



**Public Opinions, Attitudes
and Awareness About
Water in Colorado:
*2021 Survey and Focus Groups***

Colorado Water Conservation Board

REPORT

Final Report

February 24, 2022

**Public Opinions, Attitudes and
Awareness About Water in
Colorado:
*2021 Survey and Focus Groups***

Prepared for

Colorado Water Conservation Board

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EXECUTIVE SUMMARY

The Colorado Water Conservation Board (CWCB) contracted with BBC Research & Consulting (BBC) in 2021-2022 to conduct and analyze a statewide survey of public opinions, attitudes and awareness about water in Colorado. This survey and study were, in part, an update to similar research conducted by BBC for the CWCB in 2012-2013. The sampling strategy for this study of completing a large number of surveys in each of six regions throughout Colorado, and the geographic definition of those regions, were the same as in the earlier 2012-2013 research.

There were some important changes in conducting this updated survey and analysis. In the 2021 survey, new questions were added to examine Coloradan's understanding and opinion regarding important water concepts and aspects, including public familiarity, knowledge and opinions regarding Colorado's Water Plan.

Statewide Survey Results

When asked which sector uses the most water in Colorado, 31 percent of respondents correctly identified farms and ranches, but the majority of Coloradans did not correctly identify agriculture as the largest water user, with the largest proportion of respondents (39 percent) indicating they believed that households used the most water. Twenty-three percent of statewide survey respondents indicated they had prior experience with water issues from their work or education. Responses to these and other questions varied considerably between Colorado's more urbanized Front Range regions and less urbanized regions in western and southern Colorado, as discussed later in this summary.

Two questions were asked regarding government performance in protecting drinking water quality and water quality in Colorado's rivers, lakes and streams. In comparison to results for the same questions in the 2012-2013 survey, 2021 respondents were more negative regarding government performance in these areas.

Two questions examined respondents' perceptions of current and future water scarcity. The majority of statewide respondents felt that Colorado had enough water for its current needs, but not enough for its needs 40 years into the future. Perceptions regarding water scarcity also varied between the Front Range regions and the rest of Colorado, though the majority of respondents in every region believed that Colorado does not have enough water for the next 40 years.

Survey respondents were asked about their level of concern regarding nine different water issues, and which issue they felt was the most important concern. The quality of water received at home was the most important issue statewide and in each of the Front Range regions. In the rest of Colorado, the amount of water available for farms and ranches was identified as the most important issue. About ½ of all Coloradans would be willing-to-pay an additional \$10 per month to address water-related concerns, with higher proportions willing to pay a smaller amount per month.

New survey topics in this 2021 survey tested respondents understanding and opinion regarding several important water concepts, including:

- The relationship between drought in the Colorado River Basin in Western Colorado and the availability of water supplies throughout Colorado;
- Public awareness of interstate agreements that establish limits on Colorado’s ability to use the water in our rivers and streams;
- The relationships between land use planning and climate change and the amount of water we will need in the future;
- Public confidence in their own knowledge and ability to take action to ensure we use our water wisely; and
- Public familiarity, knowledge and opinions regarding Colorado’s Water Plan.

Most Coloradans (including those along the Front Range) recognize that severe drought in the Colorado River Basin across the Southwestern U.S. could have an adverse impact on the water available for their homes and businesses. They are also aware that interstate compacts limit Colorado’s usage of water from its rivers. And, most Coloradan’s believe that rising temperatures will affect our water needs in the future and that careful land use and development planning can help manage our future water needs.

Most Coloradan’s are not confident that they have the knowledge necessary to take action or support actions to manage our water use. And public familiarity with the Colorado Water Plan is fairly low, with about one in six respondents indicating they were at least somewhat familiar with the Plan. Confidence in their own water knowledge and familiarity with the Water Plan is higher in western and southern Colorado than in the Front Range. Figure ES-1 summarizes a sample of the statewide survey results and the varied results among the six study regions.

Figure ES-1. Selected Results from 2021 Statewide Water Awareness Survey

Topic	Western & Southern Colorado			Statewide	Colorado Front Range		
	San Luis	Southwest	West/NW		Central SE	Metro	Northeast
Sector Believed to Use Most Water?							
Agriculture	46%	40%	36%	31%	26%	31%	31%
Households	29%	33%	35%	39%	43%	39%	40%
Prior Water Education or Experience?	45%	39%	35%	23%	19%	21%	22%
CO Has Enough Water for Current Needs?							
Disagree/Strongly Disagree	60%	60%	46%	40%	40%	37%	40%
CO Has Enough Water for Next 40 Years?							
Disagree/Strongly Disagree	79%	77%	78%	68%	69%	62%	75%
Most Important Concern?							
Home Water Quality	16%	15%	24%	29%	35%	30%	24%
Water for Agriculture	48%	30%	15%	12%	9%	12%	12%
Water for Cities/Towns	10%	17%	20%	23%	26%	22%	24%
Familiar with Water Plan?	33%	21%	23%	17%	15%	18%	15%
Number of Survey Responses	343	326	348	2,105	344	370	374

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

SECTION I.

Introduction and Methodology

The Colorado Water Conservation Board (CWCB) contracted with BBC Research & Consulting (BBC) in 2021-2022 to conduct and analyze a statewide survey of public opinions, attitudes and awareness about water in Colorado. This report documents the results of this research. This section provides background regarding the study and discusses the development of the survey instrument and the process of conducting the survey. Section II describes the overall results of the survey from a statewide perspective, and provides insight into how opinions and attitudes concerning water vary among different demographic segments of the state's population. The following sections (sections III through VIII) describe the results of the survey for each of the six sub-state regions defined for this project.

This survey and study were, in part, an update to similar research conducted by BBC for the CWCB in 2012-2013. The sampling strategy for this study of completing a large number of surveys in each of six regions throughout Colorado, and the geographic definition of those regions, were the same as in the earlier 2012-2013 research.

There were some important changes in conducting this updated survey and analysis. In the 2021 survey, new questions were added to examine Coloradoan's understanding and opinion regarding important water concepts and aspects, including:

- The relationship between drought in the Colorado River Basin in Western Colorado and the availability of water supplies throughout Colorado;
- Public awareness of interstate agreements that establish limits on Colorado's ability to use the water in our rivers and streams;
- The relationships between land use planning and climate change and the amount of water we need to use;
- Public confidence in their own knowledge and ability to take action to ensure we use our water wisely; and
- Public familiarity, knowledge and opinions regarding Colorado's Water Plan.

To make room for these new questions while keeping the survey to a manageable length to maintain a high rate of response, some areas of inquiry in the 2012-2013 research were dropped for this update, including the perceived affordability of household water supplies and whether or not respondents were paying more attention to water issues than they had in the past.

Despite these important changes in the focus of the 2021 research, the majority of the questions in this new survey were consistent with questions asked in 2012-2013. This includes questions regarding the perceived current and future scarcity of water supplies in Colorado, the performance of government agencies in protecting water quality, and the public's level of

concern about (and suggested approaches to address) nine specific water issues throughout the state. The consistency of these questions between the 2012-2013 and 2021 surveys allows us to explore potential changes in public perceptions and awareness over the past nine years. These comparisons are noted, where appropriate, in the evaluation of the 2021 survey results in the sections that follow.

This study, together with the survey database, provides important and unbiased information on the current perspectives of Colorado's residents regarding water and water-related issues. We are confident that individuals and organizations throughout Colorado that are interested in the state's water issues, regardless of their perspectives, will find this information useful for a wide variety of purposes.

Methodology

Fundamental aspects of the methodology for this study included definition of sub-state regions for the survey, development of the survey instrument, implementation of the survey and post survey analysis. Each of these topics is discussed below.

Study regions. In view of Colorado's geographic diversity and the varied uses of water throughout the state, one key objective for this study was to not only develop information on how Coloradans as a whole perceive water and water-related issues, but also how those perceptions may differ across the state. To meet that objective, six regions were developed for this study. The map on the following page depicts the study regions.

Each of the study regions is comprised of one or more of the river basins that have been developed for water planning purposes through the Colorado Basin Roundtable process. The nine basin roundtables were collapsed into six regions for pragmatic reasons regarding both the cost of the survey research and the ability to obtain a large sample in each region, including the more sparsely populated areas of Colorado. More specifically, the following figure illustrates the relationship between the regions used in this study and the basins defined for the Basin Roundtable process.

Figure 1. Relationship between study regions and Colorado Basin Roundtables

Study Region	Basin Roundtable(s)
Central Southeast	Arkansas Basin
Denver Metro	Metro Roundtable
Northeast	South Platte Basin North Platte Basin
San Luis Valley	Rio Grande Basin
Southwest	Gunnison Basin Southwest Basin
West Northwest	Colorado Basin Yampa/White Basin

Development of the survey instrument. One of the most important aspects of any survey-based study is the development of the survey instrument. For this project, the instrument needed to gather information on several different aspects of public awareness and opinion regarding water and water issues within a typical timeframe of about 12 minutes.

- Research and preliminary survey planning conducted in 2020, including recommendations for a potential survey regarding the Colorado Water Plan developed by the OMNI Collaborative for CWCB in 2018; review of the Basin Roundtable Education Survey conducted by the Colorado Foundation for Water Education in 2010; and review of the more recent Statewide Water Education Action Plan produced by Water Education Colorado;
- Two pre-survey focus groups with members of the general public (one in the Denver Metro Area, the other in Grand Junction). These focus groups explored water knowledge and concerns to understand perceptions related to water supply and issues in Colorado; communication and engagement to learn about ways to effectively engage and communicate with residents; and new survey questions to test the design and functionality of proposed questions for the 2021 Statewide Water Awareness Survey;

- A stakeholder discussion with members of Colorado’s water education community across the state to test the design and functionality of proposed questions for the 2021 Statewide Water Awareness Survey and better understand how water-related organizations might use information resulting from the survey; and
- Several iterations of draft survey instruments and review meetings with CWCB,

The final survey instrument is provided in Attachment A to this report, and further information regarding the focus groups is provided in Attachment B.

Survey data collection process. During October and November 2021, BBC’s subcontractor Davis Research (Davis) completed at least 325 surveys with the residents of each of the six study regions, for a total of 2,105 survey responses across the state of Colorado.

While the 2012-2013 statewide water awareness survey was conducted entirely via telephone, the world has changed over the past eight years. Telephone survey response rates continue to drop, as cell phone carriers have become very sophisticated in blocking unwanted calls. Consequently, obtaining a representative sample through telephone surveys has become very difficult and much more expensive.

For the 2021-22 Statewide Water Awareness Survey, the BBC/Davis team gathered survey responses through a combination of address-based sampling and on-line panel sampling. Address-based sampling (ABS) is a process where Davis builds a sample frame using the USPS Computerized Delivery Sequence File (CDSF). This ABS frame contains nearly 100% of all households in Colorado. A random sample was taken within each Colorado defined region, so that each household in that region had equal opportunity for selection. Potential households were mailed letters in both English and Spanish and it was requested that the adult age 18 or over with the most recent birthday complete the survey. They were given the opportunity to complete the survey online or call into an 800 number to complete via telephone (which eliminates the digital divide). Online panel sampling is based on datasets of people who are part of an online survey platform and at one time agreed to either complete a one-time survey or be part of a panel to complete surveys for compensation. Davis has software that provided direct access to over 250,000 potential respondents in Colorado.

As part of Davis’ quality process, when implementing an online study using panel members or recruited respondents, they add several quality measures to provide a more rigorous data set. These measures include double verification of key information, speed timers between sections, quality questions to ensure respondents are reading instructions in detail, and a careful review of open-ended questions (to test engagement).

Survey analysis, additional research and report development. Results from the survey were analyzed for the state as a whole, for different demographic groups within the state (e.g., by age, race/ethnicity, income level, length of residence in Colorado), and by region. As further discussed in Section II, statewide results were developed by weighting the responses from the individual regions according to each region’s relative share of the state’s adult population.

Throughout the description of the statewide survey findings in Section II, and the descriptions of the regional survey results in Section III through Section VII, comparisons are made between the

survey responses of different demographic and geographic groups of respondents. Based on the sizes of the statewide and regional survey samples, differences of 4 percentage points or more in the statewide results and 5 percentage points or more in the regional results are generally statistically significant. This means there is a 95 percent statistical probability that the results for the groups being compared would not be the same even if we had been able to survey every member of the relevant demographic groups, or every resident of the state or region.

BBC received extensive support and assistance from CWCB's project team throughout this project. We had virtual meetings, and other discussions via phone and e-mail, to review preliminary survey results, focus our efforts, and improve the report. Their talent and dedication was critical to the success of this effort.

SECTION II.

Statewide Survey Results

This section provides detailed information about statewide survey responses. Survey quotas were based on obtaining a sample of at least 325 responses from each of six regions in Colorado, which differ greatly in the size of their total populations. The study team combined responses from each of the six regions to create the statewide sample analyzed in this report.¹ Because at least 325 responses were obtained from each region, the size of the regional samples did not reflect the true shares of Colorado's overall population that live in each region. For example, about 17.6 percent of statewide survey responses were obtained from the Metro Denver region, but about 50.4 percent of all Colorado adult residents reside in that region.

To adjust for true population shares, the study team assigned each response from each of the six regions a survey weight based on each region's shares of Colorado's total adult population, divided by each region's shares of the unweighted survey responses across the state. For example, this means that the 370 responses from the Denver Metro region (17.6 percent of the 2,105 total responses across the state) were each given a weight of 2.87, while each of the 348 responses from the West/NW region (16.5 percent of the total responses across the state) were each given a weight of 0.39 to reflect that region's true share of the statewide population. This approach also eliminates any differences in the statewide analysis due to differences in the sample sizes across the regions. The analysis presented in this section reflects statewide estimates based on the weighted responses derived from this method. The analysis in each of the subsequent sections describing regional results is based on the unweighted responses within each region.

The remainder of this section presents information collected from statewide survey responses on key topics, including:

- Knowledge of Colorado water use and awareness of water issues;
- Performance of government agencies;
- Scarcity perceptions;
- Water-related concerns;
- Knowledge of key water-related concepts;
- Awareness and opinion of the Colorado Water Plan;
- Need for more information and most trusted sources; and
- Demographics.

The study team examined responses based on key demographic information, as appropriate, for each survey question.

¹ Detailed survey results for each of the six regions in Colorado are presented in separate sections of this report.

To facilitate comparisons between the results of the 2021 survey and the results of the 2012-2013 survey (where applicable), we have *italicized* these comparisons in the following narrative.

Knowledge of Colorado Water Use and Issues

The survey asked two questions to gauge respondents' knowledge of Colorado water use and water-related issues. First, respondents were asked to identify which Colorado sector uses the most water. Later, during the final portion of the survey regarding participants' demographic characteristics, respondents were asked "Has any part of your education, work or volunteer experience involved water or water-related issues?"

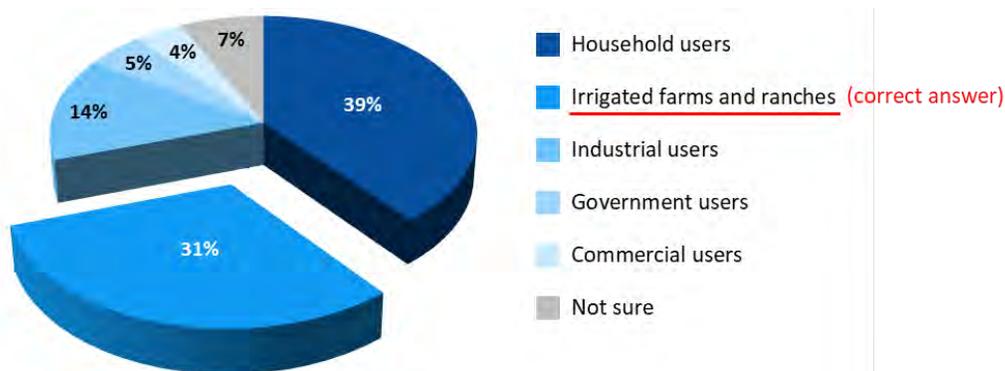
Sector that uses the most water. When asked which sector uses the most water in Colorado, 31 percent of respondents correctly identified farms and ranches, as shown in Figure II-1. The majority of Coloradans did not correctly identify agriculture as the largest water user, with the largest proportion of respondents (39 percent) indicating they believed that households used the most water.

A 2008 survey by researchers from Colorado State University (CSU) also found that most Coloradan's were not aware that agriculture accounted for the most water use in the state. Most respondents to the *Public Perceptions, Preferences and Values for Water in the West* believed household use to be the largest water user, followed by industry, with irrigated farming ranking third.

These results differ somewhat from those in the 2012-2013 survey in which 35 percent of respondents indicated that irrigated farms and ranches used the most water, while 32 percent stated that households were the largest water user. During the previous survey, 30 percent of respondents identified industrial and commercial users as the largest water using sector – while the combined proportion of respondents selecting these two sectors in the new 2021 survey was 21 percent.

It is worth noting, however, that later in the survey respondents identified the amount of water available for farms and ranches as one of the greatest concerns among nine potential water-related issues. Pages II-13 through II-15 provide more detail on this aspect of the survey.

Figure II-1. Which sector uses the most water?



Note: n=2,099.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Performance of Government Agencies

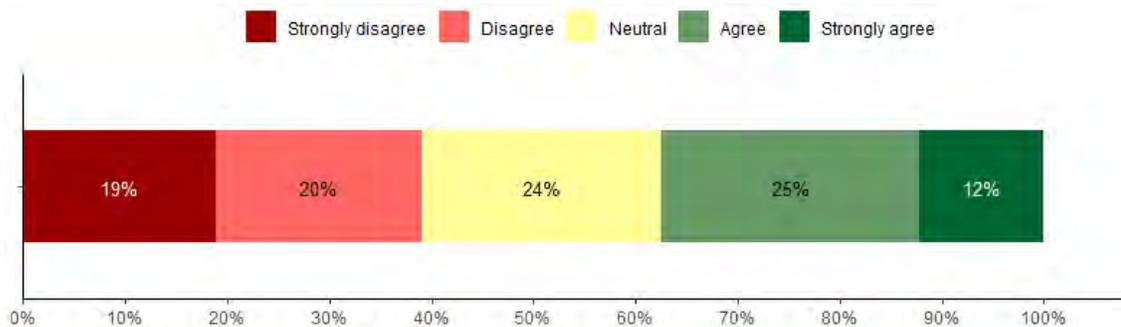
Respondents were asked two questions regarding current regulation and management of water in Colorado. Using a scale of a 1 to 10, where 1 means “completely disagree” and 10 means “completely agree,” respondents were asked to rate their level of agreement with the following statements:

- Government agencies are doing enough to protect the quality of your drinking water; and
- Government agencies are doing enough to protect the quality of water in Colorado streams, rivers, and lakes.

According to the 2008 *Public Perceptions, Preferences and Values for Water in the West* survey by CSU researchers, 80 percent of Coloradans felt that the quality of surface waters where they live were fair, good or excellent. However, 25 percent of respondents indicated that these waters were “good, but deteriorating.” 51 percent of respondents in that survey thought the state government was most responsible for protecting water quality in their community, followed by local city/county governments (23%) and the federal government (12%).

Figure II-2 and Figure II-3 present those results.

Figure II-2. Government agencies are doing enough to protect the quality of your drinking water?



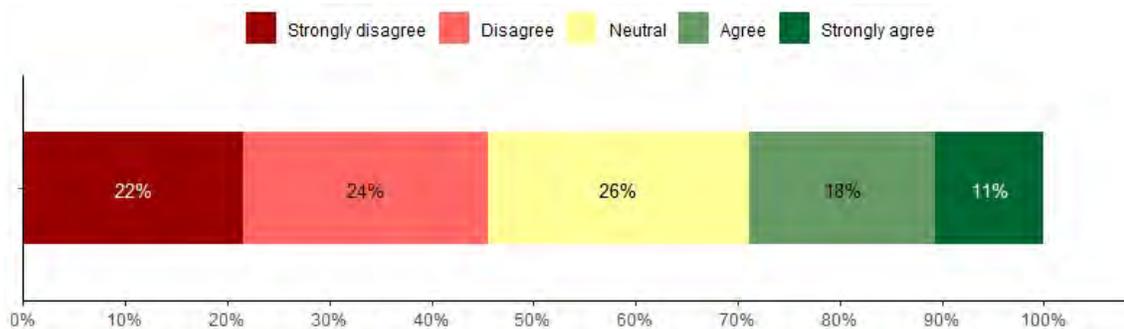
Note: n=1,933.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Overall, 37 percent of respondents agreed or strongly agreed with the statement that “government agencies are doing enough to protect the quality of your drinking water,” though there was not strong support for the statement. *This proportion is down from the almost 48 percent of respondents who felt that government agencies were doing enough in this regard during the 2012-2013 survey.* In contrast, 39 percent of respondents disagreed or strongly disagreed that government agencies were doing enough to protect drinking water quality in the 2021 survey, *compared to a little more than 22 percent in 2012-2013.*

Coloradans were less likely to agree that government agencies were doing enough to protect water quality in Colorado’s rivers, lakes and streams than to protect the quality of our drinking water. Only 29 percent of respondents agreed or strongly agreed with that statement, while 46 percent disagreed or strongly disagreed with it, as shown in Figure II-3.

Figure II-3. Government agencies are doing enough to protect the quality of water in Colorado streams, rivers, and lakes?



Note: n=1,928.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

During the 2012-2013 survey, Coloradans were also more likely to disagree that government agencies were doing enough to protect water quality in rivers, lakes and streams (24 percent) than to protect drinking water quality (22 percent). However, a much larger proportion of respondents in the earlier survey did agree or strongly agree that government agencies were doing enough in this regard (45 percent) than in the 2021 survey (29 percent).

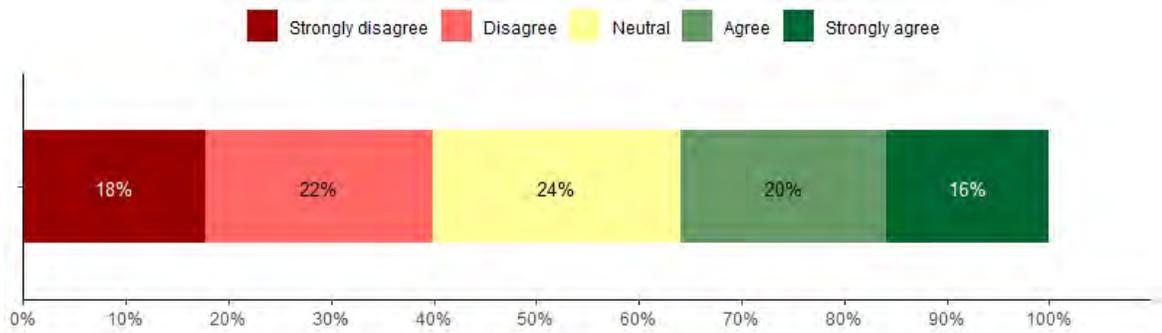
Scarcity Perceptions

As in 2012-2013, the survey asked a series of questions about perceptions of water scarcity in Colorado. Using a 1 to 10 scale, where 1 means “completely disagree” and 10 means “completely agree,” respondents were asked to rate their level agreement with the following statements:

- Colorado has enough water available to meet our current needs; and
- Colorado has enough water available to meet our needs for the next 40 years.

Current water needs. Figure II-4 shows that, overall, statewide respondents tended to slightly disagree that Colorado has enough water to meet its current needs. Forty percent of survey respondents disagreed or strongly disagreed with that statement, while 36 percent agreed or strongly agreed that we do have enough water to meet current needs. *These results indicate somewhat less concern with meeting current water needs than the 2012-2013 survey, in which 46 percent disagreed or strongly disagreed that we had enough water for current needs and 29 percent agreed or strongly agreed we had enough water for that purpose. It is noteworthy that the 2012-2013 survey took place following a very dry water year in Colorado during which some municipal providers implemented drought restrictions on their customers.*

Figure II-4. Colorado has enough water to meet our current needs?

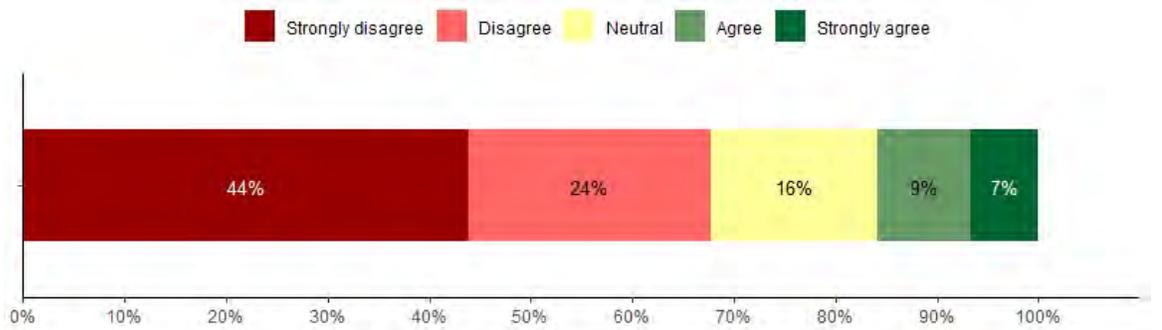


Note: n=1,971.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Water needs for the next 40 years. Looking ahead towards the future, Figure II-5 shows that, on average, Coloradans strongly disagreed that “Colorado has enough water available to meet our needs for the next 40 years.” Sixty-eight percent of respondents disagreed or strongly disagreed that we have enough water to meet these future needs, while only 16 percent agreed or strongly agreed with the statement. *These results are very similar the responses to the same question in the 2012-2013 survey, which also found 68 percent disagreement, with a slightly lower level of agreement (13 percent) than in the 2021 survey.*

Figure II-5. Colorado has enough water for the next 40 years?

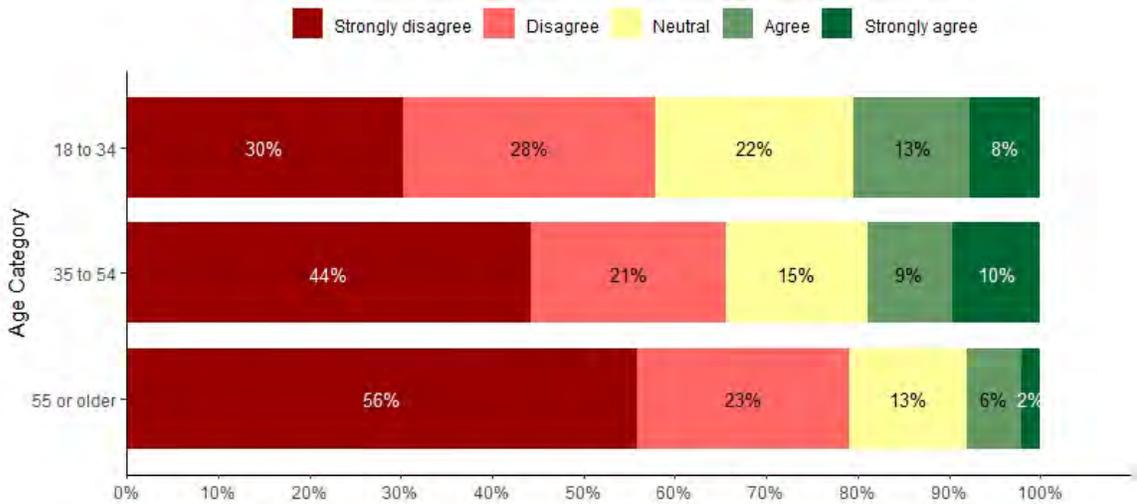


Note: n=1,872.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Demographic distinctions. Perceptions about water scarcity for the next 40 years varied with age. Figure II-6 shows that older Coloradans were more likely to disagree or strongly disagree that Colorado has enough water available for the next 40 years than younger residents. *This result is very similar to findings from the 2012-2013 survey.*

Figure II-6. Colorado has enough water for the next 40 years – responses by age group

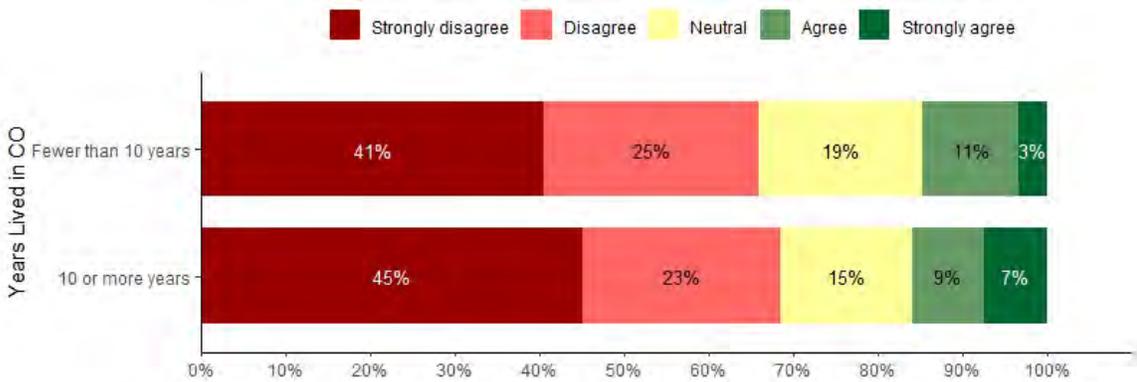


Note: n=1,872.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Respondents who have lived in Colorado for more than 10 years were also more likely to disagree that Colorado has enough water to meet our needs over the next 40 years than those who have lived in the state for less than 10 years, as shown in Figure II-7. Again, these results are very similar to the 2012-2013 survey.

Figure II-7. Colorado has enough water for the next 40 years – responses by length of Colorado residency?



Note: n=1,861.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

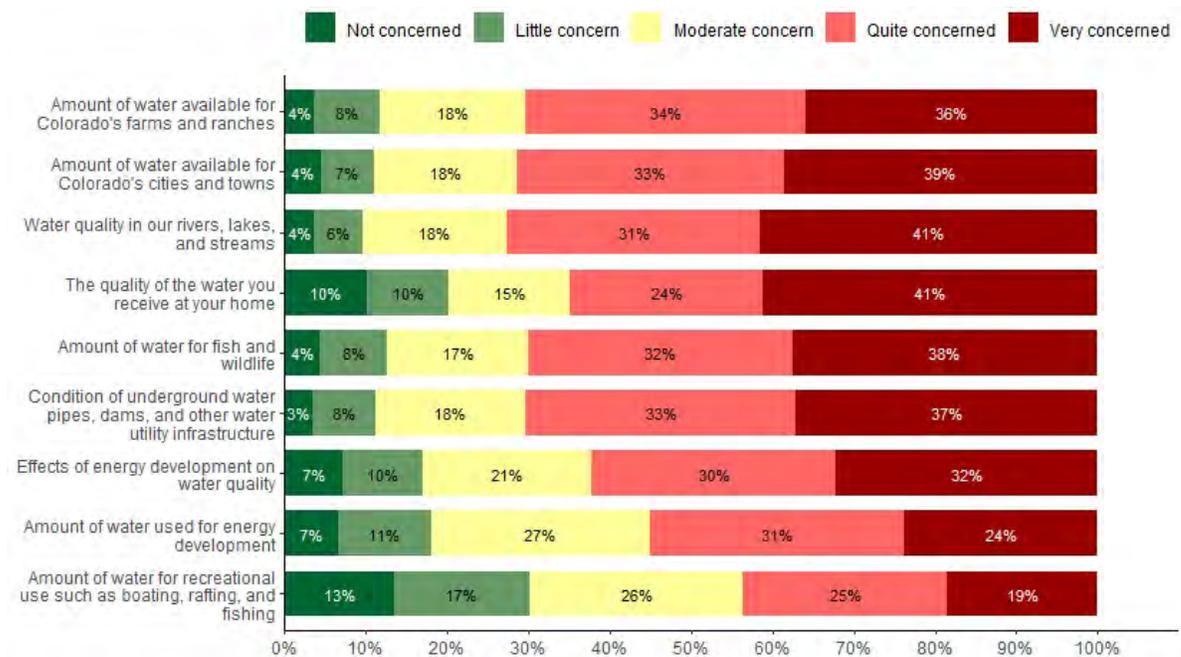
Water-Related Concerns

The survey asked a series of questions to gauge Coloradans' perceptions of water-related concerns. Using a scale of a 1 to 10 scale, where 1 means “not concerned at all” and 10 means “very concerned,” respondents were asked to rate their level of concern with the following potential water-related issues:

- Water quality in our rivers, lakes and streams;
- Amount of water available for Colorado’s cities and towns;
- Amount of water available for Colorado’s farms and ranches;
- Amount of water for recreational use such as boating, rafting and fishing;
- Amount of water for fish and wildlife;
- Condition of underground water pipes, dams and other water utility infrastructure;
- The quality of the water you receive at your home;
- Amount of water used for energy development; and
- Effects of energy development on water quality.

The order in which the potential areas of concern was presented was randomized to avoid potential issues with “starting point bias”, as was also done when the 2012-2013 survey was conducted. Figure II-8 presents the reported level of concern for each issue.

Figure II-8. Concern about water-related issues?



Note: n=1,931 to 2,090 (response rate varied by issue).

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Among the nine areas of potential concern posed to the survey respondents, five topics had mean scores between 7.3 and 7.6, indicating the average respondent was quite concerned about them. In order, these highest scoring areas of concern included:

- Water quality in our rivers, lakes and streams (mean score of 7.6),
- The amount of water available for Colorado's cities and towns (mean score of 7.5),
- The amount of water for fish and wildlife (mean score of 7.4)
- The condition of underground water pipes, dams and other water utility infrastructure (mean score of 7.4), and
- The amount of water available for Colorado's farms and ranches (mean score of 7.3).

Four of these issues of most concern were also among the top five issues in the 2012-2013 survey. In the current 2021 survey, the amount of water for fish and wildlife was a new addition to the top five concerns, replacing the quality of water received at home among the top five issues.

In the 2012-2013 survey the amount of water available for Colorado's farms and ranches was rated as the highest level of concern among the nine issues. Water quality in our rivers, lakes and streams ranked third among the list of potential concerns in 2012-2013. The amount of water available for Colorado's cities and towns ranked second on the list in both the current survey and the 2012-2013 survey. The condition of underground water pipes, dams and other water utility infrastructure rose from sixth in the list of concerns in 2012-2013 to fourth in the current 2021 survey.

The topics of least concern in the 2021 survey were:

- The quality of water you receive in your home (mean score of 7.1);
- The effects of energy development on water quality (mean score of 6.9),
- The amount of water used for energy development (mean score of 6.6), and
- The amount of water for recreational use such as boating, rafting and fishing (mean score of 5.8).

The two lowest ranking areas of concern in the 2021 survey (amount of water used for energy development and the amount of water for recreational use) were the same as in the 2012-2013 survey results, in the same order.

Willingness to pay. The survey asked participants whether they would be willing to pay an additional \$1, \$5, \$10 or \$25 per month to address potential water-related issues. Each participant was presented with only one dollar amount, and the amount presented to the participants was varied on a random basis.

Figure II-9 presents those results for all survey respondents and for respondents across varying levels of annual household incomes: less than \$50,000, \$50,000 to \$75,000 and more than \$75,000. Survey results indicate that most Coloradans would be willing to pay an additional charge to address water-related concerns.

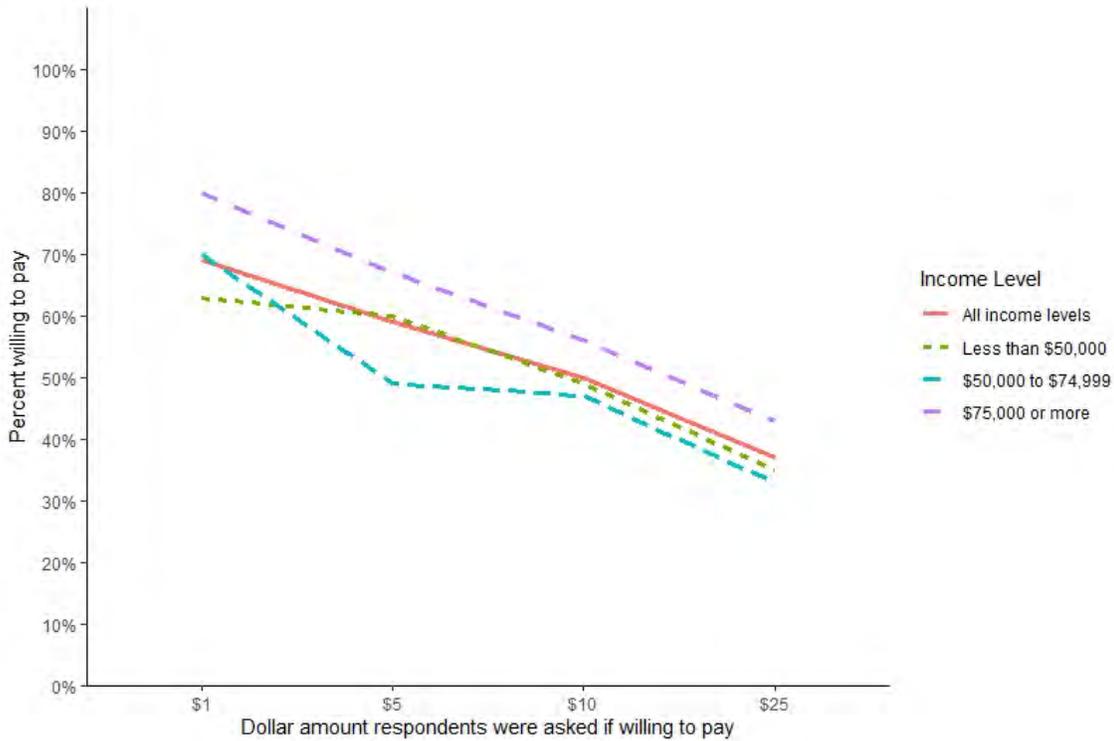
- 69 percent of respondents indicated that they would be willing to pay an additional \$1 per month (*up from 66 percent in 2012-2013*);
- 59 percent of respondents indicated that they would be willing to pay an additional \$5 per month (*up from 54 percent in 2012-2013*);
- 50 percent of respondents indicated that they would be willing to pay an additional \$10 per month (*up from 48 percent in 2012-2013*); and
- 37 percent indicated that they would be willing to pay an additional \$25 per month (*up from 34 percent in 2012-2013*).²

On average, survey households would be willing to pay about \$10 per month to address a variety of potential concerns identified in the survey. *These results are very similar to those from the 2012-2013 survey. The small increases in the proportion of respondents willing to pay each amount compared to the 2012-2013 survey may be reflective of increases in nominal household income over the past nine years, and decreases in the purchasing power of the dollar due to inflation.*

Demographic distinctions. Willingness to pay to address water-related issues varies by household income level. Households with incomes greater than \$75,000 per year are clearly more willing to pay higher amounts to address water related issues. However, willingness to pay among households with incomes between \$50,000 and \$75,000 per year is similar to that of households earning less than \$50,000 per year.

² Consistent with the 2012-2013 analysis, these estimates are “conservative” and are based on just “yes” or “no” answers and exclude the 23% of respondents who responded they did not know or did not wish to say. If those respondents are excluded from the calculation, willingness to pay \$10 per month increases from 50% to 65%.

Figure II-9. Willingness to pay to address water-related issues?



Note: n=1,874.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Most important water-related issue. Survey participants were also asked to identify which of the nine potential water-related issues discussed earlier was the most important issue that needs to be addressed.

The finding that most Coloradan’s are willing to pay to address Colorado’s water-related issues is consistent with other survey research. The 2008 survey by researchers at CSU discussed previously found that 67 percent of respondents were willing to pay \$5 per month and 59 percent were willing to pay \$10 per month to address water issues. A 2009 survey for the Colorado River Water Conservation District (“River District” or “District”) found that 56 percent of River District residents were willing to support a small increase in property taxes to help the District “protect and safeguard Western water.” The national survey by ITT found that 63 percent of voters would be willing to pay a little more in their water bills to “upgrade our water system to ensure long-term access to clean water.” The average amount voters were willing to pay was \$6.20 per month.

As shown in Figure II-10, respondents most frequently indicated that the quality of water you receive in your home was the most important potential water-related issue that needs to be addressed (29%). The five most frequently identified most important issues were:

- The quality of water you receive in your home (29 percent);
- Amount of water for Colorado’s cities and towns (23 percent);

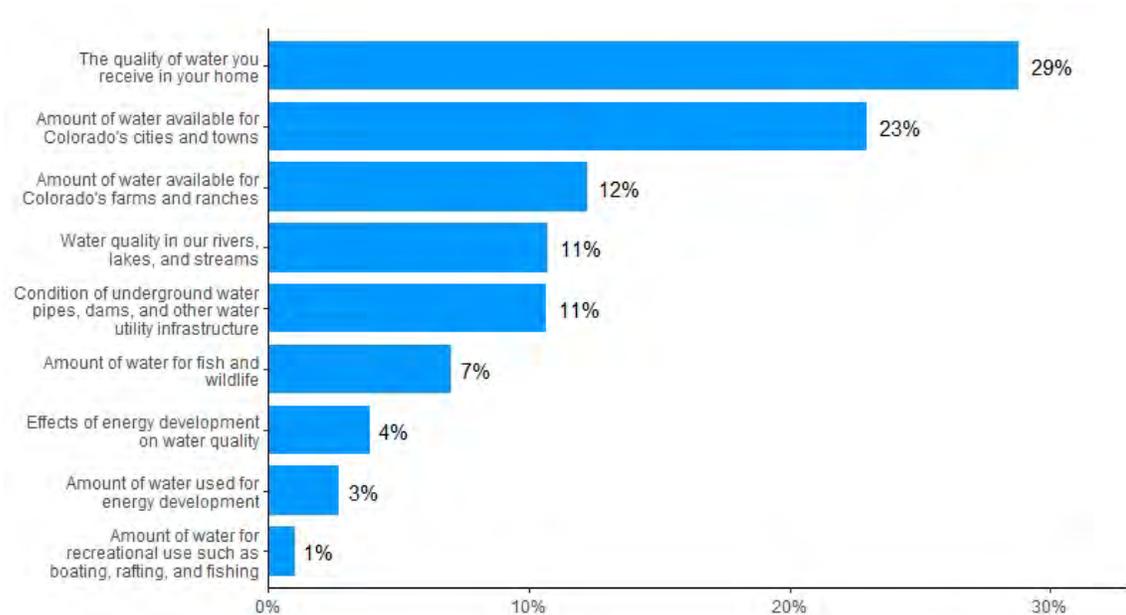
- Amount of water available for Colorado’s farms and ranches (12 percent);
- Water quality in our rivers, lakes and streams (11 percent); and
- The condition of underground water pipes, dams and other water utility infrastructure (11 percent).

Four of these five issues were among the issues of greatest concern, described earlier on page II-9, but the issue most frequently identified as the most important – the quality of water you receive in your home – was not identified as one of the issues of greatest concern in response to earlier survey questions.

This seemingly paradoxical result also occurred in the 2012-2013 survey. Follow-up telephone interviews at that time with respondents who had identified the quality of water they receive in their home as their most important issue generally indicated that:

- *Most of these respondents selected quality of water at home because of water’s critical contribution to their family’s health,*
- *Most were satisfied with their current home water quality, but were concerned about potential contamination in the future, and*
- *Some respondents cited stories in the media regarding water contamination as a reason for their concerns.*

Figure II-10. Most important water-related issue?



