CITIZEN WATER SUPPLY AND USAGE SURVEY: 2017 – 2018

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Prepared for

Tri-State Water Resource Coalition
Springfield, Missouri

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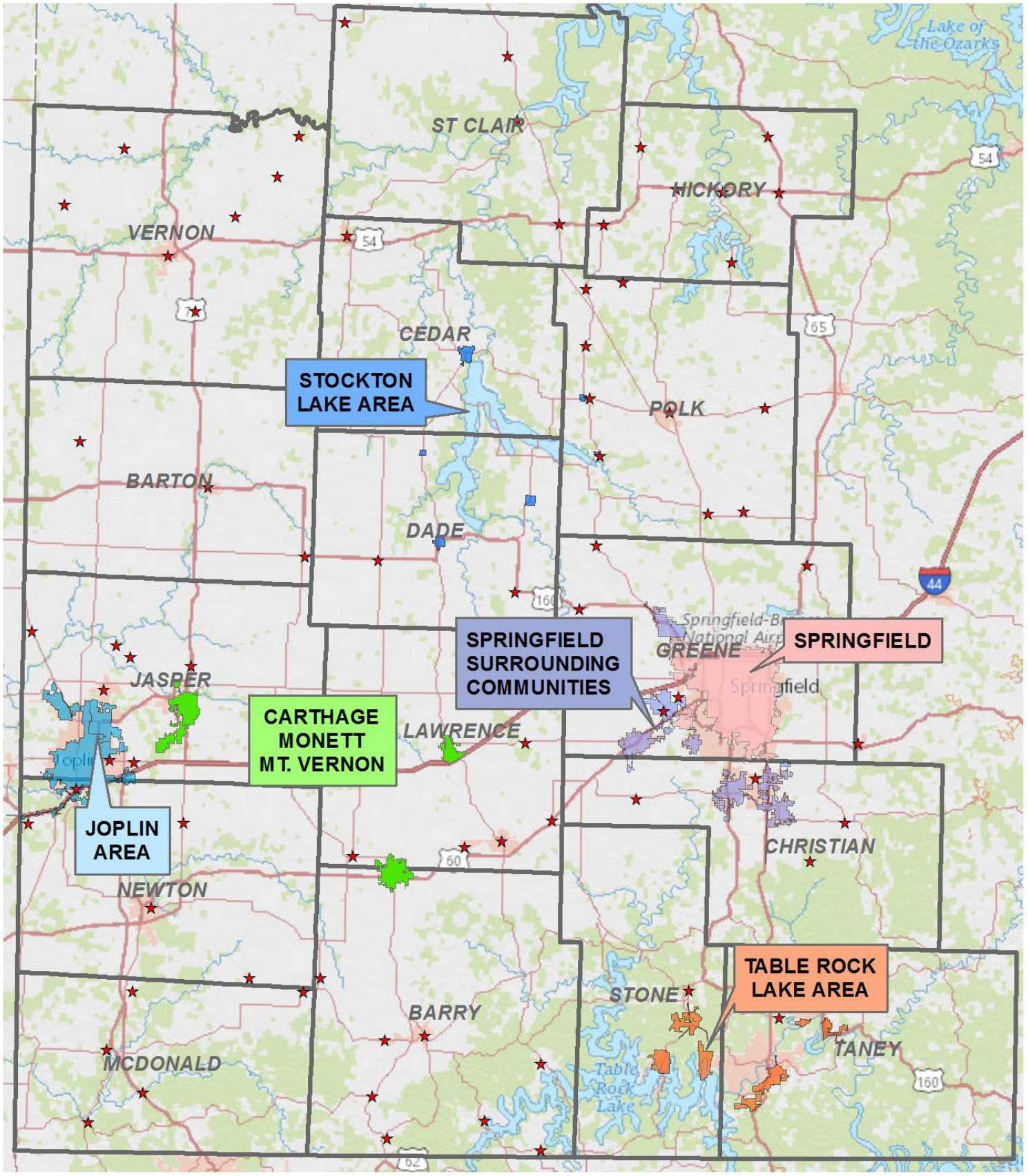
Overview of Communities Surveyed in Southwest Missouri



INTRODUCTION

This study was commissioned by the Tri-State Water Resource Coalition with the purpose of assessing the **opinions** and **perceptions** about water supply and water usage among residents throughout a 16-county area of southwest Missouri. To achieve this objective, online and telephone surveys were conducted in seven pre-defined geographic areas. The seven geographic areas surveyed included:

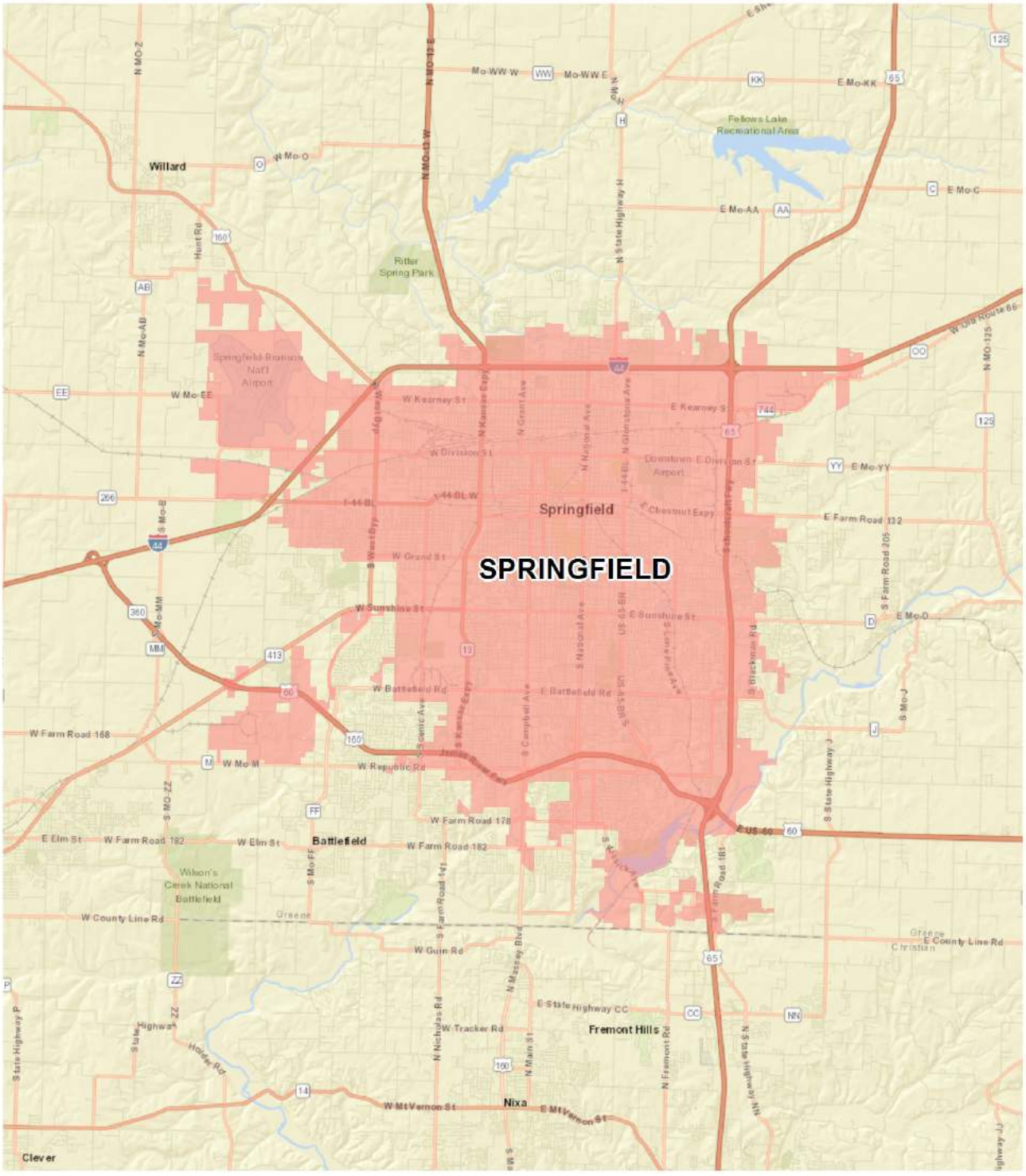
1. Springfield;
2. Nixa, Ozark, Republic, Willard, and Battlefield;
3. Stockton and the Stockton Lake area (Greenfield, Fair Play, Dadeville, Arcola, and Aldridge);
4. Table Rock Lake area (Hollister, Forsyth, Kimberling City, Rockaway Beach, Branson West, and Indian Point);
5. Joplin, Webb City, and Carl Junction;
6. Carthage, Monett, and Mt. Vernon; and
7. More than 90 rural communities located across southwest Missouri.

The surveys were conducted online and by telephone from July 2017 through March 2018. A total of 3,287 interviews were completed among residents living in 104 communities throughout the following 16 counties: Barry, Barton, Cedar, Christian, Dade, Greene, Hickory, Jasper, Lawrence, McDonald, Newton, Polk, St. Clair, Stone, Taney, and Vernon.

When appropriate, statistical weighting of sample data was conducted to ensure a representative sample and to maximize the external validity of survey findings.

The survey was designed, administered, and analyzed by **Opinion Research Specialists, LLC** of Springfield, Missouri with input from the Tri-State Water Resource Coalition.

SPRINGFIELD



EXECUTIVE SUMMARY

This Executive Summary presents an overview of the 2017 Springfield Citizen Water Supply and Usage Survey. The report is based on 597 online surveys of Springfield residents conducted during the summer and fall of 2017. Overall findings have a margin of error of +/- 4.1% at the 95% confidence interval.

The survey was designed, administered, and analyzed by **Opinion Research Specialists, LLC** of Springfield, Missouri with input from the Tri-State Water Resource Coalition. Survey findings are summarized below.

Source of Home Tap Water

- About one-third of Springfield respondents (34%) thought their home tap water originated from surface water, while 15% said it was a combination of surface water and aquifers. About 50% of respondents were unsure as to the source of their home tap water. This was particularly true for newer residents, lower-income respondents, younger respondents, and females.

Type of Organization Supplying Home Tap Water

- Most Springfield respondents (73%) believed their home tap water was supplied by the City of Springfield, while 20% thought it was supplied by a public utility.

Average Monthly Home Water Bill

- A plurality of Springfield respondents (44%) reported having average monthly water bills ranging between $21 and $30, while 42% said they paid more than $30 per month.

Monthly Home Water Bill Perceptions

- A majority of respondents (61%) said their monthly water bill was inexpensive (very or somewhat) compared to other monthly essentials and 64% rated the “value” of their home water (price paid for amount consumed) as either excellent or good.

Amount Willing to Pay Extra to Ensure Long-Term Supply of Water

- Although 37% of respondents were not willing to pay anything extra per month on their water bill to ensure a long-term supply of drinking water, 63% were willing to pay at least $1-to-$5 more per month. Willingness to pay extra increased with respondent educational level.

- With the exception of those less formally educated (high school or less), a majority of respondents (51% to 79%) from all other demographic groups were willing to pay at least $1-to-$5 more per month on their water bill to ensure a long-term supply of drinking water. This was particularly true for younger respondents (18-39 years old).

Long-Term Supply of Water: Importance and Infrastructure

- 94% of respondents "strongly agreed" that having a long-term supply of water was critical for Springfield's quality of life and economic competitiveness. Only 1% disagreed with this statement.

- 75% "strongly agreed" that locally elected officials must invest in infrastructure to ensure long-term access to water for citizens, farmers, and businesses. Only 2% disagreed with this statement.

- 55% "strongly agreed" that investments in water supply and infrastructure were needed to guarantee a long-term supply of water to southwest Missouri. Only 5% disagreed with this statement.

Reducing Water Consumption in an Emergency

- A plurality of respondents (42%) indicated they could temporarily reduce their water consumption by 10% to 20% in the event of a water shortage emergency, but 32% said their reduction in water consumption would be less than 10%, if at all.

- Lake users (Stockton, Table Rock, and/or Pomme de Terre) were more likely than nonusers to say they could reduce their water consumption by more than 20% during a drought (32% v. 19%, respectively).

Support for Using Treated Wastewater

- To save money and conserve water, at least 84% of respondents said they would support the use of treated wastewater for purposes of fire protection, landscape irrigation, and toilet flushing However, only 27% would approve the use of treated wastewater for drinking/tap water purposes.

Reallocation of Water Storage in Stockton Lake

- A large majority of Springfield respondents (71%) supported, to some extent, the idea of reallocating a small amount of water storage in Stockton Lake for use by citizens and businesses throughout southwest Missouri for long-term water supply. Nearly 25% of respondents were undecided on this proposal and 5% were opposed.

- Demographically, opposition to this plan was minimal — less than 15% of ***any*** demographic group was opposed.

INTRODUCTION

This survey was commissioned by the Tri-State Water Resource Coalition to assess the **opinions** and **perceptions** of Springfield, Missouri residents about water supply and usage in southwest Missouri. The Springfield survey is one of seven surveys targeting a 16-county area in southwest Missouri. Questions on all seven surveys are identical so that differences in perceptions can be assessed.

SURVEY DESIGN AND METHODOLOGY

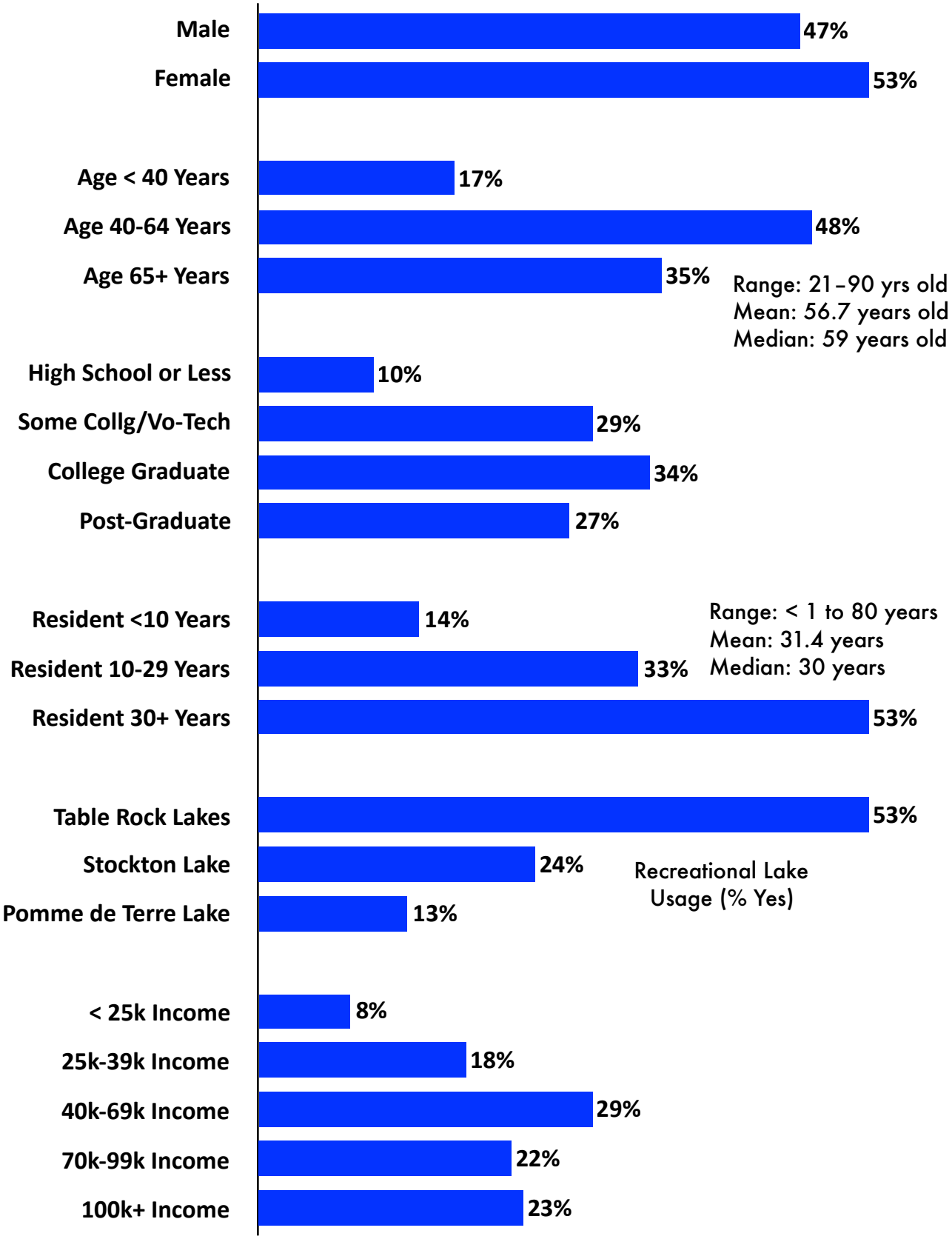
The survey was designed, administered, and analyzed by **Opinion Research Specialists, LLC** of Springfield, Missouri with input from the Tri-State Water Resource Coalition. Survey results are based on 597 completed online surveys conducted during the summer/fall of 2017.

INTERPRETATION OF DATA

Overall survey results, based on 597 completed questionnaires, have a margin of error of approximately +/- 4% at the 95% confidence interval. For example, if a response listed in the report is 57% one can be 95% confident that the "true" percentage, that which would have been attained if all adult residents of Springfield had participated in the survey, is between 53% and 61%. Margin of error increases when subsets of the total sample are analyzed (e.g., male versus female, etc.).

Some percentages in the report may not add to exactly 100% due to rounding.

SURVEY RESPONDENT PROFILE — SPRINGFIELD

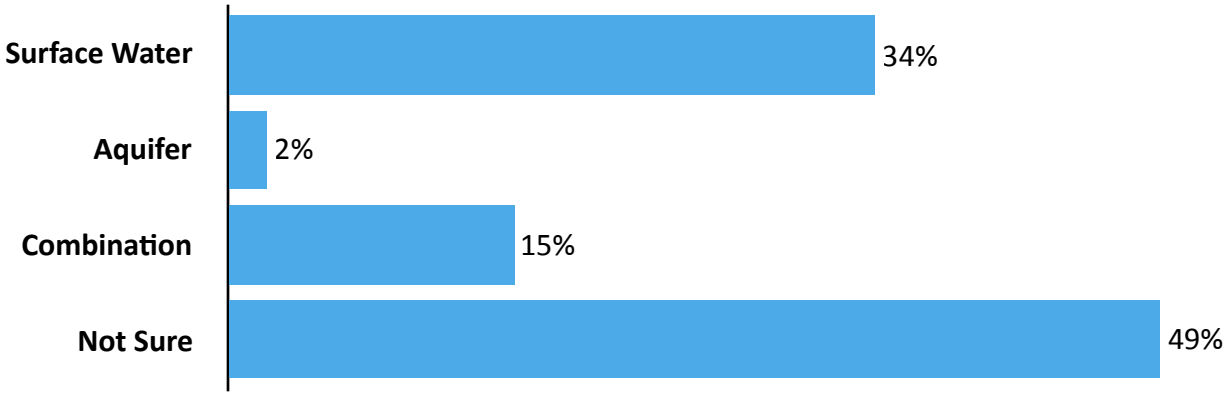


Springfield

Survey Results

Source of Home Tap Water

About 50% of Springfield respondents did not know the source of their home tap water. One-third (34%) thought their home tap water came from surface water, 2% mentioned an aquifer, and 15% said it was a combination of surface water and aquifer.

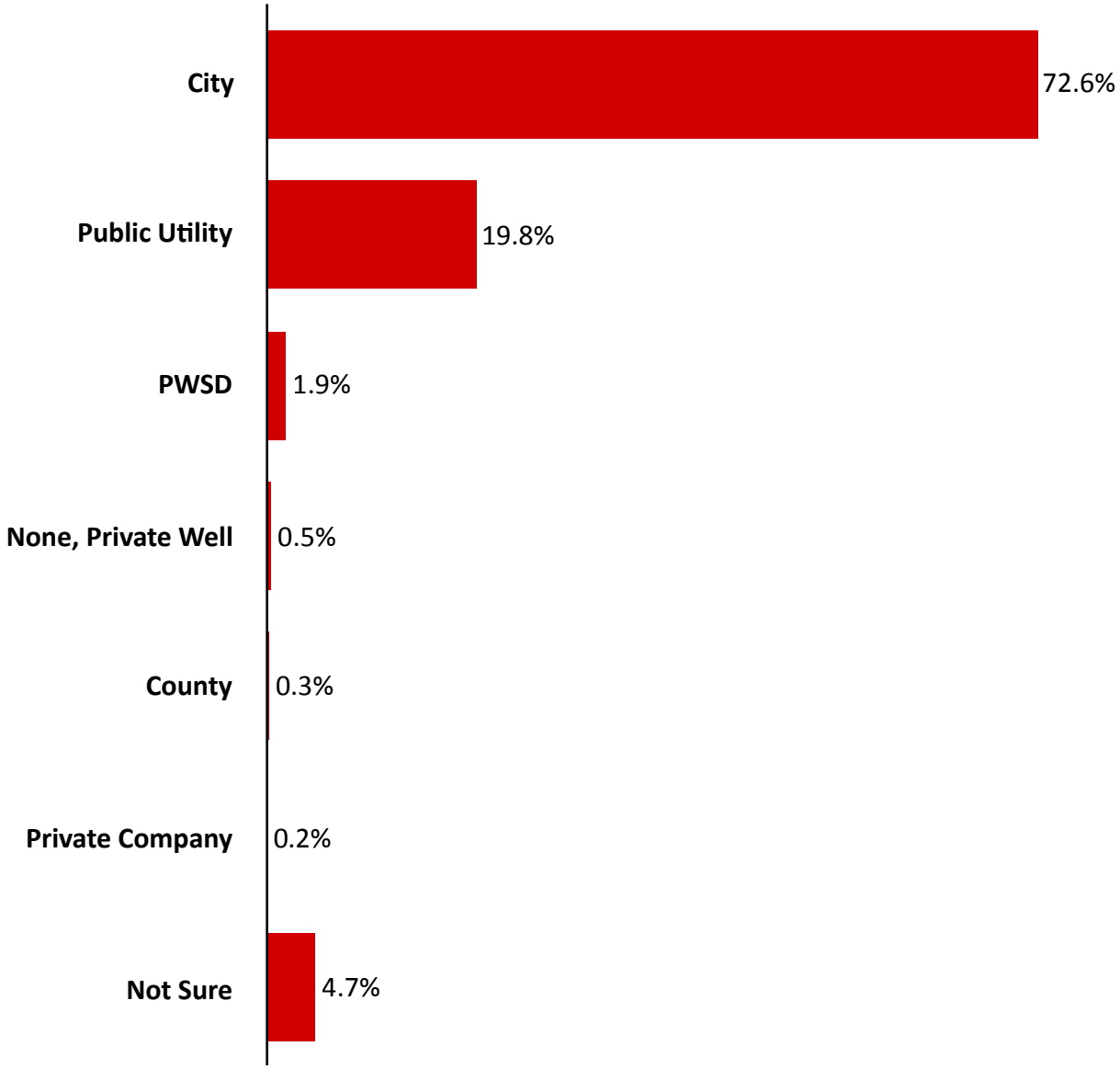


Demographic Analysis: Females, younger respondents, lower-income respondents, and recent residents to southwest Missouri were much more likely than their demographic counterparts to ***not know*** the source of their home tap water.

Demographics	Surface	Aquifer	Combination	Not Sure
Male	37%	3%	28%	32%
Female	33%	1%	5%	**61%**
18-39 years old	29%	1%	7%	**63%**
40-64 years old	36%	3%	11%	50%
65+ years old	35%	2%	26%	37%
< 25k hh income	28%	3%	13%	56%
25k-39k hh income	20%	0%	15%	**65%**
40k-69k hh income	33%	0%	19%	48%
70k-99k hh income	40%	4%	14%	42%
100k+ hh income	39%	5%	17%	39%
< 10 yrs resident	21%	3%	11%	**65%**
10-29 yrs resident	34%	1%	13%	52%
30+ yrs resident	39%	3%	19%	39%

Type of Organization Supplying Home Tap Water

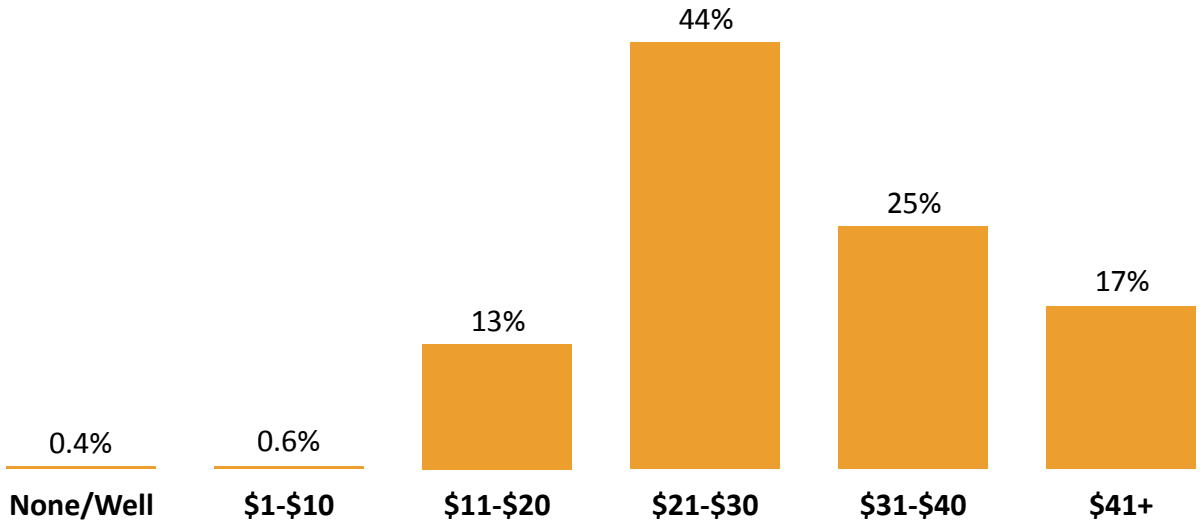
The vast majority of Springfield residents (73%) believed their home tap water was supplied by the city, while about 20% said it was supplied by a public utility.



Demographic Analysis: Regardless of demographic characteristics, the vast majority of respondents said their home tap water was city supplied.

Average Monthly Home Water Bill

A plurality of Springfield respondents (44%) reported having average monthly water bills ranging between $21 and $30, while 42% said they paid more than $30 per month.

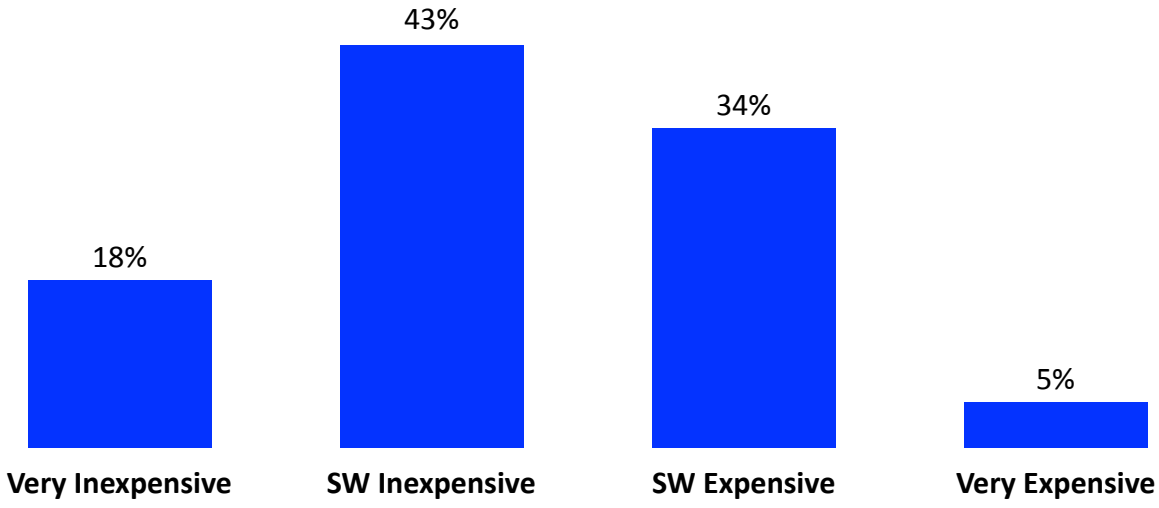


Demographic Analysis: Respondents with household incomes of at least $100,000 per year were much more likely than all other income groups (or any other demographic group) to say their average monthly water bills exceeded $40.

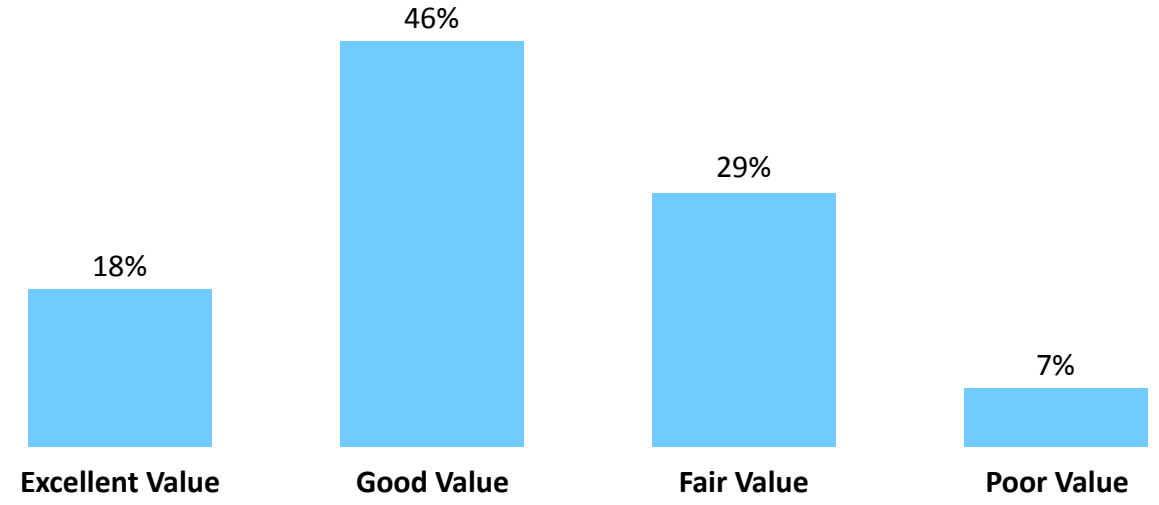
Household Income	None/ On Well	$1-$10	$11-$20	$21-$30	$31-$40	> $40
< 25k	0%	3%	18%	52%	24%	3%
25k-39k	0%	1%	22%	38%	25%	14%
40k-69k	0%	1%	14%	49%	23%	13%
70k-99k	0%	0%	14%	51%	23%	12%
100k+	1%	0%	6%	35%	27%	**31%**

Monthly Home Water Bill Perceptions

Perceived Expense: About 60% of Springfield residents said that, when compared to other monthly essentials, their monthly home water bill was either very inexpensive (18%) or somewhat inexpensive (43%). Only 5% of respondents thought it was very expensive compared to other monthly essentials.

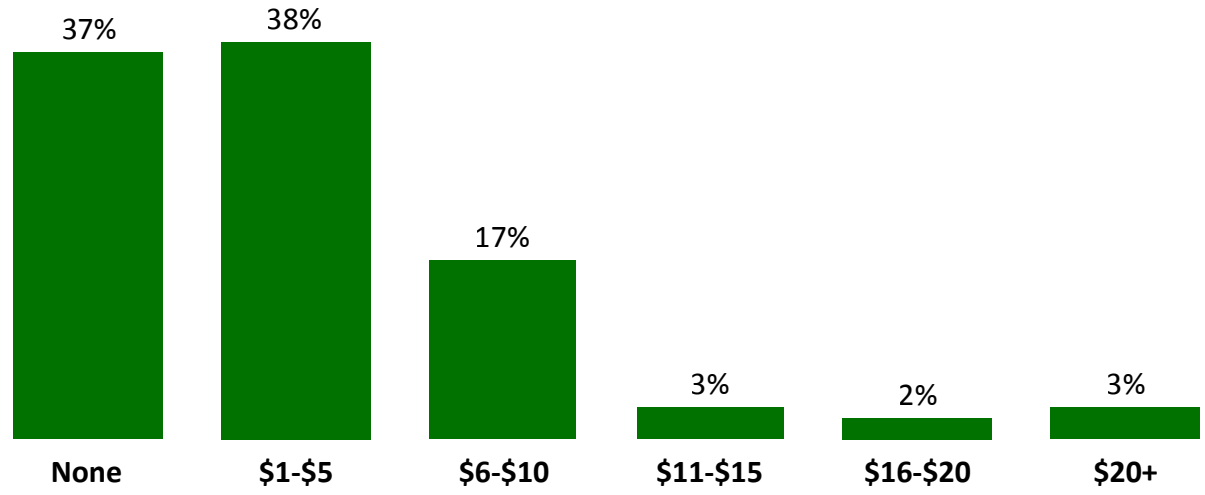


Perceived Value: When asked to consider the amount of water used per month and the cost of that water, 64% of Springfield residents were of the opinion that the water provided to their home was either an excellent (18%) or good value (46%). Only 7% of respondents thought it was a poor value.



Amount Willing to Pay Extra to Ensure Supply of Water

When asked how much more per month they would be willing to pay on their water bill to ensure a long-term supply of drinking water, 37% of respondents said they would not pay anything extra, 38% would pay $1-to-$5 extra each month, and 17% would pay $6-to-$10. Less than 10% were willing to pay more than $10 extra per month.



Demographic Analysis: Respondents without a baccalaureate degree were much more likely than those with a bachelor's or post-graduate degree to say they would **not pay anything extra per month** to ensure an adequate long-term supply of drinking water.

Education	None	$1-$5	$6-$10	$11-$15	$16-$20	> $20
High School or Less	**52%**	44%	2%	2%	0%	0%
Some College/Vo-Tech	**42%**	38%	15%	3%	2%	0%
College Graduate	28%	40%	22%	3%	3%	4%
Post-Graduate	31%	37%	18%	4%	3%	7%

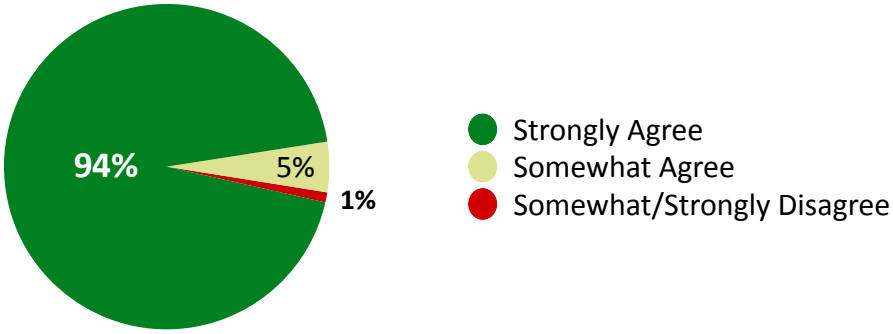
Amount Willing to Pay Extra by Demographics

With the sole exception of less formally educated respondents (high school or less), a majority of respondents (51% to 79%) from all other demographic groups were willing to pay at least $1-to-$5 more per month on their water bill to ensure a long-term supply of drinking water. This was particularly true for younger respondents (18-39 years old).

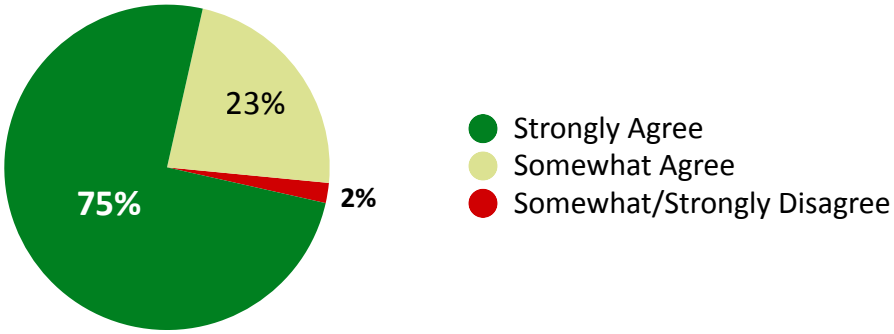
Demographics	None	$1 to $5	$6 to $10	> $10
Male	37%	33%	18%	12%
Female	34%	44%	16%	6%
Lake user	31%	43%	18%	8%
Lake nonuser	42%	33%	16%	9%
18-39 years old	**21%**	**47%**	**19%**	**13%**
40-64 years old	39%	36%	17%	8%
65+ years old	36%	39%	17%	8%
High school or less	**52%**	44%	2%	2%
Some college/vo-tech	42%	38%	15%	5%
College graduate	28%	40%	22%	10%
Post-graduate	31%	37%	18%	14%
< 25k household income	49%	42%	6%	3%
25k-39k household income	39%	33%	22%	6%
40k-69k household income	34%	46%	12%	8%
70k-99k household income	32%	40%	17%	11%
100k+ household income	29%	31%	26%	14%
< 10 years of residency	35%	39%	20%	6%
10-29 years of residency	34%	40%	14%	12%
30+ years of residency	38%	37%	18%	7%

Long-Term Supply of Water: Importance and Infrastructure

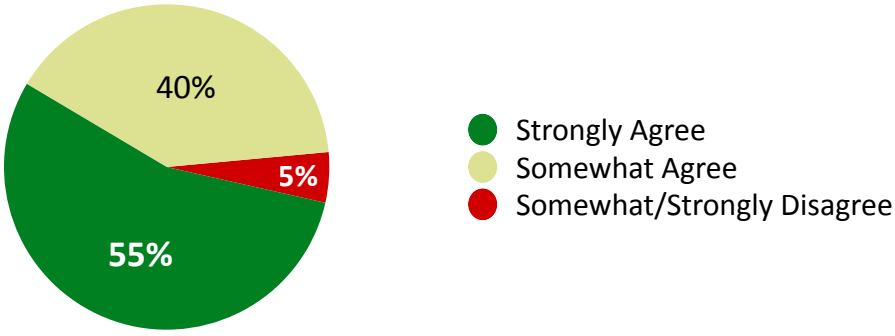
Importance of Long-Term Supply of Water: Nearly 95% of Springfield citizens *strongly agreed* that having an adequate long-term supply of water was important for their community's quality of life and economic competitiveness.



Obligation to Plan Ahead and Invest: The vast majority of Springfield residents (75%) *strongly agreed* that locally elected officials have an obligation to plan ahead and invest in the necessary infrastructure to ensure that homeowners, businesses, and farmers have adequate long-term access to water.

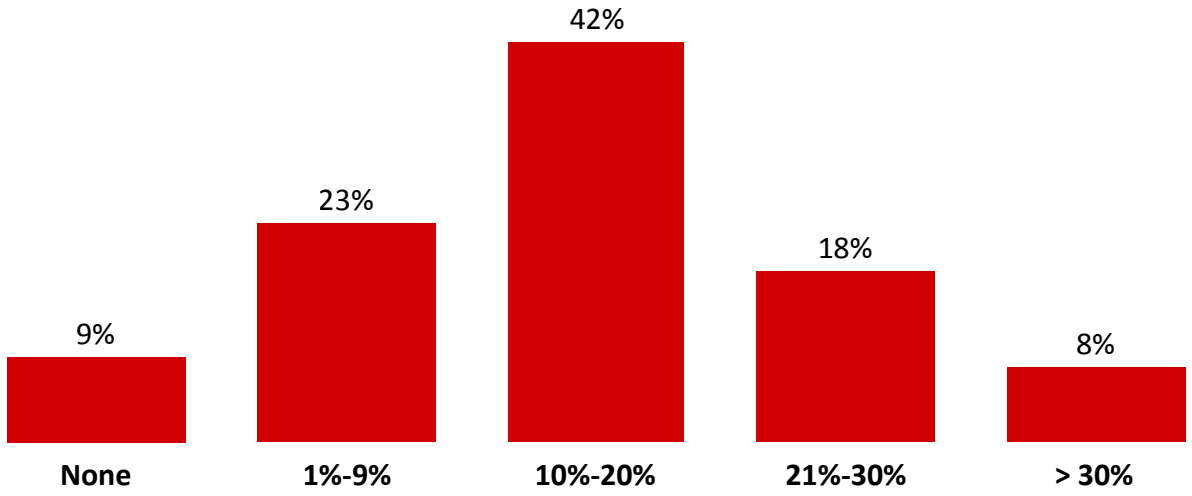


Investments in Water Supply and Infrastructure: A majority of Springfield residents (55%) *strongly agreed* that investments in water supply and infrastructure were necessary to maintain an adequate long-term supply of water in southwest Missouri.



Reducing Water Consumption in an Emergency

When asked how much they could realistically reduce their water consumption if their local water provider had to implement emergency water conservation measures, a plurality of Springfield residents (42%) indicated they could temporarily reduce their water consumption by 10% to 20%. One-quarter of respondents (26%) could reduce water consumption by more than 20%, but one-third (32%) said their reduction in water consumption would be less than 10%, if at all.

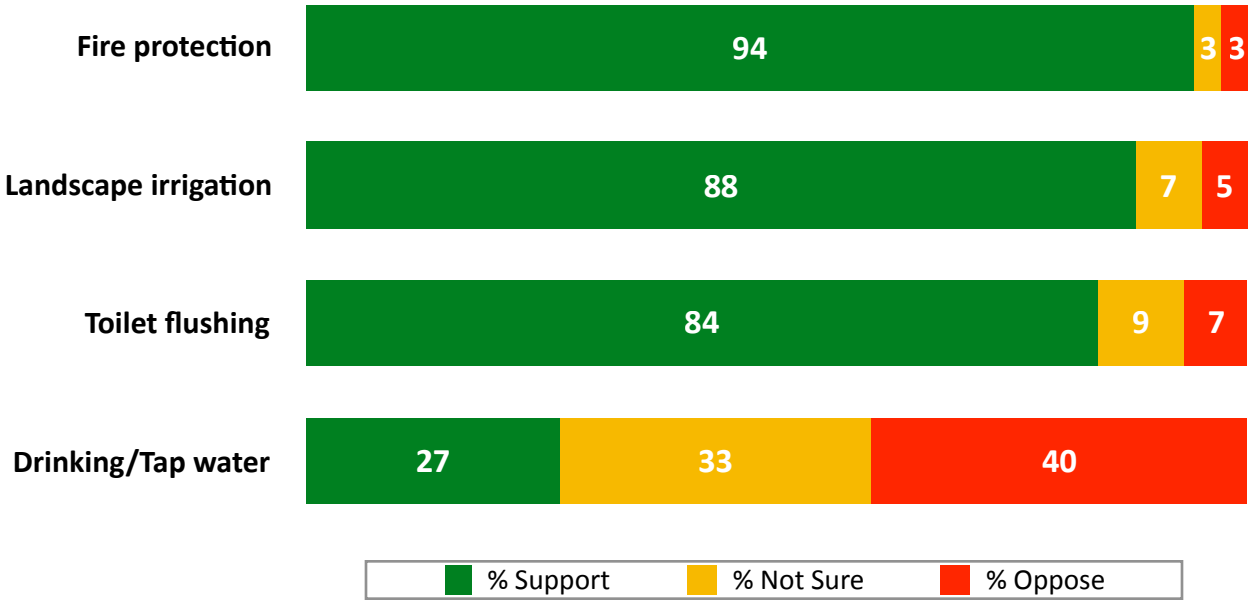


Demographic Analysis: Springfield residents who had used the Stockton, Pomme de Terre, and/or Table Rock lakes for recreational purposes in the past couple of years were more likely than lake nonusers to say they could reduce their water consumption by **more than 20%** during a drought (32% v. 19%, respectively).

Lake User	None	1%-9%	10%-20%	21%-30%	> 30%
Yes	8%	16%	44%	**23%**	**9%**
No	10%	31%	40%	**12%**	**7%**

Support for Using Treated Wastewater

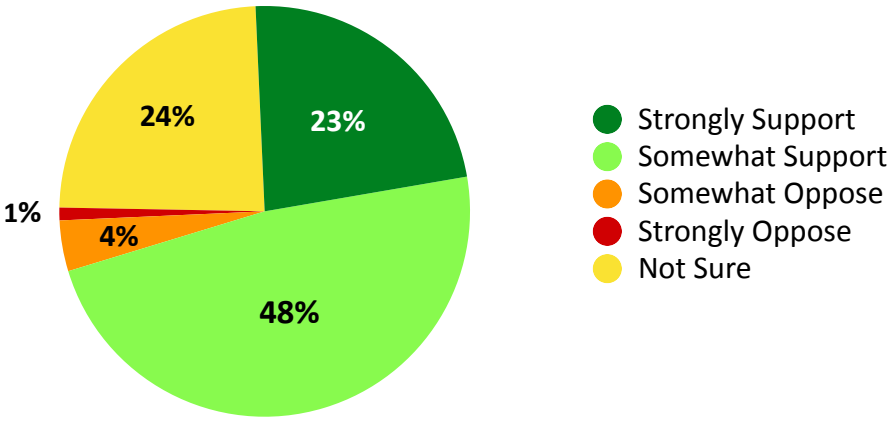
To save money and conserve water, respondents were asked if they would support or oppose the use of treated wastewater for various activities instead of being released into area waterways. While the vast majority of respondents said they would approve the use of treated wastewater for purposes of fire protection (94%), landscape irrigation (88%), and toilet flushing (84%); only 27% would do so for drinking/tap water purposes.



Demographic Analysis: There were no meaningful differences of opinion on this series of questions based on respondent demographic characteristics.

Reallocation of Water Storage in Stockton Lake

About 70% of Springfield residents either strongly (23%) or somewhat (48%) supported the idea of reallocating a small amount of water storage in Stockton Lake to be used by citizens and businesses throughout southwest Missouri for long-term water supply. Nearly 25% of respondents were undecided on this proposal and 5% were opposed.



Demographic Analysis: Male respondents were more than twice as likely as female respondents to "strongly support" the Stockton Lake water reallocation proposal (32% v. 15%). Females and Stockton Lake nonusers were twice as likely as males and Stockton Lake users to be undecided on this idea.

Demographics	Strongly Support	Somewhat Support	Somewhat Oppose	Strongly Oppose	Not Sure
Male	**32%**	48%	4%	1%	15%
Female	**15%**	49%	3%	1%	**32%**
Stockton Lake User	20%	54%	10%	3%	13%
Stockton Lake Nonuser	24%	46%	2%	1%	**27%**

Reallocation of Water Storage in Stockton L. by Demographics

Opposition to the Stockton Lake reallocation proposal was minimal — less than 15% of ***any*** demographic group was opposed. In contrast, support ranged from a low of 64% to a high of 80%. A relatively large percentage of respondents, regardless of demographic attributes, were undecided on this issue.

Demographics	Strongly or SW Support	Strongly or SW Oppose	Not Sure
Male	**80%**	5%	15%
Female	**64%**	4%	**32%**
Stockton Lake user	74%	**13%**	13%
Stockton Lake nonuser	70%	3%	27%
18-39 years old	69%	3%	28%
40-64 years old	70%	5%	25%
65+ years old	74%	6%	20%
High school or less	71%	4%	25%
Some college/vo-tech	76%	5%	19%
College graduate	73%	4%	23%
Post-graduate	**64%**	6%	**30%**
< 25k household income	67%	2%	**31%**
25k-39k household income	71%	6%	23%
40k-69k household income	75%	7%	18%
70k-99k household income	70%	3%	27%
100k+ household income	71%	4%	25%
< 10 years of residency	65%	8%	27%
10-29 years of residency	68%	3%	29%
30+ years of residency	75%	5%	20%

Demographic Analysis

NOTE: Table percentages **bolded in red** denote statistical significance at the .05 level or less.

Table percentages **bolded in red** and **shaded in yellow** denote statistical significance at the .001 level or less.

	OVERALL	Gender		Respondent Age			Educational Level				Annual Household Income					Years of Residency		
		M	F	< 40	40-64	65+	HS or Less	Some College	College Grad	Post-Grad	<25k	25k-39k	40k-69k	70k–99k	100k+	< 10	10-29	30+
Source of Home Tap Water																		
Surface Water	**34%**	**37%**	**33%**	**29%**	**36%**	**35%**	45%	31%	33%	36%	**28%**	**20%**	**33%**	**40%**	**39%**	**21%**	**34%**	**39%**
Aquifer	**2%**	**3%**	**1%**	**1%**	**3%**	**2%**	0%	3%	2%	3%	**3%**	**0%**	**0%**	**4%**	**5%**	**3%**	**1%**	**3%**
Combination	**15%**	**28%**	**5%**	**7%**	**11%**	**26%**	18%	14%	18%	15%	**13%**	**15%**	**19%**	**14%**	**17%**	**11%**	**13%**	**19%**
Not Sure	**49%**	**32%**	**61%**	**63%**	**50%**	**37%**	37%	52%	47%	46%	**56%**	**65%**	**48%**	**42%**	**39%**	**65%**	**52%**	**39%**
Type of Organization Supplying Home Tap Water																		
City	**73%**	71%	73%	67%	71%	74%	72%	75%	70%	71%	74%	82%	68%	71%	69%	**68%**	**71%**	**73%**
Public Utility	**20%**	22%	19%	20%	23%	18%	22%	16%	23%	22%	15%	14%	24%	22%	20%	**14%**	**23%**	**20%**
Public Water Supply District	**2%**	2%	2%	2%	2%	3%	2%	2%	2%	2%	0%	2%	1%	2%	5%	**3%**	**1%**	**3%**
None/Private Well	**<1%**	1%	0%	0%	1%	<1%	0%	<1%	<1%	<1%	0%	0%	0%	1%	1%	**0%**	**0%**	**1%**
County	**<1%**	0%	1%	1%	0%	<1%	0%	<1%	0%	<1%	3%	0%	1%	0%	0%	**0%**	**0%**	**1%**
Private Company	**<1%**	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**1%**	**0%**	**0%**
Neighborhood Association	**0%**	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**	**0%**	**0%**
Not Sure	**5%**	4%	5%	10%	3%	4%	4%	6%	4%	4%	8%	2%	6%	4%	5%	**14%**	**5%**	**2%**
Average Monthly Home Water Bill																		
None/On a Well	**<1%**	<1%	0%	0%	1%	0%	0%	0%	<1%	1%	**0%**	**0%**	**0%**	**0%**	**1%**	0%	0%	1%
$1–$10	**<1%**	<1%	1%	0%	1%	<1%	0%	2%	0%	0%	**3%**	**1%**	**1%**	**0%**	**0%**	1%	1%	<1%
$11–$20	**13%**	12%	15%	14%	14%	14%	5%	16%	9%	20%	**18%**	**22%**	**14%**	**14%**	**6%**	15%	14%	13%
$21–$30	**44%**	39%	48%	42%	42%	45%	53%	41%	43%	45%	**52%**	**38%**	**49%**	**51%**	**35%**	38%	43%	46%
$31–$40	**25%**	28%	22%	17%	28%	24%	31%	23%	30%	18%	**24%**	**25%**	**23%**	**23%**	**27%**	25%	22%	26%
> $40	**17%**	20%	14%	27%	14%	16%	11%	18%	17%	16%	**3%**	**14%**	**13%**	**12%**	**31%**	21%	20%	14%
Monthly Home Water Bill — Perceived Expense																		
Very Inexpensive	**18%**	21%	17%	23%	23%	13%	4%	19%	17%	27%	17%	18%	15%	26%	22%	13%	22%	18%
Somewhat Inexpensive	**43%**	42%	45%	50%	38%	47%	48%	41%	45%	44%	42%	39%	52%	43%	38%	55%	43%	40%
Somewhat Expensive	**34%**	33%	33%	24%	35%	34%	42%	33%	33%	27%	33%	38%	29%	29%	33%	27%	30%	37%
Very Expensive	**5%**	4%	5%	3%	4%	6%	6%	7%	5%	2%	8%	5%	4%	2%	7%	5%	5%	5%

	OVERALL	Gender		Respondent Age			Educational Level				Annual Household Income					Years of Residency		
		M	F	< 40	40-64	65+	HS or Less	Some College	College Grad	Post-Grad	<25k	25k-39k	40k-69k	70k–99k	100k+	< 10	10-29	30+
Monthly Home Water Bill — Perceived Value																		
Excellent Value	**18%**	19%	18%	9%	19%	22%	8%	17%	18%	25%	11%	22%	16%	18%	24%	18%	17%	19%
Good Value	**46%**	44%	49%	58%	43%	47%	49%	48%	47%	44%	46%	45%	49%	47%	47%	48%	52%	42%
Fair Value	**29%**	31%	26%	29%	31%	23%	35%	28%	27%	26%	35%	23%	30%	29%	24%	25%	24%	33%
Poor Value	**7%**	6%	7%	4%	7%	8%	8%	7%	8%	5%	8%	10%	5%	6%	5%	9%	7%	6%
Amount Willing to Pay Extra Per Month on Home Water Bill to Ensure Long-Term Supply of Drinking Water																		
None	**37%**	37%	34%	21%	39%	36%	**52%**	**42%**	**28%**	**31%**	49%	39%	34%	32%	29%	35%	34%	38%
$1–$5	**38%**	33%	44%	47%	36%	39%	**44%**	**38%**	**40%**	**37%**	42%	33%	46%	40%	31%	39%	40%	37%
$6–$10	**17%**	18%	16%	19%	17%	17%	**2%**	**15%**	**22%**	**18%**	6%	22%	12%	17%	26%	20%	14%	18%
$11–$15	**3%**	4%	2%	4%	3%	4%	**2%**	**3%**	**3%**	**4%**	0%	1%	4%	6%	3%	3%	1%	4%
$16–$20	**2%**	3%	2%	3%	3%	1%	**0%**	**2%**	**3%**	**3%**	3%	3%	2%	1%	5%	3%	5%	1%
> $20	**3%**	5%	2%	6%	2%	3%	**0%**	**0%**	**4%**	**7%**	0%	2%	2%	4%	6%	0%	6%	2%
Having an Adequate Long-Term Supply of Water is Important for Community Quality of Life and Economic Competitiveness																		
Strongly Agree	**94%**	95%	94%	92%	95%	95%	90%	95%	93%	98%	90%	94%	95%	95%	96%	96%	94%	94%
Somewhat Agree	**5%**	4%	6%	8%	5%	4%	10%	5%	6%	2%	10%	6%	4%	5%	4%	3%	6%	6%
Somewhat/Strongly Disagree	**1%**	1%	0%	0%	0%	1%	0%	0%	1%	0%	0%	0%	1%	0%	0%	1%	0%	<1%
Locally Elected Officials Have an Obligation to Plan Ahead and Invest in Infrastructure to Ensure Community Long-Term Access to Water																		
Strongly Agree	**75%**	74%	76%	75%	70%	81%	72%	70%	76%	81%	72%	70%	79%	74%	74%	82%	73%	75%
Somewhat Agree	**23%**	24%	22%	24%	26%	18%	24%	25%	23%	18%	23%	29%	19%	24%	22%	14%	25%	22%
Somewhat/Strongly Disagree	**2%**	2%	2%	1%	4%	1%	4%	5%	1%	1%	5%	1%	2%	2%	4%	4%	2%	3%
Maintaining an Adequate Long-Term Supply of Water in SW Missouri Requires Investments in Water Supply and Infrastructure																		
Strongly Agree	**55%**	57%	55%	63%	50%	60%	41%	55%	56%	63%	44%	49%	61%	50%	64%	62%	56%	54%
Somewhat Agree	**40%**	37%	42%	34%	45%	35%	52%	40%	40%	34%	50%	46%	35%	44%	32%	34%	41%	40%
Somewhat/Strongly Disagree	**5%**	6%	3%	3%	5%	5%	7%	5%	4%	3%	6%	5%	4%	6%	4%	4%	3%	6%

	OVERALL	Gender		Respondent Age			Educational Level				Annual Household Income					Years of Residency		
		M	F	< 40	40-64	65+	HS or Less	Some College	College Grad	Post-Grad	<25k	25k-39k	40k-69k	70k–99k	100k+	< 10	10-29	30+
During a Severe Drought, How Much Could You Realistically Reduce Your Water Consumption?																		
None	**9%**	9%	8%	7%	10%	9%	**6%**	**16%**	**5%**	**7%**	12%	10%	9%	9%	6%	11%	7%	9%
< 10%	**23%**	18%	27%	15%	24%	22%	**32%**	**26%**	**18%**	**21%**	34%	31%	20%	22%	17%	21%	21%	24%
10%-20%	**42%**	42%	42%	44%	44%	40%	**36%**	**37%**	**47%**	**43%**	23%	37%	46%	43%	45%	36%	41%	44%
21%-30%	**18%**	21%	17%	24%	15%	21%	**13%**	**15%**	**22%**	**21%**	20%	14%	19%	22%	18%	21%	21%	17%
> 30%	**8%**	10%	6%	10%	7%	8%	**13%**	**6%**	**8%**	**8%**	11%	8%	6%	4%	14%	11%	10%	6%
Support for Reuse of Water for FIRE PROTECTION																		
Support	**94%**	92%	96%	98%	95%	92%	90%	93%	95%	96%	**90%**	**90%**	**99%**	**92%**	**96%**	95%	96%	93%
Oppose	**3%**	5%	1%	1%	2%	5%	6%	4%	2%	1%	**8%**	**4%**	**0%**	**2%**	**2%**	4%	2%	3%
Not Sure	**3%**	3%	3%	1%	3%	3%	4%	3%	3%	3%	**2%**	**6%**	**1%**	**6%**	**2%**	1%	2%	4%
Support for Reuse of Water for LANDSCAPE IRRIGATION																		
Support	**88%**	87%	88%	89%	89%	87%	80%	86%	87%	94%	**84%**	**83%**	**83%**	**90%**	**96%**	91%	88%	87%
Oppose	**5%**	7%	4%	7%	5%	5%	8%	6%	6%	3%	**8%**	**10%**	**6%**	**3%**	**2%**	5%	6%	5%
Not Sure	**7%**	6%	8%	4%	6%	8%	12%	8%	7%	3%	**8%**	**7%**	**11%**	**7%**	**2%**	4%	6%	8%
Support for Reuse of Water for TOILET FLUSHING																		
Support	**84%**	**83%**	**87%**	94%	85%	81%	74%	82%	87%	91%	84%	82%	88%	80%	90%	83%	86%	84%
Oppose	**7%**	**10%**	**4%**	4%	7%	8%	8%	10%	6%	4%	8%	8%	4%	11%	7%	9%	7%	7%
Not Sure	**9%**	**7%**	**9%**	2%	8%	11%	18%	8%	7%	5%	8%	10%	8%	9%	3%	8%	7%	9%
Support for Reuse of Water for DRINKING/TAP WATER																		
Support	**27%**	**33%**	**22%**	31%	28%	24%	**29%**	**22%**	**32%**	**25%**	28%	30%	32%	22%	27%	**18%**	**25%**	**30%**
Oppose	**40%**	**37%**	**42%**	33%	37%	44%	**43%**	**48%**	**37%**	**33%**	54%	36%	37%	39%	37%	**47%**	**36%**	**41%**
Not Sure	**33%**	**30%**	**36%**	36%	35%	32%	**28%**	**30%**	**31%**	**42%**	18%	34%	31%	39%	36%	**35%**	**39%**	**29%**
Reallocation of Water Storage in Stockton Lake																		
Strongly Support	**23%**	**32%**	**15%**	23%	19%	27%	22%	21%	26%	22%	23%	13%	27%	21%	27%	23%	19%	25%
Somewhat Support	**48%**	**48%**	**49%**	46%	51%	47%	49%	55%	47%	42%	44%	58%	48%	49%	44%	42%	49%	50%
Somewhat Oppose	**4%**	**4%**	**3%**	2%	3%	5%	4%	4%	3%	4%	2%	4%	5%	3%	3%	7%	3%	4%
Strongly Oppose	**1%**	**1%**	**1%**	1%	2%	<1%	0%	1%	1%	2%	0%	2%	2%	0%	1%	1%	<1%	1%
Not Sure	**24%**	**15%**	**32%**	28%	25%	20%	25%	19%	23%	30%	31%	23%	18%	27%	25%	27%	29%	20%

Questionnaire

Citizen Water Supply and Usage Survey — 2017

Springfield (n = 597)

1. **How strongly do you agree or disagree with this statement: Having an adequate long-term supply of water is important for your community's quality of life and economic competitiveness.**

   94%...Strongly Agree
   5%...Somewhat Agree
   <1%...Somewhat Disagree
   <1%...Strongly Disagree

2. **What type of organization, if any, supplies your home tap water?**

   72.6%...City
   19.8%...Public Utility
   1.9%...Public Water Supply District (PWSD)
   0.5%...None, I am on a private well
   0.3%...County
   0.2%...Private Company
   0.0%...Neighborhood Association
   4.7%...Not Sure

3. **What is the source of your home tap water?**

   34%...Surface Water (e.g., lake/river)
   2%...Aquifer (e.g., well)
   15%...Combination of aquifer and surface water
   49%...Not Sure

4. **On average, about how much per month is your home water bill?**

   <1%...None, I am on a private well
   <1%...$1 to $10 per month
   13%...$11 to $20 per month
   44%...$21 to $30 per month
   25%...$31 to $40 per month
   17%...More than $40 per month

5. **Compared to other monthly essentials, how would you describe the expense of your monthly home water bill?**

   18%...Very inexpensive
   43%...Somewhat inexpensive
   34%...Somewhat expensive
   5%...Very expensive

6. **Considering the amount of water you use at home per month and the amount of your monthly home water bill, would you say the water provided to your home is an excellent, good, fair, or poor value?**

   18%...Excellent Value
   46%...Good Value
   29%...Fair Value
   7%...Poor Value

7. **Based on your current water bill, how much more would you be willing to pay per month to ensure an adequate long-term supply of drinking water?**

   37%...None, no more than what I am paying now
   38%...$1 to $5 more
   17%...$6 to $10 more
   3%...$11 to $15 more
   2%...$16 to $20 more
   3%...More than $20

8. **How strongly do you agree or disagree with this statement: Locally elected officials, such as county commissioners and city mayors, have an obligation to plan ahead and invest in the necessary infrastructure to ensure that homeowners, businesses, and farmers have adequate long-term access to water.**

   75%...Strongly Agree
   23%...Somewhat Agree
   1%...Somewhat Disagree
   1%...Strongly Disagree

9. **Droughts occur periodically as part of the natural climate cycle. When your area experiences a drought and your local provider of water has to implement emergency water conservation measures, how much could you realistically reduce your water consumption?**

   9%...None, I could not use any less water than I am using now
   23%...Less than 10%
   42%...10% to 20% less
   18%...21% to 30% less
   8%...More than 30%

10. **How strongly do you agree or disagree with this statement: To maintain an adequate long-term supply of water in southwest Missouri, investments in water supply and infrastructure are necessary.**

    55%...Strongly Agree
    40%...Somewhat Agree
    4%...Somewhat Disagree
    1%...Strongly Disagree

11. **How strongly would you support or oppose the reallocation of a small amount of water storage in Stockton Lake to be used by citizens and businesses in southwest Missouri for long-term water supply?**

    23%...Strongly Support
    48%...Somewhat Support
    4%...Somewhat Oppose
    1%...Strongly Oppose
    24%...Not Sure

12. **Water providers treat water to very high drinking water standards and then deliver it to homes and businesses for use. Once that water has been used, it is again treated to very high drinking water standards and then released into area waterways rather than being reused. To save money and conserve water, instead of releasing this highly treated water back into area waterways (lakes, streams, rivers) would you support or oppose its reuse for the following:**

	Support	Oppose	Not Sure
1. Fire protection	94%	3%	3%
2. Irrigation of landscaping	88%	5%	7%
3. Toilet flushing	84%	7%	9%
4. Drinking/Tap water	27%	40%	33%

Respondent Information: The last few questions are about you and your household. They will be used to group responses to the survey. Your responses are completely confidential and anonymous.

13. **What town or city do you live in?** Springfield = 100%

14. **Approximately how many years have you lived in southwest Missouri?**

    Range = < 1 year–80 years, Mean = 31.4 years, Median = 30 years

    < 10 years = 14%, 10–29 years = 33%, 30+ years = 53%

15. **In the past couple of years, have you used any of the following lakes or rivers for recreational purposes (e.g., camping, picnicking, swimming, fishing, boating, etc.)?**

	Yes	No
1. Table Rock Lakes	53%	47%
2. Stockton Lake	24%	76%
3. Pomme de Terre Lake	13%	87%

16. **What is your gender?** 47%...Male 53%...Female

17. **What is your birth year?**

Age range = 21–90 years old, Mean = 56.7 years old, Median = 59 years old

Age < 40 years = 17%, Age 40–64 years = 48%, Age 65+ years = 35%

18. **What is your educational level?**

1%...Did not complete high school

9%...High school graduate/GED

29%...Some college/Vo-Tech

34%...College graduate

27%...Post-graduate studies (e.g., MA, Ph.D., MD)

19. **Which of the following categories best describes your total annual household income before taxes?**

8%...Less than $25,000

18%...$25,000 to $39,999

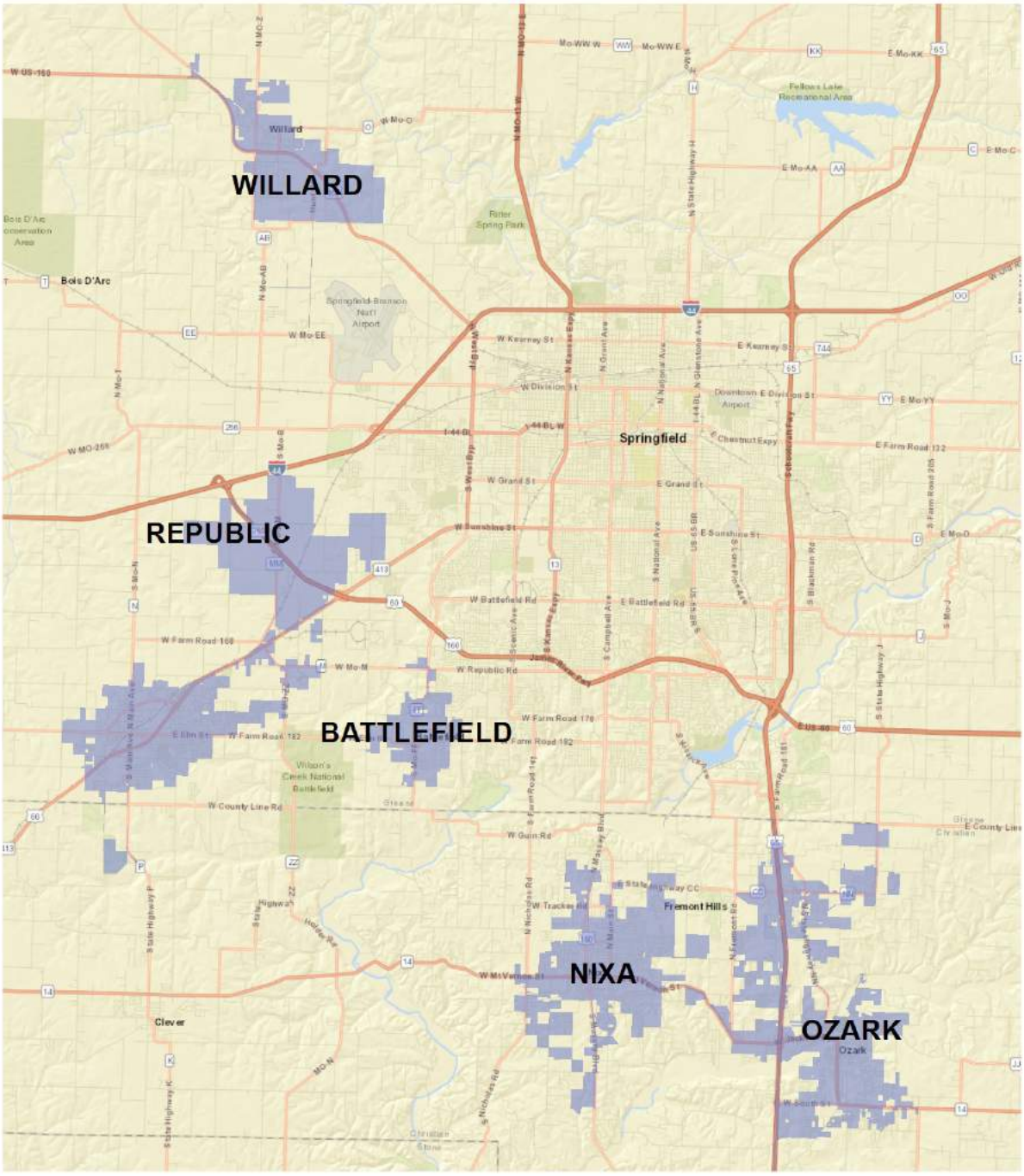
29%...$40,000 to $69,999

22%...$70,000 to $99,999

23%...$100,000 or more

Thank You! This Completes the Survey.

