with the adverse effects of global climate change." And, one-half of rural Nebraskans are somewhat or very worried about global climate change.

Appendix Figure 1. Regions of Nebraska



Metropolitan counties (not surveyed)

Appendix Table 1. *Demographic Profile of Rural Poll Respondents*[1] *Compared to 2010 Census and 2007 – 2011 American Community Survey 5 Year Average for Nebraska**

	2013 Poll	***2012 Poll***	***2011 Poll***	***2010 Poll***	***2009 Poll***	***2008 Poll***	***2007-2011 ACS***
Age : [2]							
20 - 39	31%	31%	31%	32%	32%	32%	30.5%
40 - 64	44%	44%	44%	44%	44%	44%	45.6%
65 and over	24%	24%	24%	24%	24%	24%	23.9%
Gender: [3]							
Female	51%	61%	60%	59%	57%	56%	50.5%
Male	49%	39%	40%	41%	43%	44%	49.5%
Education: [4]							
Less than 9th grade	1%	1%	1%	1%	2%	2%	4.5%
9th to 12th grade (no diploma)	3%	3%	3%	3%	3%	3%	7.4%
High school diploma (or equiv.)	23%	22%	26%	25%	26%	26%	35.1%
Some college, no degree	25%	25%	23%	25%	25%	25%	25.9%
Associate degree	15%	15%	16%	14%	15%	12%	9.8%
Bachelors degree	22%	24%	19%	20%	20%	21%	12.7%
Graduate or professional degree	12%	11%	12%	11%	10%	10%	4.7%
Household Income: [5]							
Less than $10,000	5%	6%	6%	6%	6%	7%	6.2%
$10,000 - $19,999	7%	10%	10%	10%	9%	10%	13.1%
$20,000 - $29,999	13%	11%	13%	13%	13%	14%	12.6%
$30,000 - $39,999	10%	10%	14%	12%	13%	14%	12.0%
$40,000 - $49,999	15%	12%	11%	13%	12%	13%	10.6%
$50,000 - $59,999	10%	13%	12%	11%	13%	11%	9.8%
$60,000 - $74,999	11%	14%	12%	13%	14%	13%	11.4%
$75,000 or more	29%	25%	22%	23%	21%	18%	24.1%
Marital Status: [6]							
Married	70%	70%	66%	71%	68%	70%	56.3%
Never married	12%	10%	14%	9%	10%	10%	24.4%
Divorced/separated	9%	11%	11%	11%	11%	11%	11.4%
Widowed/widower	9%	10%	10%	9%	11%	9%	7.9%

[1] Data from the Rural Polls have been weighted by age.

[2] 2010 Census universe is non-metro population 20 years of age and over.

[3] 2010 Census universe is total non-metro population.

[4] 2007-2011 American Community Survey universe is non-metro population 18 years of age and over.

[5] 2007-2011 American Community Survey universe is all non-metro households.

[6] 2007-2011 American Community Survey universe is non-metro population 15 years of age and over.

*Comparison numbers are estimates taken from the American Community Survey five-year sample and may reflect significant margins of error for areas with relatively small populations.

Appendix Table 2. *Sources of Household Water Supply by Community Size, Region and Individual Attributes*

	From where does your household water supply come?						
	Private well	*Municipal water system*	*Rural water system*	*Planned unit water system*	*Combination of sources*	*Don't know*	*Significance*
				Percentages			
Total	28	59	7	1	1	6	
Community Size				(n = 2079)			
Less than 500	46	37	11	1	2	2	
500 - 999	46	38	12	0	0	4	
1,000 - 4,999	31	54	9	0**	1	5	
5,000 - 9,999	22	67	7	0**	1	3	χ^2 = 245.04*
10,000 and up	15	73	3	1	1	7	(.000)
Region				(n = 2147)			
Panhandle	27	64	3	0**	2	4	
North Central	34	53	5	0**	0**	7	
South Central	26	63	6	2	0**	5	
Northeast	30	56	6	0	1	7	χ^2 = 83.53*
Southeast	22	55	15	0**	2	7	(.000)
Household Income Level				(n = 2029)			
Under $20,000	25	55	5	1	3	11	
$20,000 - $39,999	25	59	8	0**	1	8	
$40,000 - $59,999	22	60	9	1	1	7	χ^2 = 73.82*
$60,000 and over	32	59	5	0**	0**	2	(.000)
Age				(n = 2153)			
19 - 29	25	49	12	1	0	12	
30 - 39	18	65	5	0	1	11	
40 - 49	30	57	7	1	2	4	
50 - 64	33	58	6	1	1	2	χ^2 = 129.45*
65 and older	28	64	4	1	1	3	(.000)
Gender				(n = 2144)			
Male	30	60	6	0**	1	3	χ^2 = 39.24*
Female	25	57	8	1	1	8	(.000)
Education				(n = 2128)			
High school diploma or less	31	53	5	1	1	8	
Some college	29	59	7	0**	1	4	χ^2 = 36.02*
Bachelors or grad degree	24	62	8	1	0**	6	(.000)
Marital Status				(n = 2143)			
Married	31	56	7	1	1	5	
Never married	17	59	10	1	1	12	
Divorced/separated	22	66	6	1	1	5	χ^2 = 59.54*
Widowed	20	68	4	1	1	7	(.000)
Occupation				(n = 1584)			
Mgt, prof or education	20	70	5	1	0**	4	
Sales or office support	20	69	2	1	0	8	
Constrn, inst or maint	30	62	5	0	1	3	
Prodn/trans/warehsing	21	64	4	0	0	11	
Agriculture	62	29	9	0	0**	0**	
Food serv/pers. care	25	53	9	0	2	11	
Hlthcare supp/safety	23	58	8	0	2	9	χ^2 = 230.20*
Other	24	58	9	1	1	7	(.000)

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 3. *Impacts from Last Year's Drought by Community Size, Region and Individual Attributes*

	Indicate to what degree (if any) you have experienced the following in your area as a result of last summer's drought?							
	Voluntary decrease in water usage				***Involuntary decrease in water usage (i.e., watering bans)***			
	Not at All	*To some extent*	*A great extent*	*Significance*	*Not at All*	*To some extent*	*A great extent*	*Significance*
				Percentages				
Total	26	66	7		61	36	4	
Community Size		(n = 2057)				(n = 1995)		
Less than 500	24	65	11		55	39	6	
500 - 999	31	62	7		60	34	5	
1,000 - 4,999	23	68	8		54	42	5	
5,000 - 9,999	23	70	7	χ^2 = 19.93*	59	38	4	χ^2 = 41.14*
10,000 and up	29	66	5	(.011)	69	29	2	(.000)
Region		(n = 2116)				(n = 2052)		
Panhandle	21	69	11		59	37	5	
North Central	25	67	9		62	35	3	
South Central	27	68	6		63	34	4	
Northeast	27	65	7	χ^2 = 11.66	62	34	5	χ^2 = 11.47
Southeast	29	64	7	(.167)	55	43	3	(.177)
Household Income Level		(n = 2004)				(n = 1948)		
Under $20,000	28	66	6		47	47	6	
$20,000 - $39,999	30	61	9		62	34	4	
$40,000 - $59,999	19	74	7	χ^2 = 21.46*	58	39	3	χ^2 = 28.91*
$60,000 and over	27	65	8	(.002)	66	31	4	(.000)
Age		(n = 2124)				(n = 2064)		
19 - 29	29	64	7		69	27	4	
30 - 39	24	66	10		59	37	5	
40 - 49	26	69	5		59	37	4	
50 - 64	25	67	8	χ^2 = 12.47	61	37	3	χ^2 = 18.99*
65 and older	27	65	8	(.131)	57	40	4	(.015)
Gender		(n = 2117)				(n = 2053)		
Male	29	66	6	χ^2 = 13.87*	59	38	4	χ^2 = 5.04
Female	24	67	9	(.001)	63	33	4	(.080)
Education		(n = 2097)				(n = 2034)		
High school diploma or less	26	66	8		54	42	4	
Some college	25	69	6	χ^2 = 5.55	60	36	4	χ^2 = 20.80*
Bachelors or grad degree	28	64	9	(.235)	66	30	3	(.000)
Marital Status		(n = 2115)				(n = 2054)		
Married	26	66	8		61	35	5	
Never married	29	69	3		66	33	2	
Divorced/separated	24	68	9	χ^2 = 11.90	57	42	2	χ^2 = 13.27*
Widowed	30	63	8	(.064)	60	38	3	(.039)
Occupation		(n = 1578)				(n = 1546)		
Mgt, prof or education	24	68	7		64	31	4	
Sales or office support	25	68	7		64	32	4	
Constrn, inst or maint	31	66	3		66	31	3	
Prodn/trans/warehsing	35	55	10		68	27	6	
Agriculture	30	63	7		49	45	6	
Food serv/pers. care	26	73	2		60	40	0	
Hlthcare supp/safety	20	68	12	χ^2 = 36.30*	58	37	5	χ^2 = 29.77*
Other	19	77	3	(.001)	66	33	1	(.008)

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 3 continued.

	Indicate to what degree (if any) you have experienced the following in your area as a result of last summer's drought?							
	Reduced water supplies				***Decreased farm production (crops or livestock)***			
	Not at All	*To some extent*	*A great extent*	*Significance*	*Not at All*	*To some extent*	*A great extent*	*Significance*
				Percentages				
Total	50	44	5		31	48	22	
Community Size		(n = 1998)				(n = 1991)		
Less than 500	46	47	8		21	52	27	
500 - 999	35	57	8		22	51	27	
1,000 - 4,999	47	47	6		29	45	26	
5,000 - 9,999	49	46	5	χ^2 = 58.82*	29	45	26	χ^2 = 69.01*
10,000 and up	60	37	3	(.000)	39	48	14	(.000)
Region		(n = 2056)				(n = 2048)		
Panhandle	45	49	6		26	48	27	
North Central	50	44	6		31	47	22	
South Central	53	41	6		36	46	18	
Northeast	48	47	5	χ^2 = 8.02	25	50	25	χ^2 = 27.26*
Southeast	51	45	4	(.432)	30	48	23	(.001)
Household Income Level		(n = 1951)				(n = 1946)		
Under $20,000	42	51	7		30	46	24	
$20,000 - $39,999	55	40	5		37	43	20	
$40,000 - $59,999	49	46	5	χ^2 = 11.02	24	51	24	χ^2 = 20.93*
$60,000 and over	52	43	5	(.088)	32	48	20	(.002)
Age		(n = 2066)				(n = 2057)		
19 - 29	61	32	7		35	44	21	
30 - 39	47	48	5		22	53	24	
40 - 49	48	49	3		33	48	19	
50 - 64	50	45	5	χ^2 = 32.31*	34	44	23	χ^2 = 23.31*
65 and older	47	47	6	(.000)	26	52	22	(.003)
Gender		(n = 2056)				(n = 2049)		
Male	50	45	5	χ^2 = 0.23	29	50	21	χ^2 = 6.59*
Female	51	44	5	(.892)	33	45	23	(.037)
Education		(n = 2038)				(n = 2030)		
High school diploma or less	46	48	6		29	49	21	
Some college	50	46	4	χ^2 = 10.97*	32	47	21	χ^2 = 2.14
Bachelors or grad degree	54	40	6	(.027)	31	46	23	(.710)
Marital Status		(n = 2056)				(n = 2048)		
Married	50	44	6		29	48	23	
Never married	54	44	2		38	45	18	
Divorced/separated	51	46	3	χ^2 = 9.27	33	44	23	χ^2 = 11.42
Widowed	51	45	4	(.159)	26	53	21	(.076)
Occupation		(n = 1545)				(n = 1548)		
Mgt, prof or education	52	41	7		35	47	19	
Sales or office support	57	39	4		37	48	15	
Constrn, inst or maint	62	37	1		38	50	12	
Prodn/trans/warehsing	60	31	9		35	49	16	
Agriculture	37	54	10		12	46	42	
Food serv/pers. care	56	40	4		30	50	20	
Hlthcare supp/safety	44	53	4	χ^2 = 60.61*	26	51	23	χ^2 = 102.10*
Other	55	44	1	(.000)	38	44	18	(.000)

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 3 continued.