Note: n=2,101. Excluding responses of “all of these”, “none of these”, “other”, and “I don’t know” – n=1,480.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

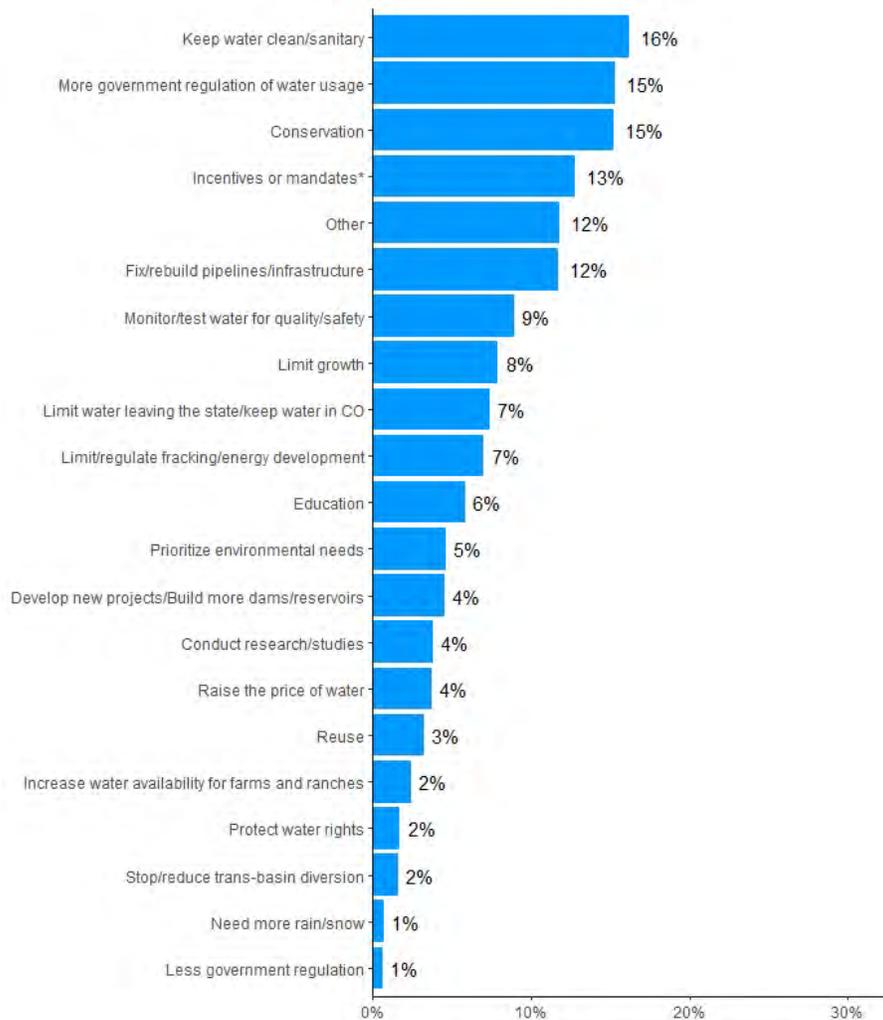
These findings regarding Colorado's priorities in terms of water-related issues are generally consistent with other survey research. In the undated *Survey of Public Attitudes About Water Issues in Colorado* conducted by CSU researchers, clean drinking water rated the highest in terms of "very/extremely important issues." A 2008 statewide survey of Texas residents also found that "clean drinking water" was the most frequently cited "very important issue" among 15 potential water quality and quantity related concerns. Water for agriculture rated highest among quantity related concerns and 7th overall. Respondents to a broader survey sponsored by Colorado College in 2011 ranked "loss of family farms and ranches" as the most serious environmental problem across western region, ahead of "pollution of rivers, lakes and streams" (#3) and "inadequate water supplies" (#5). "Impact of oil and gas on land, air, and water" was ranked #10 of 15. However, BBC's 2009 survey of Denver Water customers found that those customers ranked "having enough water" as the most important issue. Water quality/good tasting water ranked third. In the River District's 2009 survey, "Drying up of Farm and Ranch Lands" was the most frequently ranked as extremely or very concerning among various issues, along with demands from out of state water interests.

Addressing the most important water-related issues. Survey participants were asked what they thought should be done to address their most important concerns. That question was open-ended (unprompted), but responses (including a few multiple responses) were coded for analysis. Figure II-11 presents those results.

Overall, respondents most frequently indicated that their most important potential water-related issue should be addressed by keeping water clean or sanitary (16%), though the response to this question differed depending on which water-related issue respondents felt was most important (as discussed on the following page). Respondents also frequently indicated that their most important concerns should be addressed by:

- More government regulation of water usage (15%);
- Conservation (15%), or
- Incentives or mandates to promote water use efficiency through technology, efficient agricultural methods, efficient housing development and/or lower water use landscaping (13%).

Figure II-11. What should be done to address your most important water concern?



Note: *Incentives or mandates were recommended to promote water use efficiency through technology, efficient agricultural methods, efficient housing development and/or lower water use landscaping.

Totals do not equal 100% because respondents could choose more than one option.

n=1,264.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

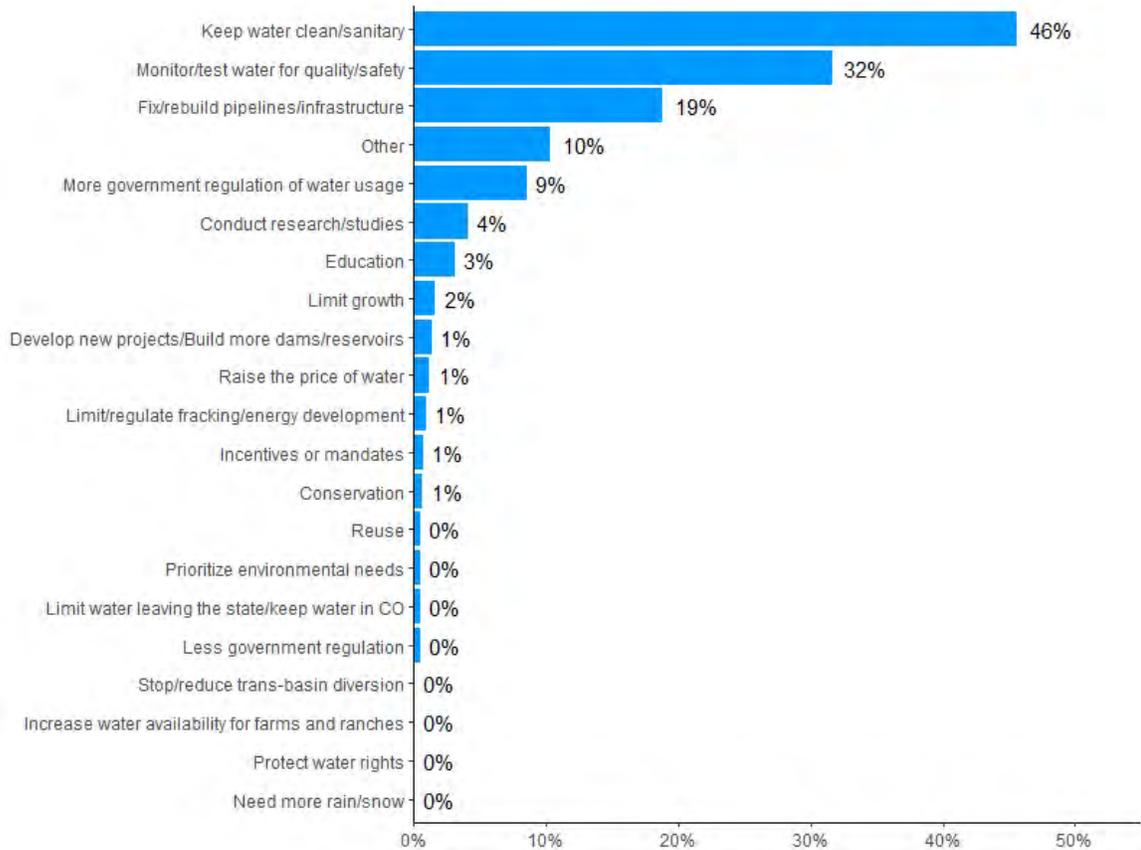
How participants thought about addressing water-related issues varied depending on what they had identified as their most important water-related concerns. Figures II-12 through II-14 show the recommended strategies among three different groups of respondents – those who selected each of the following as the most-important water-related issues: to address

- Quality of water you receive in your home;
- Amount of water for Colorado’s cities and towns; and
- Amount of water available for Colorado’s farms and ranches.

Recommended strategies among those who identified quality of water you receive in your home as the most important issue. As shown in Figure II-12, this group of respondents most often focused on measures closely related to maintaining household water quality. Strategies to

reduce water use or add to available water supplies were not commonly mentioned among this group of respondents.

Figure II-12. What should be done to address your most important water concern?
(Among respondents who identified The Quality of Water You Receive in Your Home as the most important issue)

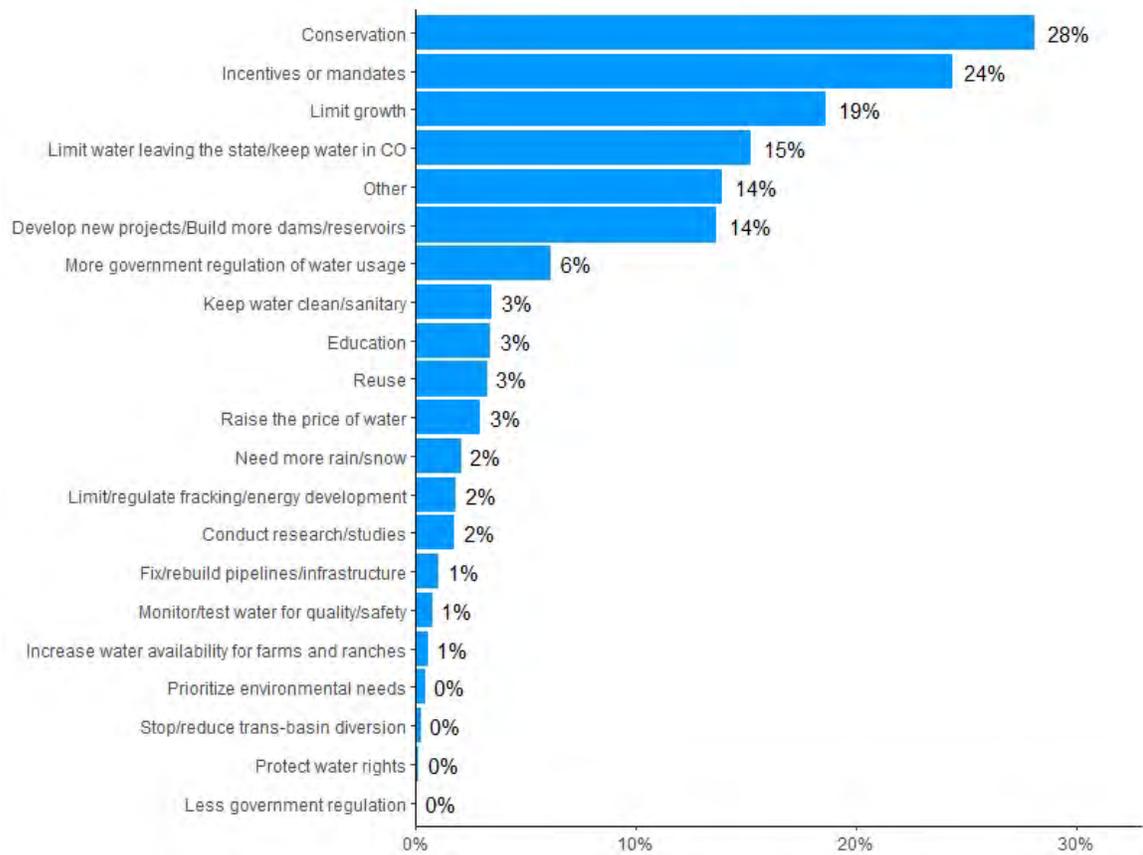


Note: n=367.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Recommended strategies among those who identified amount of water for Colorado’s cities and towns as the most important issue. As shown in Figure II-13, this group of respondents most commonly recommended measures to reduce urban water use, such as conservation, incentives/mandates, or limiting growth. Two supply-related measures were among the six most common recommendations – limiting water leaving the state and building new water supply projects.

Figure II-13. What should be done to address your most important water concern?
(Among respondents who identified amount of water for Colorado’s cities and towns as the most important issue)

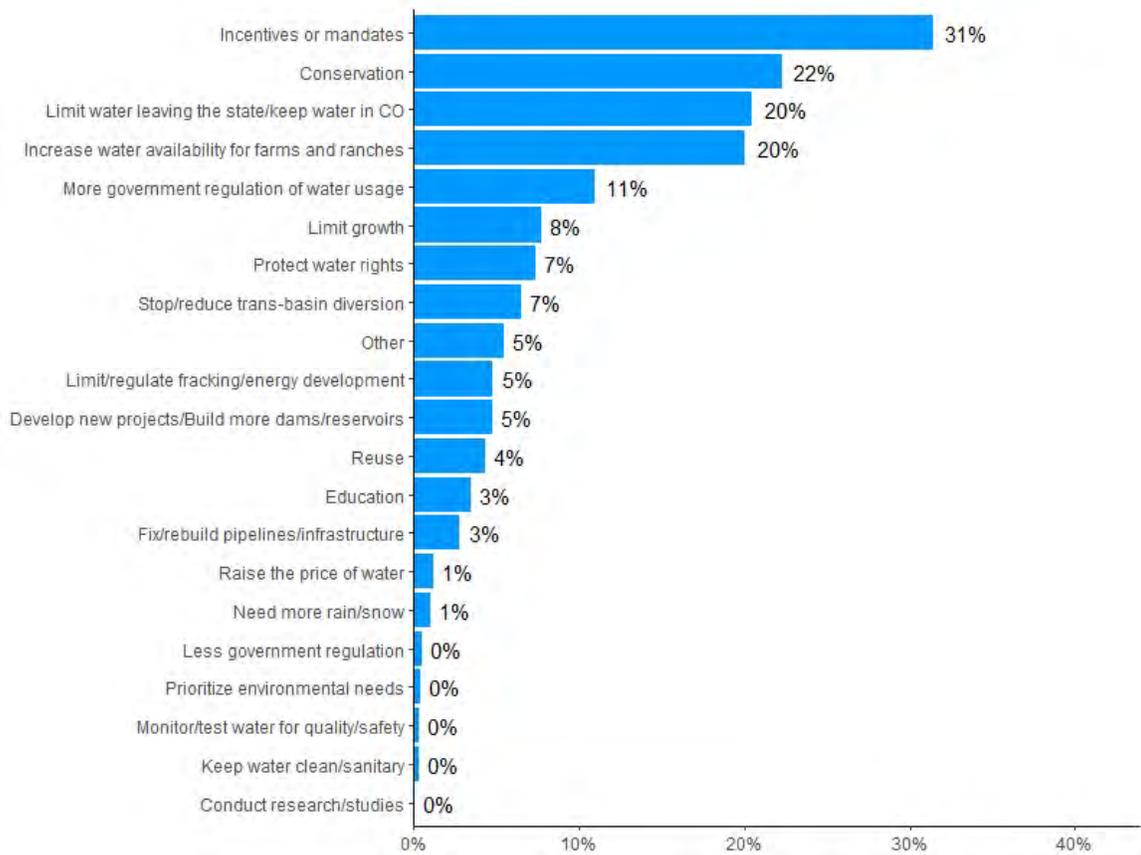


Note: n=291.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Recommended strategies among those who identified amount of water available for Colorado’s farms and ranches as the most important issue. Figure II-14 shows that the most frequently recommended measures among this group of respondents are fairly similar to those among respondents who identified water availability for cities and towns as the most important issue. Measures to reduce water use through incentives or mandates, or through conservation in general, were again the top two recommended strategies.

Figure II-14. What should be done to address your most important water concern?
 (Among respondents who identified amount of water available for Colorado’s farms and ranches as the most important issue)



Note: n=152.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Several other surveys have gathered public input on their preferences concerning water strategies. The undated *Public Perceptions, Preferences and Values for Water in the West* survey by CSU researchers found that building reservoir storage was ranked first among strategies. Various conservation and reuse options, however, were ranked second, third and fifth among the eight options provided. Taken together, conservation and reuse as a package would have ranked first. Respondents in that survey also indicated mild agreement with the proposition that “Reallocating water for the natural environment and for human use should have the same priority” (average score about 3.5, where 3.0 is neutral and 5.0 is strong agreement). A 2013 survey of 710 Colorado voters by Public Opinion Strategies found that 80 percent of Colorado voters favored emphasizing conservation over building new projects in order to meet Colorado’s water needs.

Knowledge of Important Water Concepts

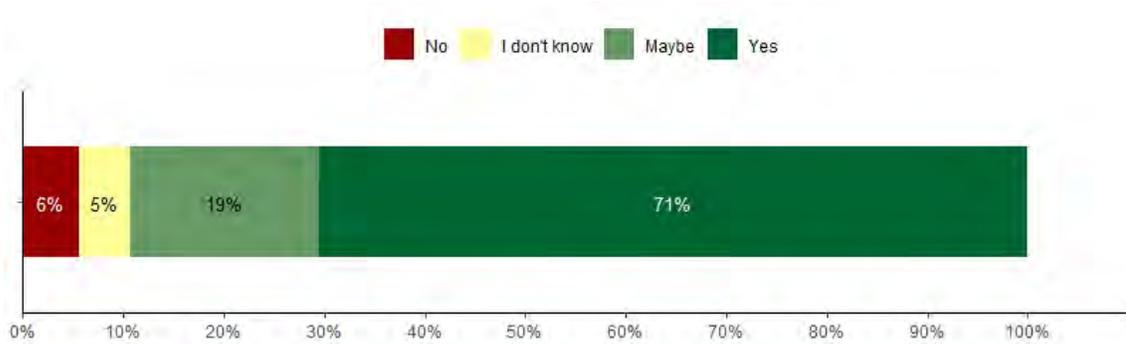
One of the major changes in the 2021 survey was the inclusion of several questions to test respondents understanding and opinion regarding important water concepts identified by CWCB and members of the water education community. These concepts included:

- The relationship between drought in the Colorado River Basin in Western Colorado and the availability of water supplies throughout Colorado;
- Public awareness of interstate agreements that establish limits on Colorado’s ability to use the water in our rivers and streams;
- The relationships between land use planning and climate change and the amount of water we will need in the future;
- Public confidence in their own knowledge and ability to take action to ensure we use our water wisely; and
- Public familiarity, knowledge and opinions regarding Colorado’s Water Plan.

Relationship between drought in Western Colorado and availability of water supply throughout Colorado. In view of the ongoing drought in the Colorado River Basin and record low water storage levels in f Lake Powell and Lake Mead, it is important that Colorado residents – particularly those living in the major population centers along the Front Range – understand that their own water supply could be impacted by drought west of the Continental Divide. Survey respondents were specifically asked “Do you believe severe drought that impacts the Colorado River Basin and the Southwestern US could have an impact on the water supply for your own home or business?”

As shown in Figure II-15, the majority of Coloradans do recognize the linkage between drought in the Colorado River Basin in Western Colorado and their own water supply – even if they live in the Front Range. Seventy-one percent of respondents across Colorado indicated they did believe their water supply could be impacted by the drought in the Colorado River Basin, while an additional 10 percent responded with “maybe.” Only 6 percent of survey respondents answered no – that they did not believe their water supply could be affected, while 5 percent indicated they did not know the answer to the question.

Figure II-15. Do you believe severe drought that impacts the Colorado River Basin and the Southwestern US could have an impact on the water supply for your own home or business?

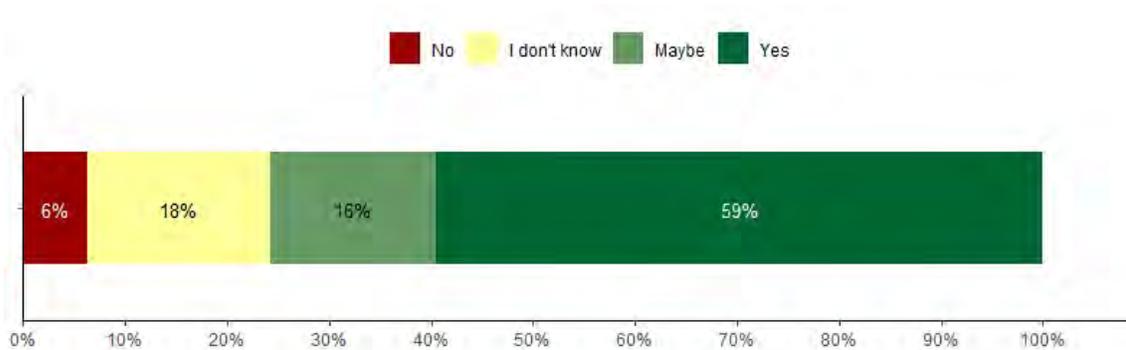


Note: n=2,102.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Understanding that interstate agreements limit Colorado’s use of water from our rivers. Survey respondents were specifically asked “Do you think that legal agreements with neighboring states limit the amount of water Colorado can use from its rivers?” As shown in Figure II-16, 59 percent of Colorado residents correctly answered yes to this question, while 16 percent answered maybe. Eighteen percent indicated they did not know, while only 6 percent incorrectly answered “no.”

Figure II-16. Do you think that legal agreements with neighboring states limit the amount of water Colorado can use from its rivers?

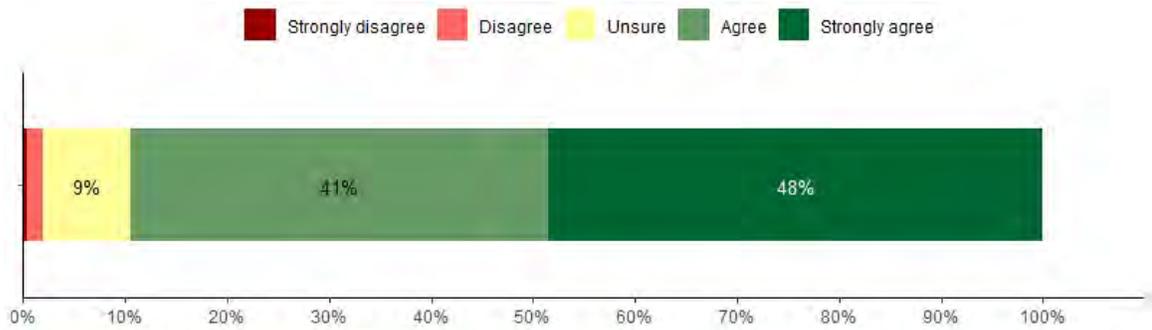


Note: n=2,100.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Recognition of relationship between land use and development planning and future water needs. Survey respondents were next asked whether they agreed or disagreed with the following statement: “We can help manage Colorado’s future water use by carefully planning how we develop new homes, businesses and infrastructure.” As shown in Figure II-17, 48 percent of Colorado residents strongly agreed with this statement, while an additional 41 percent agreed with it. Nine percent indicated they were unsure, while less than 2 percent disagreed or strongly disagreed.

Figure II-17. Agreement that we can help manage Colorado’s future water use by carefully planning how we develop new homes, businesses and infrastructure?



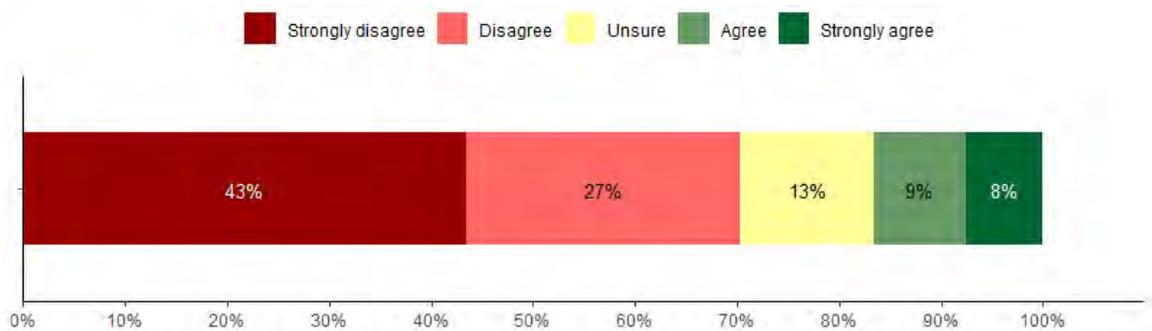
Note: n=2,099. Percentages less than 2% are not labeled.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Recognition of potential impact of rising temperatures on future water needs. The following question tested awareness that overall increases in temperatures may affect the amount of water we need in the future. This statement was deliberately posed in the negative to break up the pattern in the survey questions that agreement was the correct response.

Respondents were specifically asked whether they agreed or disagreed with the following statement: “The trend of rising temperatures is unlikely to affect Colorado’s future water needs.” As shown in Figure II-18, 70 percent of Colorado residents disagreed or strongly disagreed with this statement – indicating they believe rising temperatures will impact our future water needs. Seventeen percent agreed or strongly agreed with the statement, while 13 percent were unsure.

Figure II-18. Agreement with statement that the trend of rising temperatures is unlikely to affect Colorado’s future water needs?

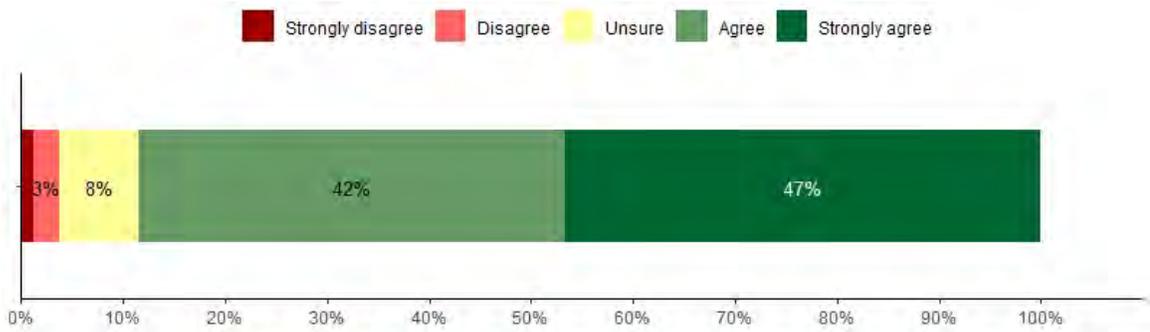


Note: n=2,086.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Recognition of relationship between proactive efforts to meet future water needs and Colorado’s economy. Survey respondents were specifically asked whether they agreed or disagreed with the following statement: “We need to take action in advance to reduce water use and/or increase water supply to continue to grow Colorado’s economy in the future.” As shown in Figure II-19, almost 90 percent of Colorado residents agreed or strongly agreed with that statement supporting the need for proactive efforts. Only 3 percent disagreed or strongly disagreed with the statement, while about 8 percent were unsure.

Figure II-19. Agreement that we need to take action in advance to reduce water use and/or increase water supply to continue to grow Colorado’s economy in the future?



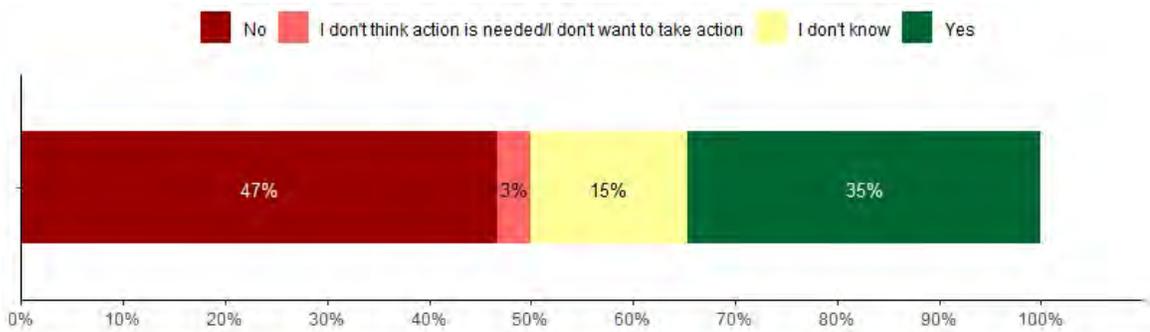
Note: n=2,088. Percentages less than 2% are not labeled.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Respondents’ confidence in having the knowledge necessary to take an active role in water stewardship. Survey respondents were asked if they had enough information about Colorado’s water situation and potential future water issues to be able to confidently take action or support actions to use our water wisely. This question corresponded to one of the metrics in the Statewide Water Education Action Plan developed by Water Education Colorado.³

As shown in Figure II-20, just over one-third of survey respondents (35 percent) indicated they were confident in have the necessary information. Almost one-half (47 percent) of respondents indicated they did not have enough information to be able to take action. The remaining respondents indicated they either did not know if they had enough information (15 percent) or that they felt that no action was needed or did not want to take action (3 percent).

Figure II-20. Do you have enough information about Colorado’s water situation and potential future water issues to be able to confidently take action or support actions to use our water wisely?



Note: n=2,082.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

³ Outcome 3, page 18. Statewide Water Education Action Plan for Colorado 2020-2025. Water Education Colorado.

Awareness of the Colorado Water Plan

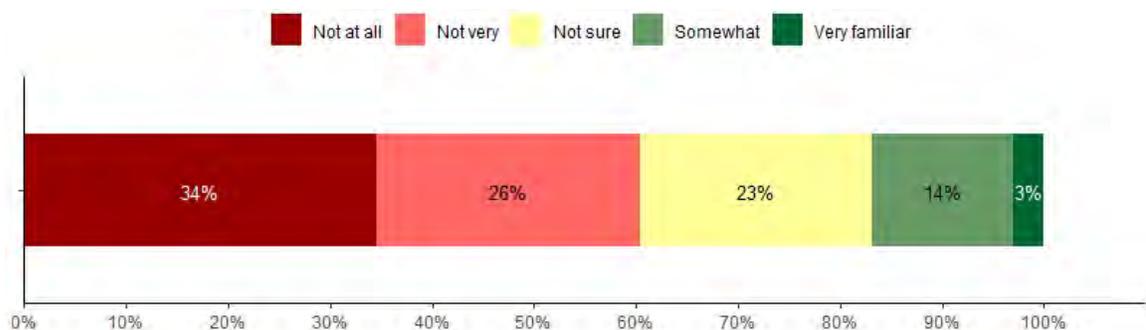
As Colorado prepares to issue the second edition of the Colorado Water Plan, we asked several questions to learn about awareness of the Water Plan among Colorado’s population and their assessment of the Water Plan. The first edition of the Water Plan was issued in 2015, and the second edition is expected to be issued during 2022 or 2023.

Familiarity with the Water Plan. Survey respondents were initially asked “How familiar are you with Colorado’s Water Plan?” The following choices were provided to them:

- Not sure. That is, you don’t know if you have ever seen or heard of the Plan.
- Not at all. That is, you know that you have not heard of or seen the Plan.
- Not very. That is, you remember hearing about or seeing the Plan, but don’t know what it says.
- Somewhat. That is, you have seen or heard about the Plan and have a general idea of what it says.
- Very familiar. That is, you know about the Plan and what it says.

As shown in Figure II-21, a relatively small portion of Colorado’s population is familiar with the Water Plan. Only 3 percent of survey respondents indicated they were very familiar with the Water Plan, while 14 percent indicated they were somewhat familiar with the plan. Twenty-six percent indicated they were “not very” familiar with the Water Plan – meaning they had heard of it but did not know what it says. The largest segment of the population (34 percent) indicated they were not at all familiar with the Water Plan, while 23 percent of respondents indicated they were not sure.

Figure II-21. Familiarity with Colorado’s Water Plan?



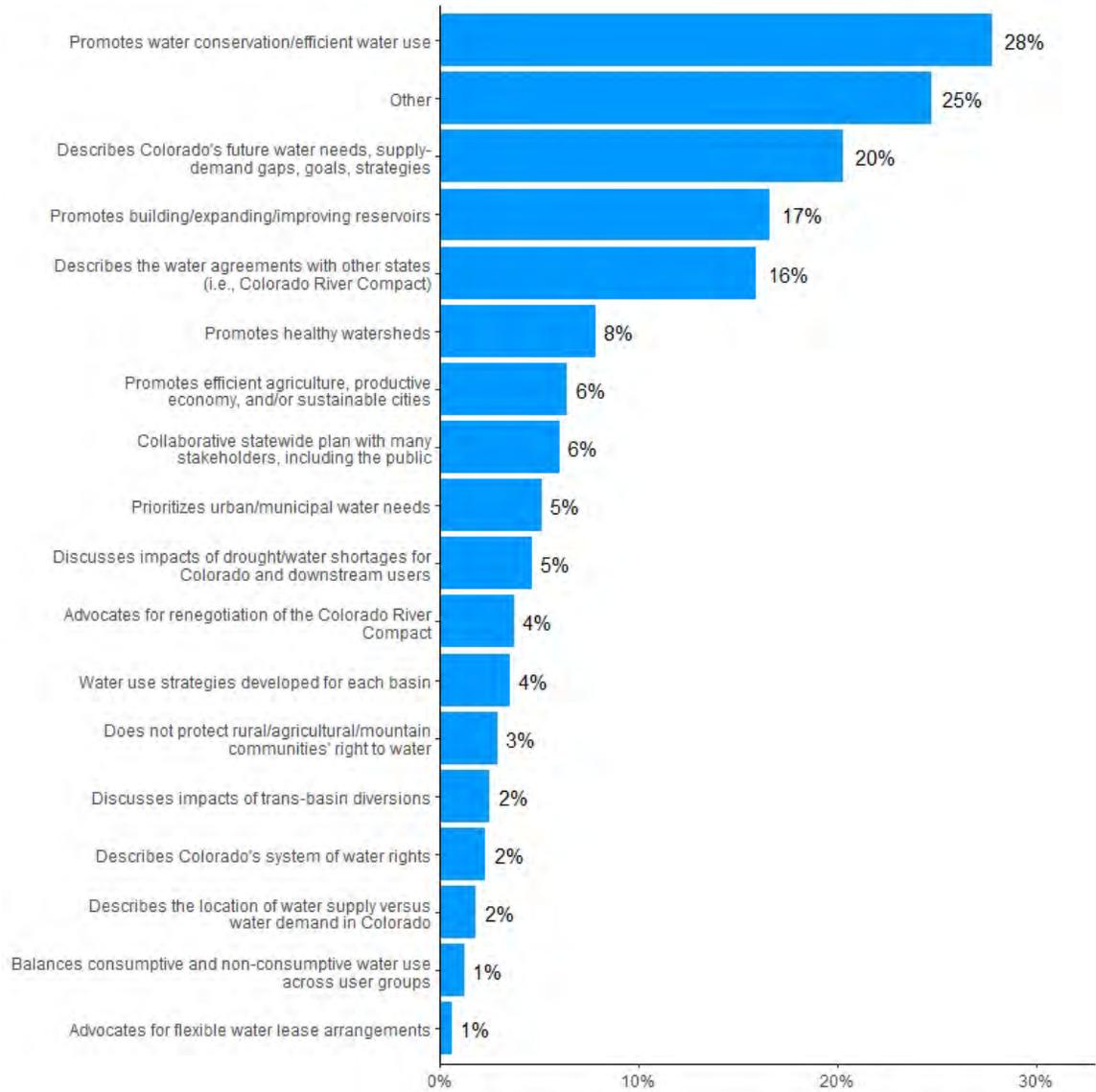
Note: n=2,091.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

What can you recall about the Water Plan? Survey respondents were next asked an open-ended question about what they remembered about the Water Plan. Not surprisingly, given the relative low proportion of respondents who indicated they were familiar with the Plan in the previous question, less than 250 respondents – or about 12 percent of the total – provided a relevant response to this question. As shown in Figure II-22 for the most part these respondents correctly recalled many of the important takeaways from the Plan, although some recollections were not accurate. Responses coded as “other” in Figure II-22 ranged from negative comments

about government (and the Plan) in general, to concerns that the Plan was not approachable or accessible to the average Coloradan or is underfunded or unenforceable. Since some of the responses included multiple aspects, the percentages shown in Figure II-22 total more than one hundred percent.

Figure II-22. What do you recall from the Water Plan?



Note: n=246.

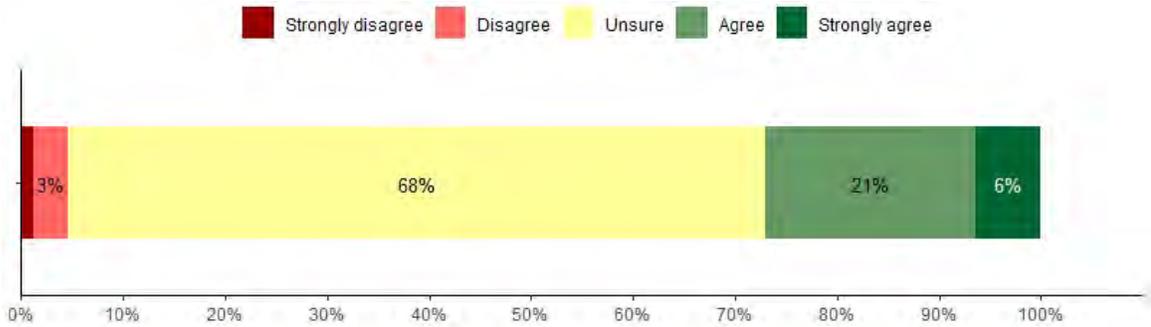
Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Agreement that the Water Plan will help us address our water-related challenges.

Respondents then were asked whether they agreed or disagreed with the following statement: “I think the Colorado Water Plan will help our state to address our water-related challenges in the future.” Not surprisingly, given the relatively low awareness and knowledge regarding the Water Plan, the most common answer to this question (68 percent of respondents) was “unsure.” However, more respondents indicated at least some confidence in the utility of the Water Plan

(27 percent agreed or strongly agreed) than not (5 percent disagreed or strongly disagreed with the statement). These results are shown in Figure II-23.

Figure II-23. Colorado’s Water Plan will help Colorado meet our future water challenges?

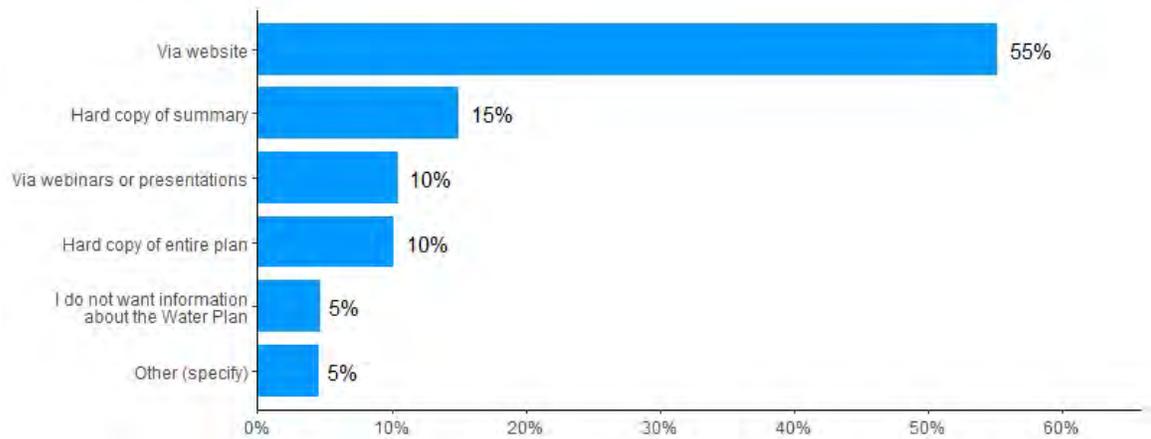


Note: n=2,039. Percentages less than 2% are not labeled.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Preferred Ways to Learn About Colorado’s Water Plan. Respondents were asked how they would prefer to receive information about the Water Plan. As show in Figure II-24, by far the most common response (55 percent) was via a website. Hard copies of a summary of the Water Plan were a more popular method than hard copies of the full document. Only 5 percent of respondents indicated they did not want any information about the Water Plan.

Figure II-24. How would you prefer to get information about Colorado’s Water Plan?



Note: n=2,065.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Trusted Sources of Information

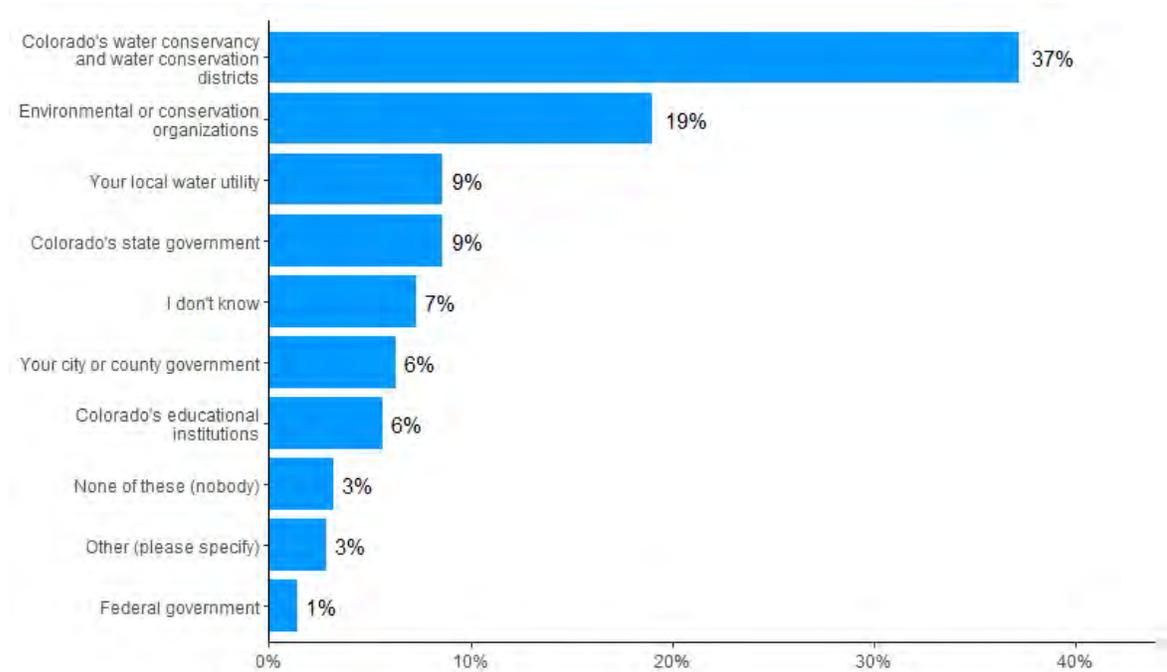
Another important survey question related to communication – asked earlier in the survey before the questions regarding the Water Plan – was what information sources were the most trusted.

Coloradans most frequently identified Colorado’s regional water conservancy and water conservation districts as the organizations they would most trust to provide information about water-related issues (37%). The next most trusted sources for information were environmental

and conservation organizations (19%). Colorado’s state government (9%), or the respondent’s local water utility (9%), were essentially tied for third among the most-trusted information sources. The least trusted source of information about Colorado’s water-related issues was the Federal government (1%). These results are shown in Figure II-25.

The ranking of the most trustworthy to least trustworthy sources is nearly identical to the results from the same question the 2012-2013 survey.

Figure II-25. Most trusted sources of information?



Note: n=2,092.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

The relatively high level of trust in local and regional government entities was also found in the 2010 *Public Perceptions, Preferences and Values for Water in the West* survey by CSU faculty. That survey found that if government was to make conservation decisions, local government was substantially preferred over state government, and state government was substantially preferred over the federal government. At the more specific level, while the 2009 River District survey of district residents found that only 37 percent of residents were familiar with District, 69 percent of those familiar had a favorable impression of the District.

Demographics

The survey collected information about key demographic information, including respondent:

- Age;
- Race/ethnicity;
- Household income; and
- Duration of residence in Colorado.

Those results are reported in Figures II-26 through II-29 on the following pages. For clarity, we present both the unweighted demographic breakdowns (based on simple counts of the 2,105 completed surveys across the state) and the demographic breakdown when the responses are weighted by region, as described in Section I of this report. The demographic makeup of the survey respondents is representative of the demographic distribution of all Colorado residents aged 18 and older, as described in more detail below.

Age. Figure II-25 presents the age distribution of survey respondents. The survey was open to Colorado residents over the age of 18. Compared to the 2012-2013 survey, survey respondents in 2021 were younger and generally more representative of the adult age distribution across Colorado.

Weighted for the relative population sizes of each of the regions:

- About 30 percent of survey respondents were between the ages of 18 and 34 – this is an increase from 22 percent of respondents in this age group in the 2012-2013 survey. Statewide Census 1-year estimates for 2019 indicate that this age group makes up 31 percent of Colorado adults;
- 39 percent of the sample were between the ages of 35 and 54 – down from 42 percent in 2012-2013. This group accounts for 34 percent of all Colorado residents based on Census 2019 1-year estimates; and
- 31 percent of respondents were 55 or older – down from 37 percent in 2012-2013. This group accounts for 35 percent of all Colorado resident based on the 2019 Census 1-year estimates.

Figure II-26.
Age distribution of survey respondents

Notes:

¹Responses weighted by regional population.

²Unweighted responses.

n=2,092.

Source:

BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Age	Share (%) ¹	Share (%) ²
18 to 24	7.6	7.3
25 to 34	22.2	17.9
35 to 44	21.8	19.2
45 to 54	17.0	16.2
55 to 64	14.3	17.5
65 to 74	13.0	16.6
75 or older	4.0	5.4

Weighted based on the regional populations, 51 percent of the survey respondents were female, 48 percent were male, and one percent responded as “other”.

Race/ethnicity. The survey asked respondents to identify their races or ethnicities. Figure II-27 shows that over 72 percent of survey respondents indicated that they were White and non-Hispanic.⁴ Almost 18 percent indicated that they were Hispanic; about 4 percent said they were Black and non-Hispanic;⁵ about two percent were of Asian or Pacific and non-Hispanic descent, and about four percent indicated that they were non-Hispanic residents of another race or mixed races.

This distribution is generally representative of Colorado adults. 2020 Census data show that 69 percent of adult residents are White and non-Hispanic. Nineteen percent are Hispanic. Four percent are Black and non-Hispanic, over 3 percent are of Asian or Pacific descent (and non-Hispanic), and about 5 percent are non-Hispanic residents of another race or combination of races.

⁴ “White” refers to non-Hispanic residents of Caucasian descent.

⁵ “Black” includes non-Hispanic respondents indicating their race was African-American or Negro.

**Figure II-27.
Races/ethnicities of survey
respondents**

Notes:

¹Responses weighted by regional population.