SPRINGFIELD SURROUNDING COMMUNITIES



EXECUTIVE SUMMARY

This Executive Summary presents an overview of the 2017 Springfield Surrounding Communities Citizen Water Supply and Usage Survey. In this report, "Springfield Surrounding Communities" refers to the following five communities: Nixa, Ozark, Republic, Battlefield, and Willard. The report is based on 758 online surveys conducted during the summer and fall of 2017. Overall findings have a margin of error of +/- 3.6% at the 95% confidence interval.

The survey was designed, administered, and analyzed by **Opinion Research Specialists, LLC** of Springfield, Missouri with input from the Tri-State Water Resource Coalition. Survey findings are summarized below.

Source of Home Tap Water

- 20% of respondents said their home tap water came from an aquifer, 8% mentioned surface water, and 4% believed it was a combination of the two. However, the vast majority of respondents (68%) were unsure as to the source of their home tap water.

Type of Organization Supplying Home Tap Water

- Most respondents (74%) believed their home tap water was supplied by the city, 9% mentioned a public water supply district, and 7% were not sure.

Average Monthly Home Water Bill

- A plurality of respondents (37%) reported having average monthly water bills in excess of $40, while 24% reported water bills averaging $21-to-$30 per month (second largest group). With the exception of respondents in households earning $25k to $39k per year, a plurality of respondents (regardless of demographic attributes) said their average monthly home water bill exceeded $40.

Monthly Home Water Bill Perceptions

- A slim majority of respondents (52%) said their monthly water bill was either "very" or "somewhat" inexpensive compared to other monthly essentials and nearly the same percentage (50%) described their bill as either an "excellent" or "good" value.

- Respondents with a high school diploma (or less) were the most likely of all demographic groups to characterize their home monthly water bill as "very expensive" and a "poor" value.

Amount Willing to Pay Extra to Ensure Long-Term Supply of Water

- Although 44% of respondents were not willing to pay anything extra per month on their water bill to ensure a long-term supply of drinking water, 56% were willing to pay at least $1-to-$5 more per month. Respondents least willing to pay anything extra per month were those with a high school diploma or less.

- With the exception of those less formally educated (high school or less), a majority of respondents (51% to 70%) from all other demographic groups were willing to pay at least $1-to-$5 more per month on their water bill to ensure a long-term supply of drinking water. This was particularly true for college graduates and of more recent residents to the area.

Long-Term Supply of Water: Importance and Infrastructure

- 94% of respondents "strongly agreed" that having a long-term supply of water was critical for their community's quality of life and economic competitiveness. Only 1% disagreed with this statement.

- 80% "strongly agreed" that locally elected officials must invest in infrastructure to ensure long-term access to water for citizens, farmers, and businesses. Only 1% disagreed with this statement.

- 55% "strongly agreed" that investments in water supply and infrastructure were needed to guarantee a long-term supply of water to southwest Missouri. Only 3% disagreed with this statement.

Reducing Water Consumption in an Emergency

- A plurality of respondents (41%) indicated they could temporarily reduce their water consumption by 10% to 20% in the event of a water shortage emergency, but 32% said they would only be able to reduce their consumption by less than 10%, if at all.

- Respondents least able or willing to reduce their water consumption during a drought were low-income respondents and those with a high school education or less.

Support for Using Treated Wastewater

- To save money and conserve water, at least 87% of respondents said they would support the use of treated wastewater for purposes of fire protection, landscape irrigation, and toilet flushing. However, only 29% would approve the use of treated wastewater for drinking/tap water purposes.

- 46% of respondents with a high school education or less supported the use of treated wastewater for drinking/tap water purposes. This percentage was much higher than that of any other demographic group in the study.

Reallocation of Water Storage in Stockton Lake

- More than 60% of respondents supported, to some extent, the idea of reallocating a small amount of water storage in Stockton Lake for use by citizens and businesses throughout southwest Missouri for long-term water supply. Approximately 30% of respondents were undecided on this proposal and 8% were opposed.

- Demographically, opposition to this plan was minimal — less than 20% of ***any*** demographic group was opposed.

INTRODUCTION

This survey was commissioned by the Tri-State Water Resource Coalition to assess the **opinions** and **perceptions** about water supply and usage in southwest Missouri among residents of communities located in close proximity to Springfield (i.e., Nixa, Ozark, Republic, Battlefield, and Willard). This survey is one of seven surveys targeting a 16-county area in southwest Missouri. Questions on all seven surveys are identical so that differences in perceptions can be assessed.

SURVEY DESIGN AND METHODOLOGY

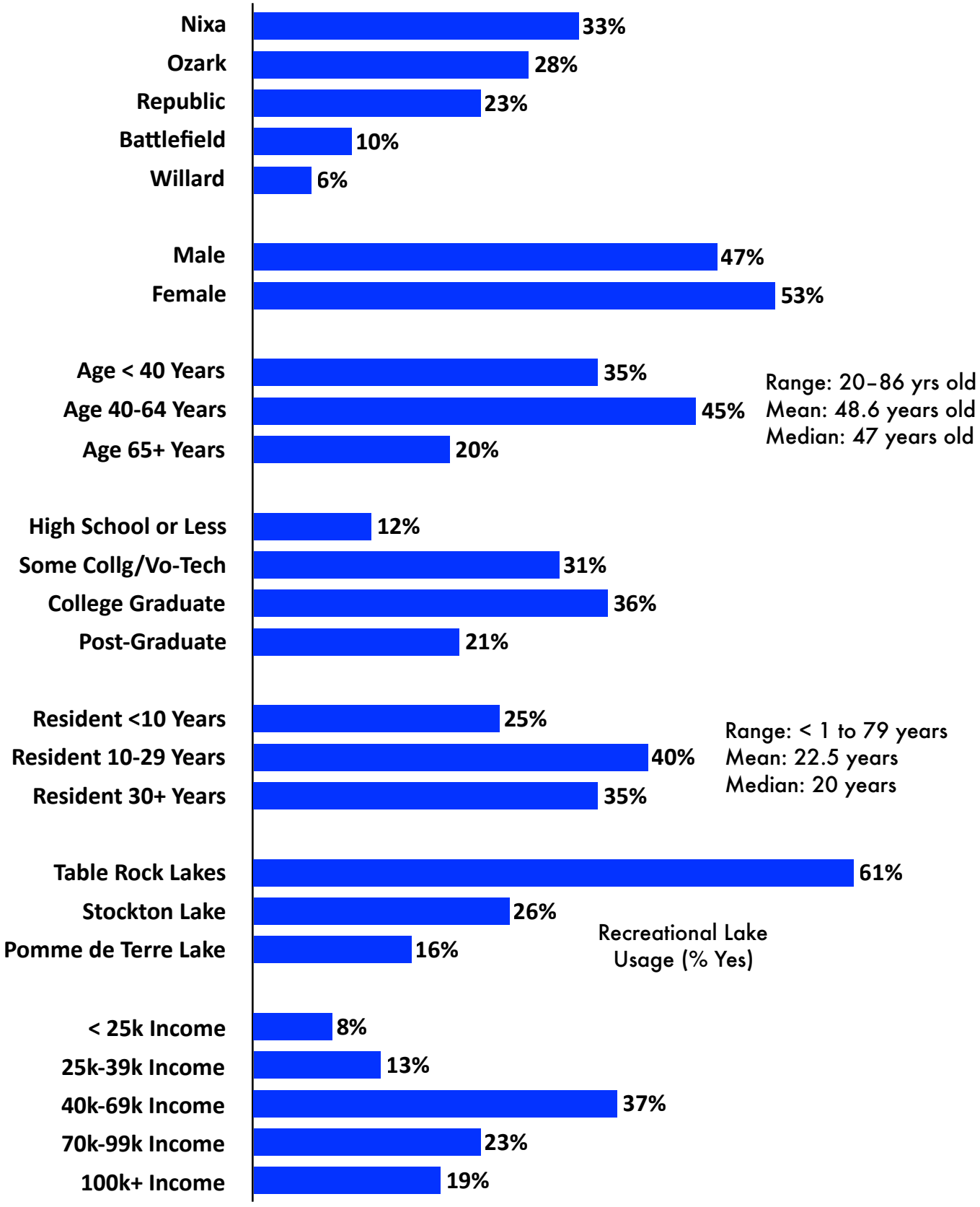
The survey was designed, administered, and analyzed by **Opinion Research Specialists, LLC** of Springfield, Missouri with input from the Tri-State Water Resource Coalition. Survey results are based on 758 completed online surveys conducted during the summer/fall of 2017.

INTERPRETATION OF DATA

Overall survey results, based on 758 completed questionnaires, have a margin of error of approximately +/- 3.5% at the 95% confidence interval. For example, if a response listed in the report is 57% one can be 95% confident that the "true" percentage, that which would have been attained if all residents in Nixa, Ozark, Republic, Battlefield, and Willard had participated in the survey, is between 53.5% and 60.5%. Margin of error increases when subsets of the total sample are analyzed (e.g., male versus female, etc.).

Some percentages in the report may not add to exactly 100% due to rounding.

SURVEY RESPONDENT PROFILE

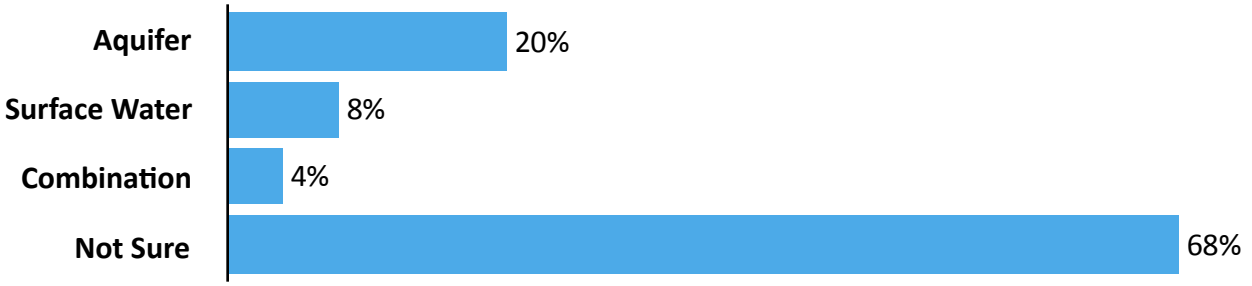


Springfield Surrounding Communities

Survey Results

Source of Home Tap Water

Nearly 70% of respondents did not know the source of their home tap water. Twenty percent said their home tap water came from an aquifer, 8% mentioned surface water, and 4% thought it was a combination of aquifer and surface water.

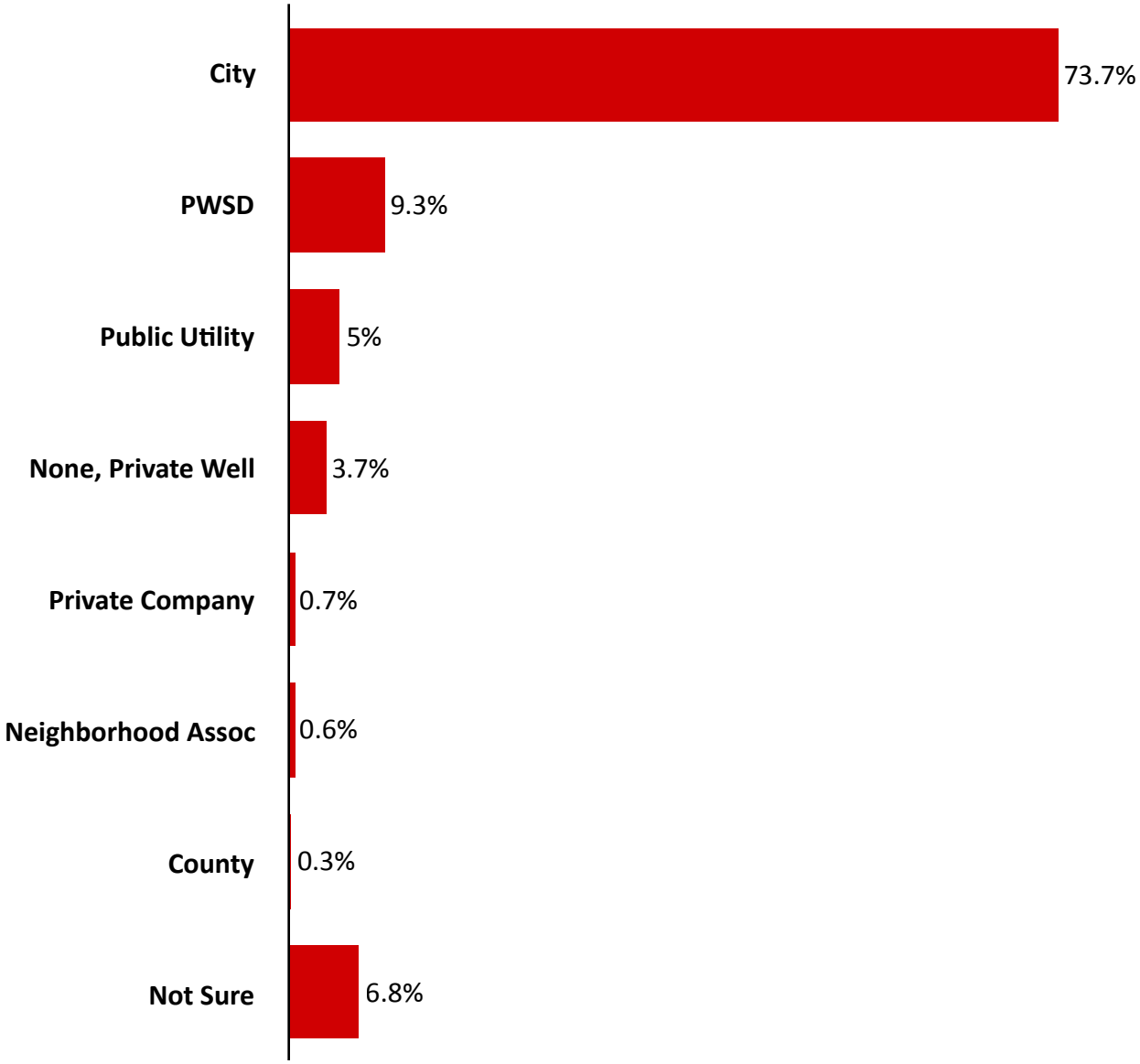


Demographic Analysis: Females, younger respondents, those least ***and*** most educated, middle-income respondents, and more recent residents to southwest Missouri (< 30 years) were significantly more likely than their demographic counterparts to ***not know*** the source of their home tap water.

Demographics	Aquifer	Surface Water	Combination	Not Sure
Male	28%	8%	3%	61%
Female	13%	8%	5%	**74%**
18-39 years old	12%	6%	3%	**79%**
40-64 years old	24%	9%	5%	62%
65+ years old	23%	11%	6%	60%
HS or Less	15%	9%	4%	**72%**
Some College/Vo-Tech	15%	11%	8%	66%
College Graduate	27%	8%	3%	62%
Post-Graduate	17%	3%	4%	**76%**
< 25k hh income	14%	30%	4%	52%
25k-39k hh income	18%	9%	5%	68%
40k-69k hh income	14%	5%	7%	**74%**
70k-99k hh income	25%	5%	4%	66%
100k+ hh income	29%	7%	3%	61%
< 10 yrs resident	20%	9%	1%	**70%**
10-29 yrs resident	17%	5%	4%	**74%**
30+ yrs resident	23%	9%	8%	60%

Type of Organization Supplying Home Tap Water

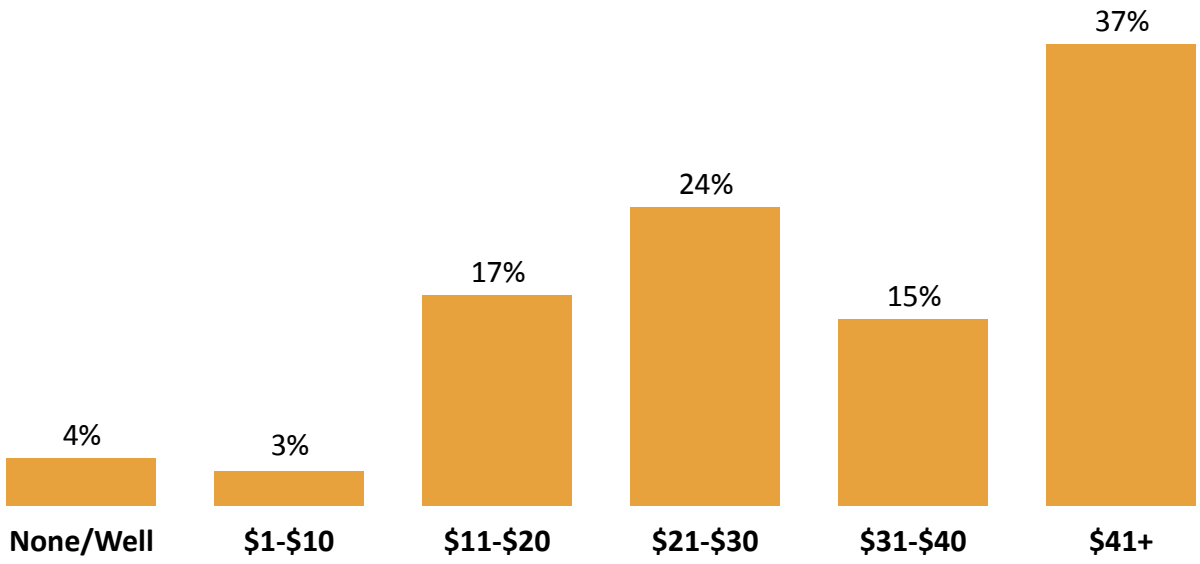
Approximately 74% of respondents believed their home tap water was supplied by the city, while 9% mentioned a public water supply district (PWSD) and 7% were not sure.



Demographic Analysis: Regardless of respondent demographic characteristics, the vast majority of those surveyed thought their home tap water was city supplied.

Average Monthly Home Water Bill

A plurality of respondents (37%) reported having average monthly water bills exceeding $40, while 24% said their water bills averaged $21-to-$30 per month (second largest group).



Demographic Analysis: With the exception of respondents in households earning $25k to $39k a year, a plurality of respondents (regardless of demographic attributes) indicated that their average monthly home water bill exceeded $40.

Monthly Home Water Bill Perceptions

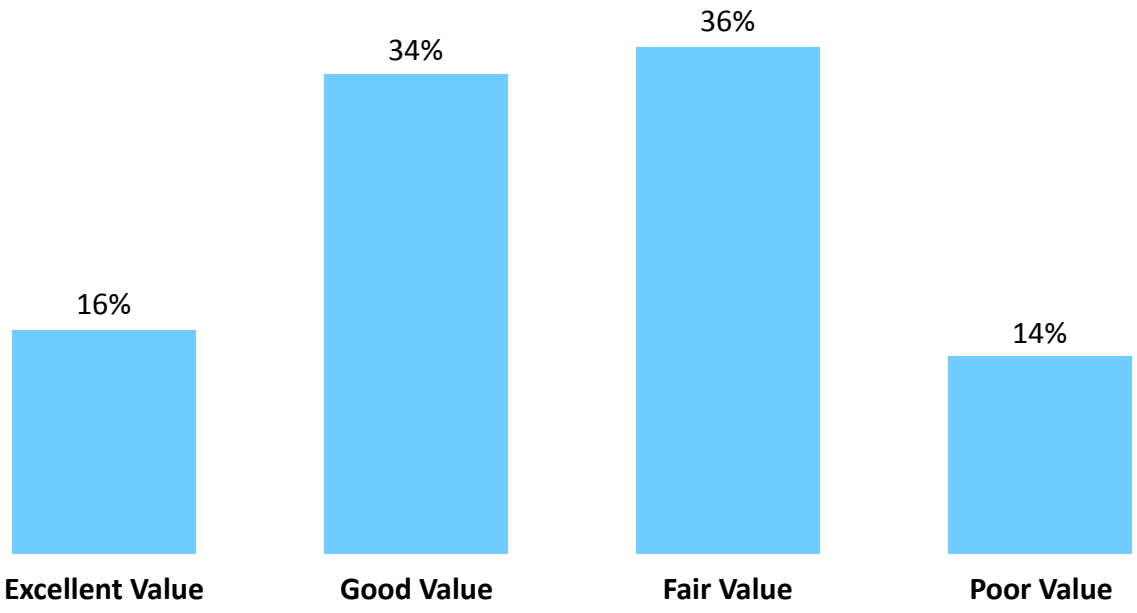
Perceived Expense: While a slim majority of respondents (52%) said their monthly water bill was either "very" or "somewhat" inexpensive compared to other monthly essentials, nearly the same percentage (48%) perceived it to be expensive (very or somewhat).

Demographic Analysis: Respondents with a high school diploma or less (27%) and long-time residents of southwest Missouri (22%) were the demographic groups most likely to characterize their home monthly water bill as "very expensive."

Demographics	Very Inexpensive	Somewhat Inexpensive	Somewhat Expensive	Very Expensive
High School or Less	12%	30%	31%	**27%**
Some College/Vo-Tech	21%	27%	36%	16%
College Graduate	20%	43%	29%	8%
Post-Graduate	23%	25%	40%	12%
< 10 yrs resident	24%	37%	30%	9%
10-29 yrs resident	21%	32%	38%	9%
30+ yrs resident	15%	31%	32%	**22%**

Monthly Home Water Bill Perceptions (Cont'd)

Perceived Value: One-half of respondents (50%) described their monthly water bill as either an excellent or good value, while the same percentage (50%) viewed it as either a fair or poor value.

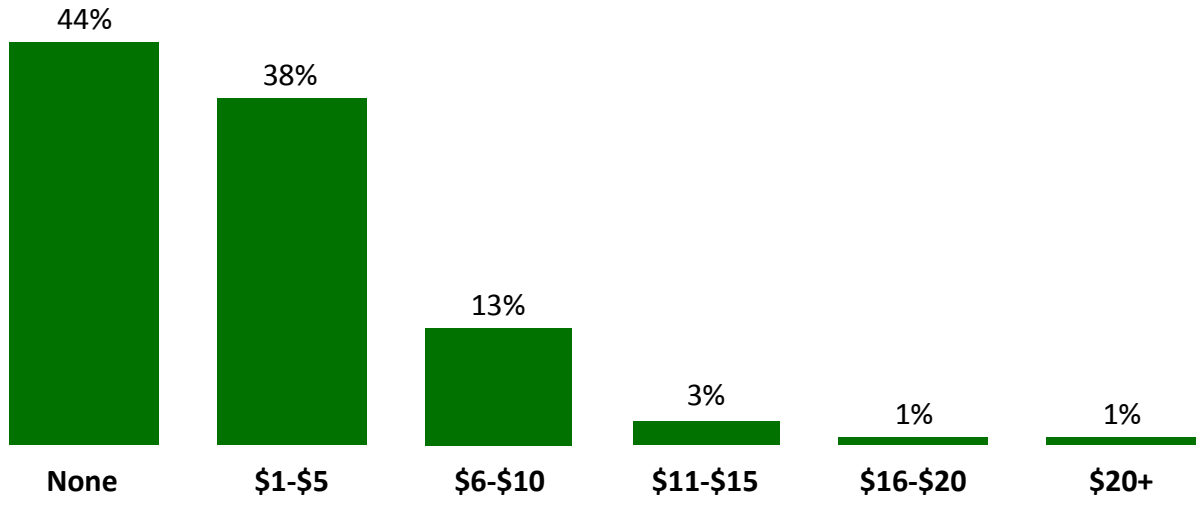


Demographic Analysis: Respondents with a high school diploma or less were far more likely than any other educational group (or any other demographic group) to describe their home monthly water bill as a "poor" value (31%).

Education	Excellent Value	Good Value	Fair Value	Poor Value
High School or Less	19%	22%	28%	**31%**
Some College/Vo-Tech	12%	36%	33%	19%
College Graduate	15%	40%	38%	7%
Post-Graduate	20%	28%	44%	8%

Amount Willing to Pay Extra to Ensure Supply of Water

When asked how much more per month they would be willing to pay on their water bill to ensure a long-term supply of drinking water, 44% of respondents said they would not pay anything extra, 38% would pay $1-to-$5 extra each month, and 13% would pay $6-to-$10. Five percent were willing to pay more than $10 extra per month.



Demographic Analysis: Respondents with a high school diploma or less were far more likely than those with additional formal education (or any other demographic group) to say they would **not pay anything extra per month** to ensure an adequate long-term supply of drinking water.

Education	None	$1-$5	$6-$10	$11-$15	$16-$20	> $20
High School or Less	**66%**	25%	8%	1%	0%	0%
Some College/Vo-Tech	49%	33%	13%	2%	2%	1%
College Graduate	30%	48%	16%	3%	0%	3%
Post-Graduate	47%	36%	11%	3%	1%	2%

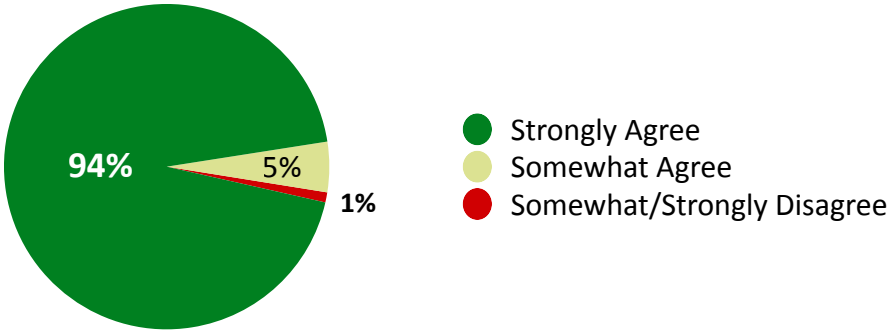
Amount Willing to Pay Extra by Demographics

With the sole exception of less formally educated respondents (high school or less), a majority of respondents (51% to 70%) from all other demographic groups were willing to pay at least $1-to-$5 more per month on their water bill to ensure a long-term supply of drinking water. This was particularly true for college graduates and of more recent residents to the area.

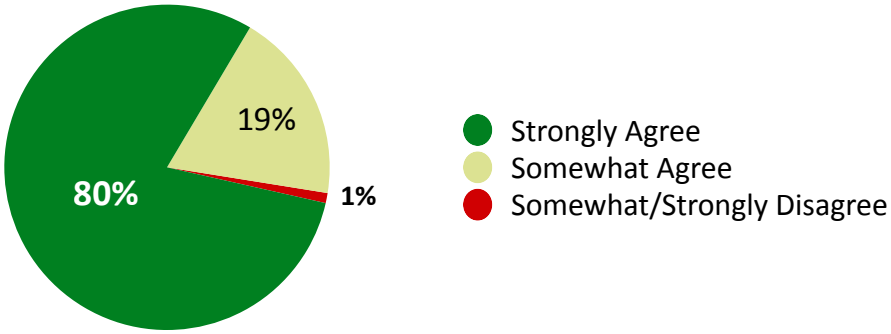
Demographics	None	$1 to $5	$6 to $10	> $10
Male	49%	34%	13%	4%
Female	40%	42%	13%	5%
Lake user	41%	42%	13%	4%
Lake nonuser	49%	32%	13%	6%
18-39 years old	44%	39%	13%	4%
40-64 years old	44%	36%	14%	7%
65+ years old	47%	40%	11%	3%
High school or less	**66%**	25%	8%	1%
Some college/vo-tech	49%	33%	13%	5%
College graduate	**30%**	**48%**	**16%**	**6%**
Post-graduate	47%	36%	11%	6%
< 25k household income	45%	43%	10%	2%
25k-39k household income	42%	43%	9%	6%
40k-69k household income	47%	35%	15%	4%
70k-99k household income	42%	44%	11%	3%
100k+ household income	39%	33%	17%	11%
< 10 years of residency	**32%**	**42%**	**19%**	**7%**
10-29 years of residency	48%	39%	10%	3%
30+ years of residency	49%	34%	12%	5%

Long-Term Supply of Water: Importance and Infrastructure

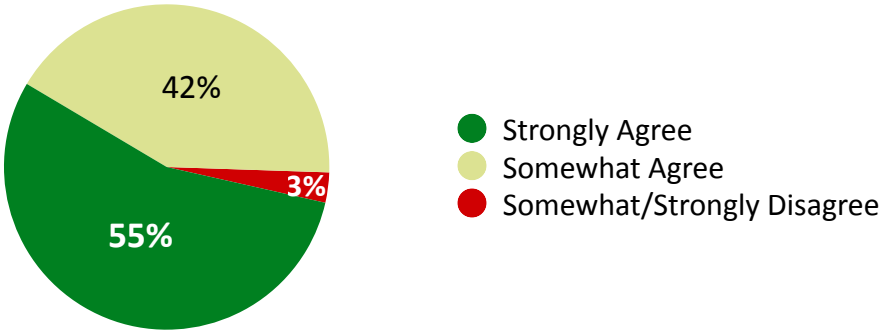
Importance of Long-Term Supply of Water: Nearly 95% of respondents *strongly agreed* that having an adequate long-term supply of water was important for their community's quality of life and economic competitiveness.



Obligation to Plan Ahead and Invest: The vast majority of respondents (80%) *strongly agreed* that locally elected officials have an obligation to plan ahead and invest in the necessary infrastructure to ensure that homeowners, businesses, and farmers have adequate long-term access to water.

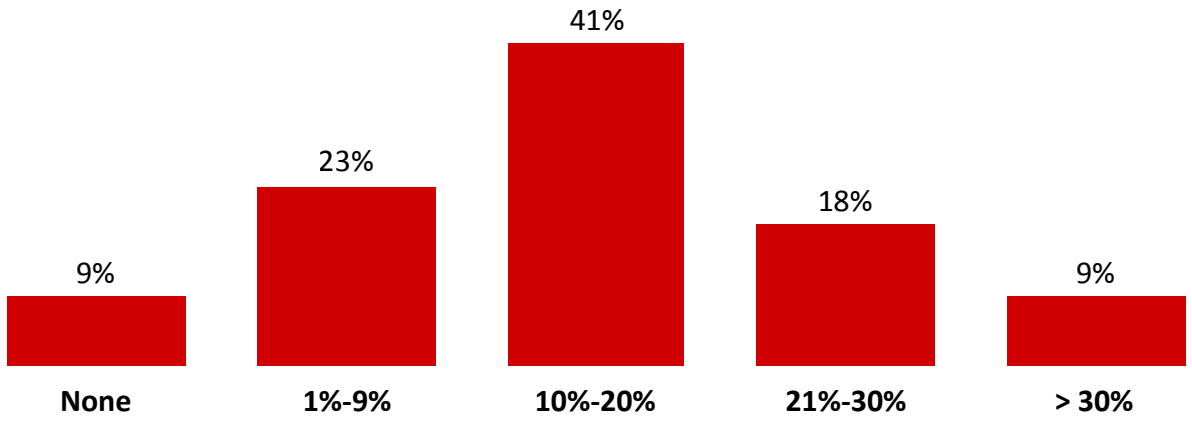


Investments in Water Supply and Infrastructure: A majority of respondents (55%) *strongly agreed* that investments in water supply and infrastructure were necessary to maintain an adequate long-term supply of water in southwest Missouri.



Reducing Water Consumption in an Emergency

A plurality of respondents (41%) indicated they could temporarily reduce their water consumption by 10% to 20% if their local water provider had to implement emergency water conservation measures. About one-quarter of residents (27%) said they could reduce their water consumption by more than 20%, and about one-third (32%) would be able to reduce water consumption by less than 10%, if at all.

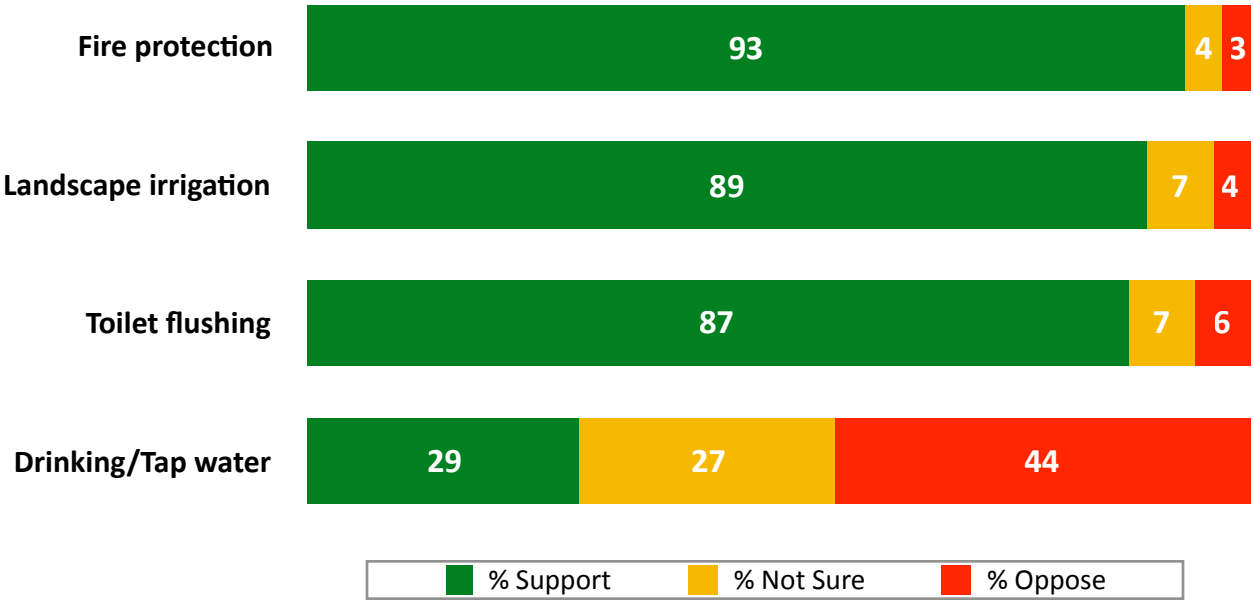


Demographic Analysis: Willingness to reduce water consumption during a drought was linked to respondent household income and educational level. Specifically, respondents least able or willing to reduce their water consumption during a drought were low-income respondents and those with a high school education or less.

Demographics	None	1%-9%	10%-20%	21%-30%	> 30%
< 25k hh income	**28%**	**26%**	28%	8%	10%
25k-39k hh income	**20%**	10%	40%	20%	10%
40k-69k hh income	9%	23%	43%	16%	9%
70k-99k hh income	5%	26%	38%	24%	7%
100k+ hh income	2%	25%	45%	20%	8%
High School or Less	**19%**	13%	39%	21%	8%
Some College/Vo-Tech	11%	24%	41%	14%	10%
College Graduate	6%	20%	47%	17%	10%
Post-Graduate	5%	31%	34%	24%	6%

Support for Using Treated Wastewater

To save money and conserve water, respondents were asked if they would support or oppose the use of treated wastewater for various activities instead of being released into area waterways. While the vast majority of respondents said they would approve the use of treated wastewater for purposes of fire protection (93%), landscape irrigation (89%); and toilet flushing (87%); only 29% would do so for drinking/tap water purposes.

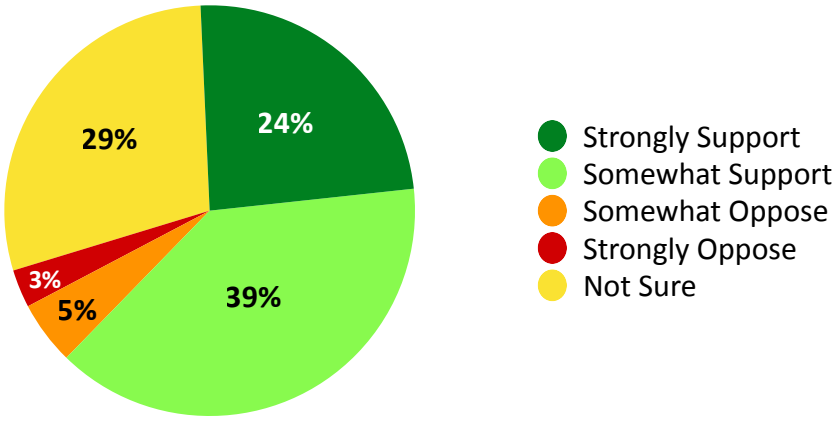


Demographic Analysis: More than 45% of respondents with a high school education or less said they would support the use of treated wastewater for drinking/tap water purposes. This level of support was significantly higher than respondents more formally educated and also much higher than that of any other demographic group in the study.

	Using Treated WasteWater for Drinking/Tap Water		
Education	**Support**	**Not Sure**	**Oppose**
High School or Less	**46%**	16%	38%
Some College/Vo-Tech	33%	22%	45%
College Graduate	21%	33%	46%
Post-Graduate	28%	32%	40%

Reallocation of Water Storage in Stockton Lake

More than 60% of respondents supported, to some extent, the idea of reallocating a small amount of water storage in Stockton Lake for use by citizens and businesses throughout southwest Missouri for long-term water supply. Approximately 30% of respondents were undecided on this proposal and 8% were opposed.



Demographic Analysis: Respondents most likely to "strongly support" the Stockton Lake water reallocation proposal were males and those less formally educated. Females and respondents with post-graduate degrees were the most likely of any demographic group to be undecided on this issue.

Demographics	Strongly Support	Somewhat Support	Somewhat Oppose	Strongly Oppose	Not Sure
Male	**37%**	38%	5%	2%	18%
Female	13%	40%	6%	3%	**38%**
High School or Less	**40%**	27%	4%	6%	23%
Some Coll/Vo-Tech	28%	40%	5%	6%	21%
College Graduate	23%	42%	6%	< 1%	29%
Post-Graduate	12%	41%	5%	0%	**42%**

Reallocation of Water Storage in Stockton L. by Demographics

While opposition to the Stockton Lake reallocation proposal was minimal — less than 20% of ***any*** demographic group was opposed, support ranged from 53% to 75%. A relatively large percentage of respondents across all demographic groups were undecided on this issue.

Demographics	Strongly or SW Support	Strongly or SW Oppose	Not Sure
Male	**75%**	7%	18%
Female	**53%**	9%	**38%**
Stockton Lake user	68%	10%	22%
Stockton Lake nonuser	62%	7%	**31%**
18-39 years old	60%	6%	**34%**
40-64 years old	60%	10%	**30%**
65+ years old	72%	10%	18%
High school or less	67%	10%	23%
Some college/vo-tech	68%	11%	21%
College graduate	65%	6%	29%
Post-graduate	**53%**	5%	**42%**
< 25k household income	73%	4%	23%
25k-39k household income	55%	**18%**	27%
40k-69k household income	58%	10%	**32%**
70k-99k household income	66%	7%	27%
100k+ household income	71%	1%	28%
< 10 years of residency	64%	6%	**30%**
10-29 years of residency	63%	8%	29%
30+ years of residency	63%	10%	27%

Demographic Analysis

NOTE: Table percentages **bolded in red** denote statistical significance at the .05 level or less.

Table percentages **bolded in red** and **shaded in yellow** denote statistical significance at the .001 level or less.

	OVERALL	Gender		Respondent Age			Educational Level				Annual Household Income					Years of Residency		
		M	F	< 40	40-64	65+	HS or Less	Some College	College Grad	Post-Grad	<25k	25k-39k	40k-69k	70k–99k	100k+	< 10	10-29	30+
Source of Home Tap Water																		
Aquifer	**20%**	28%	13%	12%	24%	23%	15%	15%	27%	17%	14%	18%	14%	25%	29%	20%	17%	23%
Surface Water	**8%**	8%	8%	6%	9%	11%	9%	11%	8%	3%	30%	9%	5%	5%	7%	9%	5%	9%
Combination	**4%**	3%	5%	3%	5%	6%	4%	8%	3%	4%	4%	5%	7%	4%	3%	1%	4%	8%
Not Sure	**68%**	61%	74%	79%	62%	60%	72%	66%	62%	76%	52%	68%	74%	66%	61%	70%	74%	60%
Type of Organization Supplying Home Tap Water																		
City	**74%**	71%	76%	79%	73%	67%	74%	76%	73%	72%	89%	63%	74%	71%	82%	64%	76%	78%
Public Water Supply District	**9%**	12%	7%	7%	8%	17%	7%	9%	8%	13%	5%	15%	8%	7%	10%	13%	9%	7%
Public Utility	**5%**	4%	6%	4%	5%	8%	12%	7%	2%	2%	4%	11%	6%	2%	4%	5%	3%	7%
None/Private Well	**4%**	3%	4%	3%	6%	0%	0%	3%	8%	1%	0%	0%	2%	11%	2%	5%	3%	3%
Private Company	**<1%**	0%	1%	1%	<1%	0%	0%	2%	<1%	0%	0%	0%	0%	2%	0%	0%	<1%	1%
Neighborhood Association	**<1%**	1%	0%	0%	1%	0%	4%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
County	**<1%**	<1%	<1%	0%	0%	0%	0%	0%	<1%	0%	0%	0%	0%	0%	0%	1%	<1%	0%
Not Sure	**7%**	8%	6%	6%	7%	7%	3%	3%	8%	12%	2%	11%	10%	4%	2%	12%	7%	4%
Average Monthly Home Water Bill																		
None/On a Well	**4%**	3%	5%	4%	7%	0%	0%	3%	9%	1%	0%	2%	3%	12%	2%	6%	3%	4%
$1–$10	**3%**	3%	4%	3%	4%	3%	11%	4%	2%	1%	10%	5%	3%	4%	2%	1%	5%	4%
$11–$20	**17%**	19%	16%	16%	12%	28%	14%	21%	14%	16%	19%	31%	17%	12%	10%	22%	17%	13%
$21–$30	**24%**	22%	25%	22%	24%	27%	31%	20%	24%	24%	26%	33%	23%	19%	22%	27%	24%	19%
$31–$40	**15%**	16%	14%	20%	12%	14%	5%	10%	19%	23%	12%	7%	17%	17%	19%	11%	18%	16%
> $40	**37%**	37%	36%	35%	41%	28%	39%	42%	32%	35%	33%	22%	37%	36%	45%	33%	33%	44%
Monthly Home Water Bill — Perceived Expense																		
Very Inexpensive	**20%**	21%	18%	18%	22%	19%	12%	21%	20%	23%	11%	27%	19%	20%	22%	24%	21%	15%
Somewhat Inexpensive	**32%**	30%	36%	37%	29%	33%	30%	27%	43%	25%	33%	30%	33%	37%	29%	37%	32%	31%
Somewhat Expensive	**34%**	35%	33%	33%	32%	36%	31%	36%	29%	40%	37%	35%	31%	31%	36%	30%	38%	32%
Very Expensive	**14%**	14%	13%	12%	17%	12%	27%	16%	8%	12%	19%	8%	17%	12%	13%	9%	9%	22%

		Gender		Respondent Age			Educational Level				Annual Household Income					Years of Residency		
	OVERALL	M	F	< 40	40-64	65+	HS or Less	Some College	College Grad	Post-Grad	<25k	25k-39k	40k-69k	70k–99k	100k+	< 10	10-29	30+
Monthly Home Water Bill — Perceived Value																		
Excellent Value	**16%**	18%	14%	16%	16%	15%	**19%**	**12%**	**15%**	**20%**	7%	16%	15%	17%	20%	15%	15%	16%
Good Value	**34%**	31%	37%	33%	32%	38%	**22%**	**36%**	**40%**	**28%**	30%	40%	32%	39%	24%	38%	36%	30%
Fair Value	**36%**	39%	34%	42%	35%	32%	**28%**	**33%**	**38%**	**44%**	49%	28%	37%	31%	46%	34%	38%	37%
Poor Value	**14%**	12%	15%	9%	17%	15%	**31%**	**19%**	**7%**	**8%**	14%	16%	16%	13%	10%	13%	11%	17%
Amount Willing to Pay Extra Per Month on Home Water Bill to Ensure Long-Term Supply of Drinking Water																		
None	**44%**	49%	40%	44%	44%	47%	**66%**	**49%**	**30%**	**47%**	45%	42%	47%	42%	39%	32%	48%	49%
$1–$5	**38%**	34%	42%	39%	36%	40%	**25%**	**33%**	**48%**	**36%**	43%	43%	35%	44%	33%	42%	39%	34%
$6–$10	**13%**	13%	13%	13%	14%	11%	**8%**	**13%**	**16%**	**11%**	10%	9%	15%	11%	17%	19%	10%	12%
$11–$15	**3%**	2%	3%	2%	4%	2%	**1%**	**2%**	**3%**	**3%**	2%	6%	1%	2%	6%	4%	3%	2%
$16–$20	**1%**	<1%	1%	0%	2%	0%	**0%**	**2%**	**0%**	**1%**	0%	0%	1%	0%	3%	1%	<1%	1%
> $20	**1%**	1%	1%	2%	1%	1%	**0%**	**1%**	**3%**	**2%**	0%	0%	2%	1%	2%	2%	<1%	2%
Having an Adequate Long-Term Supply of Water is Important for Community Quality of Life and Economic Competitiveness																		
Strongly Agree	**94%**	93%	95%	93%	95%	96%	97%	93%	93%	93%	98%	92%	97%	91%	90%	96%	92%	94%
Somewhat Agree	**5%**	6%	5%	7%	4%	4%	3%	6%	6%	6%	2%	8%	3%	8%	8%	4%	7%	5%
Somewhat/Strongly Disagree	**1%**	1%	0%	0%	1%	0%	0%	<1%	<1%	1%	0%	0%	<1%	1%	2%	0%	<1%	1%
Locally Elected Officials Have an Obligation to Plan Ahead and Invest in Infrastructure to Ensure Community Long-Term Access to Water																		
Strongly Agree	**80%**	83%	77%	79%	81%	82%	79%	73%	82%	87%	77%	80%	76%	84%	87%	80%	78%	81%
Somewhat Agree	**19%**	16%	21%	20%	17%	17%	20%	24%	17%	12%	21%	20%	22%	15%	10%	19%	20%	17%
Somewhat/Strongly Disagree	**1%**	1%	2%	1%	2%	1%	1%	3%	1%	1%	2%	0%	2%	1%	3%	1%	2%	2%
Maintaining an Adequate Long-Term Supply of Water in SW Missouri Requires Investments in Water Supply and Infrastructure																		
Strongly Agree	**55%**	58%	52%	49%	57%	61%	55%	56%	56%	51%	54%	54%	50%	56%	62%	62%	51%	55%
Somewhat Agree	**42%**	39%	44%	48%	39%	36%	35%	41%	41%	47%	39%	45%	45%	41%	35%	36%	44%	42%
Somewhat/Strongly Disagree	**3%**	3%	4%	3%	4%	3%	10%	3%	3%	2%	7%	1%	5%	3%	3%	2%	5%	3%

		Gender		Respondent Age			Educational Level				Annual Household Income					Years of Residency		
	OVERALL	M	F	< 40	40-64	65+	HS or Less	Some College	College Grad	Post-Grad	<25k	25k-39k	40k-69k	70k–99k	100k+	< 10	10-29	30+
During a Severe Drought, How Much Could You Realistically Reduce Your Water Consumption?																		
None	**9%**	8%	10%	10%	8%	12%	**19%**	**11%**	**6%**	**5%**	**28%**	**20%**	**9%**	**5%**	**2%**	**13%**	**9%**	**7%**
< 10%	**23%**	21%	24%	28%	22%	18%	**13%**	**24%**	**20%**	**31%**	**26%**	**10%**	**23%**	**26%**	**25%**	**14%**	**28%**	**22%**
10%-20%	**41%**	43%	40%	40%	38%	46%	**39%**	**41%**	**47%**	**34%**	**28%**	**40%**	**43%**	**38%**	**45%**	**45%**	**41%**	**39%**
21%-30%	**18%**	18%	18%	13%	22%	19%	**21%**	**14%**	**17%**	**24%**	**8%**	**20%**	**16%**	**24%**	**20%**	**22%**	**16%**	**18%**
> 30%	**9%**	10%	8%	9%	10%	5%	**8%**	**10%**	**10%**	**6%**	**10%**	**10%**	**9%**	**7%**	**8%**	**6%**	**6%**	**14%**
Support for Reuse of Water for FIRE PROTECTION																		
Support	**93%**	92%	95%	94%	94%	91%	95%	91%	95%	92%	**87%**	**89%**	**92%**	**96%**	**98%**	90%	96%	93%
Oppose	**3%**	3%	2%	3%	1%	4%	4%	4%	1%	2%	**9%**	**1%**	**2%**	**3%**	**2%**	3%	2%	2%
Not Sure	**4%**	5%	3%	3%	5%	5%	1%	5%	4%	7%	**4%**	**10%**	**6%**	**1%**	**0%**	7%	2%	5%
Support for Reuse of Water for LANDSCAPE IRRIGATION																		
Support	**89%**	90%	88%	90%	88%	89%	91%	56%	91%	90%	91%	82%	88%	93%	91%	86%	92%	87%
Oppose	**4%**	4%	4%	4%	3%	5%	4%	6%	3%	2%	4%	5%	4%	4%	3%	4%	4%	4%
Not Sure	**7%**	6%	8%	6%	9%	6%	5%	8%	6%	8%	5%	13%	8%	3%	6%	10%	4%	9%
Support for Reuse of Water for TOILET FLUSHING																		
Support	**87%**	85%	88%	87%	89%	86%	86%	84%	89%	86%	82%	85%	89%	92%	82%	84%	89%	86%
Oppose	**6%**	7%	5%	4%	5%	7%	11%	9%	3%	5%	11%	3%	4%	5%	9%	6%	6%	5%
Not Sure	**7%**	8%	7%	9%	6%	7%	3%	7%	8%	9%	7%	12%	7%	3%	9%	10%	5%	9%
Support for Reuse of Water for DRINKING/TAP WATER																		
Support	**29%**	33%	27%	32%	29%	26%	**46%**	**33%**	**21%**	**28%**	**34%**	**22%**	**34%**	**32%**	**22%**	24%	31%	31%
Oppose	**44%**	43%	43%	39%	45%	48%	**38%**	**45%**	**46%**	**40%**	**36%**	**57%**	**42%**	**42%**	**36%**	47%	47%	37%
Not Sure	**27%**	24%	30%	29%	26%	26%	**16%**	**22%**	**33%**	**32%**	**30%**	**21%**	**24%**	**26%**	**42%**	29%	22%	32%
Reallocation of Water Storage in Stockton Lake																		
Strongly Support	**24%**	**37%**	**13%**	**20%**	**23%**	**35%**	**40%**	**28%**	**23%**	**12%**	**34%**	**34%**	**18%**	**19%**	**31%**	23%	21%	28%
Somewhat Support	**39%**	**38%**	**40%**	**40%**	**37%**	**37%**	**27%**	**40%**	**42%**	**41%**	**39%**	**21%**	**40%**	**47%**	**40%**	41%	42%	35%
Somewhat Oppose	**5%**	**5%**	**6%**	**5%**	**5%**	**8%**	**4%**	**5%**	**6%**	**5%**	**4%**	**11%**	**6%**	**5%**	**1%**	5%	4%	7%
Strongly Oppose	**3%**	**2%**	**3%**	**1%**	**5%**	**2%**	**6%**	**6%**	**<1%**	**0%**	**0%**	**7%**	**4%**	**2%**	**0%**	1%	4%	3%
Not Sure	**29%**	**18%**	**38%**	**34%**	**30%**	**18%**	**23%**	**21%**	**29%**	**42%**	**23%**	**27%**	**32%**	**27%**	**28%**	30%	29%	27%

Questionnaire

Citizen Water Supply and Usage Survey — 2017

SGF Surrounding Communities: Battlefield, Nixa, Ozark, Republic, Willard (n = 758)

1. **How strongly do you agree or disagree with this statement: Having an adequate long-term supply of water is important for your community's quality of life and economic competitiveness.**

   94%...Strongly Agree
   6%...Somewhat Agree
   0%...Somewhat Disagree
   <1%...Strongly Disagree

2. **What type of organization, if any, supplies your home tap water?**

   73.7%...City
   9.3%...Public Water Supply District (PWSD)
   5.0%...Public Utility
   3.7%...None, I am on a private well
   0.7%...Private Company
   0.6%...Neighborhood Association
   0.3%...County
   6.8%...Not Sure

3. **What is the source of your home tap water?**

   20%...Aquifer (e.g., well)
   8%...Surface Water (e.g., lake/river)
   4%...Combination of aquifer and surface water
   68%...Not Sure

4. **On average, about how much per month is your home water bill?**

   4%...None, I am on a private well
   3%...$1 to $10 per month
   17%...$11 to $20 per month
   24%...$21 to $30 per month
   15%...$31 to $40 per month
   37%...More than $40 per month

5. **Compared to other monthly essentials, how would you describe the expense of your monthly home water bill?**

   20%...Very inexpensive
   32%...Somewhat inexpensive
   34%...Somewhat expensive
   14%...Very expensive

6. **Considering the amount of water you use at home per month and the amount of your monthly home water bill, would you say the water provided to your home is an excellent, good, fair, or poor value?**

   16%...Excellent Value
   34%...Good Value
   36%...Fair Value
   14%...Poor Value

7. **Based on your current water bill, how much more would you be willing to pay per month to ensure an adequate long-term supply of drinking water?**

   44%...None, no more than what I am paying now
   38%...$1 to $5 more
   13%...$6 to $10 more
   3%...$11 to $15 more
   1%...$16 to $20 more
   1%...More than $20

8. **How strongly do you agree or disagree with this statement: Locally elected officials, such as county commissioners and city mayors, have an obligation to plan ahead and invest in the necessary infrastructure to ensure that homeowners, businesses, and farmers have adequate long-term access to water.**

   80%...Strongly Agree
   19%...Somewhat Agree
   <1%...Somewhat Disagree
   1%...Strongly Disagree

9. **Droughts occur periodically as part of the natural climate cycle. When your area experiences a drought and your local provider of water has to implement emergency water conservation measures, how much could you realistically reduce your water consumption?**

   9%...None, I could not use any less water than I am using now
   23%...Less than 10%
   41%...10% to 20% less
   18%...21% to 30% less
   9%...More than 30%

10. **How strongly do you agree or disagree with this statement: To maintain an adequate long-term supply of water in southwest Missouri, investments in water supply and infrastructure are necessary.**

    55%...Strongly Agree
    42%...Somewhat Agree
    3%...Somewhat Disagree
    <1%...Strongly Disagree

11. **How strongly would you support or oppose the reallocation of a small amount of water storage in Stockton Lake to be used by citizens and businesses in southwest Missouri for long-term water supply?**

24%...Strongly Support
39%...Somewhat Support
5%...Somewhat Oppose
3%...Strongly Oppose
29%...Not Sure

12. **Water providers treat water to very high drinking water standards and then deliver it to homes and businesses for use. Once that water has been used, it is again treated to very high drinking water standards and then released into area waterways rather than being reused. To save money and conserve water, instead of releasing this highly treated water back into area waterways (lakes, streams, rivers) would you support or oppose its reuse for the following:**

	Support	Oppose	Not Sure
1. Fire protection	93%	3%	4%
2. Irrigation of landscaping	89%	4%	7%
3. Toilet flushing	87%	6%	7%
4. Drinking/Tap water	29%	44%	27%

Respondent Information: The last few questions are about you and your household. They will be used to group responses to the survey. Your responses are completely confidential and anonymous.

13. **What town or city do you live in?**

Nixa = 33% Ozark = 28% Republic = 23% Battlefield = 10% Willard = 6%

14. **Approximately how many years have you lived in southwest Missouri?**

Range = < 1 year–79 years, Mean = 22.5 years, Median = 20 years
< 10 years = 25%, 10–29 years = 40%, 30+ years = 35%

15. **In the past couple of years, have you used any of the following lakes or rivers for recreational purposes (e.g., camping, picnicking, swimming, fishing, boating, etc.)?**

	Yes	No
1. Table Rock Lakes	61%	39%
2. Stockton Lake	26%	74%
3. Pomme de Terre Lake	16%	84%

16. **What is your gender?** 47%...Male 53%...Female

17. **What is your birth year?**

    Age range = 20–86 years old, Mean = 48.6 years old, Median = 47 years old

    Age < 40 years = 35%, Age 40–64 years = 45%, Age 65+ years = 20%

18. **What is your educational level?**

    <1%...Did not complete high school

    12%...High school graduate/GED

    31%...Some college/Vo-Tech

    36%...College graduate

    21%...Post-graduate studies (e.g., MA, Ph.D., MD)

19. **Which of the following categories best describes your total annual household income before taxes?**

    8%...Less than $25,000

    13%...$25,000 to $39,999

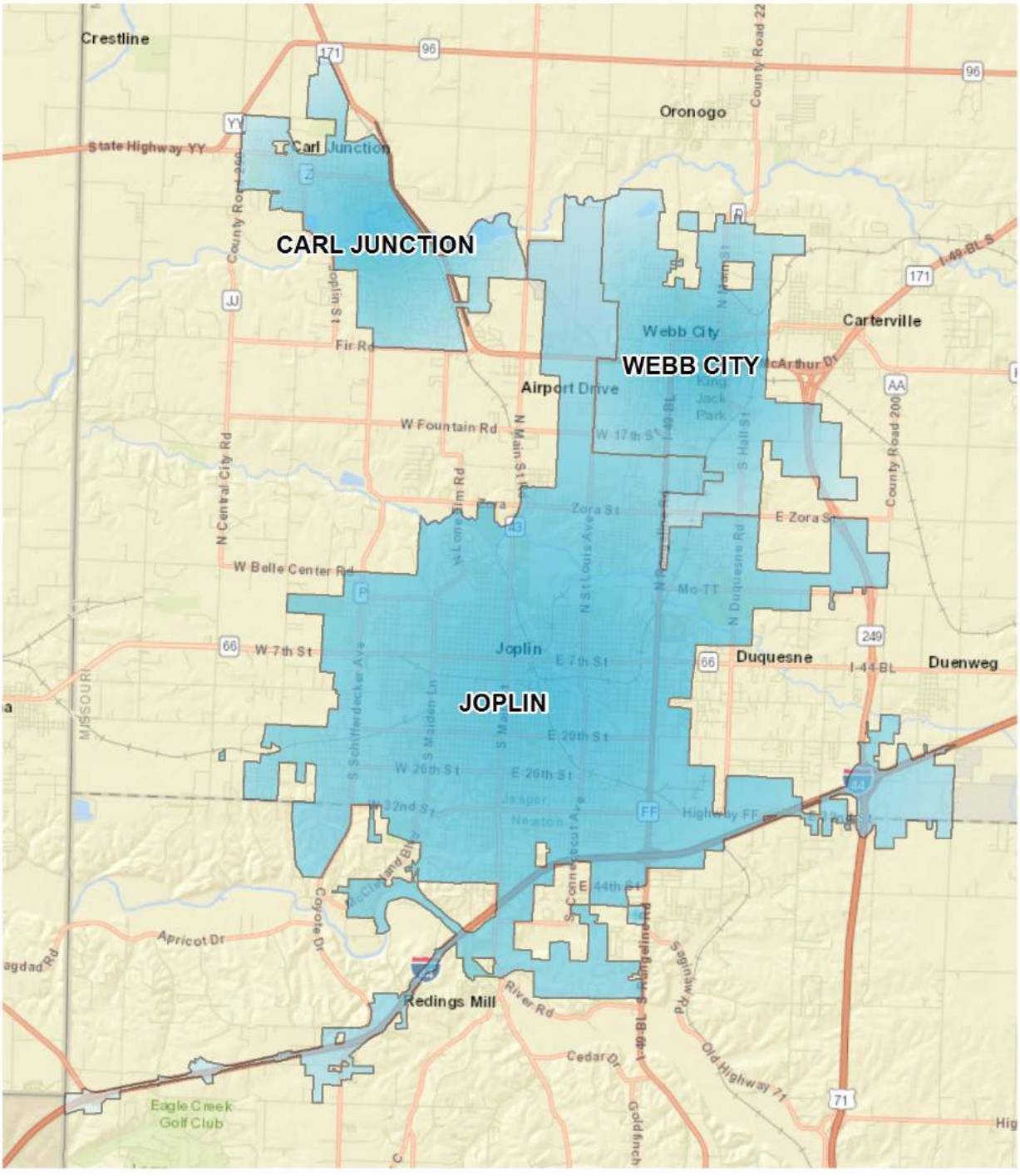
    37%...$40,000 to $69,999

    23%...$70,000 to $99,999

    19%...$100,000 or more

Thank You! This Completes the Survey.

JOPLIN, WEBB CITY, CARL JUNCTION



EXECUTIVE SUMMARY

This Executive Summary presents an overview of the 2017 Joplin, Webb City, Carl Junction Citizen Water Supply and Usage Survey. The report is based on 401 surveys conducted online and by telephone during the summer and fall of 2017. Overall findings have a margin of error of +/- 5.0% at the 95% confidence interval.

The survey was designed, administered, and analyzed by **Opinion Research Specialists, LLC** of Springfield, Missouri with input from the Tri-State Water Resource Coalition. Survey findings are summarized below.

Source of Home Tap Water

- 24% of respondents thought their home tap water originated from surface water, 15% mentioned an aquifer, and 8% said it was a combination of the two. However, a majority of respondents (53%) were unsure as to the source of their home tap water. This was particularly true for younger respondents (73%) and recent residents to the area (73%).

Type of Organization Supplying Home Tap Water

- A large plurality of respondents (47%) believed their home tap water was supplied by the city, while 16% said it was supplied by a private company, and 11% mentioned a public utility. Fifteen percent of respondents could not identify the supplier of their tap water.

Average Monthly Home Water Bill

- A plurality of respondents (35%) reported average monthly water bills in excess of $40, while 31% said their monthly water bills averaged $31-to-$40 (second largest group). Households with annual incomes of $70,000 or higher were far more likely than any other demographic group to report having monthly water bills above $40.

Monthly Home Water Bill Perceptions

- A majority of respondents (65%) said their monthly water bill was inexpensive compared to other monthly essentials and 61% rated the “value” of their home water (price paid for amount consumed) as either excellent or good.

Amount Willing to Pay Extra to Ensure Long-Term Supply of Water

- While 47% of respondents were not willing to pay anything extra per month on their water bill to ensure a long-term supply of drinking water, 53% were willing to pay at least $1-to-$5 more per month. Respondents with a post-graduate degree were the most willing of any demographic group to pay something extra per month to ensure a long-term supply of drinking water.

- With the primary exceptions of low-income respondents and those with some college or vo-tech backgrounds, a majority of respondents from most of the other demographic groups were willing to pay at least $1-to-$5 extra per month on their water bill to ensure a long-term supply of drinking water. This was especially true for respondents with post-graduate degrees (70%).

Long-Term Supply of Water: Importance and Infrastructure

- 93% of respondents “strongly agreed” that having a long-term supply of water was critical for their community’s quality of life and economic competitiveness. Less than 1% disagreed with this statement.

- 71% “strongly agreed” that locally elected officials must invest in infrastructure to ensure long-term access to water for citizens, farmers, and businesses. Only 3% disagreed with this statement.

- 52% “strongly agreed” that investments in water supply and infrastructure were needed to guarantee a long-term supply of water to southwest Missouri. Only 4% disagreed with this statement.

Reducing Water Consumption in an Emergency

- A plurality of respondents (38%) indicated they could temporarily reduce their water consumption by 10% to 20% in the event of a water shortage emergency, but 36% said they would only be able to reduce their consumption by less than 10%, if at all.

- Respondents with annual household incomes of $100,000 or more and those with post-graduate degrees were the most willing and/or able to reduce their water consumption during a severe drought.

Support for Using Treated Wastewater

- To save money and conserve water, at least 81% of respondents said they would support the use of treated wastewater for purposes of fire protection, landscape irrigation, and toilet flushing. However, only 29% would approve the use of treated wastewater for drinking/tap water purposes.

Reallocation of Water Storage in Stockton Lake

- Nearly 55% of respondents supported, to some extent, the idea of reallocating a small amount of water storage in Stockton Lake to be used by citizens and businesses throughout southwest Missouri for long-term water supply. One-third of respondents were undecided on this proposal and 13% were opposed.

- Demographically, opposition to this plan was minimal — less than 20% of ***any*** demographic group was opposed.

INTRODUCTION

This survey was commissioned by the Tri-State Water Resource Coalition to assess the **opinions** and **perceptions** about water supply and usage in southwest Missouri among residents living in the communities of Joplin, Webb City, and Carl Junction. This survey is one of seven surveys targeting a 16-county area in southwest Missouri. Questions on all seven surveys are identical so that differences in perceptions can be assessed.

SURVEY DESIGN AND METHODOLOGY

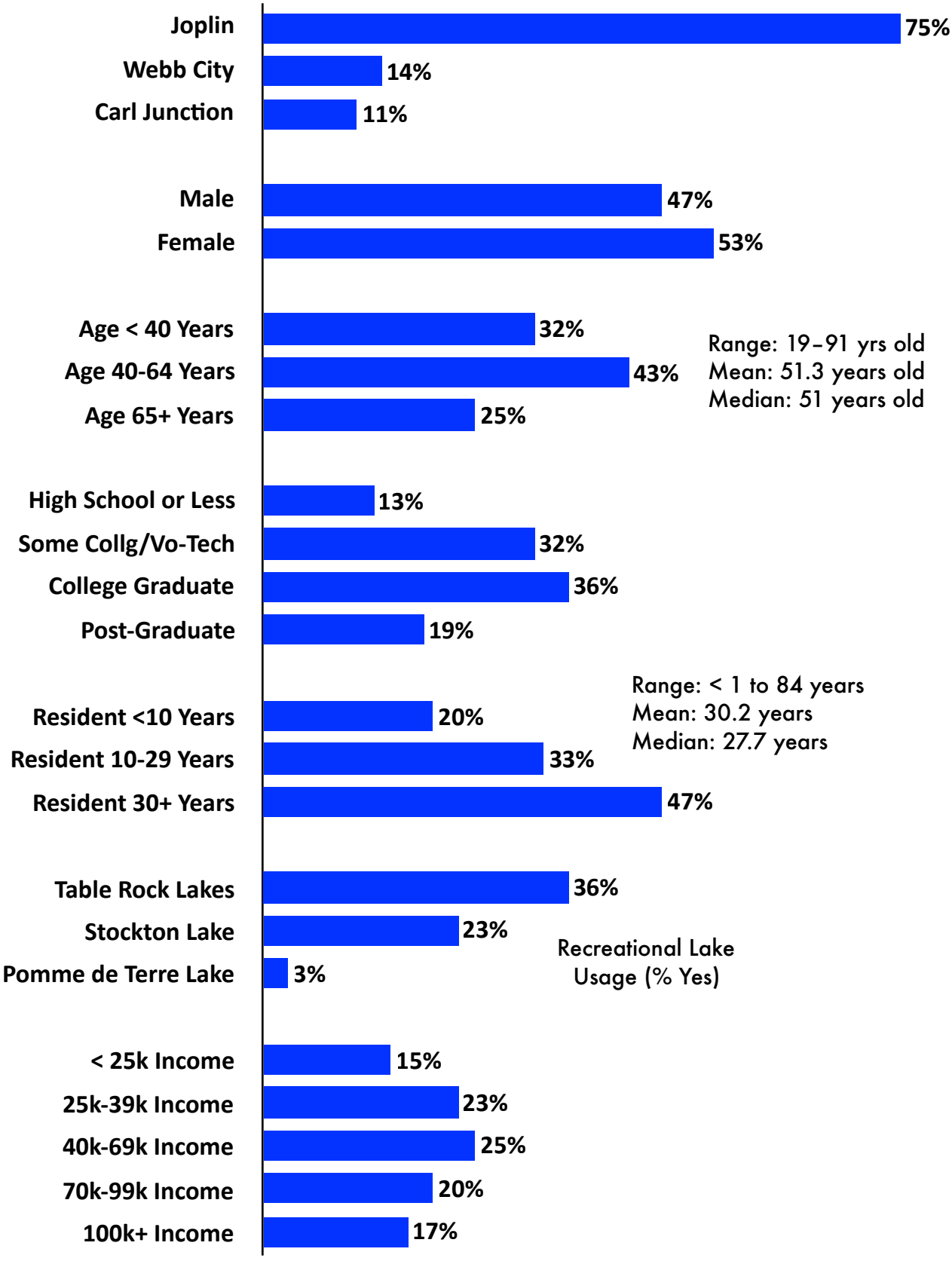
The survey was designed, administered, and analyzed by **Opinion Research Specialists, LLC** of Springfield, Missouri with input from the Tri-State Water Resource Coalition. Survey results are based on 401 completed online and telephone surveys conducted during the summer/fall of 2017.