	Indicate to what degree (if any) you have experienced the following in your area as a result of last summer's drought?							
	Loss of business income				***Loss of wildlife and wildlife habitat***			
	Not at All	*To some extent*	*A great extent*	*Significance*	*Not at All*	*To some extent*	*A great extent*	*Significance*
				Percentages				
Total	41	48	12		25	58	17	
Community Size		(n = 1971)				(n = 1991)		
Less than 500	35	50	16		18	61	21	
500 - 999	28	50	23		15	59	26	
1,000 - 4,999	33	53	14		24	56	20	
5,000 - 9,999	44	44	12	χ^2 = 99.13*	24	59	17	χ^2 = 50.95*
10,000 and up	52	43	5	(.000)	32	57	12	(.000)
Region		(n = 2028)				(n = 2049)		
Panhandle	43	43	14		24	61	15	
North Central	39	49	13		19	57	25	
South Central	45	48	7		29	58	13	
Northeast	36	49	15	χ^2 = 25.73*	24	57	19	χ^2 = 29.98*
Southeast	41	47	13	(.001)	22	58	20	(.000)
Household Income Level		(n = 1927)				(n = 1946)		
Under $20,000	35	48	17		22	65	13	
$20,000 - $39,999	49	41	10		30	55	15	
$40,000 - $59,999	39	53	9	χ^2 = 24.42*	21	58	21	χ^2 = 20.93*
$60,000 and over	41	48	11	(.000)	26	58	17	(.002)
Age		(n = 2038)				(n = 2059)		
19 - 29	47	43	11		33	47	20	
30 - 39	42	46	12		22	63	15	
40 - 49	42	49	9		22	63	15	
50 - 64	41	45	14	χ^2 = 22.03*	25	58	18	χ^2 = 30.17*
65 and older	33	55	12	(.005)	22	60	18	(.000)
Gender		(n = 2029)				(n = 2050)		
Male	39	49	12	χ^2 = 2.20	20	62	18	χ^2 = 25.26*
Female	43	46	11	(.333)	30	54	16	(.000)
Education		(n = 2008)				(n = 2030)		
High school diploma or less	39	50	11		27	54	19	
Some college	42	45	13	χ^2 = 4.24	22	61	17	χ^2 = 8.05
Bachelors or grad degree	42	47	11	(.375)	26	57	17	(.090)
Marital Status		(n = 2028)				(n = 2051)		
Married	40	47	13		23	58	19	
Never married	46	51	3		34	51	15	
Divorced/separated	43	44	13	χ^2 = 23.31*	23	63	15	χ^2 = 19.80*
Widowed	36	53	11	(.001)	27	60	13	(.003)
Occupation		(n = 1536)				(n = 1546)		
Mgt, prof or education	47	46	8		28	55	17	
Sales or office support	42	51	7		28	62	10	
Constrn, inst or maint	43	45	11		25	50	25	
Prodn/trans/warehsing	51	41	8		29	60	11	
Agriculture	20	50	30		13	63	25	
Food serv/pers. care	33	65	2		18	59	22	
Hlthcare supp/safety	45	50	5	χ^2 = 135.16*	26	58	16	χ^2 = 43.90*
Other	51	39	10	(.000)	30	53	17	(.000)

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 3 continued.

	Indicate to what degree (if any) you have experienced the following in your area as a result of last summer's drought?							
	Wildfires				***Reduced water quality***			
	Not at All	*To some extent*	*A great extent*	*Significance*	*Not at All*	*To some extent*	*A great extent*	*Significance*
				Percentages				
Total	31	48	20		52	43	4	
Community Size		(n = 1987)				(n = 1990)		
Less than 500	23	54	23		46	50	5	
500 - 999	26	48	25		49	46	5	
1,000 - 4,999	29	50	21		52	42	7	
5,000 - 9,999	31	43	26	χ^2 = 47.76*	52	42	6	χ^2 = 33.83*
10,000 and up	39	47	14	(.000)	58	41	1	(.000)
Region		(n = 2047)				(n = 2048)		
Panhandle	12	47	41		42	50	9	
North Central	16	41	43		50	44	7	
South Central	35	49	16		58	40	3	
Northeast	39	49	12	χ^2 = 234.37*	51	45	4	χ^2 = 31.24*
Southeast	38	52	9	(.000)	51	45	5	(.000)
Household Income Level		(n = 1941)				(n = 1946)		
Under $20,000	25	48	27		42	48	10	
$20,000 - $39,999	36	42	23		51	43	6	
$40,000 - $59,999	28	52	20	χ^2 = 20.77*	50	46	4	χ^2 = 38.68*
$60,000 and over	33	50	17	(.002)	57	41	2	(.000)
Age		(n = 2057)				(n = 2060)		
19 - 29	33	47	20		57	37	5	
30 - 39	28	52	20		53	44	3	
40 - 49	32	50	19		47	50	3	
50 - 64	34	45	21	χ^2 = 7.97	52	43	5	χ^2 = 15.43
65 and older	28	50	22	(.436)	52	43	5	(.051)
Gender		(n = 2047)				(n = 2051)		
Male	28	53	19	χ^2 = 20.47*	52	44	4	χ^2 = 1.72
Female	35	44	22	(.000)	53	43	5	(.422)
Education		(n = 2029)				(n = 2032)		
High school diploma or less	31	48	21		48	45	8	
Some college	28	53	20	χ^2 = 13.08*	52	43	5	χ^2 = 30.79*
Bachelors or grad degree	36	45	20	(.011)	55	43	2	(.000)
Marital Status		(n = 2046)				(n = 2048)		
Married	30	50	20		52	43	4	
Never married	37	42	21		57	40	4	
Divorced/separated	35	45	20	χ^2 = 8.75	50	45	5	χ^2 = 5.14
Widowed	32	46	22	(.188)	47	47	6	(.527)
Occupation		(n = 1543)				(n = 1546)		
Mgt, prof or education	37	46	17		55	43	2	
Sales or office support	31	49	21		54	44	2	
Constrn, inst or maint	22	68	10		57	41	2	
Prodn/trans/warehsing	33	53	15		56	38	6	
Agriculture	27	46	27		53	41	6	
Food serv/pers. care	27	43	31		37	45	18	
Hlthcare supp/safety	37	36	27	χ^2 = 62.27*	44	52	5	χ^2 = 47.93*
Other	43	42	16	(.000)	52	45	3	(.000)

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 3 continued.

Indicate to what degree (if any) you have experienced the following in your area as a result of last summer's drought?

Health effects from airborne particles

	Not at All	*To some extent*	*A great extent*	*Significance*
			Percentages	
Total	41	52	7	
Community Size		(n = 1995)		
Less than 500	38	57	5	
500 - 999	37	54	10	
1,000 - 4,999	41	51	7	
5,000 - 9,999	43	51	7	χ^2 = 9.73
10,000 and up	44	50	6	(.284)
Region		(n = 2052)		
Panhandle	33	57	10	
North Central	34	57	9	
South Central	43	51	6	
Northeast	41	53	6	χ^2 = 24.83*
Southeast	49	46	5	(.002)
Household Income Level		(n = 1953)		
Under $20,000	34	60	7	
$20,000 - $39,999	44	48	8	
$40,000 - $59,999	41	50	9	χ^2 = 15.28*
$60,000 and over	43	52	5	(.018)
Age		(n = 2062)		
19 - 29	55	37	8	
30 - 39	43	51	6	
40 - 49	39	55	6	
50 - 64	37	56	7	χ^2 = 45.29*
65 and older	36	58	7	(.000)
Gender		(n = 2054)		
Male	42	52	6	χ^2 = 5.06
Female	41	51	8	(.080)
Education		(n = 2037)		
High school diploma or less	34	57	10	
Some college	42	51	7	χ^2 = 25.70*
Bachelors or grad degree	46	49	5	(.000)
Marital Status		(n = 2053)		
Married	41	53	7	
Never married	48	43	8	
Divorced/separated	39	52	9	χ^2 = 14.17*
Widowed	37	60	3	(.028)
Occupation		(n = 1550)		
Mgt, prof or education	46	47	7	
Sales or office support	40	56	4	
Constrn, inst or maint	49	47	4	
Prodn/trans/warehsing	43	49	8	
Agriculture	43	49	8	
Food serv/pers. care	35	50	15	
Hlthcare supp/safety	40	50	11	χ^2 = 19.72
Other	42	53	5	(.139)

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 4. *Extent Factors Will Affect Amount or Cost of Water Available Over the Next Five Years by Community Size, Region and Various Individual Attributes*

	In your opinion, to what extent are the following factors likely to affect the amount or cost of water available to you over the next five years?									
	Increased probability of drought due to cyclical weather variations					*Increased probability of drought due to global climate change*				
	Don't Know	*Not at All*	*To some extent*	*A great extent*	*Chi-square (sig.)*	*Don't Know*	*Not at All*	*To some extent*	*A great extent*	*Chi-square (sig.)*
					Percentages					
Total	26	5	49	20		26	17	46	12	
Community Size		(n = 2042)					(n = 2043)			
Less than 1,000	23	6	47	25	χ^2 =	23	18	46	14	χ^2 =
1,000 - 9,999	24	6	50	20	25.53*	25	19	45	12	14.12*
10,000 and up	30	4	51	15	(.000)	28	15	48	9	(.028)
Region		(n = 2107)					(n = 2102)			
Panhandle	27	3	44	26		28	12	46	15	
North Central	30	6	46	19		31	20	40	10	
South Central	29	6	46	20	χ^2 =	26	16	45	13	χ^2 =
Northeast	24	3	55	18	36.77*	23	16	49	11	26.39*
Southeast	21	9	54	16	(.000)	22	19	51	8	(.009)
Income Level		(n = 1991)					(n = 1991)			
Under $20,000	35	5	41	20		34	15	36	15	
$20,000 - $39,999	32	4	45	18	χ^2 =	32	16	41	11	χ^2 =
$40,000 - $59,999	25	4	52	19	36.70*	23	15	51	12	41.42*
$60,000 and over	20	7	52	21	(.000)	21	18	50	10	(.000)
Age		(n = 2115)					(n = 2113)			
19 - 29	29	7	45	19		29	18	43	11	
30 - 39	27	3	51	19		23	14	51	12	
40 - 49	23	7	49	21	χ^2 =	23	15	51	11	χ^2 =
50 - 64	19	4	55	22	41.80*	20	17	50	13	43.55*
65 and older	34	5	44	17	(.000)	34	18	38	10	(.000)
Education		(n = 2083)					(n = 2080)			
H.S. diploma or less	36	4	40	20	χ^2 =	35	15	38	12	χ^2 =
Some college	23	5	55	17	55.95*	24	16	50	11	46.74*
Bachelors degree	21	6	50	23	(.000)	20	20	48	13	(.000)
Occupation		(n = 1555)					(n = 1555)			
Mgt, prof or education	18	5	57	20		18	16	52	14	
Sales or office support	30	2	44	24		30	17	43	10	
Constrn, inst or maint	26	4	54	16		26	19	46	9	
Prodn/trans/warehsing	30	7	53	10		28	15	50	7	
Agriculture	14	10	49	28	χ^2 =	18	27	46	9	χ^2 =
Food serv/pers. care	32	6	32	30	89.75*	31	19	25	25	72.65*
Hlthcare supp/safety	23	3	55	19	(.000)	25	12	47	16	(.000)
Other	39	3	40	17		36	15	38	11	

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 4 Continued.