²Unweighted responses.

n=1,983.

Source:

BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Race/Ethnicity	Share (%) ¹	Share (%) ²
Hispanic	17.5	16
Non-Hispanic by Race:		
White	72.6	76.5
Black	4.3	2.4
Asian/Pacific	1.9	1.3
Other	3.6	3.8

Income. The survey asked respondents to identify their total household incomes for 2019. Compared to the overall income distribution from Census ACS data, the survey sample has a somewhat higher proportion of middle-income households (\$50,000 to \$100,000 per year) and a lower proportion of high-income households (over \$100,000 per year). The proportion of lower income households (less than \$50,000 per year) closely matches the overall Colorado population.

Figure II-28 shows that almost 34 percent of respondents indicated that their household incomes were less than \$50,000 per year – this matches the statewide share based on Census ACS estimates for 2019. Thirty-seven percent of respondents indicated that their household incomes were between \$50,000 and \$100,000 a year – which is a higher proportion than the statewide share of 31 percent from the Census ACS data. Twenty-nine percent said their households earn over \$100,000 a year – a smaller share than the statewide proportion of 35 percent according to the Census ACS data.

**Figure II-28.
Total household income of
survey respondents**

Notes:

¹Responses weighted by regional population.

²Unweighted responses.

n=1,874.

Source:

BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Annual Household Income	Share (%) ¹	Share (%) ²
Less than \$25,000	12.9	15.2
\$25,000 to \$49,999	20.6	22.6
\$50,000 to \$74,999	18.3	18.8
\$75,000 to \$99,999	18.8	16.9
\$100,000 to \$200,000	22.7	20.7
\$200,000 or more	6.6	5.8

Duration of residence in Colorado. Seventy-five percent of survey respondents have lived in Colorado for at least 10 years. Twenty-five percent moved to Colorado within the past 10 years from another state or country.

The 2021 survey was more effective in reaching newer Colorado residents than the 2012-2013 survey in which only 14 percent of responses were from residents who had arrived in Colorado within the past 10 years.

Involvement with water and water issues. Survey respondents were asked: “Has any part of your education, work or volunteer experience involved water or water-related issues?” As shown in Figure II-29, when the responses are weighted by the regional populations, almost 23 percent of survey respondents indicated some prior involvement with water-issues. On an unweighted basis, this proportion was a little more than 30 percent of all survey respondents. The substantially higher percentage on an unweighted basis shows that respondents outside of the major population areas along the Front Range were much more likely to have some prior involvement with water and water-issues.

Figure II-29.
Prior involvement with water or water-issues in education or career?

Involved in water?	Share (%) ¹	Share (%) ²
Yes	22.8	30.5
No	77.2	69.5

Notes:

¹Responses weighted by regional population.

²Unweighted responses.

n=1,860.

Source:

BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Relative to the population as a whole, individuals with prior water-related experience or education:

- Were more likely to correctly identify agriculture as the largest water using sector in Colorado (38 percent versus 31 percent)
- Were more likely to disagree or strongly disagree that Colorado has enough water for the next 40 years (82 percent versus 68 percent)
- Were more likely to identify the quantity of water available for Colorado’s farms and ranches as the most important water-related issue (20 percent versus 12 percent)
- Indicated more confidence they had the knowledge to take action to help ensure Colorado uses its water efficiently (53 percent versus 35 percent), and
- Were more likely to say that they were somewhat or very familiar with the Colorado Water Plan (35 percent versus 17 percent).

The following sections of this report examine the responses to the survey among each of the six regions.

SECTION III.

Survey Results from Central Southeast Region

This section provides detailed information about Central Southeast (SE) survey responses.¹ Surveys were completed with 344 participants who reside in the Central SE region of Colorado. The survey collected responses on key topics, including:

- Knowledge of Colorado water use and awareness of water issues;
- Performance of government agencies;
- Scarcity perceptions;
- Water-related concerns;
- Knowledge of key water-related concepts;
- Awareness and opinion of the Colorado Water Plan;
- Need for more information and most trusted sources; and
- Demographics.

The study team compared Central SE regional responses to statewide responses, as appropriate, for each survey question.²

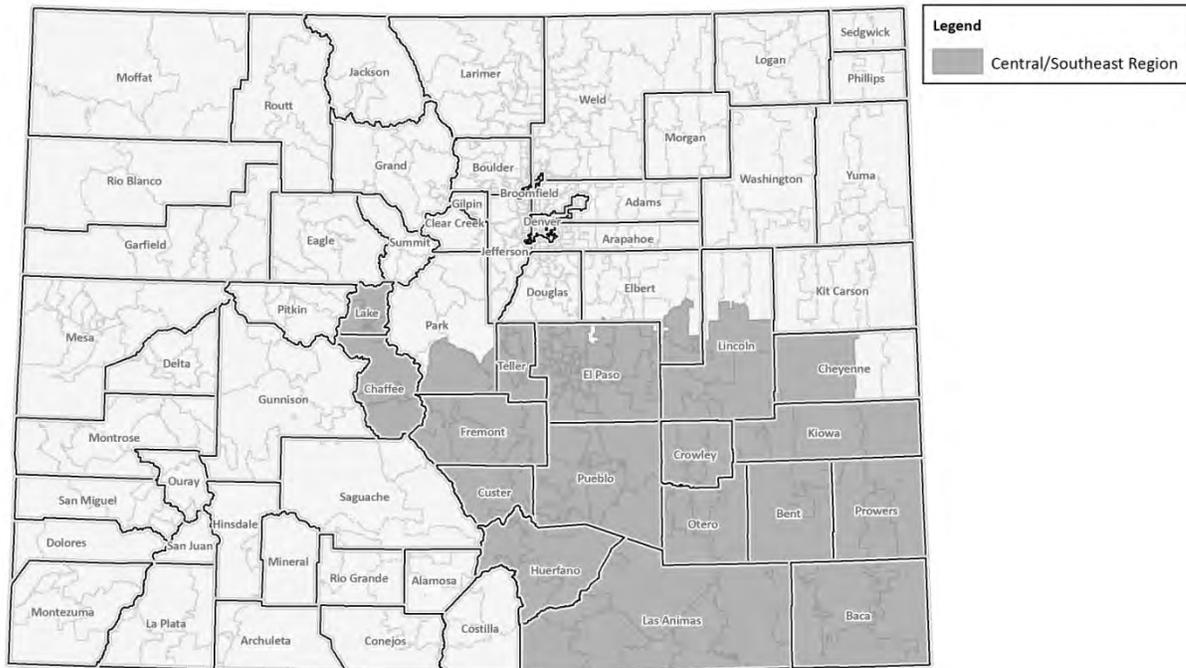
Central SE Region

The Central SE region is comprised of the Arkansas River Basin, located in southeast Colorado. The Arkansas Basin is the largest river basin in Colorado, covering over 28,000 square miles, and includes Colorado Springs and Pueblo as its largest cities. 832,995 adults (residents age 18 and over) lived in the Central SE region in 2020, comprising 18.5 percent of Colorado's total adult population. Figure III-1 presents a map of the Central SE region, as defined in this report.

¹ In this study, the Central SE region of Colorado is defined as the Arkansas Basin.

² Statewide survey responses are reported in Section II.

Figure III-1. Central SE Region



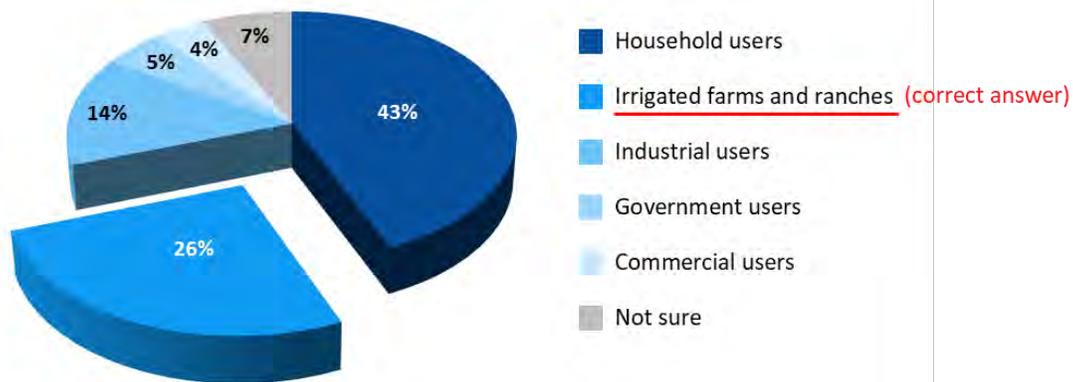
Source: BBC Research & Consulting from Colorado Water Conservation Board.

General Knowledge of Colorado Water Use and Issues

The survey asked several questions to gauge respondents' knowledge of Colorado water use and water-related issues. Initially, respondents were asked to identify which Colorado sector uses the most water. Later in the survey, respondents were also asked "Has any part of your education, work or volunteer experience involved water or water-related issues?"

Sector that uses the most water. When asked which sector uses the most water in Colorado, Central SE respondents most frequently identified households (43%), as shown in Figure III-2. Compared to statewide respondents (31%), fewer Central SE respondents (26%) correctly identified farms and ranches as the sector that uses the most water. About 18% of Central SE respondents said that industrial or commercial businesses use the most water in Colorado.

Figure III-2. Which sector uses the most water in Colorado?



Note: Central SE region n=344. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Involvement with water and water issues. Survey respondents were asked: “Has any part of your education, work or volunteer experience involved water or water-related issues?” Among the 334 respondents in the Central SE region, 287 provided a yes or no answer to this question. Nineteen percent of those respondents indicated some prior involvement with water-issues. This proportion of respondents with prior water-related experience of some type was slightly lower than the overall statewide proportion of 23 percent.

Performance of Government Agencies

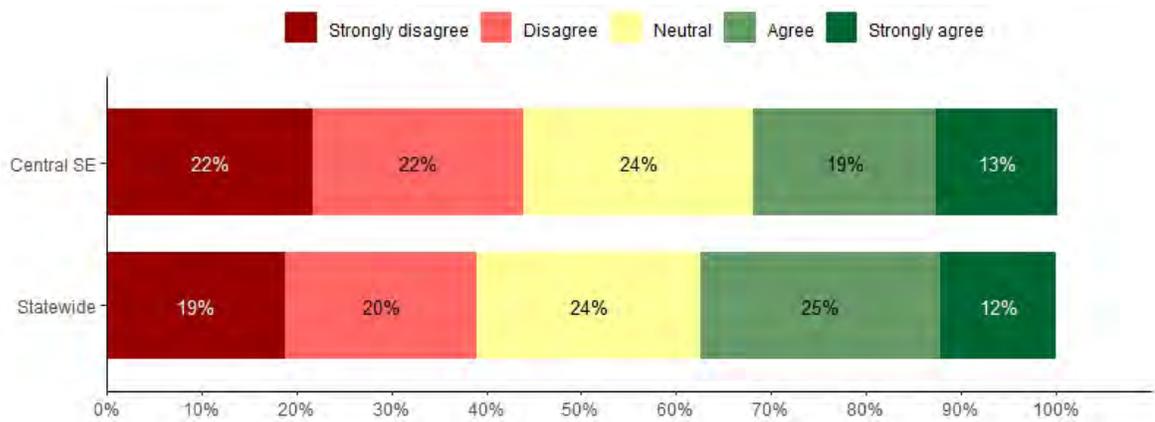
Respondents were asked two questions regarding current regulation and management of water in Colorado. Using a scale of a one to ten, where one means “completely disagree” and ten means “completely agree,” respondents were asked to rate their level of agreement with the following statements:

- Government agencies are doing enough to protect the quality of your drinking water; and
- Government agencies are doing enough to protect the quality of water in Colorado streams, rivers, and lakes.

Figures III-3 and III-4 presents those results, respectively.

Overall, about 32% of Central SE respondents agreed or strongly agreed with the statement that “government agencies are doing enough to protect the quality of your drinking water,” though there was not strong support for the statement. This is a lower approval rate than in the 2012-2013 survey (almost 38%), and also a lower approval rate than the statewide results (about 37%).

Figure III-3. Government agencies are doing enough to protect the quality of your drinking water.



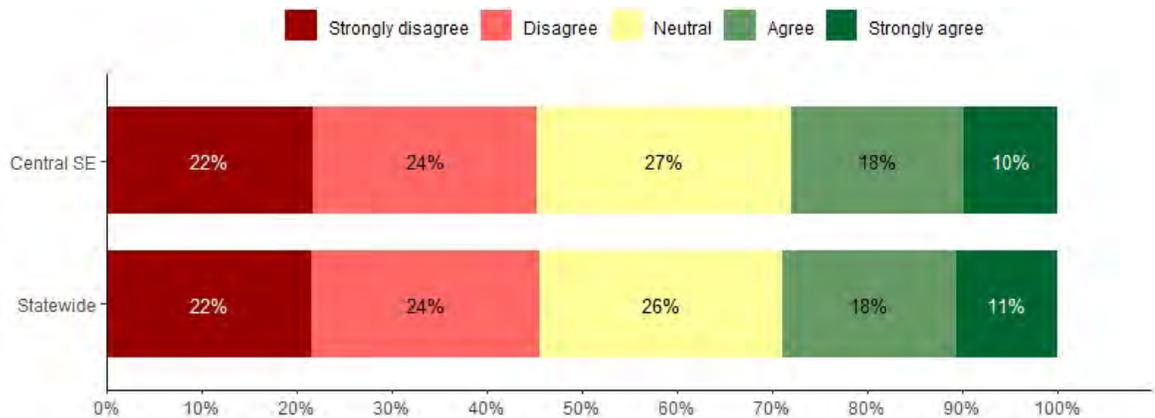
Note: Central SE region n=316. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Central SE resident responses to the statement “government agencies are doing enough to protect quality of water in Colorado’s streams, rivers and lakes” was similar. Twenty-eight percent of respondents agreed or strongly agreed with that statement, and 46% of respondents indicated that they disagreed or strongly disagreed with that statement. Twenty-seven percent of respondents provided a neutral response. Those results were quite similar to the statewide results, as shown in Figure III-4, but also indicate a considerably lower approval rating than in the 2012-2013 survey (44% of Central SE respondents agreed or strongly agreed with the same statement).

The reasons for the more negative results regarding the regulatory performance of government agencies are not entirely clear. The 2021 survey reached a larger proportion of younger adults (ages 18 to 34) and a larger proportion of recent migrants to Colorado (within the past 10 years) than in 2012-2013. It is also possible that the increasingly antagonistic political climate over the past nine years has had a general negative impact on public perceptions regarding government performance.

Figure III-4. Government agencies are doing enough to protect the quality of water in Colorado streams, rivers, and lakes.



Note: Central SE region n=318. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Scarcity Perceptions

The survey asked two questions about perceptions of water scarcity in Colorado. Using a one to ten scale, where one means “completely disagree” and ten means “completely agree,” respondents were asked to rate their level agreement with the following statements:

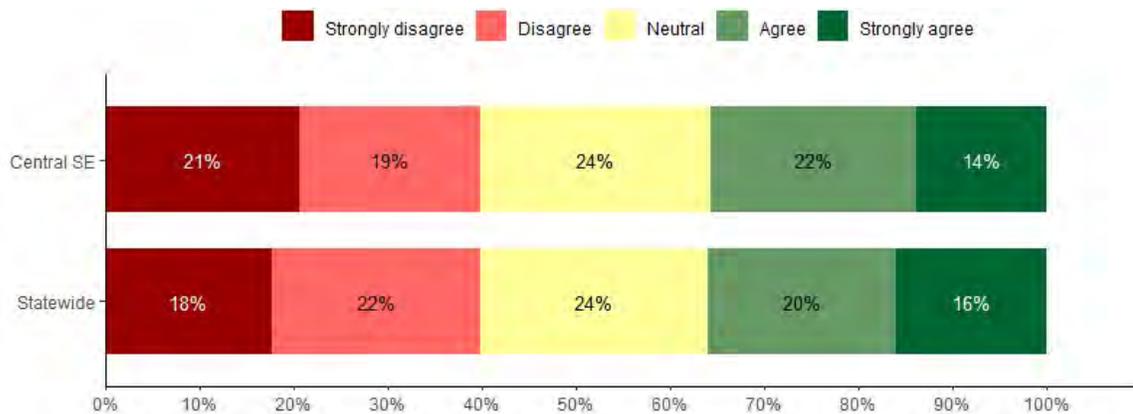
- Colorado has enough water available to meet our current needs; and
- Colorado has enough water available to meet our needs for the next 40 years.

Results from these questions are presented below.

Current water needs. Figure III-5 shows that, overall, the perceptions of Central SE respondents regarding whether or not Colorado has enough water to meet its current needs are very similar to the overall statewide perceptions of current water scarcity. Among both groups, about 40% of respondents either disagreed or strongly disagreed with the statement that we have enough water to meet our current needs, while 36% agreed or strongly agreed with that statement.

Compared to the 2012-2013 survey, 2021 respondents from the Central SE region were more likely to agree that we have enough water to meet our current needs (36% in 2021 versus under 25% in 2012-2013) – indicating less perceived current water scarcity than nine years ago. That comparison also holds for statewide survey respondents, but to a lesser degree (36% agreed in 2021 versus 29% in 2012-2013).

Figure III-5. Colorado has enough water to meet our current needs.



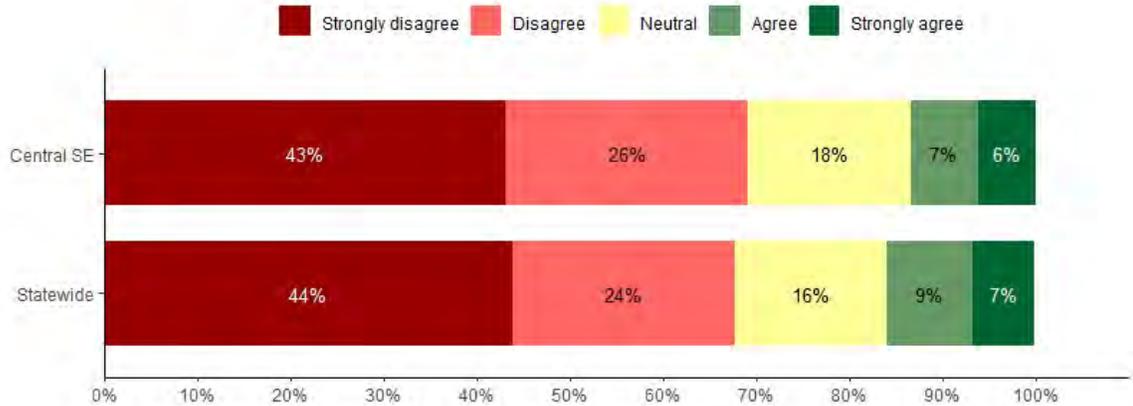
Note: Central SE region n= 311. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Water needs for the next 40 years. Figure III-6 shows that, on average, Central SE respondents were much more likely to disagree with the statement that “Colorado has enough water available to meet our needs for the next 40 years” than that we have enough water to meet our current needs. Sixty-nine percent of Central SE respondents disagreed or strongly disagreed that we have enough water for the next 40 years, compared to only 13% who agreed or strongly agreed with that statement. Regional perceptions of future water scarcity are quite similar to the statewide survey results, as shown on the following page.

The responses of Central SE residents to the question regarding scarcity of water for the future in the 2021 survey are nearly identical to their responses in the 2012-2013 survey.

Figure III-6. Colorado has enough water for the next 40 years.



Note: Central SE region n= 292. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Water-Related Concerns

The survey asked a series of questions to gauge Coloradans’ perceptions of water-related concerns. Using a scale of a one to ten scale, where one means “not concerned at all” and ten means “very concerned,” respondents were asked to rate their level of concern with the following potential water-related issues:

- Water quality in our rivers, lakes and streams;
- Amount of water available for Colorado’s cities and towns;
- Amount of water available for Colorado’s farms and ranches;
- Amount of water for recreational use such as boating, rafting, and fishing;
- Amount of water for fish and wildlife;
- Condition of underground water pipes, dams, and other water utility infrastructure;
- The quality of the water you receive at your home;
- Amount of water used for energy development; and
- Effects of energy development on water quality.

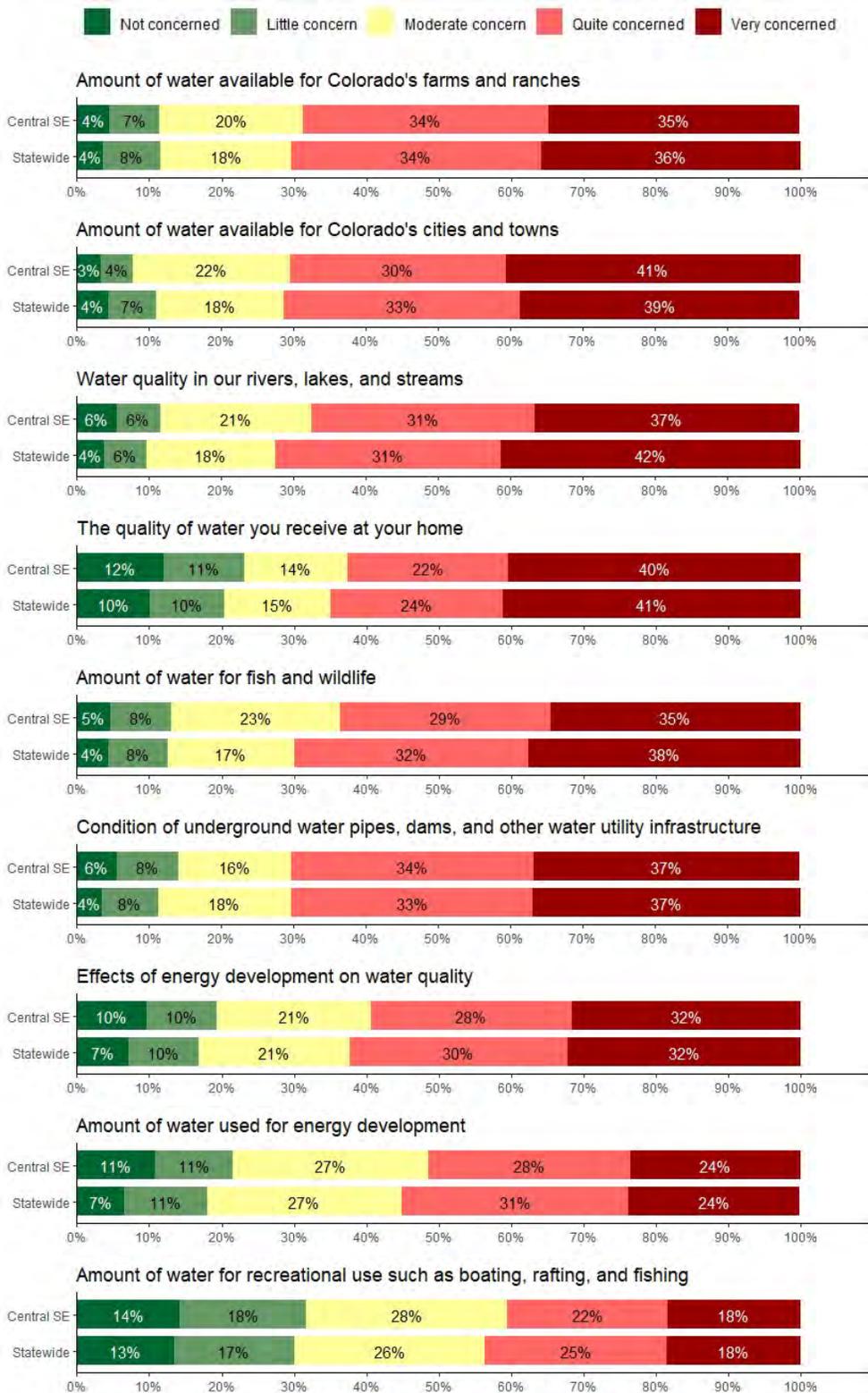
The order in which the potential areas of concern was presented was randomized to avoid potential issues with “starting point bias”, as was also done when the 2012-2013 survey was conducted. Figure III-7 on page III-9 presents the reported level of concern for each issue.

On average, the amount of water available for Colorado's cities and towns received the highest rating of concern (7.6 out of 10) from Central SE respondents. This rating was similar to the statewide results (7.5 out of 10), though other issues rated higher in terms of level of concern among the statewide respondents (see Section II).

Among the nine areas of potential concern posed to the survey respondents, five topics had mean scores greater than 7.0, indicating the average respondent was quite concerned about them. In order, these highest scoring areas of concern among Central SE respondents were:

- The amount of water available for Colorado's cities and towns (mean score of 7.6),
- The condition of underground water pipes, dams and other water utility infrastructure (mean score of 7.4),
- Water quality in our rivers, lakes and streams (mean score of 7.3),
- The amount of water available for Colorado's farms and ranches (mean score of 7.3), and
- The amount of water for fish and wildlife (mean score of 7.2).

Figure III-7. Concern about water-related issues



Note: Central SE region n's=315 to 342 (varied by issue). Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Willingness to pay. The survey asked participants whether they would be willing to pay an additional \$1, \$5, \$10, or \$25 per month to address potential water-related issues. Each participant was presented with only one dollar amount, and the amount presented to the participants was varied on a random basis.

Figure III-8 presents those results for Central SE and statewide survey respondents. The figure reflects a conservative interpretation of respondents' willingness-to-pay by assuming the 23% of regional respondents who indicated either they did not want to answer or did not know were all not willing-to-pay each amount. An alternative interpretation, based on just those who responded either yes or no indicates a higher willingness to pay.

Based on these alternative interpretations of the data, between 37% and 48% of residents in the Central SE region would be willing to pay up to \$10 more per month to address water-related issues. This indicates less willingness-to-pay than the statewide responses which show that 50% to 65% of all adults in Colorado would be willing-to-pay at least \$10 more per month. Central SE residents' willingness to pay to address water-related concerns was lower across all potential price points than the statewide average.

Figure III-8.
Willingness to pay to address water-related issues

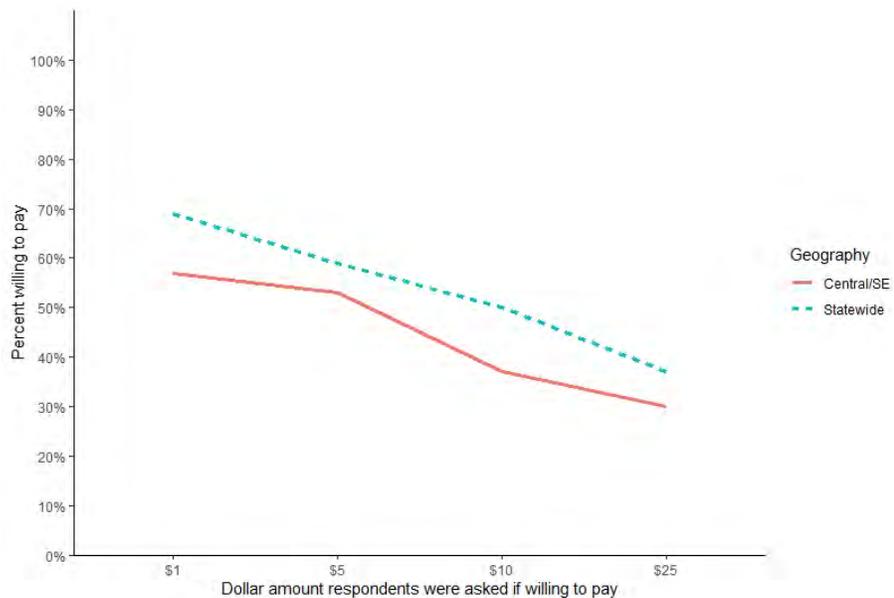
Note:

All "do not know" or "do not wish to answer" responses assumed to be unwilling to pay stated amounts.

Central SE region n=344.

Source:

BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted October-November 2021.



Most important water-related issue. Survey participants were also asked to identify which potential water-related issue is the most important issue that needs to be addressed. As shown in Figure III-9, Central SE respondents most frequently indicated that the quality of water they receive in their homes was the most important potential water-related issue that needs to be addressed (35%). Some of the likely reasons for selecting this issue as the most important were discussed in the previous section on statewide survey results, on pages II-13 and II-14.

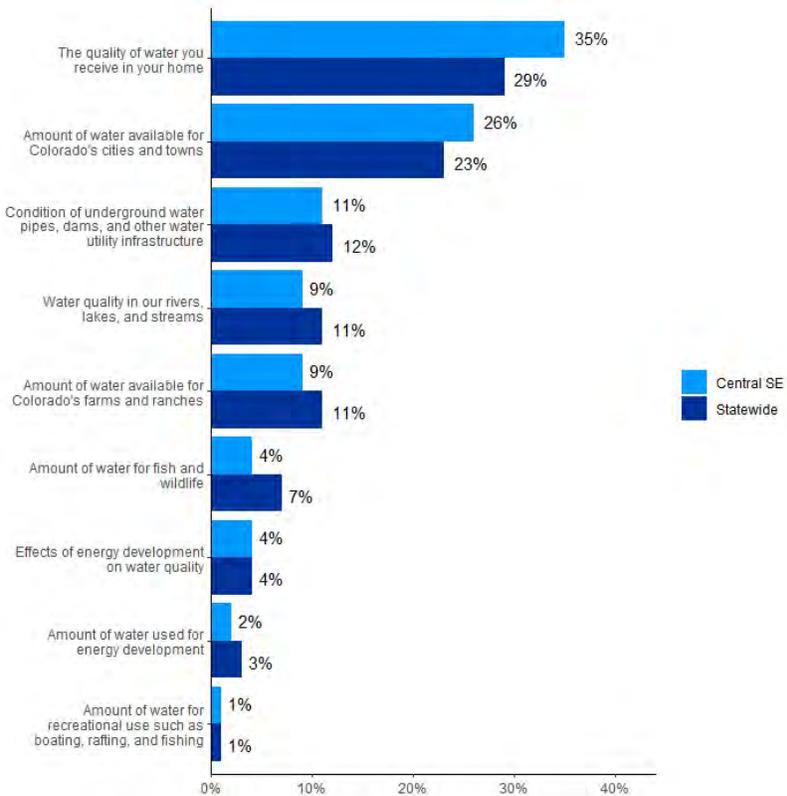
In general, the sequence of the nine issues – ranked in terms of frequency of being selected as the most important water-related issue – was the same among Central SE residents as among statewide residents. Central SE residents were slightly more likely to identify the quantity of water available for cities and towns as the most important issue (26%) than statewide residents (23%). Conversely, Central SE residents were somewhat less likely than statewide residents to

choose the quantity of water available for farms and ranches; water quality in our rivers, lakes and streams; or the amount of water available for fish and wildlife as the most important issue.

**Figure III-9.
Most important water-related issue**

Note:
Central SE region n=247.

Source:
BBC Research & Consulting from
Colorado Water Conservation Board
statewide survey conducted October-
November 2021.



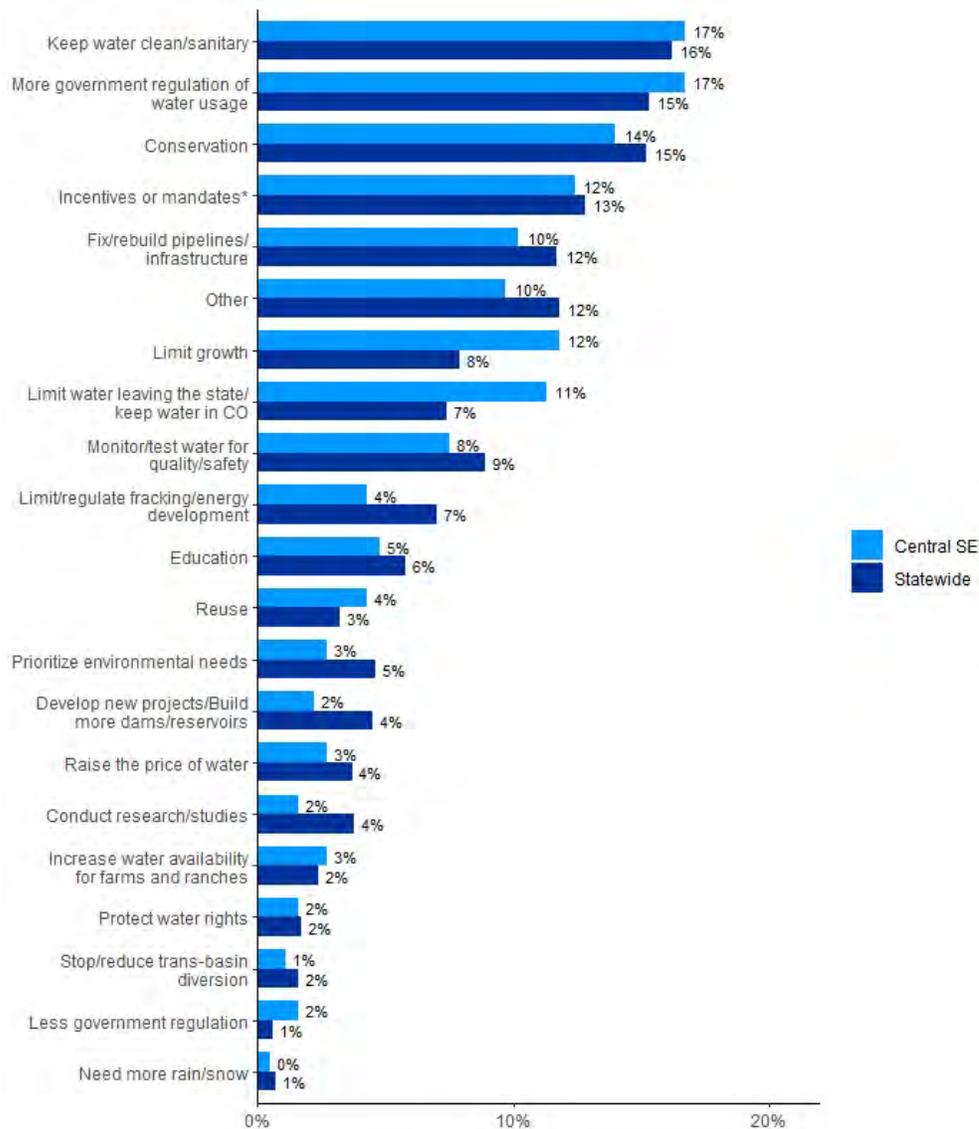
Addressing the most important water-related issues. Survey participants were asked what they thought should be done to address their most important concerns. That question was open-ended (unprompted), but responses (including some multiple responses) were coded by the surveyors. Figure III-10 presents those results.

Overall, Central SE respondents most frequently indicated that their most important potential water-related issue should be addressed by keeping water clean and sanitary (17%). Like the participants statewide, Central SE respondents also frequently indicated that their most important concerns should be addressed by:

- More government regulation of water usage (17%); or
- Conservation (14%).

As noted in Section II regarding the statewide survey results, respondents' choices of what should be done to address their most important water-related concern varied depending on which concern they deemed to be the most important.

Figure III-10. What should be done to address your most important water concern?



Note: *Incentives or mandates were recommended to promote water use efficiency through technology, efficient agricultural methods, efficient housing development and/or lower water use landscaping.

Central SE region n=186. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Knowledge of Important Water Concepts

One of the major changes in the 2021 survey was the inclusion of several questions to test respondents understanding and opinion regarding important water concepts identified by CWCB and members of the water education community. These concepts included:

- The relationship between drought in the Colorado River Basin in Western Colorado and the availability of water supplies throughout Colorado;
- Public awareness of interstate agreements that establish limits on Colorado’s ability to use the water in our rivers and streams;

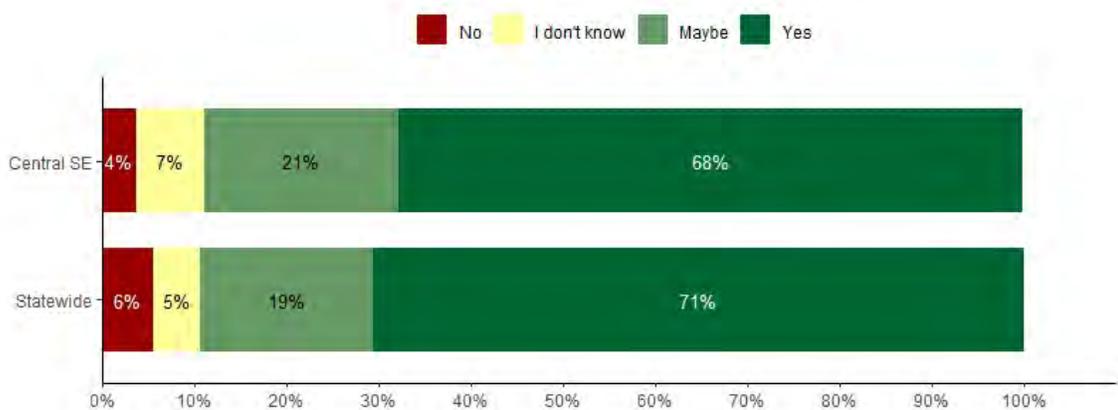
- The relationships between land use planning and climate change and the amount of water we will need in the future;
- Public confidence in their own knowledge and ability to take action to ensure we use our water wisely; and
- Public familiarity, knowledge and opinions regarding Colorado’s Water Plan.

Relationship between drought in Western Colorado and availability of water supply throughout Colorado.

In view of the ongoing drought in the Colorado River Basin and record low water storage levels in Lake Powell and Lake Mead, it is important that Colorado residents – particularly those living in the major population centers along the Front Range – understand that their own water supply could be impacted by drought west of the Continental Divide. Survey respondents were specifically asked “Do you believe severe drought that impacts the Colorado River Basin and the Southwestern US could have an impact on the water supply for your own home or business?”

As shown in Figure III-11, the responses of Central SE residents to this question were very similar to statewide responses. Among both groups, the majority of respondents do recognize the linkage between drought in the Colorado River Basin in Western Colorado and their own water supply – even if they live in the Front Range. Approximately 70% of respondents from both the Central SE region and the state as a whole indicated “yes” in response to this question, with another 20% indicating “maybe.” Only 3% of Central SE residents and 6% of statewide residents responded with a definitive “no” – indicating they did not believe drought in the Colorado River Basin would affect their own water supply.

Figure III-11. Do you believe severe drought that impacts the Colorado River Basin and the Southwestern US could have an impact on the water supply for your own home or business?

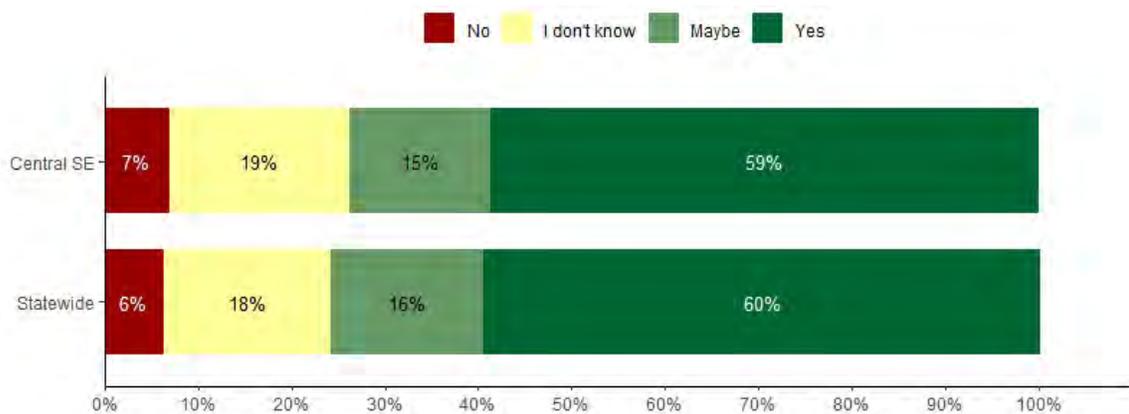


Note: Central SE region n=344. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Understanding that interstate agreements limit Colorado’s use of water from our rivers. Survey respondents were specifically asked “Do you think that legal agreements with neighboring states limit the amount of water Colorado can use from its rivers?” Once again, as shown in Figure III-12, responses from the Central SE region were similar to those across Colorado, with roughly 60% correctly indicating yes to this question and another 15% indicating “maybe.” Almost 20% of Central SE respondents (and statewide respondents) indicated they did not know, while approximately 5% indicated they did not think our water use was limited by interstate legal agreements.

Figure III-12. Do you think that legal agreements with neighboring states limit the amount of water Colorado can use from its rivers?

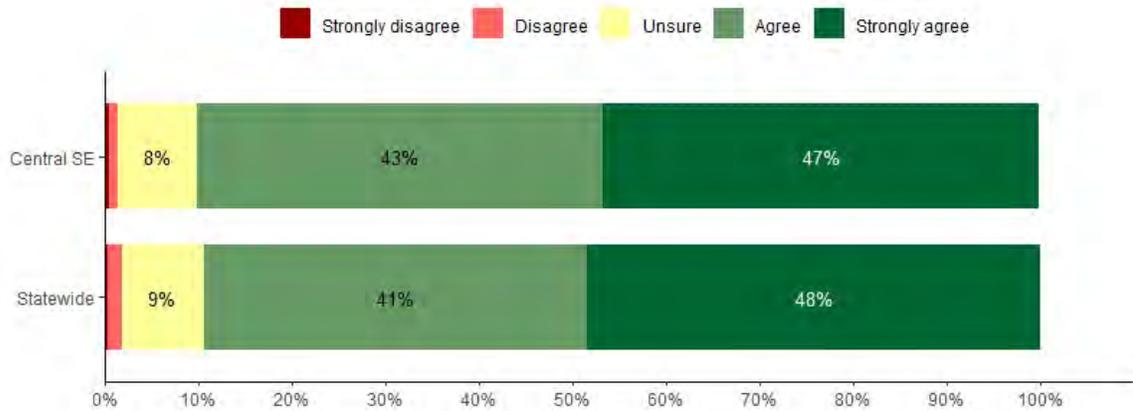


Note: Central SE region n=344. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Recognition of relationship between land use and development planning and future water needs. Survey respondents were next asked whether they agreed or disagreed with the following statement: “We can help manage Colorado’s future water use by carefully planning how we develop new homes, businesses and infrastructure.” As shown in Figure III-13, once again responses among the Central SE residents were nearly identical to those across the state. Approximately 90% of survey respondents among both groups agreed or strongly agreed with the statement that careful planning can help manage our future water needs. Only 2% (among each of the two groups) disagreed or strongly disagreed with the statement, though eight to nine percent indicated they were unsure whether they agreed or disagreed.

Figure III-13. Agreement that we can help manage Colorado’s future water use by carefully planning how we develop new homes, businesses and infrastructure?

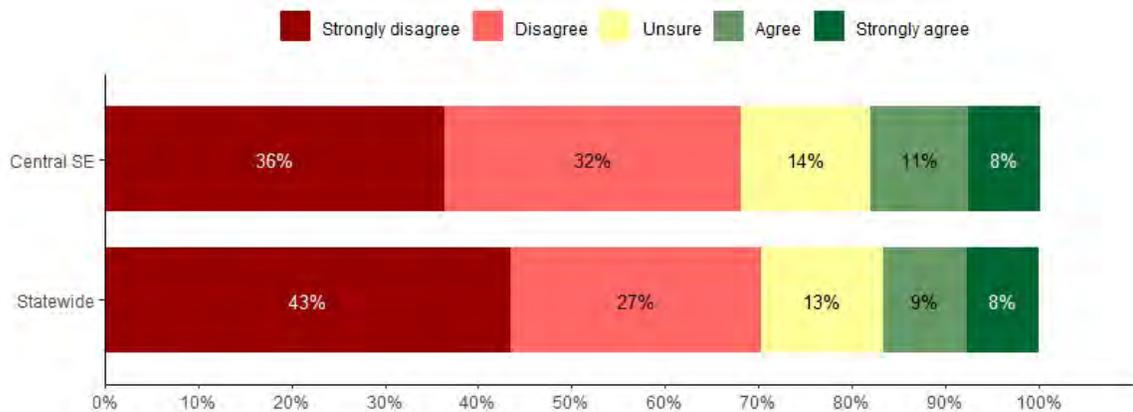


Note: Central SE region n=343. Totals may not add to 100% due to rounding. Percentages less than 2% are not labeled.
 Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Recognition of potential impact of rising temperatures on future water needs. The following question tested awareness that overall increases in temperatures may affect the amount of water we need in the future. This statement was deliberately posed in the negative to break up the pattern in the survey questions that agreement was the correct response.

Respondents were specifically asked whether they agreed or disagreed with the following statement: “The trend of rising temperatures is unlikely to affect Colorado’s future water needs.” As shown in Figure III-14, about two-thirds of Central SE residents, and Colorado residents as a whole, disagreed or strongly disagreed with this statement – indicating they believe rising temperatures will impact our future water needs. Approximately 17% (about one in six respondents) in both the Central SE region and statewide agreed or strongly agreed with the statement, while 13 to 14 percent were unsure.