INTERPRETATION OF DATA

Overall survey results, based on 401 completed questionnaires, have a margin of error of approximately +/- 5.0% at the 95% confidence interval. For example, if a response listed in the report is 57% one can be 95% confident that the "true" percentage, that which would have been attained if all adult residents of Joplin, Webb City, and Carl Junction had participated in the survey, is between 52% and 62%. Margin of error increases when subsets of the total sample are analyzed (e.g., male versus female, etc.).

Some percentages in the report may not add to exactly 100% due to rounding.

SURVEY RESPONDENT PROFILE

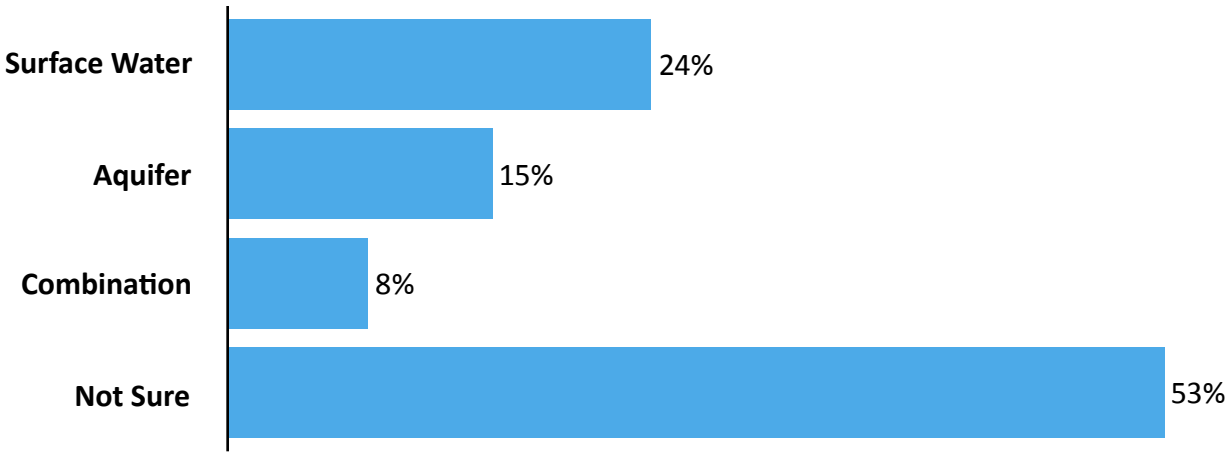


Joplin, Webb City, Carl Junction

Survey Results

Source of Home Tap Water

A majority of respondents (53%) did not know the source of their home tap water. About 25% said their tap water came via surface water, 15% mentioned an aquifer, and 8% believed it was a combination of surface water and aquifer.

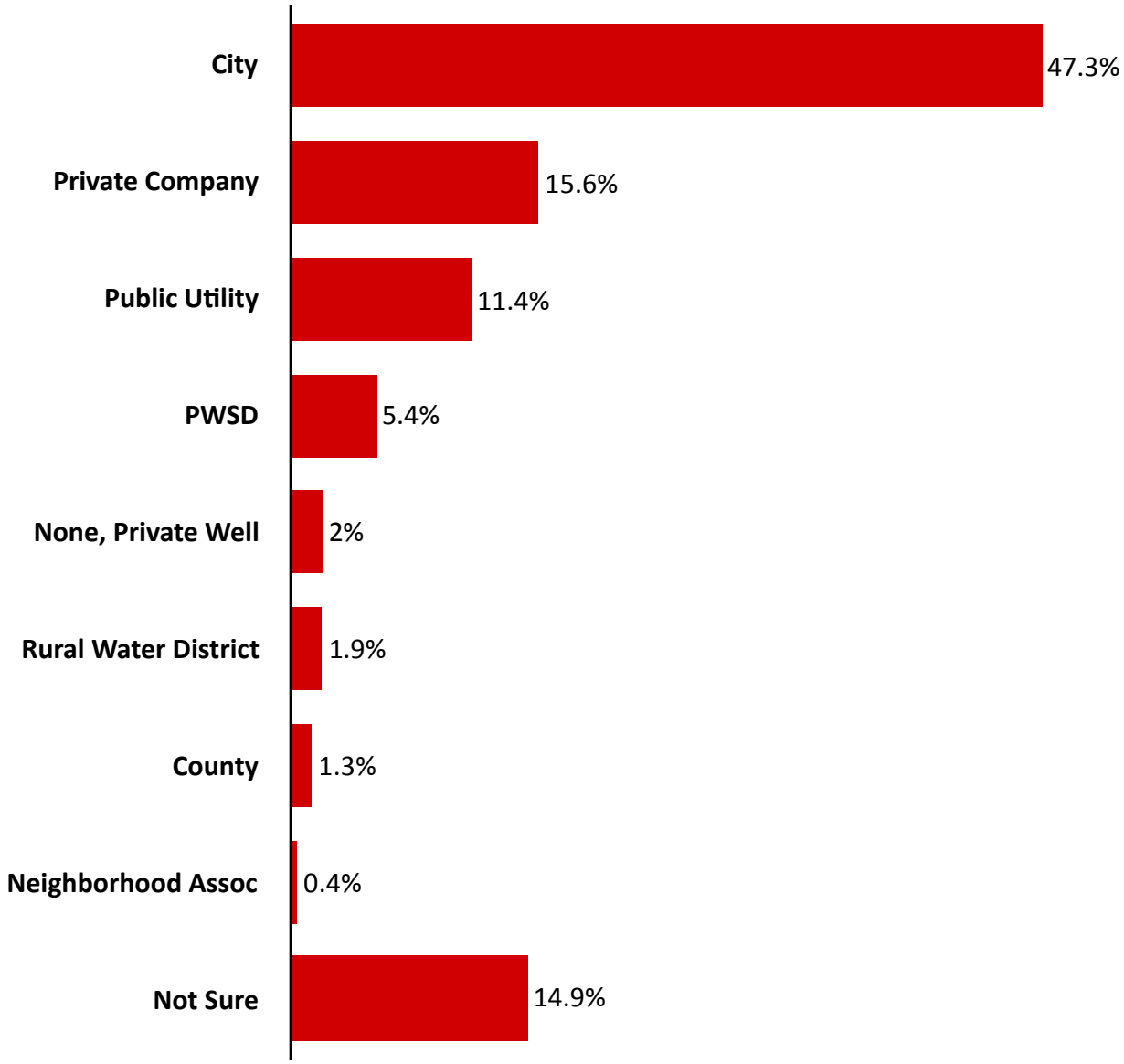


Demographic Analysis: Females, younger respondents, and recent residents to southwest Missouri (< 10 years) were significantly more likely than their demographic counterparts to ***not know*** the source of their home tap water.

Demographics	Surface Water	Aquifer	Combination	Not Sure
Male	25%	20%	12%	43%
Female	24%	10%	4%	**62%**
18-39 years old	18%	7%	2%	**73%**
40-64 years old	21%	19%	8%	52%
65+ years old	42%	14%	14%	30%
< 10 yrs resident	24%	2%	1%	**73%**
10-29 yrs resident	21%	15%	5%	59%
30+ yrs resident	28%	19%	12%	41%

Type of Organization Supplying Home Tap Water

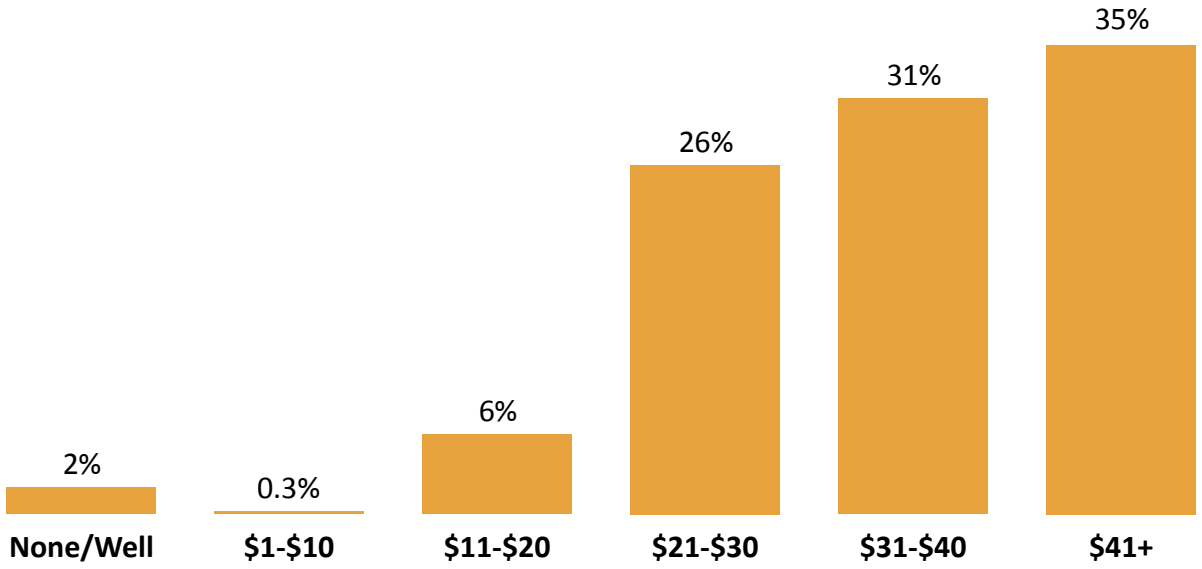
Nearly 50% of respondents believed their home tap water was supplied by the city, while about 16% said it was supplied by a private company, and 11% mentioned a public utility. Fifteen percent of respondents were unsure as to who supplied their tap water.



Demographic Analysis: Females were significantly more likely than males to believe their home tap water was supplied by the city (56% v. 37%, respectively). Recent residents to the area (< 10 years) were significantly more likely than long-time residents (30+ years) to say they were "not sure" as to who supplied their home tap water (32% v. 6%, respectively).

Average Monthly Home Water Bill

A plurality of respondents (35%) reported having average monthly water bills greater than $40, while 31% said their monthly water bills ranged from $31-to-$40 (second largest group). Less than 10% reported average monthly water bills of $20 or less.

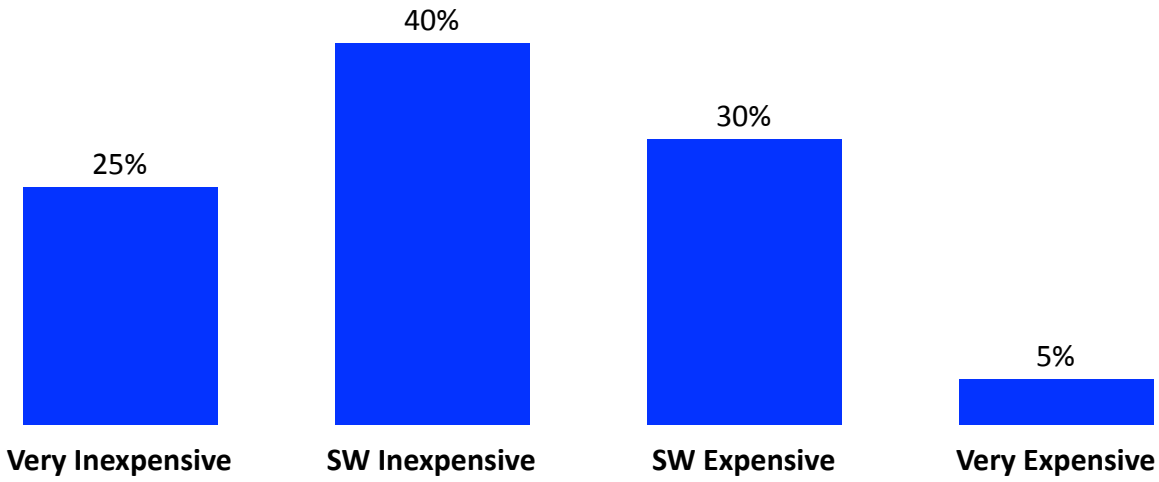


Demographic Analysis: Respondents with household incomes of at least $70,000 per year were considerably more likely than other income groups (or any other demographic group) to report having average monthly water bills greater than $40.

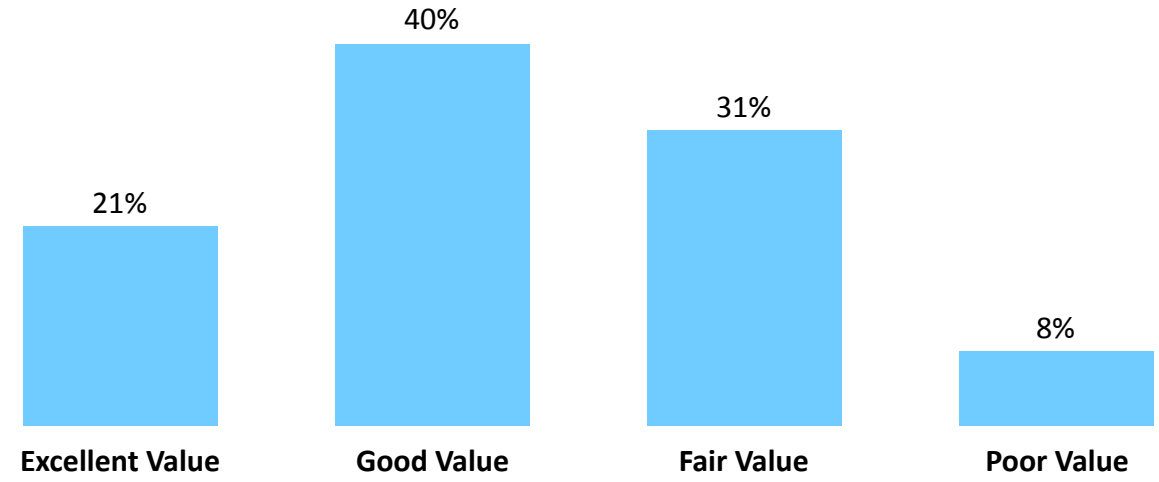
Household Income	None/ On Well	$1-$10	$11-$20	$21-$30	$31-$40	> $40
< 25k	2%	2%	24%	28%	31%	13%
25k-39k	2%	0%	1%	42%	33%	22%
40k-69k	1%	0%	6%	29%	34%	30%
70k-99k	3%	0%	5%	19%	19%	**54%**
100k+	2%	0%	0%	9%	36%	**53%**

Monthly Home Water Bill Perceptions

Perceived Expense: Sixty-five percent of respondents said that, when compared to other monthly essentials, their monthly home water bill was either very inexpensive (25%) or somewhat inexpensive (40%). Only 5% thought it was very expensive compared to other monthly essentials.

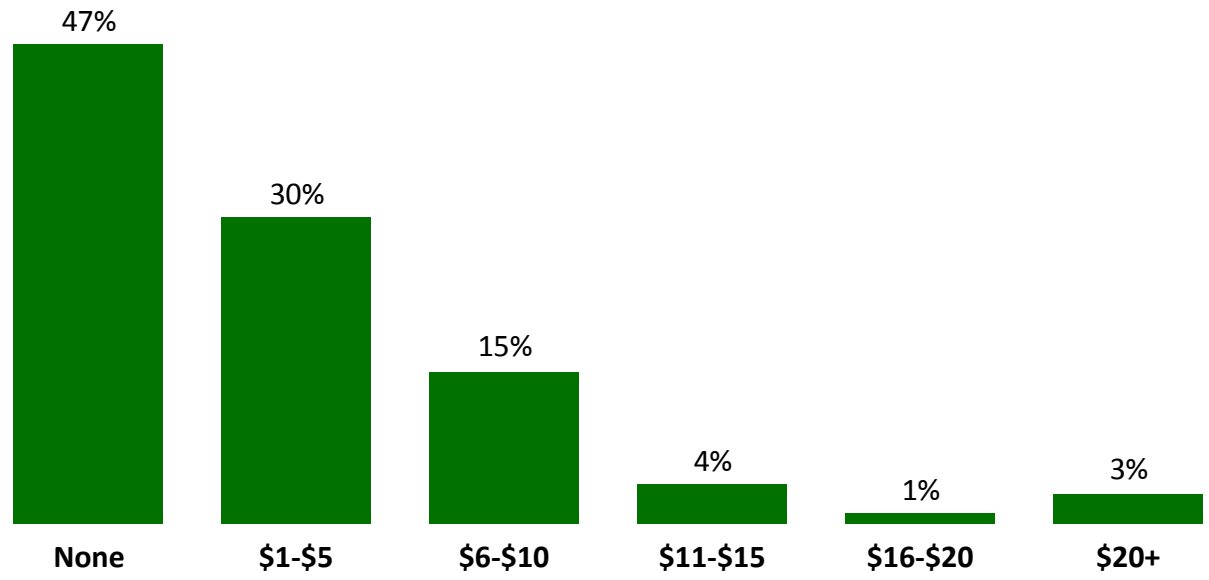


Perceived Value: More than 60% of respondents were of the opinion that the water provided to their home was either an excellent (21%) or good value (40%). Only 8% thought it was a poor value.



Amount Willing to Pay Extra to Ensure Supply of Water

When asked how much more per month they would be willing to pay on their water bill to ensure a long-term supply of drinking water, 47% of respondents said they would not pay anything extra, 30% would pay $1-to-$5 extra each month, and 15% would pay $6-to-$10. Less than 10% were willing to pay more than $10 extra per month.



Demographic Analysis: Respondents with a post-graduate degree were the most willing of any demographic group to say they would pay something extra per month to ensure a long-term supply of drinking water.

Education	None	$1-$5	$6-$10	$11-$15	$16-$20	> $20
High School or Less	49%	34%	15%	2%	0%	0%
Some College/Vo-Tech	56%	22%	14%	4%	1%	3%
College Graduate	45%	32%	15%	6%	1%	1%
Post-Graduate	**30%**	38%	16%	0%	2%	**14%**

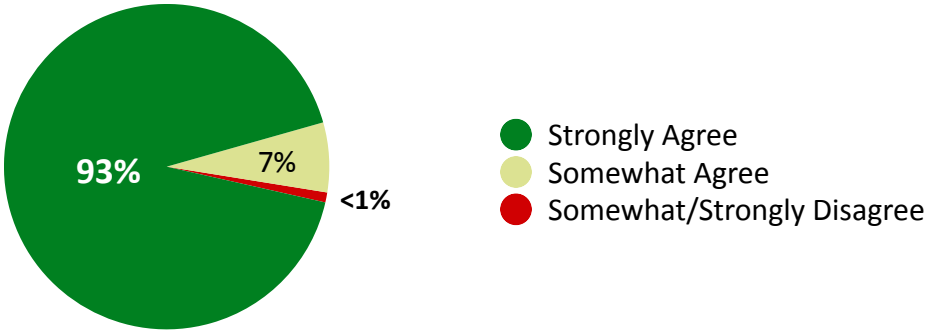
Amount Willing to Pay Extra by Demographics

With the primary exceptions of low-income respondents and those with some college or vo-tech backgrounds, a majority of respondents from most of the other demographic groups were willing to pay at least $1-to-$5 extra per month on their water bill to ensure a long-term supply of drinking water. This was especially true for respondents with post-graduate degrees (70%).

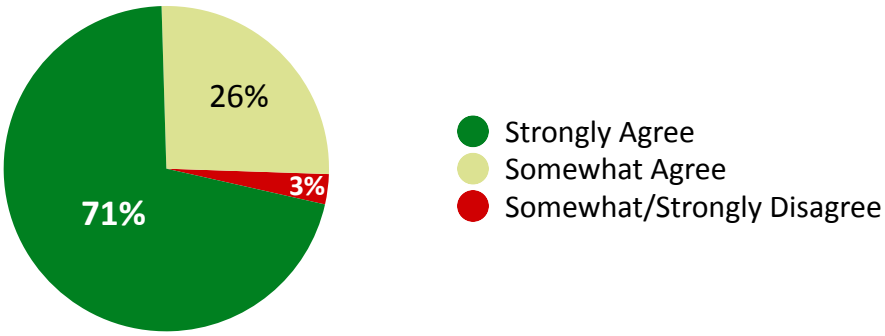
Demographics	None	$1 to $5	$6 to $10	> $10
Male	45%	29%	16%	10%
Female	47%	32%	14%	7%
Lake user	37%	34%	20%	9%
Lake nonuser	53%	27%	12%	8%
18-39 years old	51%	30%	14%	5%
40-64 years old	44%	29%	15%	12%
65+ years old	44%	33%	16%	7%
High school or less	49%	34%	15%	2%
Some college/vo-tech	**56%**	22%	14%	7%
College graduate	45%	32%	15%	8%
Post-graduate	**30%**	**38%**	**16%**	**16%**
< 25k household income	**57%**	30%	11%	2%
25k-39k household income	52%	26%	14%	7%
40k-69k household income	44%	37%	15%	3%
70k-99k household income	46%	23%	16%	16%
100k+ household income	36%	28%	20%	16%
< 10 years of residency	50%	29%	13%	8%
10-29 years of residency	44%	35%	15%	7%
30+ years of residency	46%	28%	16%	10%

Long-Term Supply of Water: Importance and Infrastructure

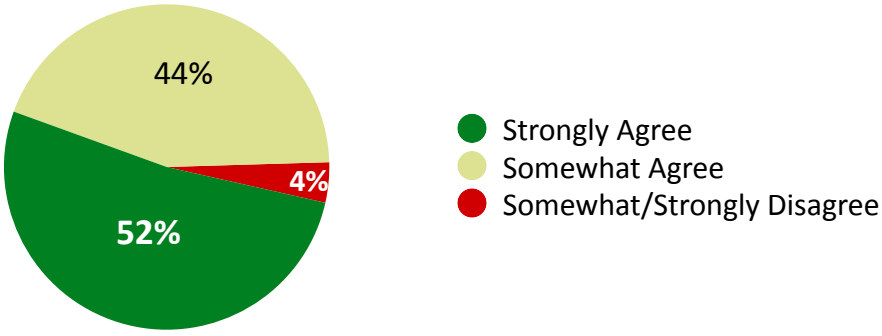
Importance of Long-Term Supply of Water: More than 90% of respondents *strongly agreed* that having an adequate long-term supply of water was important for their community's quality of life and economic competitiveness.



Obligation to Plan Ahead and Invest: The vast majority of respondents (71%) *strongly agreed* that locally elected officials have an obligation to plan ahead and invest in the necessary infrastructure to ensure that homeowners, businesses, and farmers have adequate long-term access to water.

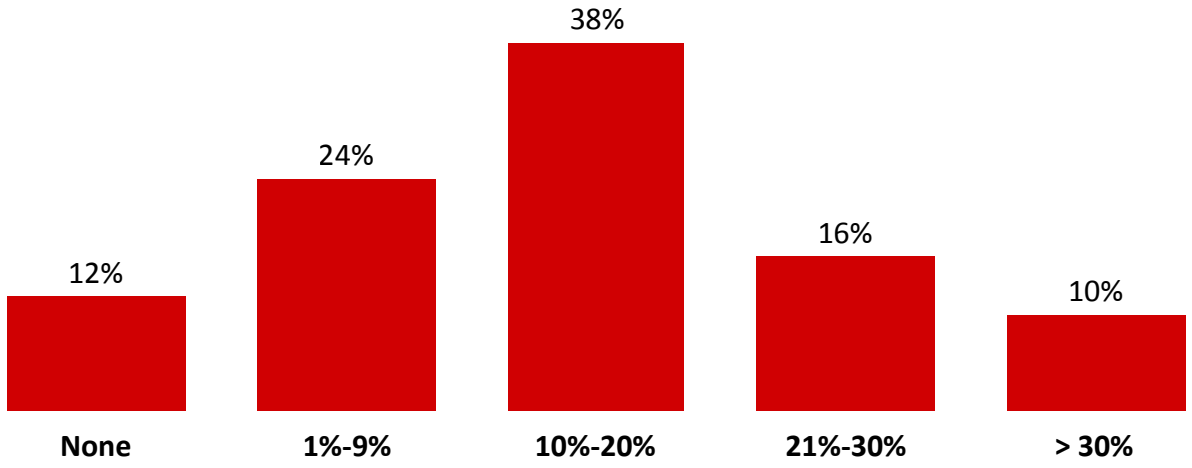


Investments in Water Supply and Infrastructure: A majority of respondents (52%) *strongly agreed* that investments in water supply and infrastructure were necessary to maintain an adequate long-term supply of water in southwest Missouri.



Reducing Water Consumption in an Emergency

In the event of a severe drought requiring emergency water conservation measures, a plurality of respondents (38%) indicated they could temporarily reduce their water consumption by 10% to 20%. About one-quarter of residents (26%) said they could reduce their water consumption by more than 20%, and just over one-third (36%) would only be able to reduce their consumption by less than 10%, if at all.

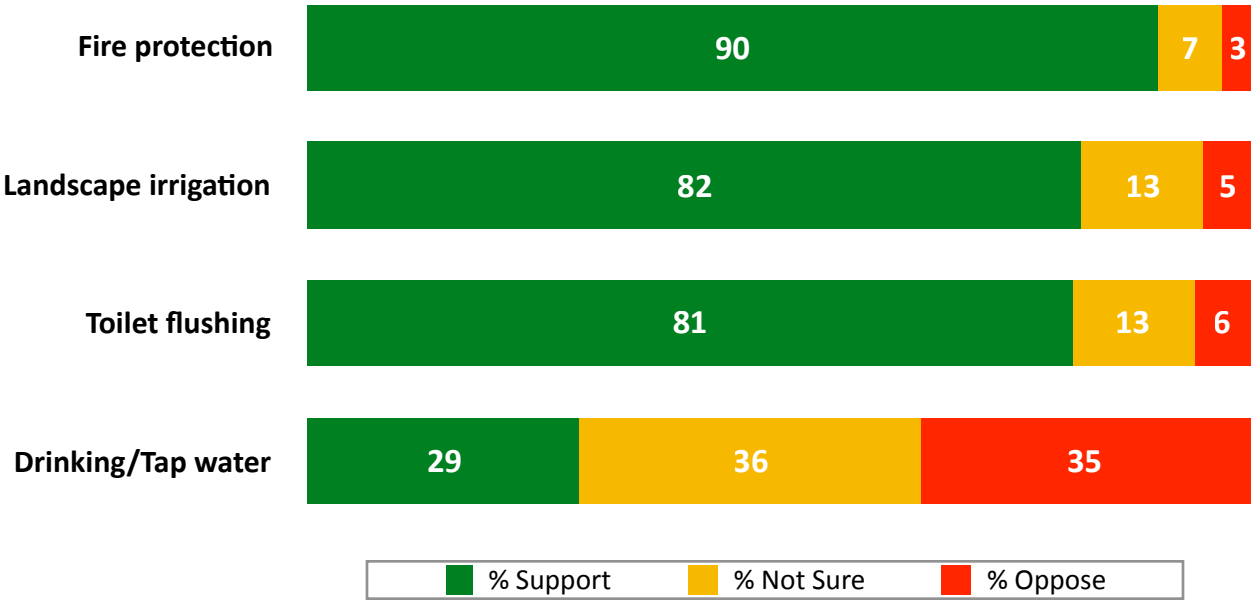


Demographic Analysis: Willingness to reduce water consumption during a drought was strongly correlated with household income and educational level. As respondent household income and educational level increased, so did the ability and/or willingness to reduce water consumption during a severe drought.

Demographics	None	1%-9%	10%-20%	21%-30%	> 30%
< 25k hh income	**17%**	**31%**	40%	6%	6%
25k-39k hh income	13%	24%	37%	17%	9%
40k-69k hh income	13%	22%	42%	13%	10%
70k-99k hh income	13%	17%	43%	13%	14%
100k+ hh income	3%	22%	27%	**35%**	**13%**
High School or Less	**19%**	19%	45%	10%	7%
Some College/Vo-Tech	12%	27%	45%	6%	10%
College Graduate	13%	27%	31%	21%	8%
Post-Graduate	5%	16%	38%	**25%**	**16%**

Support for Using Treated Wastewater

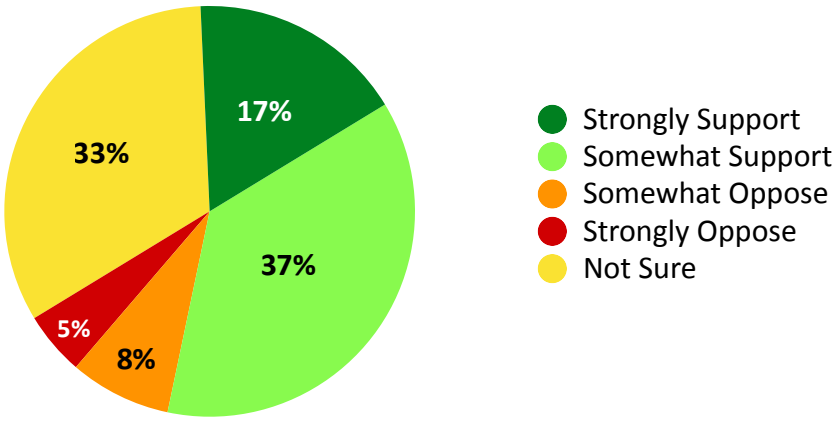
To save money and conserve water, respondents were asked if they would support or oppose the use of treated wastewater for various activities instead of being released into area waterways. While the vast majority of respondents said they would approve the use of treated wastewater for purposes of fire protection (90%), landscape irrigation (82%); and toilet flushing (81%); only 29% would do so for drinking/tap water purposes.



Demographic Analysis: There were no meaningful differences of opinion on this series of questions based on respondent demographic characteristics.

Reallocation of Water Storage in Stockton Lake

A majority of respondents (54%) either strongly (17%) or somewhat (37%) supported the idea of reallocating a small amount of water storage in Stockton Lake to be used by citizens and businesses in southwest Missouri for long-term water supply. One-third of respondents (33%) were undecided on this proposal and 13% were opposed.



Demographic Analysis: While relatively few male and female respondents were opposed to the Stockton Lake water reallocation proposal (less than 20% each), females were nearly twice as likely as males to be undecided on this idea.

Gender	Strongly Support	Somewhat Support	Somewhat Oppose	Strongly Oppose	Not Sure
Male	**23%**	38%	11%	6%	22%
Female	13%	36%	6%	3%	**42%**

Reallocation of Water Storage in Stockton L. by Demographics

While opposition to the Stockton Lake reallocation proposal was minimal — less than 20% of ***any*** demographic group was opposed, support ranged from 49% to 61%. A relatively large percentage of respondents across all demographic groups were undecided on this issue.

Demographics	Strongly or SW Support	Strongly or SW Oppose	Not Sure
Male	**61%**	17%	22%
Female	**49%**	9%	**42%**
Stockton Lake user	55%	**18%**	27%
Stockton Lake nonuser	54%	11%	**35%**
18-39 years old	55%	9%	**36%**
40-64 years old	52%	16%	31%
65+ years old	55%	12%	33%
High school or less	55%	9%	**36%**
Some college/vo-tech	50%	14%	**36%**
College graduate	55%	13%	32%
Post-graduate	**61%**	13%	26%
< 25k household income	**49%**	14%	**37%**
25k-39k household income	56%	12%	32%
40k-69k household income	57%	12%	31%
70k-99k household income	58%	13%	29%
100k+ household income	60%	13%	27%
< 10 years of residency	59%	8%	33%
10-29 years of residency	59%	8%	33%
30+ years of residency	**49%**	**18%**	33%

Demographic Analysis

NOTE: Table percentages **bolded in red** denote statistical significance at the .05 level or less.

Table percentages **bolded in red** and **shaded in yellow** denote statistical significance at the .001 level or less.

		Gender		Respondent Age			Educational Level				Annual Household Income					Years of Residency		
	OVERALL	M	F	< 40	40-64	65+	HS or Less	Some College	College Grad	Post-Grad	<25k	25k-39k	40k-69k	70k–99k	100k+	< 10	10-29	30+
Source of Home Tap Water																		
Surface Water	**24%**	**25%**	**24%**	**18%**	**21%**	**42%**	13%	28%	21%	36%	23%	25%	19%	28%	31%	**24%**	**21%**	**28%**
Aquifer	**15%**	**20%**	**10%**	**7%**	**19%**	**14%**	11%	14%	15%	13%	6%	8%	13%	25%	14%	**2%**	**15%**	**19%**
Combination	**8%**	**12%**	**4%**	**2%**	**8%**	**14%**	7%	8%	8%	9%	8%	7%	9%	8%	9%	**1%**	**5%**	**12%**
Not Sure	**53%**	**43%**	**62%**	**73%**	**52%**	**30%**	69%	50%	56%	42%	63%	60%	59%	39%	46%	**73%**	**59%**	**41%**
Type of Organization Supplying Home Tap Water																		
City	**47%**	**37%**	**56%**	**47%**	**47%**	**47%**	50%	48%	45%	46%	39%	55%	48%	42%	44%	**38%**	**46%**	**51%**
Private Company	**16%**	**25%**	**7%**	**10%**	**15%**	**24%**	9%	15%	17%	23%	12%	13%	12%	23%	24%	**14%**	**14%**	**18%**
Public Utility	**11%**	**11%**	**12%**	**9%**	**13%**	**13%**	11%	12%	13%	8%	8%	9%	17%	12%	11%	**10%**	**13%**	**12%**
Public Water Supply District	**5%**	**6%**	**5%**	**4%**	**7%**	**6%**	9%	4%	6%	3%	10%	4%	7%	2%	5%	**6%**	**2%**	**8%**
Rural Water District	**2%**	**3%**	**1%**	**1%**	**3%**	**1%**	2%	4%	1%	0%	4%	0%	0%	2%	0%	**0%**	**3%**	**2%**
None/Private Well	**2%**	**2%**	**2%**	**3%**	**1%**	**1%**	2%	0%	2%	3%	2%	1%	1%	3%	2%	**0%**	**3%**	**2%**
County	**1%**	**2%**	**<1%**	**0%**	**1%**	**1%**	0%	1%	1%	0%	2%	0%	1%	1%	0%	**0%**	**2%**	**<1%**
Neighborhood Association	**<1%**	**<1%**	**0%**	**0%**	**0%**	**1%**	0%	1%	0%	0%	0%	1%	0%	0%	0%	**0%**	**0%**	**<1%**
Not Sure	**15%**	**13%**	**17%**	**26%**	**13%**	**6%**	16%	15%	15%	17%	23%	16%	14%	15%	14%	**32%**	**17%**	**6%**
Average Monthly Home Water Bill																		
None/On a Well	**2%**	2%	2%	**3%**	**1%**	**1%**	2%	0%	3%	3%	**2%**	**2%**	**1%**	**3%**	**2%**	0%	3%	2%
$1–$10	**<1%**	0%	<1%	**0%**	**0%**	**1%**	0%	1%	0%	0%	**2%**	**0%**	**0%**	**0%**	**0%**	0%	0%	<1%
$11–$20	**6%**	8%	5%	**4%**	**6%**	**13%**	7%	9%	7%	3%	**24%**	**1%**	**6%**	**5%**	**0%**	4%	5%	8%
$21–$30	**26%**	23%	27%	**31%**	**18%**	**29%**	29%	24%	25%	24%	**28%**	**42%**	**29%**	**19%**	**9%**	29%	28%	22%
$31–$40	**31%**	32%	31%	**30%**	**32%**	**33%**	39%	32%	25%	37%	**31%**	**33%**	**34%**	**19%**	**36%**	39%	30%	29%
> $40	**35%**	35%	35%	**33%**	**43%**	**23%**	23%	34%	40%	32%	**13%**	**22%**	**30%**	**54%**	**53%**	28%	34%	38%
Monthly Home Water Bill — Perceived Expense																		
Very Inexpensive	**25%**	25%	26%	28%	21%	28%	27%	23%	23%	26%	34%	31%	15%	27%	19%	23%	25%	25%
Somewhat Inexpensive	**40%**	38%	41%	38%	45%	36%	37%	47%	37%	40%	36%	39%	50%	36%	46%	43%	40%	38%
Somewhat Expensive	**30%**	32%	28%	30%	30%	32%	27%	29%	37%	26%	26%	29%	29%	32%	31%	31%	31%	32%
Very Expensive	**5%**	5%	5%	4%	5%	4%	9%	1%	3%	8%	4%	1%	6%	5%	4%	3%	4%	5%

	OVERALL	Gender		Respondent Age			Educational Level				Annual Household Income					Years of Residency		
		M	F	< 40	40-64	65+	HS or Less	Some College	College Grad	Post-Grad	<25k	25k-39k	40k-69k	70k–99k	100k+	< 10	10-29	30+
Monthly Home Water Bill — Perceived Value																		
Excellent Value	**21%**	20%	21%	25%	19%	17%	24%	19%	17%	25%	21%	23%	19%	21%	15%	16%	15%	24%
Good Value	**40%**	37%	42%	31%	40%	46%	36%	41%	39%	38%	34%	39%	31%	41%	49%	39%	46%	36%
Fair Value	**31%**	32%	32%	34%	30%	35%	29%	34%	35%	29%	34%	28%	43%	36%	21%	39%	26%	34%
Poor Value	**8%**	11%	5%	10%	11%	2%	11%	6%	9%	8%	11%	11%	7%	2%	15%	6%	13%	6%
Amount Willing to Pay Extra Per Month on Home Water Bill to Ensure Long-Term Supply of Drinking Water																		
None	**47%**	45%	47%	51%	44%	44%	**49%**	**56%**	**45%**	**30%**	57%	52%	44%	46%	36%	50%	44%	46%
$1–$5	**30%**	29%	32%	30%	29%	33%	**34%**	**22%**	**32%**	**38%**	30%	26%	37%	23%	28%	29%	35%	28%
$6–$10	**15%**	16%	14%	14%	15%	16%	**15%**	**14%**	**15%**	**16%**	11%	14%	15%	16%	20%	13%	15%	16%
$11–$15	**4%**	4%	3%	3%	5%	4%	**2%**	**4%**	**6%**	**0%**	2%	3%	1%	9%	6%	2%	4%	5%
$16–$20	**1%**	0%	2%	1%	1%	0%	**0%**	**1%**	**1%**	**2%**	0%	1%	1%	2%	0%	4%	0%	0%
> $20	**3%**	6%	2%	1%	6%	3%	**0%**	**3%**	**1%**	**14%**	0%	3%	1%	5%	10%	2%	3%	5%
Having an Adequate Long-Term Supply of Water is Important for Community Quality of Life and Economic Competitiveness																		
Strongly Agree	**93%**	93%	93%	90%	94%	93%	91%	94%	96%	89%	96%	93%	93%	92%	89%	93%	88%	96%
Somewhat Agree	**7%**	7%	6%	9%	5%	7%	7%	5%	4%	11%	2%	7%	6%	8%	11%	7%	10%	4%
Somewhat/Strongly Disagree	**<1%**	<1%	<1%	1%	1%	0%	2%	1%	0%	0%	2%	0%	1%	0%	0%	0%	2%	0%
Locally Elected Officials Have an Obligation to Plan Ahead and Invest in Infrastructure to Ensure Community Long-Term Access to Water																		
Strongly Agree	**71%**	70%	72%	70%	71%	70%	74%	74%	66%	71%	77%	72%	66%	74%	68%	76%	69%	71%
Somewhat Agree	**26%**	26%	26%	28%	24%	29%	20%	24%	30%	27%	19%	28%	28%	24%	27%	23%	26%	27%
Somewhat/Strongly Disagree	**3%**	4%	2%	2%	5%	1%	6%	2%	4%	2%	4%	0%	6%	2%	5%	2%	5%	2%
Maintaining an Adequate Long-Term Supply of Water in SW Missouri Requires Investments in Water Supply and Infrastructure																		
Strongly Agree	**52%**	49%	54%	46%	57%	50%	**67%**	**38%**	**52%**	**64%**	49%	52%	52%	56%	46%	54%	47%	54%
Somewhat Agree	**44%**	45%	44%	50%	39%	46%	**30%**	**58%**	**42%**	**34%**	49%	45%	44%	40%	46%	41%	45%	45%
Somewhat/Strongly Disagree	**4%**	6%	2%	4%	4%	4%	**3%**	**4%**	**6%**	**2%**	2%	3%	4%	4%	8%	5%	8%	1%

		Gender		Respondent Age			Educational Level				Annual Household Income					Years of Residency		
	OVERALL	M	F	< 40	40-64	65+	HS or Less	Some College	College Grad	Post-Grad	<25k	25k-39k	40k-69k	70k–99k	100k+	< 10	10-29	30+
During a Severe Drought, How Much Could You Realistically Reduce Your Water Consumption?																		
None	**12%**	14%	10%	11%	11%	17%	**19%**	**12%**	**13%**	**5%**	**17%**	**13%**	**13%**	**13%**	**3%**	4%	13%	14%
< 10%	**24%**	24%	25%	22%	21%	29%	**19%**	**27%**	**27%**	**16%**	**31%**	**24%**	**22%**	**17%**	**22%**	16%	28%	26%
10%-20%	**38%**	32%	44%	35%	39%	43%	**45%**	**45%**	**31%**	**38%**	**40%**	**37%**	**42%**	**43%**	**27%**	49%	33%	37%
21%-30%	**16%**	16%	15%	18%	20%	6%	**10%**	**6%**	**21%**	**25%**	**6%**	**17%**	**13%**	**13%**	**35%**	23%	14%	13%
> 30%	**10%**	14%	6%	14%	9%	6%	**7%**	**10%**	**8%**	**16%**	**6%**	**9%**	**10%**	**14%**	**13%**	7%	12%	10%
Support for Reuse of Water for FIRE PROTECTION																		
Support	**90%**	90%	89%	84%	92%	92%	93%	93%	86%	90%	**92%**	**89%**	**86%**	**91%**	**94%**	86%	93%	88%
Oppose	**3%**	5%	1%	6%	1%	3%	0%	2%	5%	5%	**6%**	**0%**	**1%**	**8%**	**4%**	3%	1%	5%
Not Sure	**7%**	5%	9%	10%	7%	5%	7%	5%	9%	5%	**2%**	**11%**	**13%**	**1%**	**2%**	11%	6%	7%
Support for Reuse of Water for LANDSCAPE IRRIGATION																		
Support	**82%**	86%	79%	82%	87%	79%	85%	81%	83%	84%	**80%**	**76%**	**75%**	**92%**	**89%**	84%	82%	82%
Oppose	**5%**	5%	5%	4%	4%	7%	6%	4%	6%	5%	**4%**	**7%**	**5%**	**6%**	**5%**	2%	5%	7%
Not Sure	**13%**	9%	16%	15%	9%	14%	9%	15%	11%	11%	**16%**	**17%**	**20%**	**2%**	**6%**	14%	13%	11%
Support for Reuse of Water for TOILET FLUSHING																		
Support	**81%**	83%	79%	78%	84%	79%	81%	84%	78%	84%	**88%**	**74%**	**79%**	**79%**	**93%**	79%	81%	82%
Oppose	**6%**	6%	6%	7%	5%	6%	4%	3%	10%	5%	**2%**	**5%**	**7%**	**12%**	**3%**	7%	6%	5%
Not Sure	**13%**	11%	15%	15%	11%	15%	15%	13%	12%	11%	**10%**	**21%**	**14%**	**9%**	**4%**	14%	13%	13%
Support for Reuse of Water for DRINKING/TAP WATER																		
Support	**29%**	35%	25%	37%	27%	25%	31%	29%	30%	28%	32%	29%	24%	38%	25%	32%	30%	28%
Oppose	**35%**	35%	35%	32%	33%	41%	28%	37%	33%	42%	38%	31%	32%	38%	42%	31%	37%	35%
Not Sure	**36%**	31%	40%	31%	40%	34%	41%	34%	37%	30%	30%	40%	44%	24%	33%	37%	33%	37%
Reallocation of Water Storage in Stockton Lake																		
Strongly Support	**17%**	**23%**	**13%**	18%	15%	21%	22%	21%	9%	25%	18%	24%	14%	20%	16%	19%	19%	17%
Somewhat Support	**37%**	**38%**	**36%**	37%	37%	34%	33%	29%	46%	36%	31%	32%	43%	38%	44%	40%	40%	32%
Somewhat Oppose	**8%**	**11%**	**6%**	8%	11%	5%	7%	10%	9%	5%	6%	8%	10%	9%	11%	7%	6%	11%
Strongly Oppose	**5%**	**6%**	**3%**	1%	5%	7%	2%	4%	4%	8%	8%	4%	2%	4%	2%	1%	2%	7%
Not Sure	**33%**	**22%**	**42%**	36%	31%	33%	36%	36%	32%	26%	37%	32%	31%	29%	27%	33%	33%	33%

Questionnaire

Citizen Water Supply and Usage Survey — 2017

Joplin, Webb City, Carl Junction (n = 401)

1. **How strongly do you agree or disagree with this statement: Having an adequate long-term supply of water is important for your community's quality of life and economic competitiveness.**

   93%...Strongly Agree
   7%...Somewhat Agree
   <1%...Somewhat Disagree
   0%...Strongly Disagree

2. **What type of organization, if any, supplies your home tap water?**

   47.3%...City
   15.6%...Private Company
   11.4%...Public Utility
   5.4%...Public Water Supply District (PWSD)
   2.0%...None, I am on a private well
   1.9%...Rural Water District
   1.3%...County
   0.4%...Neighborhood Association
   14.9%...Not Sure

3. **What is the source of your home tap water?**

   24%...Surface Water (e.g., lake/river)
   15%...Aquifer (e.g., well)
   8%...Combination of aquifer and surface water
   53%...Not Sure

4. **On average, about how much per month is your home water bill?**

   2%...None, I am on a private well
   <1%...$1 to $10 per month
   6%...$11 to $20 per month
   26%...$21 to $30 per month
   31%...$31 to $40 per month
   35%...More than $40 per month

5. **Compared to other monthly essentials, how would you describe the expense of your monthly home water bill?**

   25%...Very inexpensive
   40%...Somewhat inexpensive
   30%...Somewhat expensive
   5%...Very expensive

6. **Considering the amount of water you use at home per month and the amount of your monthly home water bill, would you say the water provided to your home is an excellent, good, fair, or poor value?**

   21%...Excellent Value
   40%...Good Value
   31%...Fair Value
   8%...Poor Value

7. **Based on your current water bill, how much more would you be willing to pay per month to ensure an adequate long-term supply of drinking water?**

   47%...None, no more than what I am paying now
   30%...$1 to $5 more
   15%...$6 to $10 more
   4%...$11 to $15 more
   1%...$16 to $20 more
   3%...More than $20

8. **How strongly do you agree or disagree with this statement: Locally elected officials, such as county commissioners and city mayors, have an obligation to plan ahead and invest in the necessary infrastructure to ensure that homeowners, businesses, and farmers have adequate long-term access to water.**

   71%...Strongly Agree
   26%...Somewhat Agree
   2%...Somewhat Disagree
   1%...Strongly Disagree

9. **Droughts occur periodically as part of the natural climate cycle. When your area experiences a drought and your local provider of water has to implement emergency water conservation measures, how much could you realistically reduce your water consumption?**

   12%...None, I could not use any less water than I am using now
   24%...Less than 10%
   38%...10% to 20% less
   16%...21% to 30% less
   10%...More than 30%

10. **How strongly do you agree or disagree with this statement: To maintain an adequate long-term supply of water in southwest Missouri, investments in water supply and infrastructure are necessary.**

    52%...Strongly Agree
    44%...Somewhat Agree
    4%...Somewhat Disagree
    <1%...Strongly Disagree

11. **How strongly would you support or oppose the reallocation of a small amount of water storage in Stockton Lake to be used by citizens and businesses in southwest Missouri for long-term water supply?**

17%...Strongly Support
37%...Somewhat Support
8%...Somewhat Oppose
5%...Strongly Oppose
33%...Not Sure

12. **Water providers treat water to very high drinking water standards and then deliver it to homes and businesses for use. Once that water has been used, it is again treated to very high drinking water standards and then released into area waterways rather than being reused. To save money and conserve water, instead of releasing this highly treated water back into area waterways (lakes, streams, rivers) would you support or oppose its reuse for the following:**

	Support	Oppose	Not Sure
1. Fire protection	90%	3%	7%
2. Irrigation of landscaping	82%	5%	13%
3. Toilet flushing	81%	6%	13%
4. Drinking/Tap water	29%	35%	36%

Respondent Information: The last few questions are about you and your household. They will be used to group responses to the survey. Your responses are completely confidential and anonymous.

13. **What town or city do you live in?** Joplin = 75% Webb City = 14% Carl Junction = 11%

14. **Approximately how many years have you lived in southwest Missouri?**

Range = < 1 year–84 years, Mean = 30.2 years, Median = 27.7 years

< 10 years = 20%, 10–29 years = 33%, 30+ years = 47%

15. **In the past couple of years, have you used any of the following lakes or rivers for recreational purposes (e.g., camping, picnicking, swimming, fishing, boating, etc.)?**

	Yes	No
1. Table Rock Lakes	36%	64%
2. Stockton Lake	23%	77%
3. Pomme de Terre Lake	3%	97%

16. **What is your gender?** 47%...Male 53%...Female

17. **What is your birth year?**

Age range = 19–91 years old, Mean = 51.3 years old, Median = 51 years old

Age < 40 years = 32%, Age 40–64 years = 43%, Age 65+ years = 25%

18. **What is your educational level?**

1%...Did not complete high school

12%...High school graduate/GED

32%...Some college/Vo-Tech

36%...College graduate

19%...Post-graduate studies (e.g., MA, Ph.D., MD)

19. **Which of the following categories best describes your total annual household income before taxes?**

15%...Less than $25,000

23%...$25,000 to $39,999

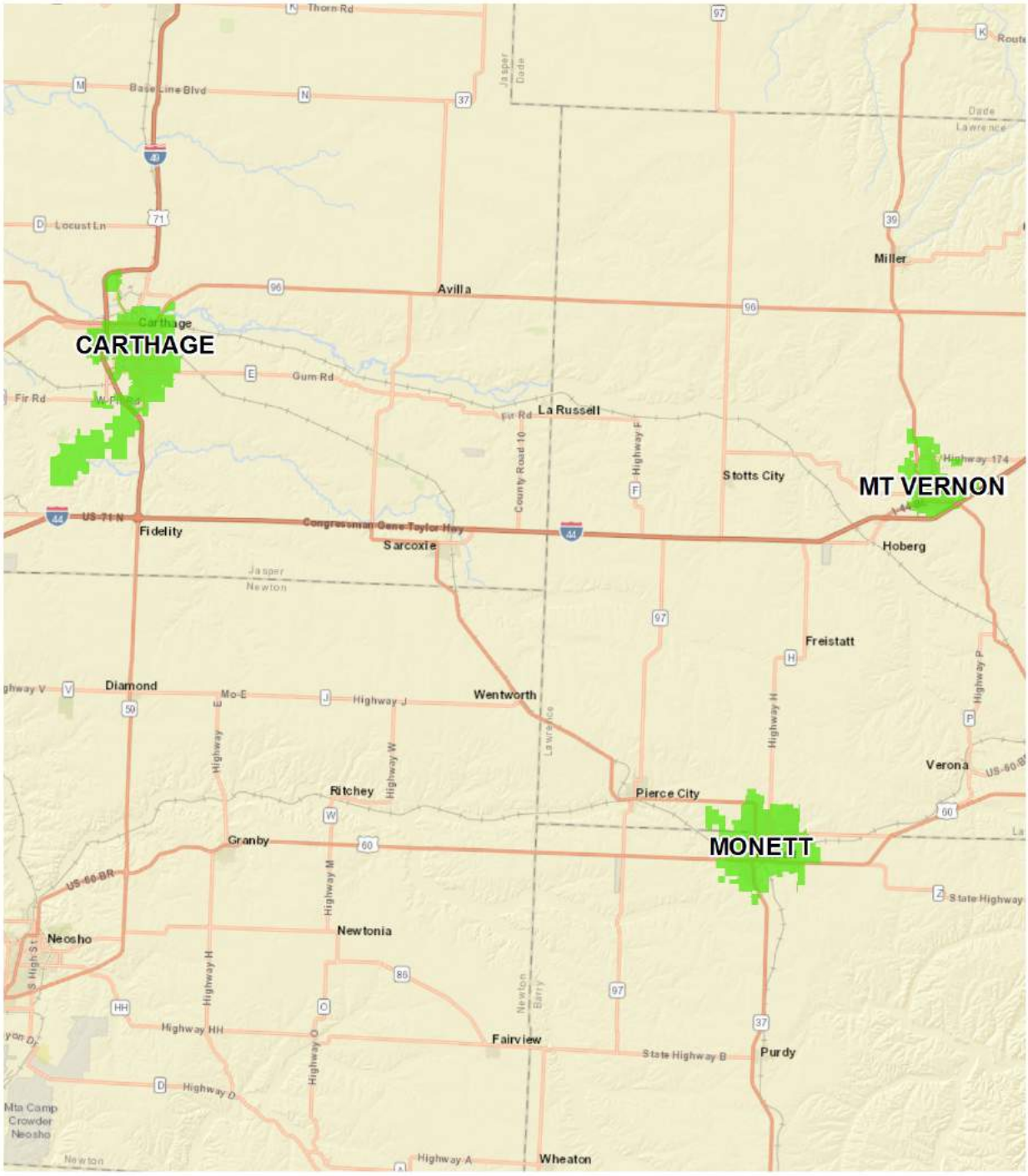
25%...$40,000 to $69,999

20%...$70,000 to $99,999

17%...$100,000 or more

Thank You! This Completes the Survey.

CARTHAGE, MONETT, MT. VERNON



EXECUTIVE SUMMARY

This Executive Summary presents an overview of the 2017 Carthage, Monett, and Mt. Vernon Citizen Water Supply and Usage Survey. The report is based on 302 surveys conducted online and by telephone during the summer and fall of 2017. Overall findings have a margin of error of +/- 5.8% at the 95% confidence interval.

The survey was designed, administered, and analyzed by **Opinion Research Specialists, LLC** of Springfield, Missouri with input from the Tri-State Water Resource Coalition. Survey findings are summarized below.

Source of Home Tap Water

- 41% of respondents thought their home tap water came from an aquifer, 4% mentioned surface water, and 5% said it was a combination of the two. Notably, one-half of respondents (50%) were unsure as to the source of their home tap water. This was particularly true for recent residents to the area (81%) and those with a high school education or less (67%).

Type of Organization Supplying Home Tap Water

- Most respondents (74%) believed their home tap water was supplied by the city, while about 15% said they were on a private well and 7% mentioned a public utility.

Average Monthly Home Water Bill

- A plurality of respondents (31%) reported having average monthly water bills ranging between $21 and $30, while 28% said they paid more than $30 per month.

Monthly Home Water Bill Perceptions

- The vast majority of respondents (76%) said their monthly water bill was inexpensive compared to other monthly essentials and 74% rated the “value” of their home water (price paid for amount consumed) as either excellent or good.

Amount Willing to Pay Extra to Ensure Long-Term Supply of Water

- While 43% of respondents were not willing to pay anything extra per month on their water bill to ensure a long-term supply of drinking water, 57% were willing to pay at least $1-to-$5 more per month. Respondents with household incomes in excess of $100,000 were far more willing than any other demographic group to say they would pay ***more than*** $5 a month to ensure a long-term supply of drinking water.

- With the exception of lower income respondents, those with some college/vo-tech backgrounds and lake nonusers, a majority of respondents (52% to 81%) from all other demographic groups were willing to pay at least $1-to-$5 extra per month on their water bill to ensure a long-term supply of drinking water. This was especially true for higher income households.

Long-Term Supply of Water: Importance and Infrastructure

- 88% of respondents "strongly agreed" that having a long-term supply of water was critical for their community's quality of life and economic competitiveness. Only 1% disagreed with this statement.

- 63% "strongly agreed" that locally elected officials must invest in infrastructure to ensure long-term access to water for citizens, farmers, and businesses. Only 6% disagreed with this statement.

- 57% "strongly agreed" that investments in water supply and infrastructure were needed to guarantee a long-term supply of water to southwest Missouri. Only 5% disagreed with this statement.

Reducing Water Consumption in an Emergency

- A plurality of respondents (37%) indicated they could temporarily reduce their water consumption by 10% to 20% in the event of a water shortage emergency and 25% could reduce consumption by more than 20%. However, 13% of respondents said they could not reduce their water consumption by any amount during an emergency.

- Willingness to reduce water consumption during a drought was inversely related to years of residency (i.e., as years of residency increased, willingness decreased).

Support for Using Treated Wastewater

- To save money and conserve water, at least 77% of respondents said they would support the use of treated wastewater for purposes of fire protection, toilet flushing, and landscape irrigation. However, only 30% would approve the use of treated wastewater for drinking/tap water purposes.

Reallocation of Water Storage in Stockton Lake

- A majority of respondents (54%) supported, to some extent, the idea of reallocating a small amount of water storage in Stockton Lake to be used by citizens and businesses throughout southwest Missouri for long-term water supply. Nearly 20% of respondents were opposed to this idea and 27% were undecided.

- Demographically, opposition to this plan was relatively low — less than 27% of ***any*** demographic group was opposed.

INTRODUCTION

This survey was commissioned by the Tri-State Water Resource Coalition to assess the **opinions** and **perceptions** about water supply and usage in southwest Missouri among residents living in the communities of Carthage, Monett, and Mt. Vernon. This survey is one of seven surveys targeting a 16-county area in southwest Missouri. Questions on all seven surveys are identical so that differences in perceptions can be assessed.

SURVEY DESIGN AND METHODOLOGY

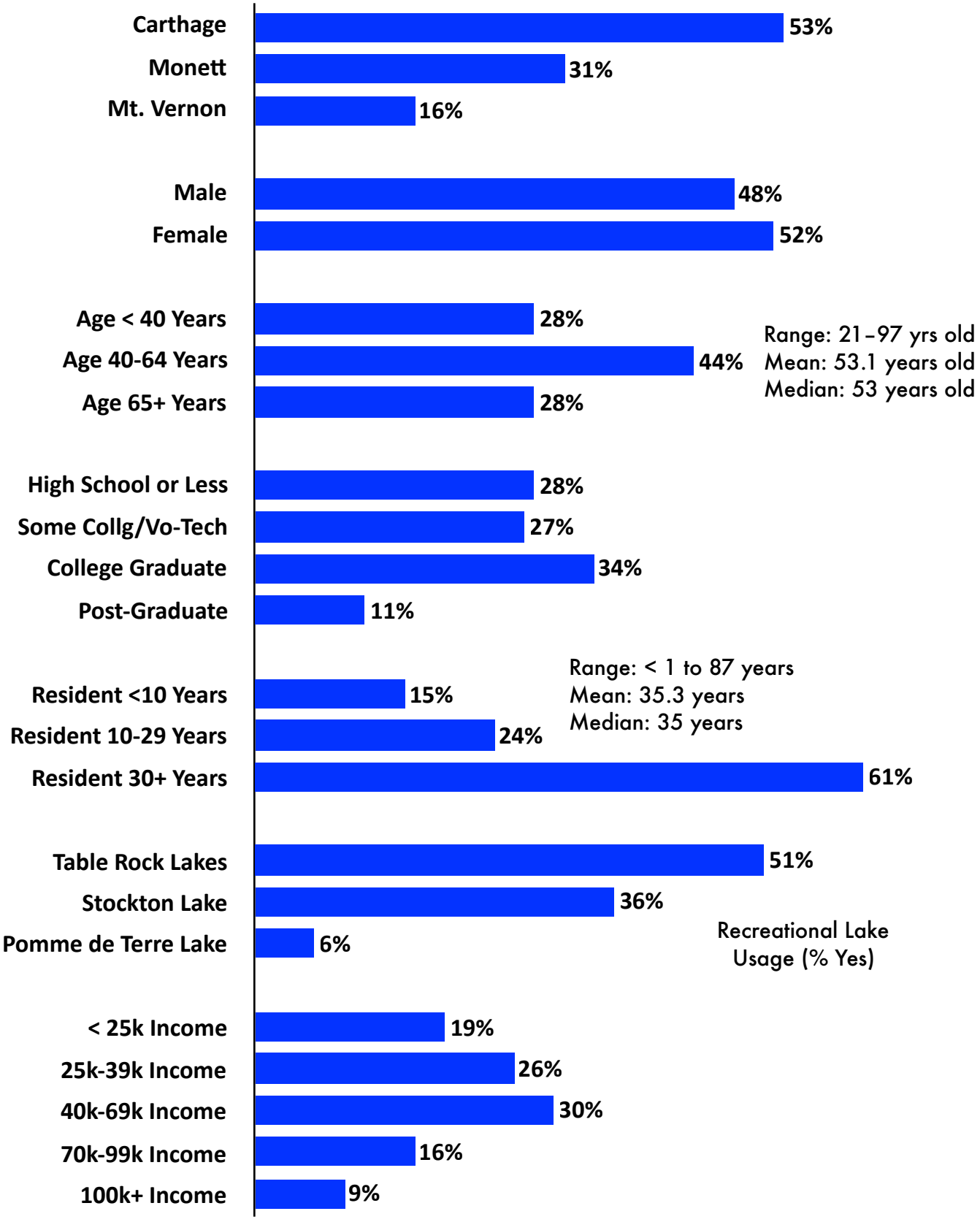
The survey was designed, administered, and analyzed by **Opinion Research Specialists, LLC** of Springfield, Missouri with input from the Tri-State Water Resource Coalition. Survey results are based on 302 completed online and telephone surveys conducted during the summer/fall of 2017.

INTERPRETATION OF DATA

Overall survey results, based on 302 completed questionnaires, have a margin of error of approximately +/- 6.0% at the 95% confidence interval. For example, if a response listed in the report is 57% one can be 95% confident that the "true" percentage, that which would have been attained if all adult residents of Carthage, Monett, and Mt. Vernon had participated in the survey, is between 51% and 63%. Margin of error increases when subsets of the total sample are analyzed (e.g., male versus female, etc.).

Some percentages in the report may not add to exactly 100% due to rounding.

SURVEY RESPONDENT PROFILE



Carthage, Monett, Mt. Vernon

Survey Results

Source of Home Tap Water

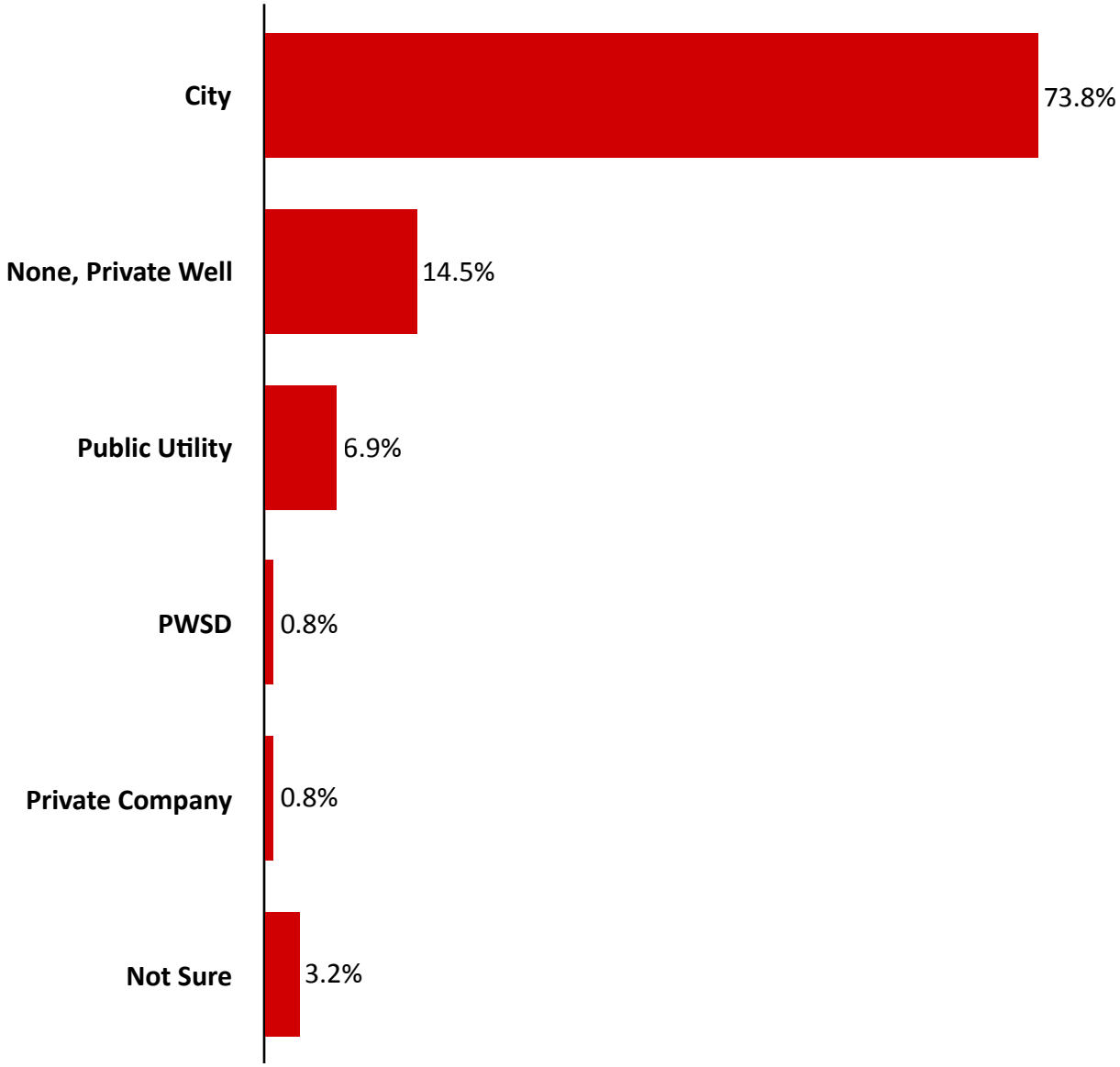
One-half of respondents (50%) did not know the source of their home tap water. About 40% said their home tap water came from an aquifer, 4% mentioned surface water, and 5% believed it was a combination of aquifer and surface water.