	In your opinion, to what extent are the following factors likely to affect the amount or cost of water available to you over the next five years?									
	Residential use of available water					*Use of available water by business and industry*				
	Don't Know	*Not at All*	*To some extent*	*A great extent*	*Chi-square (sig.)*	*Don't Know*	*Not at All*	*To some extent*	*A great extent*	*Chi-square (sig.)*
					Percentages					
Total	21	12	59	8		27	9	55	9	
Community Size		(n = 2019)					(n = 2017)			
Less than 1,000	22	17	54	8	χ^2 =	26	13	51	10	χ^2 =
1,000 - 9,999	20	13	60	8	24.32*	25	8	57	10	19.41*
10,000 and up	23	8	62	7	(.000)	29	7	57	7	(.004)
Region		(n = 2083)					(n = 2078)			
Panhandle	25	7	57	11		32	6	50	12	
North Central	25	16	52	7		28	11	51	10	
South Central	22	11	60	7	χ^2 =	28	9	56	8	χ^2 =
Northeast	19	10	64	8	33.74*	25	8	58	9	22.13*
Southeast	18	16	59	8	(.001)	21	12	58	9	(.036)
Income Level		(n = 1972)					(n = 1967)			
Under $20,000	28	8	52	12		37	6	47	10	
$20,000 - $39,999	25	11	56	8	χ^2 =	33	11	48	9	χ^2 =
$40,000 - $59,999	21	9	64	6	44.68*	25	6	61	7	57.65*
$60,000 and over	17	16	61	7	(.000)	20	11	60	10	(.000)
Age		(n = 2090)					(n = 2089)			
19 - 29	29	12	53	6		33	11	49	7	
30 - 39	22	7	61	10		26	7	56	11	
40 - 49	17	14	62	8	χ^2 =	21	9	59	12	χ^2 =
50 - 64	15	13	64	9	47.20*	19	10	61	10	55.06*
65 and older	27	12	55	7	(.000)	35	8	50	8	(.000)
Education		(n = 2058)					(n = 2056)			
H.S. diploma or less	29	11	52	9	χ^2 =	36	6	49	9	χ^2 =
Some college	20	13	61	7	29.25*	27	8	56	9	63.11*
Bachelors degree	17	12	63	8	(.000)	18	13	60	10	(.000)
Occupation		(n = 1549)					(n = 1548)			
Mgt, prof or education	13	11	69	8		18	9	63	10	
Sales or office support	24	9	61	7		33	9	52	6	
Constrn, inst or maint	15	18	61	6		23	10	60	8	
Prodn/trans/warehsing	26	13	58	3		29	6	57	8	
Agriculture	16	18	59	7	χ^2 =	17	15	59	9	χ^2 =
Food serv/pers. care	24	16	39	22	103.33*	30	8	44	18	58.81*
Hlthcare supp/safety	18	5	65	12	(.000)	25	10	53	12	(.000)
Other	37	10	44	9		37	12	41	11	

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 4 Continued.

	In your opinion, to what extent are the following factors likely to affect the amount or cost of water available to you over the next five years?									
	Use of available water for agricultural irrigation					*Use of available water for livestock production*				
	Don't Know	*Not at All*	*To some extent*	*A great extent*	*Chi-square (sig.)*	*Don't Know*	*Not at All*	*To some extent*	*A great extent*	*Chi-square (sig.)*
					Percentages					
Total	22	5	49	25		22	9	54	16	
Community Size		(n = 2045)					(n = 2041)			
Less than 1,000	18	6	49	27	χ^2 =	17	11	54	18	χ^2 =
1,000 - 9,999	21	5	47	27	13.87*	22	9	55	14	23.45*
10,000 and up	24	4	50	22	(.031)	26	6	53	15	(.001)
Region		(n = 2108)					(n = 2102)			
Panhandle	26	3	46	26		27	4	50	19	
North Central	25	5	44	26		23	10	54	14	
South Central	23	5	49	23	χ^2 =	24	9	55	12	χ^2 =
Northeast	17	4	51	28	27.62*	18	7	55	20	36.29*
Southeast	19	8	49	24	(.006)	19	12	54	16	(.000)
Income Level		(n = 1996)					(n = 1991)			
Under $20,000	30	5	37	28		30	6	45	19	
$20,000 - $39,999	27	5	47	22	χ^2 =	27	10	48	16	χ^2 =
$40,000 - $59,999	22	3	51	24	43.52*	22	6	58	14	46.61*
$60,000 and over	16	6	52	26	(.000)	17	11	58	15	(.000)
Age		(n = 2119)					(n = 2114)			
19 - 29	28	4	41	27		27	10	47	16	
30 - 39	23	1	52	24		25	5	55	16	
40 - 49	17	7	51	25	χ^2 =	17	9	59	15	χ^2 =
50 - 64	15	6	53	27	56.70*	15	10	59	16	52.50*
65 and older	27	5	46	22	(.000)	29	8	48	15	(.000)
Education		(n = 2085)					(n = 2082)			
H.S. diploma or less	30	4	38	27	χ^2 =	30	8	47	15	χ^2 =
Some college	20	4	52	24	53.45*	22	9	54	16	33.91*
Bachelors degree	16	6	52	25	(.000)	17	9	59	16	(.000)
Occupation		(n = 1564)					(n = 1558)			
Mgt, prof or education	16	5	55	24		16	8	62	14	
Sales or office support	25	7	44	25		26	8	51	16	
Constrn, inst or maint	18	2	58	22		20	10	59	11	
Prodn/trans/warehsing	23	3	46	28		23	4	58	15	
Agriculture	9	8	62	21	χ^2 =	10	15	62	14	χ^2 =
Food serv/pers. care	26	10	24	40	83.54*	26	10	41	24	70.78*
Hlthcare supp/safety	23	4	43	30	(.000)	20	6	53	21	(.000)
Other	34	5	44	17		33	10	45	12	

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 4 Continued.

	In your opinion, to what extent are the following factors likely to affect the amount or cost of water available to you over the next five years?									
	Activities in other states					*Recreational water use*				
	Don't Know	*Not at All*	*To some extent*	*A great extent*	*Chi-square (sig.)*	*Don't Know*	*Not at All*	*To some extent*	*A great extent*	*Chi-square (sig.)*
					Percentages					
Total	34	7	49	10		24	13	53	10	
Community Size		(n = 2030)					(n = 2043)			
Less than 1,000	32	9	48	11	χ^2 =	22	12	56	10	χ^2 =
1,000 - 9,999	32	9	48	11	25.21*	24	16	51	10	15.47*
10,000 and up	38	4	50	8	(.000)	26	10	54	10	(.017)
Region		(n = 2092)					(n = 2103)			
Panhandle	40	4	47	9		26	11	55	9	
North Central	34	10	39	17		24	12	53	11	
South Central	34	5	50	11	χ^2 =	25	12	52	12	χ^2 =
Northeast	34	8	50	8	47.87*	24	12	56	9	12.48
Southeast	30	10	54	6	(.000)	22	16	54	8	(.408)
Income Level		(n = 1982)					(n = 1991)			
Under $20,000	44	6	36	14		35	10	39	16	
$20,000 - $39,999	39	9	41	10	χ^2 =	30	11	50	8	χ^2 =
$40,000 - $59,999	35	6	50	10	51.26*	22	11	58	9	66.37*
$60,000 and over	27	8	56	9	(.000)	18	16	58	9	(.000)
Age		(n = 2106)					(n = 2113)			
19 - 29	38	5	49	8		26	11	55	8	
30 - 39	32	7	50	12		25	15	49	11	
40 - 49	29	10	51	11	χ^2 =	22	16	55	7	χ^2 =
50 - 64	27	9	53	11	56.66*	16	13	59	12	64.26*
65 and older	46	5	41	9	(.000)	34	9	46	11	(.000)
Education		(n = 2072)					(n = 2080)			
H.S. diploma or less	46	6	35	12	χ^2 =	35	11	43	11	χ^2 =
Some college	34	8	49	9	81.11*	23	12	54	12	73.66*
Bachelors degree	25	7	59	10	(.000)	18	15	61	7	(.000)
Occupation		(n = 1557)					(n = 1563)			
Mgt, prof or education	24	6	63	8		16	16	60	9	
Sales or office support	39	7	49	5		22	8	62	8	
Constrn, inst or maint	31	12	47	10		18	20	53	8	
Prodn/trans/warehsing	34	9	46	10		26	11	53	10	
Agriculture	28	6	54	11	χ^2 =	17	10	59	13	χ^2 =
Food serv/pers. care	43	6	31	20	73.48*	30	8	48	14	56.76*
Hlthcare supp/safety	36	5	46	13	(.000)	25	11	57	7	(.000)
Other	42	12	36	10		34	14	47	5	

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 4 Continued.