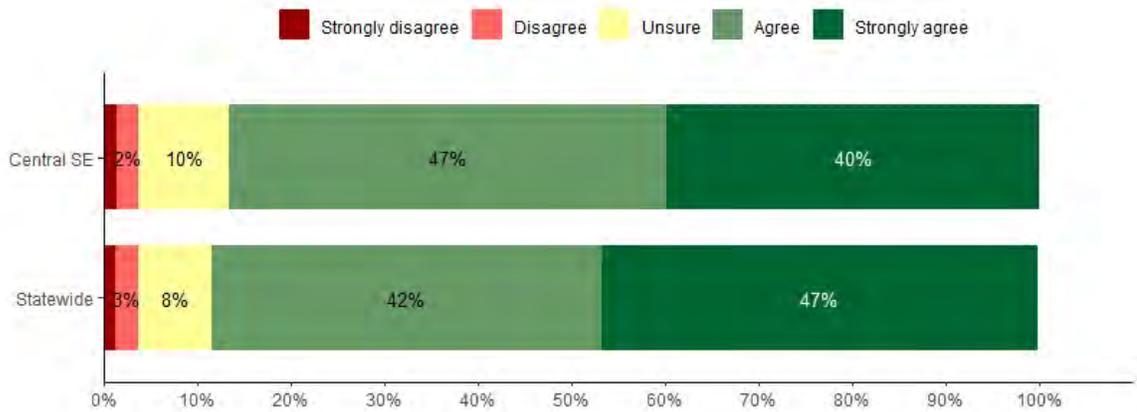
Figure III-14. Agreement with statement that the trend of rising temperatures is unlikely to affect Colorado’s future water needs?



Note: Central SE region n=341. Totals may not add to 100% due to rounding.
 Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Recognition of relationship between proactive efforts to meet future water needs and Colorado’s economy. Survey respondents were specifically asked whether they agreed or disagreed with the following statement: “We need to take action in advance to reduce water use and/or increase water supply to continue to grow Colorado’s economy in the future.” As shown in Figure III-15, almost 90% of both Central SE respondents and statewide respondents agreed or strongly agreed with the statement supporting the need for proactive efforts. Only 3% disagreed or strongly disagreed with the statement, while 8% to 10% were unsure.

Figure III-15. Agreement that we need to take action in advance to reduce water use and/or increase water supply to continue to grow Colorado’s economy in the future?



Note: Central SE region n=342. Totals may not add to 100% due to rounding. Percentages less than 2% are not labeled.

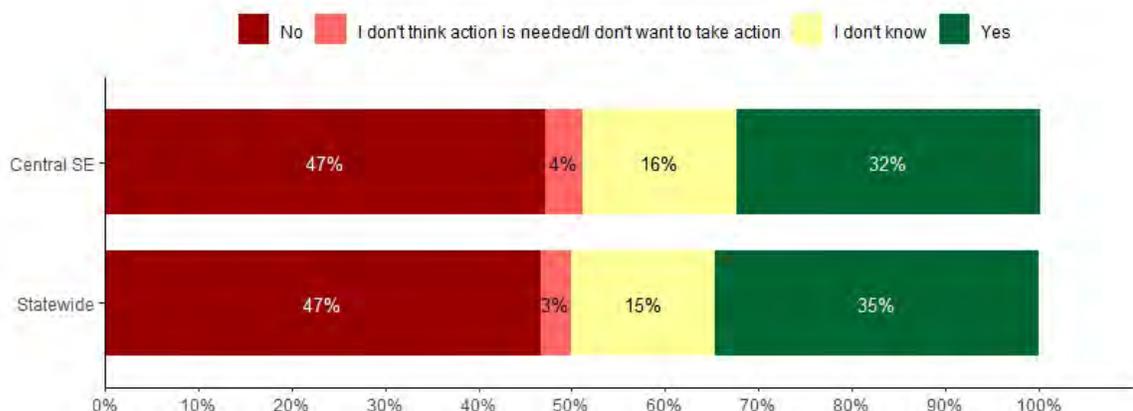
Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Respondents’ confidence in having the knowledge necessary to take an active role in water stewardship. Survey respondents were asked if they had enough information about Colorado’s water situation and potential future water issues to be able to confidently take action or support actions to use our water wisely. This question corresponded to one of the metrics in the Statewide Water Education Action Plan developed by Water Education Colorado.³

As shown in Figure III-16, a slightly smaller proportion of survey respondents in the Central SE region (32%) than statewide (35%) indicated they were confident that they have the necessary information. Almost one-half (47%) of respondents among both groups indicated they did not have enough information to be able to take action. The remaining respondents most frequently indicated they either did not know if they had enough information (15% to 16%). Very few respondents in either the Central SE region or statewide indicated that they felt that no action was needed or did not want to take action (3% to 4%).

³ Outcome 3, page 18. Statewide Water Education Action Plan for Colorado 2020-2025. Water Education Colorado.

Figure III-16. Do you have enough information about Colorado’s water situation and potential future water issues to be able to confidently take action or support actions to use our water wisely?



Note: Central SE region n=342. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Trusted Sources of Information

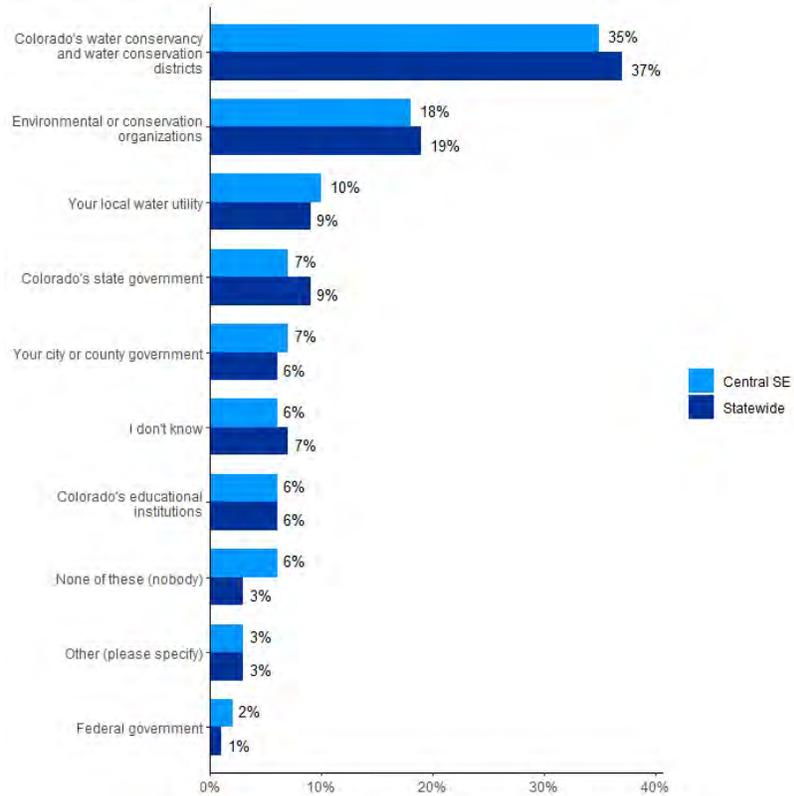
Immediately following the question about respondents’ confidence that they had enough information to be able to take action or support actions regarding water issues, the survey asked respondents to identify which organizations they would most trust to provide reliable information about Colorado’s water situation and potential issues. Figure III-17 presents those results.

In both the Central SE region and the state as a whole, the majority of respondents identified either Colorado’s regional water conservancy and water conservation districts (35% to 37%) or environmental or conservation organizations (18% to 19%) as the sources they would most trust to provide information about water-related issues. Local water utilities and the Colorado state government were the next most trusted sources. The least trusted source of information about Colorado’s water-related issues was the Federal government (1% to 2%). The rank ordering of the various sources of information was very similar to the results from the 2012-2013 survey.

Figure III-17.
Most trusted sources of information

Note:
 Central SE region n=343. Totals may not add to 100% due to rounding.

Source:
 BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted October-November 2021.



Awareness of the Colorado Water Plan

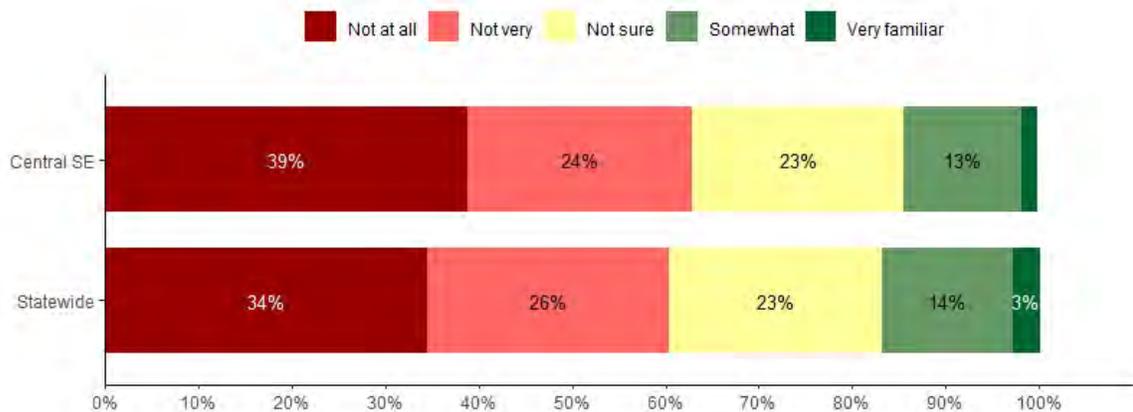
The final section of the survey, prior to gathering demographic information, was designed to gauge awareness of the Colorado Water Plan. The first edition of the Water Plan was issued in 2015, and the second edition is expected to be issued during 2022 or 2023.

Familiarity with the Water Plan. Survey respondents were initially asked “How familiar are you with Colorado’s Water Plan?” The following choices were provided to them:

- Not sure. That is, you don’t know if you have ever seen or heard of the Plan.
- Not at all. That is, you know that you have not heard of or seen the Plan.
- Not very. That is, you remember hearing about or seeing the Plan, but don’t know what it says.
- Somewhat. That is, you have seen or heard about the Plan and have a general idea of what it says.
- Very familiar. That is, you know about the Plan and what it says.

As shown in Figure III-18, most respondents from the Central SE region indicated they were either not familiar with the Water Plan at all (39%) or not very familiar with it (24%). These proportions are similar to, but slightly higher than the proportion of statewide respondents indicating little or no familiarity with the Water Plan. Fifteen percent of Central SE respondents described themselves as either somewhat familiar or very familiar with the Water Plan, similar to the statewide proportion of 17%.

Figure III-18. Familiarity with Colorado’s Water Plan?

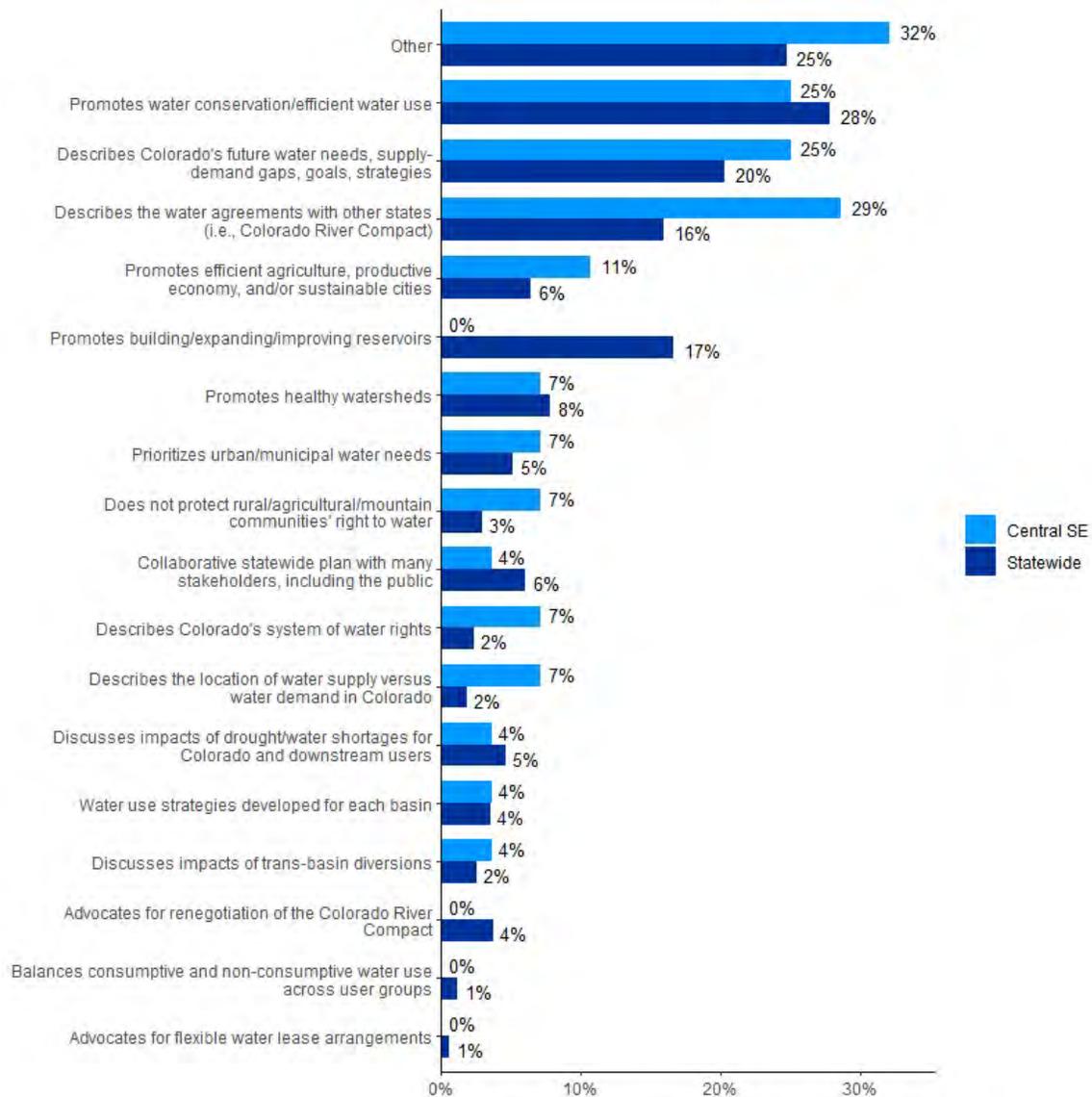


Note: Central SE region n=340. Totals may not add to 100% due to rounding. Percentages less than 2% are not labeled.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

What can you recall about the Water Plan? Survey respondents were next asked an open-ended question about what they remembered about the Water Plan. Given the relative low proportion of respondents who indicated they were familiar with the Plan in the previous question, only 28 Central SE respondents – or about 9% of the total from the Central SE region – provided a relevant response to this question. As shown in Figure III-19, for the most part these respondents correctly recalled many of the important takeaways from the Plan, although some recollections were not accurate. Responses coded as “other” in Figure III-19 ranged from negative comments about government (and the Plan) in general, to concerns that the Plan was not approachable or accessible to the average Coloradan or is underfunded or unenforceable. Since some of the responses included multiple aspects, the percentages shown in Figure III-19 total more than 100%.

Figure III-19. What do you recall from the Water Plan?



Note: Central SE n=28. Totals may not add to 100% due to rounding.

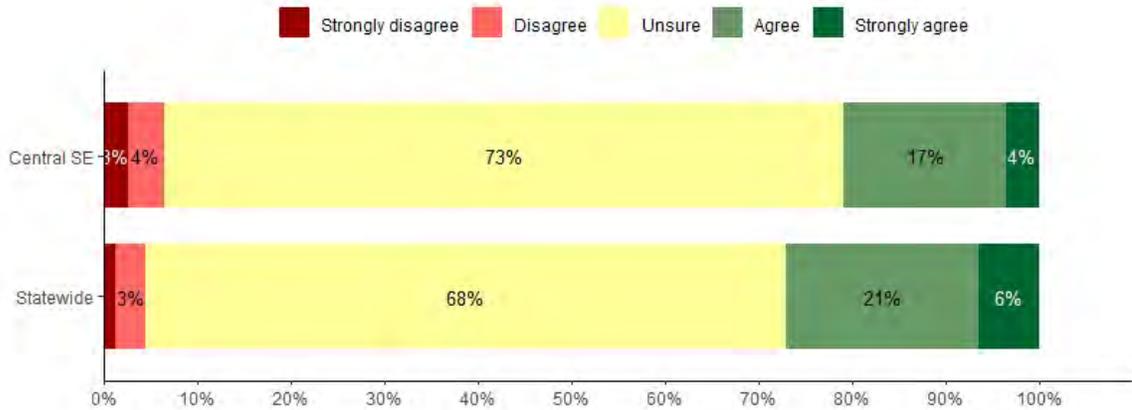
Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Agreement that the Water Plan will help us address our water-related challenges.

Respondents then were asked whether they agreed or disagreed with the following statement: “I think the Colorado Water Plan will help our state to address our water-related challenges in the future.” Given the relatively low awareness and knowledge regarding the Water Plan, the most common answer to this question (73% of Central SE respondents) was “unsure.”

While more Central SE respondents indicated at least some confidence in the utility of the Water Plan (21% agreed or strongly agreed) than not (6% disagreed or strongly disagreed with the statement), confidence in the efficacy of the Water Plan within the Central SE region is somewhat lower than it is statewide. These results are shown in Figure III-20.

Figure III-20. Colorado’s Water Plan will help Colorado meet our future water challenges?

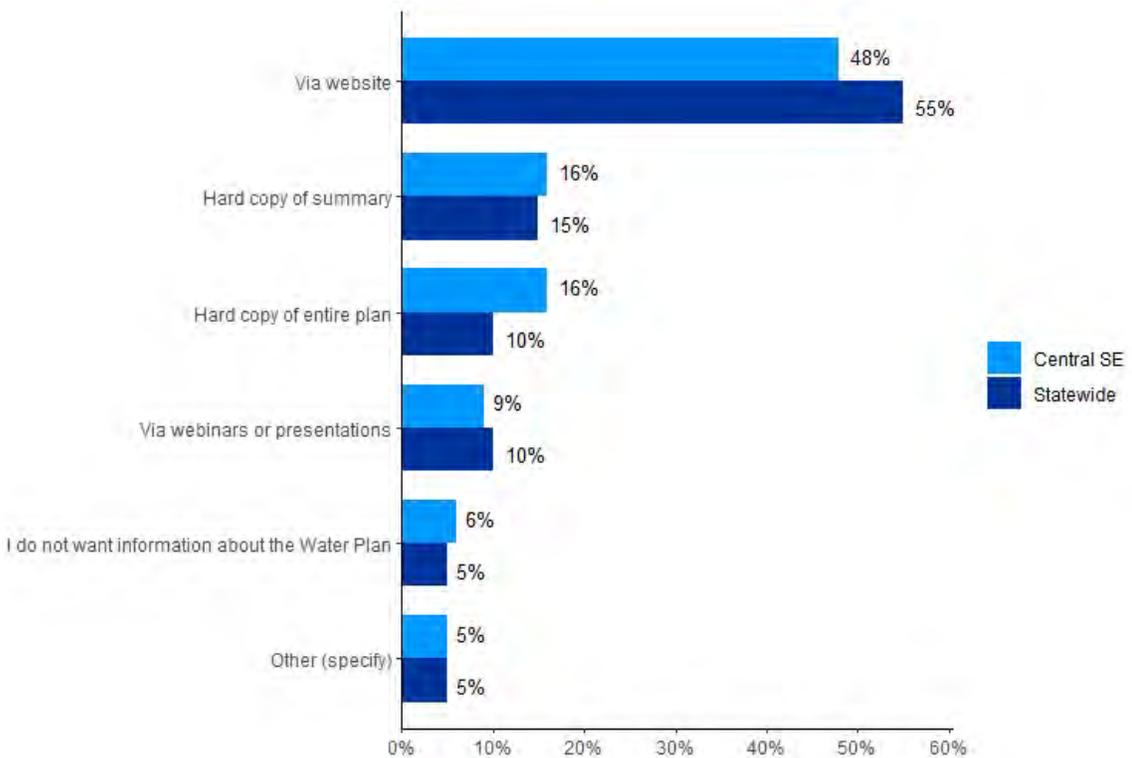


Note: Central SE region n=341. Totals may not add to 100% due to rounding. Percentages less than 2% are not labeled.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Preferred Ways to Learn About Colorado’s Water Plan. Respondents were asked how they would prefer to receive information about the Water Plan. As show in Figure III-21, by far the most common response among Central SE residents (and among statewide respondents) was via a website. Hard copies of a summary of the Water Plan were a more popular method than hard copies of the full document. Only 6% of Central SE respondents indicated they did not want any information about the Water Plan.

Figure III-21. How would you prefer to get information about Colorado’s Water Plan?



Note: Central SE region n=337. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

SECTION IV.

Survey Results from Metro Denver Region

This section provides detailed information about survey responses from the Metro Denver region. Surveys were completed with 370 participants who reside in the Metro Denver region of Colorado. The survey collected responses on key topics, including:

- Knowledge of Colorado water use and awareness of water issues;
- Performance of government agencies;
- Scarcity perceptions;
- Water-related concerns;
- Knowledge of key water-related concepts;
- Awareness and opinion of the Colorado Water Plan;
- Need for more information and most trusted sources; and
- Demographics.

The study team compared Metro Denver regional responses to statewide responses, as appropriate, for each survey question.¹

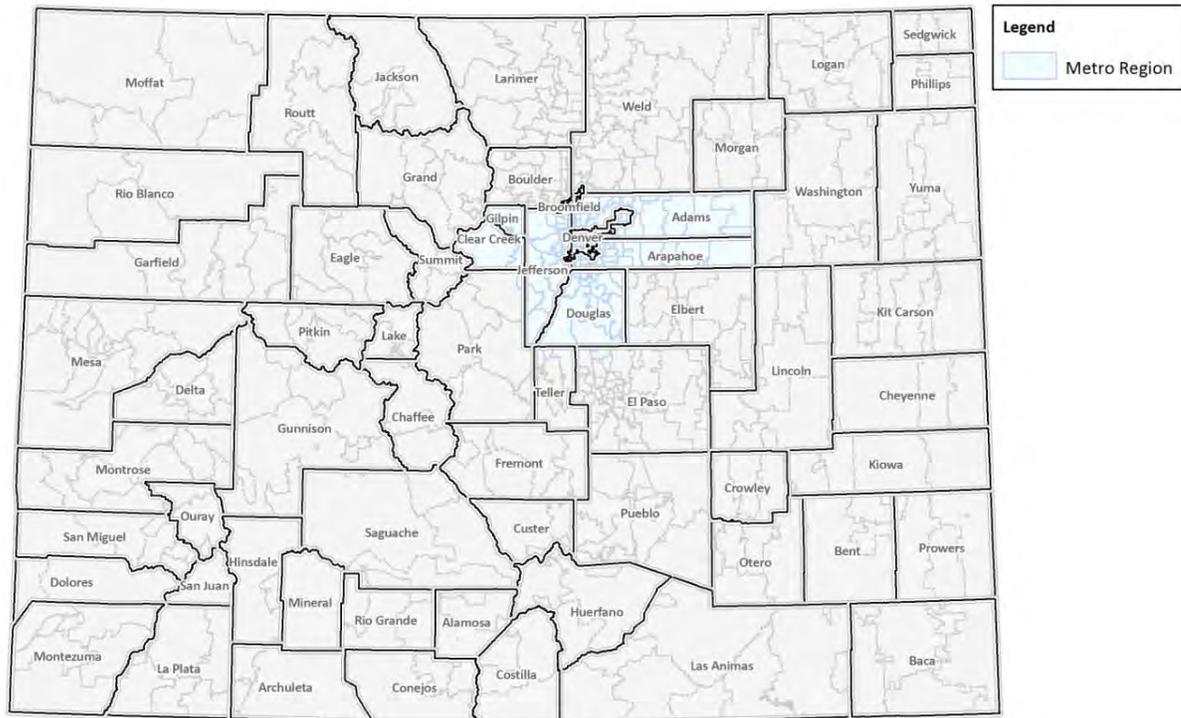
Metro Denver Region

The Metro Denver region is comprised of the Metro Roundtable, located in north central Colorado. The Metro Denver region is the smallest of the six Colorado regions used in this study in geographical area, but the largest in population. Almost 2.3 million adults (ages 18 and over) lived in the Metro Denver region in 2020, accounting for about 50.5 percent of Colorado's total adult population of just over 4.5 million. The Metro Denver region includes Adams, Arapaho, Broomfield, Clear Creek, Denver, Douglas, Gilpin and Jefferson counties.

Figure IV-1 presents a map of the Metro Denver region, as defined in this report.

¹ Statewide survey responses are reported in Section II.

Figure IV-1. Metro Denver Region



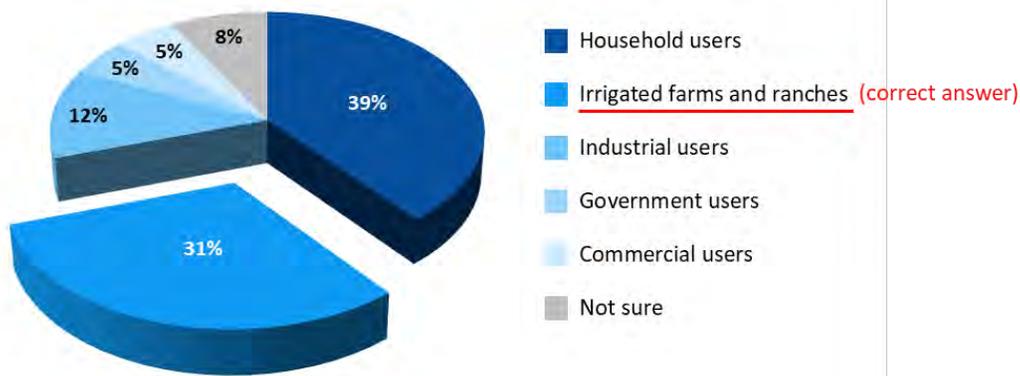
Source: BBC Research & Consulting from Colorado Water Conservation Board.

General Knowledge of Colorado Water Use and Issues

The survey asked several questions to gauge respondents' knowledge of Colorado water use and water-related issues. Initially, respondents were asked to identify which Colorado sector uses the most water. Later in the survey, respondents were also asked "Has any part of your education, work or volunteer experience involved water or water-related issues?"

Sector that uses the most water. When asked which sector uses the most water in Colorado, Metro Denver respondents most frequently identified households (39%), as shown in Figure IV-2. Compared to statewide respondents, the same proportion of Metro Denver respondents (31%) correctly identified farms and ranches as the sector that uses the most water. About 20% of Metro Denver respondents said that industrial or commercial businesses use the most water in Colorado.

Figure IV-2. Which sector uses the most water in Colorado?



Note: Metro Denver region n=369. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Involvement with water and water issues. Survey respondents were asked: “Has any part of your education, work or volunteer experience involved water or water-related issues?” Among the 370 respondents in the Metro Denver region, 309 provided a yes or no answer to this question. Twenty-one percent of those respondents indicated some prior involvement with water-issues. This proportion of respondents with prior water-related experience of some type was slightly lower than the overall statewide proportion of 23 percent.

Performance of Government Agencies

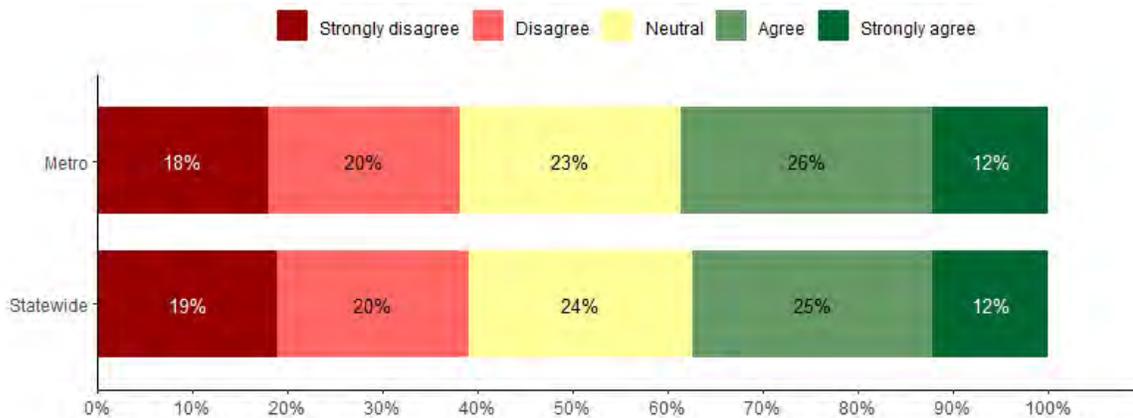
Respondents were asked two questions regarding current regulation and management of water in Colorado. Using a scale of a one to ten, where one means “completely disagree” and ten means “completely agree,” respondents were asked to rate their level of agreement with the following statements:

- Government agencies are doing enough to protect the quality of your drinking water; and
- Government agencies are doing enough to protect the quality of water in Colorado streams, rivers, and lakes.

Figures IV-3 and IV-4 presents those results, respectively.

Overall, about 38% of Metro Denver respondents agreed or strongly agreed with the statement that “government agencies are doing enough to protect the quality of your drinking water,” though there was not strong support for the statement. This is a lower approval rate than in the 2012-2013 survey (about 48%), but a similar approval rate to the statewide results described in Section II (about 37%).

Figure IV-3. Government agencies are doing enough to protect the quality of your drinking water.



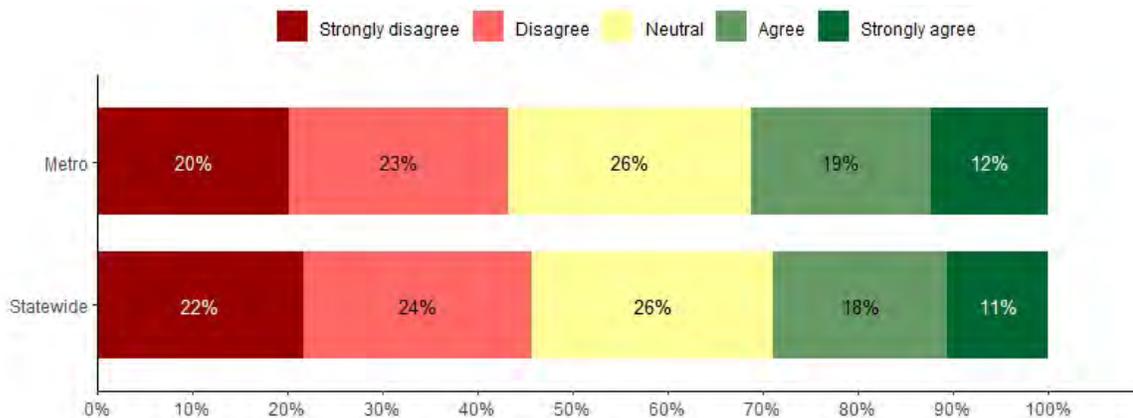
Note: Metro Denver region n=336. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Metro Denver resident responses to the statement “government agencies are doing enough to protect quality of water in Colorado’s streams, rivers and lakes” were slightly more negative. Thirty-one percent of respondents agreed or strongly agreed with that statement, while 43% of respondents indicated that they disagreed or strongly disagreed with that statement. Twenty-six percent of respondents provided a neutral response. Those results were quite similar to the statewide results, as shown in Figure IV-4, but indicate a considerably lower approval rating than in the 2012-2013 survey when 44% of Metro Denver respondents agreed or strongly agreed with the same statement.

The reasons for the more negative results regarding the regulatory performance of government agencies are not entirely clear. The 2021 survey reached a larger proportion of younger adults (ages 18 to 34) and a larger proportion of recent migrants to Colorado (within the past 10 years) than in 2012-2013. It is also possible that the increasingly antagonistic political climate across the nation over the past nine years has had a general negative impact on public perceptions regarding government performance.

Figure IV-4. Government agencies are doing enough to protect the quality of water in Colorado streams, rivers, And lakes.



Note: Metro Denver region n=333. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Scarcity Perceptions

The survey asked two questions about perceptions of water scarcity in Colorado. Using a one to ten scale, where one means “completely disagree” and ten means “completely agree,” respondents were asked to rate their level agreement with the following statements:

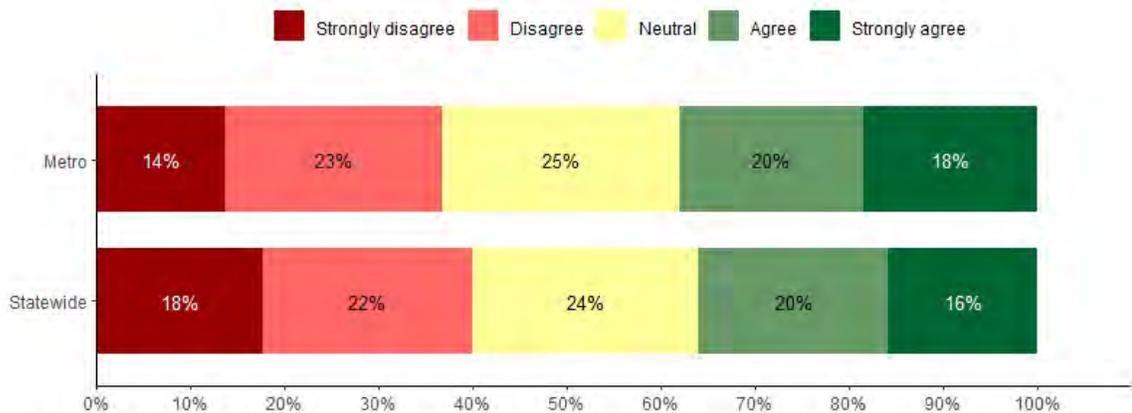
- Colorado has enough water available to meet our current needs; and
- Colorado has enough water available to meet our needs for the next 40 years.

Results from these questions are presented below.

Current water needs. Figure IV-5 shows that a slightly larger proportion of Metro Denver respondents believe Colorado has enough water to meet its current needs than the overall statewide views on this question. About 37% of Metro Denver respondents either disagreed or strongly disagreed with the statement that we have enough water to meet our current needs, while 38% agreed or strongly agreed with that statement.

Compared to the 2012-2013 survey, 2021 respondents from the Metro Denver region were more likely to agree that we have enough water to meet our current needs (38% in 2021 versus 22% in 2012-2013) – indicating less perceived current water scarcity than nine years ago. That comparison also holds for statewide survey respondents, but to a lesser degree (36% agreed in 2021 versus 29% in 2012-2013).

Figure IV-5.
Colorado has enough water to meet our current needs.



Note: Metro Denver region n=342. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

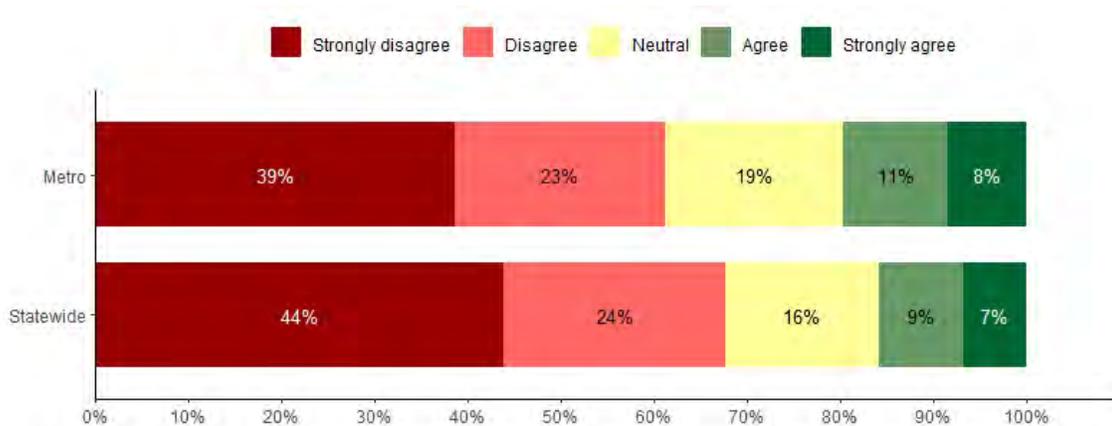
Water needs for the next 40 years. Figure IV-6 shows that, on average, Metro Denver respondents were much more likely to disagree with the statement that “Colorado has enough water available to meet our needs for the next 40 years” than that we have enough water to meet our current needs. Sixty-two percent of Metro Denver respondents disagreed or strongly disagreed that we have enough water for the next 40 years, compared to only 19% who agreed or strongly agreed with that statement. Compared to statewide respondents, however, Metro Denver residents were less likely to disagree that we have enough water for the next 40 years

(and more likely to agree that we do) than respondents from other parts of Colorado as shown in Figure IV-6.

Compared to the 2012-2013 survey 2021 Metro Denver residents were slightly more likely to agree or strongly agree that we have enough water for the next 40 years (19 percent in 2022 versus 13 percent in 2012-2013) and slightly less likely to disagree or strongly disagree with that statement (62 percent in 2022 versus 66 percent in 2012-13). However, the only statistically significant difference in the Metro Denver results between the two surveys was in the number of respondents who strongly agreed with the statement that we have enough water for the next 40 years (8% in 2021 versus 3% in 2012-13).

It is notable that the previous survey was conducted following the very hot and dry weather conditions in 2012 which led to the implementation of drought-related restrictions among some of the Metro Denver area water providers.

Figure IV-6. Colorado has enough water for the next 40 years.



Note: Metro Denver region n=319. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Water-Related Concerns

The survey asked a series of questions to gauge Coloradans' perceptions of water-related concerns. Using a scale of a one to ten scale, where one means "not concerned at all" and ten means "very concerned," respondents were asked to rate their level of concern with the following potential water-related issues:

- Water quality in our rivers, lakes and streams;
- Amount of water available for Colorado's cities and towns;
- Amount of water available for Colorado's farms and ranches;
- Amount of water for recreational use such as boating, rafting, and fishing;
- Amount of water for fish and wildlife;
- Condition of underground water pipes, dams, and other water utility infrastructure;
- The quality of the water you receive at your home;

- Amount of water used for energy development; and
- Effects of energy development on water quality.

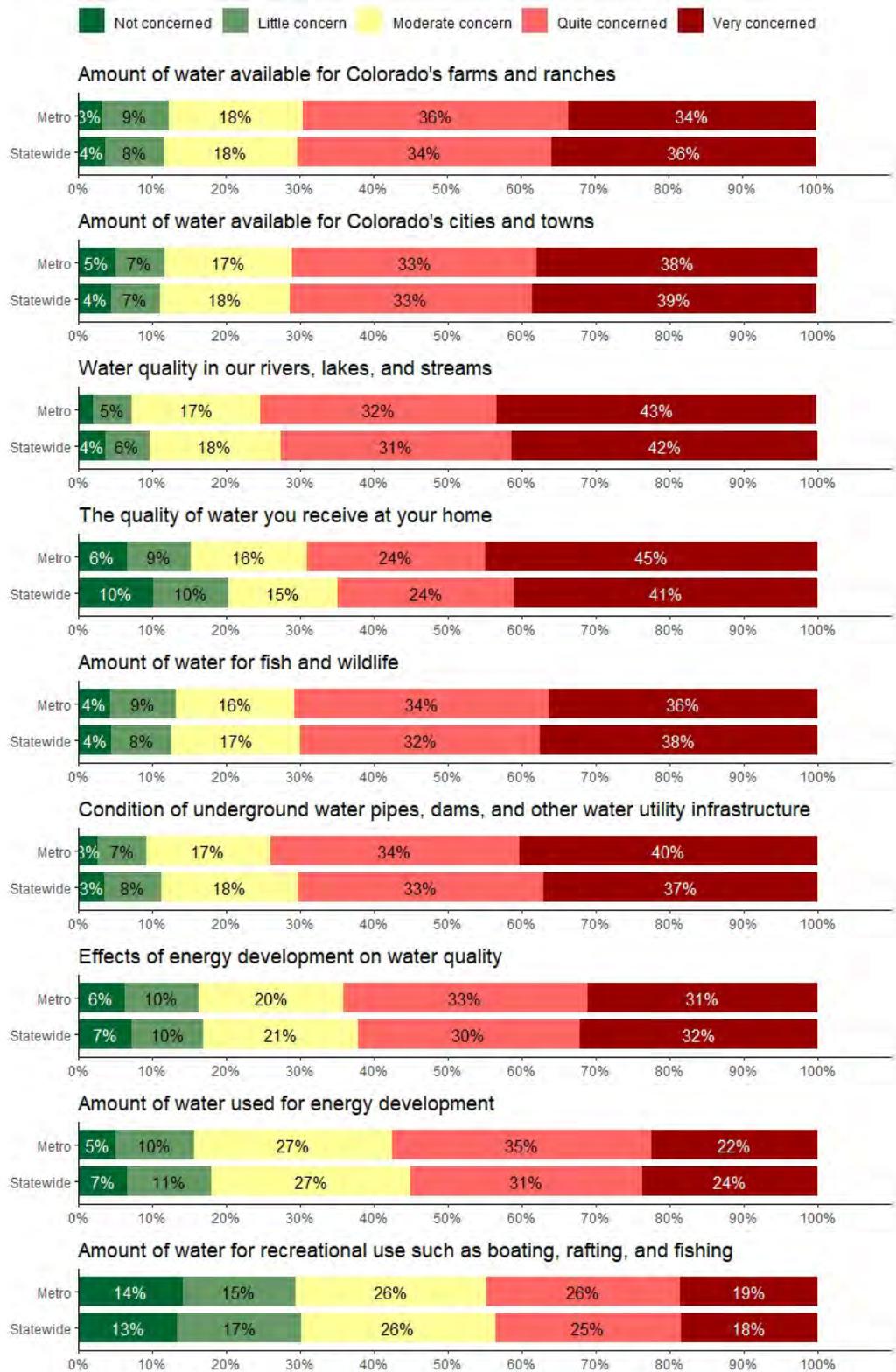
The order in which the potential areas of concern were presented was randomized to avoid potential issues with “starting point bias”, as was also done when the 2012-2013 survey was conducted. Figure IV-7 on page IV-9 presents the reported level of concern for each issue.

On average, water quality in our rivers, lakes and streams received the highest rating of concern (7.8 out of 10) from Metro Denver respondents. This issue also had the highest average level of concern in the statewide results (see Section II).

Among the nine areas of potential concern posed to the survey respondents, five other topics also had mean scores greater than 7.0, indicating the average respondent was quite concerned about them. In order, the highest scoring areas of concern among Metro Denver respondents were:

- Water quality in our rivers, lakes and streams (mean score of 7.8),
- The condition of underground water pipes, dams and other water utility infrastructure (mean score of 7.6),
- The quality of the water you receive at your home (mean score of 7.5),
- Amount of water available for Colorado’s cities and towns (mean score of 7.4), and
- The amount of water for fish and wildlife (also mean score of 7.4).

Figure IV-7. Concern about water-related issues



Note: Metro Denver region n's=334 to 369 (varied by issue). Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Willingness to pay. The survey asked participants whether they would be willing to pay an additional \$1, \$5, \$10, or \$25 per month to address potential water-related issues. Each participant was presented with only one dollar amount, and the amount presented to the participants was varied on a random basis.

Figure IV-8 presents those results for Metro Denver and statewide survey respondents. The figure reflects a conservative interpretation of respondents' willingness-to-pay by assuming the 22% of regional respondents who indicated either they did not want to answer or did not know were all not willing-to-pay each amount. An alternative interpretation, based on just those who responded either yes or no indicates a higher willingness to pay.

Based on these alternative interpretations of the data, between 53% and 68% of residents in the Metro Denver region would be willing to pay up to \$10 more per month to address water-related issues. This indicates slightly greater willingness-to-pay than the statewide responses which show that 50% to 65% of all adults in Colorado would be willing-to-pay at least \$10 more per month. As shown in Figure IV-8, Metro Denver willingness-to-pay is similar to the statewide results, which partly reflects the large weight assigned to the Metro Denver respondents based on the region's share of the overall state population.²

Figure IV-8.
Willingness to pay to address water-related issues

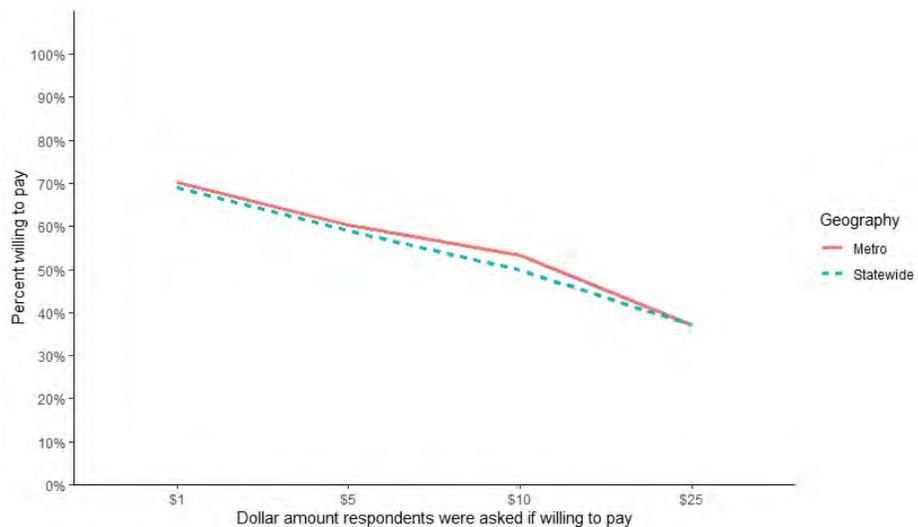
Note:

All "do not know" or "do not wish to answer" responses assumed to be unwilling to pay stated amounts.