Demographic Analysis: Females, younger and middle-aged respondents, those least formally educated, and recent residents to the area were significantly more likely than their demographic counterparts to ***not know*** the source of their home tap water.

Demographics	Aquifer	Surface Water	Combination	Not Sure
Male	49%	4%	6%	41%
Female	33%	4%	4%	**59%**
18-39 years old	30%	6%	7%	**57%**
40-64 years old	34%	6%	5%	**55%**
65+ years old	60%	0%	3%	37%
High School or Less	31%	0%	2%	**67%**
Some College/Vo-Tech	42%	3%	6%	49%
College Graduate	52%	6%	4%	38%
Post-Graduate	28%	7%	11%	54%
< 10 yrs resident	19%	0%	0%	**81%**
10-29 yrs resident	30%	7%	6%	57%
30+ yrs resident	50%	4%	5%	41%

Type of Organization Supplying Home Tap Water

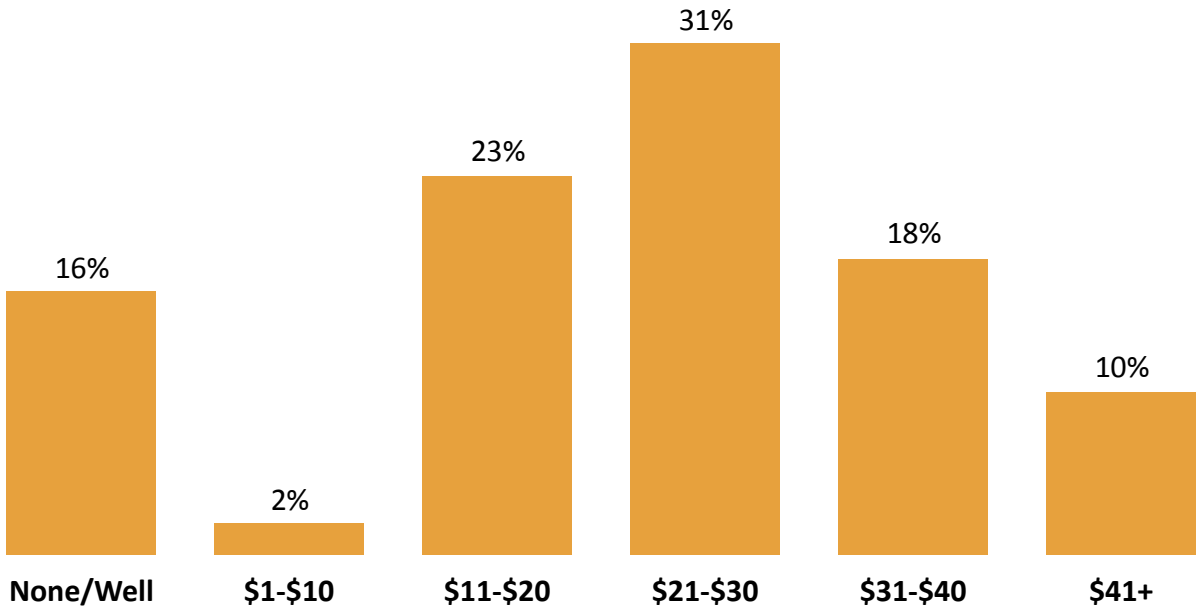
Most respondents (74%) said their home tap water was supplied by the city, while about 15% said they were on a private well and 7% believed it was supplied by a public utility.



Demographic Analysis: Regardless of respondent demographic characteristics, the vast majority of those surveyed thought their home tap water was city supplied.

Average Monthly Home Water Bill

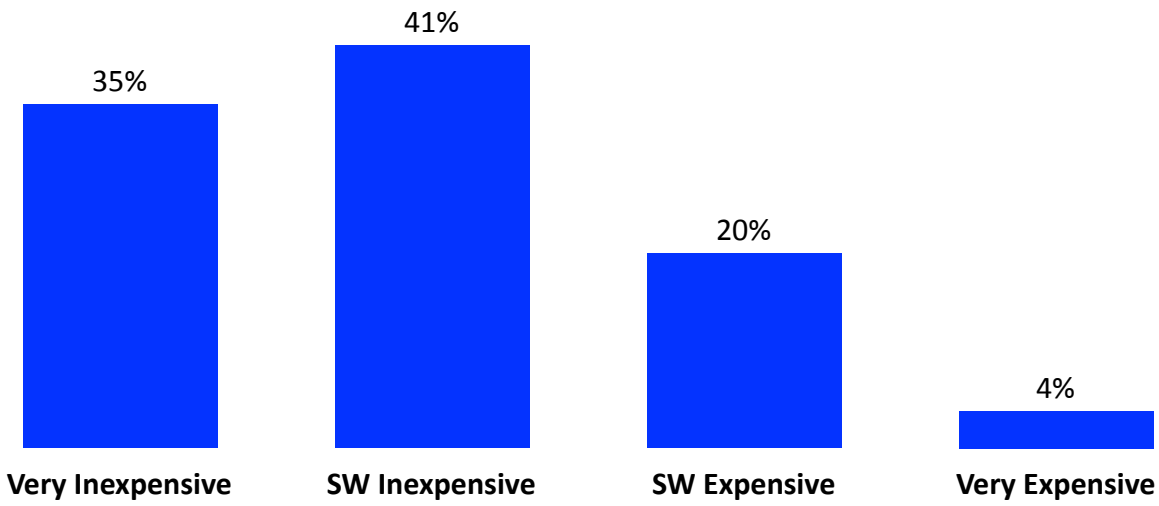
A plurality of respondents (31%) reported having average monthly water bills ranging between $21 and $30, while 28% said they paid more than $30 per month.



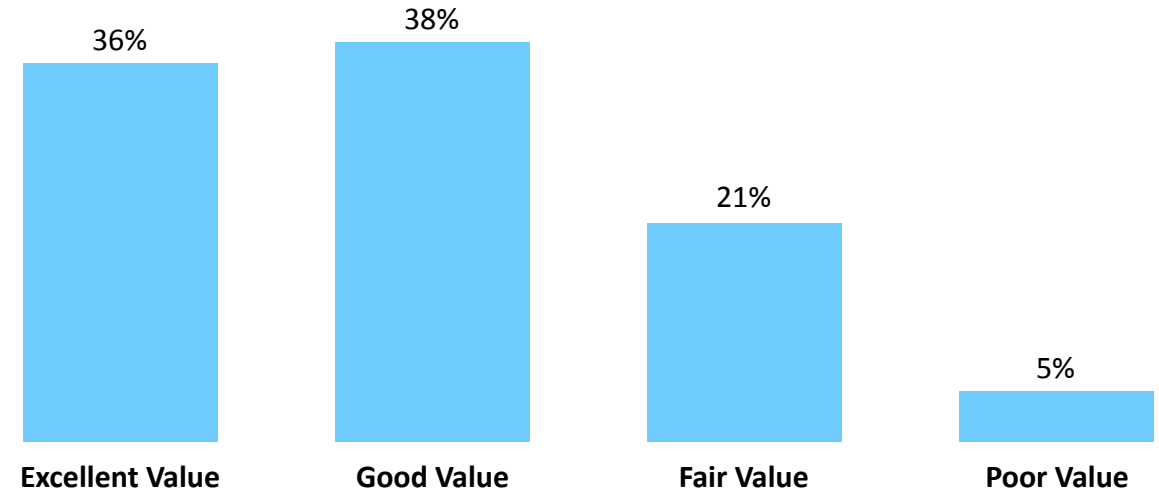
Demographic Analysis: There were no significant differences of opinion on this question based on respondent demographic characteristics.

Monthly Home Water Bill Perceptions

Perceived Expense: The vast majority of respondents (76%) said that, when compared to other monthly essentials, their monthly home water bill was either very inexpensive (35%) or somewhat inexpensive (41%). Only 4% thought it was very expensive compared to other monthly essentials.

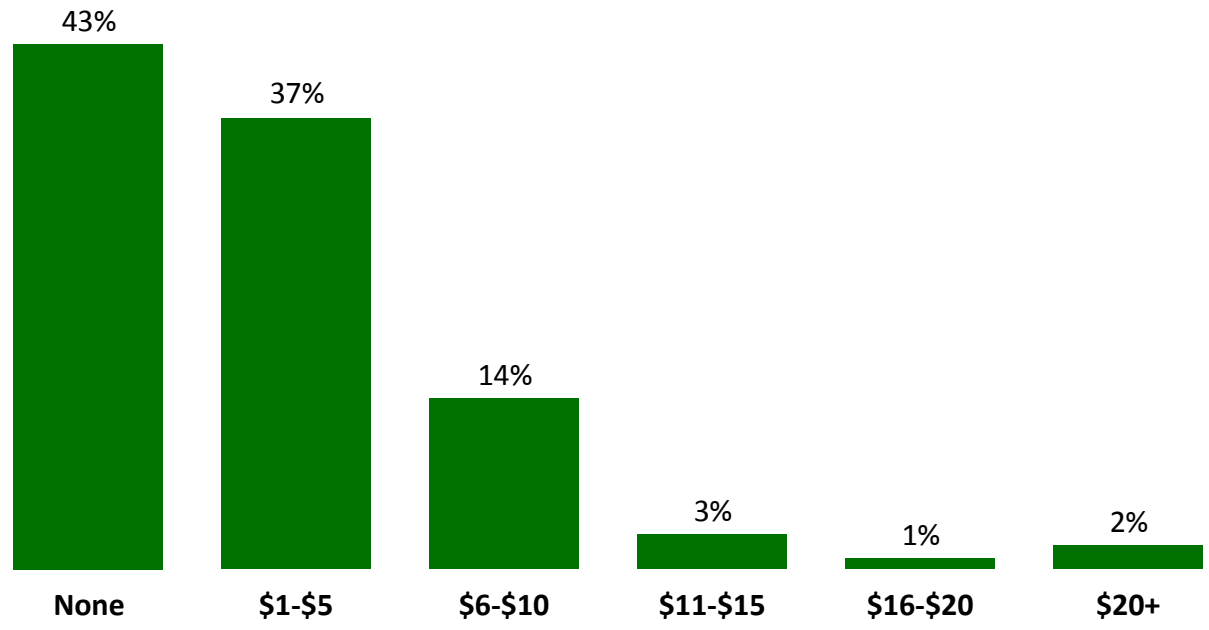


Perceived Value: Nearly 75% of respondents were of the opinion that the water provided to their home was either an excellent (36%) or good value (38%). Only 5% thought it was a poor value.



Amount Willing to Pay Extra to Ensure Supply of Water

When asked how much more per month they would be willing to pay on their water bill to ensure a long-term supply of drinking water, 43% of respondents said they would not pay anything extra, 37% would pay $1-to-$5 extra each month, and 14% would pay $6-to-$10. Six percent of respondents were willing to pay more than $10 extra per month.



Demographic Analysis: Respondents from households whose annual incomes exceeded $100,000 were significantly more likely than any demographic group to say they would pay ***more than*** $5 extra per month on their water bill to ensure a long-term supply of drinking water.

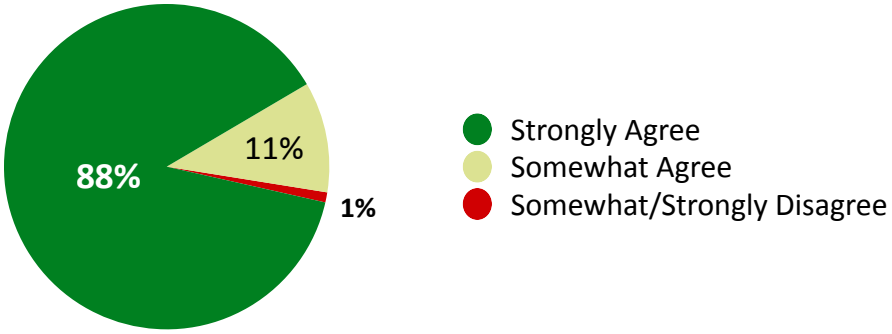
Amount Willing to Pay Extra by Demographics

With the exception of lower income respondents, those with some college/vo-tech backgrounds and lake nonusers, a majority of respondents (52% to 81%) from all other demographic groups were willing to pay at least $1-to-$5 extra per month on their water bill to ensure a long-term supply of drinking water. This was especially true for higher income households.

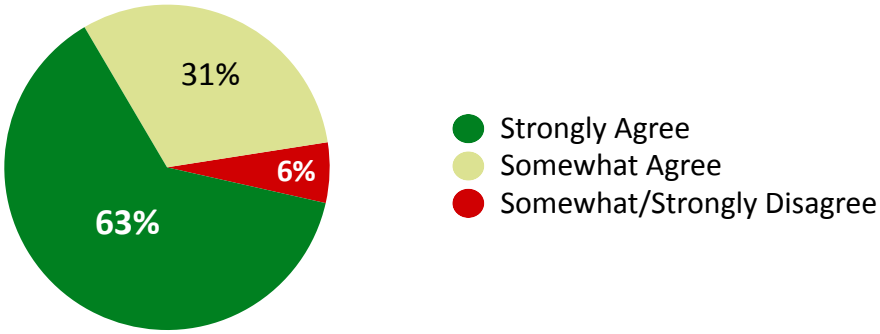
Demographics	None	$1 to $5	$6 to $10	> $10
Male	42%	37%	13%	8%
Female	43%	37%	16%	4%
Lake user	36%	39%	19%	6%
Lake nonuser	**51%**	35%	8%	6%
18-39 years old	47%	30%	17%	6%
40-64 years old	40%	36%	16%	8%
65+ years old	41%	46%	9%	4%
High school or less	44%	44%	7%	5%
Some college/vo-tech	**55%**	29%	11%	5%
College graduate	32%	35%	25%	8%
Post-graduate	33%	43%	14%	10%
< 25k household income	**53%**	36%	3%	8%
25k-39k household income	**55%**	38%	2%	5%
40k-69k household income	43%	27%	24%	6%
70k-99k household income	**19%**	**52%**	**26%**	**3%**
100k+ household income	**20%**	**33%**	**27%**	**20%**
< 10 years of residency	34%	38%	25%	3%
10-29 years of residency	46%	29%	9%	16%
30+ years of residency	43%	40%	14%	3%

Long-Term Supply of Water: Importance and Infrastructure

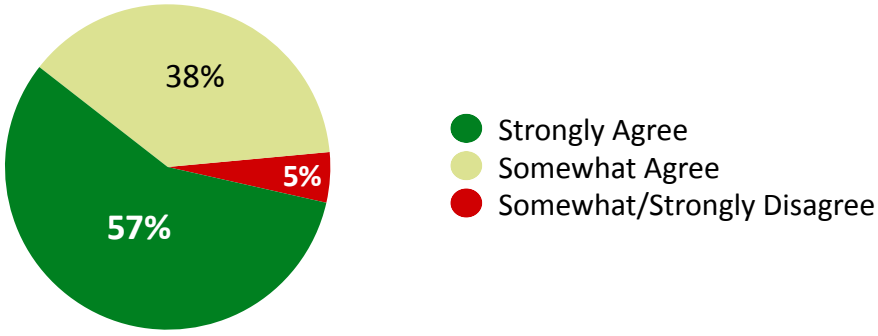
Importance of Long-Term Supply of Water: Nearly 90% of respondents *strongly agreed* that having an adequate long-term supply of water was important for their community's quality of life and economic competitiveness.



Obligation to Plan Ahead and Invest: More than 60% of respondents *strongly agreed* that locally elected officials have an obligation to plan ahead and invest in the necessary infrastructure to ensure that homeowners, businesses, and farmers have adequate long-term access to water.

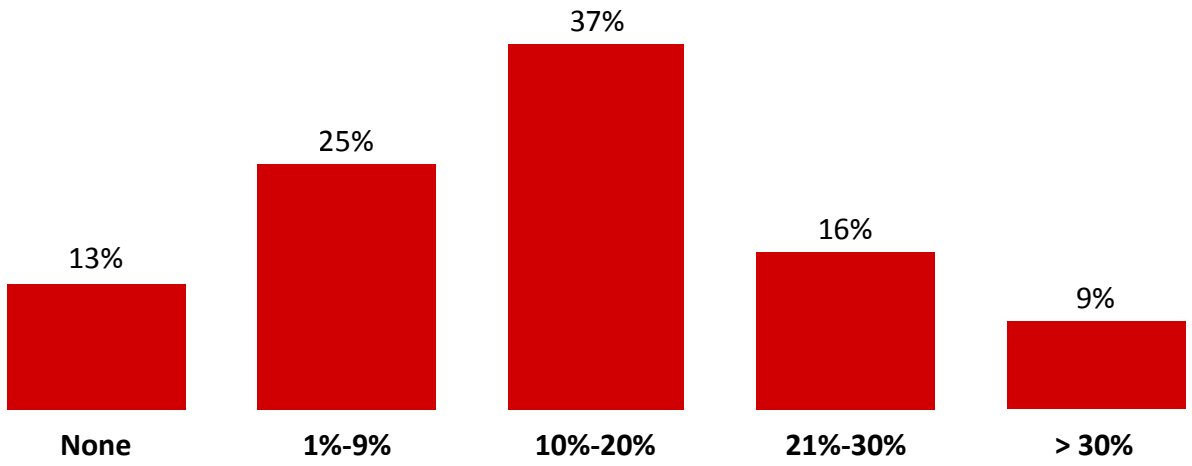


Investments in Water Supply and Infrastructure: A majority of respondents (57%) *strongly agreed* that investments in water supply and infrastructure were necessary to maintain an adequate long-term supply of water in southwest Missouri.



Reducing Water Consumption in an Emergency

In the event of a severe drought requiring emergency water conservation measures, a plurality of respondents (37%) indicated they could temporarily reduce their water consumption by 10% to 20%. Twenty-five percent of respondents could reduce water consumption by greater than 20%, and 13% said they could not reduce their water consumption by any amount during a severe drought.

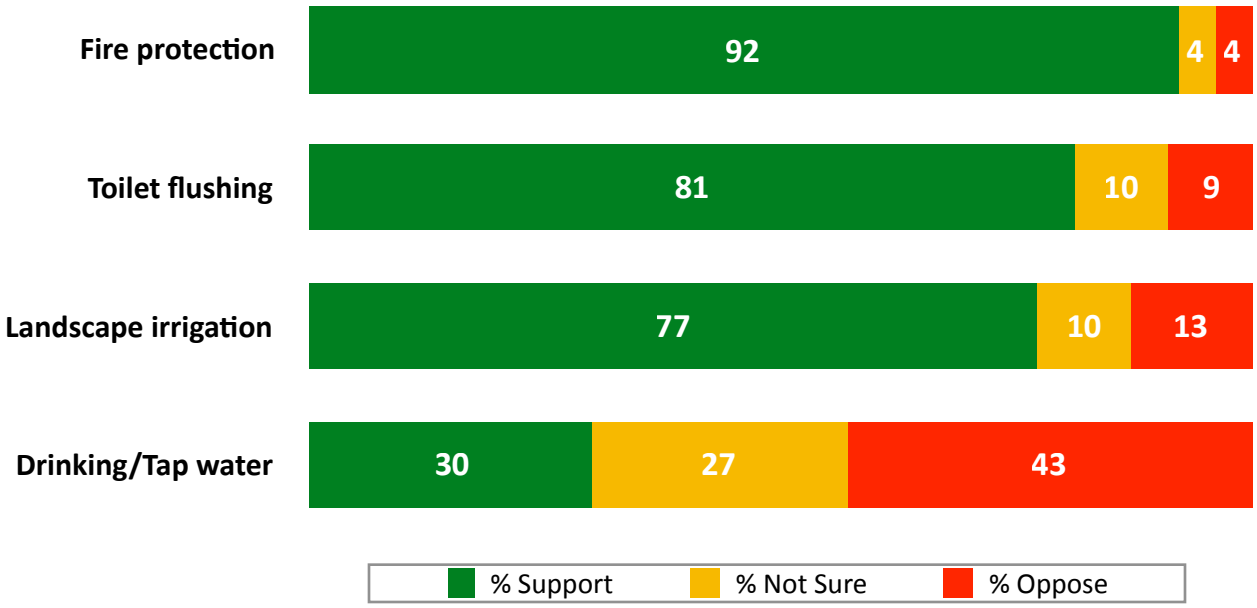


Demographic Analysis: Willingness to reduce water consumption during a drought was inversely related to respondent years of residency. As years of residency increased the ability and/or willingness to reduce water consumption during a drought decreased. For example, 49% of recent residents said they could reduce their water consumption by more than 20% compared to only 19% of residents who had lived in the area for more than 30 years.

Years of Residency	None	1%-9%	10%-20%	21%-30%	> 30%
< 10 yrs resident	8%	22%	21%	**38%**	**11%**
10-29 yrs resident	9%	22%	45%	11%	13%
30+ yrs resident	16%	27%	38%	**12%**	**7%**

Support for Using Treated Wastewater

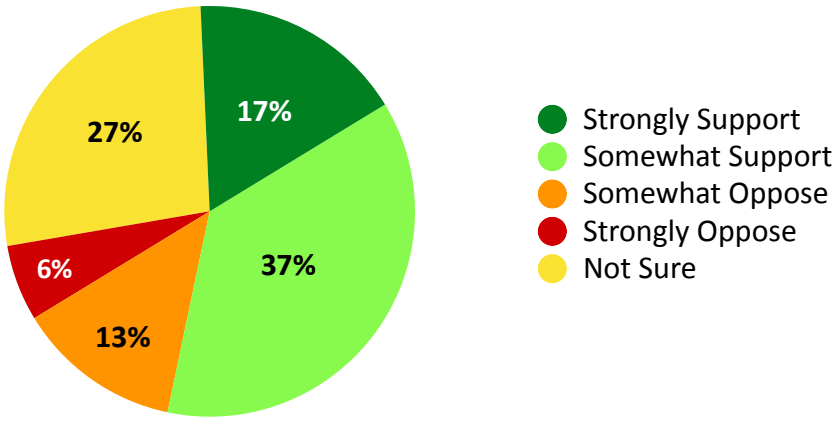
To save money and conserve water, respondents were asked if they would support or oppose the use of treated wastewater for various activities instead of being released into area waterways. While the vast majority of respondents said they would approve the use of treated wastewater for purposes of fire protection (92%), toilet flushing (81%), and landscape irrigation (77%); only 30% would do so for drinking/tap water purposes.



Demographic Analysis: There were no meaningful differences of opinion on this series of questions based on respondent demographic characteristics.

Reallocation of Water Storage in Stockton Lake

A majority of respondents (54%) either strongly (17%) or somewhat (37%) supported the idea of reallocating a small amount of water storage in Stockton Lake to be used by citizens and businesses in southwest Missouri for long-term water supply. Nearly 20% of respondents were opposed to this idea and 27% were undecided.



Demographic Analysis: Regardless of respondent demographic characteristics, opposition to the Stockton Lake water reallocation proposal was relatively low — at most 26%.

Reallocation of Water Storage in Stockton L. by Demographics

While opposition to the Stockton Lake reallocation proposal was fairly minimal — less than 27% of ***any*** demographic group was opposed, support ranged from 40% to 66%. A relatively large percentage of respondents across all demographic groups were undecided on this issue.

Demographics	Strongly or SW Support	Strongly or SW Oppose	Not Sure
Male	55%	23%	22%
Female	52%	16%	**32%**
Stockton Lake user	57%	21%	22%
Stockton Lake nonuser	52%	17%	**31%**
18-39 years old	49%	25%	26%
40-64 years old	63%	13%	24%
65+ years old	49%	24%	27%
High school or less	54%	20%	26%
Some college/vo-tech	49%	**26%**	25%
College graduate	57%	18%	25%
Post-graduate	63%	7%	**30%**
< 25k household income	52%	21%	27%
25k-39k household income	**40%**	**26%**	**34%**
40k-69k household income	65%	19%	16%
70k-99k household income	56%	15%	29%
100k+ household income	64%	**4%**	**32%**
< 10 years of residency	49%	19%	**32%**
10-29 years of residency	**66%**	12%	22%
30+ years of residency	51%	22%	27%

Demographic Analysis

NOTE: Table percentages **bolded in red** denote statistical significance at the .05 level or less.

Table percentages **bolded in red** and **shaded in yellow** denote statistical significance at the .001 level or less.

		Gender		Respondent Age			Educational Level				Annual Household Income					Years of Residency		
	OVERALL	M	F	< 40	40-64	65+	HS or Less	Some College	College Grad	Post-Grad	<25k	25k-39k	40k-69k	70k–99k	100k+	< 10	10-29	30+
Source of Home Tap Water																		
Aquifer	**41%**	**49%**	**33%**	**30%**	**34%**	**60%**	**31%**	**42%**	**52%**	**28%**	19%	39%	47%	43%	43%	**19%**	**30%**	**50%**
Surface Water	**4%**	**4%**	**4%**	**6%**	**6%**	**0%**	**0%**	**3%**	**6%**	**7%**	9%	5%	0%	0%	9%	**0%**	**7%**	**4%**
Combination	**5%**	**6%**	**4%**	**7%**	**5%**	**3%**	**2%**	**6%**	**4%**	**11%**	9%	3%	4%	5%	5%	**0%**	**6%**	**5%**
Not Sure	**50%**	**41%**	**59%**	**57%**	**55%**	**37%**	**67%**	**49%**	**38%**	**54%**	63%	53%	49%	52%	43%	**81%**	**57%**	**41%**
Type of Organization Supplying Home Tap Water																		
City	**74%**	72%	76%	**72%**	**84%**	**62%**	77%	78%	68%	71%	88%	74%	71%	62%	76%	81%	80%	69%
None/Private Well	**14%**	13%	15%	**13%**	**10%**	**21%**	12%	9%	21%	11%	5%	16%	13%	19%	19%	11%	10%	17%
Public Utility	**7%**	9%	5%	**9%**	**2%**	**13%**	6%	9%	6%	7%	5%	5%	10%	11%	0%	3%	5%	9%
Public Water Supply District	**1%**	1%	1%	**0%**	**1%**	**2%**	2%	2%	0%	0%	0%	2%	1%	0%	0%	3%	0%	1%
Private Company	**1%**	1%	1%	**0%**	**0%**	**2%**	2%	0%	1%	0%	0%	1%	2%	0%	0%	0%	0%	1%
Neighborhood Association	**0%**	0%	0%	**0%**	**0%**	**0%**	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
County	**0%**	0%	0%	**0%**	**0%**	**0%**	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Not Sure	**3%**	4%	2%	**6%**	**3%**	**0%**	1%	2%	4%	11%	2%	2%	3%	8%	5%	2%	5%	3%
Average Monthly Home Water Bill																		
None/On a Well	**16%**	15%	17%	16%	13%	21%	15%	10%	23%	13%	3%	19%	12%	22%	26%	13%	10%	19%
$1–$10	**2%**	2%	3%	6%	0%	3%	2%	2%	4%	0%	6%	4%	3%	0%	0%	3%	4%	2%
$11–$20	**23%**	26%	20%	18%	24%	26%	20%	20%	22%	30%	29%	26%	23%	25%	11%	26%	28%	21%
$21–$30	**31%**	34%	27%	29%	28%	31%	36%	34%	23%	30%	39%	19%	35%	34%	21%	26%	32%	31%
$31–$40	**18%**	17%	19%	16%	24%	12%	18%	22%	16%	18%	10%	25%	17%	13%	21%	16%	15%	19%
> $40	**10%**	6%	14%	15%	11%	7%	9%	12%	12%	9%	13%	7%	10%	6%	21%	16%	11%	8%
Monthly Home Water Bill — Perceived Expense																		
Very Inexpensive	**35%**	36%	34%	31%	35%	42%	**27%**	**26%**	**47%**	**40%**	38%	31%	27%	50%	53%	38%	38%	32%
Somewhat Inexpensive	**41%**	46%	37%	41%	42%	38%	**34%**	**49%**	**39%**	**44%**	25%	47%	47%	34%	37%	35%	44%	43%
Somewhat Expensive	**20%**	16%	24%	21%	19%	20%	**33%**	**22%**	**13%**	**12%**	30%	17%	25%	13%	5%	22%	13%	23%
Very Expensive	**4%**	2%	5%	7%	4%	0%	**6%**	**3%**	**1%**	**4%**	7%	5%	1%	3%	5%	5%	5%	2%

		Gender		Respondent Age			Educational Level				Annual Household Income					Years of Residency		
	OVERALL	M	F	< 40	40-64	65+	HS or Less	Some College	College Grad	Post-Grad	<25k	25k-39k	40k-69k	70k–99k	100k+	< 10	10-29	30+
Monthly Home Water Bill — Perceived Value																		
Excellent Value	**36%**	34%	38%	36%	29%	49%	36%	25%	45%	37%	**44%**	**36%**	**29%**	**29%**	**60%**	35%	38%	36%
Good Value	**38%**	38%	37%	40%	44%	27%	45%	40%	31%	33%	**33%**	**35%**	**39%**	**39%**	**20%**	38%	36%	38%
Fair Value	**21%**	25%	18%	21%	21%	21%	13%	30%	18%	26%	**9%**	**24%**	**29%**	**29%**	**20%**	19%	17%	23%
Poor Value	**5%**	3%	7%	3%	6%	3%	6%	5%	6%	4%	**14%**	**5%**	**3%**	**3%**	**0%**	8%	9%	3%
Amount Willing to Pay Extra Per Month on Home Water Bill to Ensure Long-Term Supply of Drinking Water																		
None	**43%**	42%	43%	47%	40%	41%	44%	55%	32%	33%	**53%**	**55%**	**43%**	**19%**	**20%**	34%	46%	43%
$1–$5	**37%**	37%	37%	30%	36%	46%	44%	29%	35%	43%	**36%**	**38%**	**27%**	**52%**	**33%**	38%	29%	40%
$6–$10	**14%**	13%	16%	17%	16%	9%	7%	11%	25%	14%	**3%**	**2%**	**24%**	**26%**	**27%**	25%	9%	14%
$11–$15	**3%**	5%	2%	5%	4%	2%	0%	5%	6%	5%	**0%**	**3%**	**3%**	**3%**	**20%**	3%	7%	2%
$16–$20	**<1%**	0%	1%	1%	0%	0%	0%	0%	1%	0%	**0%**	**0%**	**2%**	**0%**	**0%**	0%	2%	0%
> $20	**2%**	3%	1%	0%	4%	2%	5%	0%	1%	5%	**8%**	**2%**	**1%**	**0%**	**0%**	0%	7%	1%
Having an Adequate Long-Term Supply of Water is Important for Community Quality of Life and Economic Competitiveness																		
Strongly Agree	**88%**	86%	91%	85%	90%	88%	79%	90%	91%	96%	93%	77%	91%	92%	90%	89%	92%	86%
Somewhat Agree	**11%**	12%	9%	13%	9%	12%	19%	8%	9%	4%	5%	23%	7%	8%	10%	11%	8%	12%
Somewhat/Strongly Disagree	**1%**	2%	0%	2%	1%	0%	2%	2%	0%	0%	2%	0%	2%	0%	0%	0%	0%	2%
Locally Elected Officials Have an Obligation to Plan Ahead and Invest in Infrastructure to Ensure Community Long-Term Access to Water																		
Strongly Agree	**63%**	63%	63%	56%	68%	61%	59%	57%	70%	70%	**66%**	**46%**	**71%**	**67%**	**82%**	72%	63%	61%
Somewhat Agree	**31%**	32%	31%	33%	28%	34%	39%	33%	24%	30%	**24%**	**45%**	**23%**	**33%**	**18%**	22%	32%	33%
Somewhat/Strongly Disagree	**6%**	5%	6%	11%	4%	5%	2%	10%	6%	0%	**10%**	**9%**	**6%**	**0%**	**0%**	6%	5%	6%
Maintaining an Adequate Long-Term Supply of Water in SW Missouri Requires Investments in Water Supply and Infrastructure																		
Strongly Agree	**57%**	53%	59%	48%	61%	60%	54%	53%	66%	46%	68%	43%	64%	55%	62%	63%	58%	54%
Somewhat Agree	**38%**	38%	38%	44%	36%	32%	43%	35%	30%	54%	24%	45%	34%	39%	38%	31%	40%	39%
Somewhat/Strongly Disagree	**5%**	9%	3%	8%	3%	8%	3%	12%	4%	0%	8%	12%	2%	6%	0%	6%	2%	7%

		Gender		Respondent Age			Educational Level				Annual Household Income					Years of Residency		
	OVERALL	M	F	< 40	40-64	65+	HS or Less	Some College	College Grad	Post-Grad	<25k	25k-39k	40k-69k	70k–99k	100k+	< 10	10-29	30+
During a Severe Drought, How Much Could You Realistically Reduce Your Water Consumption?																		
None	**13%**	10%	16%	17%	10%	15%	14%	14%	13%	11%	16%	23%	8%	12%	5%	**8%**	**9%**	**16%**
< 10%	**25%**	28%	22%	21%	20%	34%	30%	30%	20%	15%	22%	27%	30%	12%	21%	**22%**	**22%**	**27%**
10%-20%	**37%**	35%	39%	38%	40%	34%	33%	34%	40%	48%	33%	27%	40%	52%	42%	**21%**	**45%**	**38%**
21%-30%	**16%**	15%	17%	13%	20%	10%	18%	14%	12%	22%	24%	15%	13%	12%	16%	**38%**	**11%**	**12%**
> 30%	**9%**	12%	6%	11%	10%	7%	5%	8%	15%	4%	5%	8%	9%	12%	16%	**11%**	**13%**	**7%**
Support for Reuse of Water for FIRE PROTECTION																		
Support	**92%**	89%	95%	94%	96%	87%	93%	86%	96%	96%	96%	93%	90%	89%	100%	94%	98%	89%
Oppose	**4%**	6%	3%	3%	2%	9%	3%	9%	3%	0%	4%	2%	6%	5%	0%	6%	0%	6%
Not Sure	**4%**	5%	2%	3%	2%	4%	4%	5%	1%	4%	0%	5%	4%	6%	0%	0%	2%	5%
Support for Reuse of Water for TOILET FLUSHING																		
Support	**81%**	79%	84%	81%	85%	78%	**69%**	**78%**	**91%**	**89%**	82%	79%	80%	89%	91%	86%	82%	80%
Oppose	**9%**	9%	8%	9%	8%	12%	**13%**	**13%**	**5%**	**4%**	16%	8%	9%	3%	0%	11%	13%	7%
Not Sure	**10%**	12%	8%	10%	7%	10%	**18%**	**9%**	**4%**	**7%**	2%	13%	11%	8%	9%	3%	5%	13%
Support for Reuse of Water for LANDSCAPE IRRIGATION																		
Support	**77%**	**70%**	**84%**	**77%**	**83%**	**73%**	68%	80%	84%	81%	85%	72%	76%	81%	90%	78%	81%	76%
Oppose	**13%**	**17%**	**8%**	**7%**	**11%**	**19%**	19%	9%	10%	4%	12%	15%	13%	5%	5%	11%	14%	12%
Not Sure	**10%**	**13%**	**8%**	**16%**	**6%**	**8%**	13%	11%	6%	15%	3%	13%	11%	14%	5%	11%	5%	12%
Support for Reuse of Water for DRINKING/TAP WATER																		
Support	**30%**	34%	26%	**38%**	**30%**	**23%**	27%	25%	38%	15%	34%	21%	26%	43%	32%	35%	37%	25%
Oppose	**43%**	35%	49%	**37%**	**38%**	**57%**	45%	41%	41%	52%	41%	56%	44%	30%	32%	41%	40%	45%
Not Sure	**28%**	31%	25%	**25%**	**32%**	**20%**	28%	34%	21%	33%	25%	23%	30%	27%	36%	24%	23%	30%
Reallocation of Water Storage in Stockton Lake																		
Strongly Support	**17%**	**20%**	**14%**	9%	23%	18%	16%	17%	22%	15%	27%	7%	20%	24%	23%	8%	25%	17%
Somewhat Support	**37%**	**35%**	**38%**	40%	40%	31%	38%	32%	35%	48%	25%	33%	45%	32%	41%	41%	41%	34%
Somewhat Oppose	**13%**	**19%**	**8%**	16%	7%	18%	14%	21%	7%	7%	9%	20%	13%	10%	0%	5%	5%	17%
Strongly Oppose	**6%**	**4%**	**8%**	9%	6%	6%	6%	5%	11%	0%	12%	6%	6%	5%	4%	14%	7%	5%
Not Sure	**27%**	**22%**	**32%**	26%	24%	27%	26%	25%	25%	30%	27%	34%	16%	29%	32%	32%	22%	27%

Questionnaire

Citizen Water Supply and Usage Survey — 2017

Carthage, Monett, Mt. Vernon (n = 302)

1. **How strongly do you agree or disagree with this statement: Having an adequate long-term supply of water is important for your community's quality of life and economic competitiveness.**

   88%...Strongly Agree
   11%...Somewhat Agree
   0%...Somewhat Disagree
   1%...Strongly Disagree

2. **What type of organization, if any, supplies your home tap water?**

   73.8%...City
   14.5%...None, I am on a private well
   6.9%...Public Utility
   0.8%...Public Water Supply District (PWSD)
   0.8%...Private Company
   0.0%...County
   0.0%...Neighborhood Association
   3.2%...Not Sure

3. **What is the source of your home tap water?**

   41%...Aquifer (e.g., well)
   4%...Surface Water (e.g., lake/river)
   5%...Combination of aquifer and surface water
   50%...Not Sure

4. **On average, about how much per month is your home water bill?**

   16%...None, I am on a private well
   2%...$1 to $10 per month
   23%...$11 to $20 per month
   31%...$21 to $30 per month
   18%...$31 to $40 per month
   10%...More than $40 per month

5. **Compared to other monthly essentials, how would you describe the expense of your monthly home water bill?**

   35%...Very inexpensive
   41%...Somewhat inexpensive
   20%...Somewhat expensive
   4%...Very expensive

6. **Considering the amount of water you use at home per month and the amount of your monthly home water bill, would you say the water provided to your home is an excellent, good, fair, or poor value?**

   36%...Excellent Value
   38%...Good Value
   21%...Fair Value
   5%...Poor Value

7. **Based on your current water bill, how much more would you be willing to pay per month to ensure an adequate long-term supply of drinking water?**

   43%...None, no more than what I am paying now
   37%...$1 to $5 more
   14%...$6 to $10 more
   3%...$11 to $15 more
   <1%...$16 to $20 more
   2%...More than $20

8. **How strongly do you agree or disagree with this statement: Locally elected officials, such as county commissioners and city mayors, have an obligation to plan ahead and invest in the necessary infrastructure to ensure that homeowners, businesses, and farmers have adequate long-term access to water.**

   63%...Strongly Agree
   31%...Somewhat Agree
   3%...Somewhat Disagree
   3%...Strongly Disagree

9. **Droughts occur periodically as part of the natural climate cycle. When your area experiences a drought and your local provider of water has to implement emergency water conservation measures, how much could you realistically reduce your water consumption?**

   13%...None, I could not use any less water than I am using now
   25%...Less than 10%
   37%...10% to 20% less
   16%...21% to 30% less
   9%...More than 30%

10. **How strongly do you agree or disagree with this statement: To maintain an adequate long-term supply of water in southwest Missouri, investments in water supply and infrastructure are necessary.**

    57%...Strongly Agree
    38%...Somewhat Agree
    4%...Somewhat Disagree
    1%...Strongly Disagree

11. **How strongly would you support or oppose the reallocation of a small amount of water storage in Stockton Lake to be used by citizens and businesses in southwest Missouri for long-term water supply?**

17%...Strongly Support
37%...Somewhat Support
13%...Somewhat Oppose
6%...Strongly Oppose
27%...Not Sure

12. **Water providers treat water to very high drinking water standards and then deliver it to homes and businesses for use. Once that water has been used, it is again treated to very high drinking water standards and then released into area waterways rather than being reused. To save money and conserve water, instead of releasing this highly treated water back into area waterways (lakes, streams, rivers) would you support or oppose its reuse for the following:**

	Support	Oppose	Not Sure
1. Fire protection	92%	4%	4%
2. Toilet flushing	81%	9%	10%
3. Irrigation of landscaping	77%	13%	10%
4. Drinking/Tap water	30%	43%	27%

Respondent Information: The last few questions are about you and your household. They will be used to group responses to the survey. Your responses are completely confidential and anonymous.

13. **What town or city do you live in?**

Carthage = 53% Monett = 31% Mt. Vernon = 16%

14. **Approximately how many years have you lived in southwest Missouri?**

Range = < 1 year–87 years, Mean = 35.3 years, Median = 35 years
< 10 years = 15%, 10–29 years = 24%, 30+ years = 61%

15. **In the past couple of years, have you used any of the following lakes or rivers for recreational purposes (e.g., camping, picnicking, swimming, fishing, boating, etc.)?**

	Yes	No
1. Table Rock Lakes	51%	49%
2. Stockton Lake	36%	64%
3. Pomme de Terre Lake	6%	94%

16. **What is your gender?** 48%...Male 52%...Female

17. **What is your birth year?**

    Age range = 21–97 years old, Mean = 53.1 years old, Median = 53 years old

    Age < 40 years = 28%, Age 40–64 years = 44%, Age 65+ years = 28%

18. **What is your educational level?**

    3%...Did not complete high school

    25%...High school graduate/GED

    27%...Some college/Vo-Tech

    34%...College graduate

    11%...Post-graduate studies (e.g., MA, Ph.D., MD)

19. **Which of the following categories best describes your total annual household income before taxes?**

    19%...Less than $25,000

    26%...$25,000 to $39,999

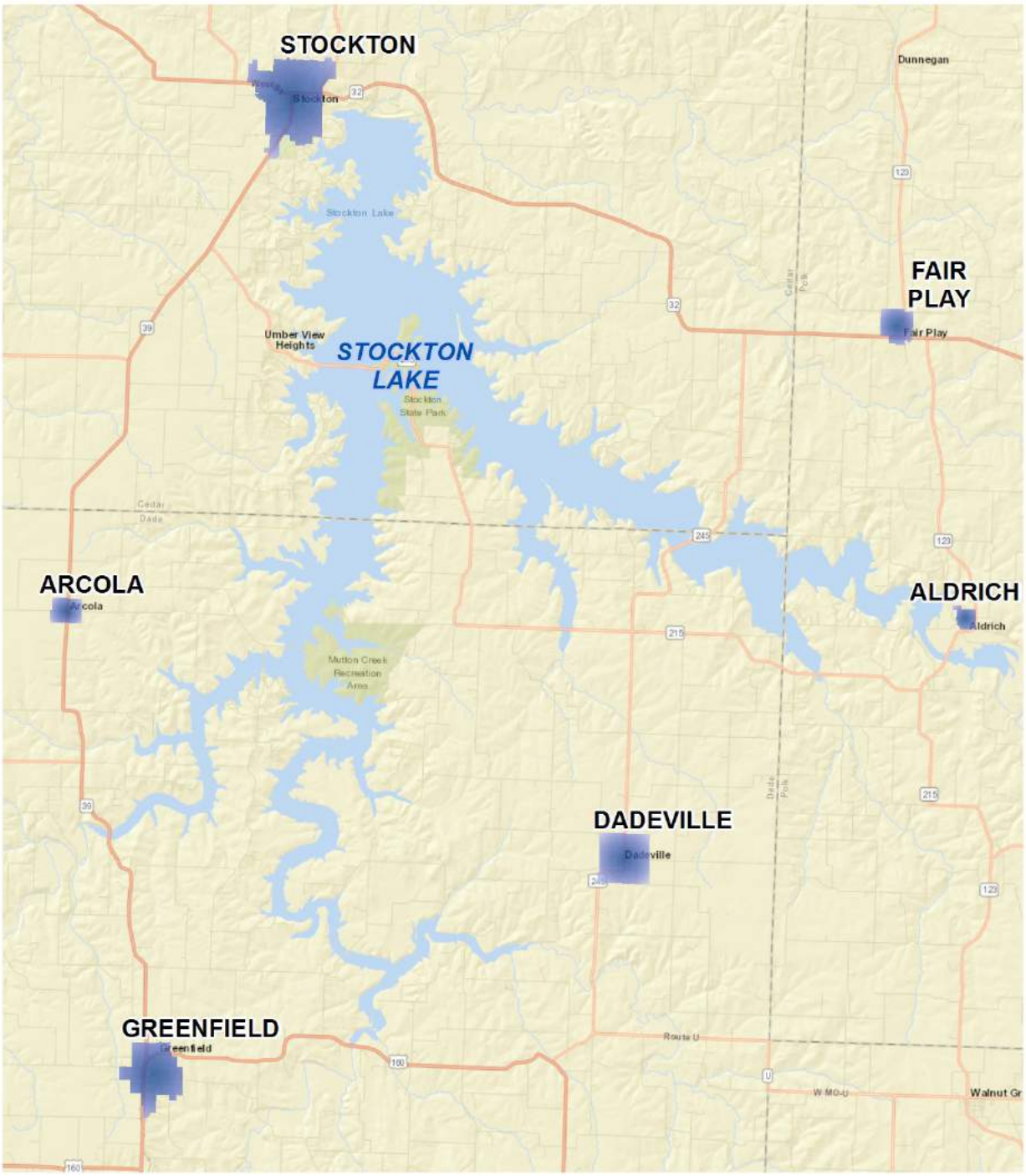
    30%...$40,000 to $69,999

    16%...$70,000 to $99,999

    9%...$100,000 or more

Thank You! This Completes the Survey.

STOCKTON LAKE AREA



EXECUTIVE SUMMARY

This Executive Summary presents an overview of the 2017 Stockton and Stockton Lake Area Citizen Water Supply and Usage Survey. The report is based on 301 surveys conducted online and by telephone during the summer and fall of 2017. Overall findings have a margin of error of +/- 5.5% at the 95% confidence interval.

The survey was designed, administered, and analyzed by **Opinion Research Specialists, LLC** of Springfield, Missouri with input from the Tri-State Water Resource Coalition. Survey findings are summarized below.

Source of Home Tap Water

- The vast majority of respondents (83%) said their home tap water came from an aquifer, while 4% mentioned surface water and 1% said it was a combination of the two. Notably, only 13% of respondents were unsure as to the source of their home tap water.

Type of Organization Supplying Home Tap Water

- About two-thirds of respondents (66%) said their home tap water was supplied via a well and 28% thought it was supplied by the city.

Average Monthly Home Water Bill

- Nearly 60% of respondents reported having no monthly water bill (they were on a private well), while 18% said they paid more than $40 a month (second largest group).

Monthly Home Water Bill Perceptions

- The vast majority of respondents (72%) said their monthly water bill was “very inexpensive” compared to other monthly essentials. Similarly, 73% rated the “value” of their home water (price paid for amount consumed) as “excellent.” Only 2% of respondents thought it was a “poor” value.

Amount Willing to Pay Extra to Ensure Long-Term Supply of Water

- 73% of respondents said they would not pay anything extra per month on their water bill to ensure a long-term supply of drinking water. This was particularly true for residents with a high school education or less (83%).

- With the exception of highly educated respondents (i.e., post-graduate degrees), a majority of respondents (57% to 83%) from all other demographic groups were **not** willing to pay anything extra per month on their water bill to ensure a long-term supply of drinking water. This was particularly true for respondents less formally educated (high school or less).

Long-Term Supply of Water: Importance and Infrastructure

- 80% of respondents "strongly agreed" that having a long-term supply of water was critical for their community's quality of life and economic competitiveness. Only 2% disagreed with this statement.

- 59% "strongly agreed" that locally elected officials must invest in infrastructure to ensure long-term access to water for citizens, farmers, and businesses. Ten percent disagreed with this statement.

- 58% "strongly agreed" that investments in water supply and infrastructure were needed to guarantee a long-term supply of water to southwest Missouri. Seven percent disagreed with this statement.

Reducing Water Consumption in an Emergency

- In the event of a severe drought, a plurality of Stockton and Stockton Lake area respondents (30%) said **no reduction** in their water consumption was possible and 21% said their reduction in consumption would be less than 10%. About 25% thought they could consume 10% to 20% less water and 22% believed they could temporarily cut water consumption by more than 20%.

- Ability and/or willingness to reduce water consumption during a severe drought was strongly linked to lake usage.

Support for Using Treated Wastewater

- To save money and conserve water, at least 70% of respondents said they would support the use of treated wastewater for purposes of fire protection, toilet flushing, and landscape irrigation. However, only 39% would approve the use of treated wastewater for drinking/tap water purposes.

Reallocation of Water Storage in Stockton Lake

- While 42% of Stockton and Stockton Lake area respondents expressed some level of support for the idea of reallocating a small amount of water storage in Stockton Lake to be used by citizens and businesses throughout southwest Missouri for long-term water supply, 37% were opposed, and 21% were undecided on this issue.

- Support for the water storage reallocation plan was strongest among younger respondents, while those most opposed were middle-income respondents. A relatively large number of respondents from each demographic group were undecided on this issue — this was especially true for nonusers of Stockton Lake (39%).

INTRODUCTION

This survey was commissioned by the Tri-State Water Resource Coalition to assess the **opinions** and **perceptions** about water supply and usage in southwest Missouri among residents living in Stockton, Missouri and other communities in the Stockton Lake area (Greenfield, Fair Play, Dadeville, Arcola, and Aldridge). This survey is one of seven surveys targeting a 16-county area in southwest Missouri. Questions on all seven surveys are identical so that differences in perceptions can be assessed.

SURVEY DESIGN AND METHODOLOGY

The survey was designed, administered, and analyzed by **Opinion Research Specialists, LLC** of Springfield, Missouri with input from the Tri-State Water Resource Coalition. Survey results are based on 301 completed online and telephone surveys conducted during the summer/fall of 2017.

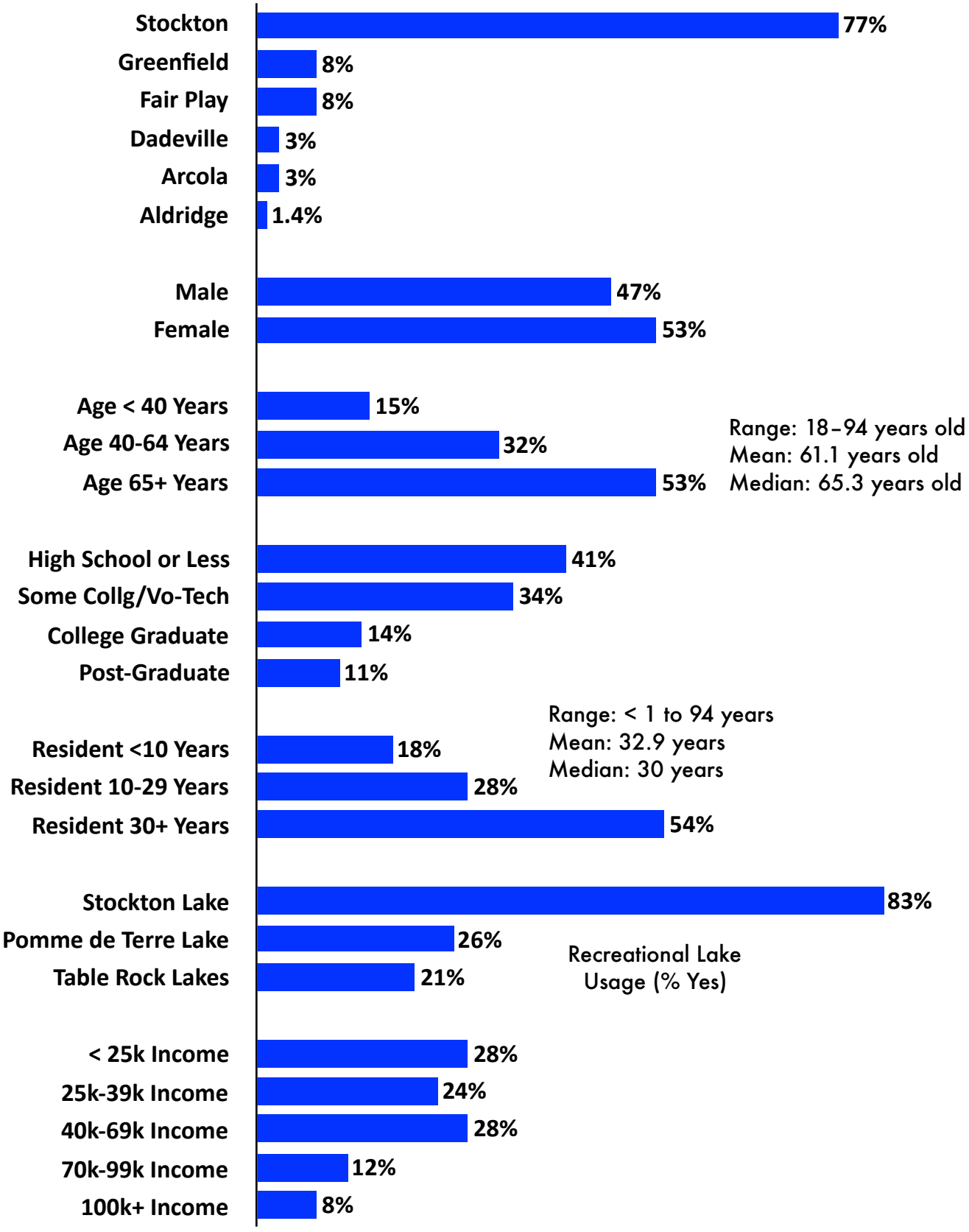
INTERPRETATION OF DATA

Overall survey results, based on 301 completed questionnaires, have a margin of error of +/- 5.5% at the 95% confidence interval. For example, if a response listed in the report is 57% one can be 95% confident that the "true" percentage, that which would have been attained if all adult residents of the City of Stockton and communities in the Stockton Lake area had participated in the survey, is between 51.5% and 62.5%. Margin of error increases when subsets of the total sample are analyzed (e.g., male versus female, etc.).

Some percentages in the report may not add to exactly 100% due to rounding.

Note: Margin of error for a sample of 301 respondents randomly selected from a population of 10,000 or greater is +/- 5.8%. However, due to the relatively small population of the City of Stockton and the Stockton Lake communities surveyed (4,049 people based on 2016 census data), margin of error is slightly lower +/- 5.5%.

SURVEY RESPONDENT PROFILE

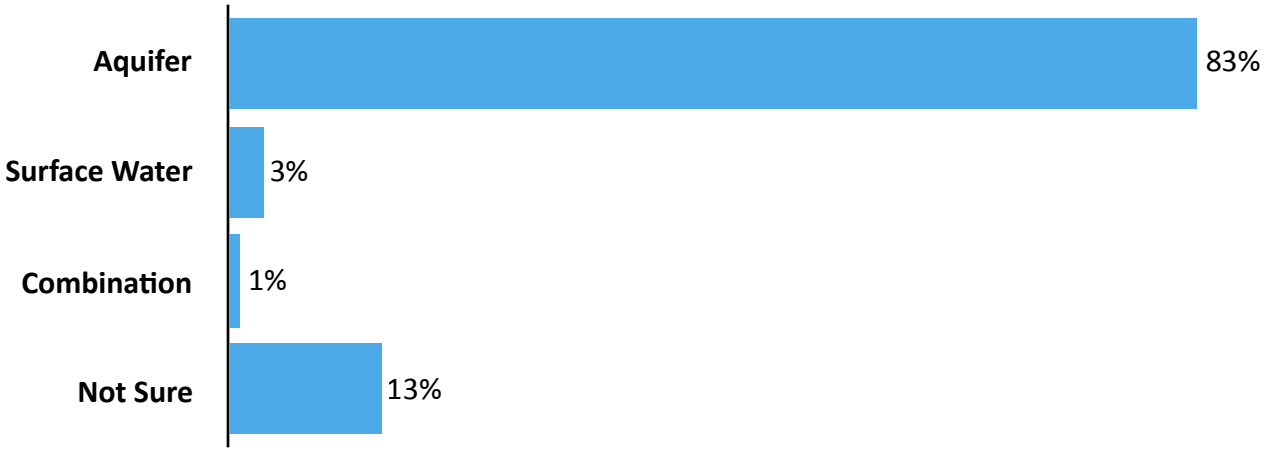


Stockton Lake Area

Survey Results

Source of Home Tap Water

Most respondents (83%) said their home tap water came from an aquifer, 3% mentioned surface water, and 1% thought it was a combination of aquifer and surface water. Relatively few respondents (13%) did not know the source of their home tap water.

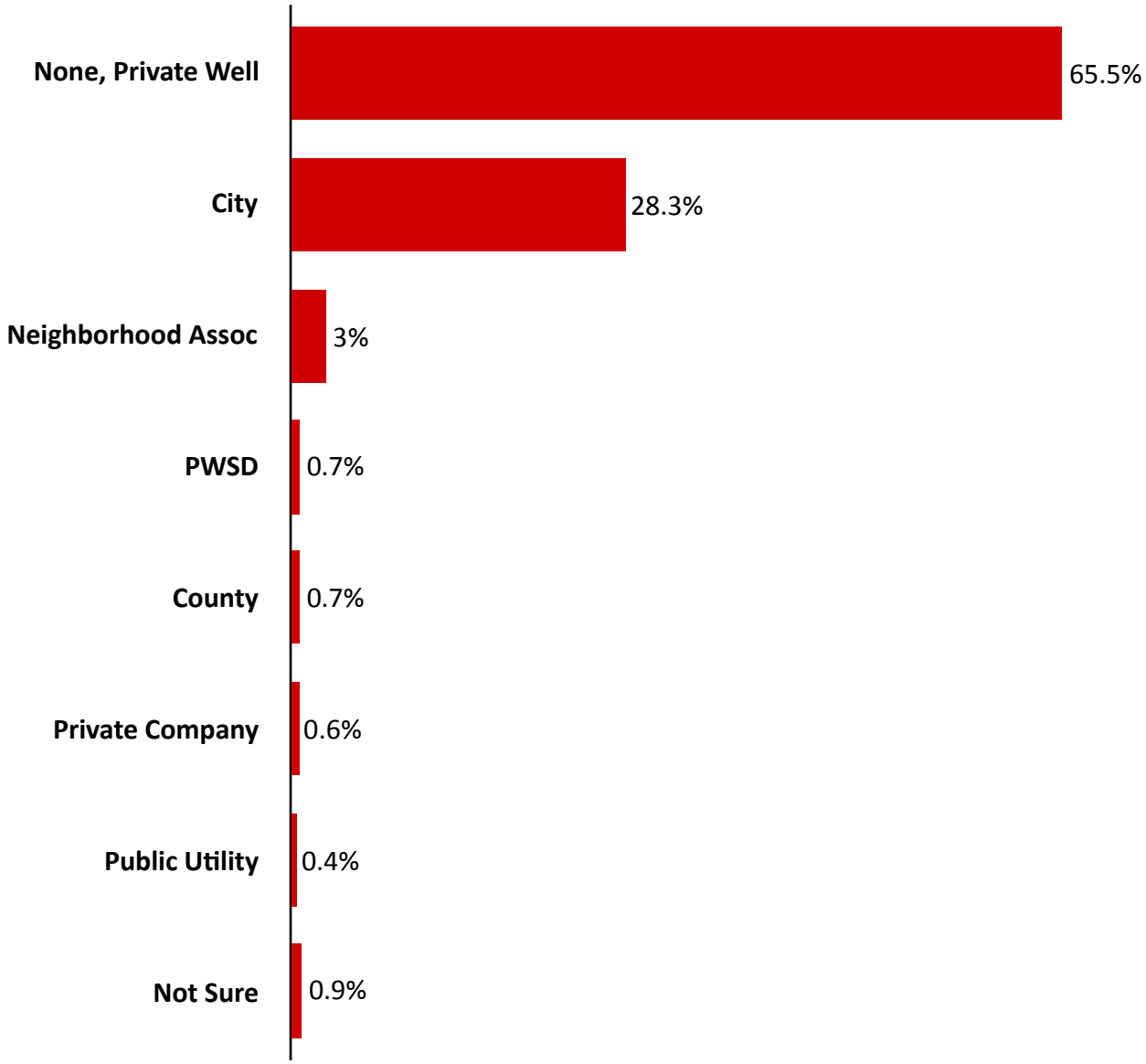


Demographic Analysis: Females and younger-to-middle-aged respondents were more likely than males and older respondents to ***not know*** the source of their home tap water.

Demographics	Aquifer	Surface Water	Combination	Not Sure
Male	90%	2%	1%	7%
Female	76%	4%	1%	**19%**
18-39 years old	67%	5%	3%	**25%**
40-64 years old	77%	5%	1%	**17%**
65+ years old	89%	1%	1%	9%

Type of Organization Supplying Home Tap Water

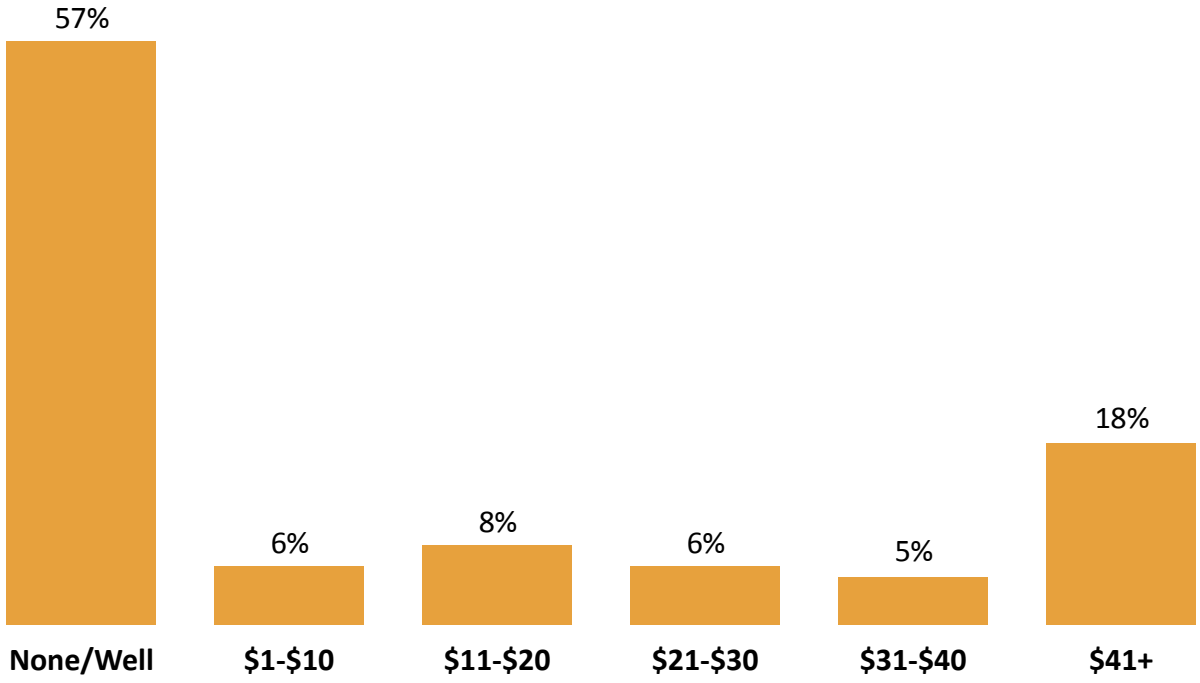
Most respondents (66%) said they were on a private well, while 28% believed their home tap water was city provided. About 5% thought their water was supplied by other types of organizations (e.g., neighborhood association, PWSD, etc.) and 1% did not know.



Demographic Analysis: With the exception of younger respondents, a majority of all demographic groups said their home tap water came from a private well. In contrast, a large plurality of younger respondents (49%) believed their tap water was provided by the city.

Average Monthly Home Water Bill

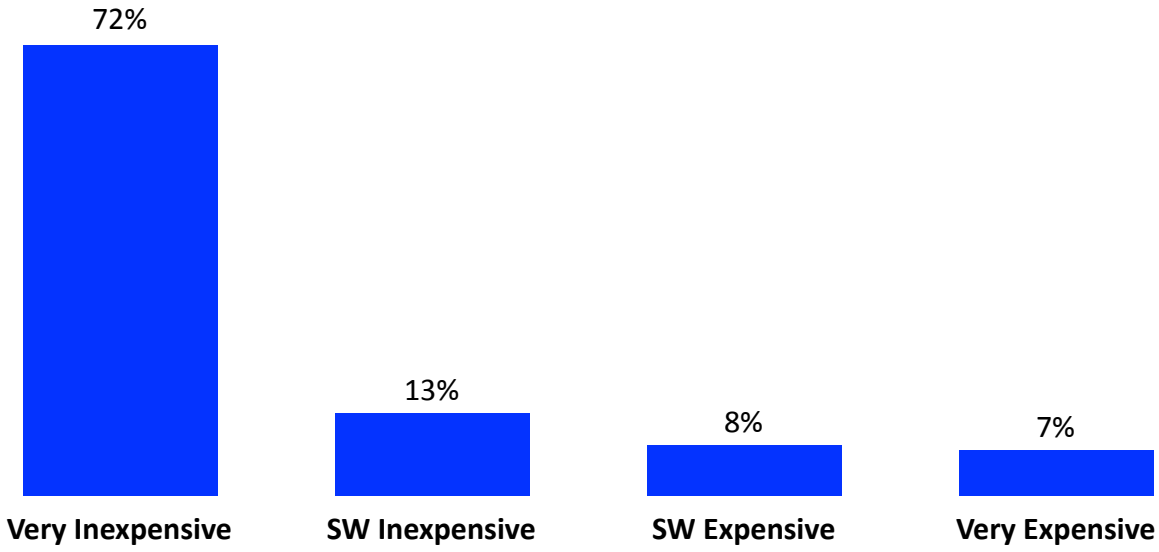
Close to 60% of respondents said they had no monthly water bill (they were on a private well), while 18% reported paying more than $40 per month (second largest group).



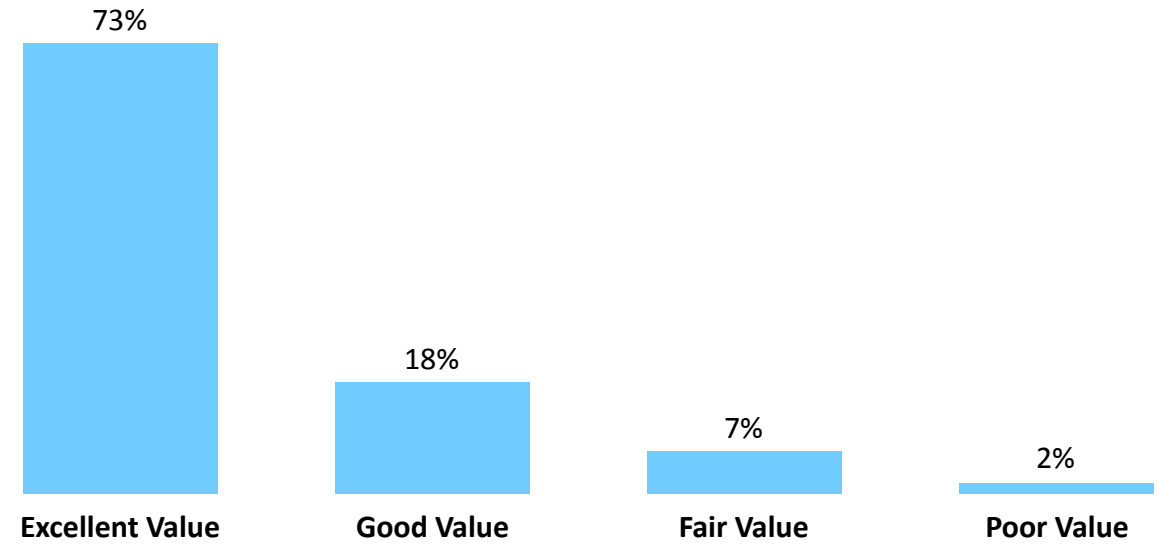
Demographic Analysis: Regardless of demographic profile, a plurality of survey respondents said their monthly water bill was $0 because their water came from a private well.