	In your opinion, to what extent are the following factors likely to affect the amount or cost of water available to you over the next five years?				
	Water demands of large urban centers				
	Don't Know	*Not at All*	*To some extent*	*A great extent*	*Chi-square*
			Percentages		
Total	30	10	45	15	
Community Size			(n = 2043)		
Less than 1,000	29	12	41	18	χ^2 =
1,000 - 9,999	29	12	47	13	26.34*
10,000 and up	32	6	48	14	(.000)
Region			(n = 2103)		
Panhandle	35	9	40	17	
North Central	32	9	42	17	
South Central	31	10	46	14	χ^2 =
Northeast	28	8	49	15	23.39*
Southeast	25	15	48	12	(.025)
Income Level			(n = 1991)		
Under $20,000	39	6	35	21	
$20,000 - $39,999	37	9	38	16	χ^2 =
$40,000 - $59,999	31	9	48	12	70.21*
$60,000 and over	22	13	52	13	(.000)
Age			(n = 2115)		
19 - 29	37	11	42	11	
30 - 39	29	12	48	11	
40 - 49	28	10	46	16	χ^2 =
50 - 64	20	11	53	17	62.46*
65 and older	39	8	38	16	(.000)
Education			(n = 2079)		
H.S. diploma or less	40	7	38	15	χ^2 =
Some college	31	10	44	16	62.47*
Bachelors degree	21	13	53	13	(.000)
Occupation			(n = 1564)		
Mgt, prof or education	23	12	54	11	
Sales or office support	30	11	46	12	
Constrn, inst or maint	28	16	41	15	
Prodn/trans/warehsing	32	8	51	9	
Agriculture	24	10	48	19	χ^2 =
Food serv/pers. care	37	8	37	18	50.23*
Hlthcare supp/safety	30	8	46	16	(.000)
Other	43	11	37	9	

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 5. *Water Use Priorities by Community Size, Region and Individual Attributes*

	Rate the priority you would personally give to each of the following uses of water.									
	Indoor use in existing homes					*Providing food and refuge for fish, birds and other animals*				
	Not a priority	*Low priority*	*Medium priority*	*High priority*	*Chi-square (sig.)*	*Not a priority*	*Low priority*	*Medium priority*	*High priority*	*Chi-square (sig.)*
					Percentages					
Total	2	5	20	73		6	19	48	28	
Community Size		(n = 2067)					(n = 2056)			
Less than 1,000	3	5	17	75	χ^2 =	6	22	48	24	χ^2 =
1,000 - 9,999	2	4	22	73	12.67*	7	19	48	26	13.81*
10,000 and up	1	5	21	72	(.049)	4	17	49	30	(.032)
Region		(n = 2127)					(n = 2118)			
Panhandle	2	3	28	68		3	19	51	26	
North Central	4	4	17	75		6	16	46	33	
South Central	1	7	17	74	χ^2 =	4	20	47	29	χ^2 =
Northeast	1	3	21	75	37.59*	6	18	48	28	23.46*
Southeast	2	4	22	73	(.000)	8	20	51	20	(.024)
Income Level		(n = 2012)					(n = 1999)			
Under $20,000	4	7	23	66		8	15	41	36	
$20,000 - $39,999	3	7	23	67	χ^2 =	7	16	47	30	χ^2 =
$40,000 - $59,999	0**	2	23	74	59.70*	6	19	48	28	37.98*
$60,000 and over	1	4	16	79	(.000)	4	22	52	23	(.000)
Age		(n = 2140)					(n = 2126)			
19 - 29	1	8	24	66		10	19	45	27	
30 - 39	1	4	22	73		5	17	50	28	
40 - 49	1	3	20	76	χ^2 =	4	21	48	26	χ^2 =
50 - 64	1	3	18	78	54.19*	3	16	52	29	27.70*
65 and older	5	5	20	71	(.000)	7	21	46	27	(.006)
Education		(n = 2107)					(n = 2091)			
H.S. diploma or less	3	7	19	71	χ^2 =	6	18	45	31	χ^2 =
Some college	1	4	23	72	27.55*	6	21	46	27	14.87*
Bachelors degree	1	4	17	77	(.000)	5	17	53	26	(.021)
Occupation		(n = 1568)					(n = 1569)			
Mgt, prof or education	0**	2	14	83		5	16	52	26	
Sales or office support	1	2	25	72		4	20	49	28	
Constrn, inst or maint	1	5	25	70		2	24	45	28	
Prodn/trans/warehsing	0	6	19	75		9	19	44	28	
Agriculture	3	5	26	66	χ^2 =	10	28	43	20	χ^2 =
Food serv/pers. care	0	4	17	79	54.93*	0	8	58	34	51.43*
Hlthcare supp/safety	0	5	22	73	(.000)	2	18	54	26	(.000)
Other	3	3	19	75		5	19	50	27	

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 5 Continued.

	Rate the priority you would personally give to each of the following uses of water.									
	Use for livestock (drinking and waste management)					*Recreation, such as fishing and boating*				
	Not a priority	*Low priority*	*Medium priority*	*High priority*	*Chi-square (sig.)*	*Not a priority*	*Low priority*	*Medium priority*	*High priority*	*Chi-square (sig.)*
					Percentages					
Total	4	5	35	56		17	44	29	10	
Community Size		(n = 2048)					(n = 2046)			
Less than 1,000	4	4	34	59	χ^2 =	19	44	26	11	χ^2 =
1,000 - 9,999	4	4	35	58	12.24	16	44	32	9	8.60
10,000 and up	3	7	37	53	(.057)	19	46	27	9	(.197)
Region		(n = 2108)					(n = 2109)			
Panhandle	2	5	38	56		19	46	23	13	
North Central	1	4	33	62		14	45	32	9	
South Central	3	5	39	53	χ^2 =	18	43	29	10	χ^2 =
Northeast	4	6	33	58	21.67*	19	43	28	11	18.07
Southeast	5	3	35	57	(.041)	16	46	32	6	(.113)
Income Level		(n = 1993)					(n = 1995)			
Under $20,000	4	6	32	58		23	34	28	14	
$20,000 - $39,999	4	7	32	57	χ^2 =	17	42	31	10	χ^2 =
$40,000 - $59,999	3	4	32	61	25.55*	19	46	26	9	27.05*
$60,000 and over	3	4	41	52	(.002)	15	47	30	9	(.001)
Age		(n = 2120)					(n = 2116)			
19 - 29	7	1	37	55		17	47	27	9	
30 - 39	1	3	41	55		19	47	25	10	
40 - 49	2	7	36	55	χ^2 =	17	46	30	7	χ^2 =
50 - 64	3	5	35	58	42.82*	17	43	30	11	9.85
65 and older	4	7	32	57	(.000)	18	41	30	11	(.630)
Education		(n = 2086)					(n = 2086)			
H.S. diploma or less	5	5	32	58	χ^2 =	18	38	32	12	χ^2 =
Some college	4	6	34	56	18.08*	19	43	29	9	26.75*
Bachelors degree	2	4	40	54	(.006)	15	51	26	9	(.000)
Occupation		(n = 1569)					(n = 1567)			
Mgt, prof or education	4	4	37	56		15	46	30	10	
Sales or office support	5	8	31	56		18	44	29	9	
Constrn, inst or maint	4	4	44	48		14	40	36	10	
Prodn/trans/warehsing	6	4	35	55		17	52	20	12	
Agriculture	0**	3	26	71	χ^2 =	25	46	23	6	χ^2 =
Food serv/pers. care	0	0	42	58	53.47*	2	40	44	15	49.65*
Hlthcare supp/safety	1	4	41	55	(.000)	20	46	23	11	(.000)
Other	3	6	42	49		13	42	37	8	

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 5 Continued.

	Rate the priority you would personally give to each of the following uses of water.									
	Irrigation of agricultural/horticultural crops					*Use for yards and landscaping in new housing developments*				
	Not a priority	*Low priority*	*Medium priority*	*High priority*	*Chi-square (sig.)*	*Not a priority*	*Low priority*	*Medium priority*	*High priority*	*Chi-square (sig.)*
					Percentages					
Total	5	9	36	51		28	45	23	4	
Community Size		(n = 2046)					(n = 2048)			
Less than 1,000	6	9	32	53	χ^2 =	33	42	21	4	χ^2 =
1,000 - 9,999	6	10	36	48	22.19*	31	45	21	4	21.29*
10,000 and up	2	8	38	51	(.001)	22	50	25	4	(.002)
Region		(n = 2107)					(n = 2110)			
Panhandle	3	8	32	57		21	50	24	5	
North Central	3	6	38	52		34	41	20	5	
South Central	3	8	35	54	χ^2 =	22	47	27	4	χ^2 =
Northeast	6	10	34	49	43.04*	32	44	19	5	45.06*
Southeast	8	14	37	41	(.000)	34	44	20	2	(.000)
Income Level		(n = 1992)					(n = 2000)			
Under $20,000	6	13	37	45		30	35	29	6	
$20,000 - $39,999	7	11	35	47	χ^2 =	31	39	24	6	χ^2 =
$40,000 - $59,999	3	10	36	51	23.87*	29	47	21	3	39.13*
$60,000 and over	4	7	36	54	(.005)	25	51	22	3	(.000)
Age		(n = 2118)					(n = 2117)			
19 - 29	7	5	29	59		35	43	20	1	
30 - 39	2	6	40	52		33	44	20	3	
40 - 49	4	12	33	51	χ^2 =	27	47	23	3	χ^2 =
50 - 64	4	10	38	48	37.59*	28	45	22	5	36.47*
65 and older	6	11	37	47	(.000)	21	46	27	5	(.000)
Education		(n = 2084)					(n = 2090)			
H.S. diploma or less	5	13	37	45	χ^2 =	27	42	24	7	χ^2 =
Some college	5	11	33	51	36.08*	30	45	23	2	31.53*
Bachelors degree	4	5	37	54	(.000)	26	49	22	3	(.000)
Occupation		(n = 1569)					(n = 1570)			
Mgt, prof or education	4	5	37	54		26	47	24	3	
Sales or office support	3	9	39	49		25	45	28	2	
Constrn, inst or maint	11	9	37	43		32	51	14	4	
Prodn/trans/warehsing	3	14	36	48		31	44	19	7	
Agriculture	3	5	28	65	χ^2 =	37	46	14	3	χ^2 =
Food serv/pers. care	2	8	43	47	63.16*	32	34	30	4	36.69*
Hlthcare supp/safety	2	7	34	57	(.000)	30	46	22	3	(.018)
Other	7	15	33	46		28	42	27	3	

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 5 Continued.

	Rate the priority you would personally give to each of the following uses of water.									
	Transferring water to other states for their use					*Community parks, pools and sports fields*				
	Not a priority	*Low priority*	*Medium priority*	*High priority*	*Chi-square (sig.)*	*Not a priority*	*Low priority*	*Medium priority*	*High priority*	*Chi-square (sig.)*
					Percentages					
Total	45	38	13	4		18	47	30	6	
Community Size		(n = 2051)					(n = 2051)			
Less than 1,000	49	34	14	3	χ^2 =	21	48	26	5	χ^2 =
1,000 - 9,999	45	39	12	4	11.46	17	49	28	5	10.69
10,000 and up	41	42	14	4	(.075)	17	45	33	5	(.098)
Region		(n = 2111)					(n = 2111)			
Panhandle	49	29	16	5		18	48	30	4	
North Central	50	38	8	5		21	50	27	3	
South Central	40	41	14	4	χ^2 =	13	50	31	6	χ^2 =
Northeast	46	38	13	3	27.08*	22	42	31	6	31.31*
Southeast	43	37	17	3	(.008)	19	47	27	8	(.002)
Income Level		(n = 1999)					(n = 1998)			
Under $20,000	47	33	16	4		26	38	30	7	
$20,000 - $39,999	45	34	16	6	χ^2 =	20	44	29	7	χ^2 =
$40,000 - $59,999	42	42	13	3	18.52*	19	50	26	5	36.60*
$60,000 and over	45	40	12	3	(.030)	14	49	34	4	(.000)
Age		(n = 2119)					(n = 2123)			
19 - 29	38	47	14	1		20	51	24	4	
30 - 39	51	33	11	4		18	44	34	4	
40 - 49	44	41	10	5	χ^2 =	16	50	28	6	χ^2 =
50 - 64	44	36	17	4	38.70*	17	44	33	6	18.60
65 and older	47	35	13	6	(.000)	20	46	28	6	(.099)
Education		(n = 2086)					(n = 2089)			
H.S. diploma or less	43	35	15	6	χ^2 =	22	45	25	8	χ^2 =
Some college	48	36	13	3	23.07*	19	48	30	4	31.67*
Bachelors degree	42	43	12	4	(.001)	14	48	33	5	(.000)
Occupation		(n = 1565)					(n = 1570)			
Mgt, prof or education	46	41	9	4		12	52	31	5	
Sales or office support	42	43	12	3		17	44	33	6	
Constrn, inst or maint	46	37	15	3		18	51	30	1	
Prodn/trans/warehsing	41	40	18	1		24	39	27	10	
Agriculture	49	38	11	3	χ^2 =	27	49	21	3	χ^2 =
Food serv/pers. care	45	33	16	6	19.99	22	41	29	8	53.33*
Hlthcare supp/safety	42	39	14	5	(.522)	18	48	30	5	(.000)
Other	49	36	12	3		16	50	29	5	

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 5 Continued.