Metro Denver region
n=370.

Source:

BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted October-November 2021.



Most important water-related issue. Survey participants were also asked to identify which potential water-related issue is the most important issue that needs to be addressed. As shown in Figure IV-9, Metro Denver respondents most frequently indicated that the quality of water they receive in their homes was the most important potential water-related issue that needs to be addressed (30%). Some of the likely reasons for selecting this issue as the most important were discussed in the previous section on statewide survey results, on pages II-13 and II-14.

In general, the sequence of the nine issues – ranked in terms of frequency of being selected as the most important water-related issue –among Metro Denver residents was very similar to that

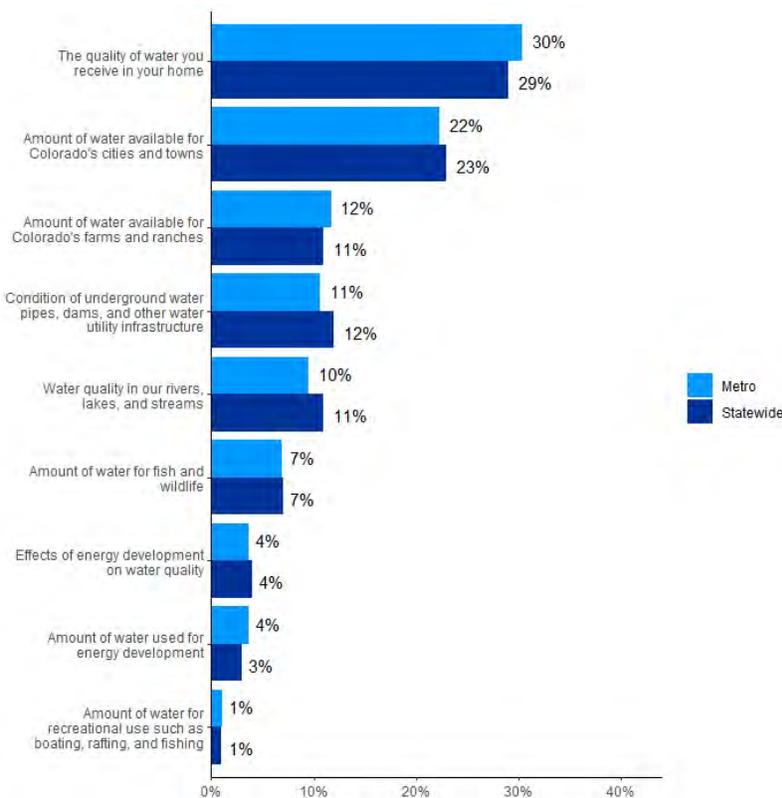
² See Section I for discussion of the weighting methodology used for the statewide analysis.

among all statewide residents. Among both samples the quality of water you receive at home and the amount of water available for Colorado’s cities and towns were the two most frequently selected most important issues. And, in both samples, the other three most frequently selected most important issues were the amount of water available for Colorado’s farms and ranches, the condition of underground pipes and other infrastructure, and water quality in Colorado’s rivers, lakes and streams.

Figure IV-9.
Most important water-related issue

Note:
Metro Denver region n=273.

Source:
BBC Research & Consulting from
Colorado Water Conservation Board
statewide survey conducted October-
November 2021.



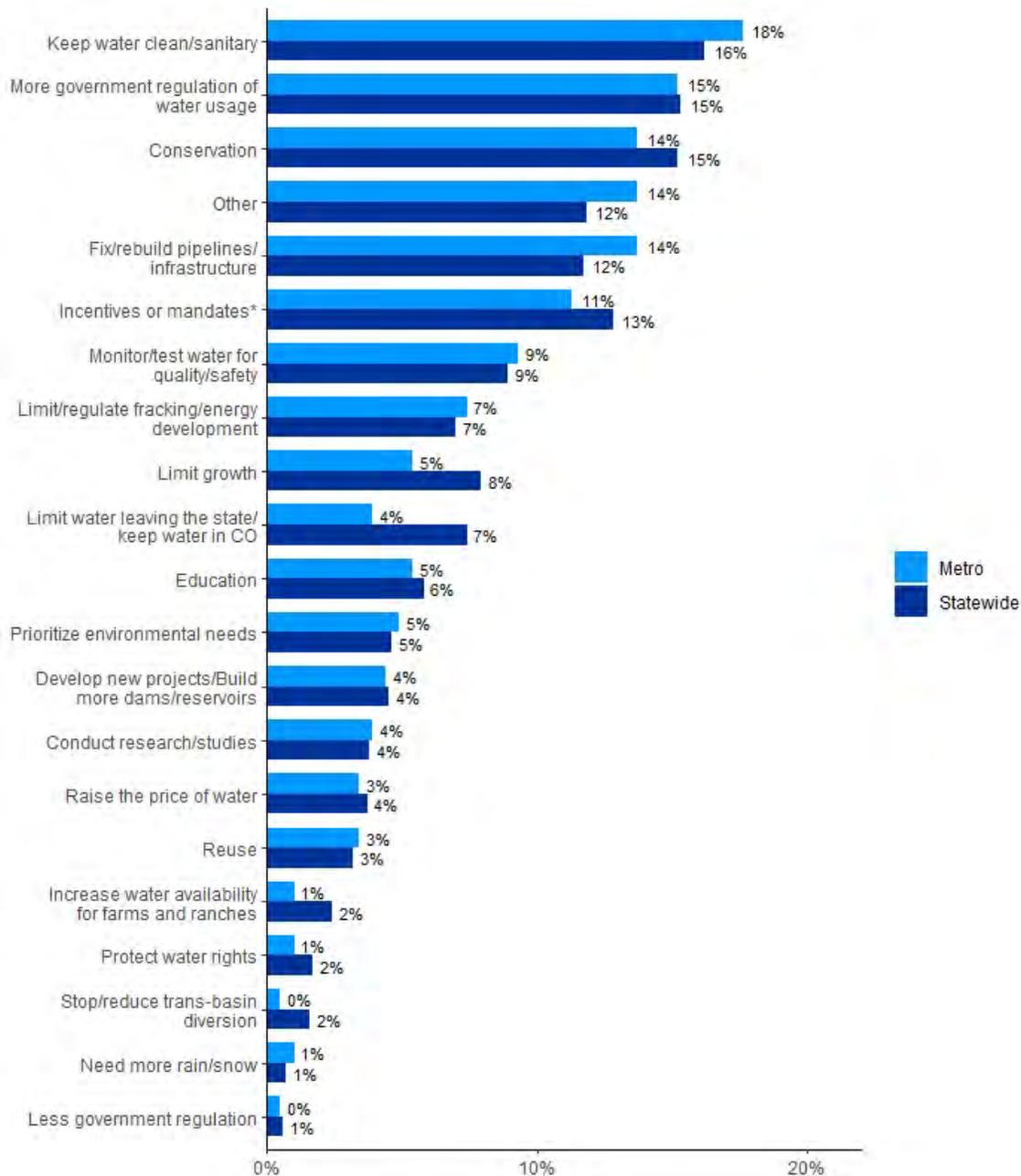
Addressing the most important water-related issues. Survey participants were asked what they thought should be done to address their most important concerns. That question was open-ended (unprompted), but responses (including some multiple responses) were coded by the surveyors. Figure IV-10 presents those results.

Overall, Metro Denver respondents most frequently indicated that their most important potential water-related issue should be addressed by keeping water clean and sanitary (18%). Like the participants statewide, Metro Denver respondents also frequently indicated that their most important concerns should be addressed by:

- More government regulation of water usage (15%); or
- Conservation (14%).

As noted in Section II regarding the statewide survey results, respondents’ choices of what should be done to address their most important water-related concern varied depending on which concern they deemed to be the most important.

Figure IV-10. What should be done to address your most important water concern?



Note: *Incentives or mandates were recommended to promote water use efficiency through technology, efficient agricultural methods, efficient housing development and/or lower water use landscaping.

Metro Denver region n=204. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Knowledge of Important Water Concepts

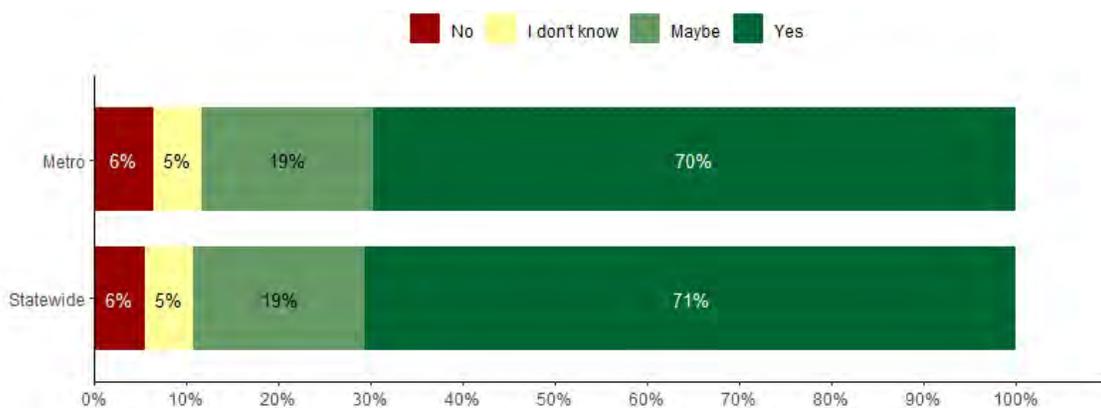
One of the major changes in the 2021 survey was the inclusion of several questions to test respondents understanding and opinion regarding important water concepts identified by CWCB and members of the water education community. These concepts included:

- The relationship between drought in the Colorado River Basin in Western Colorado and the availability of water supplies throughout Colorado;
- Public awareness of interstate agreements that establish limits on Colorado’s ability to use the water in our rivers and streams;
- The relationships between land use planning and climate change and the amount of water we will need in the future;
- Public confidence in their own knowledge and ability to take action to ensure we use our water wisely; and
- Public familiarity, knowledge and opinions regarding Colorado’s Water Plan.

Relationship between drought in Western Colorado and availability of water supply throughout Colorado. In view of the ongoing drought in the Colorado River Basin and record low water storage levels in Lake Powell and Lake Mead, it is important that Colorado residents – particularly those living in the major population centers along the Front Range – understand that their own water supply could be impacted by drought west of the Continental Divide. Survey respondents were specifically asked “Do you believe severe drought that impacts the Colorado River Basin and the Southwestern US could have an impact on the water supply for your own home or business?”

As shown in Figure IV-11, the responses of Metro Denver residents to this question were nearly identical to statewide responses. Among both groups, the majority of respondents do recognize the linkage between drought in the Colorado River Basin in Western Colorado and their own water supply – even if they live in the Front Range. Approximately 70% of respondents from both the Metro Denver region and the state as a whole indicated “yes” in response to this question, with another 19% indicating “maybe.” Only 6% of Metro Denver residents and 6% of statewide residents responded with a definitive “no” – indicating they did not believe drought in the Colorado River Basin would affect their own water supply.

Figure IV-11. Do you believe severe drought that impacts the Colorado River Basin and the Southwestern US could have an impact on the water supply for your own home or business?

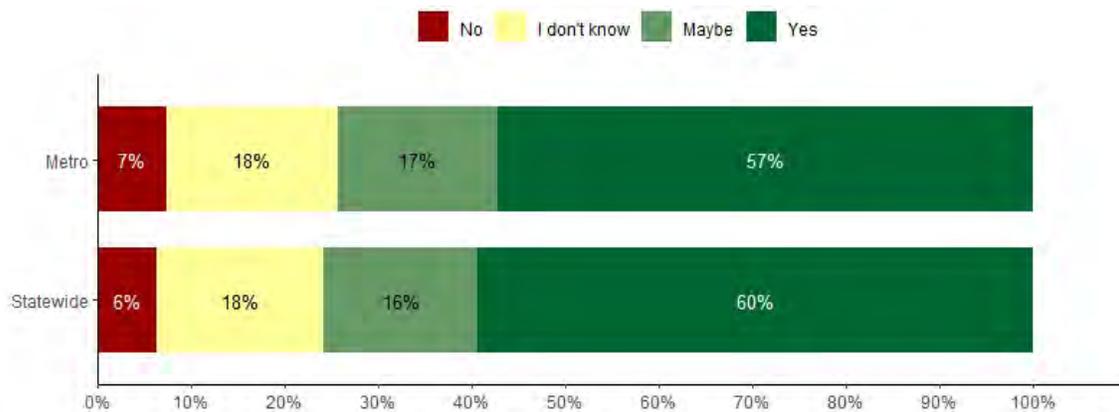


Note: Metro Denver region n=370. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Understanding that interstate agreements limit Colorado’s use of water from our rivers. Survey respondents were specifically asked “Do you think that legal agreements with neighboring states limit the amount of water Colorado can use from its rivers?” Once again, as shown in Figure IV-12, responses from the Metro Denver region were similar to those across Colorado, with nearly 60% correctly indicating yes to this question and another 17% indicating “maybe.” Almost 20% of Metro Denver respondents (and statewide respondents) indicated they did not know, while 7% indicated they did not think our water use was limited by interstate legal agreements.

Figure IV-12. Do you think that legal agreements with neighboring states limit the amount of water Colorado can use from its rivers?

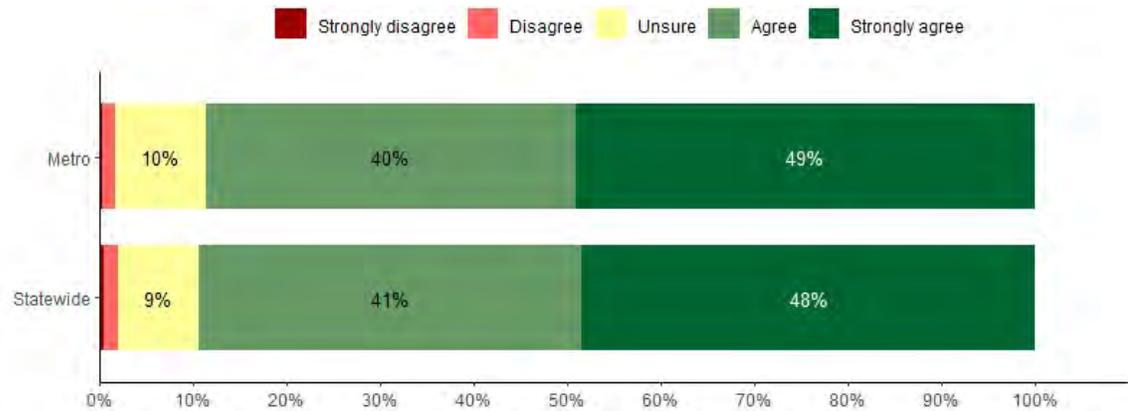


Note: Metro Denver region n=370. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Recognition of relationship between land use and development planning and future water needs. Survey respondents were next asked whether they agreed or disagreed with the following statement: “We can help manage Colorado’s future water use by carefully planning how we develop new homes, businesses and infrastructure.” As shown in Figure IV-13, once again responses among the Metro Denver residents were nearly identical to those across the state. Approximately 90% of survey respondents among both groups agreed or strongly agreed with the statement that careful planning can help manage our future water needs. Only about 2% (among each of the two groups) disagreed or strongly disagreed with the statement, though nine to ten percent indicated they were unsure whether they agreed or disagreed.

Figure IV-13. Agreement that we can help manage Colorado’s future water use by carefully planning how we develop new homes, businesses and infrastructure?



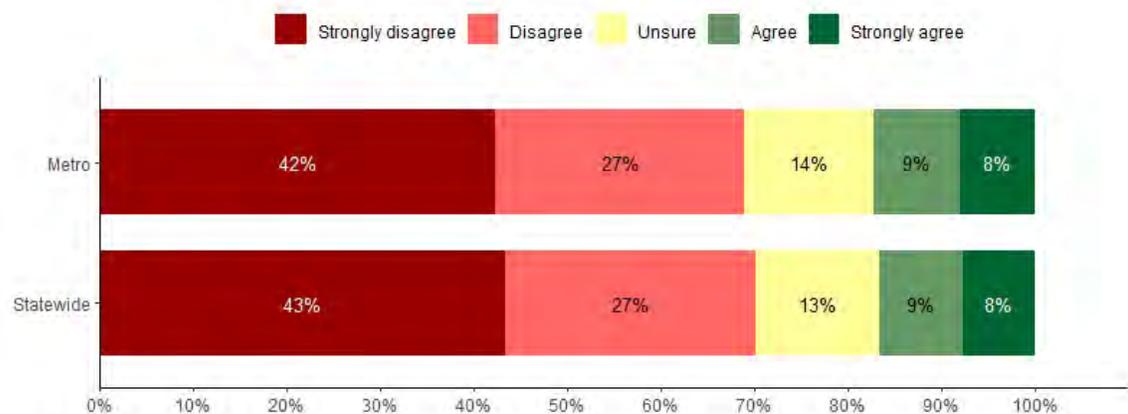
Note: Metro Denver region n=370. Totals may not add to 100% due to rounding. Percentages less than 2% are not labeled.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Recognition of potential impact of rising temperatures on future water needs. The following question tested awareness that overall increases in temperatures may affect the amount of water we need in the future. This statement was deliberately posed in the negative to break up the pattern in the survey questions that agreement was the correct response.

Respondents were specifically asked whether they agreed or disagreed with the following statement: “The trend of rising temperatures is unlikely to affect Colorado’s future water needs.” As shown in Figure IV-14, more than two-thirds of Metro Denver residents, and Colorado residents as a whole, disagreed or strongly disagreed with this statement – indicating they believe rising temperatures will impact our future water needs. Approximately 17% (about one in six respondents) in both the Metro Denver region and statewide agreed or strongly agreed with the statement, while 13 to 14 percent were unsure.

Figure IV-14. Agreement with statement that the trend of rising temperatures is unlikely to affect Colorado’s future water needs?

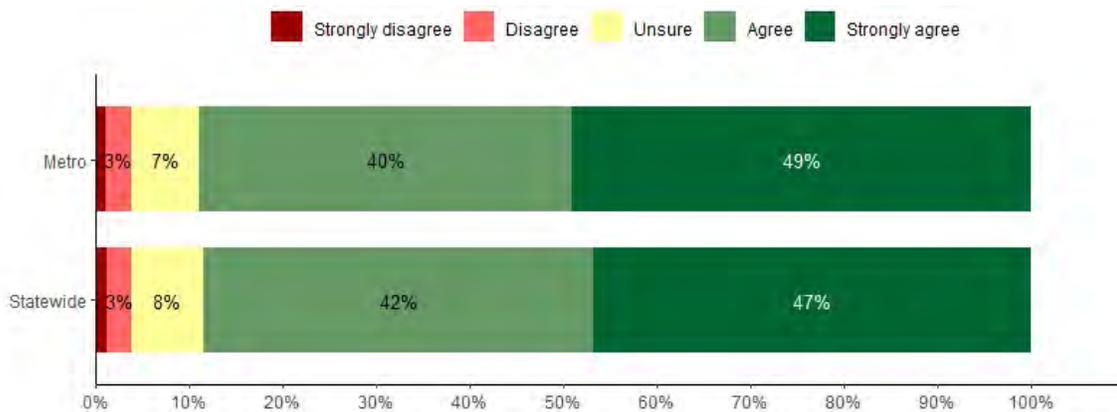


Note: Metro Denver region n=369. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Recognition of relationship between proactive efforts to meet future water needs and Colorado’s economy. Survey respondents were specifically asked whether they agreed or disagreed with the following statement: “We need to take action in advance to reduce water use and/or increase water supply to continue to grow Colorado’s economy in the future.” As shown in Figure IV-15, almost 90% of both Metro Denver respondents and statewide respondents agreed or strongly agreed with the statement supporting the need for proactive efforts. Only 3% disagreed or strongly disagreed with the statement, while 7% to 8% were unsure.

Figure IV-15. Agreement that we need to take action in advance to reduce water use and/or increase water supply to continue to grow Colorado’s economy in the future?



Note: Metro Denver region n=369. Totals may not add to 100% due to rounding. Percentages less than 2% are not labeled.

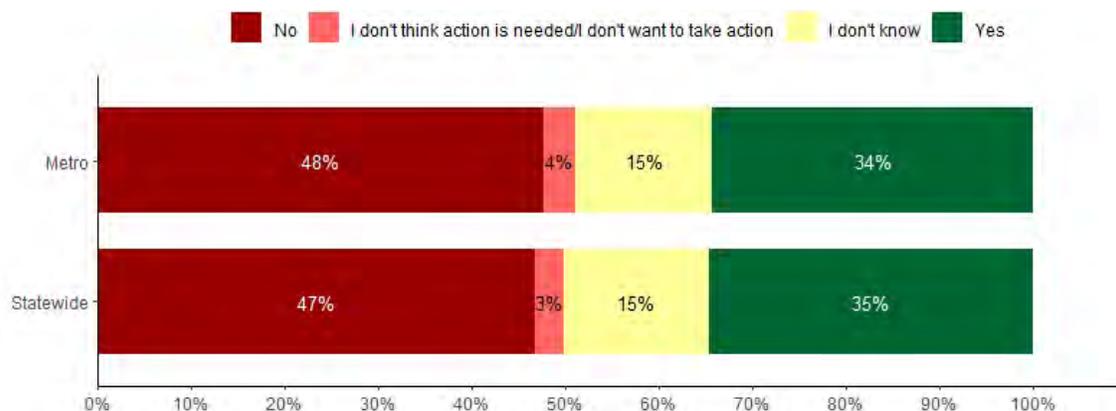
Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Respondents’ confidence in having the knowledge necessary to take an active role in water stewardship. Survey respondents were asked if they had enough information about Colorado’s water situation and potential future water issues to be able to confidently take action or support actions to use our water wisely. This question corresponded to one of the metrics in the Statewide Water Education Action Plan developed by Water Education Colorado.³

As shown in Figure IV-16, Metro Denver resident responses to this question were nearly identical to statewide results, with 34% indicating they were confident that they have the necessary information. Almost one-half (48%) of respondents indicated they did not have enough information to be able to take action. The remaining respondents most frequently indicated they did not know if they had enough information (15%). Very few respondents in either the Metro Denver region or statewide indicated that they felt that no action was needed or did not want to take action (3% to 4%).

³ Outcome 3, page 18. Statewide Water Education Action Plan for Colorado 2020-2025. Water Education Colorado.

Figure IV-16. Do you have enough information about Colorado’s water situation and potential future water issues to be able to confidently take action or support actions to use our water wisely?



Note: Metro Denver region n=370. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Trusted Sources of Information

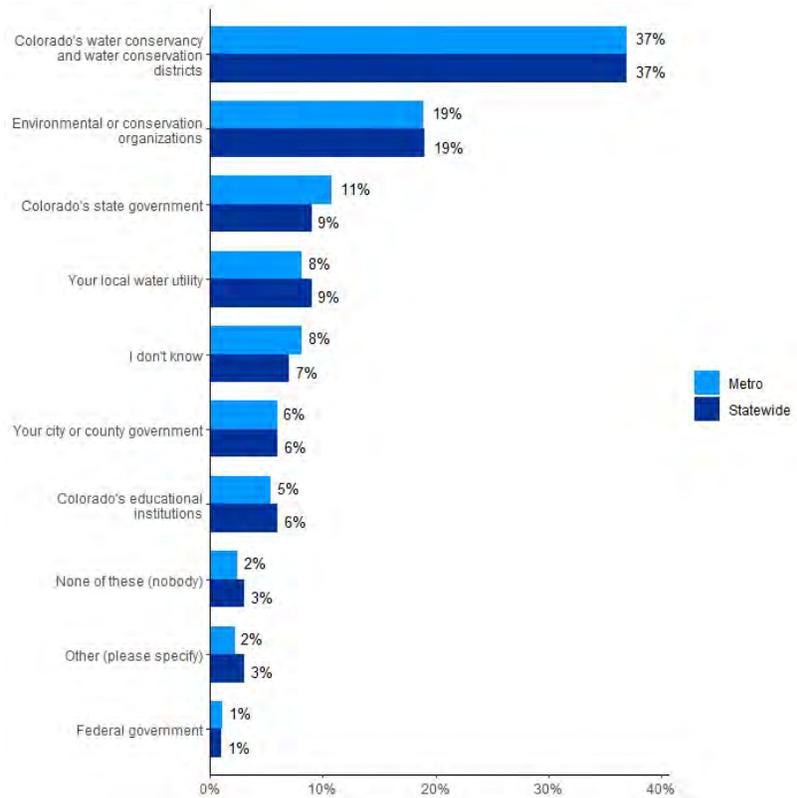
Immediately following the question about respondents’ confidence that they had enough information to be able to take action or support actions regarding water issues, the survey asked respondents to identify which organizations they would most trust to provide reliable information about Colorado’s water situation and potential issues. Figure IV-17 presents those results.

In both the Metro Denver region and the state as a whole, the majority of respondents identified either Colorado’s regional water conservancy and water conservation districts (37%) or environmental or conservation organizations (19%) as the sources they would most trust to provide information about water-related issues. Local water utilities and the Colorado state government were the next most trusted sources. The least trusted source of information about Colorado’s water-related issues was the Federal government (1%). The rank ordering of the various sources of information was very similar to the results from the 2012-2013 survey.

Figure IV-17.
Most trusted sources of information

Note:
 Metro Denver region n=370. Totals may not add to 100% due to rounding.

Source:
 BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted October-November 2021.



Awareness of the Colorado Water Plan

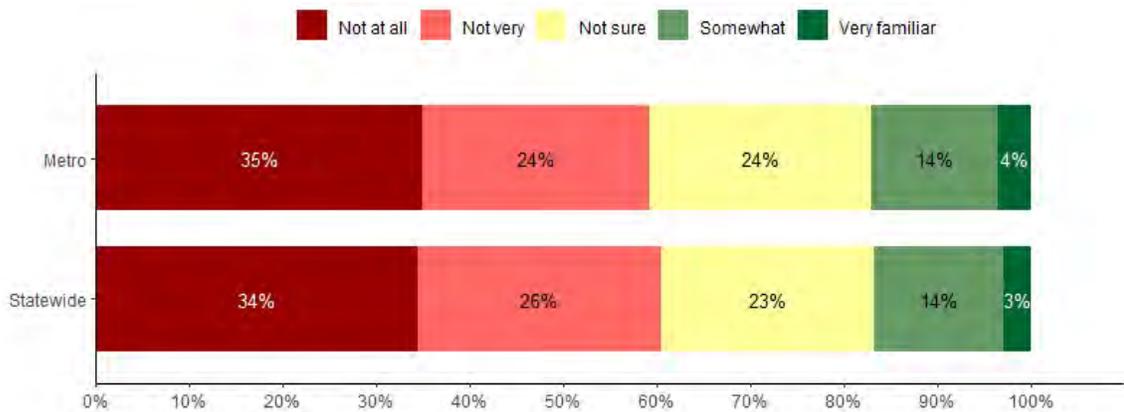
The final section of the survey, prior to gathering demographic information, was designed to gauge awareness of the Colorado Water Plan. The first edition of the Water Plan was issued in 2015, and the second edition is expected to be issued during 2022 or 2023.

Familiarity with the Water Plan. Survey respondents were initially asked “How familiar are you with Colorado’s Water Plan?” The following choices were provided to them:

- Not sure. That is, you don’t know if you have ever seen or heard of the Plan.
- Not at all. That is, you know that you have not heard of or seen the Plan.
- Not very. That is, you remember hearing about or seeing the Plan, but don’t know what it says.
- Somewhat. That is, you have seen or heard about the Plan and have a general idea of what it says.
- Very familiar. That is, you know about the Plan and what it says.

As shown in Figure IV-18, most respondents from the Denver Metro region indicated they were either not familiar with the Water Plan at all (35%) or not very familiar with it (24%). These proportions are similar to the proportion of statewide respondents indicating little or no familiarity with the Water Plan. Eighteen percent of Metro Denver respondents described themselves as either somewhat familiar or very familiar with the Water Plan, similar to the statewide proportion of 17%.

Figure IV-18. Familiarity with Colorado’s Water Plan?

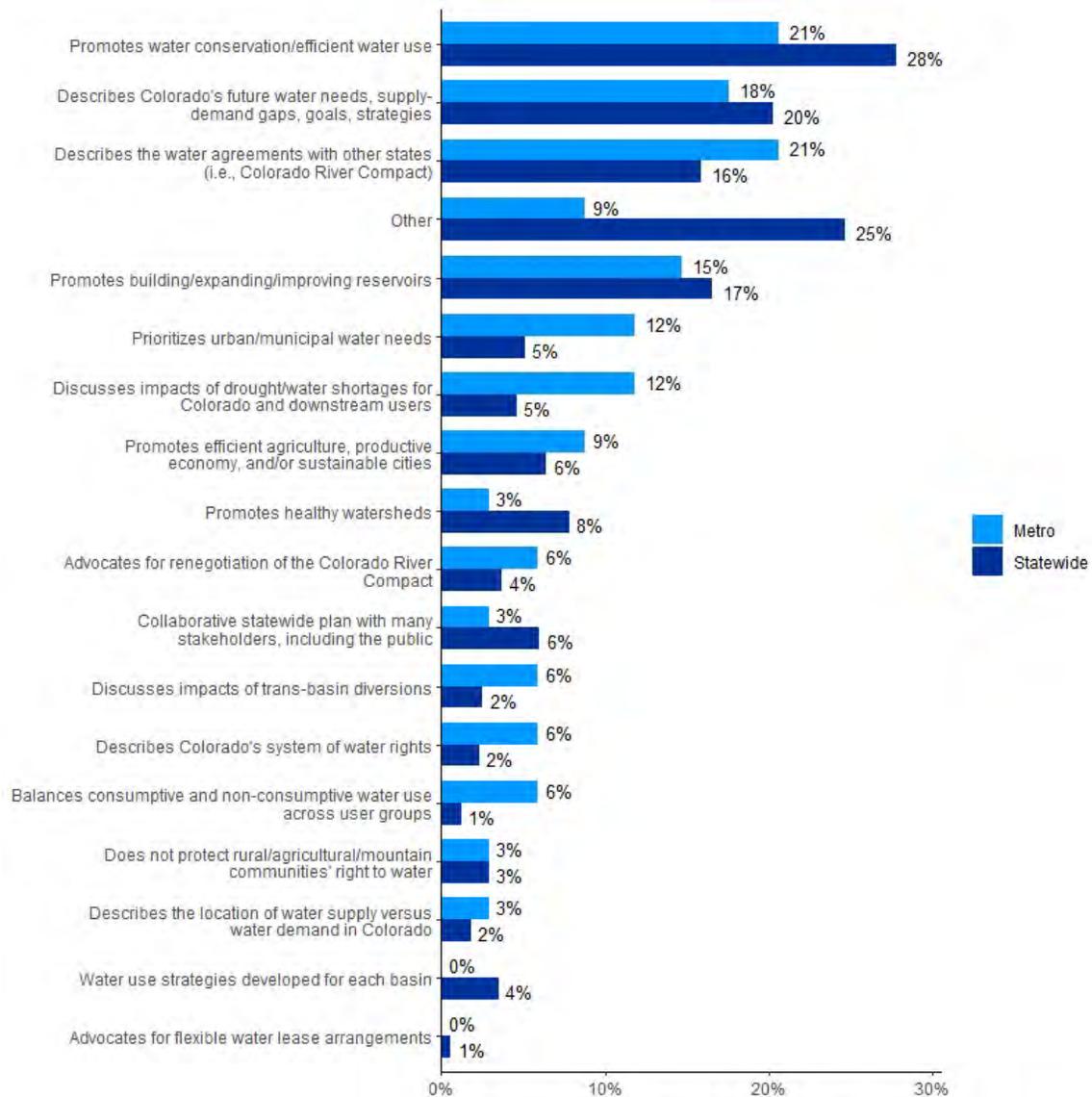


Note: Metro Denver region n=370. Totals may not add to 100% due to rounding. Percentages less than 2% are not labeled.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

What can you recall about the Water Plan? Survey respondents were next asked an open-ended question about what they remembered about the Water Plan. Given the relative low proportion of respondents who indicated they were familiar with the Plan in the previous question, only 36 Metro Denver respondents – or about 10% of the total from the Metro Denver region – provided a relevant response to this question. As shown in Figure IV-19, for the most part these respondents correctly recalled many of the important takeaways from the Plan, although some recollections were not accurate. Responses coded as “other” in Figure IV-19 ranged from negative comments about government (and the Plan) in general, to concerns that the Plan was not approachable or accessible to the average Coloradan or is underfunded or unenforceable. Since some of the responses included multiple aspects, the percentages shown in Figure IV-19 total more than 100%.

Figure IV-19. What do you recall from the Water Plan?



Note: Metro Denver region n=36. Totals may not add to 100% due to rounding.

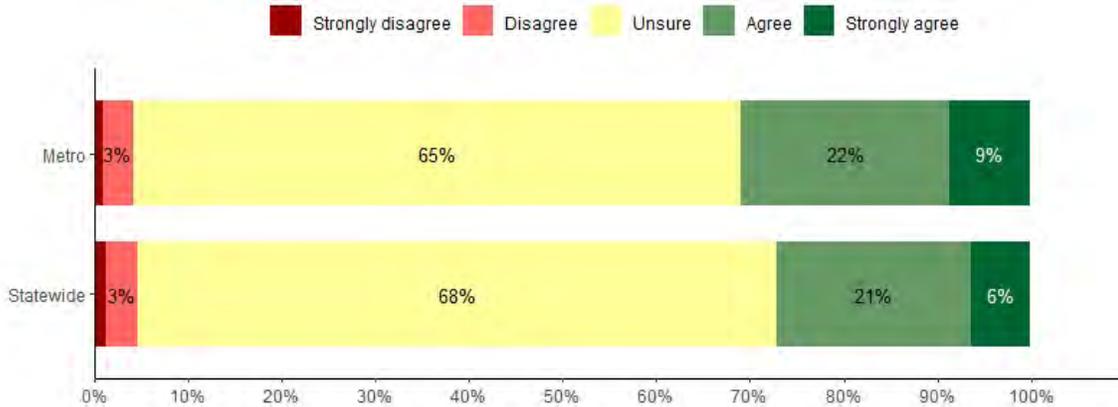
Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Agreement that the Water Plan will help us address our water-related challenges.

Respondents then were asked whether they agreed or disagreed with the following statement: “I think the Colorado Water Plan will help our state to address our water-related challenges in the future.” Given the relatively low awareness and knowledge regarding the Water Plan, the most common answer to this question (65% of Metro Denver respondents) was “unsure.”

Substantially more Metro Denver respondents indicated at least some confidence in the utility of the Water Plan (31% agreed or strongly agreed) than not (4% disagreed or strongly disagreed with the statement), and confidence in the efficacy of the Water Plan within the Metro Denver region is somewhat higher than it is statewide. These results are shown in Figure IV-20.

Figure IV-20. Colorado’s Water Plan will help Colorado meet our future water challenges?

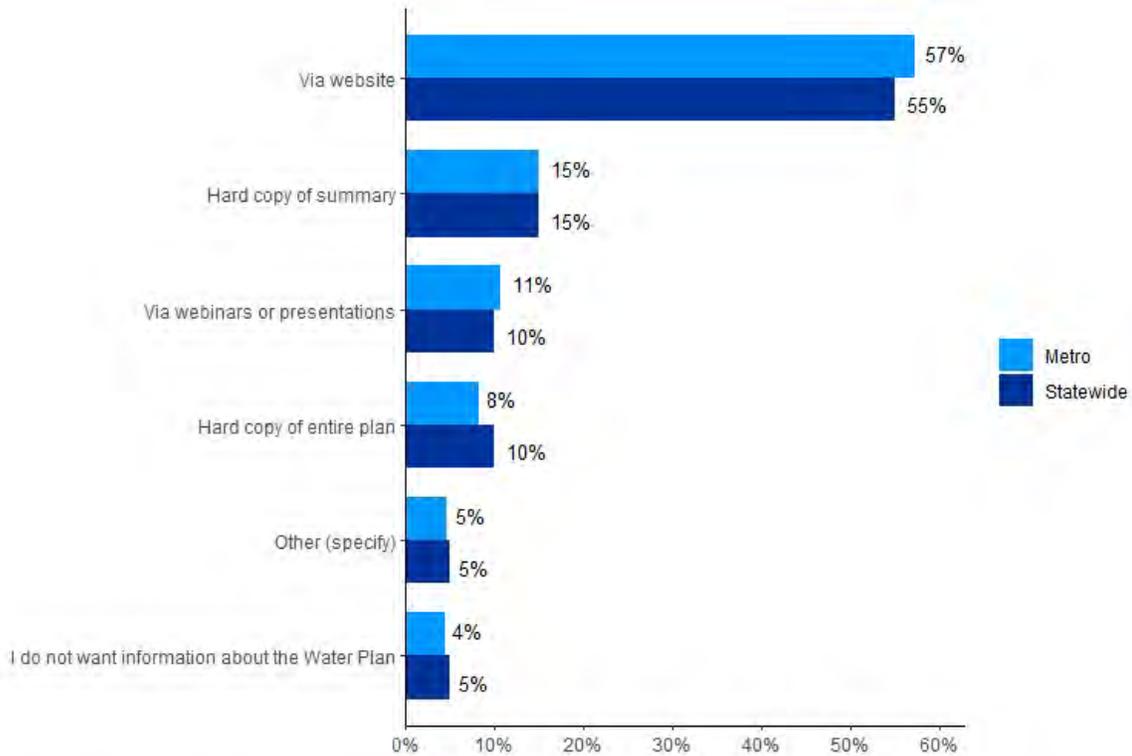


Note: Metro Denver region n=361. Totals may not add to 100% due to rounding. Percentages less than 2% are not labeled.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Preferred Ways to Learn About Colorado’s Water Plan. Respondents were asked how they would prefer to receive information about the Water Plan. As show in Figure IV-21, by far the most common response among Metro Denver residents (and among statewide respondents) was via a website. Hard copies of a summary of the Water Plan were a more popular method than hard copies of the full document. Only 4% of Metro Denver respondents indicated they did not want any information about the Water Plan.

Figure IV-21. How would you prefer to get information about Colorado’s Water Plan?



Note: Metro Denver region n=367. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

SECTION V.

Survey Results from Northeast Region

This section provides detailed information about survey responses from the Northeast region.¹ Surveys were completed with 374 participants who reside in the Northeast region of Colorado. The survey collected responses on key topics, including:

- Knowledge of Colorado water use and awareness of water issues;
- Performance of government agencies;
- Scarcity perceptions;
- Water-related concerns;
- Knowledge of key water-related concepts;
- Awareness and opinion of the Colorado Water Plan;
- Need for more information and most trusted sources; and
- Demographics.

The study team compared Northeast regional responses to statewide responses, as appropriate, for each survey question.²

Northeast Region

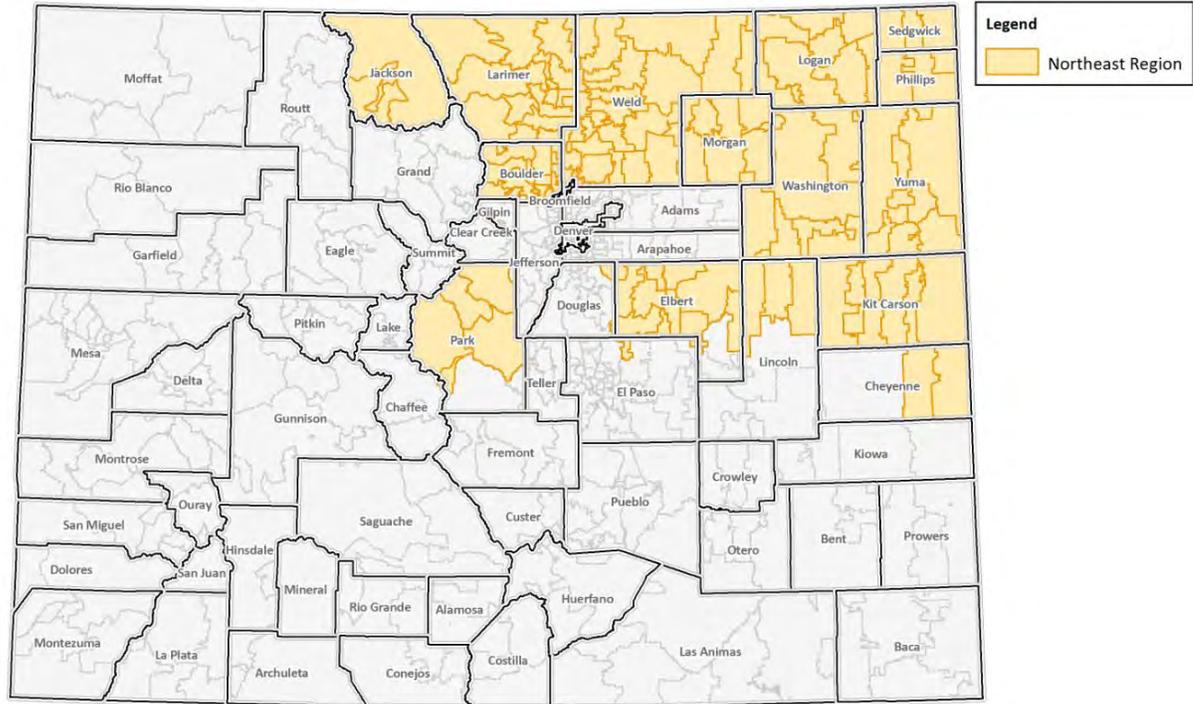
The Northeast region is comprised of the North Platte Basin and the South Platte Basin, excluding the Denver Metro region. The Northeast region is the second largest region in geographic area (after the Central SE region), and the second largest in population (after Denver Metro) with approximately 902,000 adult residents in 2020 (age 18 and older). The largest cities in the Northeast region include Boulder, Fort Collins and Greeley, though much of the region is comprised of agricultural lands.

Figure V-1 presents a map of the Northeast region, as defined in this report.

¹ In this study, the Northeast region of Colorado is defined as the South Platte and North Platte river basins, excluding the Denver Metro area which is examined separately in Section IV.

² Statewide survey responses are reported in Section II.

Figure V-1. Northeast Region



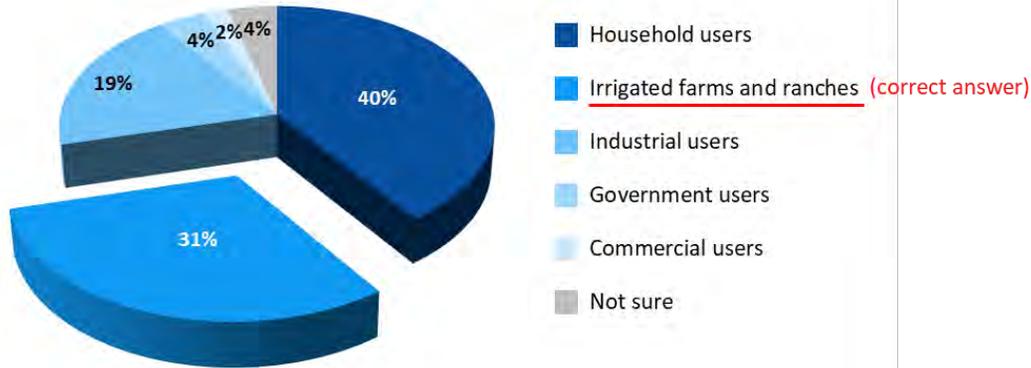
Source: BBC Research & Consulting from Colorado Water Conservation Board.

General Knowledge of Colorado Water Use and Issues

The survey asked several questions to gauge respondents' knowledge of Colorado water use and water-related issues. Initially, respondents were asked to identify which Colorado sector uses the most water. Later in the survey, respondents were also asked "Has any part of your education, work or volunteer experience involved water or water-related issues?"

Sector that uses the most water. When asked which sector uses the most water in Colorado, Central SE respondents most frequently identified households (40%), as shown in Figure V-2. Compared to statewide respondents, the same proportion of Northeast respondents (31%) correctly identified farms and ranches as the sector that uses the most water. About 21% of Northeast respondents said that industrial or commercial businesses use the most water in Colorado.

Figure V-2. Which sector uses the most water in Colorado?