Monthly Home Water Bill Perceptions

Perceived Expense: A large percentage of respondents (72%) said, when compared to other monthly essentials, their monthly home water bill was "very inexpensive" and 13% said it was "somewhat inexpensive." Only 15% thought their water bill was expensive compared to other monthly essentials.

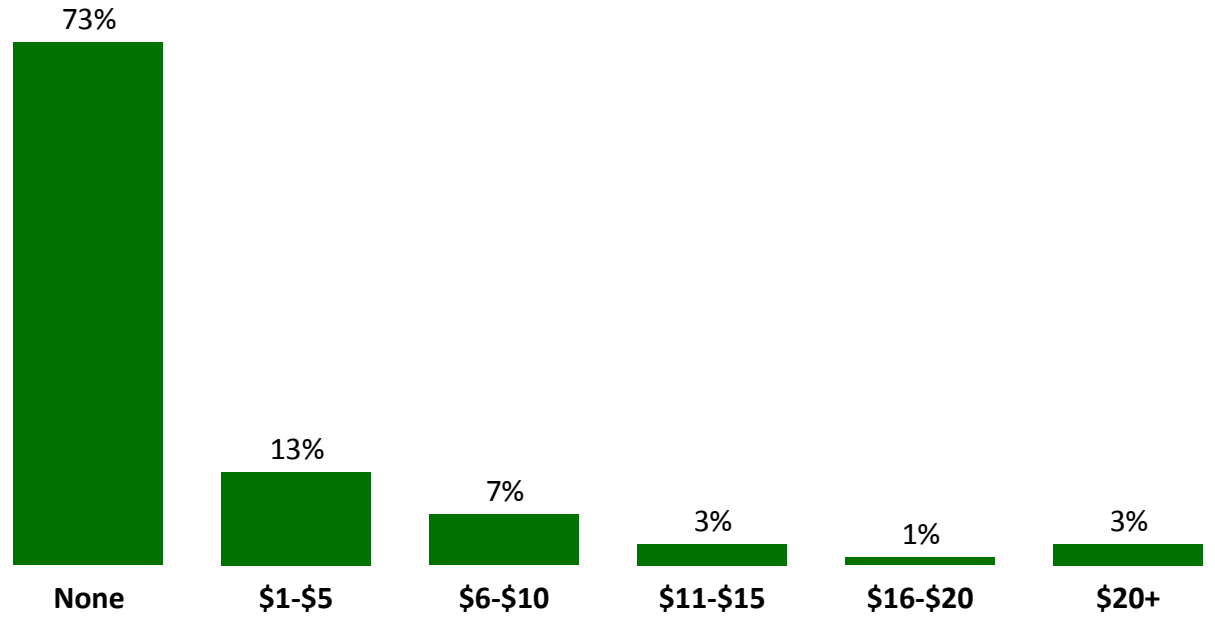


Perceived Value: Nearly 75% of respondents were of the opinion that the water provided to their home was an "excellent" value and 18% thought it was a "good" value. Only 2% said it was a "poor" value.



Amount Willing to Pay Extra to Ensure Supply of Water

When asked how much more per month they would be willing to pay on their water bill to ensure a long-term supply of drinking water, the vast majority of respondents (73%) said they would not pay anything extra.



Demographic Analysis: Respondents with limited formal education (high school or less) were much more likely than any other demographic group to say they would **not pay anything extra per month** to ensure an adequate long-term supply of drinking water.

Education	None	$1-$5	$6-$10	$11-$15	$16-$20	> $20
High School or Less	**83%**	8%	7%	0%	1%	1%
Some College/Vo-Tech	64%	16%	10%	6%	1%	3%
College Graduate	70%	20%	7%	3%	0%	0%
Post-Graduate	50%	20%	5%	0%	5%	**20%**

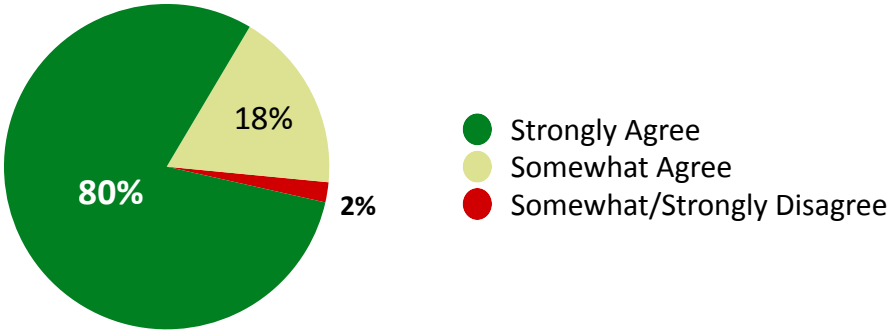
Amount Willing to Pay Extra by Demographics

With the sole exception of respondents with post-graduate degrees, a majority of respondents (57% to 83%) from all other demographic groups were **not** willing to pay anything extra per month on their water bill to ensure a long-term supply of drinking water. This was especially true for those with a high school diploma or less (83%).

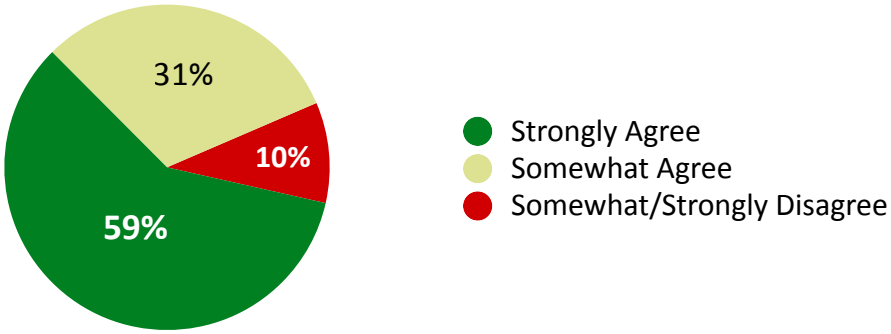
Demographics	None	$1 to $5	$6 to $10	> $10
Male	75%	11%	8%	6%
Female	70%	15%	6%	9%
Lake user	70%	16%	7%	7%
Lake nonuser	78%	3%	6%	13%
18-39 years old	70%	10%	10%	10%
40-64 years old	65%	21%	6%	8%
65+ years old	75%	10%	8%	7%
High school or less	**83%**	8%	7%	2%
Some college/vo-tech	64%	16%	10%	10%
College graduate	70%	20%	7%	3%
Post-graduate	**50%**	**20%**	**5%**	**25%**
< 25k household income	74%	12%	12%	2%
25k-39k household income	57%	19%	17%	7%
40k-69k household income	63%	15%	7%	15%
70k-99k household income	75%	15%	0%	10%
100k+ household income	75%	19%	0%	6%
< 10 years of residency	79%	15%	3%	3%
10-29 years of residency	66%	16%	10%	8%
30+ years of residency	72%	13%	7%	8%

Long-Term Supply of Water: Importance and Infrastructure

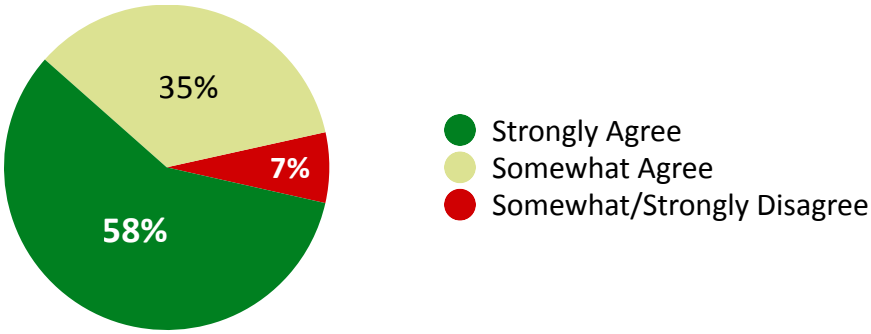
Importance of Long-Term Supply of Water: The vast majority of respondents (80%) *strongly agreed* that having an adequate long-term supply of water was important for their community's quality of life and economic competitiveness.



Obligation to Plan Ahead and Invest: A majority of respondents (59%) *strongly agreed* that locally elected officials have an obligation to plan ahead and invest in the necessary infrastructure to ensure that homeowners, businesses, and farmers have adequate long-term access to water. Ten percent disagreed with this statement.

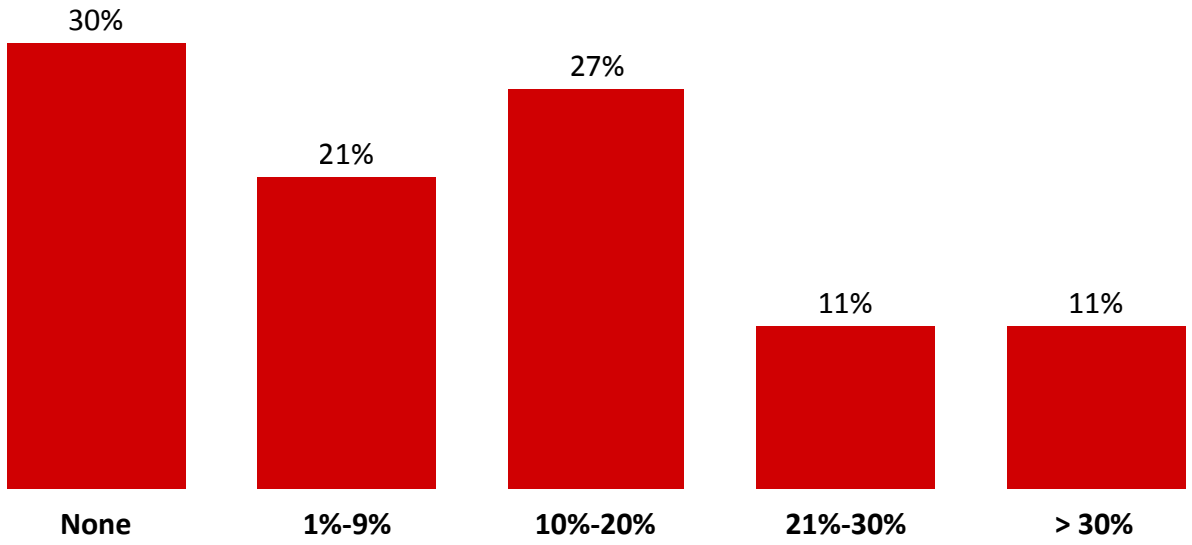


Investments in Water Supply and Infrastructure: A majority of respondents (58%) *strongly agreed* that investments in water supply and infrastructure were necessary to maintain an adequate long-term supply of water in southwest Missouri.



Reducing Water Consumption in an Emergency

In the event of a severe drought requiring emergency water conservation measures, 51% of Stockton and Stockton Lake area respondents said either **no reduction** in their water consumption would be possible (30%) or consumption could be reduced by 9% at most (21%). Just over one-quarter of respondents (27%) said they could reduce their water consumption by 10% to 20% and the remaining 22% could do so by more than 20%.

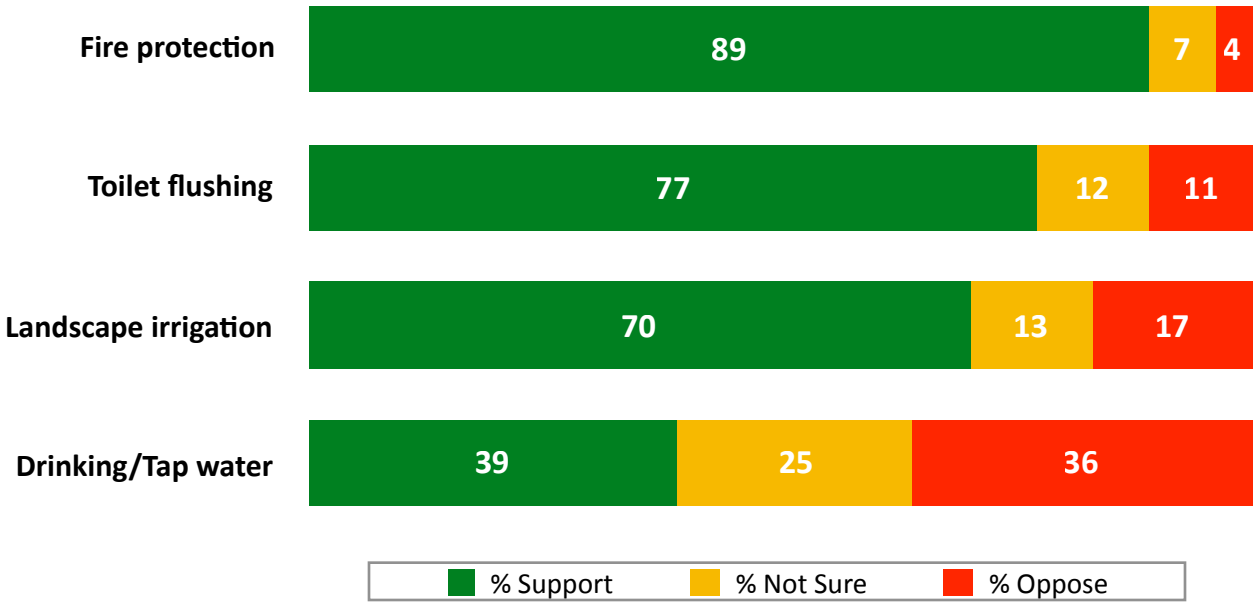


Demographic Analysis: Respondents who had **not used** Stockton, Pomme de Terre, or Table Rock Lakes for recreational purposes in the past couple of years were far more likely than lake users to say **no reduction** in water consumption would be possible during a drought (46% v. 26%, respectively).

Lake User	None	1%-9%	10%-20%	21%-30%	> 30%
Yes	**26%**	19%	29%	12%	**14%**
No	**46%**	28%	15%	8%	**3%**

Support for Using Treated Wastewater

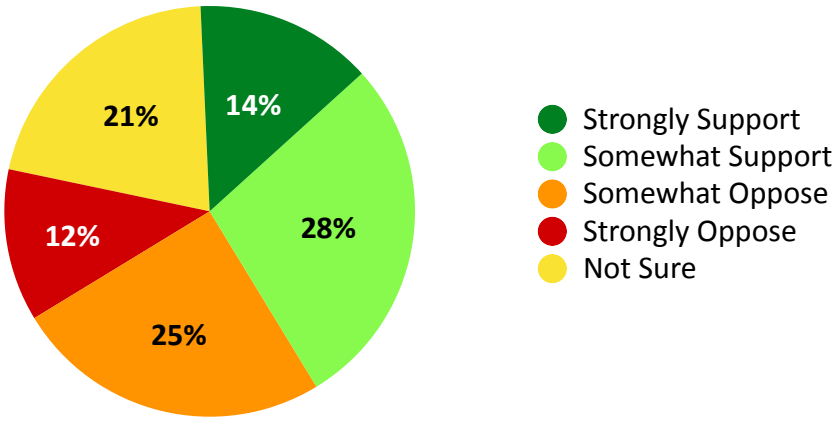
To save money and conserve water, respondents were asked if they would support or oppose the use of treated wastewater for various activities instead of being released into area waterways. While the vast majority of respondents said they would approve the use of treated wastewater for purposes of fire protection (89%), toilet flushing (77%), and landscape irrigation (70%); relatively few respondent (39%) would do so for drinking/tap water purposes.



Demographic Analysis: There were no meaningful differences of opinion on this question based on respondent demographic characteristics.

Reallocation of Water Storage in Stockton Lake

Approximately 40% of Stockton and Stockton Lake area respondents expressed some level of support for the idea of reallocating a small amount of water storage in Stockton Lake to be used by citizens and businesses in southwest Missouri for long-term water supply. Similarly, about 40% were opposed to this idea and 21% were undecided.



Demographic Analysis: There were no statistically significant differences of opinion on this question based on respondent demographic characteristics. However, Stockton Lake users were significantly more likely than nonusers to oppose this idea (40% v. 18%), while nonusers were much more likely than lake users to be undecided (39% v. 17%).

Stockton Lake User	Strongly Support	Somewhat Support	Somewhat Oppose	Strongly Oppose	Not Sure
Yes	15%	28%	**26%**	**14%**	**17%**
No	11%	32%	**14%**	**4%**	**39%**

Reallocation of Water Storage in Stockton L. by Demographics

Demographically, support for the Stockton Lake water storage reallocation plan ranged from 33% to 55%, while those opposed ranged from 18% to 44%. A relatively large percentage of respondents across all demographic groups were undecided on this issue with Stockton Lake nonusers being the most undecided by far (39%).

Demographics	Strongly or SW Support	Strongly or SW Oppose	Not Sure
Male	45%	39%	16%
Female	38%	35%	27%
Stockton Lake user	43%	40%	17%
Stockton Lake nonuser	43%	**18%**	**39%**
18-39 years old	**55%**	22%	23%
40-64 years old	41%	42%	17%
65+ years old	39%	39%	22%
High school or less	45%	33%	22%
Some college/vo-tech	43%	39%	18%
College graduate	**33%**	43%	24%
Post-graduate	45%	34%	21%
< 25k household income	43%	37%	20%
25k-39k household income	46%	27%	27%
40k-69k household income	41%	**44%**	15%
70k-99k household income	44%	40%	16%
100k+ household income	39%	39%	22%
< 10 years of residency	39%	37%	24%
10-29 years of residency	48%	29%	23%
30+ years of residency	41%	40%	19%

Demographic Analysis

NOTE: Table percentages **bolded in red** denote statistical significance at the .05 level or less.

Table percentages **bolded in red** and **shaded in yellow** denote statistical significance at the .001 level or less.

		Gender		Respondent Age			Educational Level				Annual Household Income					Years of Residency		
	OVERALL	M	F	< 40	40-64	65+	HS or Less	Some College	College Grad	Post-Grad	<25k	25k-39k	40k-69k	70k–99k	100k+	< 10	10-29	30+
Source of Home Tap Water																		
Aquifer	**83%**	**90%**	**76%**	**67%**	**77%**	**89%**	84%	79%	76%	83%	77%	75%	87%	92%	83%	79%	85%	81%
Surface Water	**3%**	**2%**	**4%**	**5%**	**5%**	**1%**	3%	4%	3%	3%	3%	6%	3%	4%	0%	2%	3%	3%
Combination	**1%**	**1%**	**1%**	**3%**	**1%**	**1%**	1%	2%	0%	0%	2%	4%	0%	0%	0%	2%	1%	1%
Not Sure	**13%**	**7%**	**19%**	**25%**	**17%**	**9%**	12%	15%	21%	14%	18%	15%	10%	4%	17%	17%	11%	15%
Type of Organization Supplying Home Tap Water																		
None/Private Well	**66%**	74%	58%	**45%**	**60%**	**69%**	64%	66%	59%	54%	56%	59%	66%	72%	67%	66%	64%	63%
City	**28%**	22%	34%	**49%**	**30%**	**27%**	30%	31%	30%	32%	41%	31%	24%	12%	33%	28%	30%	31%
Neighborhood Association	**3%**	2%	4%	**0%**	**7%**	**2%**	4%	1%	8%	4%	3%	4%	5%	8%	0%	6%	4%	2%
Public Water Supply District	**<1%**	<1%	<1%	**3%**	**1%**	**0%**	1%	1%	0%	0%	0%	2%	2%	0%	0%	0%	0%	1%
County	**<1%**	<1%	<1%	**0%**	**0%**	**<1%**	1%	0%	0%	3%	0%	2%	0%	4%	0%	0%	0%	1%
Private Company	**<1%**	0%	1%	**0%**	**1%**	**<1%**	0%	0%	0%	7%	0%	0%	1%	4%	0%	0%	0%	1%
Public Utility	**<1%**	<1%	0%	**3%**	**0%**	**0%**	0%	1%	0%	0%	0%	2%	0%	0%	0%	0%	1%	0%
Not Sure	**1%**	0%	2%	**0%**	**1%**	**0%**	0%	0%	3%	0%	0%	0%	2%	0%	0%	0%	1%	0%
Average Monthly Home Water Bill																		
None/On a Well	**57%**	62%	53%	42%	50%	59%	56%	52%	53%	46%	43%	50%	47%	69%	79%	**58%**	**56%**	**52%**
$1–$10	**6%**	7%	5%	4%	4%	7%	6%	8%	6%	4%	2%	14%	7%	9%	0%	**0%**	**2%**	**10%**
$11–$20	**8%**	9%	7%	4%	8%	9%	6%	11%	6%	17%	6%	4%	15%	9%	0%	**19%**	**5%**	**7%**
$21–$30	**6%**	2%	9%	8%	8%	5%	5%	5%	10%	12%	9%	7%	7%	4%	7%	**5%**	**3%**	**8%**
$31–$40	**5%**	3%	8%	4%	10%	5%	9%	4%	6%	0%	8%	11%	4%	0%	0%	**8%**	**6%**	**5%**
> $40	**18%**	17%	18%	38%	20%	15%	18%	20%	19%	21%	32%	14%	20%	9%	14%	**10%**	**28%**	**17%**
Monthly Home Water Bill — Perceived Expense																		
Very Inexpensive	**72%**	78%	66%	58%	64%	73%	68%	71%	67%	68%	56%	67%	69%	88%	70%	73%	64%	70%
Somewhat Inexpensive	**13%**	8%	18%	21%	20%	11%	13%	13%	16%	25%	17%	21%	15%	4%	24%	16%	11%	17%
Somewhat Expensive	**8%**	7%	10%	16%	9%	8%	7%	10%	14%	7%	14%	6%	11%	4%	0%	9%	11%	8%
Very Expensive	**7%**	7%	6%	5%	7%	8%	12%	6%	3%	0%	12%	6%	5%	4%	6%	2%	14%	5%

		Gender		Respondent Age			Educational Level				Annual Household Income					Years of Residency		
	OVERALL	M	F	< 40	40-64	65+	HS or Less	Some College	College Grad	Post-Grad	<25k	25k-39k	40k-69k	70k–99k	100k+	< 10	10-29	30+
Monthly Home Water Bill — Perceived Value																		
Excellent Value	**73%**	**81%**	**67%**	61%	63%	77%	68%	69%	69%	79%	**58%**	**72%**	**63%**	**96%**	**72%**	75%	68%	71%
Good Value	**18%**	**12%**	**23%**	28%	27%	14%	24%	18%	25%	14%	**21%**	**26%**	**24%**	**0%**	**22%**	18%	20%	21%
Fair Value	**7%**	**5%**	**8%**	11%	6%	7%	6%	8%	6%	7%	**16%**	**2%**	**11%**	**0%**	**0%**	7%	8%	6%
Poor Value	**2%**	**2%**	**2%**	0%	4%	2%	2%	5%	0%	0%	**5%**	**0%**	**2%**	**4%**	**6%**	0%	4%	2%
Amount Willing to Pay Extra Per Month on Home Water Bill to Ensure Long-Term Supply of Drinking Water																		
None	**73%**	75%	70%	70%	65%	75%	**83%**	**64%**	**70%**	**50%**	74%	57%	63%	75%	75%	79%	66%	72%
$1–$5	**13%**	11%	15%	10%	21%	10%	**8%**	**16%**	**20%**	**20%**	12%	19%	15%	15%	19%	15%	16%	13%
$6–$10	**7%**	8%	6%	10%	6%	8%	**7%**	**10%**	**7%**	**5%**	12%	17%	7%	0%	0%	3%	10%	7%
$11–$15	**3%**	4%	3%	7%	0%	3%	**0%**	**6%**	**3%**	**0%**	0%	5%	7%	0%	0%	0%	3%	3%
$16–$20	**1%**	0%	2%	0%	3%	1%	**1%**	**1%**	**0%**	**5%**	0%	2%	4%	0%	0%	0%	2%	2%
> $20	**3%**	2%	4%	3%	5%	3%	**1%**	**3%**	**0%**	**20%**	2%	0%	4%	10%	6%	3%	3%	3%
Having an Adequate Long-Term Supply of Water is Important for Community Quality of Life and Economic Competitiveness																		
Strongly Agree	**80%**	83%	77%	67%	87%	83%	78%	82%	89%	86%	68%	80%	88%	96%	83%	80%	80%	84%
Somewhat Agree	**18%**	16%	20%	33%	12%	15%	20%	16%	11%	14%	29%	18%	12%	4%	17%	20%	19%	14%
Somewhat/Strongly Disagree	**2%**	1%	3%	0%	1%	2%	2%	2%	0%	0%	3%	2%	0%	0%	0%	0%	1%	2%
Locally Elected Officials Have an Obligation to Plan Ahead and Invest in Infrastructure to Ensure Community Long-Term Access to Water																		
Strongly Agree	**59%**	**55%**	**62%**	61%	60%	59%	51%	69%	69%	50%	58%	61%	71%	54%	50%	59%	61%	59%
Somewhat Agree	**31%**	**30%**	**33%**	36%	32%	27%	35%	21%	28%	43%	33%	23%	24%	38%	44%	36%	29%	29%
Somewhat/Strongly Disagree	**10%**	**15%**	**5%**	3%	8%	14%	14%	10%	3%	7%	9%	16%	5%	8%	6%	5%	10%	12%
Maintaining an Adequate Long-Term Supply of Water in SW Missouri Requires Investments in Water Supply and Infrastructure																		
Strongly Agree	**58%**	61%	56%	59%	63%	58%	53%	65%	68%	60%	58%	53%	65%	71%	62%	70%	58%	57%
Somewhat Agree	**35%**	31%	38%	41%	32%	32%	42%	25%	26%	32%	34%	37%	30%	19%	38%	23%	37%	35%
Somewhat/Strongly Disagree	**7%**	8%	6%	0%	5%	10%	5%	10%	6%	8%	8%	10%	5%	10%	0%	7%	5%	8%

		Gender		Respondent Age			Educational Level				Annual Household Income					Years of Residency		
	OVERALL	M	F	< 40	40-64	65+	HS or Less	Some College	College Grad	Post-Grad	<25k	25k-39k	40k-69k	70k–99k	100k+	< 10	10-29	30+
During a Severe Drought, How Much Could You Realistically Reduce Your Water Consumption?																		
None	**30%**	27%	32%	19%	27%	34%	**34%**	**28%**	**33%**	**19%**	31%	25%	30%	28%	23%	21%	38%	28%
< 10%	**21%**	18%	23%	16%	22%	20%	**27%**	**20%**	**8%**	**19%**	26%	19%	17%	12%	18%	22%	11%	24%
10%-20%	**27%**	32%	23%	38%	27%	25%	**30%**	**22%**	**31%**	**27%**	29%	38%	23%	24%	35%	31%	31%	24%
21%-30%	**11%**	9%	13%	11%	8%	14%	**2%**	**17%**	**17%**	**16%**	7%	10%	14%	20%	12%	12%	13%	10%
> 30%	**11%**	14%	9%	16%	16%	7%	**7%**	**13%**	**11%**	**19%**	7%	8%	16%	16%	12%	14%	7%	13%
Support for Reuse of Water for FIRE PROTECTION																		
Support	**89%**	87%	91%	87%	92%	88%	85%	92%	92%	93%	90%	88%	88%	96%	89%	91%	91%	87%
Oppose	**4%**	6%	3%	5%	4%	4%	5%	2%	5%	7%	5%	2%	3%	4%	11%	2%	3%	6%
Not Sure	**7%**	7%	6%	8%	4%	8%	10%	6%	3%	0%	5%	10%	9%	0%	0%	7%	6%	7%
Support for Reuse of Water for TOILET FLUSHING																		
Support	**77%**	76%	78%	77%	79%	76%	68%	81%	84%	89%	75%	78%	77%	92%	89%	83%	78%	75%
Oppose	**11%**	14%	9%	8%	11%	13%	16%	9%	5%	11%	18%	6%	10%	8%	5%	6%	8%	15%
Not Sure	**12%**	10%	13%	15%	10%	11%	16%	10%	11%	0%	7%	16%	13%	0%	6%	11%	14%	10%
Support for Reuse of Water for LANDSCAPE IRRIGATION																		
Support	**70%**	73%	67%	69%	78%	66%	69%	67%	84%	68%	74%	70%	70%	72%	83%	63%	79%	68%
Oppose	**17%**	17%	16%	15%	17%	18%	17%	20%	13%	14%	14%	18%	18%	16%	17%	26%	7%	19%
Not Sure	**13%**	10%	17%	16%	5%	16%	14%	13%	3%	18%	12%	12%	12%	12%	0%	11%	14%	13%
Support for Reuse of Water for DRINKING/TAP WATER																		
Support	**39%**	43%	35%	48%	33%	39%	37%	43%	30%	43%	40%	29%	44%	48%	30%	37%	46%	36%
Oppose	**36%**	33%	39%	34%	37%	37%	43%	26%	43%	39%	46%	43%	31%	28%	35%	41%	33%	36%
Not Sure	**25%**	24%	26%	18%	30%	24%	20%	31%	27%	18%	14%	28%	25%	24%	35%	22%	21%	28%
Reallocation of Water Storage in Stockton Lake																		
Strongly Support	**14%**	15%	12%	18%	14%	13%	11%	15%	16%	21%	15%	15%	16%	12%	17%	9%	12%	16%
Somewhat Support	**28%**	30%	26%	36%	27%	27%	34%	28%	16%	24%	28%	31%	25%	32%	22%	30%	36%	24%
Somewhat Oppose	**25%**	29%	21%	15%	30%	25%	22%	26%	30%	20%	24%	19%	33%	24%	33%	22%	22%	27%
Strongly Oppose	**12%**	10%	14%	8%	12%	13%	11%	13%	14%	14%	13%	8%	11%	16%	6%	15%	7%	14%
Not Sure	**21%**	16%	27%	23%	17%	22%	22%	18%	24%	21%	20%	27%	15%	16%	22%	24%	23%	19%

Questionnaire

Stockton & Lake Area Citizen Water Supply and Usage Survey — 2017

Stockton, Greenfield, Fair Play, Dadeville, Arcola, Aldridge (n = 301)

1. **How strongly do you agree or disagree with this statement: Having an adequate long-term supply of water is important for your community's quality of life and economic competitiveness.**

   80%...Strongly Agree
   18%...Somewhat Agree
   1%...Somewhat Disagree
   1%...Strongly Disagree

2. **What type of organization, if any, supplies your home tap water?**

   65.5%...None, I am on a private well
   28.3%...City
   3.0%...Neighborhood Association
   0.7%...Public Water Supply District (PWSD)
   0.7%...County
   0.6%...Private Company
   0.4%...Public Utility
   0.9%...Not Sure

3. **What is the source of your home tap water?**

   83%...Aquifer (e.g., well)
   3%...Surface Water (e.g., lake/river)
   1%...Combination of aquifer and surface water
   13%...Not Sure

4. **On average, about how much per month is your home water bill?**

   57%...None, I am on a private well
   6%...$1 to $10 per month
   8%...$11 to $20 per month
   6%...$21 to $30 per month
   5%...$31 to $40 per month
   18%...More than $40 per month

5. **Compared to other monthly essentials, how would you describe the expense of your monthly home water bill?**

   72%...Very inexpensive
   13%...Somewhat inexpensive
   8%...Somewhat expensive
   7%...Very expensive

6. **Considering the amount of water you use at home per month and the amount of your monthly home water bill, would you say the water provided to your home is an excellent, good, fair, or poor value?**

   73%...Excellent Value
   18%...Good Value
   7%...Fair Value
   2%...Poor Value

7. **Based on your current water bill, how much more would you be willing to pay per month to ensure an adequate long-term supply of drinking water?**

   73%...None, no more than what I am paying now
   13%...$1 to $5 more
   7%...$6 to $10 more
   3%...$11 to $15 more
   1%...$16 to $20 more
   3%...More than $20

8. **How strongly do you agree or disagree with this statement: Locally elected officials, such as county commissioners and city mayors, have an obligation to plan ahead and invest in the necessary infrastructure to ensure that homeowners, businesses, and farmers have adequate long-term access to water.**

   59%...Strongly Agree
   31%...Somewhat Agree
   4%...Somewhat Disagree
   6%...Strongly Disagree

9. **Droughts occur periodically as part of the natural climate cycle. When your area experiences a drought and your local provider of water has to implement emergency water conservation measures, how much could you realistically reduce your water consumption?**

   30%...None, I could not use any less water than I am using now
   21%...Less than 10%
   27%...10% to 20% less
   11%...21% to 30% less
   11%...More than 30%

10. **How strongly do you agree or disagree with this statement: To maintain an adequate long-term supply of water in southwest Missouri, investments in water supply and infrastructure are necessary.**

    58%...Strongly Agree
    35%...Somewhat Agree
    4%...Somewhat Disagree
    3%...Strongly Disagree

11. **How strongly would you support or oppose the reallocation of a small amount of water storage in Stockton Lake to be used by citizens and businesses in southwest Missouri for long-term water supply?**

    14%...Strongly Support

    28%...Somewhat Support

    25%...Somewhat Oppose

    12%...Strongly Oppose

    21%...Not Sure

12. **Water providers treat water to very high drinking water standards and then deliver it to homes and businesses for use. Once that water has been used, it is again treated to very high drinking water standards and then released into area waterways rather than being reused. To save money and conserve water, instead of releasing this highly treated water back into area waterways (lakes, streams, rivers) would you support or oppose its reuse for the following:**

	Support	Oppose	Not Sure
1. Fire protection	89%	4%	7%
2. Toilet flushing	77%	11%	12%
3. Irrigation of landscaping	70%	17%	13%
4. Drinking/Tap water	39%	36%	25%

Respondent Information: The last few questions are about you and your household. They will be used to group responses to the survey. Your responses are completely confidential and anonymous.

13. **What town or city do you live in?** Stockton = 77% Greenfield = 8% Fair Play = 8% Dadeville = 3% Arcola = 3% Aldridge = 1.4%

14. **Approximately how many years have you lived in southwest Missouri?**

    Range = 1 year–94 years, Mean = 32.9 years, Median = 30 years

    < 10 years = 18%, 10–29 years = 28%, 30+ years = 54%

15. **In the past couple of years, have you used any of the following lakes or rivers for recreational purposes (e.g., camping, picnicking, swimming, fishing, boating, etc.)?**

	Yes	No
1. Stockton Lake	83%	17%
2. Pomme de Terre Lake	26%	74%
3. Table Rock Lakes	21%	79%

16. **What is your gender?** 47%...Male 53%...Female

17. **What is your birth year?**

Age range = 18–94 years old, Mean = 61.1 years old, Median = 65.3 years old

Age < 40 years = 15%, Age 40–64 years = 32%, Age 65+ years = 53%

18. **What is your educational level?**

8%...Did not complete high school

33%...High school graduate/GED

34%...Some college/Vo-Tech

14%...College graduate

11%...Post-graduate studies (e.g., MA, Ph.D., MD)

19. **Which of the following categories best describes your total annual household income before taxes?**

28%...Less than $25,000

24%...$25,000 to $39,999

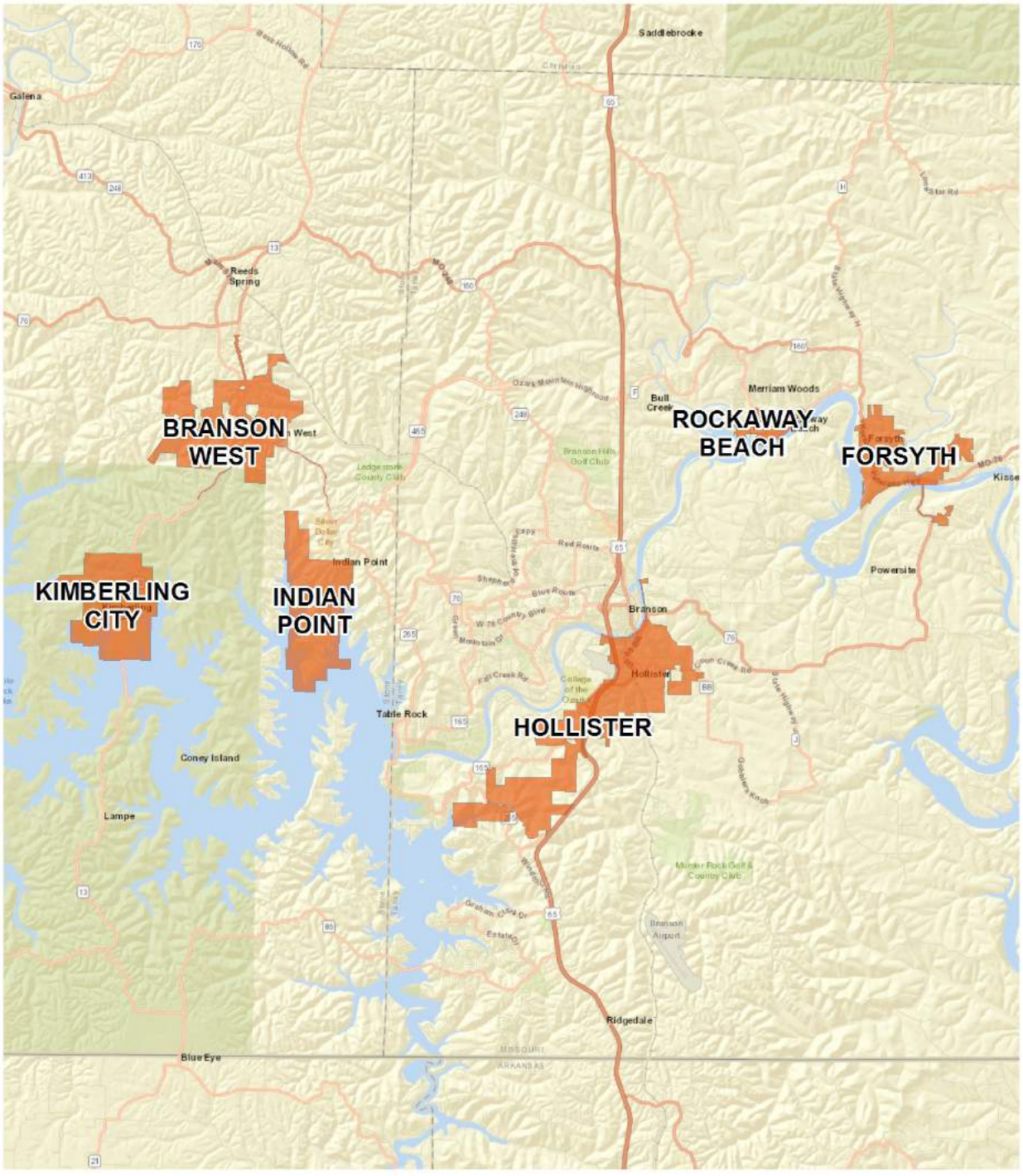
28%...$40,000 to $69,999

12%...$70,000 to $99,999

8%...$100,000 or more

Thank You! This Completes the Survey.

TABLE ROCK LAKE AREA



EXECUTIVE SUMMARY

This Executive Summary presents an overview of the 2018 Table Rock Lake Area Citizen Water Supply and Usage Survey. In this report, the "Table Rock Lake Area" refers to the following six communities: Hollister, Forsyth, Kimberling City, Rockaway Beach, Branson West, and Indian Point. The report is based on 307 online surveys conducted during March 2018. Overall findings have a margin of error of +/- 5.7% at the 95% confidence interval.

The survey was designed, administered, and analyzed by **Opinion Research Specialists, LLC** of Springfield, Missouri with input from the Tri-State Water Resource Coalition. Survey findings are summarized below.

Source of Home Tap Water

- A majority of respondents (60%) said their home tap water came from an aquifer, while just 3% mentioned surface water and 2% said it was a combination of the two (aquifer and surface water). About one-third of respondents (35%) did not know the source of their home tap water.

Type of Organization Supplying Home Tap Water

- Nearly one-half of respondents (47%) said their home tap water was supplied via a private well and 30% thought it was supplied by the city. About 9% of respondents were unsure as to the supplier of their home tap water.

Average Monthly Home Water Bill

- Average monthly home water bills among Table Rock Lake area respondents were widely dispersed with a slim plurality (26%) indicating they had no monthly water bill (on a private well), followed by 21% who said their average monthly water bill exceeded $40.

- 52% of respondents with annual household incomes of $100,000 or more reported having average monthly water bills in excess of $40. This percentage was much higher than all other income groups or any other demographic category.

Monthly Home Water Bill Perceptions

- The vast majority of respondents (70%) said their monthly water bill was inexpensive (very or somewhat) compared to other monthly essentials and the same percentage (70%) rated the "value" of their home water (price paid for amount consumed) as either excellent or good.

Amount Willing to Pay Extra to Ensure Long-Term Supply of Water

- Although 58% of respondents were not willing to pay anything extra per month on their water bill to ensure a long-term supply of drinking water, 42% were willing to pay at least $1-to-$5 more per month.

- With the major exception of high-income respondents and, to a much lesser extent, middle-income respondents and those with post-graduate degrees, a majority of respondents (53% to 80%) from all other demographic groups were **not** willing to pay anything extra per month on their water bill to ensure a long-term supply of drinking water. This was especially true for low-income respondents (80%).

Long-Term Supply of Water: Importance and Infrastructure

- 86% of respondents "strongly agreed" that a long-term supply of water was critical for their community's quality of life and economic competitiveness. Only 1% disagreed with this statement.

- 73% "strongly agreed" that locally elected officials must invest in infrastructure to ensure long-term access to water for citizens, farmers, and businesses. Only 6% disagreed with this statement.

- 69% "strongly agreed" that investments in water supply and infrastructure were needed to guarantee a long-term supply of water to southwest Missouri. Only 4% disagreed with this statement.

Reducing Water Consumption in an Emergency

- A plurality of respondents (38%) said they could temporarily reduce their water consumption by 10% to 20% in the event of a water shortage emergency, and 36% could reduce their consumption by more than 20%.

- 59% of post-graduates said they could reduce their water consumption by **greater than 20%** in the event of a severe drought. This percentage was noticeable higher than that of any other demographic group.

Support for Using Treated Wastewater

- To save money and conserve water, at least 80% of respondents said they would support the use of treated wastewater for purposes of fire protection, toilet flushing, and landscape irrigation. However, only 42% would approve the use of treated wastewater for drinking/tap water purposes.

Reallocation of Water Storage in Stockton Lake

- While 41% of respondents supported, to some extent, the reallocation of a small amount of water storage in Stockton Lake for use by citizens and businesses throughout southwest Missouri, a plurality of respondents (46%) were undecided on this idea and 13% were opposed.

- Demographically, opposition to this proposal was relatively low — less than 30% of ***any*** demographic group was opposed.

INTRODUCTION

This survey was commissioned by the Tri-State Water Resource Coalition to assess the **opinions** and **perceptions** about water supply and usage in southwest Missouri among residents living in communities located in the Table Rock Lake area (i.e., Hollister, Forsyth, Kimberling City, Rockaway Beach, Branson West, and Indian Point). This survey is one of seven surveys targeting a 16-county area in southwest Missouri. Questions on all seven surveys are identical so that differences in perceptions can be assessed.

SURVEY DESIGN AND METHODOLOGY

The survey was designed, administered, and analyzed by **Opinion Research Specialists, LLC** of Springfield, Missouri with input from the Tri-State Water Resource Coalition. Survey results are based on 307 completed online surveys conducted during March (March 7-9 and March 15-22) 2018.

INTERPRETATION OF DATA

Overall survey results, based on 307 completed questionnaires, have a margin of error of approximately +/- 5.5% at the 95% confidence interval. For example, if a response listed in the report is 57% one can be 95% confident that the "true" percentage, that which would have been attained if all "Table Rock Lake Area" residents had participated in the survey, is between 51.5% and 62.5%. Margin of error increases when subsets of the total sample are analyzed (e.g., male versus female, etc.).

Some percentages in the report may not add to exactly 100% due to rounding.

SURVEY RESPONDENT PROFILE

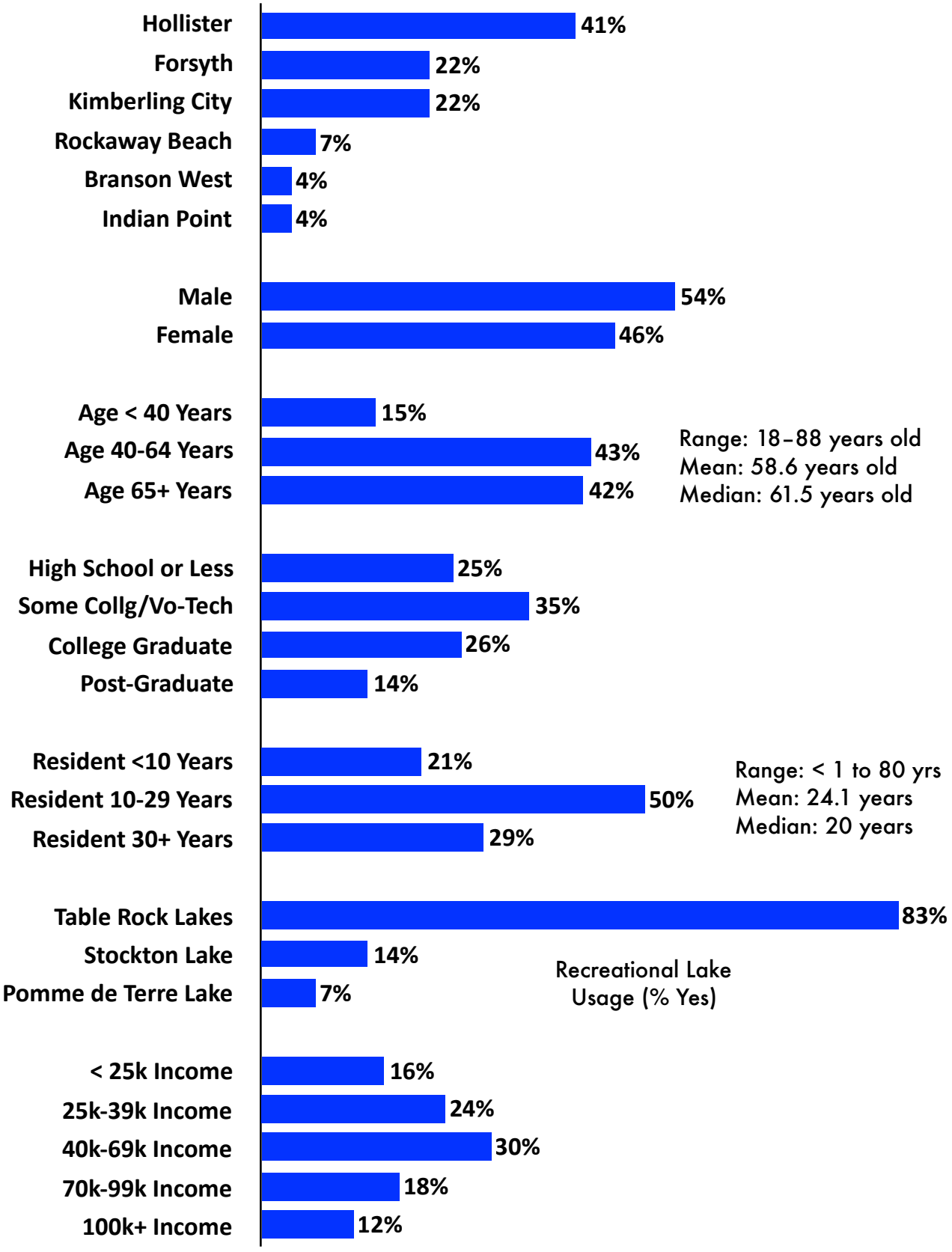
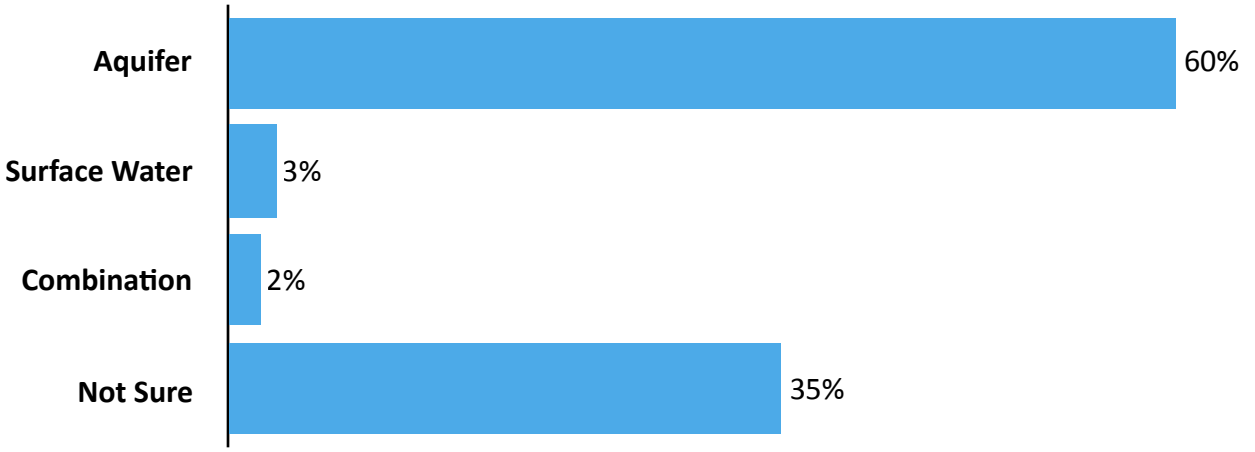


Table Rock Lake Area

Survey Results

Source of Home Tap Water

A majority of respondents (60%) said their home tap water came from an aquifer, 3% mentioned surface water, and 2% thought it was a combination of the two. About one-third of respondents (35%) did not know the source of their home tap water.

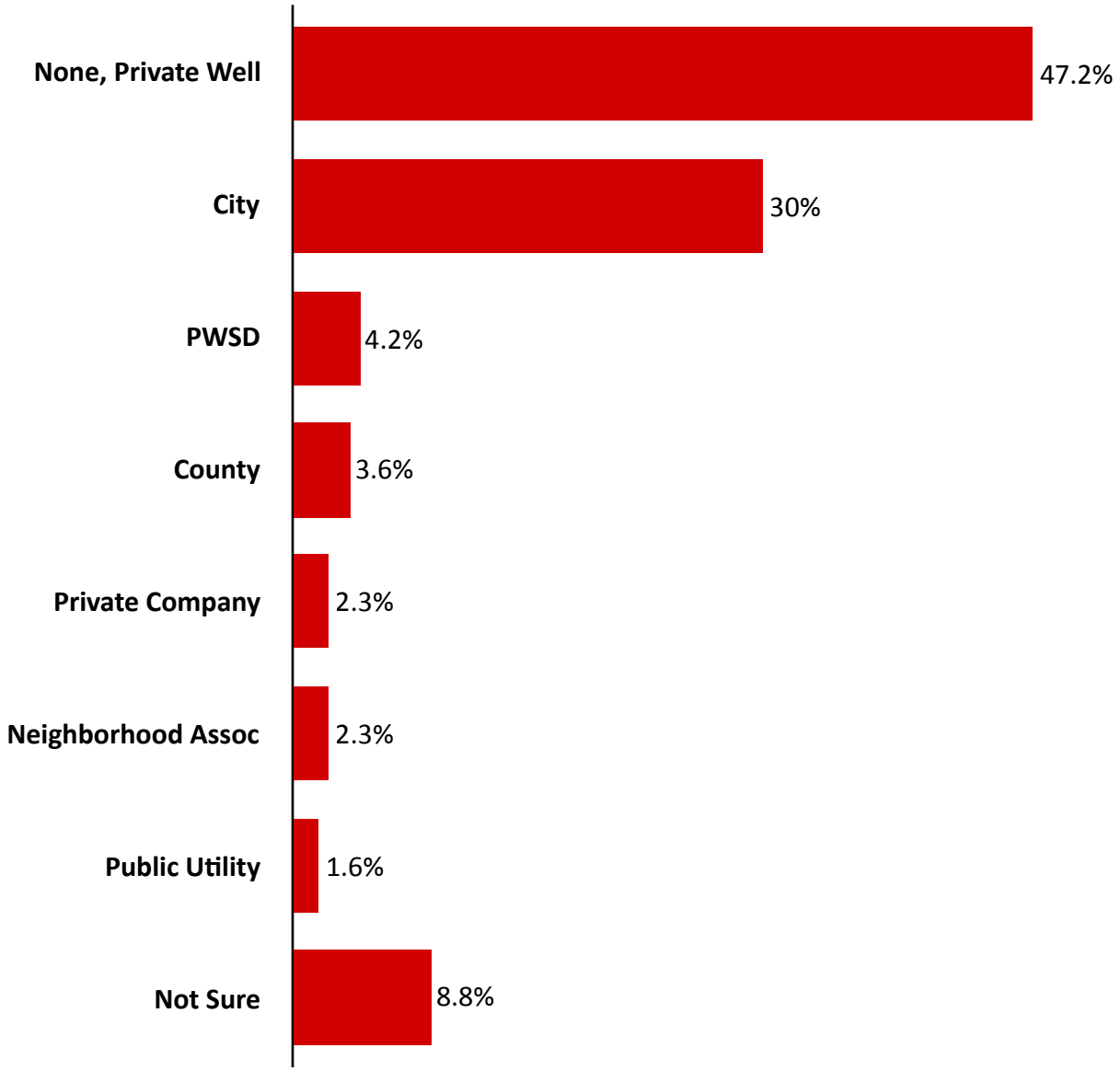


Demographic Analysis: Female respondents were considerably more likely than male respondents to **not know** the source of their home tap water.

Gender	Aquifer	Surface Water	Combination	Not Sure
Male	67%	3%	2%	28%
Female	51%	4%	3%	**42%**

Type of Organization Supplying Home Tap Water

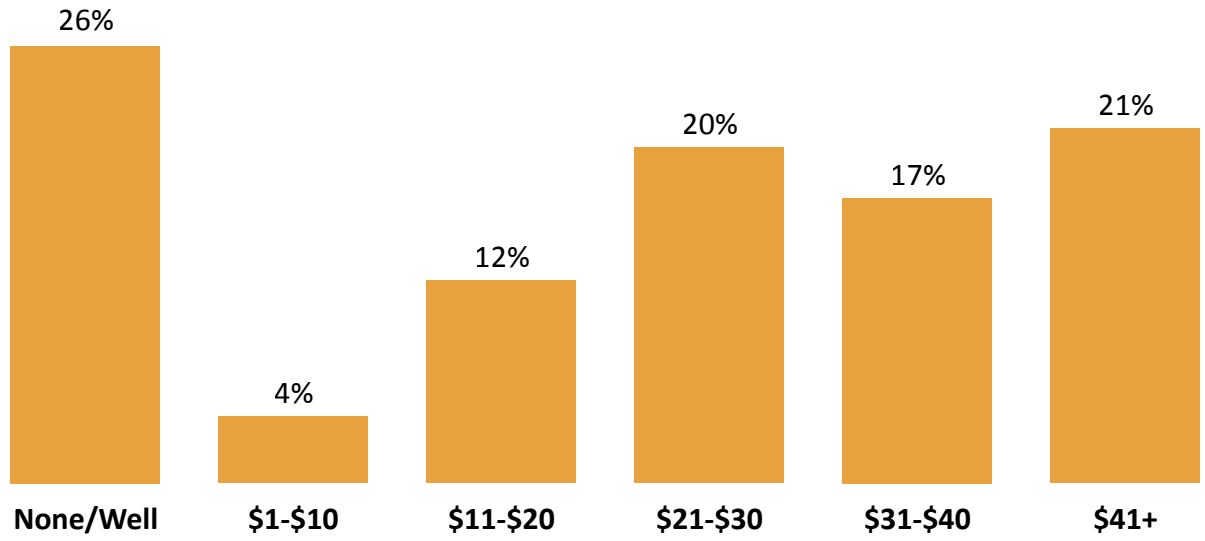
Nearly 50% of respondents said they were on a private well and 30% believed their home tap water was supplied by the city. About 8% thought their water was supplied by either a PWSD or the county, and 9% did not know who supplied their home tap water.



Demographic Analysis: There were no statistically significant differences of opinion on this question based on respondent demographics.

Average Monthly Home Water Bill

The average monthly home water bill among Table Rock Lake area respondents was widely dispersed with a slim plurality (26%) indicating they had no monthly water bill due to being on a private well, followed closely by 21% who reported average monthly water bills in excess $40. Overall, most respondents (58%) said their water bills exceeded $20 a month.

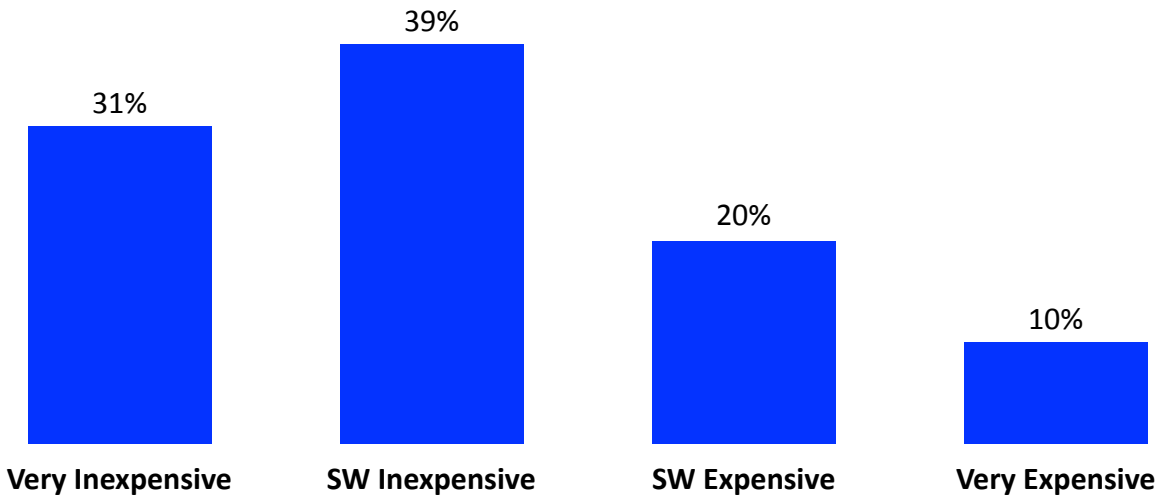


Demographic Analysis: More than 50% of respondents with annual household incomes of $100,000 or more had average monthly water bills in excess of $40. This percentage was much higher than all other income groups or any other demographic category.

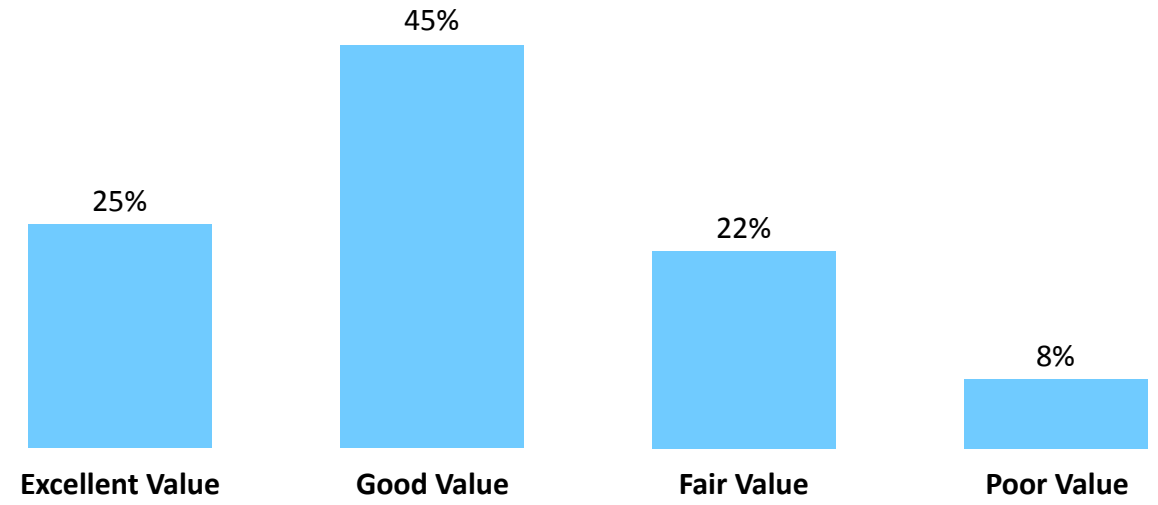
Household Income	None/ On Well	$1-$10	$11-$20	$21-$30	$31-$40	> $40
< 25k	38%	0%	4%	24%	17%	17%
25k-39k	20%	3%	17%	25%	15%	20%
40k-69k	19%	11%	15%	21%	11%	23%
70k-99k	31%	0%	11%	14%	30%	14%
100k+	13%	0%	9%	9%	17%	**52%**

Monthly Home Water Bill Perceptions

Perceived Expense: The vast majority of respondents (70%) said their monthly home water bill was either very inexpensive (31%) or somewhat inexpensive (39%) compared to other monthly essentials. Only 10% thought it was very expensive compared to other monthly essentials.

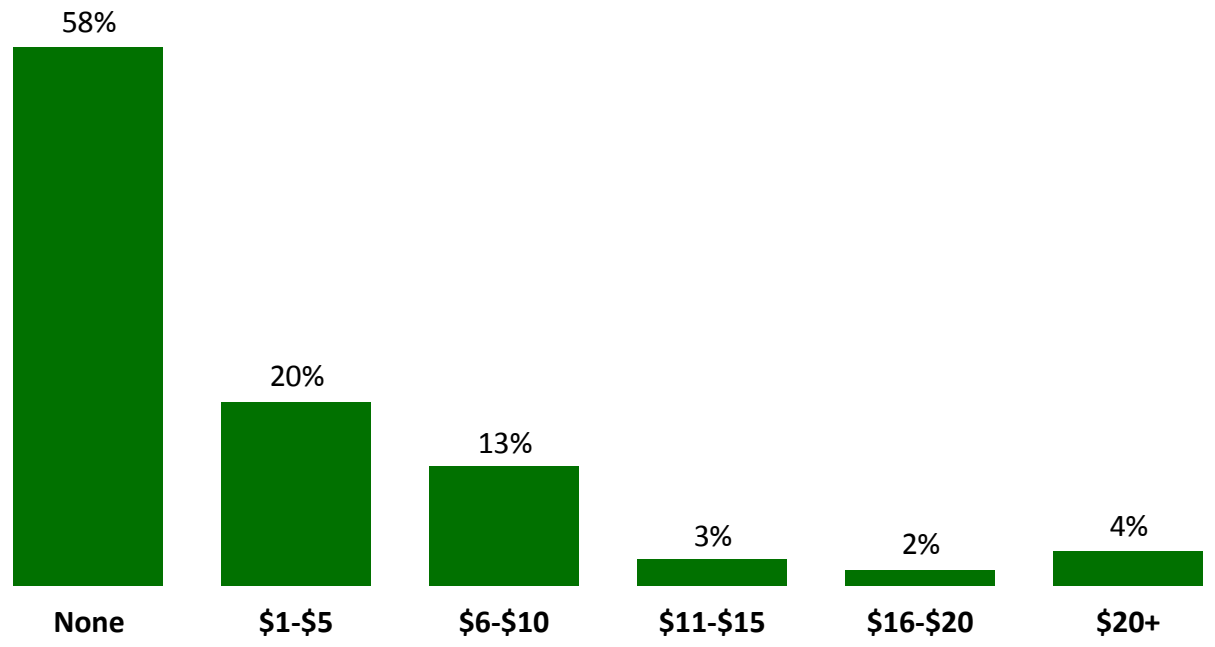


Perceived Value: Seventy percent of respondents were of the opinion that the water provided to their home was either an excellent (25%) or good value (45%). Only 8% thought it was a poor value.



Amount Willing to Pay Extra to Ensure Supply of Water

Nearly 60% of respondents said they would not pay anything extra on their monthly water bill to ensure a long-term supply of drinking water, while 20% were willing to pay $1-to-$5 more per month and 13% said they would pay $6-to-$10 extra. Less than 10% of respondents were willing to pay more than $10 extra per month.



Demographic Analysis: There were no statistically significant differences of opinion on this question based on respondent demographics.

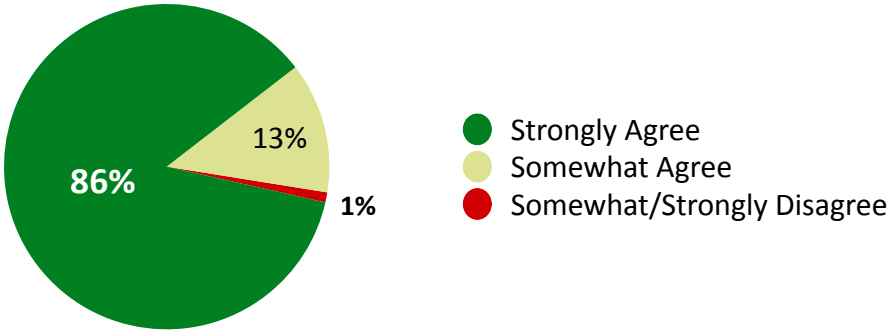
Amount Willing to Pay Extra by Demographics

With the exception of high income and, to a lesser extent, middle-income respondents and those with post-graduate degrees, a majority of respondents (53% to 80%) from all other demographic groups were **not** willing to pay anything extra per month on their water bill to ensure a long-term supply of drinking water. This was especially true for low-income respondents (80%).

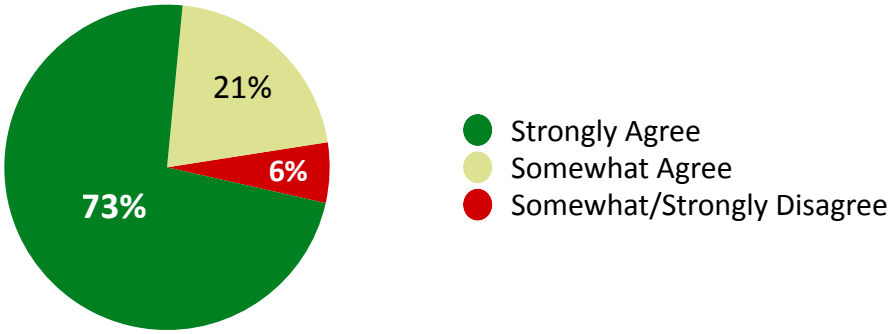
Demographics	None	$1 to $5	$6 to $10	> $10
Male	54%	19%	14%	13%
Female	64%	21%	11%	4%
Lake user	55%	20%	14%	11%
Lake nonuser	69%	19%	9%	3%
18-39 years old	54%	23%	11%	12%
40-64 years old	58%	18%	15%	9%
65+ years old	60%	20%	12%	8%
High school or less	61%	23%	10%	6%
Some college/vo-tech	62%	15%	16%	7%
College graduate	53%	22%	12%	13%
Post-graduate	48%	24%	14%	14%
< 25k household income	**80%**	12%	4%	4%
25k-39k household income	50%	18%	26%	6%
40k-69k household income	49%	24%	17%	10%
70k-99k household income	58%	21%	9%	12%
100k+ household income	**35%**	**25%**	**20%**	**20%**
< 10 years of residency	61%	13%	12%	14%
10-29 years of residency	57%	24%	13%	6%
30+ years of residency	57%	17%	14%	12%

Long-Term Supply of Water: Importance and Infrastructure

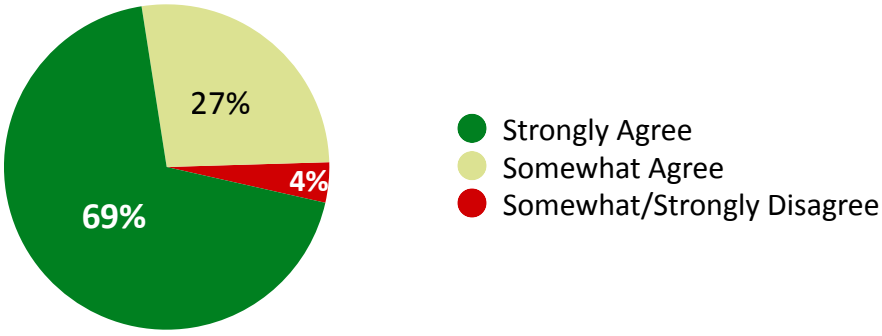
Importance of Long-Term Supply of Water: Approximately 85% of respondents *strongly agreed* that having an adequate long-term supply of water was important for their community's quality of life and economic competitiveness.