	Rate the priority you would personally give to each of the following uses of water.									
	Industrial use in existing businesses					*Watering golf courses*				
	Not a priority	*Low priority*	*Medium priority*	*High priority*	*Chi-square (sig.)*	*Not a priority*	*Low priority*	*Medium priority*	*High priority*	*Chi-square (sig.)*
					Percentages					
Total	7	22	53	18		48	37	12	3	
Community Size		(n = 2031)					(n = 2048)			
Less than 1,000	9	21	52	18	χ^2 =	51	35	11	3	χ^2 =
1,000 - 9,999	8	24	53	16	20.57*	46	40	12	2	10.31
10,000 and up	4	20	55	21	(.002)	48	35	14	4	(.112)
Region		(n = 2095)					(n = 2106)			
Panhandle	5	29	54	12		39	44	14	4	
North Central	9	21	55	16		54	34	10	2	
South Central	5	20	54	21	χ^2 =	45	39	13	3	χ^2 =
Northeast	7	21	51	21	24.48*	49	37	11	4	23.88*
Southeast	8	23	53	16	(.018)	55	31	12	3	(.021)
Income Level		(n = 1980)					(n = 1995)			
Under $20,000	9	21	49	21		52	31	13	4	
$20,000 - $39,999	10	21	52	17	χ^2 =	50	32	13	5	χ^2 =
$40,000 - $59,999	6	23	54	17	22.78*	55	32	10	3	53.93*
$60,000 and over	4	22	55	19	(.007)	40	45	14	2	(.000)
Age		(n = 2101)					(n = 2117)			
19 - 29	8	19	52	21		56	32	9	3	
30 - 39	4	26	58	13		49	40	10	2	
40 - 49	6	27	51	16	χ^2 =	48	38	13	2	χ^2 =
50 - 64	6	20	53	21	30.03*	45	37	13	4	22.26*
65 and older	8	18	54	20	(.003)	44	38	14	4	(.035)
Education		(n = 2072)					(n = 2083)			
H.S. diploma or less	9	20	51	20	χ^2 =	49	33	12	6	χ^2 =
Some college	6	23	52	19	13.55*	50	36	12	2	22.21*
Bachelors degree	5	22	56	17	(.035)	44	41	12	3	(.001)
Occupation		(n = 1556)					(n = 1561)			
Mgt, prof or education	5	23	52	20		38	45	14	3	
Sales or office support	6	16	57	21		43	41	14	2	
Constrn, inst or maint	5	24	58	13		45	45	10	1	
Prodn/trans/warehsing	2	22	46	29		56	28	11	5	
Agriculture	8	15	55	23	χ^2 =	61	28	10	1	χ^2 =
Food serv/pers. care	10	16	62	12	47.64*	52	36	6	6	72.62*
Hlthcare supp/safety	5	31	50	14	(.001)	51	40	8	2	(.000)
Other	6	23	57	15		57	23	16	4	

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 5 Continued.

	Rate the priority you would personally give to each of the following uses of water.									
	Preserving the habitat of threatened and endangered species					*Indoor use in new housing developments*				
	Not a priority	*Low priority*	*Medium priority*	*High priority*	*Chi-square (sig.)*	*Not a priority*	*Low priority*	*Medium priority*	*High priority*	*Chi-square (sig.)*
					Percentages					
Total	13	30	37	20		11	23	39	28	
Community Size		(n = 2051)					(n = 2041)			
Less than 1,000	16	33	35	15	χ^2 =	13	23	38	26	χ^2 =
1,000 - 9,999	15	31	35	20	29.35*	11	25	40	25	15.21*
10,000 and up	9	28	40	23	(.000)	9	22	37	32	(.019)
Region		(n = 2109)					(n = 2100)			
Panhandle	9	34	36	21		12	27	38	24	
North Central	12	32	37	20		11	21	44	24	
South Central	12	28	38	22	χ^2 =	10	23	37	30	χ^2 =
Northeast	15	30	37	18	12.91	11	23	38	28	9.71
Southeast	15	32	33	20	(.376)	11	22	39	29	(.641)
Income Level		(n = 1997)					(n = 1988)			
Under $20,000	15	22	35	29		14	26	36	25	
$20,000 - $39,999	10	29	38	23	χ^2 =	14	22	41	24	χ^2 =
$40,000 - $59,999	11	28	41	21	37.57*	10	24	39	27	18.11*
$60,000 and over	14	35	35	16	(.000)	8	23	39	31	(.034)
Age		(n = 2119)					(n = 2111)			
19 - 29	10	27	34	30		15	28	36	21	
30 - 39	13	25	38	24		8	22	43	27	
40 - 49	9	29	45	17	χ^2 =	7	27	35	31	χ^2 =
50 - 64	13	32	35	20	68.85*	11	20	38	31	35.49*
65 and older	19	35	32	15	(.000)	11	21	42	26	(.000)
Education		(n = 2084)					(n = 2075)			
H.S. diploma or less	14	30	35	22	χ^2 =	12	22	37	29	χ^2 =
Some college	13	31	36	20	4.44	11	24	39	27	3.06
Bachelors degree	12	30	39	19	(.617)	10	24	39	28	(.802)
Occupation		(n = 1569)					(n = 1559)			
Mgt, prof or education	12	28	41	19		12	22	35	31	
Sales or office support	12	34	39	16		9	24	37	31	
Constrn, inst or maint	15	30	30	25		9	29	38	24	
Prodn/trans/warehsing	10	32	37	22		6	14	46	34	
Agriculture	25	40	25	10	χ^2 =	14	29	38	20	χ^2 =
Food serv/pers. care	4	25	47	25	89.12*	9	32	32	28	49.90*
Hlthcare supp/safety	5	30	47	19	(.000)	10	26	41	24	(.000)
Other	13	25	41	22		7	13	47	33	

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 5 Continued.

	Rate the priority you would personally give to each of the following uses of water.									
	Swimming pools for individual homes					*New industrial uses (manufacturing & other processing)*				
	Not a priority	*Low priority*	*Medium priority*	*High priority*	*Chi-square (sig.)*	*Not a priority*	*Low priority*	*Medium priority*	*High priority*	*Chi-square (sig.)*
					Percentages					
Total	68	25	5	2		8	27	48	17	
Community Size		(n = 2049)					(n = 2044)			
Less than 1,000	73	21	4	2	χ^2 =	9	27	50	15	χ^2 =
1,000 - 9,999	66	25	7	2	13.09*	10	30	44	17	28.75*
10,000 and up	66	27	5	2	(.042)	5	24	51	20	(.000)
Region		(n = 2110)					(n = 2100)			
Panhandle	68	24	6	2		9	35	44	12	
North Central	69	24	6	2		8	32	46	14	
South Central	63	30	5	2	χ^2 =	5	29	47	19	χ^2 =
Northeast	69	23	5	4	25.85*	7	23	52	19	45.70*
Southeast	72	18	7	3	(.011)	13	22	47	18	(.000)
Income Level		(n = 1998)					(n = 1988)			
Under $20,000	60	26	9	5		12	25	46	17	
$20,000 - $39,999	66	26	6	3	χ^2 =	9	33	43	15	χ^2 =
$40,000 - $59,999	73	22	4	1	32.25*	9	28	48	16	32.67*
$60,000 and over	68	26	5	1	(.000)	5	24	52	19	(.000)
Age		(n = 2121)					(n = 2112)			
19 - 29	76	20	3	1		11	35	38	16	
30 - 39	70	24	5	1		6	26	53	15	
40 - 49	65	29	3	3	χ^2 =	7	29	47	17	χ^2 =
50 - 64	66	25	7	2	39.53*	7	26	48	19	33.87*
65 and older	63	25	8	4	(.000)	8	23	52	17	(.001)
Education		(n = 2084)					(n = 2078)			
H.S. diploma or less	61	26	8	5	χ^2 =	7	25	46	22	χ^2 =
Some college	69	25	5	1	42.20*	8	27	48	17	14.51*
Bachelors degree	71	25	3	1	(.000)	8	30	48	15	(.024)
Occupation		(n = 1571)					(n = 1561)			
Mgt, prof or education	70	26	3	2		11	29	44	17	
Sales or office support	69	25	6	1		5	29	45	21	
Constrn, inst or maint	63	26	8	3		6	29	55	10	
Prodn/trans/warehsing	74	17	4	4		3	19	56	23	
Agriculture	77	17	4	2	χ^2 =	6	24	52	19	χ^2 =
Food serv/pers. care	66	26	4	4	34.14*	10	24	48	18	51.45*
Hlthcare supp/safety	67	27	4	2	(.035)	7	40	40	13	(.000)
Other	65	25	8	3		9	26	48	18	

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 5 Continued.

	Rate the priority you would personally give to the following use of water.				
	Watering existing yards and landscaping				
	Not a priority	*Low priority*	*Medium priority*	*High priority*	*Chi-square (sig.)*
			Percentages		
Total	26	45	24	5	
Community Size		(n = 2067)			
Less than 1,000	26	49	19	6	χ^2 =
1,000 - 9,999	30	43	23	4	23.97*
10,000 and up	22	45	28	5	(.001)
Region		(n = 2134)			
Panhandle	15	53	26	6	
North Central	23	48	24	6	
South Central	20	47	29	4	χ^2 =
Northeast	35	39	21	5	82.31*
Southeast	37	41	16	6	(.000)
Income Level		(n = 2014)			
Under $20,000	29	37	26	9	
$20,000 - $39,999	29	39	25	7	χ^2 =
$40,000 - $59,999	32	43	22	3	46.24*
$60,000 and over	21	51	24	4	(.000)
Age		(n = 2142)			
19 - 29	34	50	11	5	
30 - 39	27	43	28	2	
40 - 49	24	46	25	6	χ^2 =
50 - 64	26	44	25	5	56.66*
65 and older	23	42	30	6	(.000)
Education		(n = 2105)			
H.S. diploma or less	27	44	23	7	χ^2 =
Some college	30	41	25	4	24.94*
Bachelors degree	22	50	24	4	(.000)
Occupation		(n = 1575)			
Mgt, prof or education	24	43	27	6	
Sales or office support	25	47	23	4	
Constrn, inst or maint	28	49	20	3	
Prodn/trans/warehsing	31	46	17	6	
Agriculture	39	44	14	3	χ^2 =
Food serv/pers. care	28	38	30	4	43.33*
Hlthcare supp/safety	24	48	26	3	(.003)
Other	22	47	28	3	

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 6. *Concern about Groundwater Levels in Nebraska by Community Size, Region and Individual Attributes*