Note: Northeast region n=374. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Involvement with water and water issues. Survey respondents were asked: “Has any part of your education, work or volunteer experience involved water or water-related issues?” Among the 374 respondents in the Northeast region, 327 provided a yes or no answer to this question. Twenty-two percent of those respondents indicated some prior involvement with water-issues, very similar to the overall statewide proportion of 23 percent.

Performance of Government Agencies

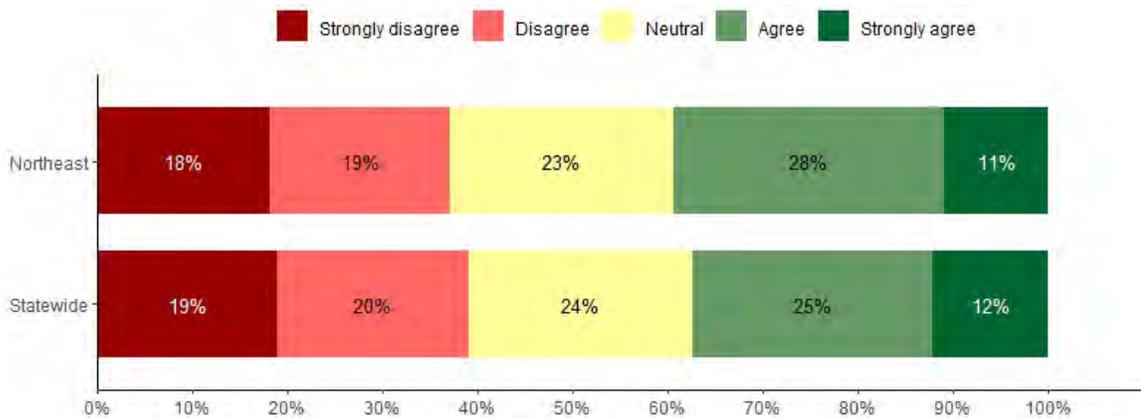
Respondents were asked two questions regarding current regulation and management of water in Colorado. Using a scale of a one to ten, where one means “completely disagree” and ten means “completely agree,” respondents were asked to rate their level of agreement with the following statements:

- Government agencies are doing enough to protect the quality of your drinking water; and
- Government agencies are doing enough to protect the quality of water in Colorado streams, rivers, and lakes.

Figures V-3 and V-4 presents those results, respectively.

Overall, about 39% of Northeast region respondents agreed or strongly agreed with the statement that “government agencies are doing enough to protect the quality of your drinking water,” though there was not strong support for the statement. This is a lower approval rate than in the 2012-2013 survey (47%), but a slightly higher approval rate than the statewide results (about 37%).

Figure V-3. Government agencies are doing enough to protect the quality of your drinking water.



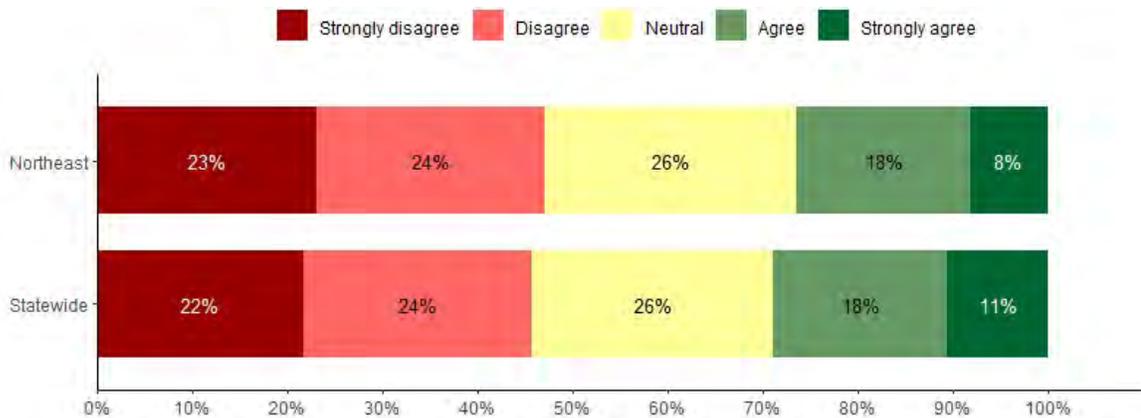
Note: Northeast region n=337. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Northeast resident responses to the statement “government agencies are doing enough to protect quality of water in Colorado’s streams, rivers and lakes” were somewhat more negative. Twenty-six percent of respondents agreed or strongly agreed with that statement, and 47% of respondents indicated that they disagreed or strongly disagreed with that statement. Twenty-six percent of respondents provided a neutral response. Those results were quite similar to the statewide results, as shown in Figure V-4, but indicate a considerably lower approval rating than in the 2012-2013 survey (48% of Northeast respondents agreed or strongly agreed with the same statement in the earlier survey).

The reasons for the more negative results regarding the regulatory performance of government agencies are not entirely clear. The 2021 survey reached a larger proportion of younger adults (ages 18 to 34) and a larger proportion of recent migrants to Colorado (within the past 10 years) than in 2012-2013. It is also possible that the increasingly antagonistic political climate over the past nine years has had a general negative impact on public perceptions regarding government performance.

Figure V-4. Government agencies are doing enough to protect the quality of water in Colorado streams, rivers, and lakes.



Note: Northeast region n=333. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Scarcity Perceptions

The survey asked two questions about perceptions of water scarcity in Colorado. Using a one to ten scale, where one means “completely disagree” and ten means “completely agree,” respondents were asked to rate their level agreement with the following statements:

- Colorado has enough water available to meet our current needs; and
- Colorado has enough water available to meet our needs for the next 40 years.

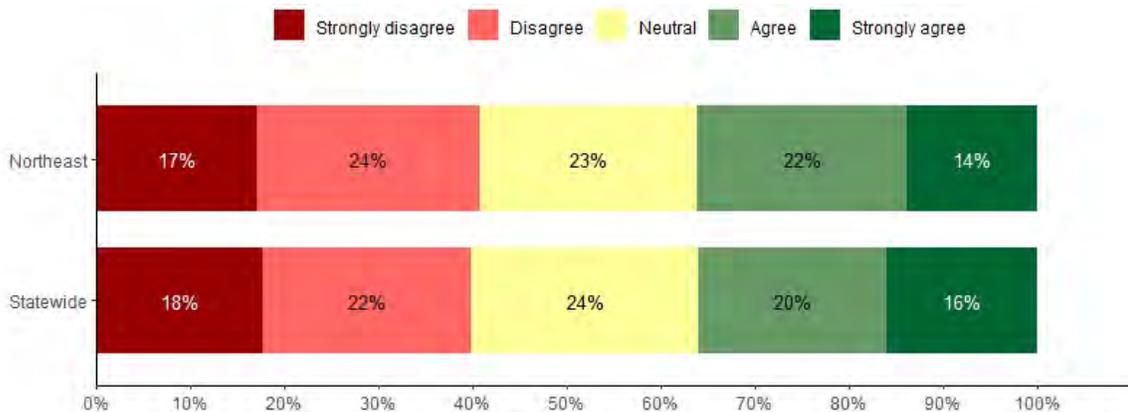
Results from these questions are presented below.

Current water needs. Figure V-5 shows that, overall, the perceptions of Northeast region respondents regarding whether or not Colorado has enough water to meet its current needs are very similar to the overall statewide perceptions of current water scarcity. Among both groups, about 40% of respondents either disagreed or strongly disagreed with the statement that we have enough water to meet our current needs, while about 36% agreed or strongly agreed with that statement.

Compared to the 2012-2013 survey, 2021 respondents from the Northeast region were more likely to agree that we have enough water to meet our current needs (36% in 2021 versus 27% in 2012-2013) – indicating less perceived current water scarcity than nine years ago. That comparison also holds for statewide survey respondents, but to a lesser degree (36% agreed in 2021 versus 29% in 2012-2013).

It is notable that the previous survey was conducted following the very hot and dry weather conditions in 2012 which led to the implementation of drought-related restrictions among some of the Front Range water providers.

Figure V-5. Colorado has enough water to meet our current needs.



Note: Northeast region n= 346. Totals may not equal 100% due to rounding.

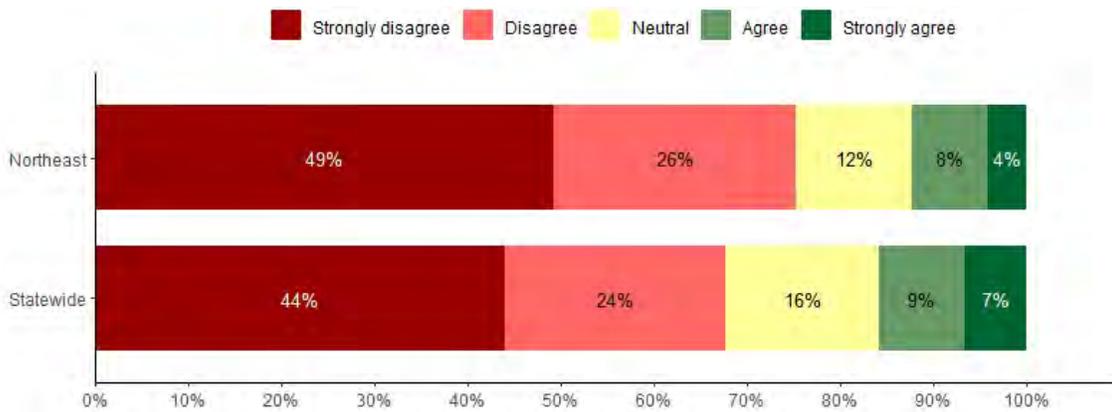
Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Water needs for the next 40 years. Figure V-6 shows that, on average, Northeast respondents were much more likely to disagree with the statement that “Colorado has enough water available to meet our needs for the next 40 years” than that we have enough water to meet our current needs. Seventy-five percent of Northeast respondents disagreed or strongly

disagreed that we have enough water for the next 40 years, compared to only 12% who agreed or strongly agreed with that statement. Regional perceptions of future water scarcity are somewhat stronger than in the statewide survey results, as shown in Figure V-6. This could be at least partly attributable to the rapid growth and development that is occurring in portions of the Northeast region.

The responses of Central SE residents to the question regarding scarcity of water for the future in the 2021 survey are fairly similar to their responses in the 2012-2013 survey when 70 percent of regional respondents disagreed or strongly disagreed with the same statement.

Figure V-6. Colorado has enough water for the next 40 years.



Note: Northeast region n= 315. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Water-Related Concerns

The survey asked a series of questions to gauge Coloradans’ perceptions of water-related concerns. Using a scale of a one to ten scale, where one means “not concerned at all” and ten means “very concerned,” respondents were asked to rate their level of concern with the following potential water-related issues:

- Water quality in our rivers, lakes and streams;
- Amount of water available for Colorado’s cities and towns;
- Amount of water available for Colorado’s farms and ranches;
- Amount of water for recreational use such as boating, rafting, and fishing;
- Amount of water for fish and wildlife;
- Condition of underground water pipes, dams, and other water utility infrastructure;
- The quality of the water you receive at your home;
- Amount of water used for energy development; and
- Effects of energy development on water quality.

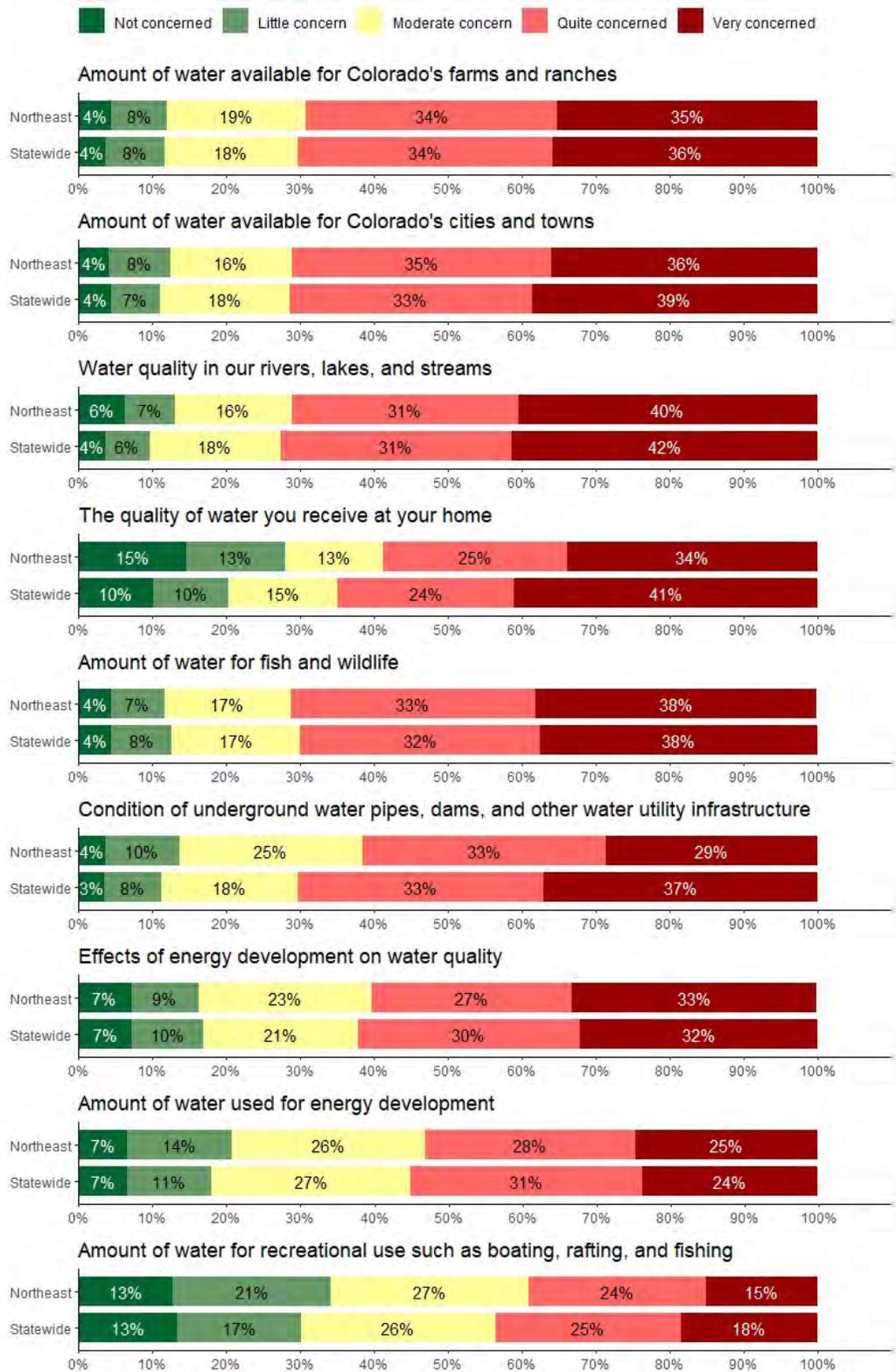
The order in which the potential areas of concern was presented was randomized to avoid potential issues with “starting point bias”, as was also done when the 2012-2013 survey was conducted. Figure V-7 on page V-8 presents the reported level of concern for each issue.

Among Northeast region survey respondents, three of the nine issues tied for the highest level of concern (with a mean score of 7.4 out of 10). These issues were:

- Water quality in our rivers, lakes and streams;
- Amount of water available for Colorado’s cities and towns; and
- Amount of water for fish and wildlife.

The amount of water for Colorado’s farms and ranches followed close behind with a mean score of 7.3.

Figure V-7. Concern about water-related issues



Note: Northeast region n's=348 to 369 (varied by issue). Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Willingness to pay. The survey asked participants whether they would be willing to pay an additional \$1, \$5, \$10, or \$25 per month to address potential water-related issues. Each participant was presented with only one dollar amount, and the amount presented to the participants was varied on a random basis.

Figure V-8 presents those results for Northeast region and statewide survey respondents. The figure reflects a conservative interpretation of respondents' willingness-to-pay by assuming the 20% of regional respondents who indicated either they did not want to answer or did not know were all not willing-to-pay each amount. An alternative interpretation, based on just those who responded either yes or no indicates a higher willingness to pay.

Based on these alternative interpretations of the data, between 53% and 69% of residents in the Northeast region would be willing to pay up to \$10 more per month to address water-related issues. This indicates similar willingness-to-pay to the statewide responses which show that 50% to 65% of all adults in Colorado would be willing-to-pay at least \$10 more per month. Northeast residents' willingness to pay to address water-related concerns was slightly higher across all potential price points than the statewide average.

Figure V-8.
Willingness to pay to address water-related issues

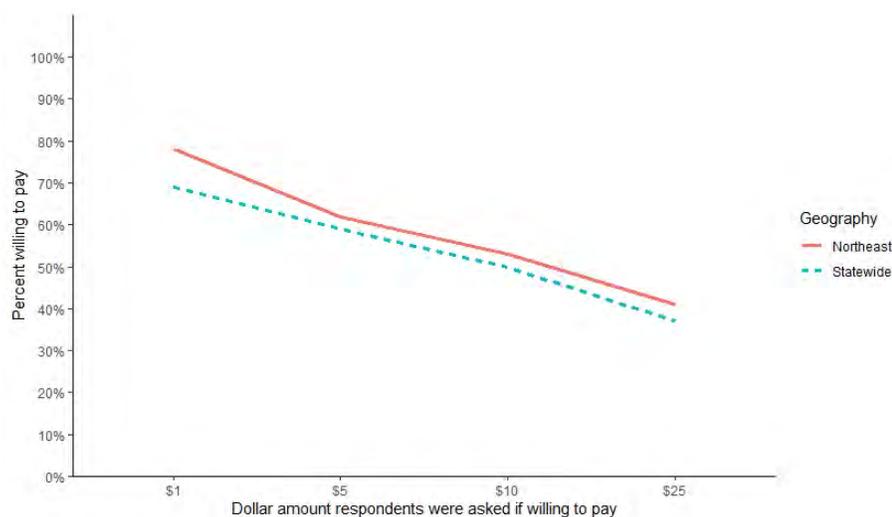
Note:

All "do not know" or "do not wish to answer" responses assumed to be unwilling to pay stated amounts.

Northeast region n=374.

Source:

BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted October-November 2021.



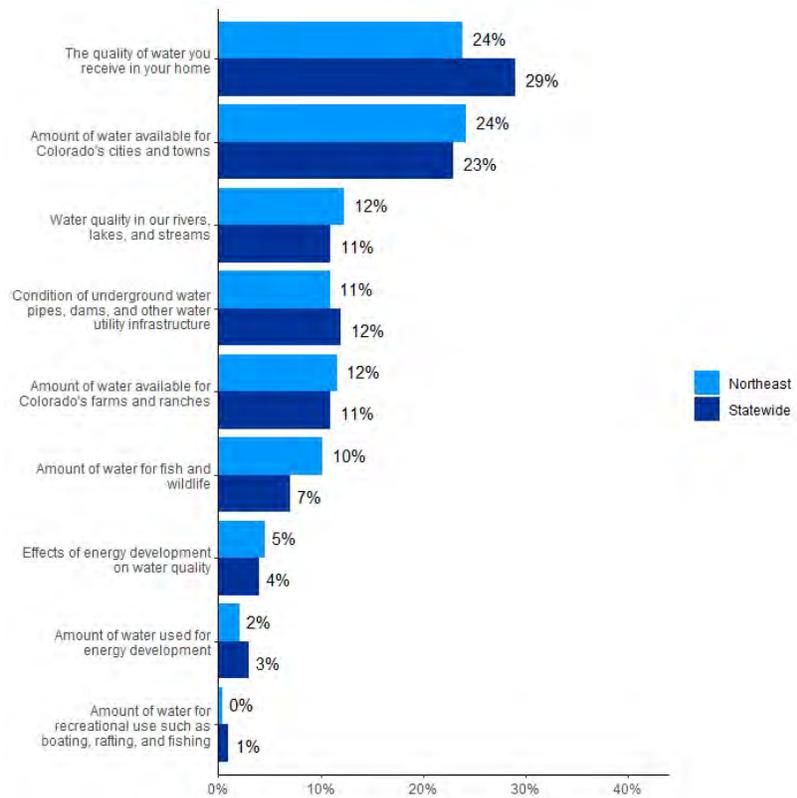
Most important water-related issue. Survey participants were also asked to identify which potential water-related issue is the most important issue that needs to be addressed. As shown in Figure V-9, Northeast respondents most frequently indicated that the quality of water they receive in their homes was the most important potential water-related issue that needs to be addressed (24%) though this issue was selected as the most important one less frequently than statewide (35%). Some of the likely reasons for selecting this issue as one of the most important were discussed in the previous section on statewide survey results, on pages II-13 and II-14. Northeast region residents were equally likely to choose water available for cities and towns as the most important issue as home water quality.

In general, the sequence of the nine issues – ranked in terms of frequency of being selected as the most important water-related issue – was very similar to the statewide results, as shown in Figure V-9.

**Figure V-9.
Most important water-related issue**

Note:
Northeast region n=285.

Source:
BBC Research & Consulting from
Colorado Water Conservation Board
statewide survey conducted October-
November 2021.



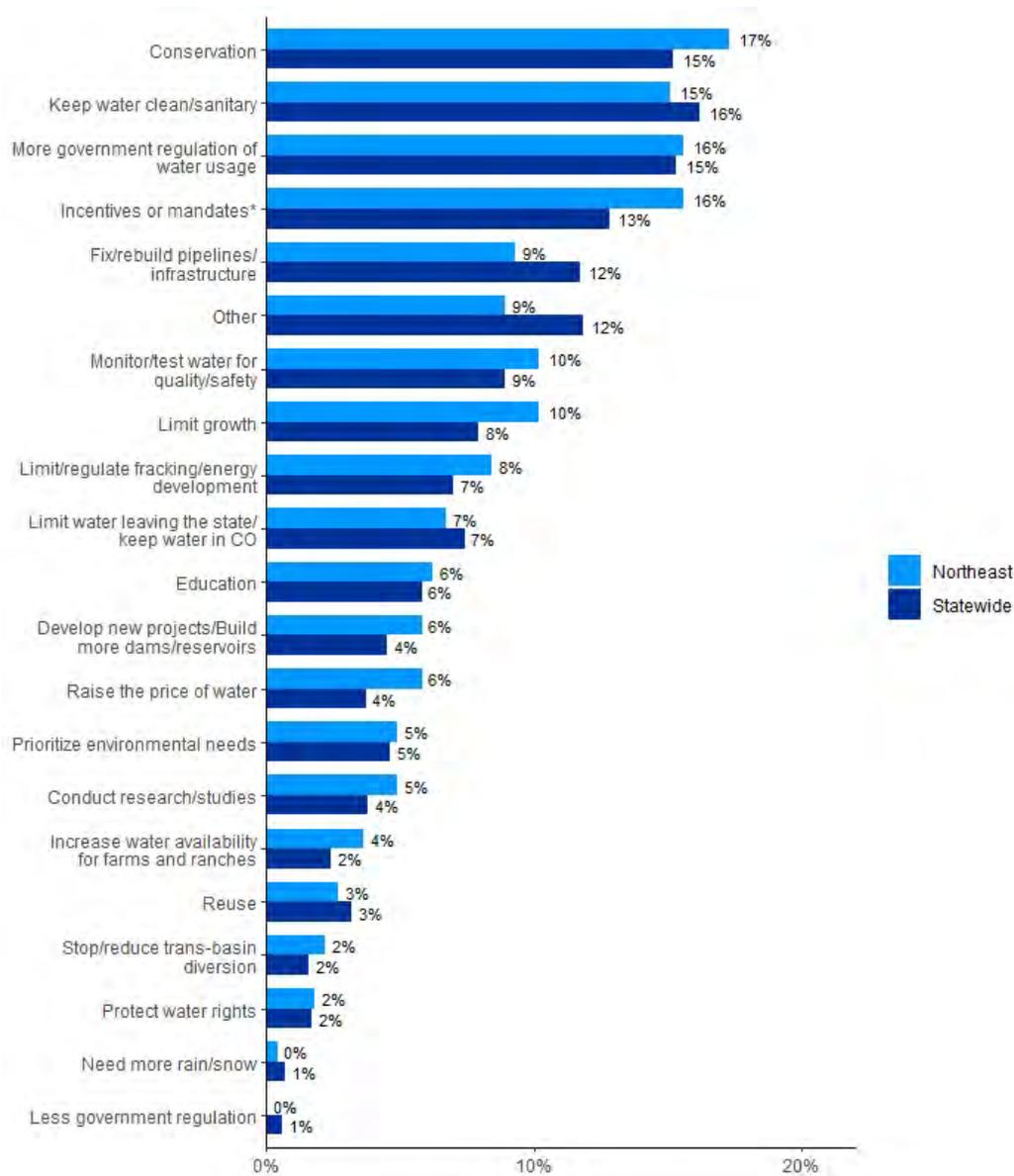
Addressing the most important water-related issues. Survey participants were asked what they thought should be done to address their most important concerns. That question was open-ended (unprompted), but responses (including some multiple responses) were coded by the surveyors. Figure V-10 presents those results.

Overall, Northeast respondents most frequently indicated that their most important potential water-related issue should be addressed by conservation (17%). Northeast region respondents also frequently indicated that their most important concerns should be addressed by:

- More government regulation of water usage (16%),
- Incentives or mandates (15%), or
- Keeping water clean and sanitary (15%).

As noted in Section II regarding the statewide survey results, respondents' choices of what should be done to address their most important water-related concern varied depending on which concern they deemed to be the most important.

Figure V-10. What should be done to address your most important water concern?



Note: *Incentives or mandates were recommended to promote water use efficiency through technology, efficient agricultural methods, efficient housing development and/or lower water use landscaping.

Northeast region n=225. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Knowledge of Important Water Concepts

One of the major changes in the 2021 survey was the inclusion of several questions to test respondents understanding and opinion regarding important water concepts identified by CWCB and members of the water education community. These concepts included:

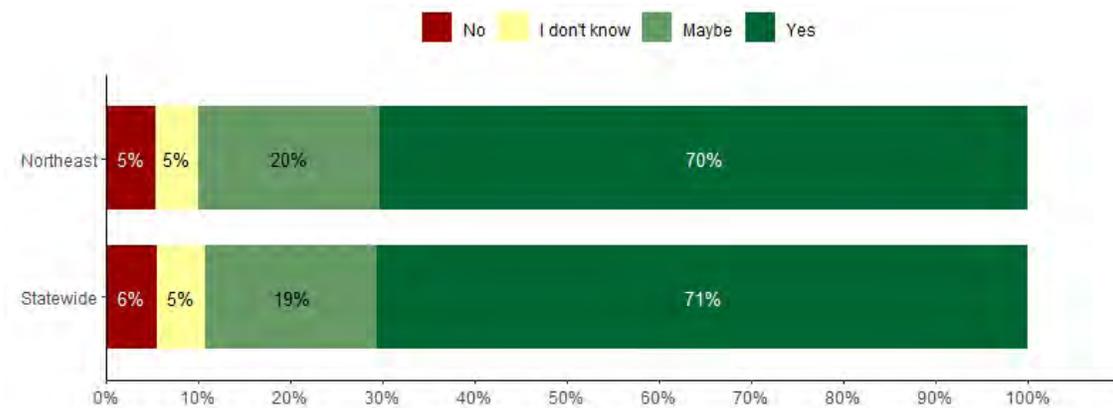
- The relationship between drought in the Colorado River Basin in Western Colorado and the availability of water supplies throughout Colorado;

- Public awareness of interstate agreements that establish limits on Colorado’s ability to use the water in our rivers and streams;
- The relationships between land use planning and climate change and the amount of water we will need in the future;
- Public confidence in their own knowledge and ability to take action to ensure we use our water wisely; and
- Public familiarity, knowledge and opinions regarding Colorado’s Water Plan.

Relationship between drought in Western Colorado and availability of water supply throughout Colorado. In view of the ongoing drought in the Colorado River Basin and record low water storage levels in Lake Powell and Lake Mead, it is important that Colorado residents – particularly those living in the major population centers along the Front Range – understand that their own water supply could be impacted by drought west of the Continental Divide. Survey respondents were specifically asked “Do you believe severe drought that impacts the Colorado River Basin and the Southwestern US could have an impact on the water supply for your own home or business?”

As shown in Figure V-11, the responses of Northeast region residents to this question were nearly identical to statewide responses. Among both groups, the majority of respondents do recognize the linkage between drought in the Colorado River Basin in Western Colorado and their own water supply – even if they live in the Front Range. Approximately 70% of respondents from both the Northeast region and the state as a whole indicated “yes” in response to this question, with about 20% indicating “maybe.” Only 4% of Northeast residents and 6% of statewide residents responded with a definitive “no” – indicating they did not believe drought in the Colorado River Basin would affect their own water supply.

Figure V-11. Do you believe severe drought that impacts the Colorado River Basin and the Southwestern US could have an impact on the water supply for your own home or business?



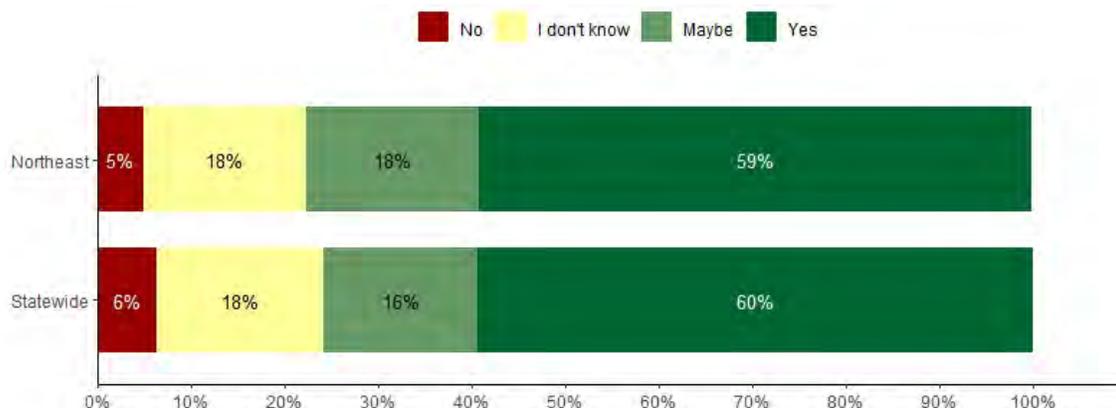
Note: Northeast region n=373. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Understanding that interstate agreements limit Colorado’s use of water from our rivers. Survey respondents were specifically asked “Do you think that legal agreements with neighboring states limit the amount of water Colorado can use from its rivers?” Once again, as shown in Figure V-12, responses from the Northeast region were very similar to those across

Colorado, with nearly 60% correctly indicating yes to this question and another 18% indicating “maybe.” Eighteen percent of Central SE respondents (and statewide respondents) indicated they did not know, while approximately 5% indicated they did not think our water use was limited by interstate legal agreements.

Figure V-12. Do you think that legal agreements with neighboring states limit the amount of water Colorado can use from its rivers?

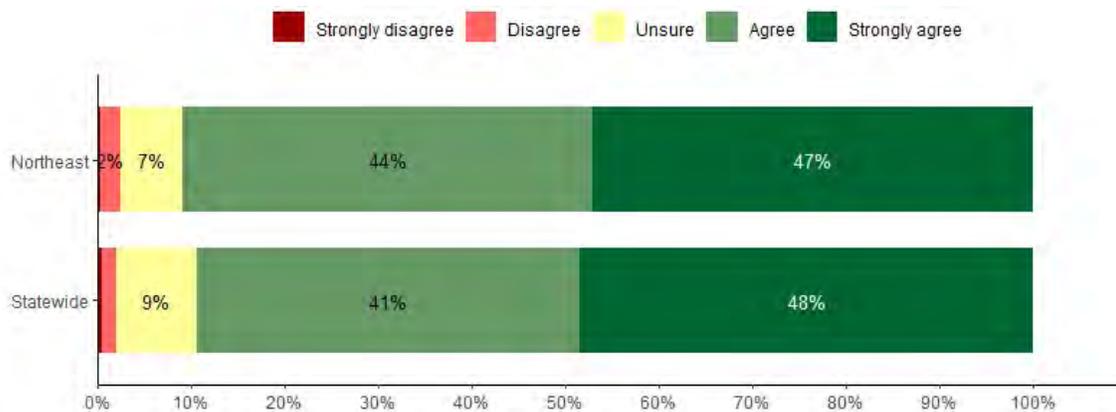


Note: Northeast region n=372. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Recognition of relationship between land use and development planning and future water needs. Survey respondents were next asked whether they agreed or disagreed with the following statement: “We can help manage Colorado’s future water use by carefully planning how we develop new homes, businesses and infrastructure.” As shown in Figure V-13, once again responses among the Northeast residents were very similar to those across the state. Over 90% of survey respondents among both groups agreed or strongly agreed with the statement that careful planning can help manage our future water needs. Only 2% disagreed or strongly disagreed with the statement, though 7% indicated they were unsure whether they agreed or disagreed.

Figure V-13. Agreement that we can help manage Colorado’s future water use by carefully planning how we develop new homes, businesses and infrastructure?



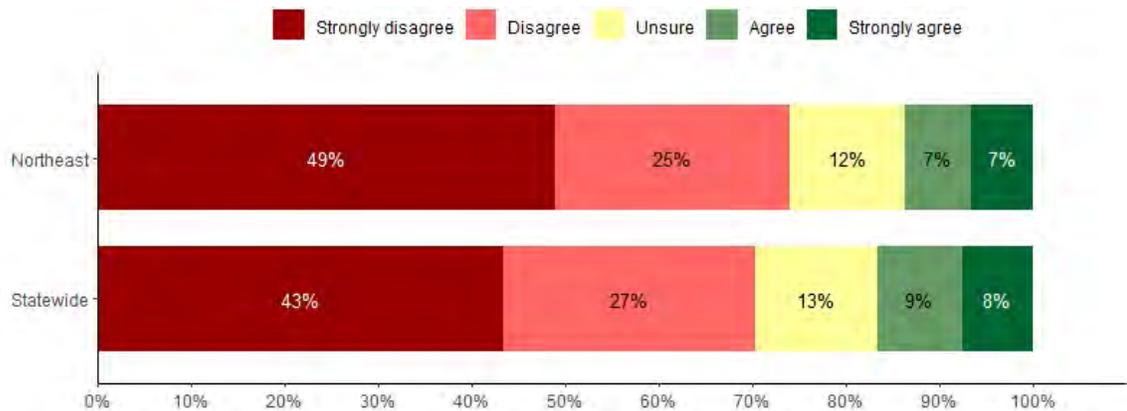
Note: Northeast region n=374. Totals may not add to 100% due to rounding. Percentages less than 2% are not labeled.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Recognition of potential impact of rising temperatures on future water needs. The following question tested awareness that overall increases in temperatures may affect the amount of water we need in the future. This statement was deliberately posed in the negative to break up the pattern in the survey questions that agreement was the correct response.

Respondents were specifically asked whether they agreed or disagreed with the following statement: “The trend of rising temperatures is unlikely to affect Colorado’s future water needs.” As shown in Figure V-14, almost 3/4 of Northeast residents disagreed or strongly disagreed with this statement – indicating they believe rising temperatures will impact our future water needs. Approximately 14% (about one in seven respondents) in the Northeast region agreed or strongly agreed with the statement, while 12 percent were unsure. As shown in Figure V-14, respondents from the Northeast region were a little more likely to believe rising temperatures will affect our future water needs than overall statewide respondents.

Figure V-14. Agreement with statement that the trend of rising temperatures is unlikely to affect Colorado’s future water needs?

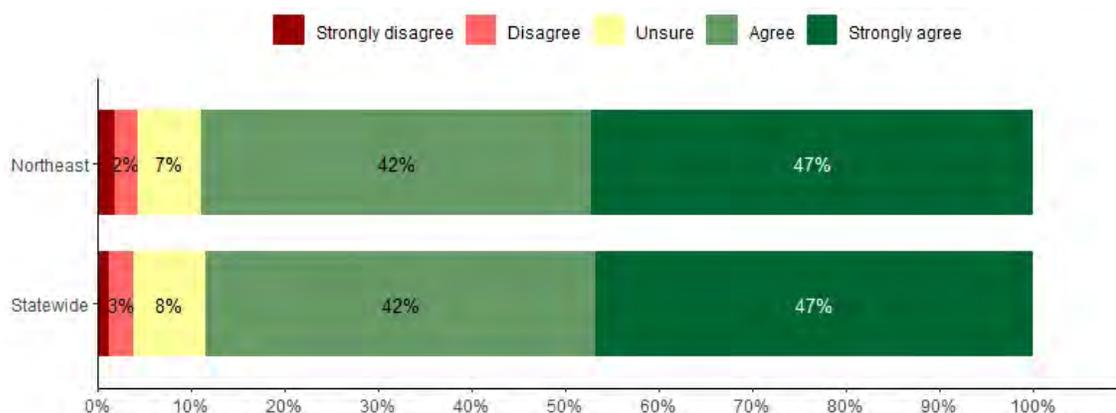


Note: Northeast region n=372. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Recognition of relationship between proactive efforts to meet future water needs and Colorado’s economy. Survey respondents were specifically asked whether they agreed or disagreed with the following statement: “We need to take action in advance to reduce water use and/or increase water supply to continue to grow Colorado’s economy in the future.” As shown in Figure V-15, almost 90% of both Northeast respondents and statewide respondents agreed or strongly agreed with the statement supporting the need for proactive efforts. Only 4% disagreed or strongly disagreed with the statement, while 7% were unsure.

Figure V-15. Agreement that we need to take action in advance to reduce water use and/or increase water supply to continue to grow Colorado’s economy in the future?



Note: Northeast region n=373. Totals may not add to 100% due to rounding. Percentages less than 2% are not labeled.

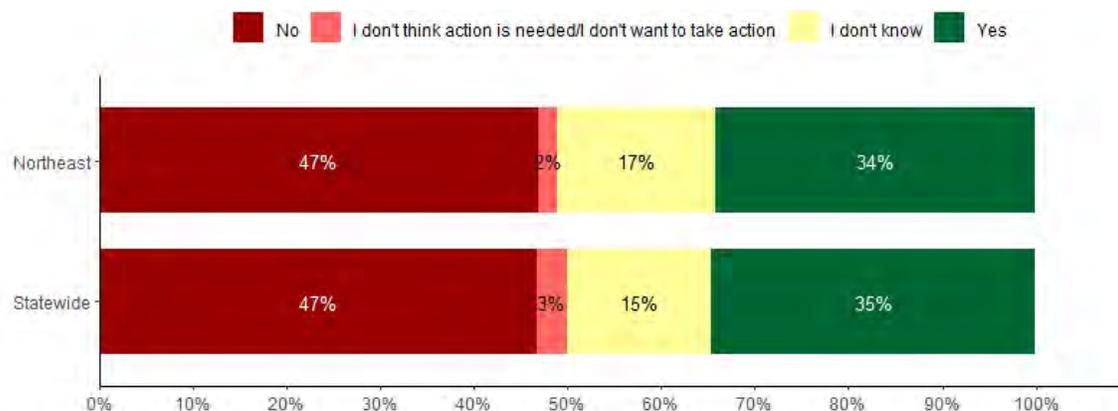
Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Respondents’ confidence in having the knowledge necessary to take an active role in water stewardship. Survey respondents were asked if they had enough information about Colorado’s water situation and potential future water issues to be able to confidently take action or support actions to use our water wisely. This question corresponded to one of the metrics in the Statewide Water Education Action Plan developed by Water Education Colorado.³

As shown in Figure V-16, responses to this question from Northeast residents were nearly identical to the statewide results. Thirty-four percent of regional respondents indicated they were confident that they have the necessary information, while almost one-half (47%) of respondents indicated they did not have enough information to be able to take action. The remaining respondents most frequently indicated they either did not know if they had enough information (17%). Very few respondents in either the Northeast region or statewide indicated that they felt that no action was needed or did not want to take action (2% to 3%).

³ Outcome 3, page 18. Statewide Water Education Action Plan for Colorado 2020-2025. Water Education Colorado.

Figure V-16. Do you have enough information about Colorado’s water situation and potential future water issues to be able to confidently take action or support actions to use our water wisely?



Note: Northeast region n=374. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Trusted Sources of Information

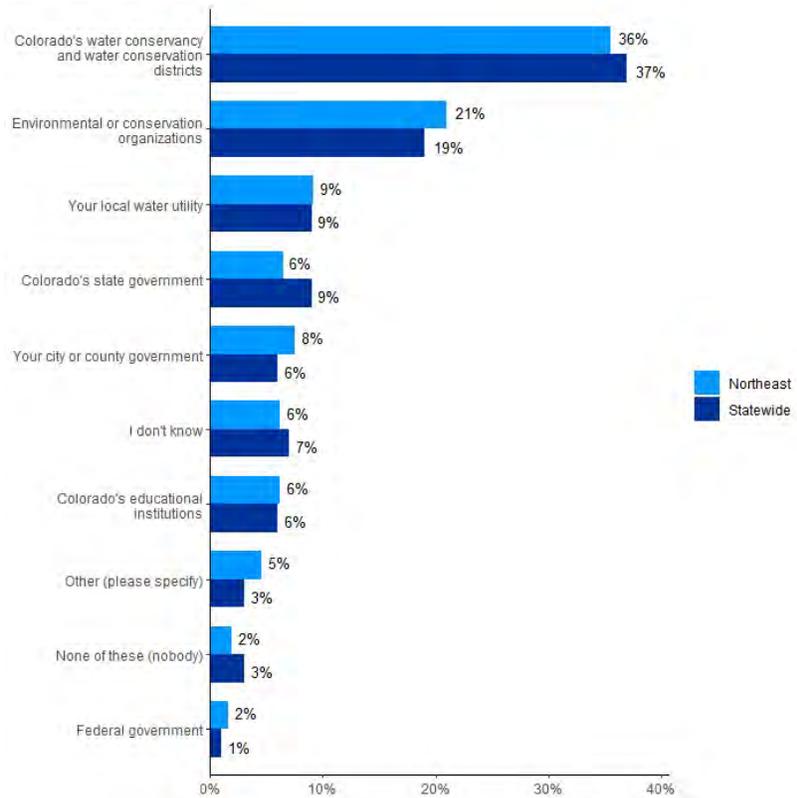
Immediately following the question about respondents’ confidence that they had enough information to be able to take action or support actions regarding water issues, the survey asked respondents to identify which organizations they would most trust to provide reliable information about Colorado’s water situation and potential issues. Figure V-17 presents those results.

In both the Northeast region and the state as a whole, the majority of respondents identified either Colorado’s regional water conservancy and water conservation districts (36% to 37%) or environmental or conservation organizations (19% to 21%) as the sources they would most trust to provide information about water-related issues. Local water utilities or other local governments (cities or counties) were the next most trusted sources. The least trusted source of information about Colorado’s water-related issues was the Federal government (1% to 2%). The rank ordering of the various sources of information was very similar to the results from the 2012-2013 survey.

Figure V-17.
Most trusted sources of information

Note:
 Northeast region n=372. Totals may not add to 100% due to rounding.

Source:
 BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted October-November 2021.



Awareness of the Colorado Water Plan

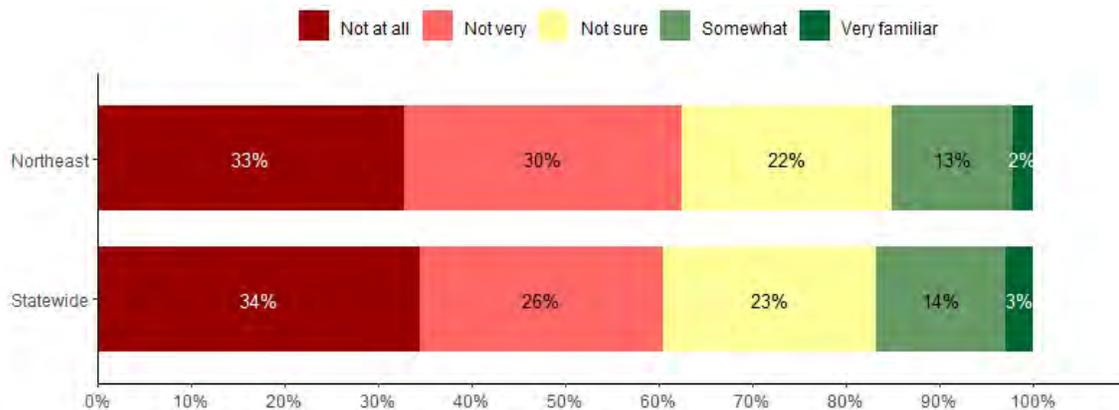
The final section of the survey, prior to gathering demographic information, was designed to gauge awareness of the Colorado Water Plan. The first edition of the Water Plan was issued in 2015, and the second edition is expected to be issued during 2022 or 2023.

Familiarity with the Water Plan. Survey respondents were initially asked “How familiar are you with Colorado’s Water Plan?” The following choices were provided to them:

- Not sure. That is, you don’t know if you have ever seen or heard of the Plan.
- Not at all. That is, you know that you have not heard of or seen the Plan.
- Not very. That is, you remember hearing about or seeing the Plan, but don’t know what it says.
- Somewhat. That is, you have seen or heard about the Plan and have a general idea of what it says.
- Very familiar. That is, you know about the Plan and what it says.