Obligation to Plan Ahead and Invest: The vast majority of respondents (73%) *strongly agreed* that locally elected officials have an obligation to plan ahead and invest in the necessary infrastructure to ensure that homeowners, businesses, and farmers have adequate long-term access to water.

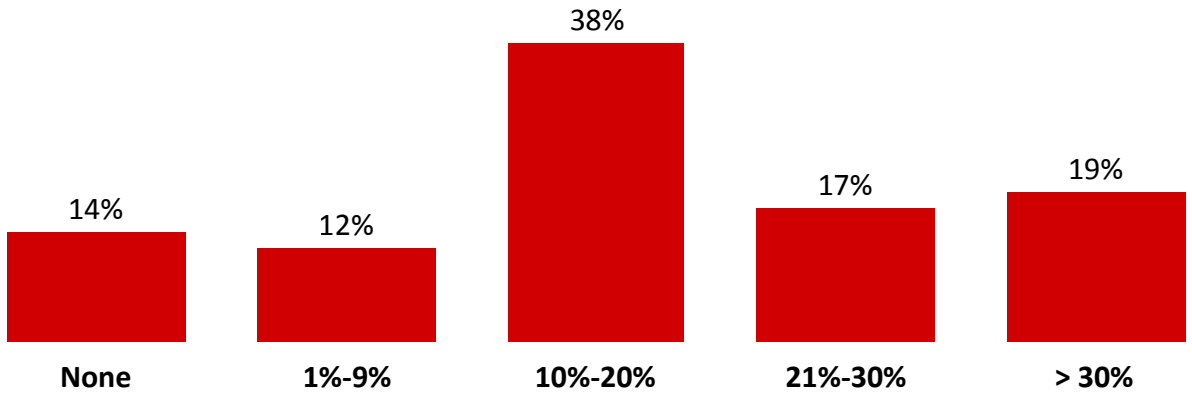


Investments in Water Supply and Infrastructure: Nearly 70% of respondents *strongly agreed* that investments in water supply and infrastructure were necessary to maintain an adequate long-term supply of water in southwest Missouri.



Reducing Water Consumption in an Emergency

A plurality of respondents (38%) indicated they could temporarily reduce their water consumption by 10% to 20% if their local water provider had to implement emergency water conservation measures. More than one-third of residents (36%) said they could reduce their water consumption by more than 20%, and about one-quarter (26%) would be able to reduce water consumption by less than 10%, if at all.

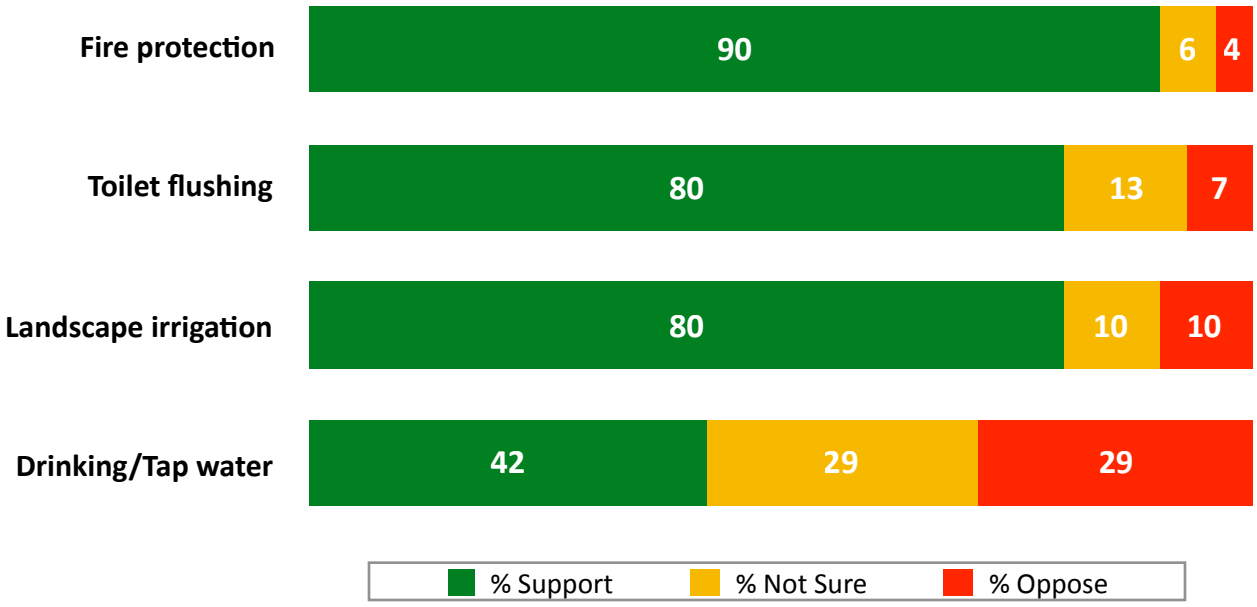


Demographic Analysis: Respondents who had used the Table Rock, Stockton, and/or Pomme de Terre lakes for recreational purposes in the past couple of years were more likely than lake nonusers to say they could reduce their water consumption by **greater than 20%** during a drought (38% v. 22%, respectively). However, nearly 60% of post-graduates said they could reduce their water consumption by **greater than 20%** in the event of a severe drought. This percentage was noticeable higher than that of any other demographic group.

Demographics	None	1%-9%	10%-20%	21%-30%	> 30%
Lake User	13%	10%	38%	**19%**	**19%**
Lake Nonuser	14%	25%	39%	4%	18%
High School or Less	16%	17%	40%	8%	19%
Some College/Vo-Tech	16%	10%	42%	20%	12%
College Graduate	13%	9%	41%	17%	20%
Post-Graduate	3%	19%	19%	**27%**	**32%**

Support for Using Treated Wastewater

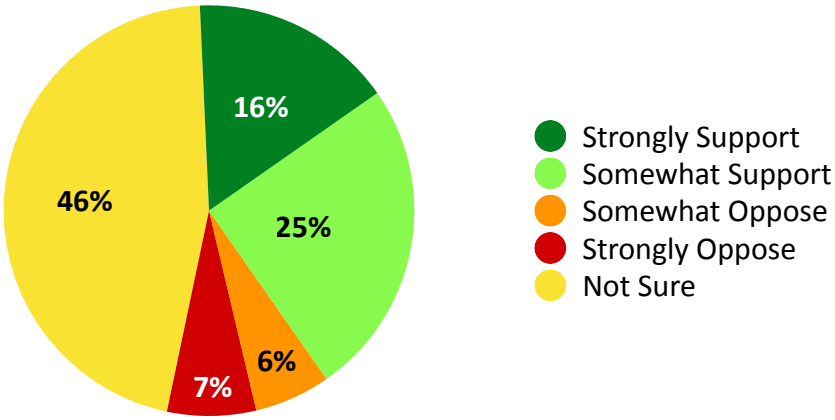
To save money and conserve water, respondents were asked if they would support or oppose the use of treated wastewater for various activities instead of being released into area waterways. While the vast majority of respondents said they would approve the use of treated wastewater for purposes of fire protection (90%), toilet flushing (80%), and landscape irrigation (80%); relatively few respondent (42%) would do so for drinking/tap water purposes.



Demographic Analysis: There were no meaningful differences of opinion on this question based on respondent demographic characteristics.

Reallocation of Water Storage in Stockton Lake

When asked if they would support or oppose the idea of reallocating a small amount of water storage in Stockton Lake to be used by citizens and businesses in southwest Missouri for long-term water supply, a plurality of respondents (46%) were undecided and 41% expressed some level of support. Less than 15% of respondents were opposed to this idea.



Demographic Analysis: More than 50% of females, older respondents, and those with some college/vo-tech educational backgrounds were undecided on the Stockton Lake water reallocation proposal.

Demographics	Strongly Support	Somewhat Support	Somewhat Oppose	Strongly Oppose	Not Sure
Male	21%	27%	7%	6%	39%
Female	10%	22%	5%	8%	**55%**
18-39 years old	15%	46%	5%	7%	27%
40-64 years old	23%	23%	6%	7%	41%
65+ years old	10%	22%	8%	5%	**55%**
HS or Less	19%	31%	10%	4%	36%
Some Coll/Vo-Tech	13%	25%	5%	5%	**52%**
College Graduate	21%	26%	6%	3%	44%
Post-Graduate	10%	20%	5%	22%	43%

Reallocation of Water Storage in Stockton L. by Demographics

While opposition to the Stockton Lake reallocation plan was relatively low — less than 30% of ***any*** demographic group was opposed, support ranged from 30% to 61%. A relatively large percentage of respondents across most demographic categories were undecided on this issue.

Demographics	Strongly or SW Support	Strongly or SW Oppose	Not Sure
Male	48%	13%	39%
Female	32%	13%	**55%**
Stockton Lake user	40%	22%	38%
Stockton Lake nonuser	42%	12%	46%
18-39 years old	**61%**	12%	27%
40-64 years old	46%	13%	41%
65+ years old	32%	13%	**55%**
High school or less	50%	14%	36%
Some college/vo-tech	38%	10%	52%
College graduate	47%	9%	44%
Post-graduate	**30%**	**27%**	43%
< 25k household income	43%	14%	43%
25k-39k household income	49%	12%	39%
40k-69k household income	50%	12%	38%
70k-99k household income	53%	5%	42%
100k+ household income	37%	19%	44%
< 10 years of residency	41%	15%	44%
10-29 years of residency	45%	10%	45%
30+ years of residency	38%	15%	47%

Demographic Analysis

NOTE: Table percentages **bolded in red** denote statistical significance at the .05 level or less.

Table percentages **bolded in red** and **shaded in yellow** denote statistical significance at the .001 level or less.

		Gender		Respondent Age			Educational Level				Annual Household Income					Years of Residency		
	OVERALL	M	F	< 40	40-64	65+	HS or Less	Some College	College Grad	Post-Grad	<25k	25k-39k	40k-69k	70k–99k	100k+	< 10	10-29	30+
Source of Home Tap Water																		
Aquifer	**60%**	**67%**	**51%**	51%	55%	65%	55%	57%	61%	70%	46%	60%	71%	49%	48%	59%	61%	60%
Surface Water	**3%**	**3%**	**4%**	0%	3%	4%	1%	5%	3%	0%	6%	4%	2%	5%	0%	7%	1%	2%
Combination	**2%**	**2%**	**3%**	2%	2%	3%	3%	3%	3%	0%	0%	4%	1%	7%	0%	5%	1%	4%
Not Sure	**35%**	**28%**	**42%**	47%	40%	28%	41%	35%	33%	30%	48%	32%	25%	39%	52%	29%	37%	34%
Type of Organization Supplying Home Tap Water																		
None/Private Well	**47%**	50%	44%	39%	39%	55%	44%	45%	51%	50%	37%	49%	60%	44%	37%	43%	51%	45%
City	**30%**	31%	29%	42%	34%	23%	31%	33%	28%	20%	37%	26%	24%	29%	26%	25%	30%	31%
Public Water Supply District	**4%**	4%	5%	2%	5%	5%	6%	4%	3%	8%	3%	5%	1%	10%	4%	2%	6%	5%
County	**4%**	3%	4%	2%	5%	3%	7%	2%	3%	3%	3%	4%	5%	2%	7%	3%	1%	7%
Private Company	**2%**	3%	1%	0%	4%	2%	1%	2%	1%	7%	3%	2%	1%	0%	11%	8%	1%	1%
Neighborhood Association	**2%**	1%	4%	0%	1%	3%	1%	3%	3%	2%	3%	0%	0%	2%	4%	5%	1%	1%
Public Utility	**2%**	2%	1%	0%	1%	3%	0%	1%	2%	3%	0%	2%	1%	2%	3%	0%	2%	3%
Rural Water District	**0%**	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Not Sure	**9%**	6%	12%	15%	11%	6%	10%	10%	9%	7%	14%	11%	8%	10%	8%	14%	8%	7%
Average Monthly Home Water Bill																		
None/On a Well	**26%**	27%	25%	14%	22%	30%	28%	18%	33%	19%	**38%**	**20%**	**19%**	**31%**	**13%**	18%	26%	29%
$1–$10	**4%**	5%	3%	0%	4%	5%	2%	4%	5%	6%	**0%**	**3%**	**11%**	**0%**	**0%**	2%	4%	7%
$11–$20	**12%**	14%	10%	7%	10%	18%	10%	14%	12%	19%	**4%**	**17%**	**15%**	**11%**	**9%**	24%	12%	8%
$21–$30	**20%**	19%	20%	17%	22%	20%	20%	24%	20%	8%	**24%**	**25%**	**21%**	**14%**	**9%**	13%	23%	19%
$31–$40	**17%**	15%	19%	31%	15%	13%	12%	20%	16%	17%	**17%**	**15%**	**11%**	**30%**	**17%**	17%	15%	17%
> $40	**21%**	20%	23%	33%	27%	14%	28%	20%	14%	31%	**17%**	**20%**	**23%**	**14%**	**52%**	26%	20%	20%
Monthly Home Water Bill — Perceived Expense																		
Very Inexpensive	**31%**	35%	26%	32%	23%	38%	**17%**	**34%**	**43%**	**20%**	30%	32%	33%	31%	19%	28%	30%	35%
Somewhat Inexpensive	**39%**	37%	43%	32%	43%	37%	**39%**	**45%**	**20%**	**57%**	31%	38%	47%	34%	29%	37%	39%	40%
Somewhat Expensive	**20%**	20%	20%	25%	20%	21%	**29%**	**17%**	**25%**	**13%**	26%	21%	11%	22%	43%	22%	23%	15%
Very Expensive	**10%**	8%	11%	11%	14%	4%	**15%**	**4%**	**12%**	**10%**	13%	9%	9%	13%	9%	13%	8%	10%

		Gender		Respondent Age			Educational Level				Annual Household Income					Years of Residency		
	OVERALL	M	F	< 40	40-64	65+	HS or Less	Some College	College Grad	Post-Grad	<25k	25k-39k	40k-69k	70k–99k	100k+	< 10	10-29	30+
Monthly Home Water Bill — Perceived Value																		
Excellent Value	**25%**	29%	20%	18%	19%	33%	18%	21%	33%	32%	18%	35%	19%	34%	14%	33%	17%	33%
Good Value	**45%**	42%	48%	32%	48%	47%	55%	49%	33%	39%	52%	41%	45%	38%	50%	39%	45%	49%
Fair Value	**22%**	23%	21%	36%	22%	15%	11%	23%	26%	22%	26%	9%	22%	14%	36%	22%	25%	12%
Poor Value	**8%**	6%	11%	14%	11%	5%	16%	7%	8%	7%	4%	15%	14%	14%	0%	6%	13%	6%
Amount Willing to Pay Extra Per Month on Home Water Bill to Ensure Long-Term Supply of Drinking Water																		
None	**58%**	54%	64%	54%	58%	60%	61%	62%	53%	48%	80%	50%	49%	58%	35%	61%	57%	57%
$1–$5	**20%**	19%	21%	23%	18%	20%	23%	15%	22%	24%	12%	18%	24%	21%	25%	13%	24%	17%
$6–$10	**13%**	14%	11%	11%	15%	12%	10%	16%	12%	14%	4%	26%	17%	9%	20%	12%	13%	14%
$11–$15	**3%**	5%	1%	6%	2%	2%	2%	3%	3%	3%	0%	3%	2%	6%	5%	6%	0%	5%
$16–$20	**2%**	2%	1%	0%	1%	4%	2%	1%	2%	4%	0%	3%	4%	0%	0%	0%	2%	4%
> $20	**4%**	6%	2%	6%	6%	2%	2%	3%	8%	7%	4%	0%	4%	6%	15%	8%	4%	3%
Having an Adequate Long-Term Supply of Water is Important for Community Quality of Life and Economic Competitiveness																		
Strongly Agree	**86%**	83%	89%	78%	87%	88%	79%	82%	93%	90%	73%	81%	85%	93%	89%	87%	82%	90%
Somewhat Agree	**13%**	16%	10%	22%	12%	10%	19%	16%	7%	10%	21%	17%	15%	7%	11%	11%	16%	10%
Somewhat/Strongly Disagree	**1%**	1%	1%	0%	1%	2%	2%	2%	0%	0%	6%	2%	0%	0%	0%	2%	2%	0%
Locally Elected Officials Have an Obligation to Plan Ahead and Invest in Infrastructure to Ensure Community Long-Term Access to Water																		
Strongly Agree	**73%**	70%	76%	67%	78%	70%	**84%**	**64%**	**79%**	**63%**	63%	74%	72%	85%	87%	73%	72%	73%
Somewhat Agree	**21%**	21%	21%	28%	16%	22%	**11%**	**25%**	**16%**	**34%**	23%	22%	19%	10%	13%	25%	21%	17%
Somewhat/Strongly Disagree	**6%**	9%	3%	5%	6%	8%	**5%**	**11%**	**5%**	**3%**	14%	4%	9%	5%	0%	2%	7%	10%
Maintaining an Adequate Long-Term Supply of Water in SW Missouri Requires Investments in Water Supply and Infrastructure																		
Strongly Agree	**69%**	**74%**	**63%**	62%	74%	68%	74%	69%	70%	58%	58%	65%	71%	76%	75%	69%	66%	76%
Somewhat Agree	**27%**	**20%**	**36%**	33%	21%	29%	21%	30%	24%	37%	36%	33%	24%	21%	17%	25%	30%	21%
Somewhat/Strongly Disagree	**4%**	**6%**	**1%**	5%	5%	3%	5%	1%	6%	5%	6%	2%	5%	3%	8%	6%	4%	3%

		Gender		Respondent Age			Educational Level				Annual Household Income					Years of Residency		
	OVERALL	M	F	< 40	40-64	65+	HS or Less	Some College	College Grad	Post-Grad	<25k	25k-39k	40k-69k	70k–99k	100k+	< 10	10-29	30+
During a Severe Drought, How Much Could You Realistically Reduce Your Water Consumption?																		
None	**14%**	**18%**	**8%**	10%	16%	11%	**16%**	**16%**	**13%**	**3%**	22%	12%	13%	10%	11%	16%	11%	15%
< 10%	**12%**	**9%**	**17%**	15%	12%	12%	**17%**	**10%**	**9%**	**19%**	16%	20%	8%	10%	7%	7%	15%	14%
10%-20%	**38%**	**37%**	**40%**	39%	39%	38%	**40%**	**42%**	**41%**	**19%**	38%	38%	36%	40%	30%	38%	43%	29%
21%-30%	**17%**	**12%**	**23%**	23%	15%	18%	**8%**	**20%**	**17%**	**27%**	12%	20%	24%	12%	11%	16%	16%	20%
> 30%	**19%**	**24%**	**12%**	13%	18%	21%	**19%**	**12%**	**20%**	**32%**	12%	10%	19%	28%	41%	23%	15%	22%
Support for Reuse of Water for FIRE PROTECTION																		
Support	**90%**	88%	93%	93%	89%	89%	82%	91%	94%	92%	82%	94%	88%	92%	96%	92%	91%	86%
Oppose	**4%**	5%	2%	2%	6%	3%	6%	4%	4%	0%	6%	0%	4%	5%	0%	3%	5%	2%
Not Sure	**6%**	7%	5%	5%	5%	8%	12%	5%	2%	8%	12%	6%	8%	3%	4%	5%	4%	12%
Support for Reuse of Water for TOILET FLUSHING																		
Support	**80%**	**74%**	**87%**	83%	80%	78%	67%	81%	87%	84%	67%	83%	80%	90%	85%	81%	81%	75%
Oppose	**7%**	**10%**	**4%**	7%	9%	7%	12%	7%	7%	3%	15%	4%	8%	5%	0%	14%	6%	7%
Not Sure	**13%**	**16%**	**9%**	10%	11%	15%	21%	12%	6%	13%	18%	13%	12%	5%	15%	5%	13%	18%
Support for Reuse of Water for LANDSCAPE IRRIGATION																		
Support	**80%**	80%	80%	83%	82%	76%	70%	79%	87%	87%	76%	83%	71%	85%	85%	78%	83%	74%
Oppose	**10%**	12%	8%	15%	10%	9%	12%	13%	7%	5%	6%	13%	15%	10%	7%	12%	9%	13%
Not Sure	**10%**	8%	12%	2%	8%	15%	18%	8%	6%	8%	18%	4%	14%	5%	8%	10%	8%	13%
Support for Reuse of Water for DRINKING/TAP WATER																		
Support	**42%**	**46%**	**38%**	54%	43%	37%	41%	40%	49%	34%	35%	55%	41%	51%	30%	49%	43%	36%
Oppose	**29%**	**32%**	**25%**	17%	31%	31%	30%	34%	23%	26%	33%	28%	27%	28%	29%	34%	29%	26%
Not Sure	**29%**	**22%**	**37%**	29%	26%	32%	29%	26%	28%	40%	32%	17%	32%	21%	41%	17%	28%	38%
Reallocation of Water Storage in Stockton Lake																		
Strongly Support	**16%**	**21%**	**10%**	**15%**	**23%**	**10%**	**19%**	**13%**	**21%**	**10%**	14%	11%	20%	24%	11%	12%	19%	15%
Somewhat Support	**25%**	**27%**	**22%**	**46%**	**23%**	**22%**	**31%**	**25%**	**26%**	**20%**	29%	38%	30%	29%	26%	29%	26%	23%
Somewhat Oppose	**6%**	**7%**	**5%**	**5%**	**6%**	**8%**	**10%**	**5%**	**6%**	**5%**	8%	4%	6%	0%	8%	7%	6%	6%
Strongly Oppose	**7%**	**6%**	**8%**	**7%**	**7%**	**5%**	**4%**	**5%**	**3%**	**22%**	6%	8%	6%	5%	11%	8%	4%	9%
Not Sure	**46%**	**39%**	**55%**	**27%**	**41%**	**55%**	**36%**	**52%**	**44%**	**43%**	43%	39%	38%	42%	44%	44%	45%	47%

Questionnaire

Citizen Water Supply and Usage Survey — 2018

Table Rock Lake Area (n = 307)

1. **How strongly do you agree or disagree with this statement: Having an adequate long-term supply of water is important for your community's quality of life and economic competitiveness.**

   86%...Strongly Agree
   13%...Somewhat Agree
   <1%...Somewhat Disagree
   <1%...Strongly Disagree

2. **What type of organization, if any, supplies your home tap water?**

   47.2%...None, I am on a private well
   30.0%...City
   4.2%...Public Water Supply District (PWSD)
   3.6%...County
   2.3%...Private Company
   2.3%...Neighborhood Association
   1.6%...Public Utility
   8.8%...Not Sure

3. **What is the source of your home tap water?**

   60%...Aquifer (e.g., well)
   3%...Surface Water (e.g., lake/river)
   2%...Combination of aquifer and surface water
   35%...Not Sure

4. **On average, about how much per month is your home water bill?**

   26%...None, I am on a private well
   4%...$1 to $10 per month
   12%...$11 to $20 per month
   20%...$21 to $30 per month
   17%...$31 to $40 per month
   21%...More than $40 per month

5. **Compared to other monthly essentials, how would you describe the expense of your monthly home water bill?**

   31%...Very inexpensive
   39%...Somewhat inexpensive
   20%...Somewhat expensive
   10%...Very expensive

6. **Considering the amount of water you use at home per month and the amount of your monthly home water bill, would you say the water provided to your home is an excellent, good, fair, or poor value?**

   25%...Excellent Value
   45%...Good Value
   22%...Fair Value
   8%...Poor Value

7. **Based on your current water bill, how much more would you be willing to pay per month to ensure an adequate long-term supply of drinking water?**

   58%...None, no more than what I am paying now
   20%...$1 to $5 more
   13%...$6 to $10 more
   3%...$11 to $15 more
   2%...$16 to $20 more
   4%...More than $20

8. **How strongly do you agree or disagree with this statement: Locally elected officials, such as county commissioners and city mayors, have an obligation to plan ahead and invest in the necessary infrastructure to ensure that homeowners, businesses, and farmers have adequate long-term access to water.**

   73%...Strongly Agree
   21%...Somewhat Agree
   3%...Somewhat Disagree
   3%...Strongly Disagree

9. **Droughts occur periodically as part of the natural climate cycle. When your area experiences a drought and your local provider of water has to implement emergency water conservation measures, how much could you realistically reduce your water consumption?**

   14%...None, I could not use any less water than I am using now
   12%...Less than 10%
   38%...10% to 20% less
   17%...21% to 30% less
   19%...More than 30%

10. **How strongly do you agree or disagree with this statement: To maintain an adequate long-term supply of water in southwest Missouri, investments in water supply and infrastructure are necessary.**

    69%...Strongly Agree
    27%...Somewhat Agree
    2%...Somewhat Disagree
    2%...Strongly Disagree

11. **How strongly would you support or oppose the reallocation of a small amount of water storage in Stockton Lake to be used by citizens and businesses in southwest Missouri for long-term water supply?**

16%...Strongly Support
25%...Somewhat Support
6%...Somewhat Oppose
7%...Strongly Oppose
46%...Not Sure

12. **Water providers treat water to very high drinking water standards and then deliver it to homes and businesses for use. Once that water has been used, it is again treated to very high drinking water standards and then released into area waterways rather than being reused. To save money and conserve water, instead of releasing this highly treated water back into area waterways (lakes, streams, rivers) would you support or oppose its reuse for the following:**

	Support	Oppose	Not Sure
1. Fire protection	90%	4%	6%
2. Toilet flushing	80%	7%	13%
3. Irrigation of landscaping	80%	10%	10%
4. Drinking/Tap water	42%	29%	29%

Respondent Information: The last few questions are about you and your household. They will be used to group responses to the survey. Your responses are completely confidential and anonymous.

13. **What town or city do you live in?** Hollister = 41%, Forsyth = 22%, Kimberling City = 22%, Rockaway Beach = 7%, Branson West = 4%, Indian Point = 4%

14. **Approximately how many years have you lived in southwest Missouri?**

Range = <1 year–80 years, Mean = 24.1 years, Median = 20 years
< 10 years = 21%, 10–29 years = 50%, 30+ years = 29%

15. **In the past couple of years, have you used any of the following lakes or rivers for recreational purposes (e.g., camping, picnicking, swimming, fishing, boating, etc.)?**

	Yes	No
1. Table Rock Lakes	83%	17%
2. Stockton Lake	14%	86%
3. Pomme de Terre Lake	7%	93%

16. **What is your gender?** 54%...Male 46%...Female

17. **What is your birth year?**

Age range = 18–88 years old, Mean = 58.6 years old, Median = 61.5 years old

Age < 40 years = 15%, Age 40–64 years = 43%, Age 65+ years = 42%

18. **What is your educational level?**

2%...Did not complete high school

23%...High school graduate/GED

35%...Some college/Vo-Tech

26%...College graduate

14%...Post-graduate studies (e.g., MA, Ph.D., MD)

19. **Which of the following categories best describes your total annual household income before taxes?**

16%...Less than $25,000

24%...$25,000 to $39,999

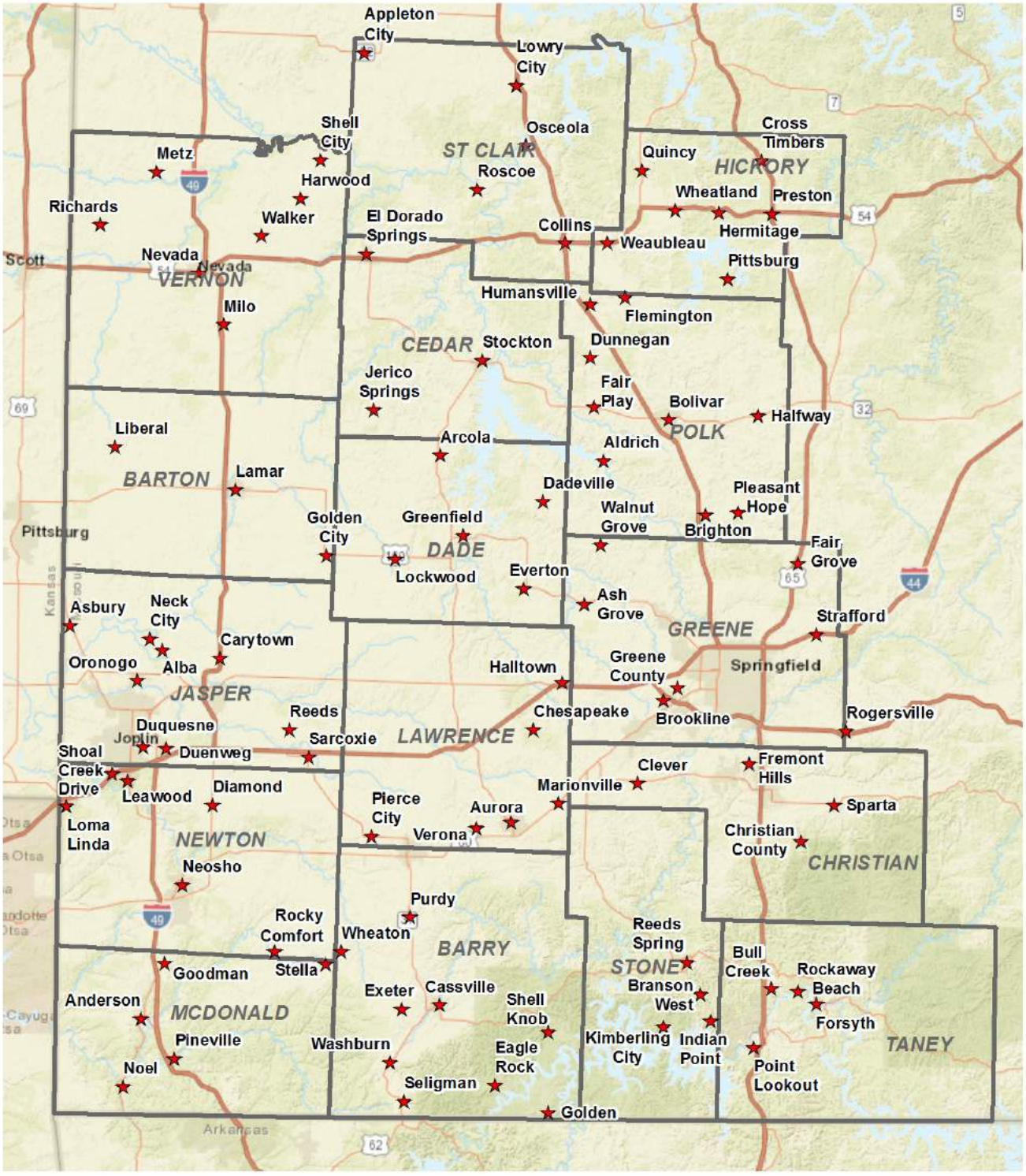
30%...$40,000 to $69,999

18%...$70,000 to $99,999

12%...$100,000 or more

Thank You! This Completes the Survey.

RURAL AREAS


Appleton City
Lowry City
Shell City
Osceola
Cross Timbers
Metz
ST CLAIR
Quincy
HICKORY
Harwood
Roscoe
Wheatland
Preston
Richards
Walker
El Dorado Springs
Collins
Weaubleau
Hermitage
Scott
Nevada
Nevada
VERNON
Pittsburg
Humansville
Milo
Flemington
CEDAR
Stockton
Dunnegan
Jerico Springs
Fair Play
Bolivar
Halfway
Liberal
POLK
Arcola
Aldrich
BARTON
Lamar
Dadeville
Pleasant Hope
Walnut Grove
Brighton
Pittsburg
Golden City
Greenfield
DADE
Fair Grove
Lockwood
Everton
Asbury
Neck City
Ash Grove
Strafford
GREENE
Carytown
Oronogo
Alba
Halltown
Greene County
Springfield
JASPER
Reeds
Chesapeake
Brookline
Rogersville
Duquesne
Joplin
Sarcoxie
LAWRENCE
Shoal Creek Drive
Duenweg
Clever
Fremont Hills
Leawood
Diamond
Marionville
Sparta
Pierce City
Aurora
Loma Linda
Verona
Christian County
NEWTON
CHRISTIAN
Neosho
Purdy
Rocky Comfort
Wheaton
Reeds Spring
BARRY
STONE
Bull Creek
Rockaway Beach
Goodman
Stella
Branson West
Exeter
Cassville
Shell Knob
Anderson
MCDONALD
Forsyth
Pineville
Washburn
Eagle Rock
Kimberling City
Indian Point
TANEY
Noel
Seligman
Point Lookout
Golden
Arkansas

EXECUTIVE SUMMARY

This Executive Summary presents an overview of the 2017/2018 Rural Area Citizen Water Supply and Usage Survey. In this report, "Rural Area" refers to survey respondents representing 93 rural communities in a 16-county area of southwest Missouri. The report is based on 995 surveys conducted online and by telephone during the summer and fall of 2017 as well as the spring of 2018. Overall findings have a margin of error of +/- 3.2% at the 95% confidence interval.

The survey was designed, administered, and analyzed by **Opinion Research Specialists, LLC** of Springfield, Missouri with input from the Tri-State Water Resource Coalition. Survey findings are summarized below.

Source of Home Tap Water

- A majority of respondents (54%) said their home tap water came from an aquifer, while 7% mentioned surface water and 2% said it was a combination of the two (aquifer and surface water). More than one-third of respondents (37%) did not know the source of their home tap water. This was especially true of younger respondents (54%).

Type of Organization Supplying Home Tap Water

- Just over 40% of respondents said their home tap water was supplied via a private well and 35% thought it was supplied by the city. Approximately 17% of respondents received their home tap water from one of the following organizations – public utility, PWSD, private company, county, rural water district, or neighborhood association.

Average Monthly Home Water Bill

- Average monthly home water bills for rural area respondents were widely dispersed with a plurality (35%) indicating they had no monthly water bill (on a private well), followed by 21% who reported having average monthly water bills in excess of $40. Overall, 54% of rural area respondents said their water bills averaged more than $20 per month.

Monthly Home Water Bill Perceptions

- The vast majority of respondents (73%) said their monthly water bill was inexpensive (very or somewhat) compared to other monthly essentials and 72% rated the "value" of their home water (price paid for amount consumed) as either excellent or good. Older respondents (65+) were much more likely than any other demographic group to describe their monthly home water bill as "very inexpensive" and to rate it as an "excellent" value.

Amount Willing to Pay Extra to Ensure Long-Term Supply of Water

- While 61% of respondents were not willing to pay anything extra per month on their water bill to ensure a long-term supply of drinking water, 39% were willing to pay at least $1-to-$5 more per month. Those least willing to pay anything extra per month were respondents from households earning less than $25,000 a year (74%).

- With the exception of respondents from high-income households and those with post-graduate degrees, a majority of respondents (51% to 74%) from all other demographic groups were **not** willing to pay anything extra per month on their water bill to ensure a long-term supply of drinking water. This was especially true for low-income respondents (74%).

Long-Term Supply of Water: Importance and Infrastructure

- 84% of respondents "strongly agreed" that a long-term supply of water was critical for their community's quality of life and economic competitiveness. Only 2% disagreed with this statement.

- 69% "strongly agreed" that locally elected officials must invest in infrastructure to ensure long-term access to water for citizens, farmers, and businesses. Only 6% disagreed with this statement.

- 60% "strongly agreed" that investments in water supply and infrastructure were needed to guarantee a long-term supply of water to southwest Missouri. Only 5% disagreed with this statement.

Reducing Water Consumption in an Emergency

- A plurality of respondents (36%) said they could temporarily reduce their water consumption by 10% to 20% in the event of a water shortage emergency and 25% could reduce their consumption by more than 20%. However, a sizable percentage of rural area respondents (20%) indicated they could not reduce water consumption by any amount and a similar percentage said their reduction would be less than 10%.

- Nearly 95% of respondents with a post-graduate degree indicated some level of reduction was possible compared to 72% of respondents with a high school education or less.

Support for Using Treated Wastewater

- To save money and conserve water, at least 76% of respondents said they would support the use of treated wastewater for purposes of fire protection, toilet flushing, and landscape irrigation. However, only 38% would approve the use of treated wastewater for drinking/tap water purposes.

Reallocation of Water Storage in Stockton Lake

- While 48% of respondents supported, to some extent, the reallocation of a small amount of water storage in Stockton Lake for use by citizens and businesses throughout southwest Missouri, 15% were opposed to this idea and 37% were undecided.

- Demographically, opposition to this proposal was minimal — less than 25% of ***any*** demographic group was opposed.

INTRODUCTION

This survey was commissioned by the Tri-State Water Resource Coalition to assess the **opinions** and **perceptions** about water supply and usage in southwest Missouri among residents living in 93 rural communities. This survey is one of seven surveys targeting a 16-county area in southwest Missouri. Questions on all seven surveys were identical so that differences in perceptions, if any, could be assessed.

SURVEY DESIGN AND METHODOLOGY

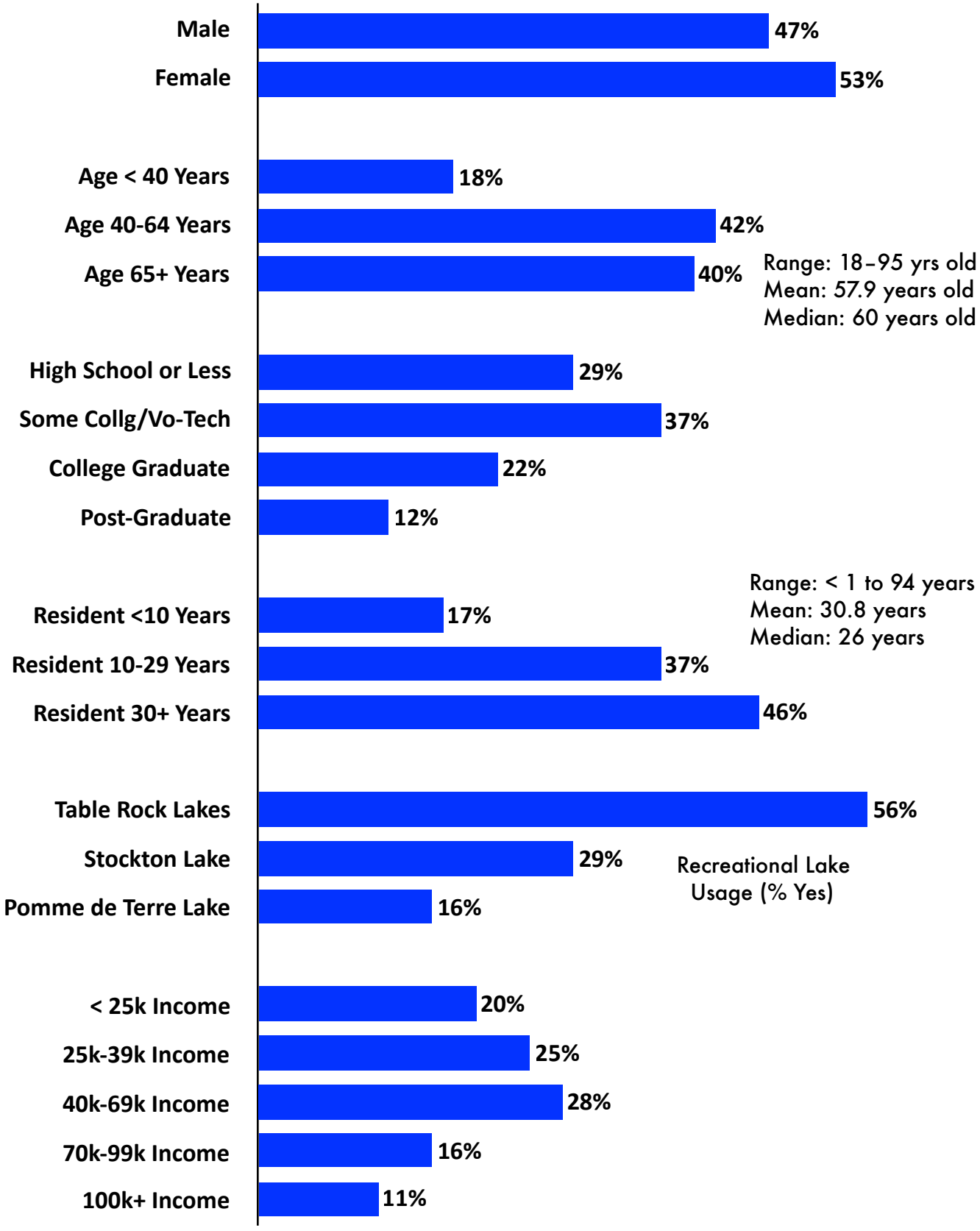
The survey was designed, administered, and analyzed by **Opinion Research Specialists, LLC** of Springfield, Missouri with input from the Tri-State Water Resource Coalition. Survey results are based on 995 completed online and telephone surveys conducted during the summer/fall of 2017 as well as the spring of 2018. See Appendix A for a complete listing of rural communities surveyed.

INTERPRETATION OF DATA

Overall survey results, based on 995 completed questionnaires, have a margin of error of approximately +/- 3% at the 95% confidence interval. For example, if a response listed in the report is 57% one can be 95% confident that the "true" percentage, that which would have been attained if all adult residents in each of the 93 rural communities (see Appendix A for a listing of communities) had participated in the survey, is between 54% and 60%. Margin of error increases when subsets of the total sample are analyzed (e.g., male versus female, etc.).

Some percentages in the report may not add to exactly 100% due to rounding.

SURVEY RESPONDENT PROFILE — RURAL AREAS



Rural Areas

Survey Results

Source of Home Tap Water

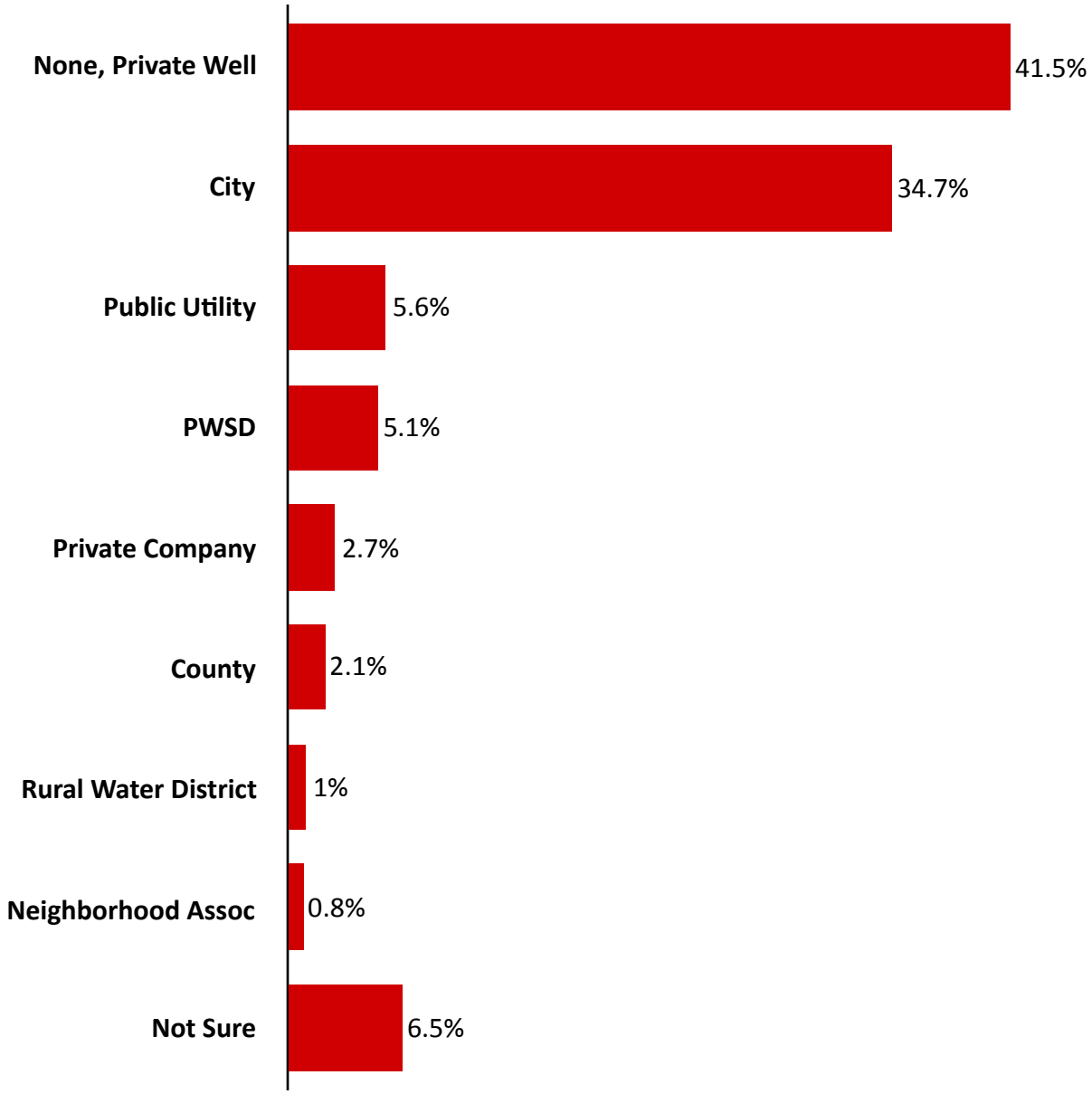
A majority of respondents (54%) said their home tap water came from an aquifer, 7% mentioned surface water, and 2% thought it was a combination of the two. A sizable percentage of respondents (37%) did not know the source of their home tap water.

Demographic Analysis: Younger respondents were significantly more likely than older respondents (or any other demographic group) to ***not know*** the source of their home tap water (54% v. 26%, respectively).

Respondent Age	Aquifer	Surface Water	Combination	Not Sure
18-39 years old	38%	6%	2%	**54%**
40-64 years old	51%	6%	3%	40%
65+ years old	66%	7%	7%	26%

Type of Organization Supplying Home Tap Water

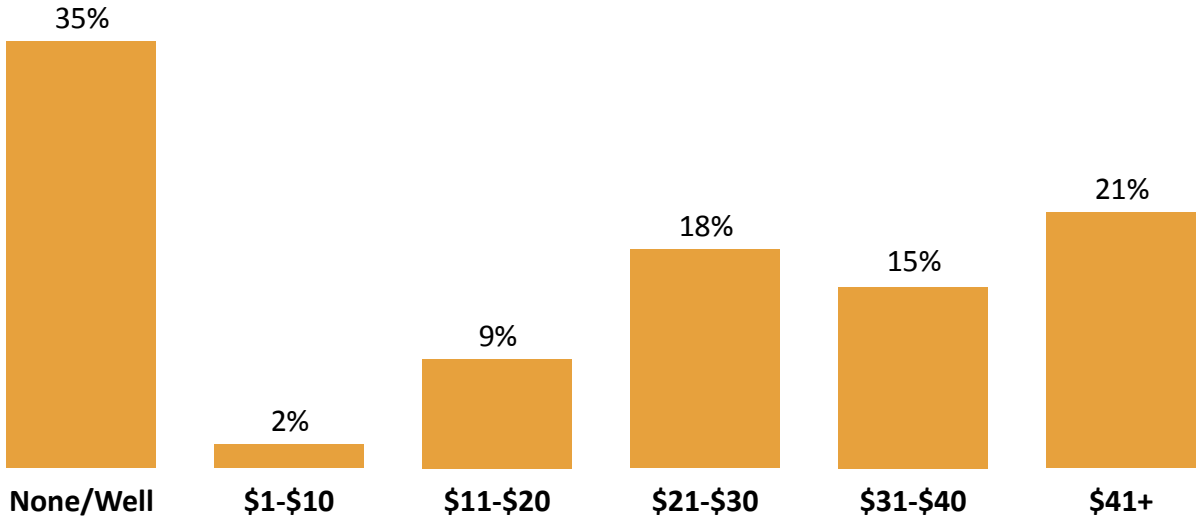
Approximately 40% of respondents said they were on a private well and 35% believed their home tap water was supplied by the city. About 11% mentioned either a public utility or PWSD, 7% indicated some other type of organization (e.g., private company, county, rural water district, or neighborhood association), and 6.5% did not know.



Demographic Analysis: Older respondents were significantly more likely than younger respondents to say their home tap water came from a private well. Conversely, younger respondents were much more likely than older respondents to say their home tap water was supplied by the city.

Average Monthly Home Water Bill

The average monthly home water bill for rural area respondents was widely dispersed with a plurality (35%) indicating no monthly water bill as a result of being on a private well, followed by 21% who reported monthly water bills in excess of $40. Overall, 54% of rural area respondents said their home water bills averaged more than $20 per month.

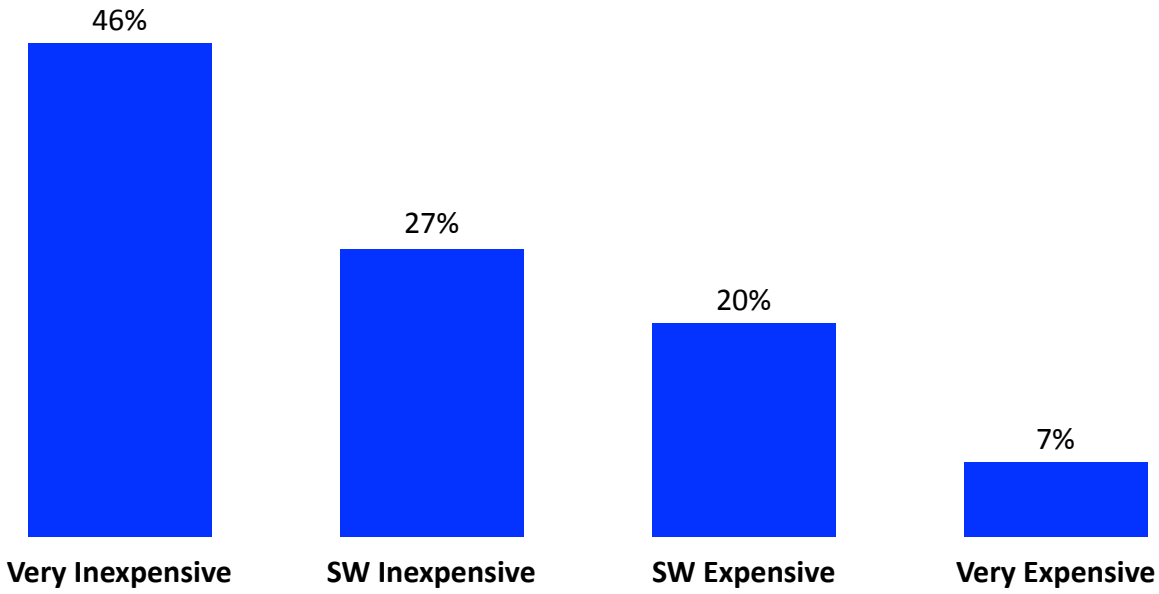


Demographic Analysis: Older respondents and long-time residents were much more likely than younger respondents and recent residents to say they had no monthly water bill as a consequence of being on a private well.

Demographics	None/ Well	$1-$10	$11-$20	$21-$30	$31-$40	> $40
18-39 years old	22%	2%	7%	17%	23%	29%
40-64 years old	31%	2%	7%	18%	17%	25%
65+ years old	**41%**	3%	11%	19%	10%	16%
< 10 yrs resident	21%	2%	18%	20%	19%	20%
10-29 yrs resident	32%	4%	9%	22%	14%	19%
30+ yrs resident	**38%**	2%	6%	16%	15%	23%

Monthly Home Water Bill Perceptions

Perceived Expense: Nearly 50% of respondents said their monthly home water bill was "very inexpensive" when compared to other monthly essentials and 27% thought it was "somewhat inexpensive." Only 7% believed it was "very expensive" compared to other monthly essentials.

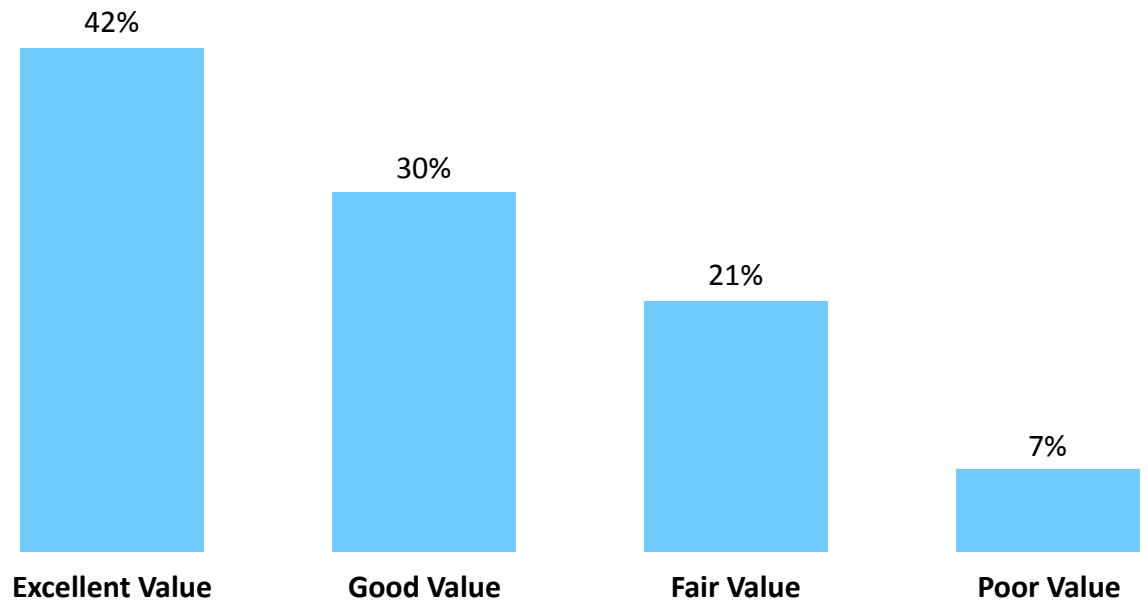


Demographic Analysis: Older respondents were significantly more likely than younger respondents (or any other demographic group) to describe their home monthly water bill as "very inexpensive."

Respondent Age	Very Inexpensive	Somewhat Inexpensive	Somewhat Expensive	Very Expensive
18-39 years old	36%	30%	28%	6%
40-64 years old	36%	33%	21%	10%
65+ years old	**53%**	23%	18%	6%

Monthly Home Water Bill Perceptions (Cont'd)

Perceived Value: More than 40% of respondents were of the opinion that the water provided to their home was an "excellent" value and 30% thought it was a "good" value. Only 7% said it was a "poor" value.

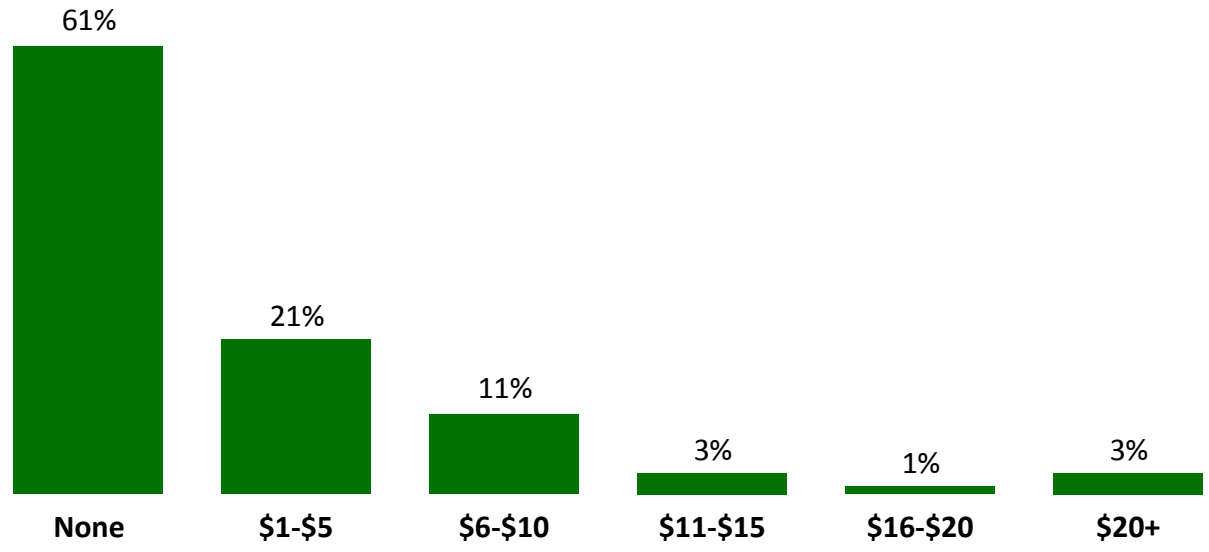


Demographic Analysis: Older respondents were significantly more likely than younger respondents (or any other demographic group) to describe their home monthly water bill as an "excellent" value (52%).

Respondent Age	Excellent Value	Good Value	Fair Value	Poor Value
18-39 years old	25%	32%	30%	13%
40-64 years old	33%	36%	24%	7%
65+ years old	**52%**	28%	14%	6%

Amount Willing to Pay Extra to Ensure Supply of Water

About 60% of respondents said they would not pay anything extra on their monthly water bill to ensure a long-term supply of drinking water, while 21% were willing to pay $1-to-$5 more per month. Less than 10% of respondents were willing to pay more than $10 extra per month.



Demographic Analysis: Respondents from households earning less than $25,000 a year were much more likely than any other demographic group (household income or otherwise) to say they would **not pay anything extra per month** to ensure an adequate long-term supply of drinking water.

Household Income	None	$1-$5	$6-$10	$11-$15	$16-$20	> $20
< 25k	**74%**	13%	12%	0%	0%	1%
25k-39k	54%	24%	19%	1%	2%	0%
40k-69k	51%	27%	11%	5%	2%	4%
70k-99k	57%	26%	9%	4%	0%	4%
100k+	44%	25%	15%	3%	3%	10%

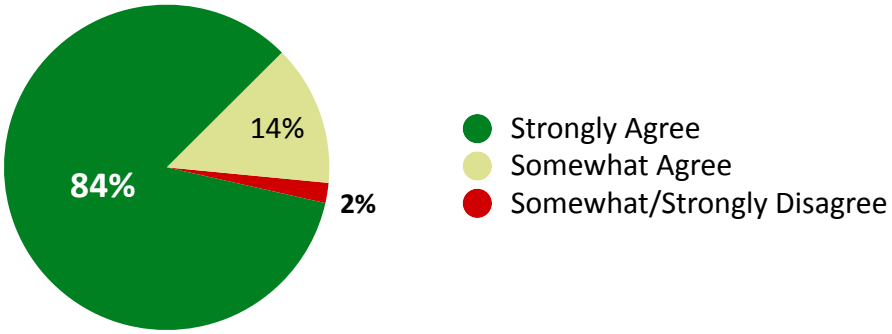
Amount Willing to Pay Extra by Demographics

With the exception of respondents from high-income households and those with post-graduate degrees, a majority of respondents (51% to 74%) from all other demographic groups were **not** willing to pay anything extra per month on their water bill to ensure a long-term supply of drinking water. This was especially true for low-income respondents.

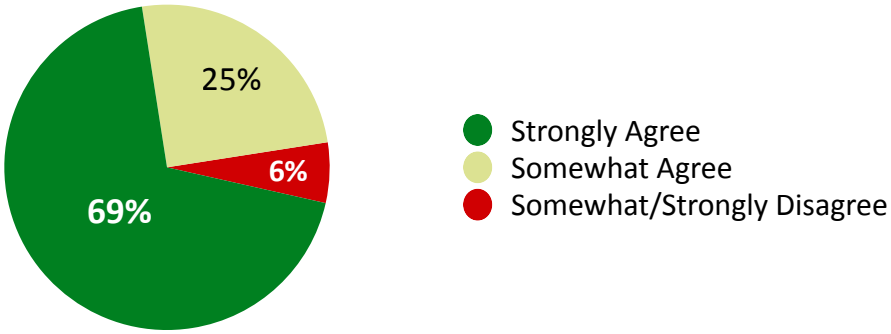
Demographics	None	$1 to $5	$6 to $10	> $10
Male	60%	18%	12%	10%
Female	61%	23%	10%	6%
Lake user	58%	22%	12%	8%
Lake nonuser	66%	19%	10%	5%
18-39 years old	57%	25%	11%	7%
40-64 years old	57%	20%	13%	10%
65+ years old	64%	20%	11%	5%
High school or less	67%	17%	12%	4%
Some college/vo-tech	61%	22%	11%	6%
College graduate	56%	22%	12%	10%
Post-graduate	**47%**	**28%**	**12%**	**13%**
< 25k household income	**74%**	13%	12%	1%
25k-39k household income	54%	24%	19%	3%
40k-69k household income	51%	27%	11%	11%
70k-99k household income	57%	26%	9%	8%
100k+ household income	**44%**	**25%**	**15%**	**16%**
< 10 years of residency	59%	21%	11%	9%
10-29 years of residency	58%	23%	13%	6%
30+ years of residency	61%	20%	11%	8%

Long-Term Supply of Water: Importance and Infrastructure

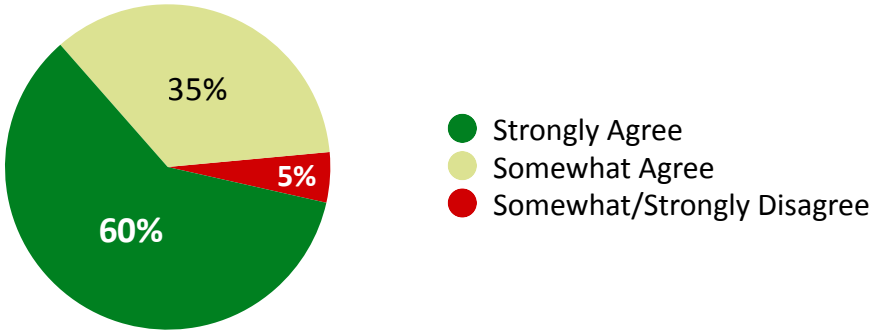
Importance of Long-Term Supply of Water: Nearly 85% of respondents *strongly agreed* that having an adequate long-term supply of water was important for their community's quality of life and economic competitiveness.



Obligation to Plan Ahead and Invest: Nearly 70% of respondents *strongly agreed* that locally elected officials have an obligation to plan ahead and invest in the necessary infrastructure to ensure that homeowners, businesses, and farmers have adequate long-term access to water.

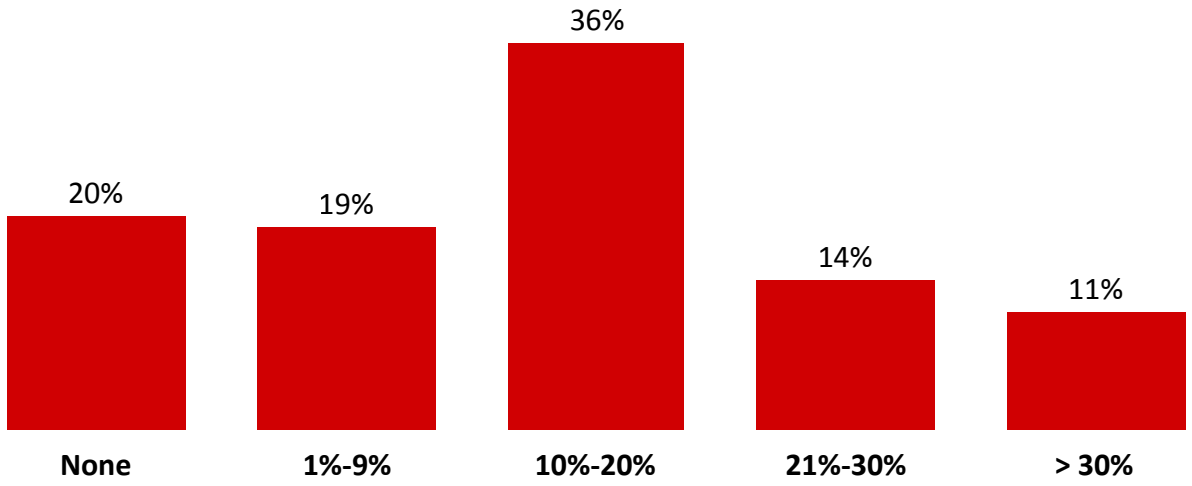


Investments in Water Supply and Infrastructure: A majority of respondents (60%) *strongly agreed* that investments in water supply and infrastructure were necessary to maintain an adequate long-term supply of water in southwest Missouri.



Reducing Water Consumption in an Emergency

A plurality of respondents (36%) indicated they could temporarily reduce their water consumption by 10% to 20% if their local water provider had to implement emergency water conservation measures. While 25% of respondents thought they could reduce their water consumption by more than 20%, a relatively large percentage of residents (39%) said their reduction in water consumption would by less than 10%, if at all.

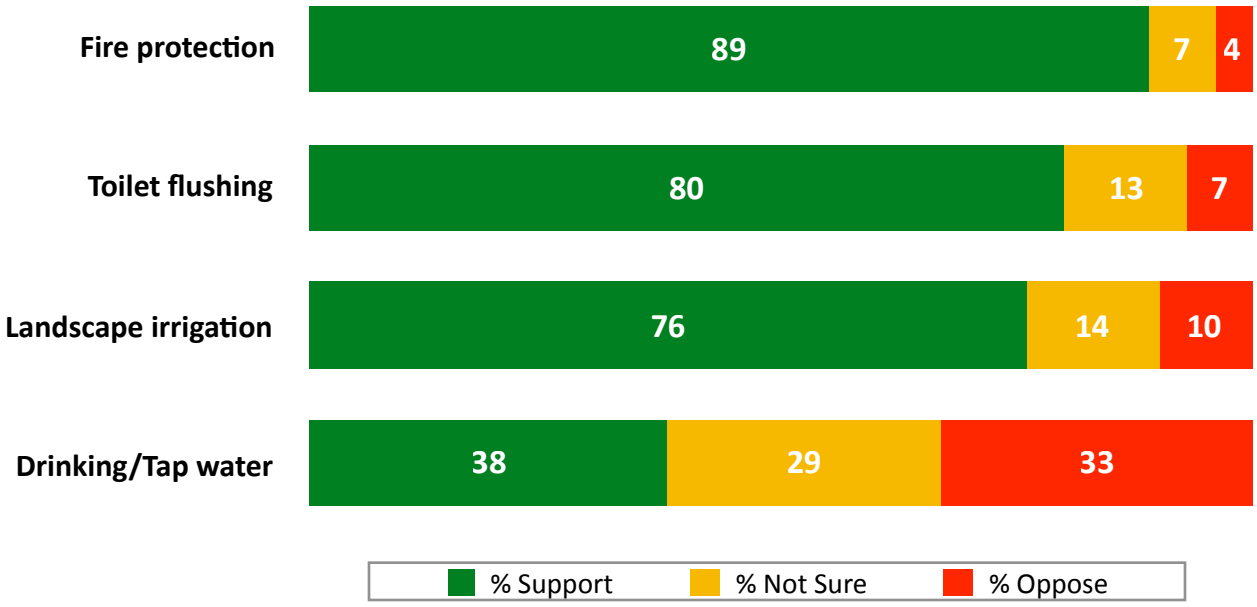


Demographic Analysis: Willingness to reduce water consumption during a drought was strongly related to respondent educational level. For example, 94% of post-graduates indicated some level of reduction was possible compared to 72% of respondents with a high school education or less.