	How concerned are you about groundwater levels in Nebraska?				
	Not at all	*Only a little*	*A moderate amount*	*A great deal*	*Significance*
			Percentages		
Total	6	16	36	43	
Community Size			(n = 2109)		
Less than 500	5	11	36	48	
500 - 999	3	19	29	49	
1,000 - 4,999	7	14	31	48	χ^2 = 52.72*
5,000 - 9,999	3	20	39	38	(.000)
10,000 and up	7	17	42	36	
Region			(n = 2175)		
Panhandle	4	15	31	50	
North Central	8	12	31	49	
South Central	7	15	42	37	χ^2 = 45.65*
Northeast	3	16	35	46	(.000)
Southeast	7	20	35	38	
Income Level			(n = 2052)		
Under $20,000	8	10	27	55	
$20,000 - $39,999	7	17	34	43	χ^2 = 44.57*
$40,000 - $59,999	7	14	38	41	(.000)
$60,000 and over	4	19	41	37	
Age			(n = 2182)		
19 - 29	12	24	43	21	
30 - 39	7	23	38	31	
40 - 49	6	17	37	39	χ^2 = 203.32*
50 - 64	3	10	38	49	(.000)
65 and older	3	10	27	60	
Gender			(n = 2172)		
Male	5	16	36	44	χ^2 = 1.75
Female	6	16	37	41	(.627)
Marital Status			(n = 2169)		
Married	6	17	36	41	
Never married	10	15	39	36	
Divorced/separated	3	11	38	48	χ^2 = 31.07*
Widowed	5	13	29	54	(.000)
Education			(n = 2148)		
H.S. diploma or less	5	12	32	51	
Some college	4	19	35	42	χ^2 = 45.83*
Bachelors or grad degree	9	15	40	37	(.000)
Occupation			(n = 1592)		
Mgt, prof or education	5	17	42	37	
Sales or office support	3	20	43	34	
Constrn, inst or maint	4	21	37	37	
Prodn/trans/warehsing	12	21	31	36	
Agriculture	2	15	33	50	
Food serv/pers. care	6	14	40	40	χ^2 = 64.23*
Hlthcare supp/safety	5	17	34	44	(.000)
Other	13	16	42	29	

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 7. *How Well Understand Global Climate Change by Community Size, Region and Individual Attributes*

	How well do you feel you understand global climate change?					
	Not at all	*Not very well*	*Fairly well*	*Very well*	*Unsure*	*Significance*
			Percentages			
Total	5	20	51	18	6	
Community Size			(n = 2078)			
Less than 500	5	17	50	23	6	
500 - 999	7	19	54	14	6	
1,000 - 4,999	4	21	51	16	9	χ^2 = 37.39*
5,000 - 9,999	5	18	47	19	11	(.002)
10,000 and up	6	21	53	17	4	
Region			(n = 2149)			
Panhandle	3	20	51	19	8	
North Central	9	16	52	16	7	
South Central	4	20	52	19	5	χ^2 = 25.05
Northeast	7	21	51	15	7	(.069)
Southeast	4	22	48	20	6	
Income Level			(n = 2023)			
Under $20,000	12	20	43	16	9	
$20,000 - $39,999	6	20	51	17	6	χ^2 = 53.38*
$40,000 - $59,999	4	20	51	18	7	(.000)
$60,000 and over	3	19	54	20	5	
Age			(n = 2157)			
19 - 29	5	18	54	16	7	
30 - 39	5	22	53	16	4	
40 - 49	4	20	54	19	3	χ^2 = 62.76*
50 - 64	3	19	50	23	6	(.000)
65 and older	9	22	45	14	10	
Gender			(n = 2146)			
Male	4	15	52	23	6	χ^2 = 56.94*
Female	6	24	49	13	7	(.000)
Marital Status			(n = 2146)			
Married	4	20	52	19	6	
Never married	8	18	50	19	5	
Divorced/separated	7	15	55	17	6	χ^2 = 57.93*
Widowed	9	30	38	10	13	(.000)
Education			(n = 2120)			
H.S. diploma or less	9	23	42	14	13	
Some college	4	18	56	16	6	χ^2 = 112.12*
Bachelors or grad degree	3	20	52	23	2	(.000)
Occupation			(n = 1573)			
Mgt, prof or education	2	22	53	21	3	
Sales or office support	11	20	50	15	4	
Constrn, inst or maint	5	14	60	16	5	
Prodn/trans/warehsing	7	19	53	19	2	
Agriculture	2	20	47	23	8	
Food serv/pers. care	6	27	46	15	6	χ^2 = 72.40*
Hlthcare supp/safety	4	20	58	15	3	(.000)
Other	4	9	64	16	7	

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 8. *Perception about Global Climate Change Happening by Community Size, Region and Individual Attributes*

	Do you think that global climate change is happening?				
	Definitely yes	*Yes somewhat*	*Definitely no*	*Don't know*	*Significance*
			Percentages		
Total	25	48	13	14	
Community Size			(n = 2074)		
Less than 500	20	50	16	15	
500 - 999	26	50	9	14	
1,000 - 4,999	22	52	13	13	χ^2 = 34.88*
5,000 - 9,999	21	49	16	14	(.000)
10,000 and up	32	43	11	14	
Region			(n = 2139)		
Panhandle	24	50	12	14	
North Central	21	48	12	18	
South Central	29	46	13	12	χ^2 = 16.95
Northeast	22	50	13	15	(.152)
Southeast	26	48	12	14	
Income Level			(n = 2020)		
Under $20,000	29	42	13	17	
$20,000 - $39,999	26	44	13	16	χ^2 = 25.78*
$40,000 - $59,999	25	51	9	15	(.002)
$60,000 and over	25	50	15	11	
Age			(n = 2150)		
19 - 29	30	39	18	14	
30 - 39	24	52	10	14	
40 - 49	22	56	11	12	χ^2 = 47.99*
50 - 64	28	49	12	11	(.000)
65 and older	22	44	14	19	
Gender			(n = 2139)		
Male	22	47	19	13	χ^2 = 65.23*
Female	29	49	8	15	(.000)
Marital Status			(n = 2141)		
Married	23	50	14	13	
Never married	34	40	12	15	
Divorced/separated	32	46	8	13	χ^2 = 35.54*
Widowed	21	46	11	22	(.000)
Education			(n = 2115)		
H.S. diploma or less	24	45	13	19	
Some college	25	50	12	13	χ^2 = 19.13*
Bachelors or grad degree	27	48	14	11	(.004)
Occupation			(n = 1572)		
Mgt, prof or education	29	47	12	13	
Sales or office support	20	48	15	17	
Constrn, inst or maint	20	53	17	11	
Prodn/trans/warehsing	28	45	20	7	
Agriculture	10	54	22	15	
Food serv/pers. care	41	31	6	22	χ^2 = 87.46*
Hlthcare supp/safety	25	58	8	9	(.000)
Other	32	47	13	8	

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 9. *Opinions about Global Climate Change by Community Size, Region and Individual Attributes*

	Please rate the extent to which you agree or disagree with the following statements regarding global climate change.							
	Increased carbon dioxide and other gases released into the atmosphere will, if unchecked, lead to global climate change.				***Firms and government researchers will develop new technologies to solve the problem.***			
	Disagree	*Neither*	*Agree*	*Significance*	*Disagree*	*Neither*	*Agree*	*Significance*
				Percentages				
Total	17	25	59		32	35	33	
Community Size		(n = 1973)				(n = 1992)		
Less than 500	20	26	54		30	35	35	
500 - 999	12	27	61		32	35	34	
1,000 - 4,999	14	25	62		33	34	34	
5,000 - 9,999	21	26	53	χ^2 = 14.68	34	40	26	χ^2 = 8.36
10,000 and up	17	23	60	(.066)	31	35	35	(.399)
Region		(n = 2035)				(n = 2053)		
Panhandle	18	26	55		35	31	33	
North Central	15	26	59		32	42	26	
South Central	17	24	59		32	35	34	
Northeast	14	26	60	χ^2 = 5.28	31	35	34	χ^2 = 15.17
Southeast	19	24	58	(.727)	30	32	39	(.056)
Household Income Level		(n = 1933)				(n = 1952)		
Under $20,000	12	25	63		33	31	36	
$20,000 - $39,999	16	25	59		33	37	30	
$40,000 - $59,999	15	27	58	χ^2 = 10.26	31	37	32	χ^2 = 4.93
$60,000 and over	19	23	58	(.114)	31	34	35	(.553)
Age		(n = 2046)				(n = 2063)		
19 - 29	15	32	53		36	36	29	
30 - 39	15	21	64		35	35	30	
40 - 49	14	23	64		31	35	34	
50 - 64	17	23	60	χ^2 = 24.84*	31	35	34	χ^2 = 10.34
65 and older	20	25	54	(.002)	28	35	37	(.242)
Gender		(n = 2036)				(n = 2052)		
Male	23	22	55	χ^2 = 62.16*	35	32	34	χ^2 = 11.50*
Female	10	28	62	(.000)	29	38	33	(.003)
Education		(n = 2010)				(n = 2029)		
High school diploma or less	16	29	55		32	37	32	
Some college	15	24	61	χ^2 = 11.81*	35	35	31	χ^2 = 9.40
Bachelors or grad degree	19	22	59	(.019)	29	34	37	(.052)
Marital Status		(n = 2034)				(n = 2053)		
Married	18	26	56		32	35	34	
Never married	11	20	69		36	37	28	
Divorced/separated	15	16	70	χ^2 = 26.58*	33	35	32	χ^2 = 6.34
Widowed	18	28	54	(.000)	27	37	36	(.386)
Occupation		(n = 1517)				(n = 1533)		
Mgt, prof or education	17	25	58		29	35	36	
Sales or office support	17	29	54		31	34	35	
Constrn, inst or maint	16	22	62		39	34	27	
Prodn/trans/warehsing	25	14	61		27	35	38	
Agriculture	22	28	50		31	31	38	
Food serv/pers. care	8	22	69		33	40	27	
Hlthcare supp/safety	11	21	67	χ^2 = 36.22*	29	41	31	χ^2 = 16.95
Other	14	30	56	(.001)	35	39	26	(.259)

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 9 Continued.