As shown in Figure V-18, most respondents from the Northeast region indicated they were either not familiar with the Water Plan at all (33%) or not very familiar with it (30%). These proportions are similar to the proportion of statewide respondents indicating little or no familiarity with the Water Plan. Fifteen percent of Northeast respondents described themselves as either somewhat familiar or very familiar with the Water Plan, similar to the statewide proportion of 17%.

Figure V-18. Familiarity with Colorado’s Water Plan?

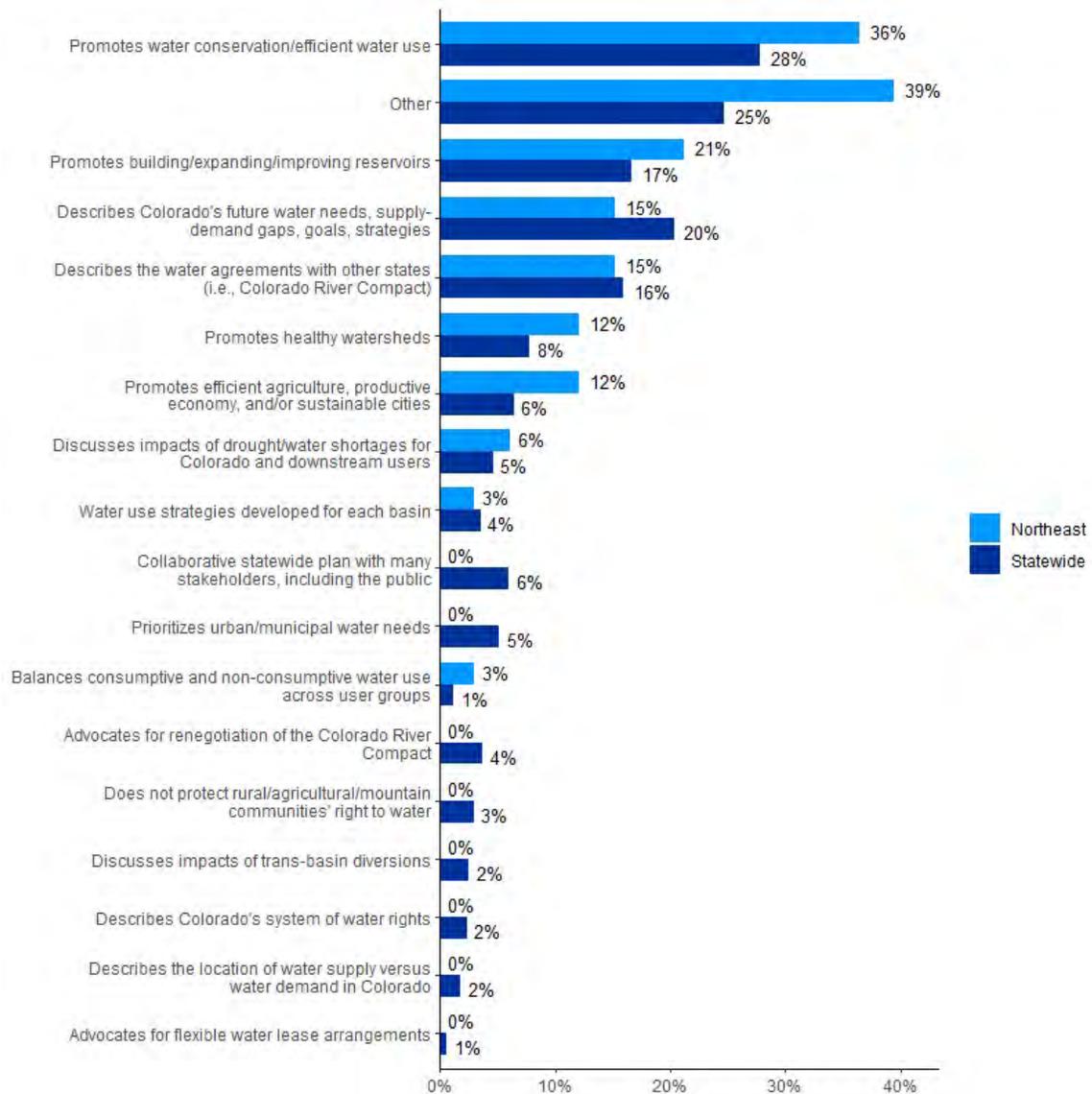


Note: Northeast region n=373. Totals may not add to 100% due to rounding. Percentages less than 2% are not labeled.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

What can you recall about the Water Plan? Survey respondents were next asked an open-ended question about what they remembered about the Water Plan. Given the relative low proportion of respondents who indicated they were familiar with the Plan in the previous question, only 33 Northeast respondents – or a little less than 9% of the total from the Northeast region – provided a relevant response to this question. As shown in Figure V-19, for the most part these respondents correctly recalled many of the important takeaways from the Plan, although some recollections were not accurate. Responses coded as “other” in Figure V-19 ranged from negative comments about government (and the Plan) in general, to concerns that the Plan was not approachable or accessible to the average Coloradan or is underfunded or unenforceable. Since some of the responses included multiple aspects, the percentages shown in Figure V-19 total more than 100%.

Figure V-19. What do you recall from the Water Plan?



Note: Northeast region n=33. Totals may not add to 100% due to rounding.

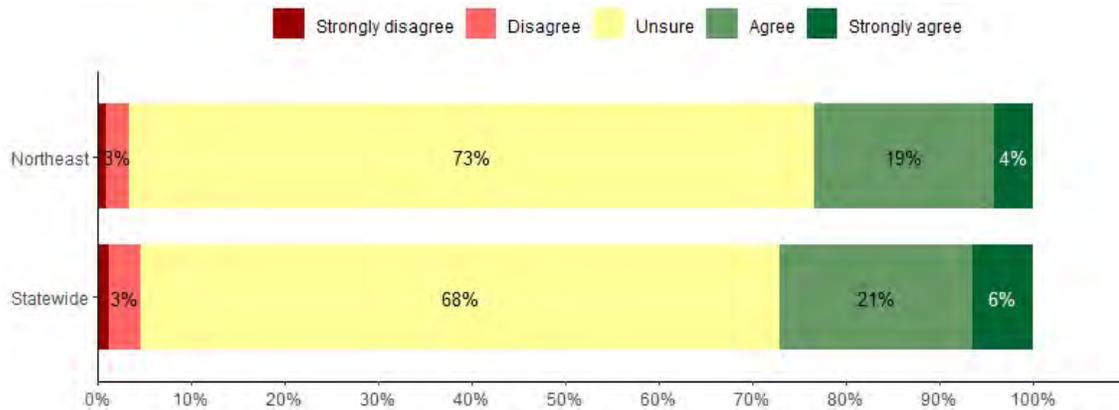
Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Agreement that the Water Plan will help us address our water-related challenges.

Respondents then were asked whether they agreed or disagreed with the following statement: “I think the Colorado Water Plan will help our state to address our water-related challenges in the future.” Given the relatively low awareness and knowledge regarding the Water Plan, the most common answer to this question (73% of Northeast respondents) was “unsure.”

While more Northeast respondents indicated at least some confidence in the utility of the Water Plan (23% agreed or strongly agreed) than not (4% disagreed or strongly disagreed with the statement), confidence in the efficacy of the Water Plan within the Northeast region appears to be a little lower than it is statewide. These results are shown in Figure V-20.

Figure V-20. Colorado’s Water Plan will help Colorado meet our future water challenges?

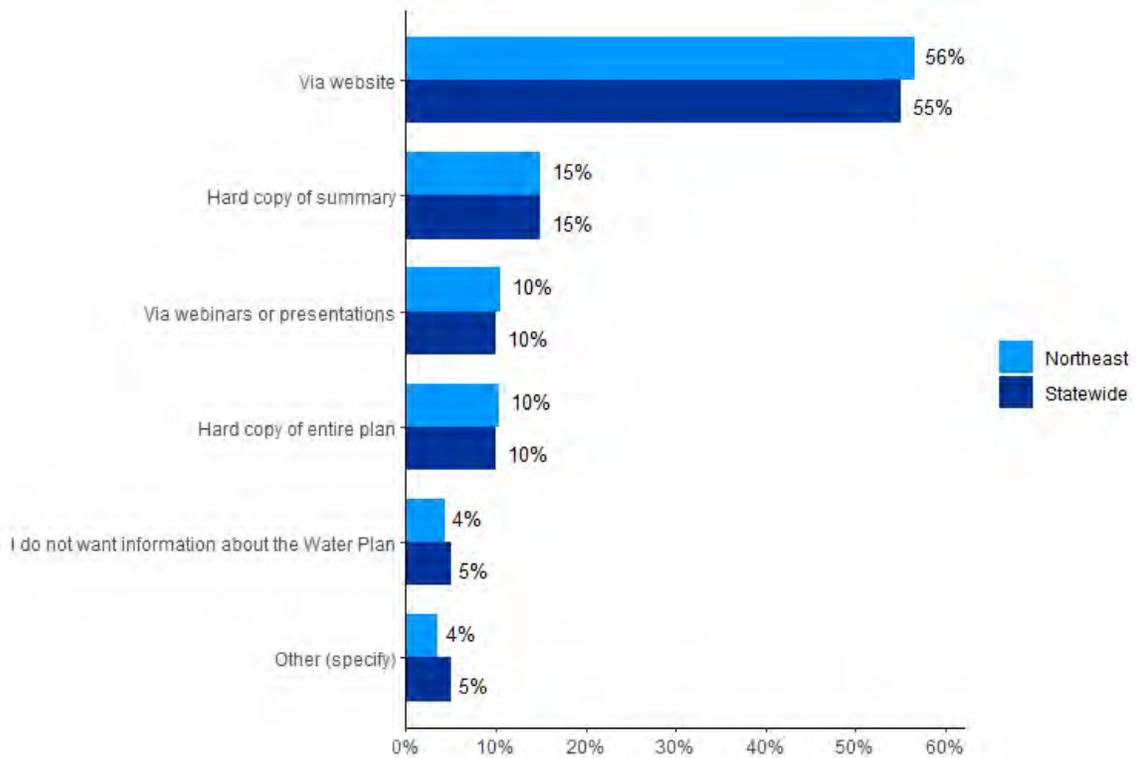


Note: Northeast region n=358. Totals may not add to 100% due to rounding. Percentages less than 2% are not labeled.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Preferred Ways to Learn About Colorado’s Water Plan. Respondents were asked how they would prefer to receive information about the Water Plan. As show in Figure V-21, by far the most common response among Northeast residents (and among statewide respondents) was via a website. Hard copies of a summary of the Water Plan were a more popular method than hard copies of the full document. Only 4% of Northeast respondents indicated they did not want any information about the Water Plan.

Figure V-21. How would you prefer to get information about Colorado’s Water Plan?



Note: Northeast region n=370. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

SECTION VI.

Survey Results from San Luis Region

This section provides detailed information about survey responses from the San Luis region.¹ Surveys were completed with 343 participants who reside in the San Luis region of Colorado. The survey collected responses on key topics, including:

- Knowledge of Colorado water use and awareness of water issues;
- Performance of government agencies;
- Scarcity perceptions;
- Water-related concerns;
- Knowledge of key water-related concepts;
- Awareness and opinion of the Colorado Water Plan;
- Need for more information and most trusted sources; and
- Demographics.

The study team compared San Luis regional responses to statewide responses, as appropriate, for each survey question.²

San Luis Region

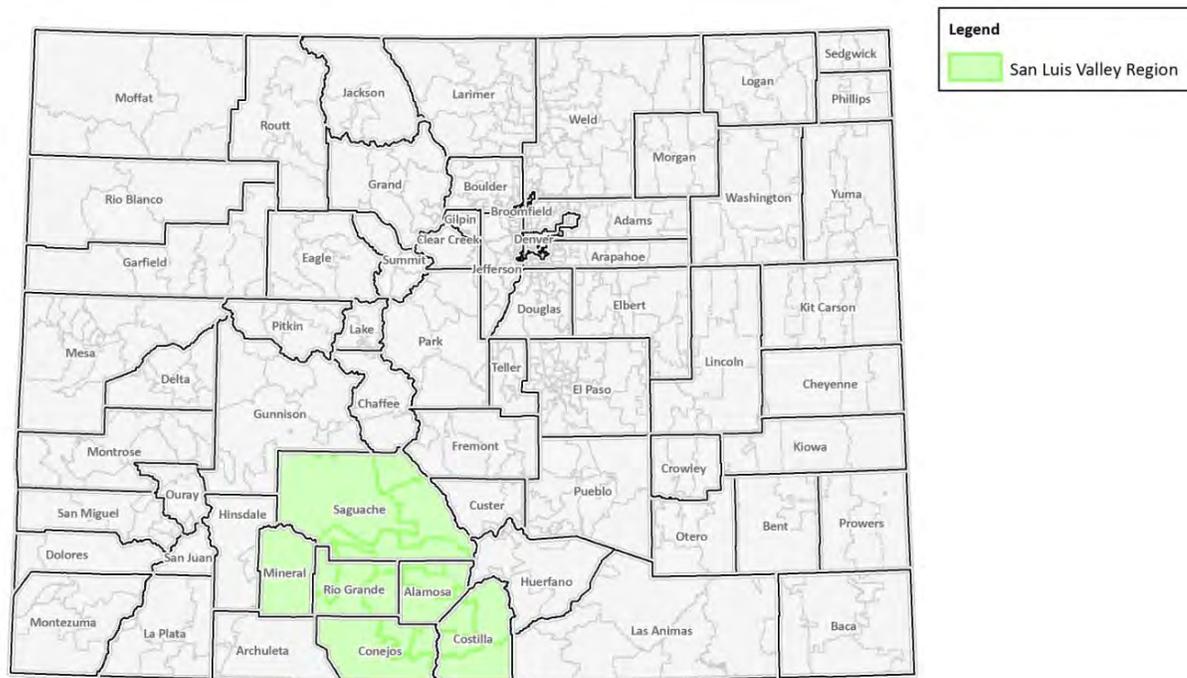
The San Luis region is comprised of the San Luis Valley, located in south central Colorado. The San Luis region contains the headwaters of the Rio Grande River and was the first part of Colorado settled by immigrants of European descent. The San Luis region is the second smallest of the six regions defined for this study in terms of geographic area and has the smallest population among the regions with approximately 36,400 adult residents (age 18 and over) in 2020. Alamosa is the largest city in the San Luis region.

Figure VI-1 presents a map of the San Luis region, as defined in this report.

¹ In this study, the San Luis region includes Alamosa, Conejos, Costilla, Hinsdale, Mineral, Rio Grande, and Saguache counties.

² Statewide survey responses are reported in Section II.

Figure VI-1. San Luis Region



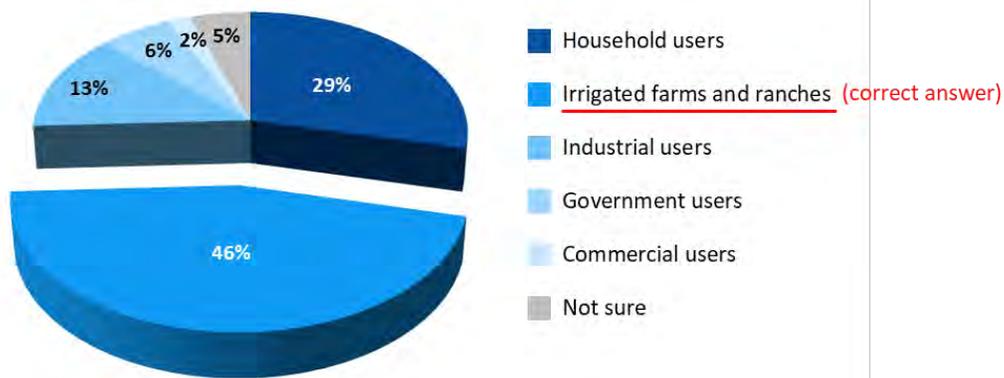
Source: BBC Research & Consulting from Colorado Water Conservation Board.

General Knowledge of Colorado Water Use and Issues

The survey asked several questions to gauge respondents' knowledge of Colorado water use and water-related issues. Initially, respondents were asked to identify which Colorado sector uses the most water. Later in the survey, respondents were also asked "Has any part of your education, work or volunteer experience involved water or water-related issues?"

Sector that uses the most water. When asked which sector uses the most water in Colorado, San Luis region respondents most frequently correctly identified irrigated farms and ranches (46%), as shown in Figure VI-2. Compared to statewide respondents (39%), fewer San Luis respondents (29%) incorrectly identified households as the sector that uses the most water. About 15% of San Luis respondents said that industrial or commercial businesses use the most water in Colorado.

Figure VI-2. Which sector uses the most water in Colorado?



Note: San Luis region n=339. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Involvement with water and water issues. Survey respondents were asked: “Has any part of your education, work or volunteer experience involved water or water-related issues?” Among the 343 respondents in the San Luis region, 338 provided a yes or no answer to this question. Forty-five percent of those respondents indicated some prior involvement with water-issues. This proportion of respondents with prior water-related experience of some type was much higher than the overall statewide proportion of 23 percent, likely reflecting the major role of irrigated agriculture in the San Luis Valley.

Performance of Government Agencies

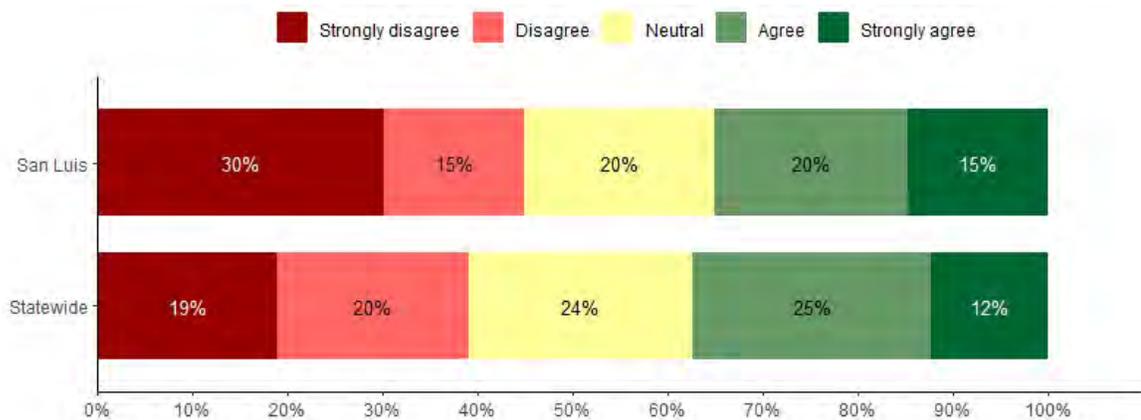
Respondents were asked two questions regarding current regulation and management of water in Colorado. Using a scale of a one to ten, where one means “completely disagree” and ten means “completely agree,” respondents were asked to rate their level of agreement with the following statements:

- Government agencies are doing enough to protect the quality of your drinking water; and
- Government agencies are doing enough to protect the quality of water in Colorado streams, rivers, and lakes.

Figures VI-3 and VI-4 presents those results, respectively.

Overall, about 35% of San Luis respondents agreed or strongly agreed with the statement that “government agencies are doing enough to protect the quality of your drinking water,” though there was not strong support for the statement. This is a lower approval rate than in the 2012-2013 survey (almost 44%), and also a lower approval rate than the statewide results (about 37%).

Figure VI-3. Government agencies are doing enough to protect the quality of your drinking water.



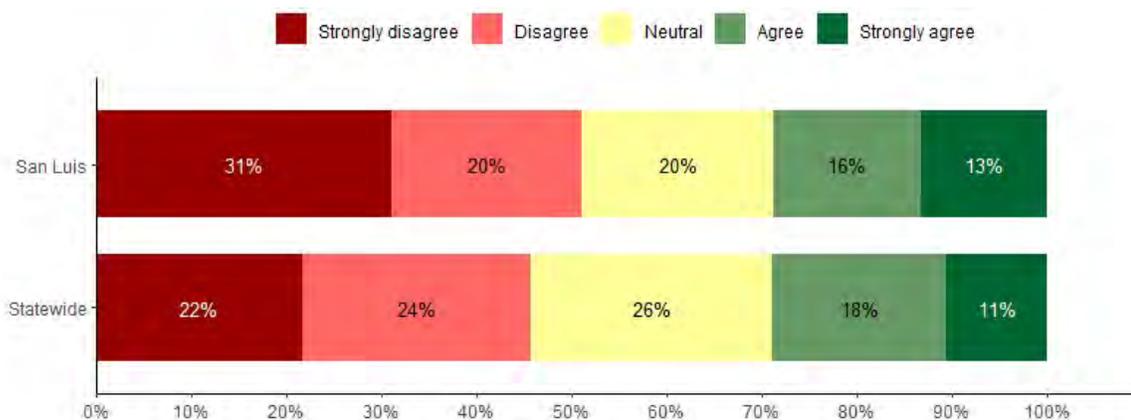
Note: San Luis region n=316. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

San Luis region resident responses to the statement “government agencies are doing enough to protect quality of water in Colorado’s streams, rivers and lakes” was similar. Twenty-nine percent of respondents agreed or strongly agreed with that statement, and 51% of respondents indicated that they disagreed or strongly disagreed with that statement. Twenty percent of respondents provided a neutral response. The proportion of San Luis residents strongly disagreeing that government agencies are doing enough to protect water quality in rivers, lakes and streams (31%), was considerably higher than across the state as a whole (22%). San Luis regional results also indicate a considerably lower approval rating than in the 2012-2013 survey (43% of San Luis respondents agreed or strongly agreed with the same statement in the earlier survey).

The reasons for the more negative results regarding the regulatory performance of government agencies are not entirely clear. The 2021 survey reached a larger proportion of younger adults (ages 18 to 34) and a larger proportion of recent migrants to Colorado (within the past 10 years) than in 2012-2013. It is also possible that the increasingly antagonistic political climate over the past nine years has had a general negative impact on public perceptions regarding government performance.

Figure VI-4. Government agencies are doing enough to protect the quality of water in Colorado streams, rivers, and lakes.



Note: San Luis region n=323. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Scarcity Perceptions

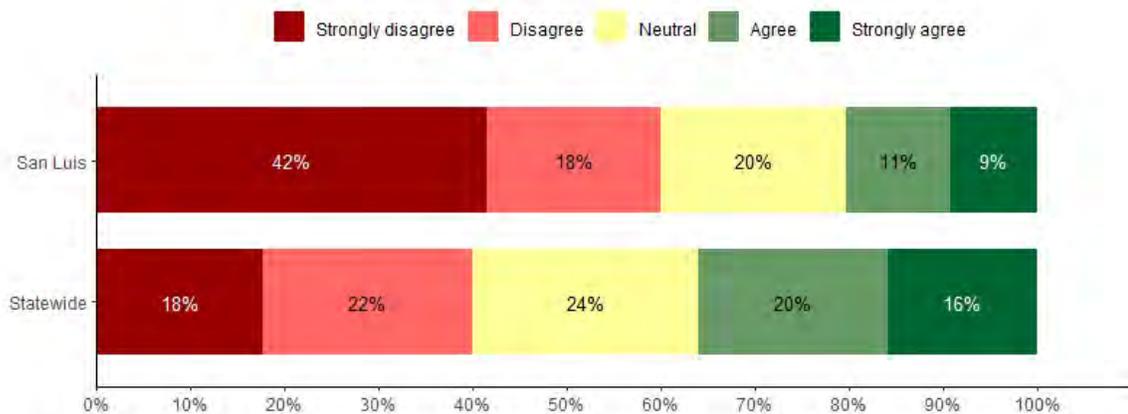
The survey asked two questions about perceptions of water scarcity in Colorado. Using a one to ten scale, where one means “completely disagree” and ten means “completely agree,” respondents were asked to rate their level agreement with the following statements:

- Colorado has enough water available to meet our current needs; and
- Colorado has enough water available to meet our needs for the next 40 years.

Results from these questions are presented below.

Current water needs. Figure VI-5 shows that residents in the San Luis region were much more likely to disagree or strongly disagree that Colorado has enough water to meet its current needs (60% combined) than statewide residents (40% combined). This result is not surprising given the major efforts that have been underway to reduce groundwater pumping in the San Luis Valley to sustainable levels and to meet water delivery requirements to New Mexico under the Rio Grande Compact. Regional results were very similar to the region’s responses to the same question in the 2012-13 survey.

Figure VI-5. Colorado has enough water to meet our current needs.



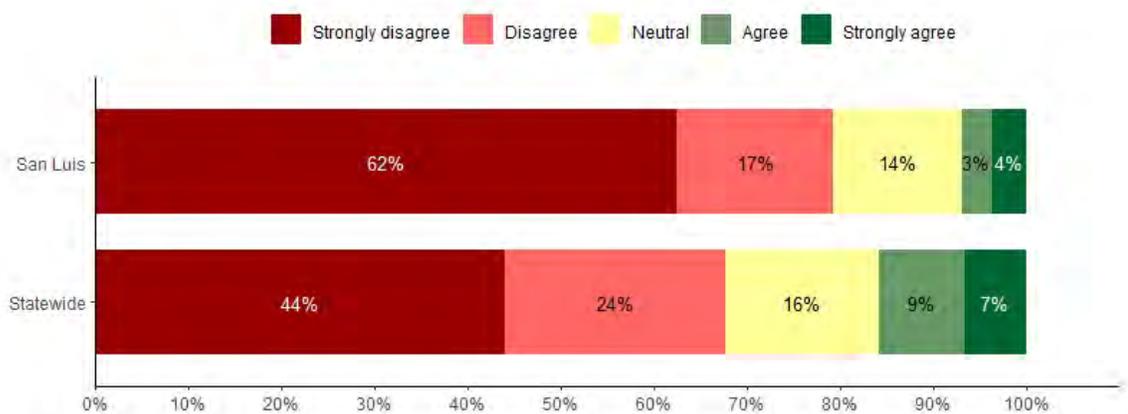
Note: San Luis region n= 325. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Water needs for the next 40 years. Figure VI-6 shows that, on average, San Luis respondents were even more likely to disagree with the statement that “Colorado has enough water available to meet our needs for the next 40 years” than that we have enough water to meet our current needs. Seventy-nine percent of San Luis respondents disagreed or strongly disagreed that we have enough water for the next 40 years, compared to only 7% who agreed or strongly agreed with that statement. Like the region’s heightened perception of current water scarcity shown previously in Figure IV-5, the San Luis region is also more pessimistic regarding the availability of water to meet future needs than the state as a whole, as shown in Figure IV-6.

The responses of San Luis residents to the question regarding scarcity of water for the future in the 2021 survey are nearly identical to their responses in the 2012-2013 survey.

Figure IV-6. Colorado has enough water for the next 40 years.



Note: San Luis region n=317. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Water-Related Concerns

The survey asked a series of questions to gauge Coloradans' perceptions of water-related concerns. Using a scale of a one to ten scale, where one means "not concerned at all" and ten means "very concerned," respondents were asked to rate their level of concern with the following potential water-related issues:

- Water quality in our rivers, lakes and streams;
- Amount of water available for Colorado's cities and towns;
- Amount of water available for Colorado's farms and ranches;
- Amount of water for recreational use such as boating, rafting, and fishing;
- Amount of water for fish and wildlife;
- Condition of underground water pipes, dams, and other water utility infrastructure;
- The quality of the water you receive at your home;
- Amount of water used for energy development; and
- Effects of energy development on water quality.

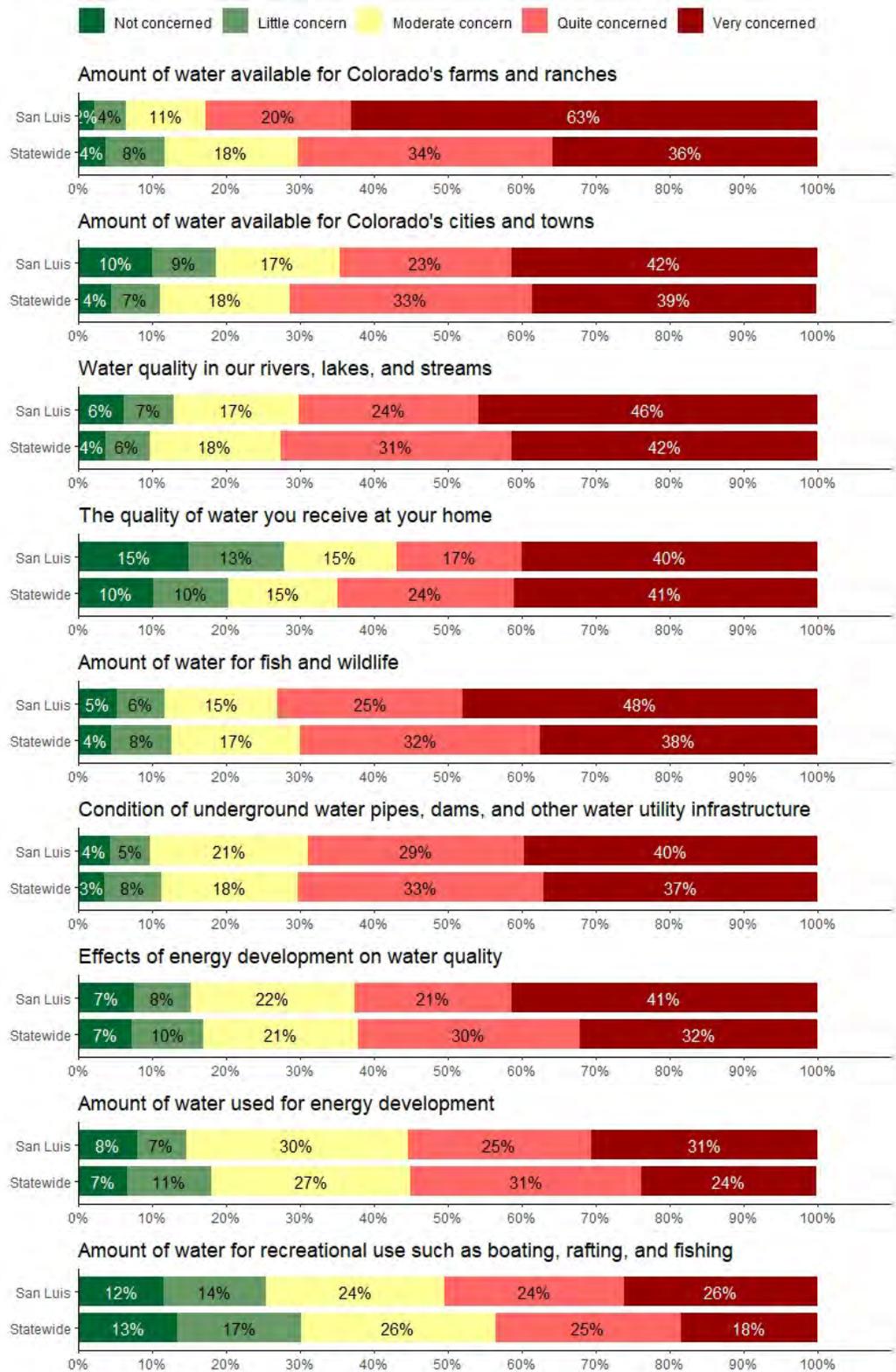
The order in which the potential areas of concern was presented was randomized to avoid potential issues with "starting point bias", as was also done when the 2012-2013 survey was conducted. Figure VI-7 on page VI-8 presents the reported level of concern for each issue.

On average, the amount of water available for Colorado's farms and ranches received the highest rating of concern (8.5 out of 10) from San Luis respondents. This rating was considerably higher than in the statewide results (7.3 out of 10).

Among the nine areas of potential concern posed to the survey respondents, six topics had mean scores greater than 7.0, indicating the average respondent was quite concerned about them. In order, these highest scoring areas of concern among San Luis respondents were:

- The amount of water available for Colorado's farms and ranches (mean score of 8.5),
- The amount of water available for fish and wildlife (mean score of 7.7),
- Water quality in our rivers, lakes and streams (mean score of 7.6),
- The condition of underground water pipes, dams and other water utility infrastructure (mean score of 7.5), and
- The amount of water available for cities and towns, and the effects of energy development on water quality (both scoring 7.2).

Figure VI-7. Concern about water-related issues



Note: San Luis region n's=317 to 342 (varied by issue). Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Willingness to pay. The survey asked participants whether they would be willing to pay an additional \$1, \$5, \$10, or \$25 per month to address potential water-related issues. Each participant was presented with only one dollar amount, and the amount presented to the participants was varied on a random basis.

Figure VI-8 presents those results for San Luis region and statewide survey respondents. The figure reflects a conservative interpretation of respondents' willingness-to-pay by assuming the 30% of regional respondents who indicated either they did not want to answer or did not know were all not willing-to-pay each amount. An alternative interpretation, based on just those who responded either yes or no indicates a higher willingness to pay.

Based on these alternative interpretations of the data, between 37% and 52% of residents in the San Luis region would be willing to pay up to \$10 more per month to address water-related issues. This indicates less willingness-to-pay than the statewide responses which show that 50% to 65% of all adults in Colorado would be willing-to-pay at least \$10 more per month. San Luis residents were slightly more likely to be willing to pay \$5 per month (40% to 53%) to address water-related concerns, and much more likely to be willing to pay \$1 (59% to 86%) per month.

Figure VI-8.
Willingness to pay to address water-related issues

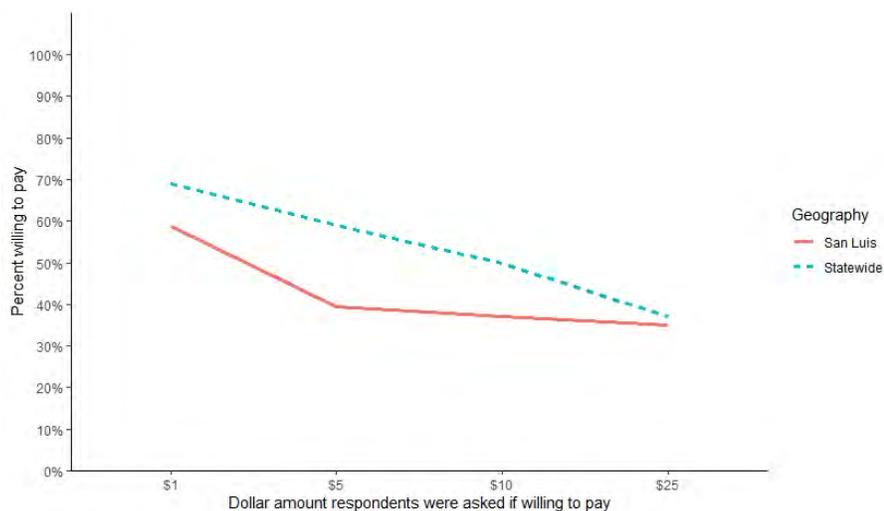
Note:

All "do not know" or "do not wish to answer" responses assumed to be unwilling to pay stated amounts.

San Luis region n=343.

Source:

BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted October-November 2021.

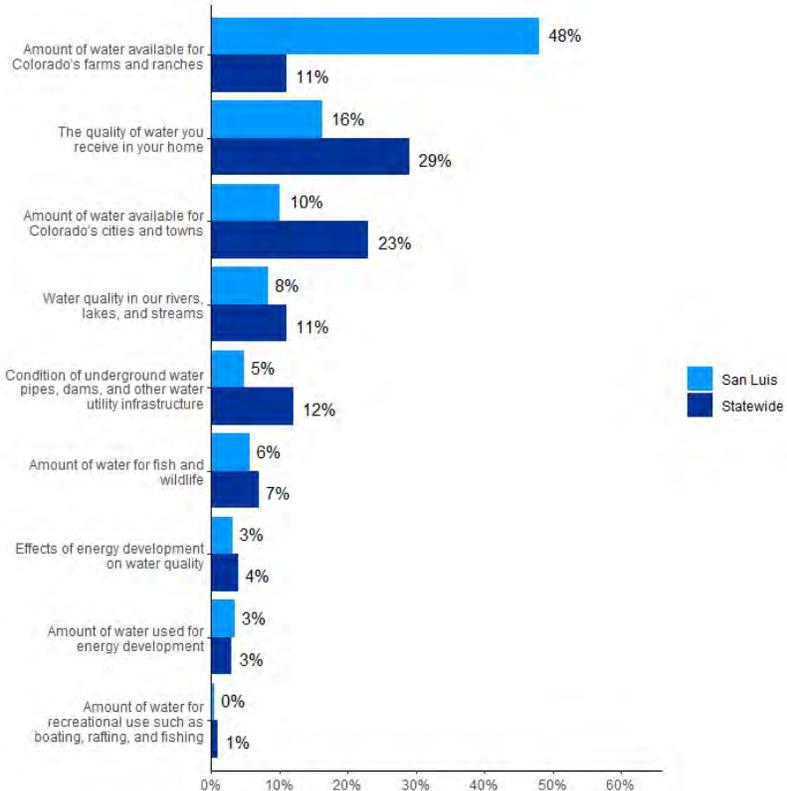


Most important water-related issue. Survey participants were also asked to identify which potential water-related issue is the most important issue that needs to be addressed. As shown in Figure VI-9, San Luis respondents were more than four times more likely to identify the amount of water available for farms and ranches as the most important issue than statewide respondents. Consequently, the proportions of San Luis respondents identifying the quality of water they receive at their home (16%) or the amount of water available for cities and towns (10%) as the most important issue were much lower than average across the state as a whole. These results are generally consistent with the San Luis regional results from the 2012-13 survey.

**Figure VI-9.
Most important water-
related issue**

Note:
San Luis region n=229.

Source:
BBC Research & Consulting from
Colorado Water Conservation Board
statewide survey conducted October-
November 2021.



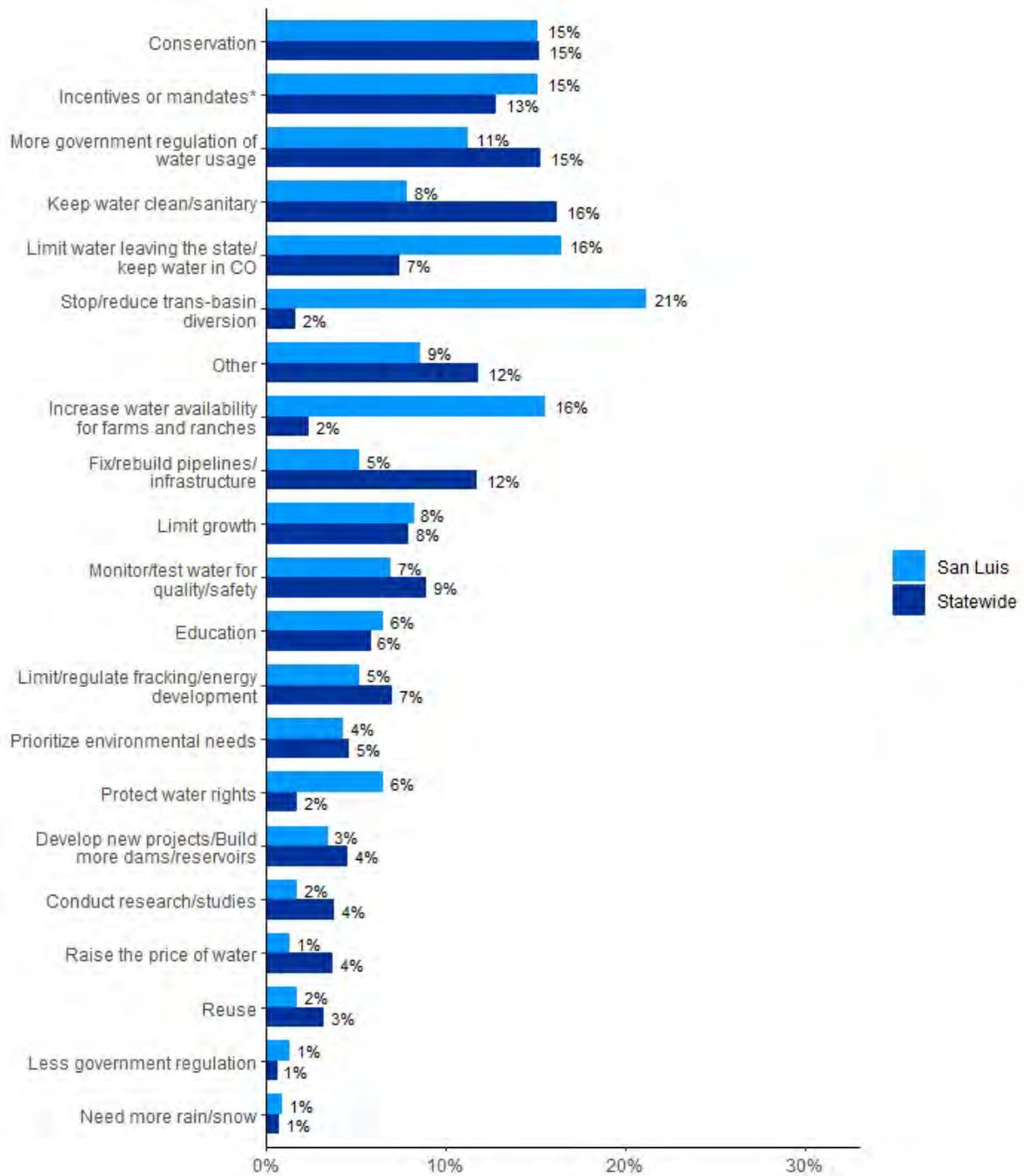
Addressing the most important water-related issues. Survey participants were asked what they thought should be done to address their most important concerns. That question was open-ended (unprompted), but responses (including some multiple responses) were coded by the surveyors. Figure VI-10 presents those results.

Overall, San Luis respondents most frequently indicated that their most important potential water-related issue should be addressed by stopping or reducing trans-basin diversions (21%). Consistent with the region's high level of concern regarding water availability for agriculture, San Luis respondents also frequently indicated that their most important concerns should be addressed by:

- Limiting water leaving the state (16%); or
- More generally increasing water availability for farms and ranches (16%).

Like the previous question regarding the most important water-related concern, the pattern of San Luis region responses regarding what should be done is markedly different than the statewide responses, with less emphasis on home drinking water quality.

Figure VI-10. What should be done to address your most important water concern?



Note: *Incentives or mandates were recommended to promote water use efficiency through technology, efficient agricultural methods, efficient housing development and/or lower water use landscaping.

San Luis region n=232. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Knowledge of Important Water Concepts

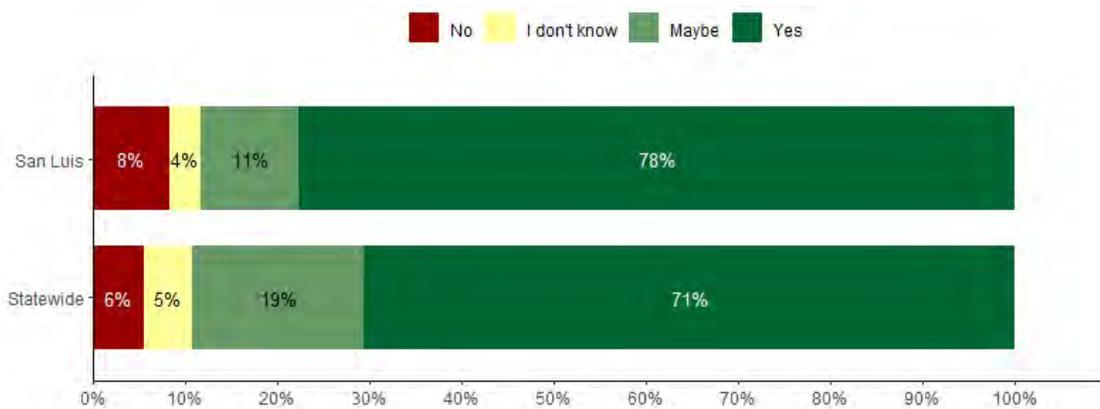
One of the major changes in the 2021 survey was the inclusion of several questions to test respondents understanding and opinion regarding important water concepts identified by CWCB and members of the water education community. These concepts included:

- The relationship between drought in the Colorado River Basin in Western Colorado and the availability of water supplies throughout Colorado;
- Public awareness of interstate agreements that establish limits on Colorado’s ability to use the water in our rivers and streams;
- The relationships between land use planning and climate change and the amount of water we will need in the future;
- Public confidence in their own knowledge and ability to take action to ensure we use our water wisely; and
- Public familiarity, knowledge and opinions regarding Colorado’s Water Plan.

Relationship between drought in Western Colorado and availability of water supply throughout Colorado. In view of the ongoing drought in the Colorado River Basin and record low water storage levels in Lake Powell and Lake Mead, it is important that Colorado residents – particularly those living in the major population centers along the Front Range – understand that their own water supply could be impacted by drought west of the Continental Divide. Survey respondents were specifically asked “Do you believe severe drought that impacts the Colorado River Basin and the Southwestern US could have an impact on the water supply for your own home or business?”