Education	None	1%-9%	10%-20%	21%-30%	> 30%
High School or Less	**28%**	20%	32%	8%	12%
Some College/Vo-Tech	20%	16%	37%	17%	10%
College Graduate	14%	21%	38%	15%	12%
Post-Graduate	6%	23%	36%	17%	18%

Support for Using Treated Wastewater

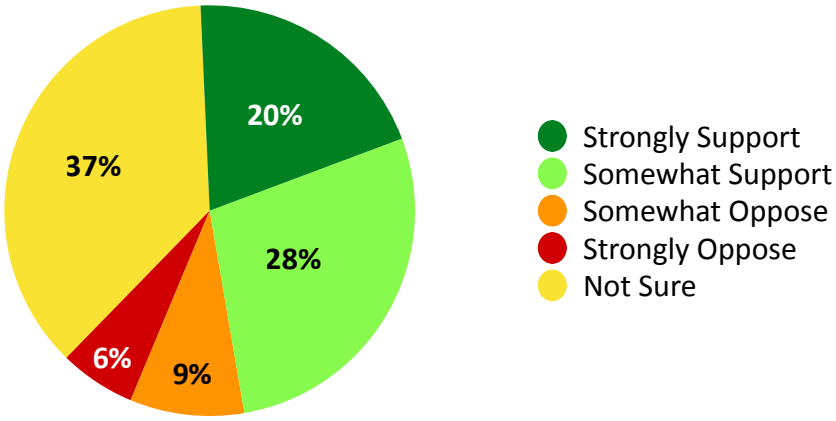
To save money and conserve water, respondents were asked if they would support or oppose the use of treated wastewater for various activities instead of being released into area waterways. While the vast majority of respondents said they would approve the use of treated wastewater for purposes of fire protection (89%), toilet flushing (80%), and landscape irrigation (76%); relatively few respondent (38%) would do so for drinking/tap water purposes.



Demographic Analysis: There were no meaningful differences of opinion on this series of questions based on respondent demographic characteristics.

Reallocation of Water Storage in Stockton Lake

Nearly 50% of respondents either strongly (28%) or somewhat (20%) supported the idea of reallocating a small amount of water storage in Stockton Lake to be used by citizens and businesses in southwest Missouri for long-term water supply. Fifteen percent of respondents were opposed to this idea and 37% were undecided.



Demographic Analysis: Females and older respondents (65+) were far more likely than males and younger respondents (and all other demographic groups) to be undecided on the Stockton Lake water reallocation proposal (46% and 43%, respectively).

Demographics	Strongly Support	Somewhat Support	Somewhat Oppose	Strongly Oppose	Not Sure
Male	25%	31%	10%	5%	29%
Female	14%	26%	8%	6%	**46%**
18-39 years old	22%	37%	8%	7%	26%
40-64 years old	21%	30%	9%	6%	34%
65+ years old	17%	26%	9%	5%	**43%**

Reallocation of Water Storage in Stockton L. by Demographics

While opposition to the Stockton Lake reallocation proposal was minimal — less than 25% of ***any*** demographic group was opposed, support ranged from 40% to 59%. A relatively large percentage of respondents across all demographic groups were undecided on this issue.

Demographics	Strongly or SW Support	Strongly or SW Oppose	Not Sure
Male	56%	15%	29%
Female	**40%**	14%	**46%**
Stockton Lake user	51%	**24%**	25%
Stockton Lake nonuser	48%	11%	**41%**
18-39 years old	**59%**	15%	26%
40-64 years old	51%	15%	34%
65+ years old	43%	14%	**43%**
High school or less	50%	15%	35%
Some college/vo-tech	48%	14%	38%
College graduate	54%	11%	35%
Post-graduate	44%	20%	36%
< 25k household income	49%	12%	39%
25k-39k household income	57%	11%	32%
40k-69k household income	53%	16%	31%
70k-99k household income	53%	15%	32%
100k+ household income	54%	12%	34%
< 10 years of residency	49%	15%	36%
10-29 years of residency	54%	10%	36%
30+ years of residency	46%	17%	37%

APPENDIX A

Rural Areas Surveyed in Southwest Missouri

(A total of 93 rural communities in southwest Missouri were surveyed)

1. Alba = 1 online
2. Aldrich = 4 telephone
3. Anderson = 18 telephone
4. Appleton City = 2 telephone
5. Arcola = 8 telephone
6. Asbury = 3 online
7. Ash Grove = 7 telephone
8. Aurora = 108 online
9. Bolivar (26 telephone & 1 online) = 27 total
10. Branson West = 13 telephone
11. Brighton = 1 telephone
12. Brookline = 24 online
13. Bull Creek = 1 online
14. Carytown = 1 telephone
15. Cassville (16 telephone & 6 online) = 22 total
16. Chesapeake = 1 online
17. Christian County (rural residents) = 14 online
18. Clever = 5 online
19. Collins = 4 telephone
20. Cross Timbers = 1 telephone
21. Dadeville = 8 telephone
22. Diamond = 1 online
23. Duenweg = 1 online
24. Dunnegan = 2 telephone

25. Duquesne = 7 online
26. Eagle Rock = 1 telephone
27. El Dorado Springs = 8 telephone
28. Everton = 5 telephone
29. Exeter = 1 telephone
30. Fair Grove = 6 telephone
31. Fair Play = 23 telephone
32. Flemington = 5 telephone
33. Forsyth = 67 telephone
34. Fremont Hills = 4 online
35. Golden = 1 telephone
36. Golden City = 4 telephone
37. Goodman (3 telephone & 2 online) = 5 total
38. Greene County (rural residents) = 25 online
39. Greenfield = 24 telephone
40. Halfway = 7 telephone
41. Hall Town = 1 telephone
42. Harwood = 1 telephone
43. Hermitage = 4 telephone
44. Hollister (3 online & 124 telephone) = 127 total
45. Humansville = 10 telephone
46. Indian Point = 13 telephone
47. Jerico Springs = 5 telephone
48. Kimberling City = 68 telephone
49. Lamar (27 telephone & 7 online) = 34 total
50. Leawood = 1 online
51. Liberal = 2 telephone

52. Lockwood = 20 telephone
53. Loma Linda = 5 online
54. Lowry City = 4 telephone
55. Marionville = 37 online
56. Metz = 1 telephone
57. Milo = 1 telephone
58. Neck City = 1 online
59. Neosho = (27 telephone & 4 online) = 31 total
60. Nevada = 19 telephone
61. Noel = 4 telephone
62. Oronogo = 4 online
63. Osceola = 11 telephone
64. Pierce City = 7 online
65. Pineville = 1 telephone
66. Pittsburg = 4 telephone
67. Pleasant Hope = 3 telephone
68. Point Lookout = 1 online
69. Preston = 5 telephone
70. Purdy = 1 telephone
71. Quincy = 1 telephone
72. Reeds = 1 online
73. Reeds Springs = 1 online
74. Richards = 2 telephone
75. Rockaway Beach = 20 telephone
76. Rocky Comfort = 2 telephone
77. Rogersville = 9 online
78. Roscoe = 1 telephone

79. Sarcoxie = 1 online
80. Schell City = 1 telephone
81. Seligman = 1 telephone
82. Shell Knob = 10 telephone
83. Shoal Creek Drive = 1 online
84. Sparta = 1 online
85. Stella = 1 telephone
86. Strafford (17 online & 4 telephone) = 21 total
87. Verona = 6 online
88. Walker = 1 telephone
89. Walnut Grove = 6 telephone
90. Washburn = 2 telephone
91. Weaubleau = 7 telephone
92. Wheatland = 3 telephone
93. Wheaton = 1 telephone

Demographic Analysis

NOTE: Table percentages **bolded in red** denote statistical significance at the .05 level or less.

Table percentages **bolded in red** and **shaded in yellow** denote statistical significance at the .001 level or less.

		Gender		Respondent Age			Educational Level				Annual Household Income					Years of Residency		
	OVERALL	M	F	< 40	40-64	65+	HS or Less	Some College	College Grad	Post-Grad	<25k	25k-39k	40k-69k	70k–99k	100k+	< 10	10-29	30+
Source of Home Tap Water																		
Aquifer	**54%**	**64%**	**50%**	**38%**	**51%**	**66%**	51%	56%	57%	53%	**43%**	**51%**	**59%**	**49%**	**60%**	47%	55%	58%
Surface Water	**7%**	**6%**	**6%**	**6%**	**6%**	**7%**	5%	8%	4%	8%	**9%**	**10%**	**4%**	**7%**	**4%**	8%	4%	7%
Combination	**2%**	**2%**	**2%**	**2%**	**3%**	**1%**	2%	2%	4%	1%	**1%**	**4%**	**1%**	**4%**	**1%**	2%	2%	2%
Not Sure	**37%**	**28%**	**42%**	**54%**	**40%**	**26%**	42%	34%	35%	38%	**47%**	**35%**	**36%**	**40%**	**35%**	43%	39%	33%
Type of Organization Supplying Home Tap Water																		
None/Private Well	**41%**	**47%**	**40%**	**28%**	**38%**	**51%**	41%	40%	44%	38%	33%	39%	41%	40%	49%	**34%**	**44%**	**42%**
City	**35%**	**32%**	**36%**	**48%**	**35%**	**29%**	38%	36%	32%	27%	46%	34%	33%	33%	23%	**32%**	**32%**	**36%**
Public Utility	**6%**	**6%**	**5%**	**6%**	**7%**	**4%**	3%	5%	7%	10%	3%	8%	6%	10%	5%	**7%**	**6%**	**5%**
Public Water Supply District	**5%**	**3%**	**7%**	**3%**	**6%**	**6%**	5%	5%	3%	11%	3%	6%	6%	5%	7%	**4%**	**5%**	**6%**
Private Company	**3%**	**4%**	**1%**	**3%**	**4%**	**2%**	3%	3%	4%	5%	2%	2%	5%	3%	7%	**7%**	**3%**	**2%**
County	**2%**	**2%**	**2%**	**1%**	**2%**	**2%**	3%	2%	1%	3%	2%	2%	2%	3%	4%	**3%**	**1%**	**3%**
Rural Water District	**1%**	**1%**	**1%**	**1%**	**1%**	**1%**	1%	2%	0%	0%	1%	2%	1%	1%	1%	**1%**	**1%**	**2%**
Neighborhood Association	**1%**	**1%**	**1%**	**0%**	**1%**	**1%**	1%	1%	1%	1%	1%	0%	0%	1%	1%	**2%**	**1%**	**0%**
Not Sure	**6%**	**4%**	**7%**	**10%**	**6%**	**4%**	5%	6%	8%	5%	9%	7%	6%	4%	3%	**10%**	**7%**	**4%**
Average Monthly Home Water Bill																		
None/On a Well	**35%**	**38%**	**35%**	**22%**	**31%**	**41%**	37%	31%	37%	25%	**32%**	**30%**	**27%**	**36%**	**42%**	**21%**	**32%**	**38%**
$1–$10	**2%**	**4%**	**1%**	**2%**	**2%**	**3%**	3%	2%	3%	2%	**4%**	**2%**	**5%**	**1%**	**0%**	**2%**	**4%**	**2%**
$11–$20	**9%**	**10%**	**7%**	**7%**	**7%**	**11%**	5%	10%	7%	18%	**2%**	**11%**	**11%**	**7%**	**7%**	**18%**	**9%**	**6%**
$21–$30	**18%**	**18%**	**16%**	**17%**	**18%**	**19%**	17%	20%	16%	16%	**24%**	**20%**	**19%**	**16%**	**8%**	**20%**	**22%**	**16%**
$31–$40	**15%**	**11%**	**18%**	**23%**	**17%**	**10%**	14%	15%	18%	16%	**13%**	**17%**	**17%**	**20%**	**10%**	**19%**	**14%**	**15%**
> $40	**21%**	**19%**	**23%**	**29%**	**25%**	**16%**	24%	22%	19%	23%	**25%**	**20%**	**21%**	**20%**	**33%**	**20%**	**19%**	**23%**
Monthly Home Water Bill — Perceived Expense																		
Very Inexpensive	**46%**	50%	44%	**36%**	**36%**	**53%**	46%	44%	41%	37%	42%	46%	35%	42%	45%	35%	41%	47%
Somewhat Inexpensive	**27%**	24%	29%	**30%**	**33%**	**23%**	24%	29%	26%	38%	19%	27%	39%	27%	29%	32%	28%	26%
Somewhat Expensive	**20%**	19%	20%	**28%**	**21%**	**18%**	21%	22%	23%	18%	28%	21%	20%	21%	21%	22%	26%	19%
Very Expensive	**7%**	7%	7%	**6%**	**10%**	**6%**	9%	5%	10%	7%	11%	6%	6%	10%	5%	11%	5%	8%

		Gender		Respondent Age			Educational Level				Annual Household Income					Years of Residency		
	OVERALL	M	F	< 40	40-64	65+	HS or Less	Some College	College Grad	Post-Grad	<25k	25k-39k	40k-69k	70k–99k	100k+	< 10	10-29	30+
Monthly Home Water Bill — Perceived Value																		
Excellent Value	**42%**	47%	41%	**25%**	**33%**	**52%**	43%	38%	37%	37%	37%	42%	29%	37%	41%	**36%**	**33%**	**44%**
Good Value	**30%**	27%	33%	**32%**	**36%**	**28%**	32%	31%	31%	33%	27%	30%	37%	31%	37%	**28%**	**35%**	**31%**
Fair Value	**21%**	20%	19%	**30%**	**24%**	**14%**	17%	23%	24%	23%	28%	17%	23%	24%	20%	**28%**	**24%**	**17%**
Poor Value	**7%**	6%	7%	**13%**	**7%**	**6%**	8%	8%	8%	7%	8%	11%	11%	8%	2%	**8%**	**8%**	**8%**
Amount Willing to Pay Extra Per Month on Home Water Bill to Ensure Long-Term Supply of Drinking Water																		
None	**61%**	60%	61%	57%	57%	64%	67%	61%	56%	47%	**74%**	**54%**	**51%**	**57%**	**44%**	59%	58%	61%
$1–$5	**21%**	18%	23%	25%	20%	20%	17%	22%	22%	28%	**13%**	**24%**	**27%**	**26%**	**25%**	21%	23%	20%
$6–$10	**11%**	12%	10%	11%	13%	11%	12%	11%	12%	12%	**12%**	**19%**	**11%**	**9%**	**15%**	11%	13%	11%
$11–$15	**3%**	4%	3%	2%	4%	2%	2%	3%	3%	4%	**0%**	**1%**	**5%**	**4%**	**3%**	5%	2%	3%
$16–$20	**1%**	2%	1%	0%	2%	2%	1%	1%	1%	4%	**0%**	**2%**	**2%**	**0%**	**3%**	0%	2%	2%
> $20	**3%**	4%	2%	5%	4%	1%	1%	2%	6%	5%	**1%**	**0%**	**4%**	**4%**	**10%**	4%	2%	3%
Having an Adequate Long-Term Supply of Water is Important for Community Quality of Life and Economic Competitiveness																		
Strongly Agree	**84%**	85%	84%	85%	89%	81%	**75%**	**85%**	**93%**	**90%**	**75%**	**85%**	**89%**	**92%**	**91%**	88%	84%	84%
Somewhat Agree	**14%**	14%	15%	14%	10%	17%	**23%**	**13%**	**6%**	**9%**	**23%**	**14%**	**10%**	**6%**	**8%**	11%	15%	14%
Somewhat/Strongly Disagree	**2%**	1%	1%	1%	1%	2%	**2%**	**2%**	**1%**	**1%**	**2%**	**1%**	**1%**	**2%**	**1%**	1%	1%	2%
Locally Elected Officials Have an Obligation to Plan Ahead and Invest in Infrastructure to Ensure Community Long-Term Access to Water																		
Strongly Agree	**69%**	70%	69%	**73%**	**75%**	**63%**	67%	70%	75%	68%	67%	72%	71%	77%	81%	72%	73%	66%
Somewhat Agree	**25%**	23%	27%	**21%**	**20%**	**31%**	26%	23%	20%	29%	26%	25%	23%	17%	16%	23%	23%	26%
Somewhat/Strongly Disagree	**6%**	7%	4%	**6%**	**5%**	**6%**	7%	7%	5%	3%	7%	3%	6%	6%	3%	5%	4%	8%
Maintaining an Adequate Long-Term Supply of Water in SW Missouri Requires Investments in Water Supply and Infrastructure																		
Strongly Agree	**60%**	**65%**	**56%**	61%	62%	59%	60%	63%	61%	52%	56%	62%	64%	58%	65%	66%	61%	59%
Somewhat Agree	**35%**	**28%**	**41%**	35%	33%	35%	34%	34%	34%	42%	39%	34%	31%	38%	28%	28%	34%	36%
Somewhat/Strongly Disagree	**5%**	**7%**	**3%**	4%	5%	6%	6%	3%	5%	6%	5%	4%	5%	4%	7%	6%	5%	5%

		Gender		Respondent Age			Educational Level				Annual Household Income					Years of Residency		
	OVERALL	M	F	< 40	40-64	65+	HS or Less	Some College	College Grad	Post-Grad	<25k	25k-39k	40k-69k	70k–99k	100k+	< 10	10-29	30+
During a Severe Drought, How Much Could You Realistically Reduce Your Water Consumption?																		
None	**20%**	**23%**	**17%**	15%	20%	20%	**28%**	**20%**	**14%**	**6%**	23%	20%	17%	14%	17%	**18%**	**14%**	**23%**
< 10%	**19%**	**15%**	**23%**	20%	21%	17%	**20%**	**16%**	**21%**	**23%**	19%	19%	17%	24%	15%	**15%**	**17%**	**23%**
10%-20%	**36%**	**35%**	**36%**	36%	35%	36%	**32%**	**37%**	**38%**	**36%**	37%	33%	40%	36%	35%	**36%**	**41%**	**31%**
21%-30%	**14%**	**13%**	**15%**	19%	12%	15%	**8%**	**17%**	**15%**	**17%**	14%	19%	14%	11%	10%	**16%**	**15%**	**13%**
> 30%	**11%**	**14%**	**9%**	10%	12%	12%	**12%**	**10%**	**12%**	**18%**	7%	9%	12%	15%	23%	**15%**	**13%**	**10%**
Support for Reuse of Water for FIRE PROTECTION																		
Support	**89%**	**87%**	**90%**	94%	89%	87%	**83%**	**92%**	**89%**	**92%**	86%	93%	88%	93%	92%	90%	89%	88%
Oppose	**4%**	**6%**	**2%**	2%	5%	4%	**4%**	**3%**	**5%**	**2%**	3%	2%	5%	3%	4%	4%	5%	3%
Not Sure	**7%**	**7%**	**8%**	4%	6%	9%	**13%**	**5%**	**6%**	**6%**	11%	5%	7%	4%	4%	6%	6%	9%
Support for Reuse of Water for TOILET FLUSHING																		
Support	**80%**	**77%**	**83%**	83%	80%	80%	**72%**	**83%**	**83%**	**86%**	**74%**	**84%**	**78%**	**87%**	**88%**	80%	80%	81%
Oppose	**7%**	**10%**	**4%**	8%	7%	6%	**10%**	**6%**	**7%**	**3%**	**9%**	**5%**	**10%**	**4%**	**1%**	12%	6%	6%
Not Sure	**13%**	**13%**	**13%**	9%	13%	14%	**18%**	**11%**	**10%**	**11%**	**17%**	**11%**	**12%**	**9%**	**11%**	8%	14%	13%
Support for Reuse of Water for LANDSCAPE IRRIGATION																		
Support	**76%**	**77%**	**75%**	**84%**	**77%**	**73%**	**69%**	**78%**	**80%**	**83%**	74%	80%	73%	82%	85%	77%	80%	74%
Oppose	**10%**	**13%**	**8%**	**10%**	**11%**	**8%**	**11%**	**11%**	**10%**	**4%**	9%	11%	12%	9%	8%	11%	10%	10%
Not Sure	**14%**	**10%**	**17%**	**6%**	**12%**	**19%**	**20%**	**11%**	**10%**	**13%**	17%	9%	15%	9%	7%	12%	10%	16%
Support for Reuse of Water for DRINKING/TAP WATER																		
Support	**38%**	**43%**	**33%**	42%	40%	34%	37%	38%	39%	37%	40%	44%	35%	32%	42%	39%	43%	32%
Oppose	**33%**	**34%**	**32%**	29%	31%	37%	35%	37%	28%	26%	33%	33%	34%	34%	30%	35%	30%	37%
Not Sure	**29%**	**23%**	**35%**	29%	29%	29%	28%	25%	33%	37%	27%	23%	31%	34%	28%	26%	27%	31%
Reallocation of Water Storage in Stockton Lake																		
Strongly Support	**20%**	**25%**	**14%**	**22%**	**21%**	**17%**	**22%**	**18%**	**22%**	**16%**	18%	23%	20%	24%	22%	22%	20%	19%
Somewhat Support	**28%**	**31%**	**26%**	**37%**	**30%**	**26%**	**28%**	**30%**	**32%**	**28%**	31%	34%	33%	29%	32%	27%	34%	27%
Somewhat Oppose	**9%**	**10%**	**8%**	**8%**	**9%**	**9%**	**11%**	**8%**	**8%**	**6%**	6%	4%	13%	6%	5%	8%	6%	10%
Strongly Oppose	**6%**	**5%**	**6%**	**7%**	**6%**	**5%**	**4%**	**6%**	**3%**	**14%**	6%	7%	3%	9%	7%	7%	4%	7%
Not Sure	**37%**	**29%**	**46%**	**26%**	**34%**	**43%**	**35%**	**38%**	**35%**	**36%**	39%	32%	31%	32%	34%	36%	36%	37%

Questionnaire

Citizen Water Supply and Usage Survey — 2017/2018

Rural areas (n = 995)

1. **How strongly do you agree or disagree with this statement: Having an adequate long-term supply of water is important for your community's quality of life and economic competitiveness.**

   84%...Strongly Agree
   14%...Somewhat Agree
   1%...Somewhat Disagree
   1%...Strongly Disagree

2. **What type of organization, if any, supplies your home tap water?**

   41.5%...None, I am on a private well
   34.7%...City
   5.6%...Public Utility
   5.1%...Public Water Supply District (PWSD)
   2.7%...Private Company
   2.1%...County
   1.0%...Rural Water District
   0.8%...Neighborhood Association
   6.5%...Not Sure

3. **What is the source of your home tap water?**

   54%...Aquifer (e.g., well)
   7%...Surface Water (e.g., lake/river)
   2%...Combination of aquifer and surface water
   37%...Not Sure

4. **On average, about how much per month is your home water bill?**

   35%...None, I am on a private well
   2%...$1 to $10 per month
   9%...$11 to $20 per month
   18%...$21 to $30 per month
   15%...$31 to $40 per month
   21%...More than $40 per month

5. **Compared to other monthly essentials, how would you describe the expense of your monthly home water bill?**

   46%...Very inexpensive
   27%...Somewhat inexpensive
   20%...Somewhat expensive
   7%...Very expensive

6. **Considering the amount of water you use at home per month and the amount of your monthly home water bill, would you say the water provided to your home is an excellent, good, fair, or poor value?**

   42%...Excellent Value
   30%...Good Value
   21%...Fair Value
   7%...Poor Value

7. **Based on your current water bill, how much more would you be willing to pay per month to ensure an adequate long-term supply of drinking water?**

   61%...None, no more than what I am paying now
   21%...$1 to $5 more
   11%...$6 to $10 more
   3%...$11 to $15 more
   1%...$16 to $20 more
   3%...More than $20

8. **How strongly do you agree or disagree with this statement: Locally elected officials, such as county commissioners and city mayors, have an obligation to plan ahead and invest in the necessary infrastructure to ensure that homeowners, businesses, and farmers have adequate long-term access to water.**

   69%...Strongly Agree
   25%...Somewhat Agree
   2%...Somewhat Disagree
   4%...Strongly Disagree

9. **Droughts occur periodically as part of the natural climate cycle. When your area experiences a drought and your local provider of water has to implement emergency water conservation measures, how much could you realistically reduce your water consumption?**

   20%...None, I could not use any less water than I am using now
   19%...Less than 10%
   36%...10% to 20% less
   14%...21% to 30% less
   11%...More than 30%

10. **How strongly do you agree or disagree with this statement: To maintain an adequate long-term supply of water in southwest Missouri, investments in water supply and infrastructure are necessary.**

    60%...Strongly Agree
    35%...Somewhat Agree
    2%...Somewhat Disagree
    3%...Strongly Disagree

11. **How strongly would you support or oppose the reallocation of a small amount of water storage in Stockton Lake to be used by citizens and businesses in southwest Missouri for long-term water supply?**

20%...Strongly Support
28%...Somewhat Support
9%...Somewhat Oppose
6%...Strongly Oppose
37%...Not Sure

12. **Water providers treat water to very high drinking water standards and then deliver it to homes and businesses for use. Once that water has been used, it is again treated to very high drinking water standards and then released into area waterways rather than being reused. To save money and conserve water, instead of releasing this highly treated water back into area waterways (lakes, streams, rivers) would you support or oppose its reuse for the following:**

	Support	Oppose	Not Sure
1. Fire protection	89%	4%	7%
2. Toilet flushing	80%	7%	13%
3. Irrigation of landscaping	76%	10%	14%
4. Drinking/Tap water	38%	33%	29%

Respondent Information: The last few questions are about you and your household. They will be used to group responses to the survey. Your responses are completely confidential and anonymous.

13. **What town or city do you live in?** Percentages reported are based on 995 respondents representing 93 rural communities in a 16-county area of SW Missouri.

14. **Approximately how many years have you lived in southwest Missouri?**

Range = <1 year–94 years, Mean = 30.8 years, Median = 26 years
< 10 years = 17%, 10–29 years = 37%, 30+ years = 46%

15. **In the past couple of years, have you used any of the following lakes or rivers for recreational purposes (e.g., camping, picnicking, swimming, fishing, boating, etc.)?**

	Yes	No
1. Table Rock Lakes	56%	44%
2. Stockton Lake	29%	71%
3. Pomme de Terre Lake	16%	84%

16. **What is your gender?** 47%...Male 53%...Female

17. **What is your birth year?**

    Age range = 18–95 years old, Mean = 57.9 years old, Median = 60 years old

    Age < 40 years = 18%, Age 40–64 years = 42%, Age 65+ years = 40%

18. **What is your educational level?**

    4%...Did not complete high school

    25%...High school graduate/GED

    37%...Some college/Vo-Tech

    22%...College graduate

    12%...Post-graduate studies (e.g., MA, Ph.D., MD)

19. **Which of the following categories best describes your total annual household income before taxes?**

    20%...Less than $25,000

    25%...$25,000 to $39,999

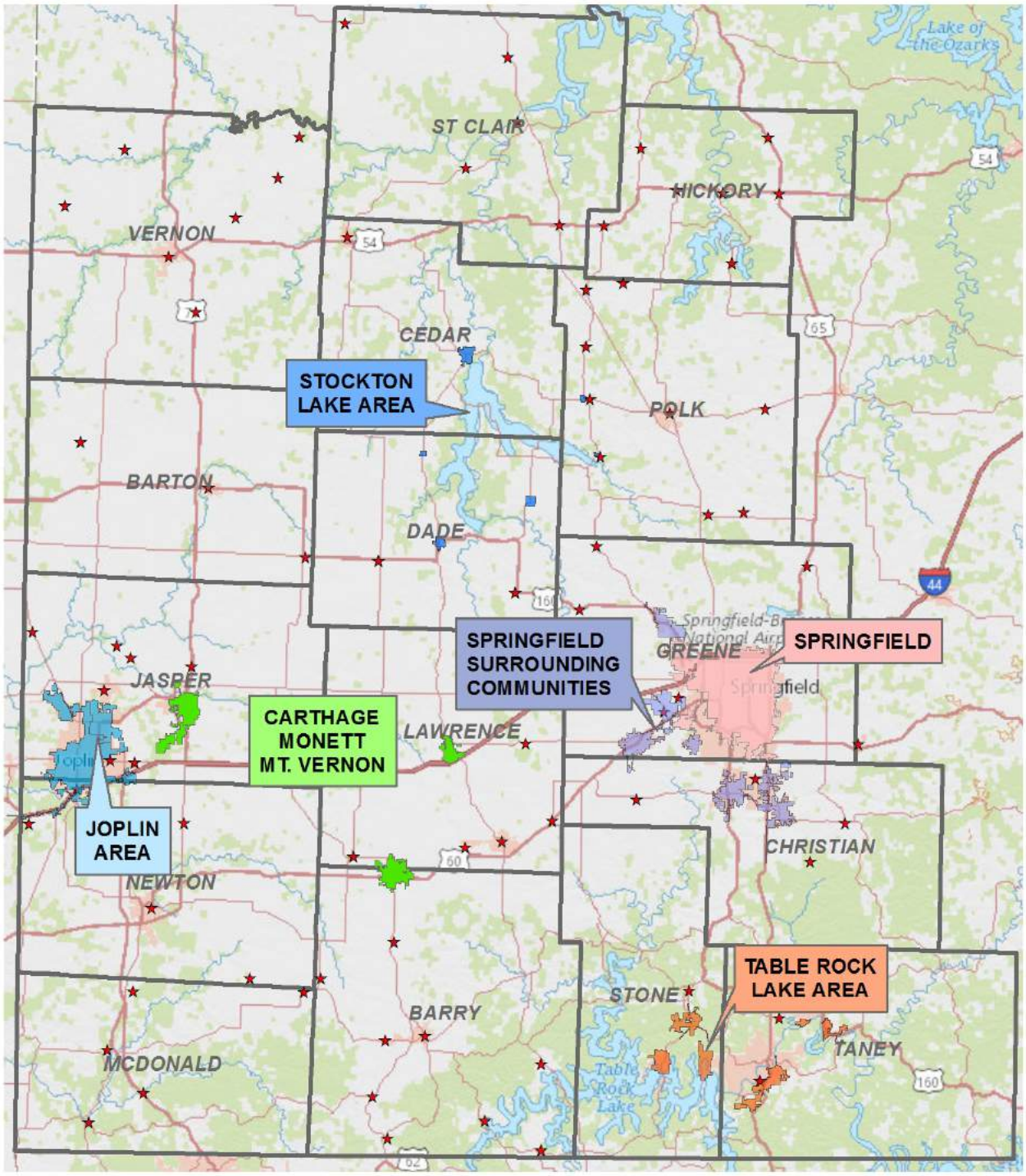
    28%...$40,000 to $69,999

    16%...$70,000 to $99,999

    11%...$100,000 or more

Thank You! This Completes the Survey.

OVERALL FINDINGS & SURVEY COMPARISONS



EXECUTIVE SUMMARY

This Executive Summary presents an overview of the 2017/2018 Overall Tri-State Citizen Water Supply and Usage Survey. The report is based on 3,287 surveys conducted in 104 communities throughout a 16-county area in southwest Missouri. The surveys were administered online and by telephone during the summer and fall of 2017 as well as the winter and spring of 2018. Overall findings have a margin of error of +/- 1.7% at the 95% confidence interval.

The survey was designed, administered, and analyzed by **Opinion Research Specialists, LLC** of Springfield, Missouri with input from the Tri-State Water Resource Coalition. Survey findings are summarized below.

Source of Home Tap Water

- 31% of respondents from southwest Missouri said their home tap water came from an aquifer, 16% mentioned surface water, and 7% thought it was a combination of the two. A relatively large percentage of respondents (46%) did not know the source of their home tap water. This was particularly true for younger respondents (65%) and newer residents (62%).

- A majority of respondents from the Stockton Lake area (83%), Table Rock Lake area (60%), and rural areas of southwest Missouri (54%) said their home tap water came from an aquifer, while 49% to 68% of respondents from the other four geographic areas did not know the source of their home tap water.

Type of Organization Supplying Home Tap Water

- A slim majority of southwest Missouri respondents (53%) said their home tap water was supplied by the city and 20% indicated they were on a private well. About 6% of respondents were unsure as to the supplier of their home tap water.

- More than 70% of respondents from the Carthage, Monett, and Mt. Vernon area, communities surrounding Springfield, and Springfield itself, said their home tap water was supplied by the city. Moreover, a plurality of Joplin, Webb City, and Carl Junction respondents (47%) also believed their home tap water was city supplied. Respondents from the Stockton Lake area (66%), Table Rock Lake area (47%), and rural areas (42%) were most likely to be on a private well.

Average Monthly Home Water Bill

- The average monthly home water bill among southwest Missouri respondents was widely dispersed with a slim plurality (26%) indicating they paid between $21 to $30, followed by 21% of respondents who reported average monthly bills in excess of $40.

- 57% of Stockton Lake area respondents paid no monthly water bill (on a private well), while those from communities surrounding Springfield and residents from the Joplin, Webb City, and Carl Junction area reported the highest average monthly water bills.

Monthly Home Water Bill Perceptions

- Nearly 70% of respondents residing in southwest Missouri said their monthly water bill was inexpensive compared to other monthly essentials and 68% rated the value of their home water (price paid for amount consumed) as either excellent or good. Older respondents were much more likely than younger respondents to describe their monthly water bill as “very inexpensive” and as an “excellent” value.

- With the exception of respondents from the Springfield surrounding communities, more than 60% of respondents in each of the other six geographic areas perceived their monthly home water bill to be inexpensive (very or somewhat) and to be either an excellent or good value. More than 70% of Stockton Lake area respondents said their monthly water bill was “very inexpensive” and was an “excellent” value.

Amount Willing to Pay Extra to Ensure Long-Term Supply of Water

- While 46% of respondents said they would not pay anything extra per month on their water bill to ensure a long-term supply of drinking water, 54% did indicate a willingness to pay at least $1-to-$5 more per month. Respondents least able/willing to pay anything extra per month were lower income (less than $25,000 per year) and less formally educated (high school or less).

- With the primary exceptions of low-income respondents and those less formally educated, a majority of most of the other demographic groups were willing to pay at least $1-to-$5 extra per month on their water bill to ensure a long-term supply of drinking water. This was especially true for high-income respondents and those with at least a college degree.

- A majority of respondents from Springfield, Carthage, Monett, Mt.Vernon, Springfield surrounding communities, and the Joplin, Webb City, Carl Junction area said they would be willing to pay **at least** $1 to $5 more on their monthly water bill to ensure a long-term supply of drinking water. And while a majority of respondents from the Stockton Lake area, Table Rock Lake area, and rural areas said they would not pay anything extra per month, between 27% and 42% were willing to pay something.

Long-Term Supply of Water: Importance and Infrastructure

- 90% of southwest Missouri respondents "strongly agreed" that a long-term supply of water was critical for their community's quality of life and economic competitiveness. At least 80% of respondents from each of the seven geographic areas "strongly agreed" with this statement.

- 71% "strongly agreed" that locally elected officials must invest in infrastructure to ensure long-term access to water for citizens, farmers, and businesses. At least 59% of respondents from each of the seven geographic areas "strongly agreed" with this statement.

- 57% "strongly agreed" that investments in water supply and infrastructure were needed to guarantee a long-term supply of water to southwest Missouri. At least 52% of respondents from each of the seven geographic areas "strongly agreed" with this statement.

Reducing Water Consumption in an Emergency

- A plurality of respondents (38%) indicated they could temporarily reduce their water consumption by 10% to 20% in the event of a severe drought, while 26% thought they could do so by more than 20%. However, 36% of respondents said their level of water reduction would be less than 10%, if at all.

- With the exception of the Stockton Lake area, a plurality of respondents from each of the other geographic areas said they could temporarily reduce their water consumption by 10% to 20% in the event of a severe drought. A plurality of Stockton Lake area respondents (30%) said they could not reduce their water consumption by any amount.

Support for Using Treated Wastewater

- To save money and conserve water, at least 82% of respondents said they would support the use of treated wastewater for purposes of fire protection, toilet flushing, and landscape irrigation. However, only 32% would approve the use of treated wastewater for drinking/tap water purposes. Level of support for each the four treated wastewater options mentioned above was fairly consistent across all seven geographic areas.

Reallocation of Water Storage in Stockton Lake

- A majority of southwest Missouri respondents (58%) said they supported (strongly or somewhat) the idea of reallocating a small amount of water storage in Stockton Lake to be used by citizens and businesses throughout southwest Missouri. About 10% of respondents were opposed to this concept and 31% were undecided.

- Demographically, a majority of all demographic groups supported the water storage reallocation proposal, while those opposed never exceeded 20% in any single group. A relatively large percentage of respondents from each demographic category were undecided on this issue (22% to 39%).

- With the exception of Stockton Lake area respondents, opposition to the Stockton Lake reallocation proposal was minimal — less than 20% of respondents from the other six geographic areas of southwest Missouri were opposed. Notably, 37% of Stockton Lake users were opposed, 42% were supportive, and 21% were undecided.

INTRODUCTION

This study was commissioned by the Tri-State Water Resource Coalition with the purpose of assessing the **opinions** and **perceptions** about water supply and water usage among residents in 104 communities throughout a 16-county area in southwest Missouri.

SURVEY DESIGN AND METHODOLOGY

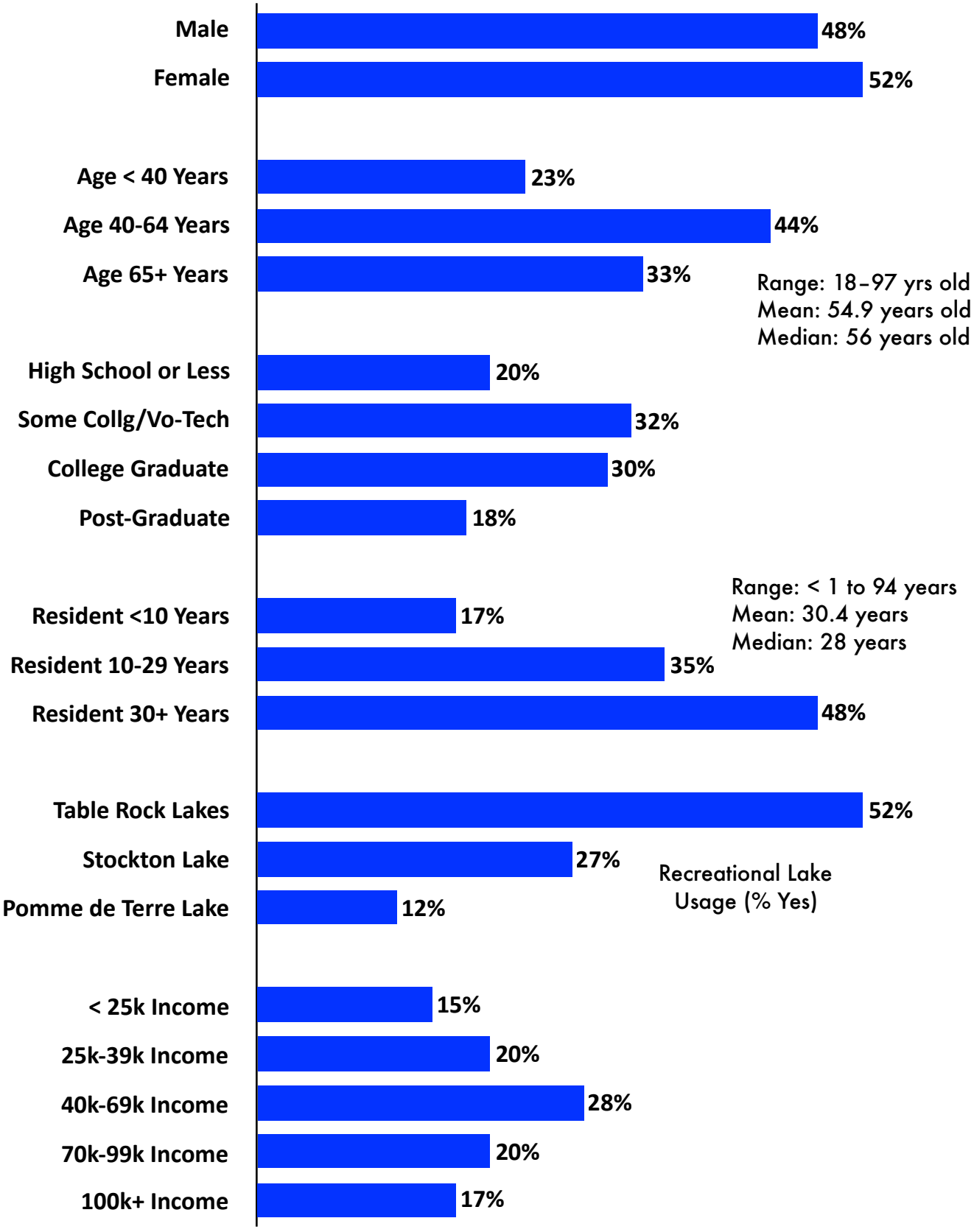
The survey was designed, administered, and analyzed by **Opinion Research Specialists, LLC** of Springfield, Missouri with input from the Tri-State Water Resource Coalition. Survey results are based on 3,287 completed online and telephone surveys conducted during the summer/fall of 2017 as well as winter/spring of 2018. See Appendix B for a complete listing of communities surveyed.

INTERPRETATION OF DATA

Overall survey results, based on 3,287 completed questionnaires, have a margin of error of approximately +/- 2% at the 95% confidence interval. For example, if a response listed in the report is 57% one can be 95% confident that the "true" percentage, that which would have been attained if all adult residents in the 16-county area of southwest Missouri had participated in the survey, is between 55% and 59%. Margin of error increases when subsets of the total sample are analyzed (e.g., male versus female, etc.).

Some percentages in the report may not add to exactly 100% due to rounding.

SURVEY RESPONDENT PROFILE — 16 County Area SW MO



A Comparison of Demographic Profiles by Geographic Area

Geographic Area Surveyed	% Male	% Female
Table Rock Lake Area	54	46
Carthage, Monett, Mt. Vernon	48	52
OVERALL	**48**	**52**
Springfield	47	53
Nixa, Ozark, Republic, Willard, Bfld	47	53
Joplin, Webb City, Carl Junction	47	53
Rural Areas	47	53
Stockton Lake Area	47	53

Region Surveyed	Mean Age	Median Age
Stockton Lake Area	**61**	**65**
Table Rock Lake Area	59	62
Rural Areas	58	60
Springfield	57	59
OVERALL	**55**	**56**
Carthage, Monett, Mt. Vernon	53	53
Joplin, Webb City, Carl Junction	51	51
Nixa, Ozark, Republic, Willard, Bfld	**49**	**47**

Region Surveyed	%HS	%SC/VT	%College	%Post-Grad
Stockton Lake Area	**41**	**34**	**14**	**11**
Rural Areas	29	37	22	12
Carthage, Monett, Mt. Vernon	28	27	34	11
Table Rock Lake Area	25	35	26	14
OVERALL	**20**	**32**	**30**	**18**
Joplin, Webb City, Carl Junction	13	32	36	19
Nixa, Ozark, Republic, Willard, Bfld	12	31	36	21
Springfield	**10**	**29**	**34**	**27**

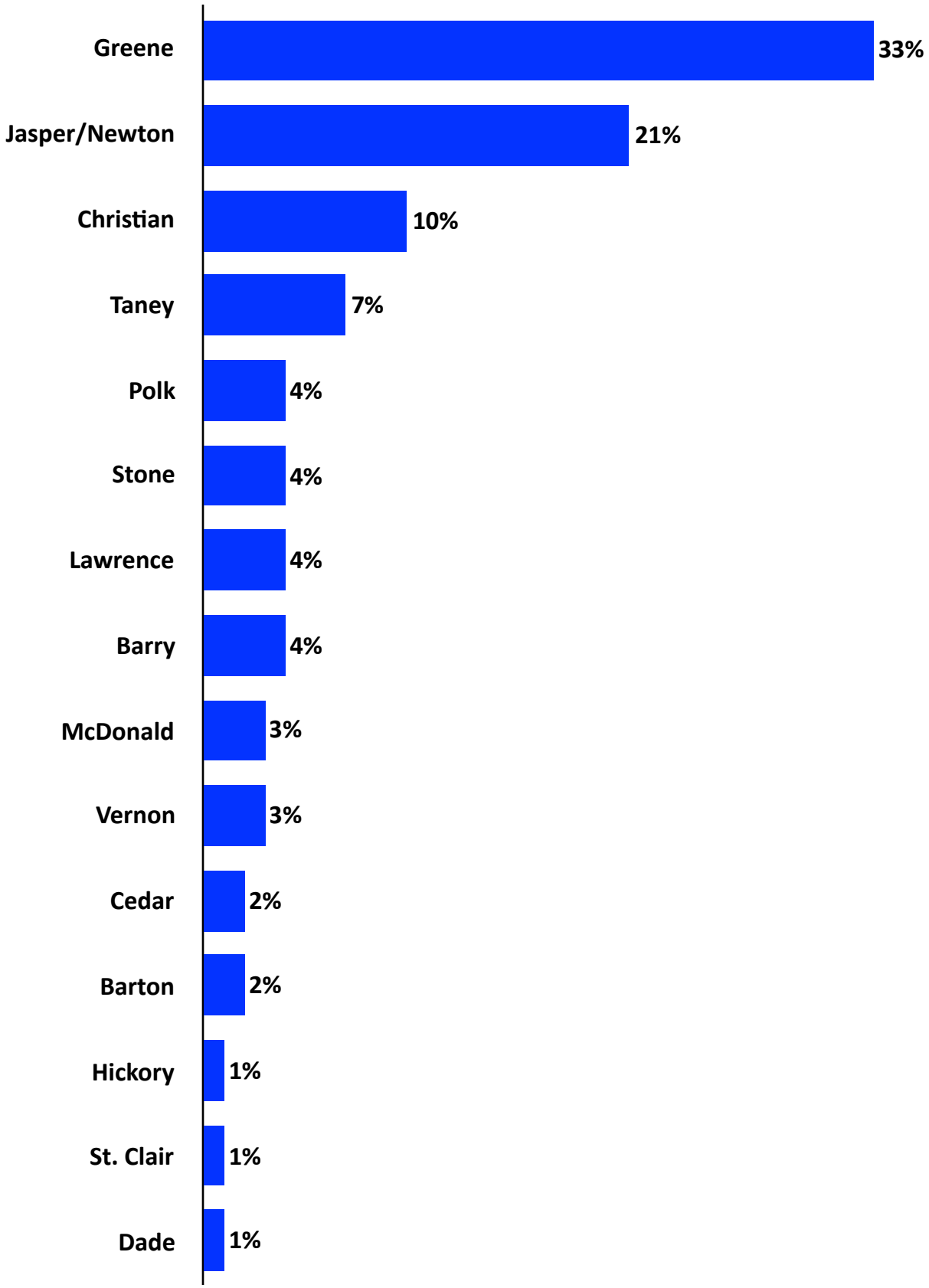
A Comparison of Demographic Profiles by Geographic Area

Geographic Area Surveyed	Mean Yrs of Residency	Median Yrs of Resid.
Carthage, Monett, Mt. Vernon	**35**	**35**
Stockton Lake Area	33	30
Springfield	31	30
Rural Areas	31	26
OVERALL	**30**	**28**
Joplin, Webb City, Carl Jnct	30	28
Table Rock Lake Area	24	20
Nixa, Ozark, Rep, Willard, Bfld	**22**	**20**

Region Surveyed	%Table Rock Lake	%Stockton L	%Pome de Terre
Table Rock Lake Area	**83**	**14**	**7**
Nixa, Ozark, Rep, Willard, Bfld	61	26	16
Rural Areas	56	29	16
Springfield	53	24	13
OVERALL	**52**	**27**	**12**
Carthage, Monett, Mt. Vernon	51	36	6
Joplin, Webb City, Carl Jnct	36	23	3
Stockton Lake Area	**21**	**83**	**26**

Region Surveyed	%<25k	%25-39k	%40-69k	%70-99k	%100k+
Stockton Lake Area	**28**	**24**	**28**	**12**	**8**
Rural Areas	20	25	28	16	11
Carthage, Monett, Mt. Vernon	19	26	30	16	9
Table Rock Lake Area	16	24	30	18	12
OVERALL	**15**	**20**	**28**	**20**	**17**
Joplin, Webb City, Carl Jnct	15	23	25	20	17
Nixa, Ozark, Rep, Willard, Bfld	8	13	37	23	19
Springfield	**8**	**18**	**29**	**22**	**23**

SURVEY RESPONDENT PROFILE BY COUNTY RESIDENCE

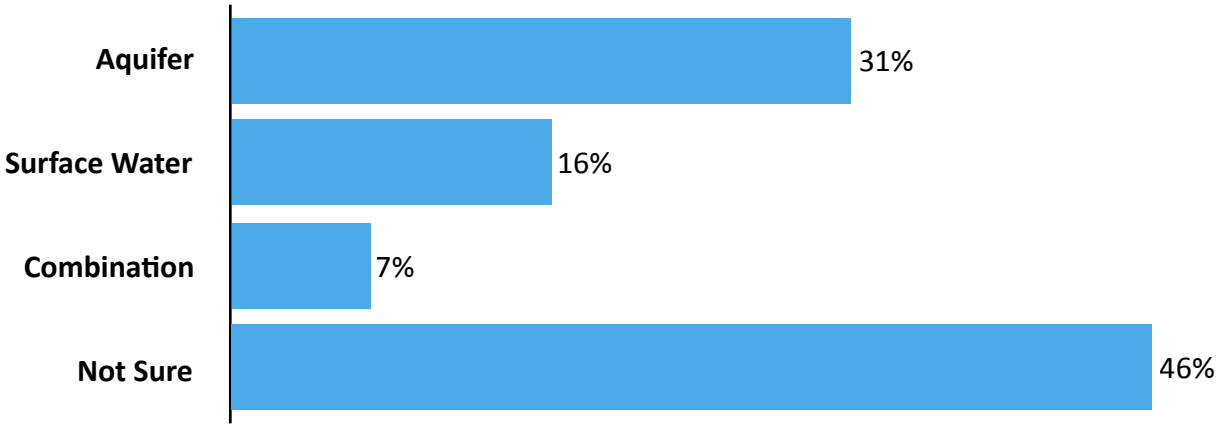


Overall Findings & Survey Comparisons

Survey Results

Source of Home Tap Water

Approximately 50% of respondents in southwest Missouri did not know the source of their home tap water. About one-third of all respondents (31%) said their home tap water came from an aquifer, 16% mentioned surface water, and 7% thought it was a combination of aquifer and surface water.

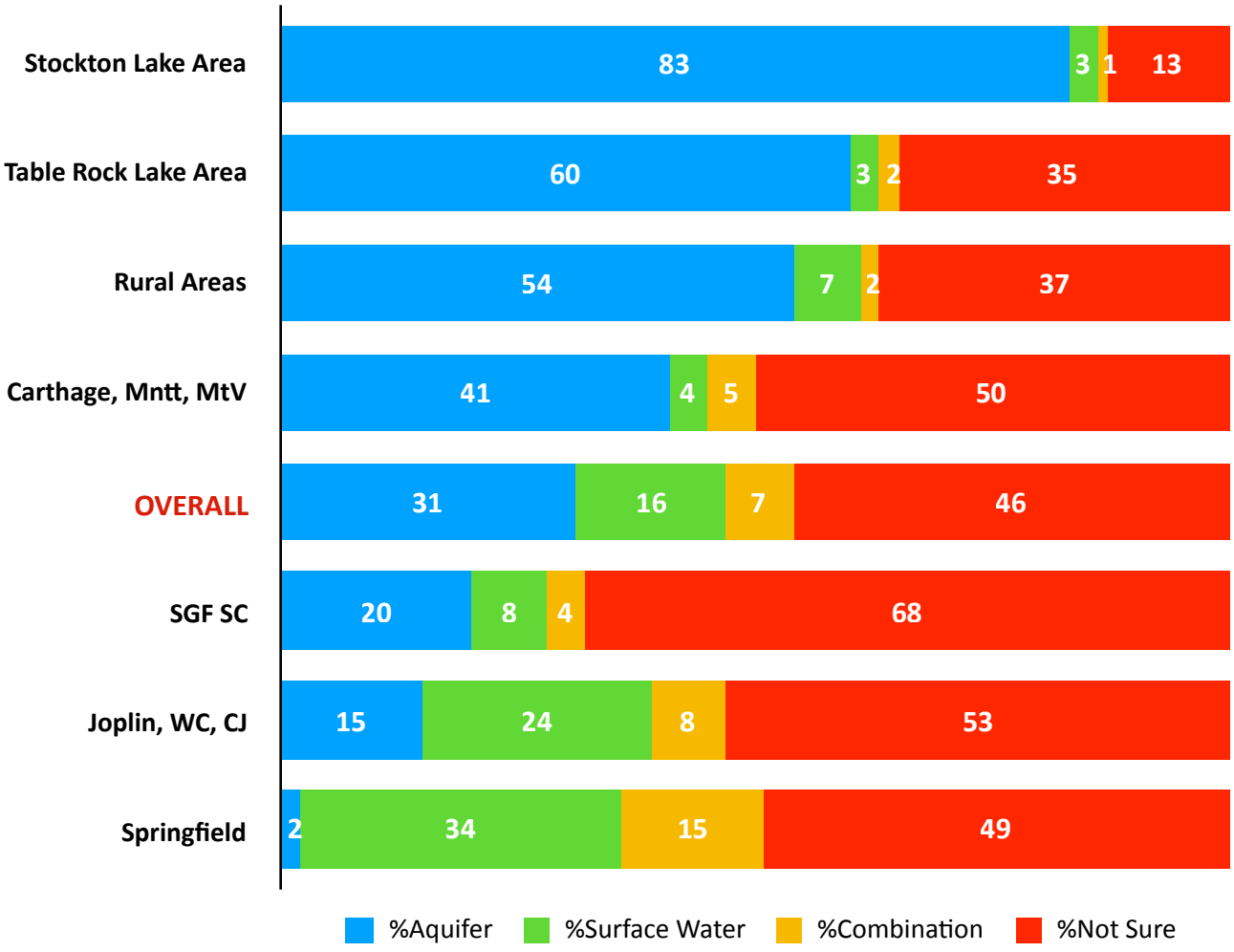


Demographic Analysis: Younger respondents, recent residents to southwest Missouri, and females were significantly more likely than their demographic counterparts to say they did **not** know the source of their home tap water.

Demographics	Aquifer	Surface Water	Combination	Not Sure
18-39 years old	18%	13%	4%	**65%**
40-64 years old	27%	18%	7%	48%
65+ years old	40%	17%	10%	33%
< 10 yrs resident	22%	12%	4%	**62%**
10-29 yrs resident	29%	15%	6%	50%
30+ yrs resident	32%	19%	10%	39%
Male	38%	16%	11%	35%
Female	25%	15%	4%	**56%**

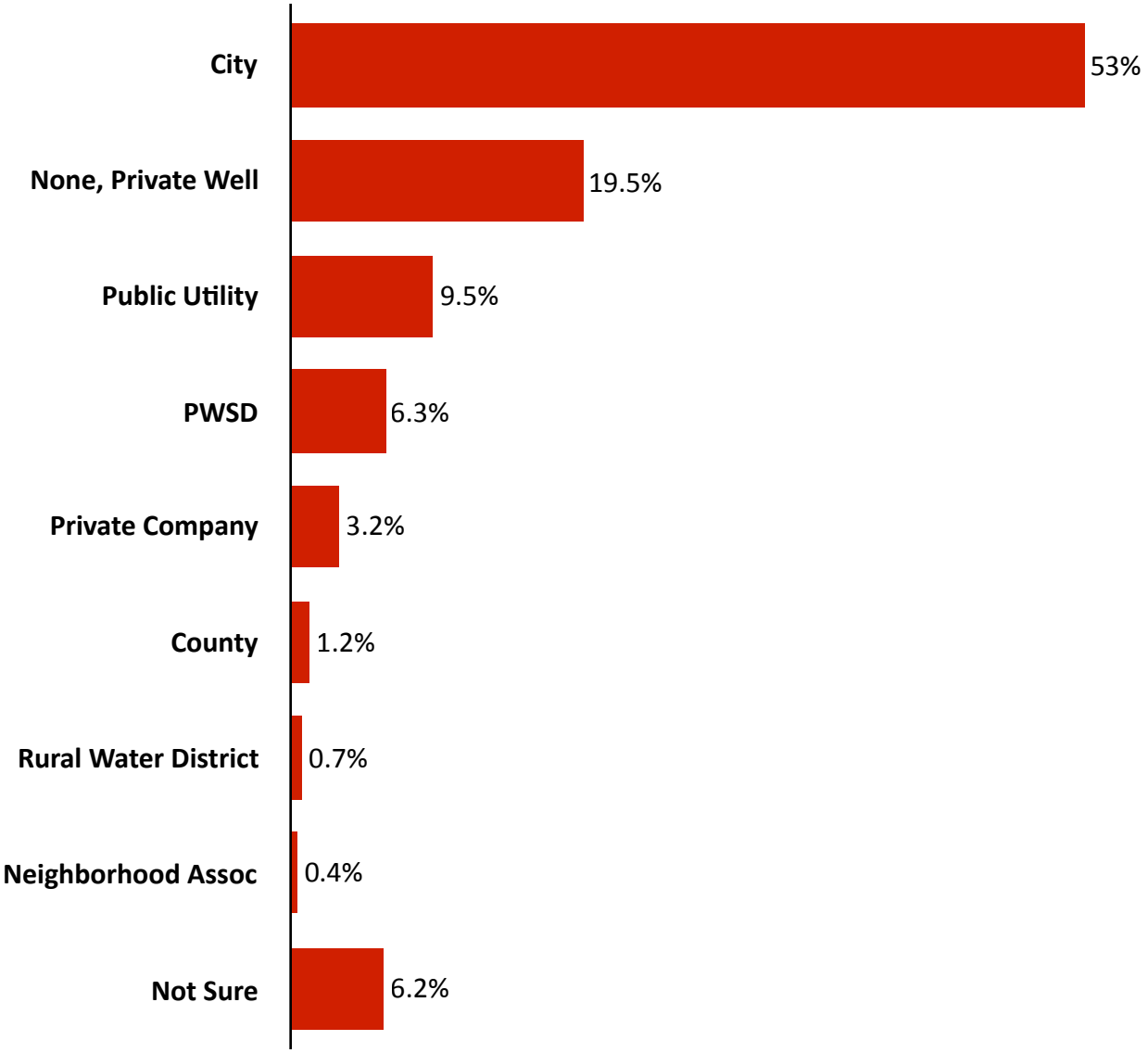
Source of Home Tap Water by Geographic Area

A majority of respondents from the Stockton Lake area, Table Rock Lake area, and rural areas of southwest Missouri said their home tap water came from an aquifer, while a majority or plurality of respondents from the other four geographic areas did not know the source of their home tap water.



Type of Organization Supplying Home Tap Water

A slim majority of respondents in southwest Missouri said their home tap water was city supplied (53%) and about 20% indicated they were on a private well. Approximately 6% were unsure as to the supplier of their home tap water.



Demographic Analysis: With the exception of older respondents (47%), at least 50% of respondents in each demographic group said their home tap water was provided by the city.

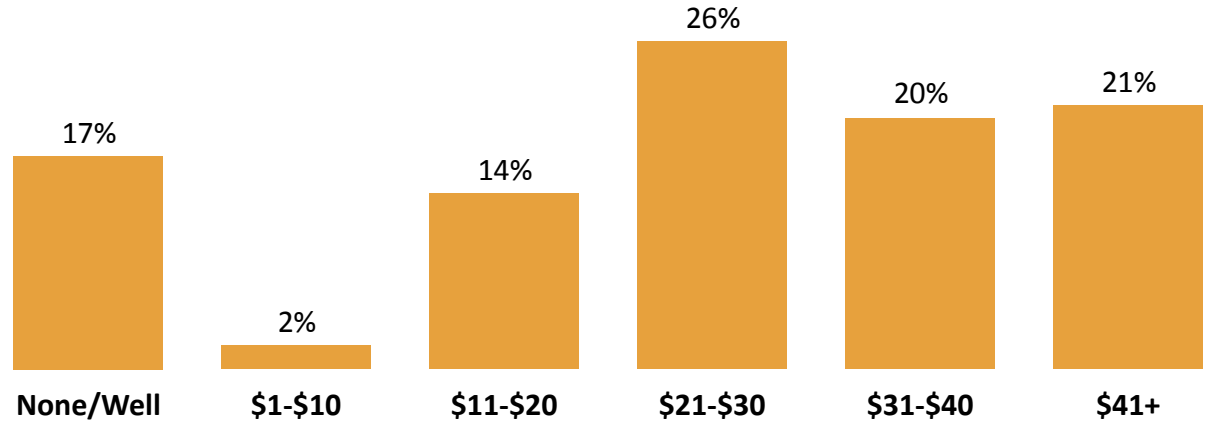
Type of Organization Supplying Home Tap Water by Geographic Area

More than 70% of respondents from the Carthage, Monett, and Mt. Vernon area, communities surrounding Springfield, and Springfield itself, said their home tap water was supplied by the city. Moreover, a plurality of Joplin, Webb City, and Carl Junction respondents (47%) also believed their home tap water was city supplied. Respondents from the Stockton Lake area (66%), Table Rock Lake area (47%), and rural areas (42%) were most likely to be on a private well.

Type of Organization Supplying Home Tap Water	Carthage, Monett, Mt. Vernon	SGF SC	SGF	Joplin, Webb City, Carl Junction	Stockton Lake Area	Table Rock Lake Area	Rural Areas
City	**73.8%**	**73.7%**	**72.6%**	**47.3%**	28.3%	30.0%	34.7%
None/Private Well	14.5%	3.7%	0.5%	2.0%	**65.5%**	**47.2%**	**41.5%**
Public Utility	6.9%	5.0%	19.8%	11.4%	0.4%	1.6%	5.6%
PWSD	0.8%	9.3%	1.9%	5.4%	0.7%	4.2%	5.1%
Private Company	0.8%	0.7%	0.2%	15.6%	0.6%	2.3%	2.7%
County	0.0%	0.3%	0.3%	1.3%	0.7%	3.6%	2.1%
Neighborhood Association	0.0%	0.6%	0.0%	0.4%	3.0%	2.3%	0.8%
Rural Water District	0.0%	0.0%	0.0%	1.9%	0.0%	0.0%	1.0%
Not Sure	3.2%	6.8%	4.7%	14.9%	0.9%	8.8%	6.5%

Average Monthly Home Water Bill

The average home water bill among southwest Missouri respondents was widely dispersed with a slim plurality (26%) indicating they paid between $21 to $30 per month, followed by 21% of respondents whose average monthly bill exceeded $40. Overall, 67% of SW Missouri respondents had home water bills averaging more than $20 per month.



Demographic Analysis: Older respondents (65+ years old) and residents with less formal education (high school or less) were more likely than other demographic groups to have no monthly water bill (i.e., on a well). High income households (100k+) were the most likely of all demographic groups to pay more than $40 a month for their home tap water.

Demographics	None/ Well	$1-$10	$11-$20	$21-$30	$31-$40	$41+
18-39 yrs old	9%	3%	14%	27%	21%	26%
40-64 yrs old	13%	2%	13%	26%	22%	24%
65+ yrs old	**21%**	2%	17%	27%	17%	16%
High School or Less	**22%**	3%	10%	25%	20%	20%
Some Collg/Vo-Tech	15%	2%	16%	26%	19%	22%
College Graduate	13%	2%	13%	27%	23%	22%
Post-Graduate	8%	1%	18%	31%	20%	22%
< 25k hh income	17%	4%	14%	27%	18%	20%
25k-39k hh income	14%	3%	17%	28%	20%	18%
40k-69k hh income	10%	3%	16%	30%	21%	20%
70k-99k hh income	15%	1%	14%	29%	18%	23%
100k+ hh income	13%	0%	8%	22%	24%	**33%**

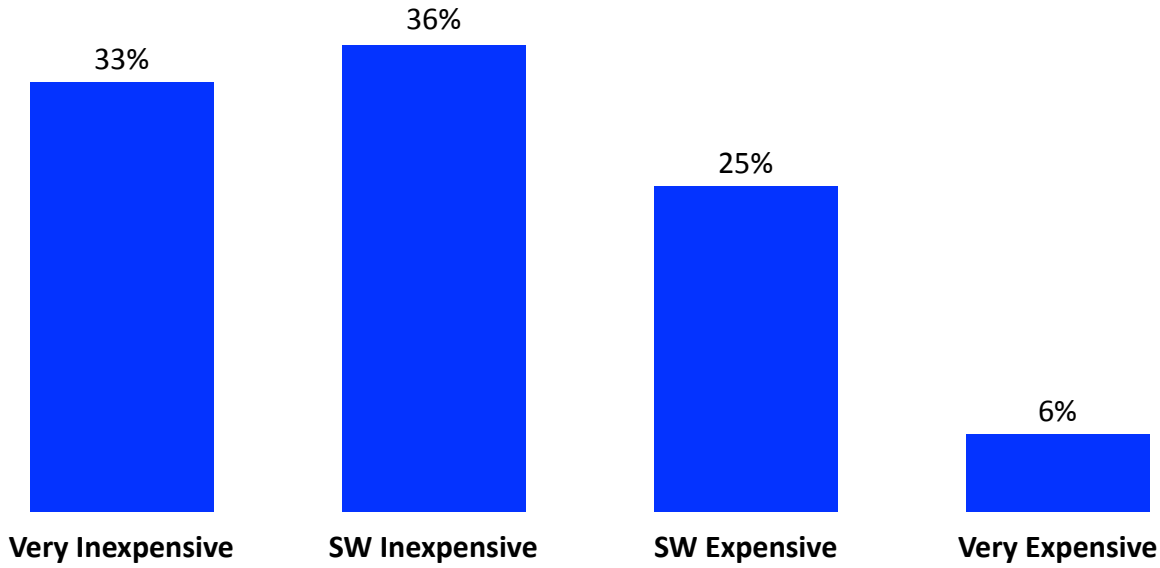
Average Monthly Home Water Bill by Geographic Area

A majority of Stockton Lake area respondents (57%) and a plurality of rural area as well as Table Rock Lake area respondents paid no monthly water bill (private well). Respondents from the communities surrounding Springfield and those from the Joplin, Webb City, and Carl Junction area had the highest monthly water bills on average.

Average Monthly Home Water Bill	Stockton Lake Area	Rural Areas	Table Rock Lake Area	SGF	Carthage, Monett, Mt. Vernon	SGF SC	Joplin, Webb City, Carl Junction
None/Private Well	**57%**	**35%**	**26%**	< 1%	16%	4%	2%
$1 to $10 per mo	6%	2%	4%	< 1%	2%	3%	< 1%
$11 to $20 per mo	8%	9%	12%	13%	23%	17%	6%
$21 to $30 per mo	6%	18%	20%	**44%**	**31%**	24%	26%
$31 to $40 per mo	5%	15%	17%	25%	18%	15%	31%
More than $40	18%	21%	21%	17%	10%	**37%**	**35%**

Monthly Home Water Bill Perceptions — Expense

Perceived Expense: Nearly 70% of respondents in southwest Missouri said that, when compared to other monthly essentials, their monthly home water bill was either very inexpensive (33%) or somewhat inexpensive (36%). Only 6% thought it was "very expensive" compared to other monthly essentials.