	Please rate the extent to which you agree or disagree with the following statements regarding global climate change.							
	We will have to change our lifestyles to reduce energy consumption.				***We will learn to live with and adapt to a changing climate.***			
	Disagree	*Neither*	*Agree*	*Significance*	*Disagree*	*Neither*	*Agree*	*Significance*
				Percentages				
Total	13	17	70		10	18	72	
Community Size		(n = 1998)				(n = 1990)		
Less than 500	16	15	70		16	18	66	
500 - 999	12	18	70		7	14	78	
1,000 - 4,999	12	18	70		8	18	74	
5,000 - 9,999	16	21	63	χ^2 = 10.95	9	19	72	χ^2 = 19.34*
10,000 and up	13	15	72	(.205)	9	20	72	(.013)
Region		(n = 2059)				(n = 2050)		
Panhandle	19	13	68		8	15	77	
North Central	14	23	63		9	23	69	
South Central	12	16	73		8	19	73	
Northeast	11	16	72	χ^2 = 21.50*	10	17	74	χ^2 = 17.68*
Southeast	14	17	69	(.006)	14	16	70	(.024)
Household Income Level		(n = 1955)				(n = 1948)		
Under $20,000	14	15	71		11	21	69	
$20,000 - $39,999	11	21	68		9	18	73	
$40,000 - $59,999	14	16	70	χ^2 = 8.01	9	17	74	χ^2 = 2.56
$60,000 and over	14	15	71	(.238)	10	18	72	(.861)
Age		(n = 2070)				(n = 2059)		
19 - 29	12	25	63		7	22	71	
30 - 39	12	13	75		12	13	75	
40 - 49	12	16	72		8	20	72	
50 - 64	13	14	73	χ^2 = 31.20*	9	17	74	χ^2 = 15.78*
65 and older	17	17	66	(.000)	11	18	71	(.046)
Gender		(n = 2059)				(n = 2050)		
Male	19	17	64	χ^2 = 55.87*	11	14	75	χ^2 = 22.98*
Female	8	17	75	(.000)	9	22	69	(.000)
Education		(n = 2036)				(n = 2027)		
High school diploma or less	14	20	67		9	23	68	
Some college	12	17	71	χ^2 = 9.28	8	17	75	χ^2 = 19.07*
Bachelors or grad degree	15	14	72	(.055)	12	16	72	(.001)
Marital Status		(n = 2061)				(n = 2051)		
Married	15	15	70		9	18	73	
Never married	9	26	65		9	21	70	
Divorced/separated	12	12	77	χ^2 = 27.45*	11	16	73	χ^2 = 3.74
Widowed	12	21	67	(.000)	11	21	68	(.712)
Occupation		(n = 1533)				(n = 1534)		
Mgt, prof or education	12	16	72		11	19	71	
Sales or office support	11	15	73		8	26	67	
Constrn, inst or maint	17	17	66		17	14	69	
Prodn/trans/warehsing	15	18	67		8	14	78	
Agriculture	20	22	57		8	17	75	
Food serv/pers. care	12	14	74		4	14	82	
Hlthcare supp/safety	7	11	83	χ^2 = 39.30*	8	13	79	χ^2 = 31.28*
Other	12	22	67	(.000)	10	25	66	(.005)

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 9 Continued.

	Please rate the extent to which you agree or disagree with the following statements regarding global climate change.							
	Global climate change is a problem but the U.S. won't do anything about it.				***We will do nothing since global climate change is not a problem.***			
	Disagree	*Neither*	*Agree*	*Significance*	*Disagree*	*Neither*	*Agree*	*Significance*
				Percentages				
Total	45	35	21		56	29	15	
Community Size		(n = 1986)				(n = 1972)		
Less than 500	47	35	18		53	25	22	
500 - 999	39	41	20		57	30	14	
1,000 - 4,999	45	34	22		56	30	14	
5,000 - 9,999	42	38	20	χ^2 = 8.60	52	32	16	χ^2 = 17.94*
10,000 and up	47	33	20	(.377)	59	29	12	(.022)
Region		(n = 2048)				(n = 2030)		
Panhandle	44	41	15		58	29	13	
North Central	44	39	18		50	36	14	
South Central	48	32	20		56	29	16	
Northeast	43	33	24	χ^2 = 16.65*	61	26	13	χ^2 = 21.92*
Southeast	43	34	23	(.034)	51	27	21	(.005)
Household Income Level		(n = 1944)				(n = 1933)		
Under $20,000	40	32	28		53	30	17	
$20,000 - $39,999	38	38	24		53	32	15	
$40,000 - $59,999	42	35	23	χ^2 = 36.36*	56	30	14	χ^2 = 7.24
$60,000 and over	50	35	15	(.000)	59	26	16	(.299)
Age		(n = 2056)				(n = 2043)		
19 - 29	44	38	18		49	36	15	
30 - 39	41	36	23		60	27	13	
40 - 49	41	41	18		59	28	13	
50 - 64	47	33	20	χ^2 = 19.47*	58	28	14	χ^2 = 24.58*
65 and older	47	29	24	(.013)	54	26	20	(.002)
Gender		(n = 2048)				(n = 2033)		
Male	52	30	19	χ^2 = 40.93*	53	27	19	χ^2 = 25.66*
Female	38	40	22	(.000)	59	30	11	(.000)
Education		(n = 2025)				(n = 2009)		
High school diploma or less	42	35	23		51	30	19	
Some college	39	39	22	χ^2 = 34.28*	57	31	13	χ^2 = 17.49*
Bachelors or grad degree	53	29	17	(.000)	60	24	16	(.002)
Marital Status		(n = 2045)				(n = 2034)		
Married	47	34	19		56	28	16	
Never married	34	41	25		52	39	9	
Divorced/separated	43	32	24	χ^2 = 17.25*	58	24	18	χ^2 = 20.03*
Widowed	42	35	23	(.008)	58	27	15	(.003)
Occupation		(n = 1531)				(n = 1529)		
Mgt, prof or education	45	37	19		61	24	15	
Sales or office support	38	41	21		51	32	18	
Constrn, inst or maint	42	37	22		55	27	19	
Prodn/trans/warehsing	55	32	14		55	32	13	
Agriculture	52	36	12		46	36	17	
Food serv/pers. care	35	42	23		65	27	8	
Hlthcare supp/safety	42	34	24	χ^2 = 25.83*	64	25	11	χ^2 = 28.61*
Other	42	38	21	(.027)	57	33	10	(.012)

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 9 Continued.

	Please rate the extent to which you agree or disagree with the following statements regarding global climate change.							
	We need to do something right now to deal with the adverse effects of global climate change.				***We will need to do something in my lifetime to deal with the adverse effects of global climate change.***			
	Disagree	*Neither*	*Agree*	*Significance*	*Disagree*	*Neither*	*Agree*	*Significance*
				Percentages				
Total	21	28	50		17	23	60	
Community Size		(n = 1994)				(n = 1984)		
Less than 500	26	28	46		23	22	56	
500 - 999	22	29	49		16	19	65	
1,000 - 4,999	20	32	48		15	26	59	
5,000 - 9,999	27	35	38	χ^2 = 40.22*	23	25	52	χ^2 = 25.61*
10,000 and up	18	24	58	(.000)	14	23	63	(.001)
Region		(n = 2053)				(n = 2044)		
Panhandle	22	31	48		17	27	56	
North Central	22	34	44		17	29	54	
South Central	20	28	52		16	21	62	
Northeast	20	29	51	χ^2 = 15.23	14	25	62	χ^2 = 20.39*
Southeast	25	22	52	(.055)	22	19	60	(.009)
Household Income Level		(n = 1952)				(n = 1943)		
Under $20,000	19	22	59		17	20	63	
$20,000 - $39,999	17	30	53		15	27	58	
$40,000 - $59,999	22	29	49	χ^2 = 16.00*	17	24	59	χ^2 = 8.93
$60,000 and over	24	29	48	(.014)	18	21	61	(.177)
Age		(n = 2063)				(n = 2056)		
19 - 29	23	27	49		15	21	64	
30 - 39	16	27	57		13	21	66	
40 - 49	15	36	49		12	27	61	
50 - 64	22	27	51	χ^2 = 29.69*	18	23	59	χ^2 = 30.73*
65 and older	27	26	47	(.000)	23	25	52	(.000)
Gender		(n = 2054)				(n = 2045)		
Male	30	24	46	χ^2 = 101.34*	23	22	55	χ^2 = 57.57*
Female	12	33	54	(.000)	11	25	64	(.000)
Education		(n = 2029)				(n = 2025)		
High school diploma or less	20	30	50		16	28	56	
Some college	19	31	50	χ^2 = 11.46*	15	25	60	χ^2 = 22.85*
Bachelors or grad degree	24	24	52	(.022)	19	18	63	(.000)
Marital Status		(n = 2054)				(n = 2046)		
Married	23	30	48		18	24	59	
Never married	16	25	59		13	21	66	
Divorced/separated	16	24	61	χ^2 = 22.20*	14	20	66	χ^2 = 13.93*
Widowed	21	31	48	(.001)	20	29	51	(.030)
Occupation		(n = 1538)				(n = 1527)		
Mgt, prof or education	22	27	51		14	20	66	
Sales or office support	23	29	48		19	29	53	
Constrn, inst or maint	22	29	50		20	27	53	
Prodn/trans/warehsing	19	28	53		14	26	60	
Agriculture	36	28	37		27	21	52	
Food serv/pers. care	16	20	63		13	23	65	
Hlthcare supp/safety	12	32	56	χ^2 = 48.90*	11	21	68	χ^2 = 43.95*
Other	16	36	48	(.000)	12	29	58	(.000)

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 9 Continued.

	Please rate the extent to which you agree or disagree with the following statements regarding global climate change.							
	Human activity, including industry and transportation, is a significant cause of climate change.				***Global climate change requires immediate action by the government.***			
	Disagree	*Neither*	*Agree*	*Significance*	*Disagree*	*Neither*	*Agree*	*Significance*
				Percentages				
Total	20	26	54		31	32	38	
Community Size		(n = 1987)				(n = 1980)		
Less than 500	24	22	54		37	26	37	
500 - 999	19	23	57		33	35	32	
1,000 - 4,999	19	28	53		28	34	38	
5,000 - 9,999	27	29	44	χ^2 = 22.22*	38	34	28	χ^2 = 27.83*
10,000 and up	17	27	56	(.005)	27	31	42	(.001)
Region		(n = 2048)				(n = 2039)		
Panhandle	28	29	44		37	31	32	
North Central	19	33	48		32	34	35	
South Central	18	27	55		30	32	38	
Northeast	18	26	56	χ^2 = 36.96*	29	35	36	χ^2 = 19.23*
Southeast	23	17	60	(.000)	29	26	46	(.014)
Household Income Level		(n = 1946)				(n = 1943)		
Under $20,000	18	20	61		25	25	51	
$20,000 - $39,999	19	25	56		26	33	40	
$40,000 - $59,999	19	26	55	χ^2 = 12.20	29	34	37	χ^2 = 29.35*
$60,000 and over	23	28	50	(.058)	35	32	33	(.000)
Age		(n = 2061)				(n = 2051)		
19 - 29	15	34	51		27	32	41	
30 - 39	21	24	55		30	31	39	
40 - 49	17	26	56		27	37	36	
50 - 64	21	24	55	χ^2 = 25.91*	30	32	38	χ^2 = 18.49*
65 and older	25	23	52	(.001)	37	27	36	(.018)
Gender		(n = 2050)				(n = 2042)		
Male	29	25	46	χ^2 = 97.60*	40	25	35	χ^2 = 96.58*
Female	12	27	61	(.000)	21	39	40	(.000)
Education		(n = 2024)				(n = 2017)		
High school diploma or less	20	25	55		29	32	40	
Some college	19	28	53	χ^2 = 2.20	28	34	37	χ^2 = 11.11*
Bachelors or grad degree	21	25	54	(.698)	35	28	37	(.025)
Marital Status		(n = 2049)				(n = 2041)		
Married	22	28	50		34	33	33	
Never married	12	26	62		16	31	53	
Divorced/separated	16	14	70	χ^2 = 39.95*	27	24	50	χ^2 = 56.65*
Widowed	20	26	54	(.000)	30	33	37	(.000)
Occupation		(n = 1531)				(n = 1530)		
Mgt, prof or education	18	28	54		29	33	38	
Sales or office support	17	30	53		30	34	36	
Constrn, inst or maint	29	27	44		36	34	30	
Prodn/trans/warehsing	20	32	48		33	25	43	
Agriculture	29	26	45		45	30	25	
Food serv/pers. care	8	20	71		19	23	57	
Hlthcare supp/safety	17	25	58	χ^2 = 36.44*	21	38	42	χ^2 = 59.66*
Other	16	30	54	(.001)	22	43	34	(.000)

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 9 Continued.