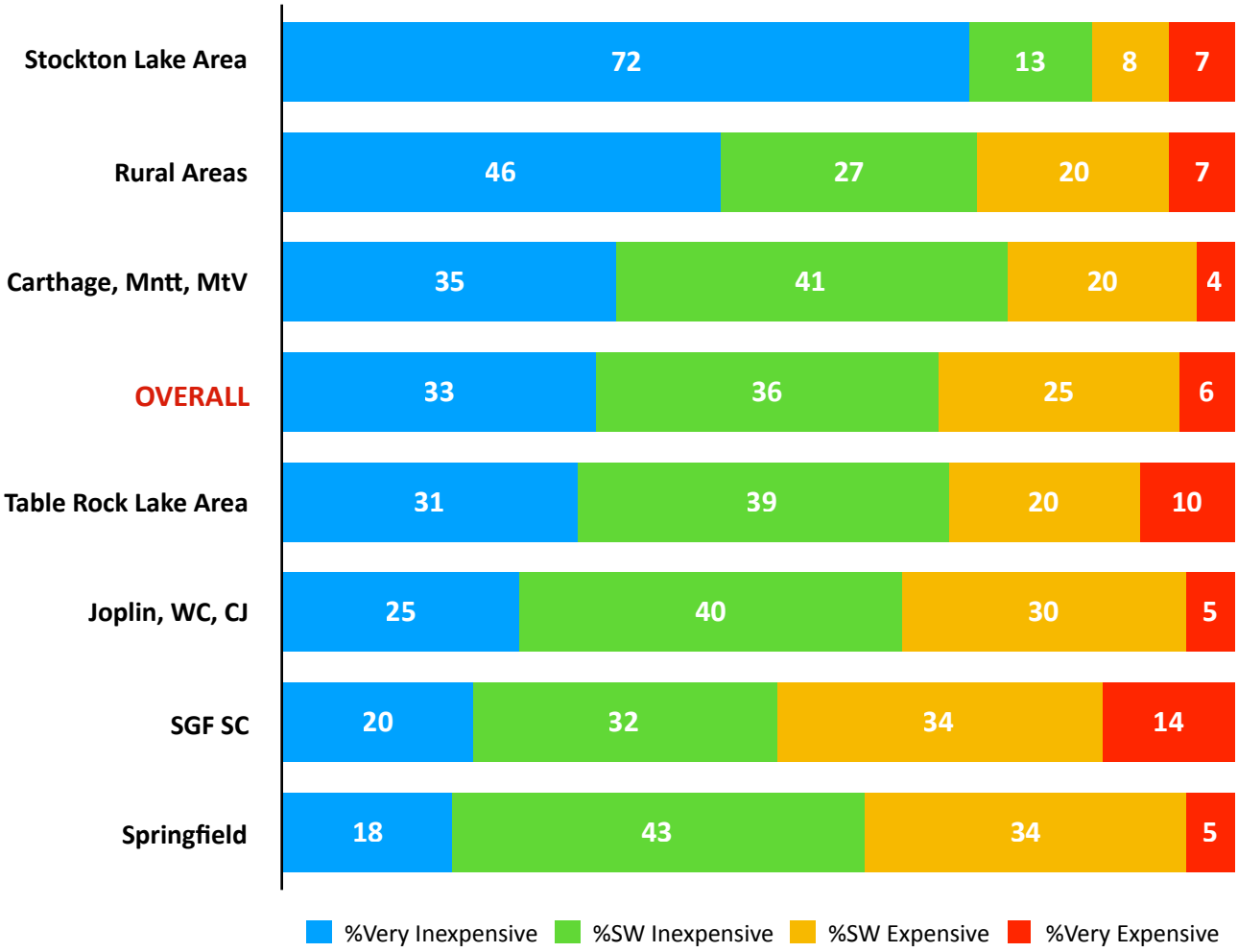


Demographic Analysis: Older respondents were more likely than younger or middle-aged respondents to perceive their monthly home water bill as very inexpensive. Older respondents are also much more likely to receive their water from a well.

Respondent Age	Very Inexpensive	Somewhat Inexpensive	Somewhat Expensive	Very Expensive
18-39 years old	30%	39%	26%	5%
40-64 years old	29%	37%	26%	8%
65+ years old	**37%**	34%	24%	5%

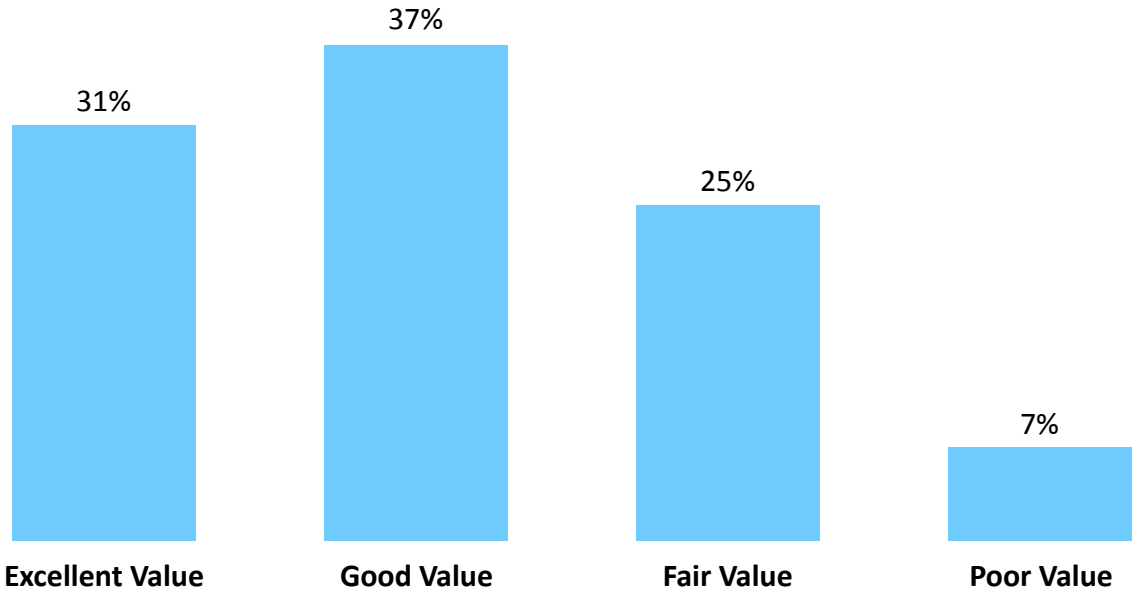
Monthly Home Water Bill Perceptions — Expense by Geographic Area

Perceived Expense: While 52% to 85% of respondents across the seven geographic areas perceived their monthly home water bill to be either "very or "somewhat" inexpensive (compared to other monthly essentials), 72% of Stockton Lake area respondents described their monthly home water bill as ***very inexpensive***. Respondents from the Springfield surrounding communities held mixed perceptions about their home water bill — 52% said it was inexpensive (very or somewhat) and 48% said it was expensive (very or somewhat).



Monthly Home Water Bill Perceptions — Value

Perceived Value: When asked to consider the amount of water used per month and the cost of that water, about 70% of respondents believed the water provided to their home was either an excellent (32%) or good value (37%). Only 6% said it was a poor value.

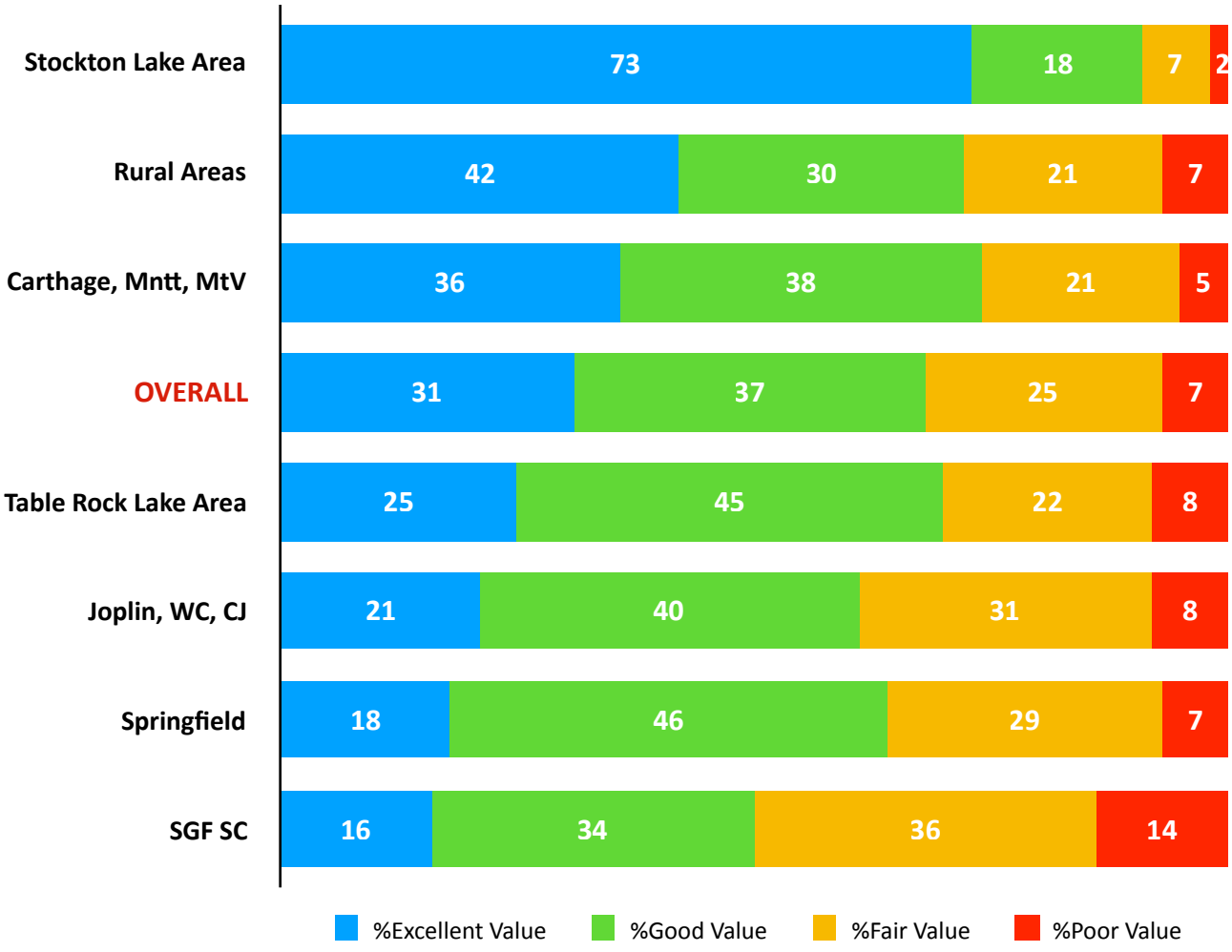


Demographic Analysis: Older respondents were significantly more likely than younger or middle-aged respondents to perceive their monthly home water bill as an excellent value. Older respondents are also much more likely to receive their water from a well.

Respondent Age	Excellent Value	Good Value	Fair Value	Poor Value
18-39 years old	22%	40%	31%	7%
40-64 years old	25%	39%	28%	8%
65+ years old	**38%**	36%	21%	5%

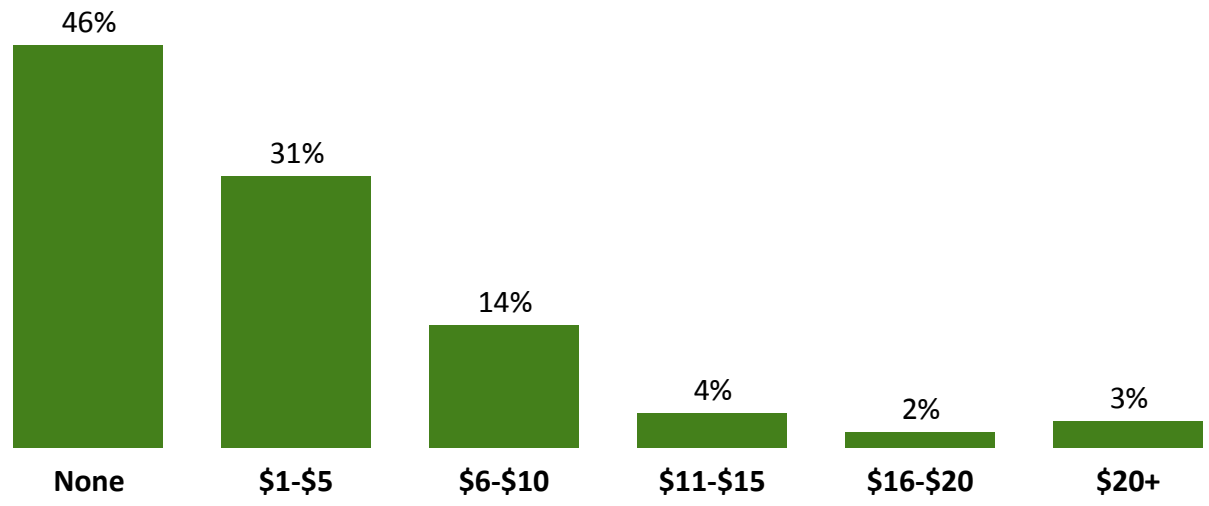
Monthly Home Water Bill Perceptions — Value by Geographic Area

Perceived Value: While 50% to 91% of respondents across the seven geographic areas perceived their monthly home water bill to be either an excellent or good value, 73% of Stockton Lake area respondents said their monthly home water bill was an ***excellent value***. Respondents from the Springfield surrounding communities were evenly divided in their perceptions — 50% said their water bill was either an excellent or good value and 50% believed it was a fair or poor value.



Amount Willing to Pay Extra to Ensure Supply of Water

When asked how much more per month they would be willing to pay on their water bill to ensure a long-term supply of drinking water, 46% of southwest Missouri respondents said they would not pay anything extra. About one-third (31%) would pay $1-$5 extra each month and 14% would pay $6-$10. Less than 10% of respondents were willing to pay more than $10 extra per month to secure an extended supply of drinking water.



Demographic Analysis: Respondents with the least amount of formal education and those with annual household incomes less than $25,000 were significantly less likely than all other demographic groups to be able/willing to pay anything extra per month to ensure an adequate long-term supply of drinking water.

Demographics	None	$1-$5	$6-$10	$11-$15	$16-$20	> $20
High School or Less	**59%**	28%	10%	2%	1%	<1%
Some College/Vo-Tech	51%	30%	14%	3%	1%	1%
College Graduate	37%	35%	18%	5%	1%	4%
Post-Graduate	36%	35%	16%	3%	3%	7%
< 25k hh income	**62%**	28%	9%	1%	<1%	<1%
25k-39k hh income	47%	30%	18%	2%	2%	1%
40k-69k hh income	42%	37%	14%	3%	1%	3%
70k-99k hh income	41%	34%	15%	6%	1%	3%
100k+ hh income	34%	30%	21%	5%	3%	7%

Amount Willing to Pay Extra by Demographics

With the primary exceptions of low-income respondents and those less formally educated, a majority of respondents from most of the other demographic groups were willing to pay at least $1-to-$5 extra per month on their water bill to ensure a long-term supply of drinking water. This was especially true for high-income respondents and those with at least a college degree.

Demographics	None	$1 to $5	$6 to $10	> $10
Male	48%	28%	15%	9%
Female	45%	35%	14%	6%
Lake user	42%	34%	15%	9%
Lake nonuser	51%	29%	13%	7%
18-39 years old	43%	35%	15%	7%
40-64 years old	46%	30%	15%	9%
65+ years old	49%	31%	14%	6%
High school or less	**59%**	28%	10%	3%
Some college/vo-tech	51%	30%	14%	5%
College graduate	**37%**	**35%**	**18%**	**10%**
Post-graduate	**36%**	**35%**	**16%**	**13%**
< 25k household income	**62%**	28%	9%	1%
25k-39k household income	47%	30%	18%	5%
40k-69k household income	42%	37%	14%	7%
70k-99k household income	41%	34%	15%	10%
100k+ household income	**34%**	**30%**	**21%**	**15%**
< 10 years of residency	44%	33%	15%	8%
10-29 years of residency	45%	33%	14%	8%
30+ years of residency	48%	30%	14%	8%

Willing to Pay Something Extra Each Month to Ensure a Long-Term Supply of Water by Geographic Area

A majority of respondents from Springfield (63%), Carthage, Monett, Mt.Vernon (57%), Springfield surrounding communities (56%), and the Joplin, Webb City, Carl Junction area (53%) said they would be willing to pay something extra on their monthly water bill to ensure a long-term supply of drinking water. And while a majority of respondents from the Stockton Lake area (73%), Table Rock Lake area (58%), and rural areas (61%) said they would not pay anything extra per month, between 27% and 42% were willing to pay something.

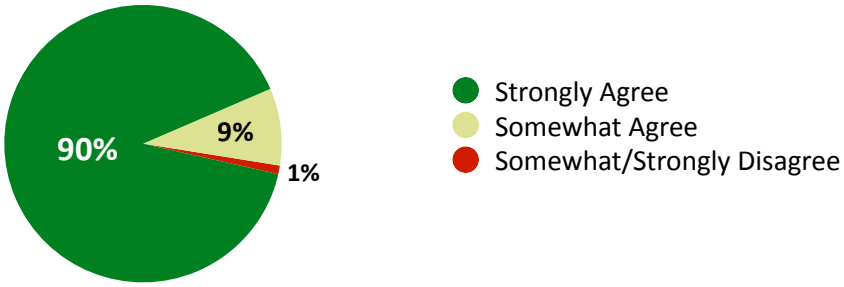
Willing to Pay Something Extra Per Month	SGF	Carthage, Monett, Mt. Vernon	SGF SC	Joplin, Webb City, Carl Junction	Table Rock Lake Area	Rural Areas	Stockton Lake Area
Yes	**63%**	**57%**	**56%**	**53%**	42%	39%	27%
No	37%	43%	44%	47%	**58%**	**61%**	**73%**

Amount Willing to Pay Extra Each Month to Ensure a Long-Term Supply of Water by Geographic Area

Monthly Amount Willing to Pay Extra	SGF	Carthage, Monett, Mt. Vernon	SGF SC	Joplin, Webb City, Carl Junction	Table Rock Lake Area	Rural Areas	Stockton Lake Area
More than $20	3%	2%	1%	3%	4%	3%	3%
$16 to $20	2%	< 1%	1%	1%	2%	1%	1%
$11 to $15	3%	3%	3%	4%	3%	3%	3%
$6 to $10	17%	14%	13%	15%	13%	11%	7%
$1 to $5	38%	37%	38%	30%	20%	21%	13%
Nothing	37%	43%	44%	47%	58%	61%	73%

Importance of Long-Term Supply of Water

Ninety percent of southwest Missouri respondents *strongly agreed* that having an adequate long-term supply of water was important for their community's quality of life and economic competitiveness.



Demographic Analysis: Regardless of demographic characteristic, more than 80% of respondents strongly agreed that having an adequate long-term supply of water was important for community quality of life and economic competitiveness. Moreover, less than 3% of any demographic group disagreed (either somewhat or strongly) with this statement.

Importance of Long-Term Supply of Water by Geographic Area

At least 80% of respondents from each of the seven geographic areas *strongly agreed* that having an adequate long-term supply of water was important for community quality of life and economic competitiveness.

Importance of Long-Term Supply of Water	SGF SC	SGF	Joplin, Webb City, Carl Junction	Carthage, Monett, Mt. Vernon	Table Rock Lake Area	Rural Areas	Stockton Lake Area
Strongly Agree	94%	94%	93%	88%	86%	84%	80%
Somewhat Agree	6%	5%	7%	11%	13%	14%	18%
Somewhat Disagree	0%	< 1%	< 1%	0%	< 1%	1%	1%
Strongly Disagree	< 1%	< 1%	0%	1%	< 1%	1%	1%

Obligation to Plan Ahead and Invest

About 70% of all respondents *strongly agreed* that locally elected officials have an obligation to plan ahead and invest in the necessary infrastructure to ensure that homeowners, businesses, and farmers have adequate long-term access to water.

Demographic Analysis: More than 65% of respondents in any demographic subgroup *strongly agreed* that locally elected officials have an obligation to plan ahead and invest in necessary infrastructure to ensure long-term access to water. Moreover, less than 7% of any demographic subgroup disagreed (either somewhat or strongly) with this statement.

Obligation to Plan Ahead and Invest by Geographic Area

Depending on the geographic area, 80% to 59% of all respondents *strongly agreed* that locally elected officials have an obligation to plan ahead and invest in the necessary infrastructure to ensure that homeowners, businesses, and farmers have adequate long-term access to water.

Obligation to Plan Ahead and Invest	SGF SC	SGF	Table Rock Lake Area	Joplin, Webb City, Carl Junction	Rural Areas	Carthage, Monett, Mt. Vernon	Stockton Lake Area
Strongly Agree	**80%**	**75%**	**73%**	**71%**	**69%**	**63%**	**59%**
Somewhat Agree	19%	23%	21%	26%	25%	31%	31%
Somewhat Disagree	<1%	1%	3%	2%	2%	3%	4%
Strongly Disagree	1%	1%	3%	1%	4%	3%	6%

Investments in Water Supply and Infrastructure

A majority of all respondents (57%) *strongly agreed* and 38% *somewhat agreed* that investments in water supply and infrastructure were necessary to maintain an adequate long-term supply of water in southwest Missouri.

Demographic Analysis: There were no meaningful differences of opinion based on respondent demographic characteristics. Specifically, more than 50% of respondents in any demographic subgroup *strongly agreed* that investments in water supply and infrastructure were necessary to maintain an adequate long-term supply of water in southwest Missouri. Moreover, less than 8% of any demographic subgroup disagreed (either "somewhat" or "strongly") with this statement.

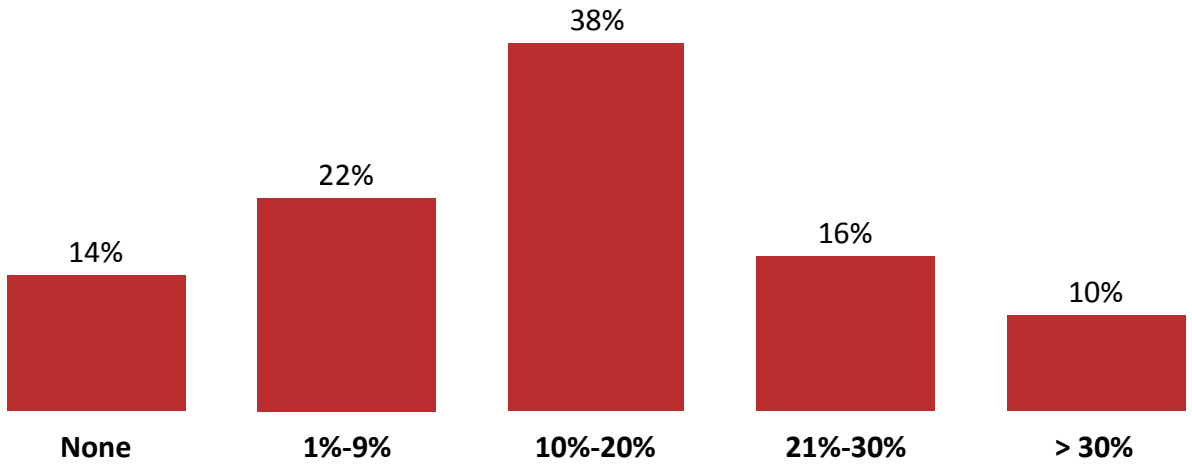
Investments in Water Supply and Infrastructure by Geographic Area

Across the seven geographic areas, 69% to 52% of respondents *strongly agreed* that investments in water supply and infrastructure were necessary to maintain an adequate long-term supply of water in southwest Missouri.

Investments in Water Supply and Infrastructure	Table Rock Lake Area	Rural Areas	Stockton Lake Area	Carthage, Monett, Mt. Vernon	SGF SC	SGF	Joplin, Webb City, Carl Junction
Strongly Agree	69%	60%	58%	57%	55%	55%	52%
Somewhat Agree	27%	35%	35%	38%	42%	40%	44%
Somewhat Disagree	2%	2%	4%	4%	3%	4%	4%
Strongly Disagree	2%	3%	3%	1%	< 1%	1%	< 1%

Reducing Water Consumption in an Emergency

In the event of a severe drought requiring emergency water conservation measures, a plurality of southwest Missouri respondents (38%) indicated they could temporarily reduce their water consumption by 10% to 20% and about one-quarter of respondents (26%) thought they could do so by more than 20%. However, 36% of respondents said their level of water reduction would be less than 10%, if at all.



Demographic Analysis: Respondents with the least amount of formal education and those with annual household incomes less than $25,000 were much more likely than their demographic counterparts to say they could **not** reduce their water consumption by any amount during a drought.

Demographics	None	1%-9%	10%-20%	21%-30%	> 30%
High School or Less	21%	23%	36%	11%	9%
Some College/Vo-Tech	16%	23%	38%	14%	9%
College Graduate	9%	21%	42%	18%	10%
Post-Graduate	7%	22%	38%	21%	12%
< 25k hh income	19%	24%	35%	14%	8%
25k-39k hh income	16%	24%	35%	17%	8%
40k-69k hh income	13%	20%	43%	15%	9%
70k-99k hh income	11%	22%	41%	16%	10%
100k+ hh income	7%	20%	39%	19%	15%

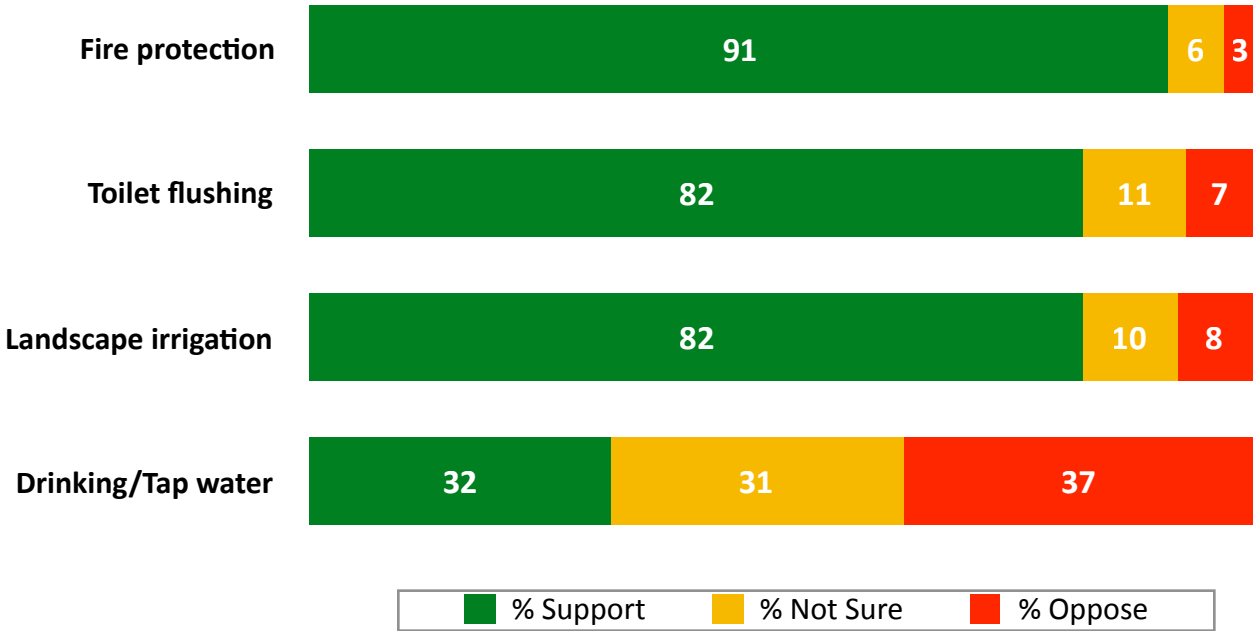
Reducing Water Consumption in an Emergency by Geographic Area

With the exception of the Stockton Lake area, a plurality of respondents from each of the other geographic areas said they could temporarily reduce their water consumption by 10% to 20% in the event of a severe drought. A plurality of Stockton Lake Area respondents (30%) indicated they could not reduce their water consumption by any amount.

Reducing Water Consumption in an Emergency	SGF	SGF SC	Joplin, Webb City, Carl Junction	Table Rock Lake Area	Carthage, Monett, Mt. Vernon	Rural Areas	Stockton Lake Area
None	9%	9%	12%	14%	13%	20%	**30%**
1% to 9%	23%	23%	24%	12%	25%	19%	21%
10% to 20%	**42%**	**41%**	**38%**	**38%**	**37%**	**36%**	27%
21% to 30%	18%	18%	16%	17%	16%	14%	11%
More than 30%	8%	9%	10%	19%	9%	11%	11%

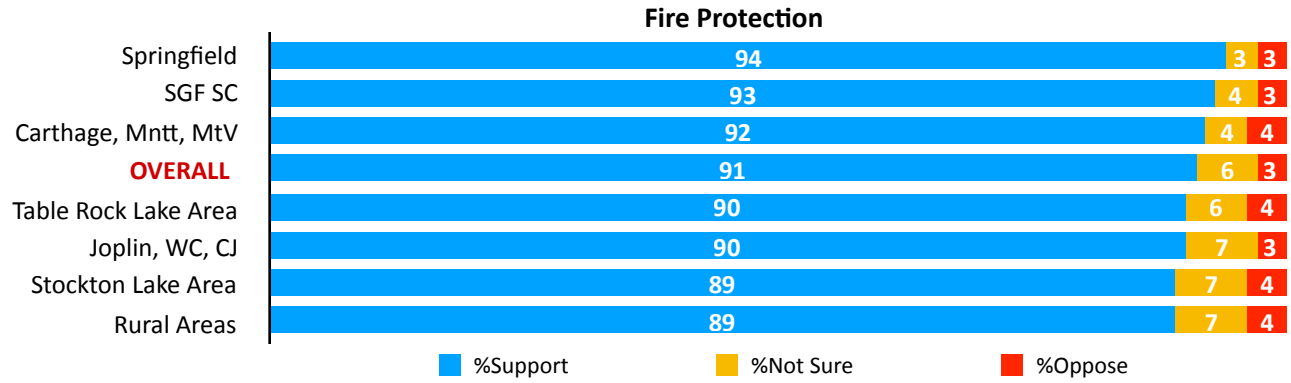
Support for Using Treated Wastewater

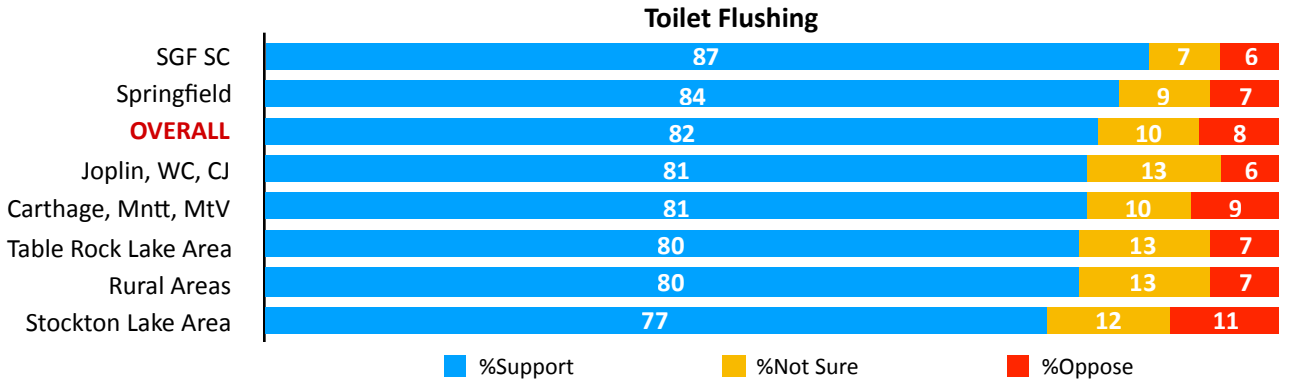
To save money and conserve water, respondents were asked if they would support or oppose the use of treated wastewater for various activities instead of being released into area waterways. While the vast majority of respondents said they would approve the use of treated wastewater for purposes of fire protection (91%), toilet flushing (82%), and landscape irrigation (82%); only 32% would do so for drinking/tap water purposes.

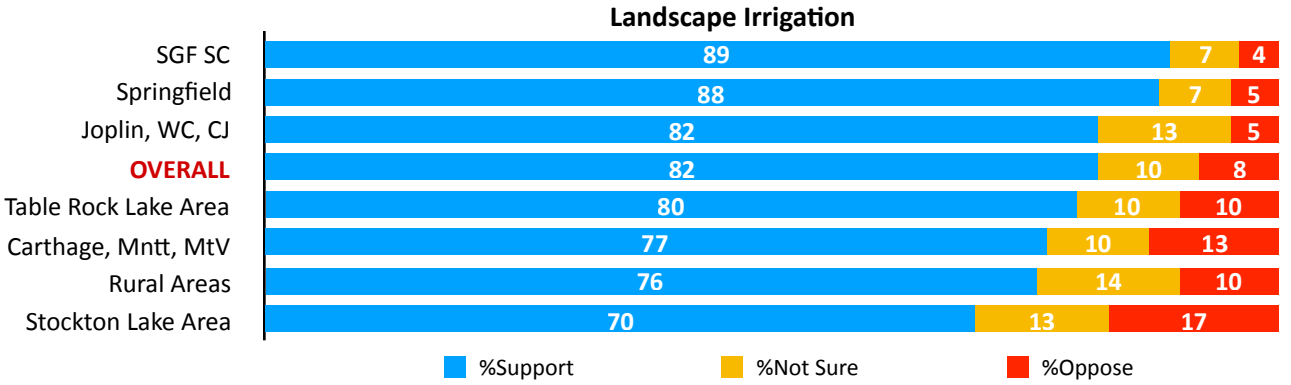


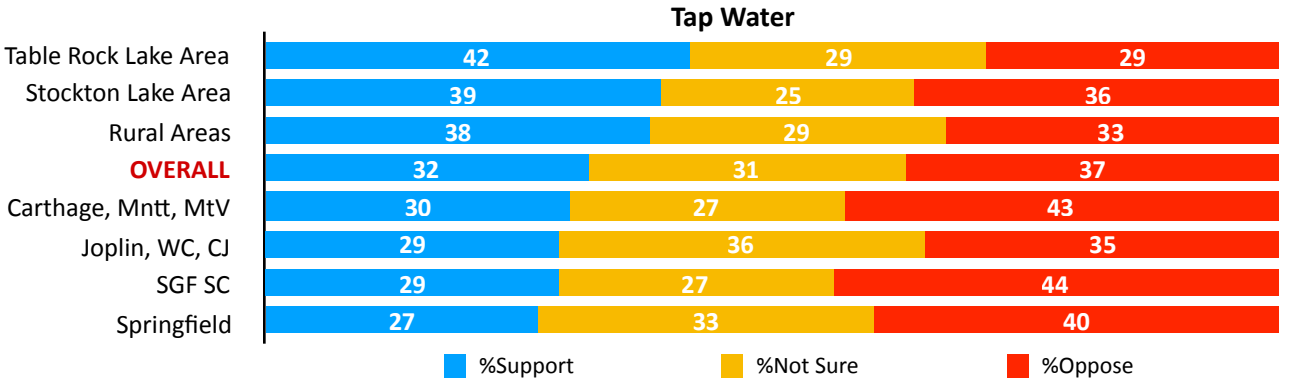
Demographic Analysis: There were no meaningful differences of opinion on this series of questions based on respondent demographic characteristics.

Using Treated Wastewater by Geographic Area



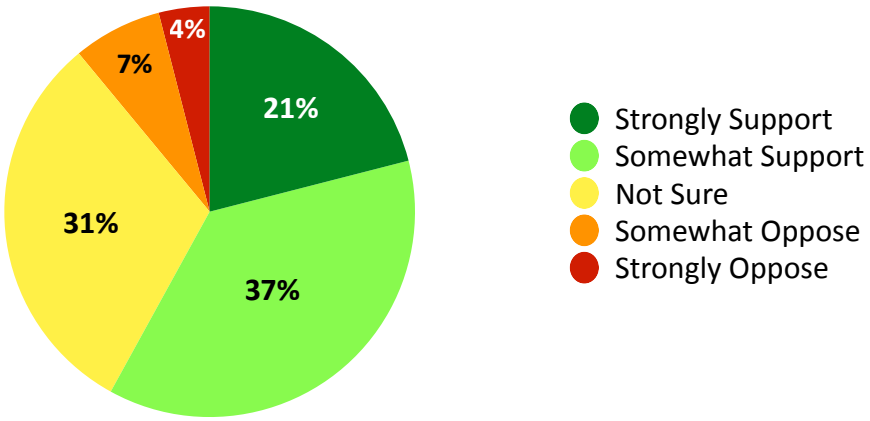






Reallocation of Water Storage in Stockton Lake

A majority of southwest Missouri respondents (58%) either strongly (21%) or somewhat (37%) supported the reallocation of a small amount of water storage in Stockton Lake to be used by citizens and businesses in southwest Missouri for long-term water supply. A relatively large percentage of respondents (31%) were undecided on this proposal and only 11% were opposed.



Demographic Analysis: While relatively few male and female respondents were opposed to the Stockton Lake water reallocation proposal (less than 13% each), females were much more likely than males to be undecided (39% v. 22%, respectively) and males more likely to "strongly" support this idea (27% v. 15%, respectively).

Gender	Strongly Support	Somewhat Support	Somewhat Oppose	Strongly Oppose	Not Sure
Male	**27%**	39%	8%	4%	22%
Female	15%	36%	6%	4%	**39%**

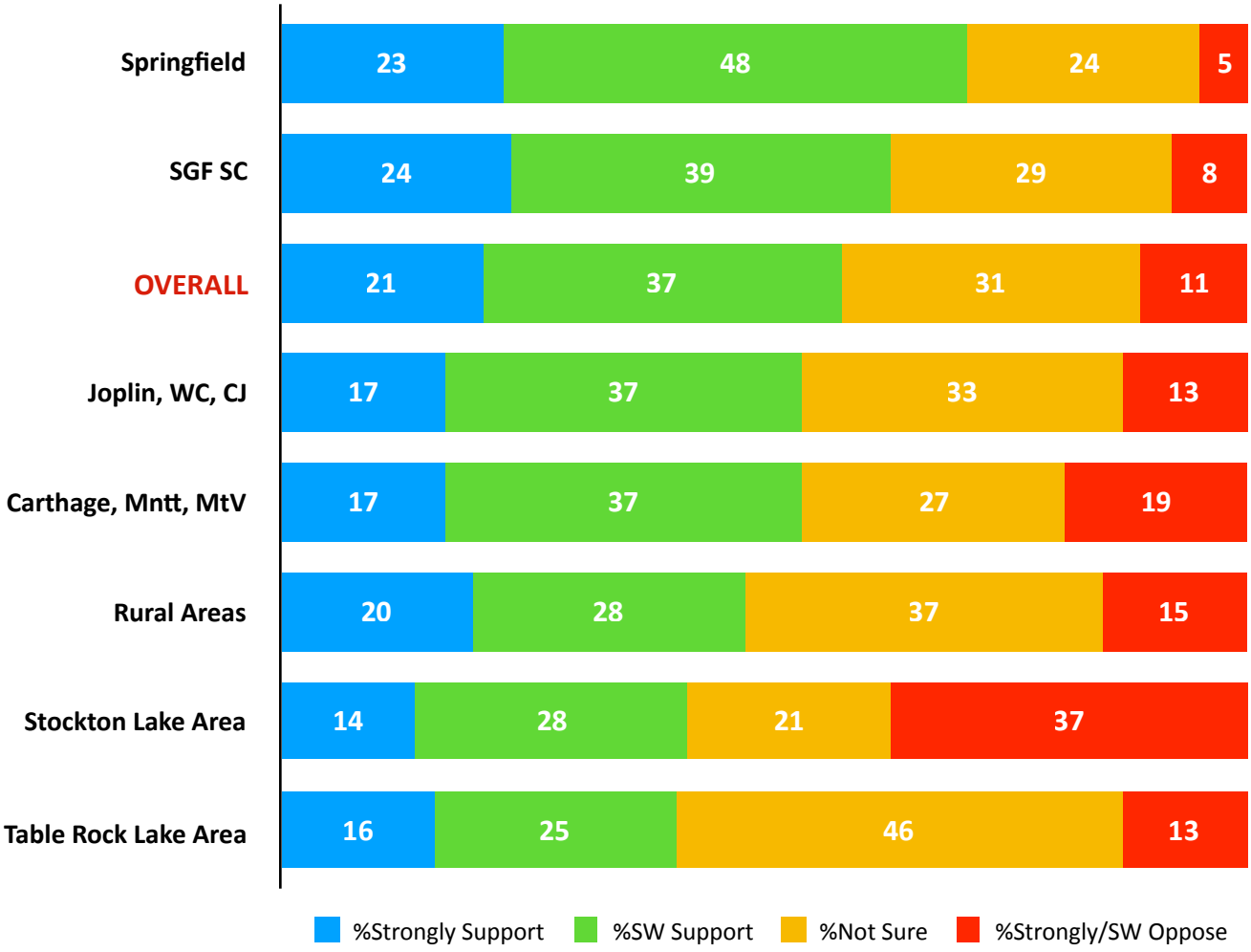
Reallocation of Water Storage in Stockton L. by Demographics

Opposition to the Stockton Lake reallocation proposal was minimal and never exceeded 20% in any demographic group. In contrast, a ***majority*** of all demographic groups expressed some degree of support for this idea. A relatively large percentage of respondents from each demographic category were undecided on this issue (22% to 39%).

Demographics	Strongly or SW Support	Strongly or SW Oppose	Not Sure
Male	**66%**	12%	22%
Female	**51%**	10%	**39%**
Stockton L. User	58%	**20%**	22%
Stockton L. Nonuser	58%	8%	34%
18-39 years old	59%	11%	30%
40-64 years old	60%	11%	29%
65+ years old	55%	12%	33%
High School or Less	54%	13%	33%
Some Collg/Vo-Tech	59%	12%	29%
College Graduate	62%	8%	30%
Post-Graduate	59%	10%	31%
< 25k household income	54%	12%	34%
25k-39k household income	58%	12%	30%
40k-69k household income	61%	12%	27%
70k-99k household income	64%	8%	28%
100k+ household income	64%	7%	29%
< 10 yrs resident	56%	11%	33%
10-29 yrs resident	60%	8%	32%
30+ yrs resident	59%	13%	28%

Reallocation of Water Storage in Stockton Lake by Geographic Area

With the exception of Stockton Lake area respondents (37%), opposition to the Stockton Lake reallocation proposal was minimal — less than 20% of respondents from the other six geographic areas were opposed. Support for this idea ranged from the low 40's (Stockton Lake area and Table Rock Lake area respondents) to as high as 71% (Springfield respondents). A relatively large percentage of respondents across all seven geographic areas were undecided on this issue (21% to 46%).



APPENDIX B

Southwest Missouri Communities Surveyed by County

16 counties, 104 communities (3,287 interviews: 2,284 online, 1,003 telephone)

GREENE COUNTY: 832 total

1. Springfield = 597 online
2. Battlefield = 90 online
3. Republic = 37 online
4. Brookline = 24 online
5. Strafford = 17 online + 4 telephone = 21 total
6. Willard = 10 online
7. Rogersville = 9 online
8. Ash Grove = 7 telephone
9. Walnut Grove = 6 telephone
10. Fair Grove = 6 telephone
11. Greene County (rural residents) = 25 online

CHRISTIAN COUNTY: 645 total

1. Nixa = 523 online
2. Ozark = 98 online
3. Clever = 5 online
4. Fremont Hills = 4 online
5. Sparta = 1 online
6. Christian County (rural residents) = 14 online

JASPER COUNTY: 579 total

1. Joplin (264 online & 37 telephone) = 301 total
2. Carthage = 158 online
3. Webb City = 65 online
4. Carl Junction (31 telephone & 4 online) = 35 total
5. Duquesne = 7 online

6. Oronogo = 4 online
7. Asbury = 3 online
8. Alba = 1 online
9. Carytown = 1 online
10. Neck City = 1 online
11. Sarcoxie = 1 online
12. Duenweg = 1 online
13. Reeds = 1 online

CEDAR COUNTY: 247 total

1. Stockton (233 telephone & 1 online) = 234 total
2. El Dorado Springs = 8 telephone
3. Jerico Springs = 5 telephone

TANEY COUNTY: 216 total

1. Hollister = 3 online & 124 telephone = 127 total
2. Forsyth = 67 telephone
3. Rockaway Beach = 20 telephone
4. Point Lookout = 1 online
5. Bull Creek = 1 online

LAWRENCE COUNTY: 180 total

1. Aurora = 108 online
2. Marionville = 37 online
3. Mount Vernon = 20 telephone
4. Pierce City = 7 online
5. Verona = 6 online
6. Chesapeake = 1 online
7. Hall Town = 1 telephone

BARRY COUNTY: 164 total

1. Monett = 124 online
2. Cassville (16 telephone & 6 online) = 22 total
3. Shell Knob = 10 telephone
4. Washburn = 2 telephone
5. Eagle Rock = 1 telephone
6. Exeter = 1 telephone
7. Golden = 1 telephone
8. Purdy = 1 telephone
9. Seligman = 1 telephone
10. Wheaton = 1 telephone

STONE COUNTY: 95 total

1. Kimberling City = 68 telephone
2. Branson West = 13 telephone
3. Indian Point = 13 telephone
4. Reeds Spring = 1 online

POLK COUNTY: 82 total

1. Bolivar (26 telephone & 1 online) = 27 total
2. Fair Play = 23 telephone
3. Humansville = 10 telephone
4. Halfway = 7 telephone
5. Flemington = 5 telephone
6. Aldrich = 4 telephone
7. Pleasant Hope = 3 telephone
8. Dunnegan = 2 telephone
9. Brighton = 1 telephone

DADE COUNTY: 65 total

1. Greenfield (23 telephone & 1 online) = 24 total
2. Lockwood = 20 telephone
3. Dadeville = 8 telephone
4. Arcola = 8 telephone
5. Everton = 5 telephone

BARTON COUNTY: 40 total

1. Lamar (27 telephone & 7 online) = 34 total
2. Golden City = 4 telephone
3. Liberal = 2 telephone

NEWTON COUNTY: 40 total

1. Neosho = (27 telephone & 4 online) = 31 total
2. Loma Linda = 5 online
3. Diamond = 1 online
4. Stella = 1 telephone
5. Leawood = 1 online
6. Shoal Creek Drive = 1 online

McDONALD COUNTY: 30 total

1. Anderson = 18 telephone
2. Goodman (3 telephone & 2 online) = 5 total
3. Noel = 4 telephone
4. Rocky Comfort = 2 telephone
5. Pineville = 1 telephone

VERNON COUNTY: 26 total

1. Nevada = 19 telephone
2. Richards = 2 telephone
3. Milo = 1 telephone
4. Harwood = 1 telephone
5. Schell City = 1 telephone
6. Metz = 1 telephone
7. Walker = 1 telephone

HICKORY COUNTY: 25 total

1. Weaubleau = 7 telephone
2. Preston = 5 telephone
3. Hermitage = 4 telephone
4. Pittsburg = 4 telephone
5. Wheatland = 3 telephone
6. Cross Timbers = 1 telephone
7. Quincy = 1 telephone

ST. CLAIR COUNTY: 21 total

1. Osceola = 11 telephone
2. Lowry City = 4 telephone
3. Collins = 4 telephone
4. Appleton City = 1 telephone
5. Roscoe = 1 telephone

Demographic Analysis

NOTE: Table percentages **bolded in red** denote statistical significance at the .05 level or less.

Table percentages **bolded in red** and **shaded in yellow** denote statistical significance at the .001 level or less.

		Gender		Respondent Age			Educational Level				Annual Household Income					Years of Residency		
	OVERALL	M	F	< 40	40-64	65+	HS or Less	Some College	College Grad	Post-Grad	<25k	25k-39k	40k-69k	70k–99k	100k+	< 10	10-29	30+
Source of Home Tap Water																		
Aquifer	**31%**	**38%**	**25%**	**18%**	**27%**	**40%**	**36%**	**31%**	**27%**	**20%**	**27%**	**28%**	**28%**	**27%**	**25%**	**22%**	**29%**	**32%**
Surface Water	**16%**	**16%**	**15%**	**13%**	**18%**	**17%**	**11%**	**16%**	**17%**	**23%**	**14%**	**15%**	**14%**	**19%**	**23%**	**12%**	**15%**	**19%**
Combination	**7%**	**11%**	**4%**	**4%**	**7%**	**10%**	**5%**	**7%**	**9%**	**9%**	**5%**	**7%**	**8%**	**8%**	**9%**	**4%**	**6%**	**10%**
Not Sure	**46%**	**35%**	**56%**	**65%**	**48%**	**33%**	**48%**	**46%**	**47%**	**48%**	**54%**	**50%**	**50%**	**46%**	**43%**	**62%**	**50%**	**39%**
Type of Organization Supplying Home Tap Water																		
City	**53%**	**50%**	**56%**	**60%**	**56%**	**47%**	**51%**	**54%**	**55%**	**55%**	56%	56%	55%	54%	55%	**51%**	**53%**	**56%**
None/Private Well	**20%**	**22%**	**17%**	**10%**	**16%**	**26%**	**26%**	**19%**	**15%**	**11%**	18%	18%	15%	16%	14%	**13%**	**20%**	**18%**
Public Utility	**10%**	**10%**	**9%**	**9%**	**11%**	**9%**	**7%**	**9%**	**12%**	**13%**	6%	8%	12%	12%	11%	**8%**	**10%**	**11%**
Public Water Supply District	**6%**	**6%**	**7%**	**6%**	**6%**	**7%**	**5%**	**5%**	**6%**	**9%**	5%	6%	6%	6%	9%	**9%**	**5%**	**6%**
Private Company	**3%**	**4%**	**2%**	**3%**	**3%**	**4%**	**3%**	**3%**	**4%**	**4%**	3%	3%	3%	4%	5%	**4%**	**3%**	**3%**
County	**1%**	**1%**	**1%**	**<1%**	**1%**	**1%**	**1%**	**1%**	**1%**	**1%**	1%	1%	1%	1%	1%	**1%**	**1%**	**1%**
Rural Water District	**1%**	**1%**	**<1%**	**<1%**	**1%**	**1%**	**1%**	**1%**	**<1%**	**0%**	1%	1%	<1%	1%	0%	**0%**	**1%**	**1%**
Neighborhood Association	**< 1%**	**<1%**	**<1%**	**0%**	**<1%**	**1%**	**1%**	**<1%**	**<1%**	**<1%**	1%	<1%	<1%	<1%	<1%	**1%**	**<1%**	**<1%**
Not Sure	**6%**	**5%**	**7%**	**11%**	**6%**	**4%**	**5%**	**6%**	**7%**	**7%**	9%	7%	7%	5%	5%	**13%**	**7%**	**3%**
Average Monthly Home Water Bill																		
None/On a Well	**17%**	18%	15%	**9%**	**13%**	**21%**	**22%**	**15%**	**13%**	**8%**	**17%**	**14%**	**10%**	**15%**	**13%**	**8%**	**16%**	**16%**
$1–$10	**2%**	2%	2%	**3%**	**2%**	**2%**	**3%**	**2%**	**2%**	**1%**	**4%**	**3%**	**3%**	**1%**	**0%**	**2%**	**3%**	**2%**
$11–$20	**14%**	14%	14%	**14%**	**13%**	**17%**	**10%**	**16%**	**13%**	**18%**	**14%**	**17%**	**16%**	**14%**	**8%**	**20%**	**14%**	**13%**
$21–$30	**26%**	26%	27%	**27%**	**26%**	**27%**	**25%**	**26%**	**27%**	**31%**	**27%**	**28%**	**30%**	**29%**	**22%**	**27%**	**27%**	**27%**
$31–$40	**20%**	20%	20%	**21%**	**22%**	**17%**	**20%**	**19%**	**23%**	**20%**	**18%**	**20%**	**21%**	**18%**	**24%**	**23%**	**19%**	**20%**
> $40	**21%**	20%	22%	**26%**	**24%**	**16%**	**20%**	**22%**	**22%**	**22%**	**20%**	**18%**	**20%**	**23%**	**33%**	**20%**	**21%**	**22%**
Monthly Home Water Bill — Perceived Expense																		
Very Inexpensive	**33%**	**35%**	**31%**	**30%**	**29%**	**37%**	34%	32%	29%	32%	**34%**	**34%**	**25%**	**33%**	**30%**	28%	32%	32%
Somewhat Inexpensive	**36%**	**35%**	**37%**	**39%**	**37%**	**34%**	31%	37%	39%	39%	**9%**	**35%**	**45%**	**36%**	**37%**	42%	38%	35%
Somewhat Expensive	**25%**	**24%**	**25%**	**26%**	**26%**	**24%**	26%	26%	26%	24%	**29%**	**27%**	**25%**	**24%**	**27%**	24%	25%	26%
Very Expensive	**6%**	**6%**	**7%**	**5%**	**8%**	**5%**	9%	5%	6%	5%	**28%**	**4%**	**5%**	**7%**	**6%**	6%	5%	7%

		Gender		Respondent Age			Educational Level				Annual Household Income					Years of Residency		
	OVERALL	M	F	< 40	40-64	65+	HS or Less	Some College	College Grad	Post-Grad	<25k	25k-39k	40k-69k	70k–99k	100k+	< 10	10-29	30+
Monthly Home Water Bill — Perceived Value																		
Excellent Value	**31%**	32%	29%	**22%**	**25%**	**38%**	33%	27%	26%	30%	**28%**	**32%**	**22%**	**27%**	**29%**	**26%**	**25%**	**32%**
Good Value	**37%**	35%	40%	**40%**	**39%**	**36%**	36%	38%	39%	39%	**33%**	**37%**	**40%**	**39%**	**41%**	**38%**	**42%**	**36%**
Fair Value	**25%**	27%	24%	**31%**	**28%**	**21%**	23%	27%	28%	26%	**30%**	**22%**	**30%**	**28%**	**24%**	**28%**	**25%**	**26%**
Poor Value	**7%**	6%	7%	**7%**	**8%**	**5%**	8%	8%	7%	5%	**9%**	**9%**	**8%**	**6%**	**6%**	**8%**	**8%**	**6%**
Amount Willing to Pay Extra Per Month on Home Water Bill to Ensure Long-Term Supply of Drinking Water																		
None	**46%**	**48%**	**45%**	43%	46%	49%	**59%**	**51%**	**37%**	**36%**	**62%**	**47%**	**42%**	**41%**	**34%**	44%	45%	48%
$1–$5	**31%**	**28%**	**35%**	35%	30%	31%	**28%**	**30%**	**35%**	**35%**	**28%**	**30%**	**37%**	**34%**	**30%**	33%	33%	30%
$6–$10	**14%**	**15%**	**14%**	15%	15%	14%	**10%**	**14%**	**18%**	**16%**	**9%**	**18%**	**14%**	**15%**	**21%**	15%	14%	14%
$11–$15	**4%**	**4%**	**3%**	3%	4%	3%	**2%**	**3%**	**5%**	**3%**	**1%**	**2%**	**3%**	**6%**	**5%**	5%	3%	4%
$16–$20	**2%**	**1%**	**1%**	1%	2%	1%	**1%**	**1%**	**1%**	**3%**	**<1%**	**2%**	**1%**	**1%**	**3%**	1%	2%	1%
> $20	**3%**	**4%**	**2%**	3%	3%	2%	**<1%**	**1%**	**4%**	**7%**	**<1%**	**1%**	**3%**	**3%**	**7%**	2%	3%	3%
Having an Adequate Long-Term Supply of Water is Important for Community Quality of Life and Economic Competitiveness																		
Strongly Agree	**90%**	90%	90%	**89%**	**93%**	**88%**	**81%**	**90%**	**94%**	**94%**	**84%**	**89%**	**92%**	**93%**	**94%**	93%	89%	90%
Somewhat Agree	**9%**	9%	9%	**11%**	**6%**	**11%**	**17%**	**9%**	**6%**	**5%**	**14%**	**11%**	**7%**	**6%**	**5%**	7%	10%	9%
Somewhat/Strongly Disagree	**1%**	1%	1%	**<1%**	**1%**	**1%**	**2%**	**1%**	**<1%**	**1%**	**2%**	**<1%**	**1%**	**1%**	**1%**	<1%	1%	1%
Locally Elected Officials Have an Obligation to Plan Ahead and Invest in Infrastructure to Ensure Community Long-Term Access to Water																		
Strongly Agree	**71%**	72%	71%	71%	73%	71%	**66%**	**71%**	**74%**	**76%**	**71%**	**69%**	**73%**	**74%**	**78%**	76%	71%	71%
Somewhat Agree	**25%**	24%	26%	26%	23%	25%	**29%**	**24%**	**23%**	**22%**	**23%**	**29%**	**23%**	**23%**	**18%**	21%	25%	25%
Somewhat/Strongly Disagree	**4%**	4%	3%	3%	4%	4%	**5%**	**5%**	**3%**	**2%**	**6%**	**2%**	**4%**	**3%**	**4%**	3%	4%	4%
Maintaining an Adequate Long-Term Supply of Water in SW Missouri Requires Investments in Water Supply and Infrastructure																		
Strongly Agree	**57%**	**58%**	**55%**	54%	57%	59%	55%	55%	58%	58%	53%	55%	59%	55%	62%	60%	55%	57%
Somewhat Agree	**38%**	**35%**	**42%**	42%	38%	36%	38%	40%	37%	38%	41%	41%	37%	41%	33%	35%	40%	39%
Somewhat/Strongly Disagree	**5%**	**6%**	**3%**	4%	5%	5%	7%	5%	5%	4%	6%	4%	4%	4%	5%	5%	5%	4%

		Gender		Respondent Age			Educational Level				Annual Household Income					Years of Residency		
	OVERALL	M	F	< 40	40-64	65+	HS or Less	Some College	College Grad	Post-Grad	<25k	25k-39k	40k-69k	70k–99k	100k+	< 10	10-29	30+
During a Severe Drought, How Much Could You Realistically Reduce Your Water Consumption?																		
None	**14%**	**15%**	**13%**	11%	13%	16%	**21%**	**16%**	**9%**	**7%**	**19%**	**16%**	**13%**	**11%**	**7%**	**11%**	**12%**	**15%**
1%-9%	**22%**	**20%**	**24%**	21%	22%	23%	**23%**	**23%**	**21%**	**22%**	**24%**	**24%**	**20%**	**22%**	**20%**	**19%**	**21%**	**24%**
10%-20%	**38%**	**37%**	**40%**	39%	40%	37%	**36%**	**38%**	**42%**	**38%**	**35%**	**35%**	**43%**	**41%**	**39%**	**40%**	**40%**	**37%**
21%-30%	**16%**	**16%**	**16%**	18%	15%	15%	**11%**	**14%**	**18%**	**21%**	**14%**	**17%**	**15%**	**16%**	**19%**	**20%**	**16%**	**15%**
> 30%	**10%**	**12%**	**7%**	11%	10%	9%	**9%**	**9%**	**10%**	**12%**	**8%**	**8%**	**9%**	**10%**	**15%**	**10%**	**11%**	**9%**
Support for Reuse of Water for FIRE PROTECTION																		
Support	**91%**	**90%**	**92%**	93%	92%	89%	**86%**	**91%**	**93%**	**94%**	**89%**	**91%**	**92%**	**93%**	**95%**	90%	93%	91%
Oppose	**3%**	**5%**	**2%**	3%	3%	5%	**4%**	**4%**	**3%**	**2%**	**5%**	**3%**	**3%**	**3%**	**3%**	5%	3%	3%
Not Sure	**6%**	**5%**	**6%**	4%	5%	6%	**10%**	**5%**	**4%**	**4%**	**6%**	**6%**	**5%**	**4%**	**2%**	5%	4%	6%
Support for Reuse of Water for TOILET FLUSHING																		
Support	**82%**	**81%**	**83%**	84%	83%	80%	**72%**	**82%**	**85%**	**88%**	**78%**	**81%**	**82%**	**83%**	**89%**	**80%**	**84%**	**82%**
Oppose	**7%**	**8%**	**5%**	7%	7%	7%	**10%**	**7%**	**6%**	**5%**	**9%**	**6%**	**7%**	**8%**	**5%**	**11%**	**6%**	**7%**
Not Sure	**11%**	**11%**	**12%**	9%	10%	13%	**18%**	**11%**	**9%**	**7%**	**13%**	**13%**	**11%**	**9%**	**6%**	**9%**	**10%**	**11%**
Support for Reuse of Water for LANDSCAPE IRRIGATION																		
Support	**82%**	**82%**	**81%**	**85%**	**84%**	**78%**	**72%**	**81%**	**85%**	**90%**	**77%**	**79%**	**79%**	**88%**	**91%**	**83%**	**84%**	**80%**
Oppose	**8%**	**9%**	**6%**	**7%**	**7%**	**8%**	**10%**	**8%**	**7%**	**3%**	**9%**	**10%**	**8%**	**5%**	**5%**	**8%**	**8%**	**8%**
Not Sure	**10%**	**9%**	**13%**	**8%**	**9%**	**14%**	**18%**	**11%**	**8%**	**7%**	**14%**	**11%**	**13%**	**7%**	**4%**	**9%**	**8%**	**12%**
Support for Reuse of Water for DRINKING/TAP WATER																		
Support	**32%**	**37%**	**26%**	**37%**	**32%**	**29%**	32%	32%	32%	30%	35%	35%	32%	30%	30%	31%	33%	31%
Oppose	**37%**	**35%**	**39%**	**33%**	**36%**	**42%**	39%	40%	36%	35%	39%	37%	37%	36%	37%	40%	36%	38%
Not Sure	**31%**	**28%**	**35%**	**30%**	**32%**	**29%**	29%	28%	32%	35%	26%	28%	31%	34%	33%	29%	31%	31%
Reallocation of Water Storage in Stockton Lake																		
Strongly Support	**21%**	**27%**	**15%**	19%	20%	22%	**20%**	**21%**	**21%**	**21%**	**21%**	**19%**	**21%**	**24%**	**23%**	**19%**	**20%**	**22%**
Somewhat Support	**37%**	**39%**	**36%**	40%	40%	33%	**34%**	**38%**	**41%**	**38%**	**33%**	**39%**	**40%**	**40%**	**41%**	**37%**	**40%**	**37%**
Somewhat Oppose	**7%**	**8%**	**6%**	7%	7%	8%	**10%**	**7%**	**5%**	**5%**	**6%**	**7%**	**9%**	**5%**	**4%**	**7%**	**5%**	**8%**
Strongly Oppose	**4%**	**4%**	**4%**	4%	4%	4%	**3%**	**5%**	**3%**	**5%**	**6%**	**5%**	**3%**	**3%**	**3%**	**4%**	**3%**	**5%**
Not Sure	**31%**	**22%**	**39%**	30%	29%	33%	**33%**	**29%**	**30%**	**31%**	**34%**	**30%**	**27%**	**28%**	**29%**	**33%**	**32%**	**28%**

Questionnaire

Tri-State Citizen Water Supply and Usage Survey — 2017/2018

Overall (n = 3,287)

1. **How strongly do you agree or disagree with this statement: Having an adequate long-term supply of water is important for your community's quality of life and economic competitiveness.**

   90%...Strongly Agree
   9%...Somewhat Agree
   <1%...Somewhat Disagree
   <1%...Strongly Disagree

2. **What type of organization, if any, supplies your home tap water?**

   53.0%...City
   19.5%...None, I am on a private well
   9.5%...Public Utility
   6.3%...Public Water Supply District (PWSD)
   3.2%...Private Company
   1.2%...County
   0.7%...Rural Water District
   0.4%...Neighborhood Association
   6.2%...Not Sure

3. **What is the source of your home tap water?**

   31%...Aquifer (e.g., well)
   16%...Surface Water (e.g., lake/river)
   7%...Combination of aquifer and surface water
   46%...Not Sure

4. **On average, about how much per month is your home water bill?**

   17%...None, I am on a private well
   2%...$1 to $10 per month
   14%...$11 to $20 per month
   26%...$21 to $30 per month
   20%...$31 to $40 per month
   21%...More than $40 per month

5. **Compared to other monthly essentials, how would you describe the expense of your monthly home water bill?**

   33%...Very inexpensive
   36%...Somewhat inexpensive
   25%...Somewhat expensive
   6%...Very expensive

6. **Considering the amount of water you use at home per month and the amount of your monthly home water bill, would you say the water provided to your home is an excellent, good, fair, or poor value?**

   31%...Excellent Value
   37%...Good Value
   25%...Fair Value
   7%...Poor Value

7. **Based on your current water bill, how much more would you be willing to pay per month to ensure an adequate long-term supply of drinking water?**

   46%...None, no more than what I am paying now
   31%...$1 to $5 more
   14%...$6 to $10 more
   4%...$11 to $15 more
   2%...$16 to $20 more
   3%...More than $20

8. **How strongly do you agree or disagree with this statement: Locally elected officials, such as county commissioners and city mayors, have an obligation to plan ahead and invest in the necessary infrastructure to ensure that homeowners, businesses, and farmers have adequate long-term access to water.**

   71%...Strongly Agree
   25%...Somewhat Agree
   2%...Somewhat Disagree
   2%...Strongly Disagree

9. **Droughts occur periodically as part of the natural climate cycle. When your area experiences a drought and your local provider of water has to implement emergency water conservation measures, how much could you realistically reduce your water consumption?**

   14%...None, I could not use any less water than I am using now
   22%...Less than 10%
   38%...10% to 20% less
   16%...21% to 30% less
   10%...More than 30%

10. **How strongly do you agree or disagree with this statement: To maintain an adequate long-term supply of water in southwest Missouri, investments in water supply and infrastructure are necessary.**

    57%...Strongly Agree
    38%...Somewhat Agree
    3%...Somewhat Disagree
    2%...Strongly Disagree

11. **How strongly would you support or oppose the reallocation of a small amount of water storage in Stockton Lake to be used by citizens and businesses in southwest Missouri for long-term water supply?**

21%...Strongly Support
37%...Somewhat Support
7%...Somewhat Oppose
4%...Strongly Oppose
31%...Not Sure

12. **Water providers treat water to very high drinking water standards and then deliver it to homes and businesses for use. Once that water has been used, it is again treated to very high drinking water standards and then released into area waterways rather than being reused. To save money and conserve water, instead of releasing this highly treated water back into area waterways (lakes, streams, rivers) would you support or oppose its reuse for the following:**

	Support	Oppose	Not Sure
1. Fire protection	91%	3%	6%
2. Toilet flushing	82%	7%	11%
3. Irrigation of landscaping	82%	8%	10%
4. Drinking/Tap water	32%	37%	31%

Respondent Information: The last few questions are about you and your household. They will be used to group responses to the survey. Your responses are completely confidential and anonymous.

13. **What town or city do you live in?** Percentages reported are based on 3,287 respondents representing 104 rural communities in a 16-county area of SW Missouri.

14. **Approximately how many years have you lived in southwest Missouri?**

Range = <1 year–94 years, Mean = 30.4 years, Median = 28 years
< 10 years = 17%, 10–29 years = 35%, 30+ years = 48%

15. **In the past couple of years, have you used any of the following lakes or rivers for recreational purposes (e.g., camping, picnicking, swimming, fishing, boating, etc.)?**

	Yes	No
1. Table Rock Lakes	52%	48%
2. Stockton Lake	27%	73%
3. Pomme de Terre Lake	12%	88%

16. **What is your gender?** 48%...Male 52%...Female

17. **What is your birth year?**

    Age range = 18–97 years old, Mean = 54.9 years old, Median = 56 years old

    Age < 40 years = 23%, Age 40–64 years = 44%, Age 65+ years = 33%

18. **What is your educational level?**

    3%...Some high school

    17%...High school graduate/GED

    32%...Some college/Vo-Tech

    30%...College graduate

    18%...Post-graduate studies (e.g., MA, Ph.D., MD)

19. **Which of the following categories best describes your total annual household income before taxes?**

    15%...Less than $25,000

    20%...$25,000 to $39,999

    28%...$40,000 to $69,999

    20%...$70,000 to $99,999

    17%...$100,000 or more

Thank You! This Completes the Survey.

OPINION RESEARCH SPECIALISTS, LLC

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