	Please rate the extent to which you agree or disagree with the following statements regarding global climate change.							
	It is my responsibility to help reduce the impacts of global climate change.				***Global climate change is something people can control.***			
	Disagree	*Neither*	*Agree*	*Significance*	*Disagree*	*Neither*	*Agree*	*Significance*
				Percentages				
Total	14	26	59		28	31	41	
Community Size		(n = 1981)				(n = 1969)		
Less than 500	16	22	62		30	30	41	
500 - 999	13	23	64		23	37	40	
1,000 - 4,999	13	31	56		27	31	43	
5,000 - 9,999	21	31	48	χ^2 = 33.42*	37	34	29	χ^2 = 23.80*
10,000 and up	12	24	64	(.000)	26	31	44	(.002)
Region		(n = 2042)				(n = 2026)		
Panhandle	19	24	57		34	28	38	
North Central	15	29	57		29	33	38	
South Central	15	26	59		27	32	42	
Northeast	11	27	62	χ^2 = 10.11	25	35	40	χ^2 = 11.42
Southeast	15	24	61	(.258)	28	28	45	(.179)
Household Income Level		(n = 1938)				(n = 1933)		
Under $20,000	19	23	59		31	25	44	
$20,000 - $39,999	15	28	56		25	35	40	
$40,000 - $59,999	12	28	60	χ^2 = 8.92	32	28	41	χ^2 = 14.39*
$60,000 and over	14	25	62	(.178)	27	34	40	(.026)
Age		(n = 2052)				(n = 2041)		
19 - 29	15	27	58		25	32	43	
30 - 39	13	22	65		27	32	41	
40 - 49	10	28	62		28	32	39	
50 - 64	15	25	61	χ^2 = 19.92*	27	31	42	χ^2 = 3.79
65 and older	18	29	53	(.011)	31	30	39	(.875)
Gender		(n = 2040)				(n = 2031)		
Male	19	24	57	χ^2 = 35.40*	33	27	40	χ^2 = 34.95*
Female	10	28	62	(.000)	22	36	42	(.000)
Education		(n = 2018)				(n = 2012)		
High school diploma or less	15	30	55		29	33	39	
Some college	12	28	60	χ^2 = 20.63*	25	34	41	χ^2 = 12.20*
Bachelors or grad degree	17	21	63	(.000)	31	27	42	(.016)
Marital Status		(n = 2041)				(n = 2029)		
Married	15	25	60		29	32	40	
Never married	13	30	57		23	31	46	
Divorced/separated	12	22	66	χ^2 = 10.65	27	28	45	χ^2 = 7.43
Widowed	15	34	52	(.100)	27	35	39	(.283)
Occupation		(n = 1530)				(n = 1522)		
Mgt, prof or education	14	23	64		25	32	42	
Sales or office support	11	32	57		26	29	45	
Constrn, inst or maint	17	24	59		29	38	34	
Prodn/trans/warehsing	19	24	58		25	32	44	
Agriculture	19	28	53		36	31	33	
Food serv/pers. care	16	20	63		41	25	35	
Hlthcare supp/safety	6	23	71	χ^2 = 38.34*	27	34	39	χ^2 = 21.31
Other	13	35	51	(.000)	30	28	42	(.094)

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 9 Continued.

	Please rate the extent to which you agree or disagree with the following statements regarding global climate change.							
	Too much fuss is made about global climate change.				***Current climate change is due to normal climate patterns.***			
	Disagree	*Neither*	*Agree*	*Significance*	*Disagree*	*Neither*	*Agree*	*Significance*
				Percentages				
Total	38	26	36		25	28	47	
Community Size		(n = 1983)				(n = 1975)		
Less than 500	35	22	43		25	22	54	
500 - 999	38	26	36		23	25	52	
1,000 - 4,999	34	30	36		24	28	48	
5,000 - 9,999	32	32	37	χ^2 = 27.25*	22	35	43	χ^2 = 24.10*
10,000 and up	44	24	32	(.001)	29	30	42	(.002)
Region		(n = 2048)				(n = 2037)		
Panhandle	37	28	35		25	28	48	
North Central	33	30	38		22	28	50	
South Central	40	27	33		28	31	41	
Northeast	37	26	36	χ^2 = 14.17	24	27	49	χ^2 = 17.33*
Southeast	40	20	40	(.077)	27	22	51	(.027)
Household Income Level		(n = 1943)				(n = 1933)		
Under $20,000	44	21	35		33	24	43	
$20,000 - $39,999	40	25	36		25	30	46	
$40,000 - $59,999	35	32	33	χ^2 = 13.52*	23	31	46	χ^2 = 10.15
$60,000 and over	38	26	37	(.035)	25	27	48	(.119)
Age		(n = 2056)				(n = 2047)		
19 - 29	35	33	32		22	33	44	
30 - 39	38	28	34		23	33	43	
40 - 49	40	28	32		27	28	44	
50 - 64	42	24	34	χ^2 = 30.72*	28	28	44	χ^2 = 29.33*
65 and older	35	21	44	(.000)	24	21	55	(.000)
Gender		(n = 2048)				(n = 2038)		
Male	31	21	48	χ^2 = 123.50*	21	21	57	χ^2 = 98.89*
Female	45	31	24	(.000)	29	35	36	(.000)
Education		(n = 2023)				(n = 2018)		
High school diploma or less	33	29	38		26	28	46	
Some college	39	28	33	χ^2 = 16.84*	24	30	45	χ^2 = 4.98
Bachelors or grad degree	42	21	37	(.002)	27	25	48	(.290)
Marital Status		(n = 2045)				(n = 2036)		
Married	35	26	38		24	27	49	
Never married	49	26	24		26	38	36	
Divorced/separated	49	22	29	χ^2 = 32.95*	36	25	39	χ^2 = 31.86*
Widowed	33	29	38	(.000)	23	25	53	(.000)
Occupation		(n = 1528)				(n = 1527)		
Mgt, prof or education	45	26	30		30	30	41	
Sales or office support	36	26	38		23	32	45	
Constrn, inst or maint	24	37	40		16	28	57	
Prodn/trans/warehsing	35	22	43		30	25	46	
Agriculture	21	30	49		11	25	64	
Food serv/pers. care	46	29	25		31	35	33	
Hlthcare supp/safety	47	24	29	χ^2 = 69.96*	29	27	44	χ^2 = 62.79*
Other	44	25	32	(.000)	25	37	38	(.000)

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 9 Continued.

	Please rate the extent to which you agree or disagree with the following statements regarding global climate change			
	Agriculture is a major contributor of greenhouse gases.			
	Disagree	*Neither*	*Agree*	*Significance*
		Percentages		
Total	48	37	15	
Community Size		(n = 1985)		
Less than 500	56	28	16	
500 - 999	54	30	16	
1,000 - 4,999	50	37	13	
5,000 - 9,999	51	37	12	χ^2 = 30.57*
10,000 and up	42	42	17	(.000)
Region		(n = 2045)		
Panhandle	53	33	14	
North Central	46	40	13	
South Central	48	36	16	
Northeast	45	40	15	χ^2 = 8.91
Southeast	50	34	16	(.350)
Household Income Level		(n = 1941)		
Under $20,000	41	37	22	
$20,000 - $39,999	48	36	16	
$40,000 - $59,999	49	38	13	χ^2 = 10.81
$60,000 and over	48	37	14	(.094)
Age		(n = 2055)		
19 - 29	38	50	13	
30 - 39	46	38	16	
40 - 49	50	37	13	
50 - 64	49	36	15	χ^2 = 44.90*
65 and older	54	28	18	(.000)
Gender		(n = 2045)		
Male	55	30	15	χ^2 = 47.06*
Female	41	44	16	(.000)
Education		(n = 2021)		
High school diploma or less	47	38	15	
Some college	47	38	16	χ^2 = 2.02
Bachelors or grad degree	50	35	15	(.732)
Marital Status		(n = 2045)		
Married	49	37	14	
Never married	42	38	20	
Divorced/separated	48	38	14	χ^2 = 12.95*
Widowed	46	33	21	(.044)
Occupation		(n = 1529)		
Mgt, prof or education	42	42	16	
Sales or office support	40	44	16	
Constrn, inst or maint	48	38	14	
Prodn/trans/warehsing	48	39	13	
Agriculture	71	21	9	
Food serv/pers. care	54	27	19	
Hlthcare supp/safety	46	36	18	χ^2 = 79.41*
Other	41	52	8	(.000)

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Appendix Table 10. *Worry about Global Climate Change by Community Size, Region and Individual Attributes*

	How worried are you about global climate change?				
	Not at all worried	*Not very worried*	*Somewhat worried*	*Very worried*	*Significance*
			Percentages		
Total	17	33	42	8	
Community Size			(n = 2071)		
Less than 500	20	32	42	5	
500 - 999	13	34	46	7	
1,000 - 4,999	18	35	38	9	χ^2 = 21.22*
5,000 - 9,999	20	33	38	8	(.047)
10,000 and up	13	33	44	9	
Region			(n = 2133)		
Panhandle	16	39	38	7	
North Central	19	32	44	6	
South Central	16	34	41	8	χ^2 = 14.38
Northeast	15	33	44	8	(.277)
Southeast	18	30	42	11	
Income Level			(n = 2018)		
Under $20,000	18	24	44	14	
$20,000 - $39,999	19	33	41	7	χ^2 = 24.12*
$40,000 - $59,999	15	35	44	7	(.004)
$60,000 and over	16	35	41	8	
Age			(n = 2142)		
19 - 29	20	37	40	3	
30 - 39	15	37	38	10	
40 - 49	15	32	47	6	χ^2 = 46.86*
50 - 64	14	31	43	12	(.000)
65 and older	19	31	40	10	
Gender			(n = 2133)		
Male	22	35	37	7	χ^2 = 62.53*
Female	11	32	47	10	(.000)
Marital Status			(n = 2132)		
Married	17	36	40	8	
Never married	21	24	48	7	
Divorced/separated	9	28	47	16	χ^2 = 41.86*
Widowed	16	32	45	7	(.000)
Education			(n = 2108)		
H.S. diploma or less	17	29	45	9	
Some college	14	35	43	8	χ^2 = 11.79
Bachelors or grad degree	19	35	39	8	(.067)
Occupation			(n = 1600)		
Mgt, prof or education	14	34	41	11	
Sales or office support	14	43	37	6	
Constrn, inst or maint	18	40	35	7	
Prodn/trans/warehsing	19	31	41	8	
Agriculture	27	33	37	3	
Food serv/pers. care	14	14	55	16	χ^2 = 58.95*
Hlthcare supp/safety	12	39	41	8	(.000)
Other	13	38	44	6	

* Chi-square values are statistically significant at the .05 level. 0** = Less than 1 percent.

Rural Poll Research Report 13-3, September 2013

It is the policy of the University of Nebraska-Lincoln not to discriminate on the basis of sex, age, disability, race, color, religion, marital status, veteran's status, national or ethnic origin, or sexual orientation.