As shown in Figure VI-11, the responses of San Luis residents to this question were generally similar to statewide responses. Among both groups, the majority of respondents recognize the potential linkage between drought in the Colorado River Basin in Western Colorado and their own water supply. Approximately 78% of respondents from the San Luis region answered “yes” to this question (compared to 70% statewide). Interestingly a higher proportion of San Luis residents (8%) also responded with a definitive “no” to this question than across the state – with fewer San Luis residents indicating “maybe” as their response.

Figure VI-11. Do you believe severe drought that impacts the Colorado River Basin and the Southwestern US could have an impact on the water supply for your own home or business?

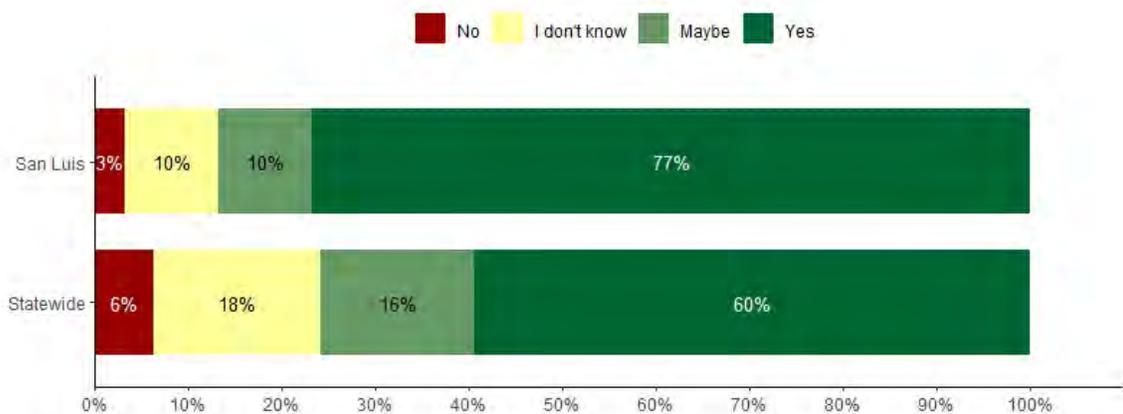


Note: San Luis region n=341. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Understanding that interstate agreements limit Colorado’s use of water from our rivers. Survey respondents were specifically asked “Do you think that legal agreements with neighboring states limit the amount of water Colorado can use from its rivers?” As shown in Figure VI-12, San Luis residents were more likely than statewide respondents to answer this question with a definitive “yes” (77% vs. 60%). Relatively few San Luis respondents (20%) indicated they did not know or “maybe” compared to statewide respondents (34%).

Figure VI-12. Do you think that legal agreements with neighboring states limit the amount of water Colorado can use from its rivers?



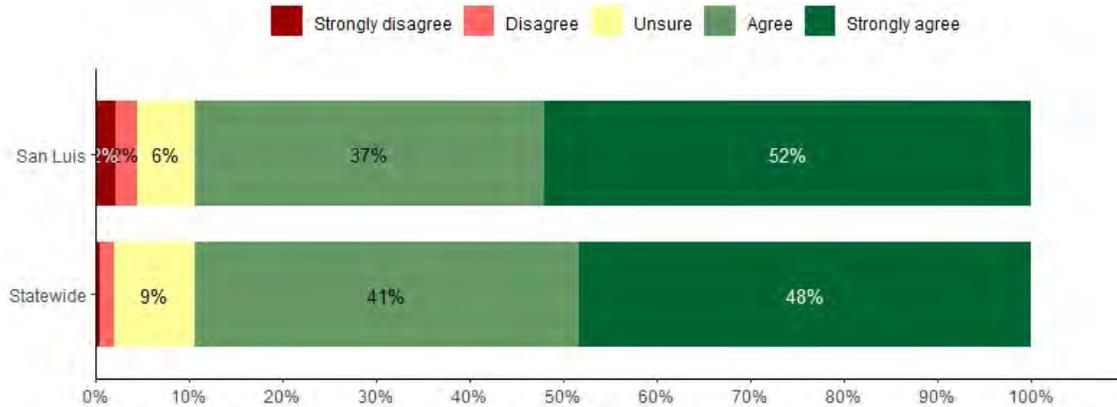
Note: San Luis region n=340. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Recognition of relationship between land use and development planning and future water needs. Survey respondents were next asked whether they agreed or disagreed with the following statement: “We can help manage Colorado’s future water use by carefully planning how we develop new homes, businesses and infrastructure.” As shown in Figure VI-13, responses among the San Luis residents were quite similar to those across the state. Approximately 90% of survey respondents among both groups agreed or strongly agreed with the statement that careful planning can help manage our future water needs. Less than 5%

(among each of the two groups) disagreed or strongly disagreed with the statement, though six to nine percent indicated they were unsure whether they agreed or disagreed.

Figure VI-13. Agreement that we can help manage Colorado’s future water use by carefully planning how we develop new homes, businesses and infrastructure?



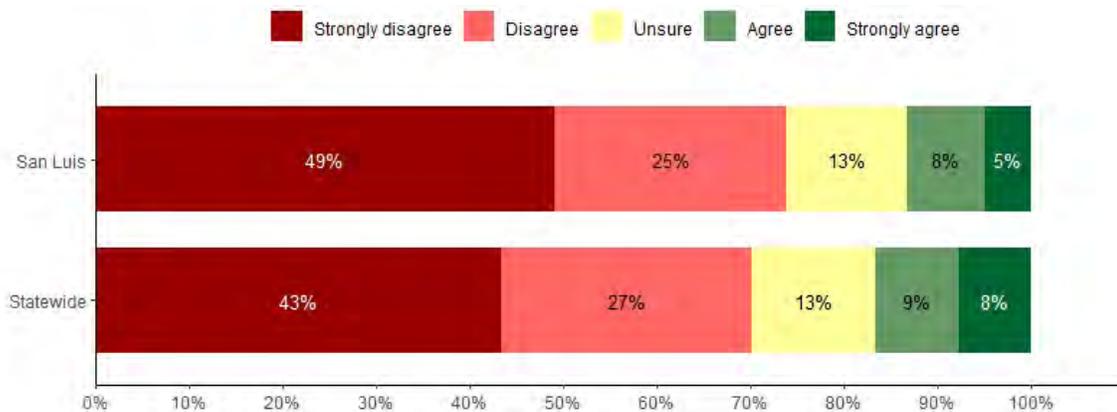
Note: San Luis region n=342. Totals may not add to 100% due to rounding. Percentages less than 2% are not labeled.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Recognition of potential impact of rising temperatures on future water needs. The following question tested awareness that overall increases in temperatures may affect the amount of water we need in the future. This statement was deliberately posed in the negative to break up the pattern in the survey questions that agreement was the correct response.

Respondents were specifically asked whether they agreed or disagreed with the following statement: “The trend of rising temperatures is unlikely to affect Colorado’s future water needs.” As shown in Figure VI-14, nearly ¾ of San Luis residents (74%) disagreed or strongly disagreed with this statement – indicating they believe rising temperatures will impact our future water needs. This is a slightly higher proportion than among the overall statewide responses (70%).

Figure VI-14. Agreement with statement that the trend of rising temperatures is unlikely to affect Colorado’s future water needs?

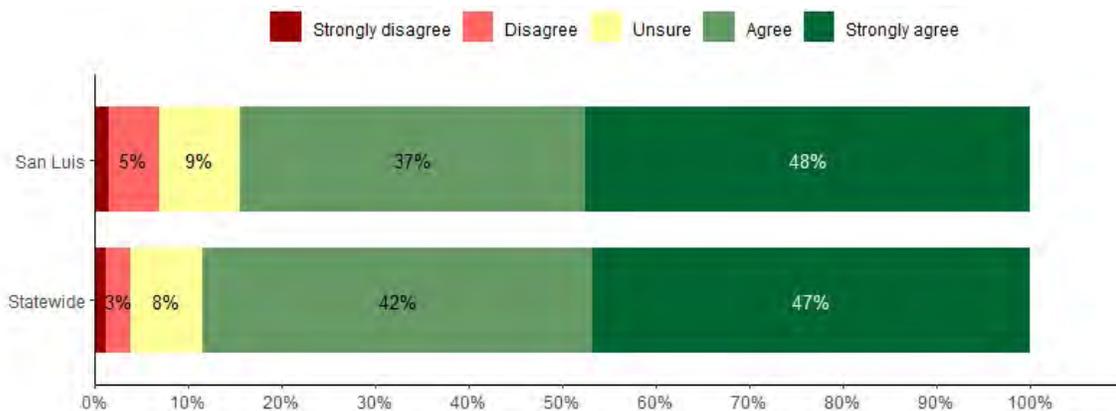


Note: San Luis region n=337. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Recognition of relationship between proactive efforts to meet future water needs and Colorado’s economy. Survey respondents were specifically asked whether they agreed or disagreed with the following statement: “We need to take action in advance to reduce water use and/or increase water supply to continue to grow Colorado’s economy in the future.” As shown in Figure VI-15, the large majority of San Luis respondents agreed or strongly agreed with this statement (85%). Six percent of San Luis respondents disagreed or strongly disagreed with the statement, compared to 3% of statewide respondents.

Figure VI-15. Agreement that we need to take action in advance to reduce water use and/or increase water supply to continue to grow Colorado’s economy in the future?



Note: San Luis region n=336. Totals may not add to 100% due to rounding. Percentages less than 2% are not labeled.

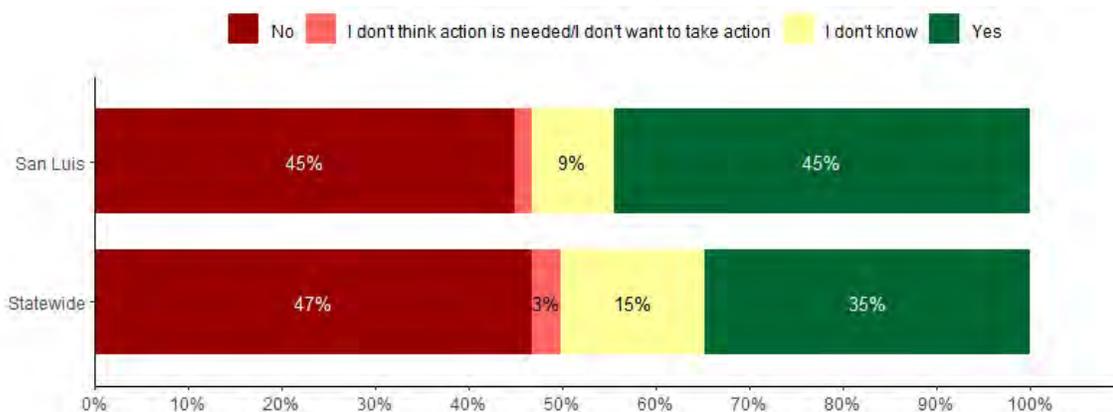
Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Respondents’ confidence in having the knowledge necessary to take an active role in water stewardship. Survey respondents were asked if they had enough information about Colorado’s water situation and potential future water issues to be able to confidently take action or support actions to use our water wisely. This question corresponded to one of the metrics in the Statewide Water Education Action Plan developed by Water Education Colorado.³

As shown in Figure VI-16, San Luis residents were more confident they had the necessary knowledge to take an active role in water stewardship (45%) than respondents across the state as a whole (35%). However, the proportion of both groups that responded with a definitive “no” to this question was very similar. Fewer San Luis respondents indicated they did not know if they had the necessary knowledge (9%) than statewide (15%).

³ Outcome 3, page 18. Statewide Water Education Action Plan for Colorado 2020-2025. Water Education Colorado.

Figure VI-16. Do you have enough information about Colorado’s water situation and potential future water issues to be able to confidently take action or support actions to use our water wisely?



Note: San Luis Region n=332. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Trusted Sources of Information

Immediately following the question about respondents’ confidence that they had enough information to be able to take action or support actions regarding water issues, the survey asked respondents to identify which organizations they would most trust to provide reliable information about Colorado’s water situation and potential issues. Figure VI-17 presents those results.

In both the San Luis region and the state as a whole, the majority of respondents identified either Colorado’s regional water conservancy and water conservation districts (46% and 37% respectively) or environmental or conservation organizations (14% and 19% respectively) as the sources they would most trust to provide information about water-related issues. In the San Luis Valley, the state government and the local city or county government were the next most trusted sources (at 7% for each). Local water utilities received a lower rating among San Luis residents than statewide, though this may simply reflect the large number of San Luis residents whose water is self-supplied from wells and do not have a local water utility.

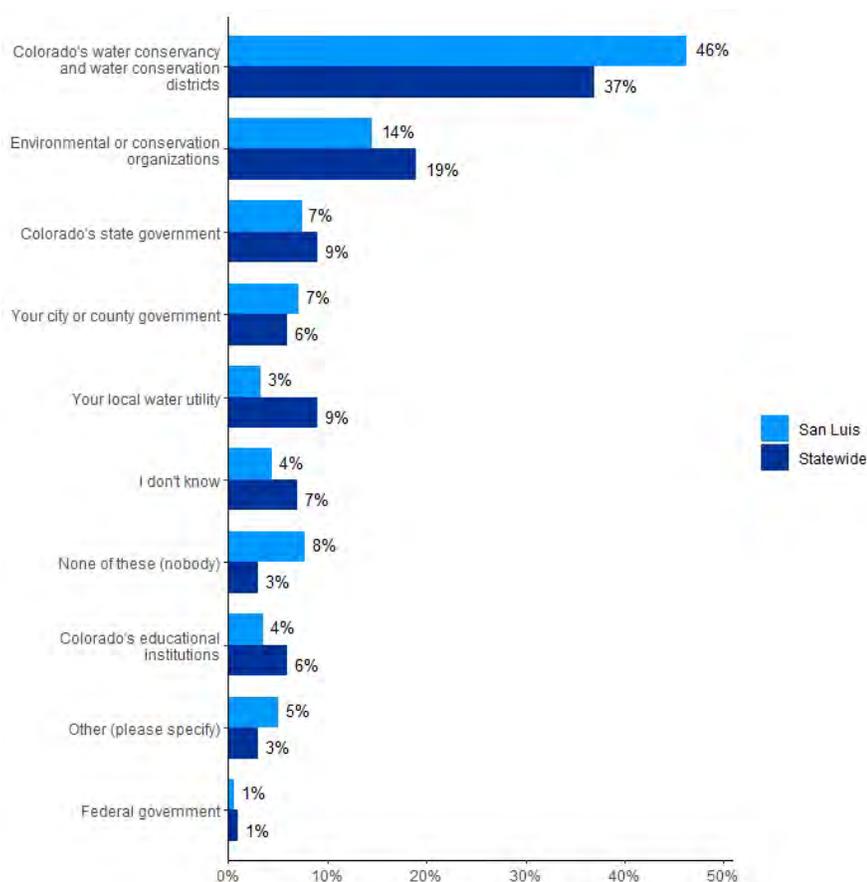
**Figure VI-17.
Most trusted
sources of
information**

Note:

San Luis region n=337. Totals may not add to 100% due to rounding.

Source:

BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted October-November 2021.



Awareness of the Colorado Water Plan

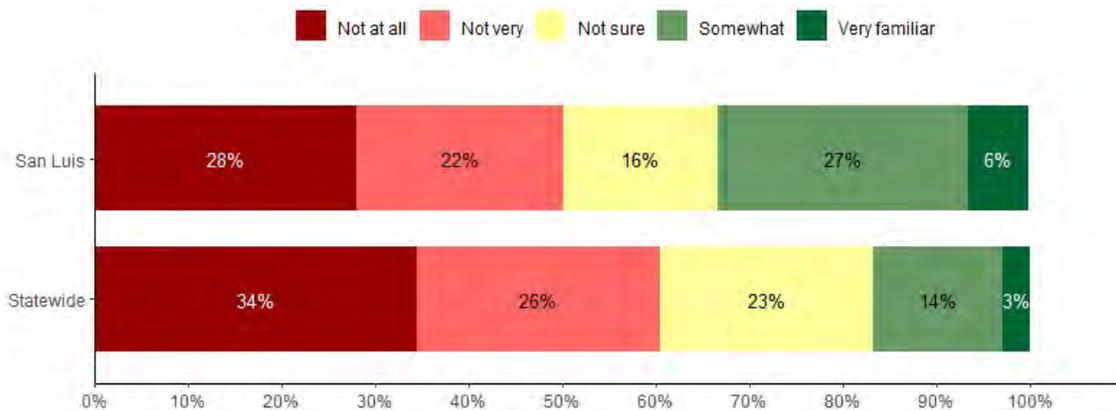
The final section of the survey, prior to gathering demographic information, was designed to gauge awareness of the Colorado Water Plan. The first edition of the Water Plan was issued in 2015, and the second edition is expected to be issued during 2022 or 2023.

Familiarity with the Water Plan. Survey respondents were initially asked “How familiar are you with Colorado’s Water Plan?” The following choices were provided to them:

- Not sure. That is, you don’t know if you have ever seen or heard of the Plan.
- Not at all. That is, you know that you have not heard of or seen the Plan.
- Not very. That is, you remember hearing about or seeing the Plan, but don’t know what it says.
- Somewhat. That is, you have seen or heard about the Plan and have a general idea of what it says.
- Very familiar. That is, you know about the Plan and what it says.

As shown in Figure VI-18, familiarity with the Water Plan was about twice as high in the San Luis region (with 33% indicating they were either somewhat or very familiar) than statewide. Fifty percent of San Luis respondents indicated they were not at all or not very familiar with the Water Plan, a lower proportion than the 60% of statewide respondents.

Figure VI-18. Familiarity with Colorado’s Water Plan?



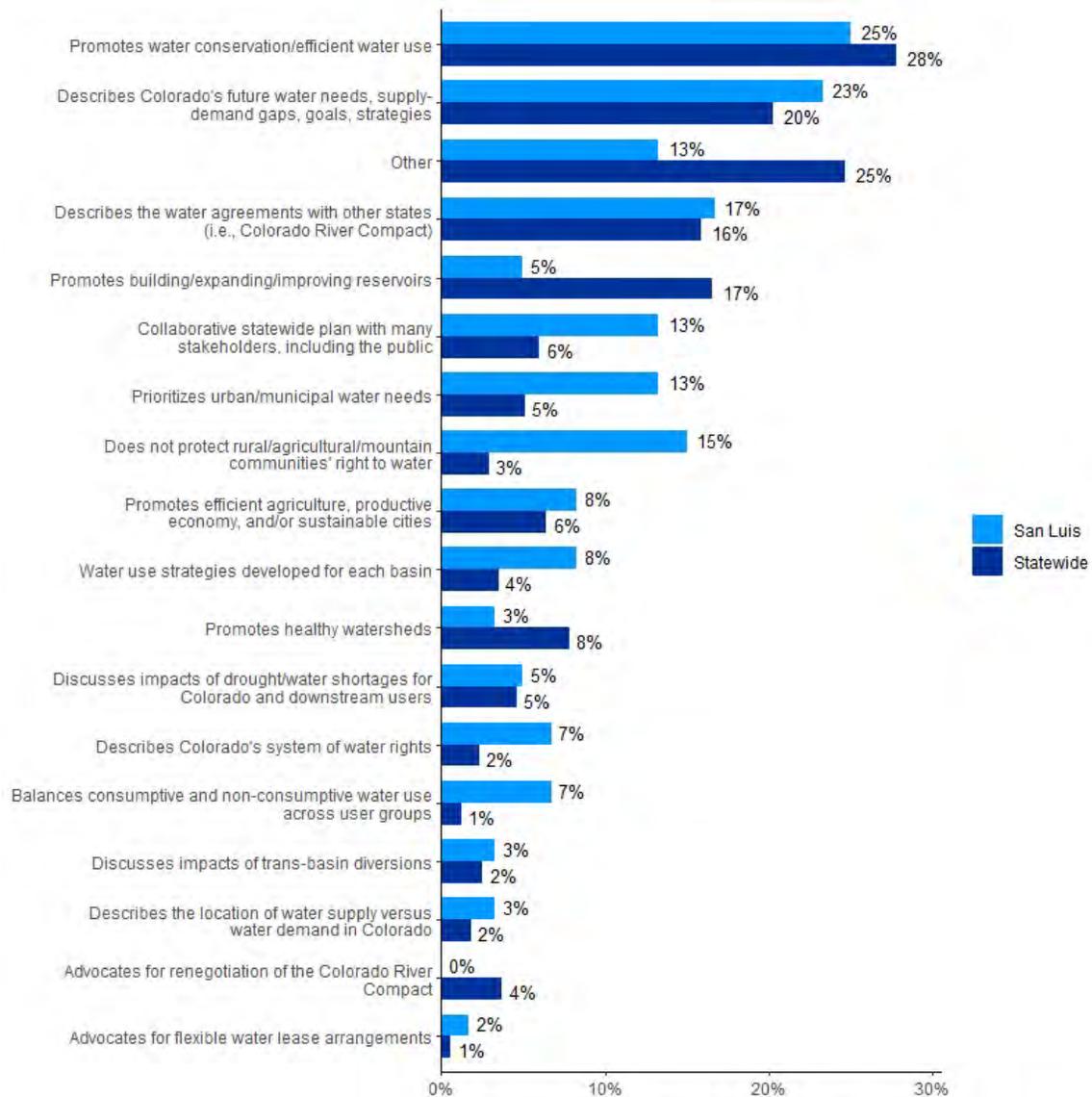
Note: San Luis region n=339. Totals may not add to 100% due to rounding. Percentages less than 2% are not labeled.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

What can you recall about the Water Plan? Survey respondents were next asked an open-ended question about what they remembered about the Water Plan. Sixty San Luis respondents – or about 18% of the total from the San Luis region – provided a relevant response to this question. As shown in Figure VI-19, for the most part these respondents correctly recalled many of the important takeaways from the Plan, although some recollections were not accurate. It is noteworthy that San Luis respondents were more likely to say that the Water Plan either prioritizes urban/municipal water needs (13%) or does not protect rural/agricultural/mountain communities right to water (15%) than statewide respondents.

Responses coded as “other” in Figure VI-19 ranged from negative comments about government (and the Plan) in general, to concerns that the Plan was not approachable or accessible to the average Coloradan or is underfunded or unenforceable. Since some of the responses included multiple aspects, the percentages shown in Figure VI-19 total more than 100%.

Figure VI-19. What do you recall from the Water Plan?



Note: San Luis n=60. Totals may not add to 100% due to rounding.

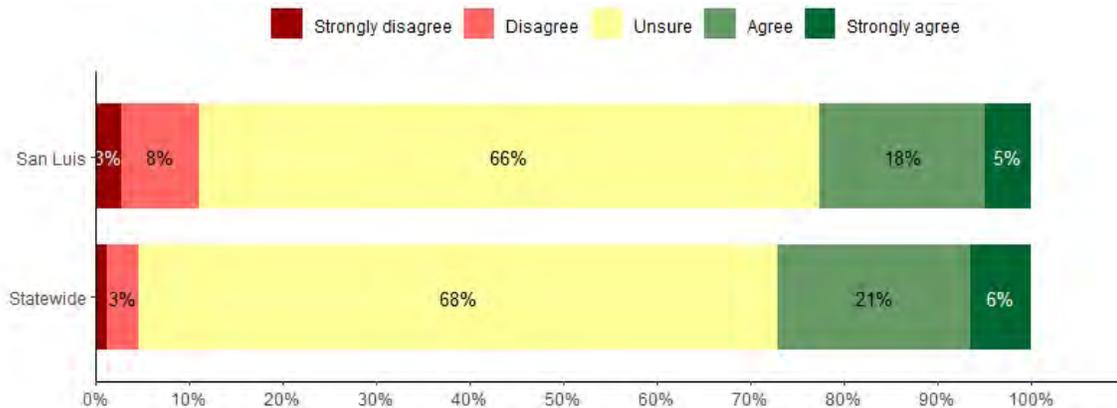
Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Agreement that the Water Plan will help us address our water-related challenges.

Respondents then were asked whether they agreed or disagreed with the following statement: “I think the Colorado Water Plan will help our state to address our water-related challenges in the future.” Given the relatively low awareness and knowledge regarding the Water Plan even in the San Luis region, the most common answer to this question (66% of San Luis respondents) was “unsure.”

While more San Luis respondents indicated at least some confidence in the utility of the Water Plan (23% agreed or strongly agreed) than not (11% disagreed or strongly disagreed with the statement), confidence in the efficacy of the Water Plan within the San Luis region is somewhat lower than it is statewide. These results are shown in Figure VI-20.

Figure VI-20. Colorado’s Water Plan will help Colorado meet our future water challenges?

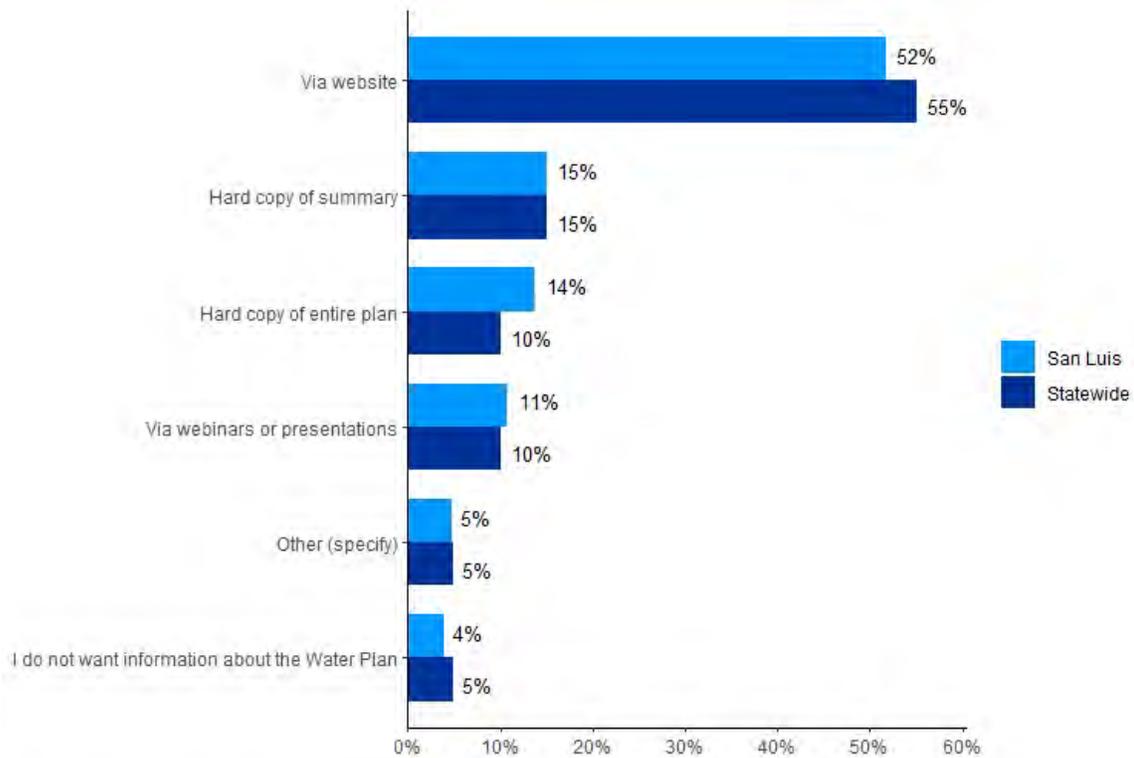


Note: San Luis region n=326. Totals may not add to 100% due to rounding. Percentages less than 2% are not labeled.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Preferred Ways to Learn About Colorado’s Water Plan. Respondents were asked how they would prefer to receive information about the Water Plan. As show in Figure VI-21, by far the most common response among San Luis residents (and among statewide respondents) was via a website. Hard copies of a summary of the Water Plan were a more popular method than hard copies of the full document. Only 4% of San Luis respondents indicated they did not want any information about the Water Plan.

Figure VI-21. How would you prefer to get information about Colorado’s Water Plan?



Note: San Luis region n=333. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

SECTION VII.

Survey Results from Southwest Region

This section provides detailed information about Southwest region survey responses.¹ Surveys were completed with 326 participants who reside in the Southwest region of Colorado. The survey collected responses on key topics, including:

- Knowledge of Colorado water use and awareness of water issues;
- Performance of government agencies;
- Scarcity perceptions;
- Water-related concerns;
- Knowledge of key water-related concepts;
- Awareness and opinion of the Colorado Water Plan;
- Need for more information and most trusted sources; and
- Demographics.

The study team compared Southwest regional responses to statewide responses, as appropriate, for each survey question.²

Southwest Region

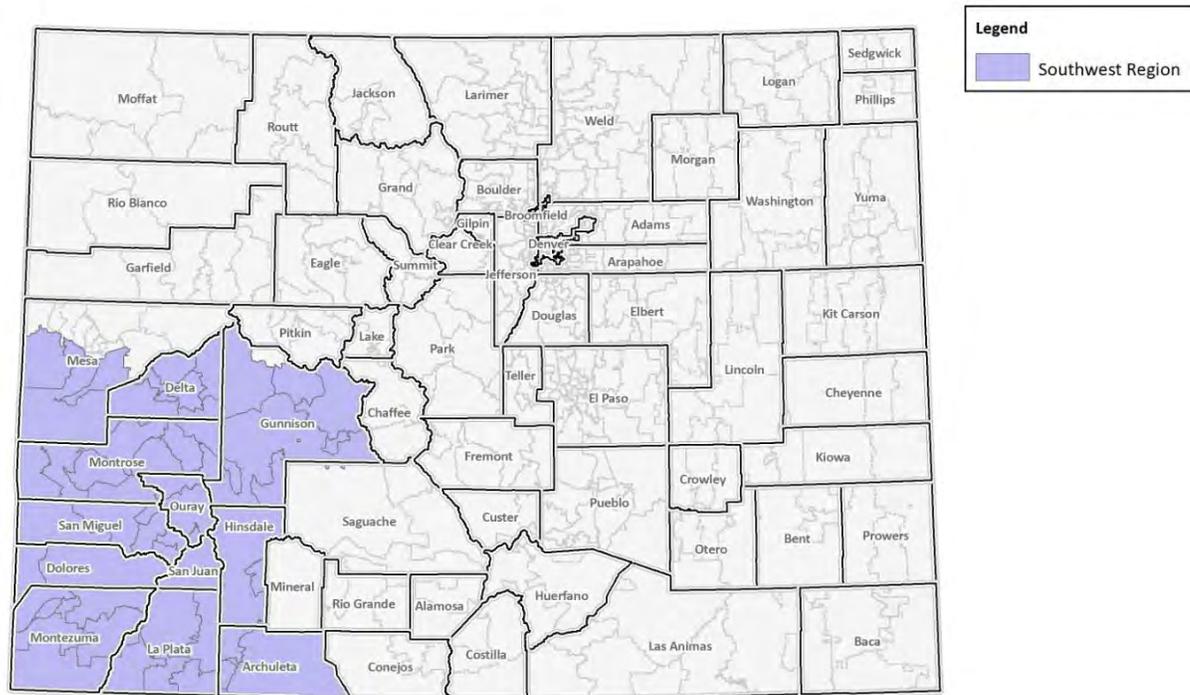
The Southwest region is comprised of the Gunnison Basin and the Dolores, San Juan, and San Miguel Basins (sometimes simply referred to as the Southwest Basin) — all located in southwestern Colorado. The Southwest region had approximately 175,000 adult residents in 2020. Montrose and Durango are the largest cities in the region.

Figure VII-1 presents a map of the Southwest region, as defined in this report.

¹ In this study, the Southwest region of Colorado is defined as the Southwest Basin and the Gunnison Basin.

² Statewide survey responses are reported in Section II.

Figure VII-1. Southwest Region



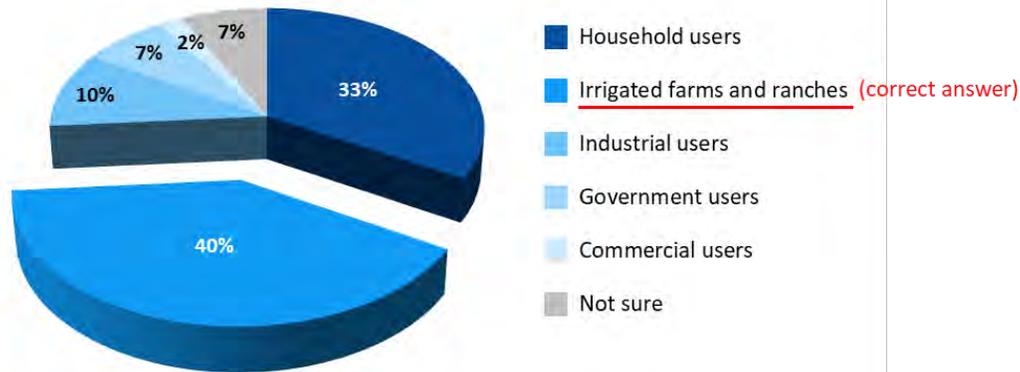
Source: BBC Research & Consulting from Colorado Water Conservation Board.

General Knowledge of Colorado Water Use and Issues

The survey asked several questions to gauge respondents' knowledge of Colorado water use and water-related issues. Initially, respondents were asked to identify which Colorado sector uses the most water. Later in the survey, respondents were also asked "Has any part of your education, work or volunteer experience involved water or water-related issues?"

Sector that uses the most water. When asked which sector uses the most water in Colorado, Southwest respondents most often correctly identified irrigated farms and ranches (40%), as shown in Figure VII-2. Compared to statewide respondents (39%), fewer Southwest respondents (33%) misidentified households as the sector that uses the most water. About 12% of Southwest respondents said that industrial or commercial businesses use the most water in Colorado, while the remainder (15%) either indicated government as the largest user or that they were unsure.

Figure VII-2. Which sector uses the most water in Colorado?



Note: Southwest region n=326. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Involvement with water and water issues. Survey respondents were asked: “Has any part of your education, work or volunteer experience involved water or water-related issues?” Among the 326 respondents in the Southwest region, 297 provided a yes or no answer to this question. Thirty-nine percent of those respondents indicated some prior involvement with water-issues. This proportion of respondents with prior water-related experience of some type was considerably greater than the overall statewide proportion of 23 percent, likely reflecting the large role of irrigated agriculture within the Southwest region.

Performance of Government Agencies

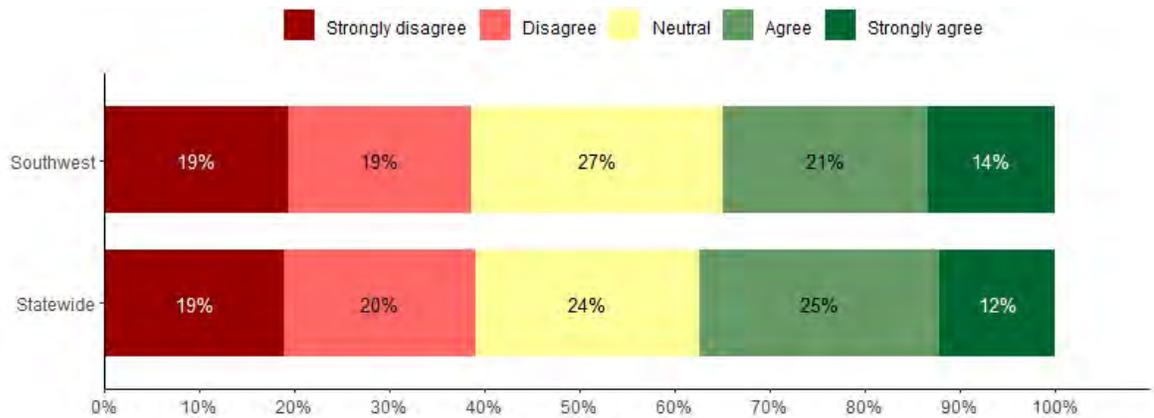
Respondents were asked two questions regarding current regulation and management of water in Colorado. Using a scale of a one to ten, where one means “completely disagree” and ten means “completely agree,” respondents were asked to rate their level of agreement with the following statements:

- Government agencies are doing enough to protect the quality of your drinking water; and
- Government agencies are doing enough to protect the quality of water in Colorado streams, rivers, and lakes.

Figures VII-3 and VII-4 presents those results, respectively.

Overall, about 35% of Southwest respondents agreed or strongly agreed with the statement that “government agencies are doing enough to protect the quality of your drinking water,” though there was not strong support for the statement. This is a lower approval rate than in the 2012-2013 survey (over 42%), but similar to the statewide results in this 2021 survey (about 37%).

Figure VII-3. Government agencies are doing enough to protect the quality of your drinking water.



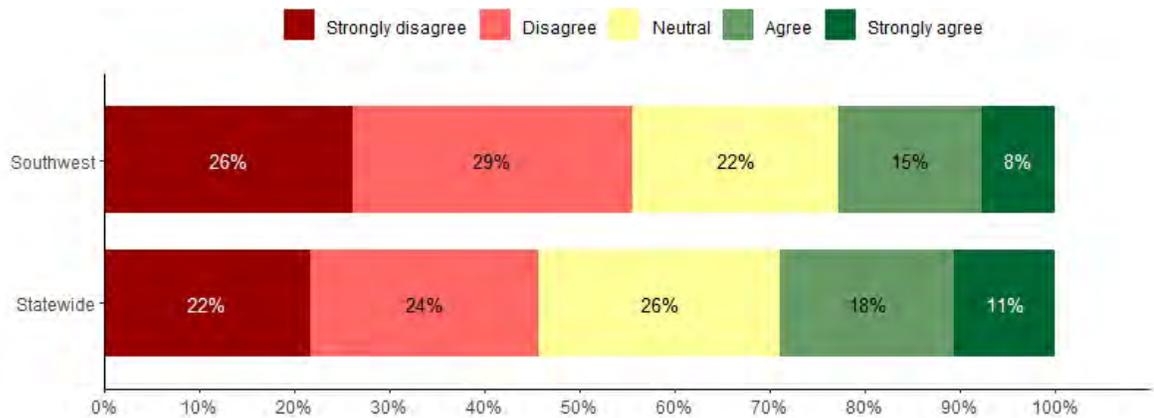
Note: Southwest region n=304. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Southwest resident responses to the statement “government agencies are doing enough to protect quality of water in Colorado’s streams, rivers and lakes” were more critical. Only 23% of respondents agreed or strongly agreed with that statement, and 55% of respondents indicated that they disagreed or strongly disagreed with that statement. Twenty-two percent of respondents provided a neutral response. Those results were more negative than the statewide results, as shown in Figure VII-4, and also indicate a considerably lower approval rating than in the 2012-2013 survey (49% of Central SE respondents agreed or strongly agreed with the same statement).

The reasons for the more negative results regarding the regulatory performance of government agencies are not entirely clear. The 2021 survey reached a larger proportion of younger adults (ages 18 to 34) and a larger proportion of recent migrants to Colorado (within the past 10 years) than in 2012-2013. It is also possible that the increasingly antagonistic political climate over the past nine years has had a general negative impact on public perceptions regarding government performance.

Figure VII-4. Government agencies are doing enough to protect the quality of water in Colorado streams, rivers, and lakes.



Note: Southwest region n=299. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Scarcity Perceptions

The survey asked two questions about perceptions of water scarcity in Colorado. Using a one to ten scale, where one means “completely disagree” and ten means “completely agree,” respondents were asked to rate their level agreement with the following statements:

- Colorado has enough water available to meet our current needs; and
- Colorado has enough water available to meet our needs for the next 40 years.

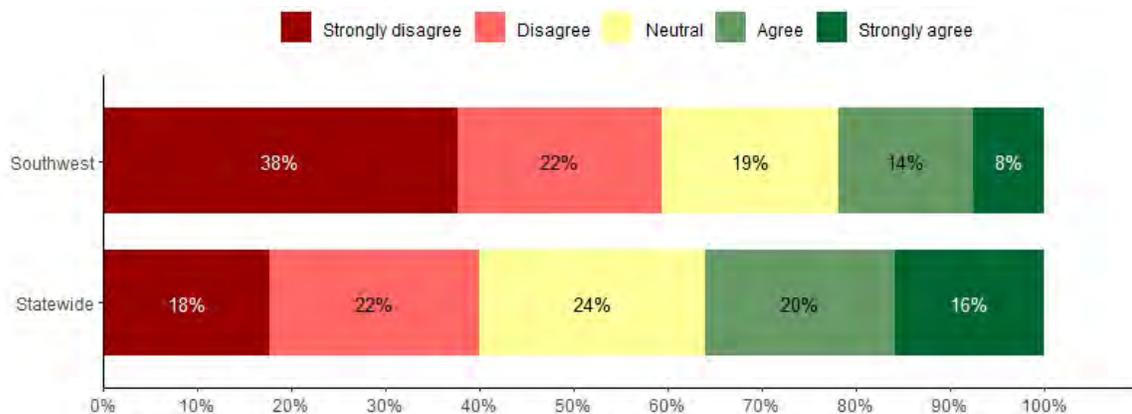
Results from these questions are presented below.

Current water needs. Figure VII-5 shows that Southwest respondents were much more likely to disagree or strongly disagree that Colorado has enough water to meet its current needs (60%) than the statewide sample (40%), indicating a heightened sense of current water scarcity within the region.

Compared to the 2012-2013 survey, 2021 respondents from the Southwest region were again more likely to disagree (or strongly disagree) that we have enough water to meet our current needs (60% in 2021 versus 50% in 2012-2013) – again indicating an increased perception of current water scarcity within the region than nine years ago. In contrast, statewide respondents were slightly less likely to disagree or strongly disagree that we have enough water to meet current needs in the current survey (40%) than in 2012-2013 (46%).

Much of Southwest Colorado has been in a serious drought since 2018 or earlier, resulting in less water available to meet crop irrigation needs than normal. This may be the primary reason for the increased perception of current water scarcity within the region.

Figure VII-5. Colorado has enough water to meet our current needs.



Note: Southwest region n= 314. Totals may not equal 100% due to rounding.

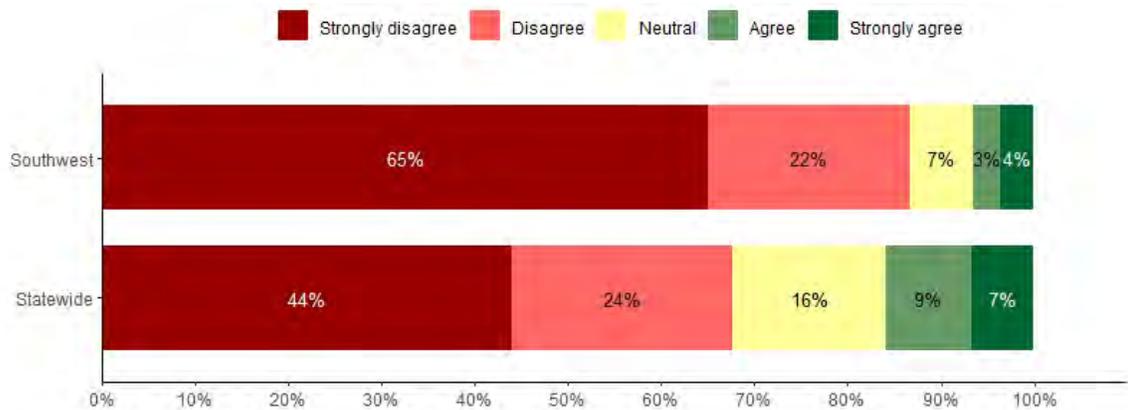
Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Water needs for the next 40 years. Figure VII-6 shows that, on average, Southwest respondents were also much more likely to disagree with the statement that “Colorado has enough water available to meet our needs for the next 40 years” than that we have enough water to meet our current needs. Eighty-seven percent of Southwest respondents disagreed or strongly disagreed that we have enough water for the next 40 years, compared to only 7% who agreed or

strongly agreed with that statement. Regional perceptions of future water scarcity are again more negative than the statewide survey results, as shown in Figure VII-6.

The responses of Southwest residents to the question regarding scarcity of water for the future in the 2021 survey are also more pessimistic than their responses in the 2012-2013 survey (when 70 percent of Southwest respondents disagreed or strongly disagreed with the same statement).

Figure VII-6. Colorado has enough water for the next 40 years.



Note: Southwest region n= 309. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Water-Related Concerns

The survey asked a series of questions to gauge Coloradans’ perceptions of water-related concerns. Using a scale of a one to ten scale, where one means “not concerned at all” and ten means “very concerned,” respondents were asked to rate their level of concern with the following potential water-related issues:

- Water quality in our rivers, lakes and streams;
- Amount of water available for Colorado’s cities and towns;
- Amount of water available for Colorado’s farms and ranches;
- Amount of water for recreational use such as boating, rafting, and fishing;
- Amount of water for fish and wildlife;
- Condition of underground water pipes, dams, and other water utility infrastructure;
- The quality of the water you receive at your home;
- Amount of water used for energy development; and
- Effects of energy development on water quality.

The order in which the potential areas of concern was presented was randomized to avoid potential issues with “starting point bias”, as was also done when the 2012-2013 survey was conducted. Figure VII-7 on page VII-8 presents the reported level of concern for each issue.

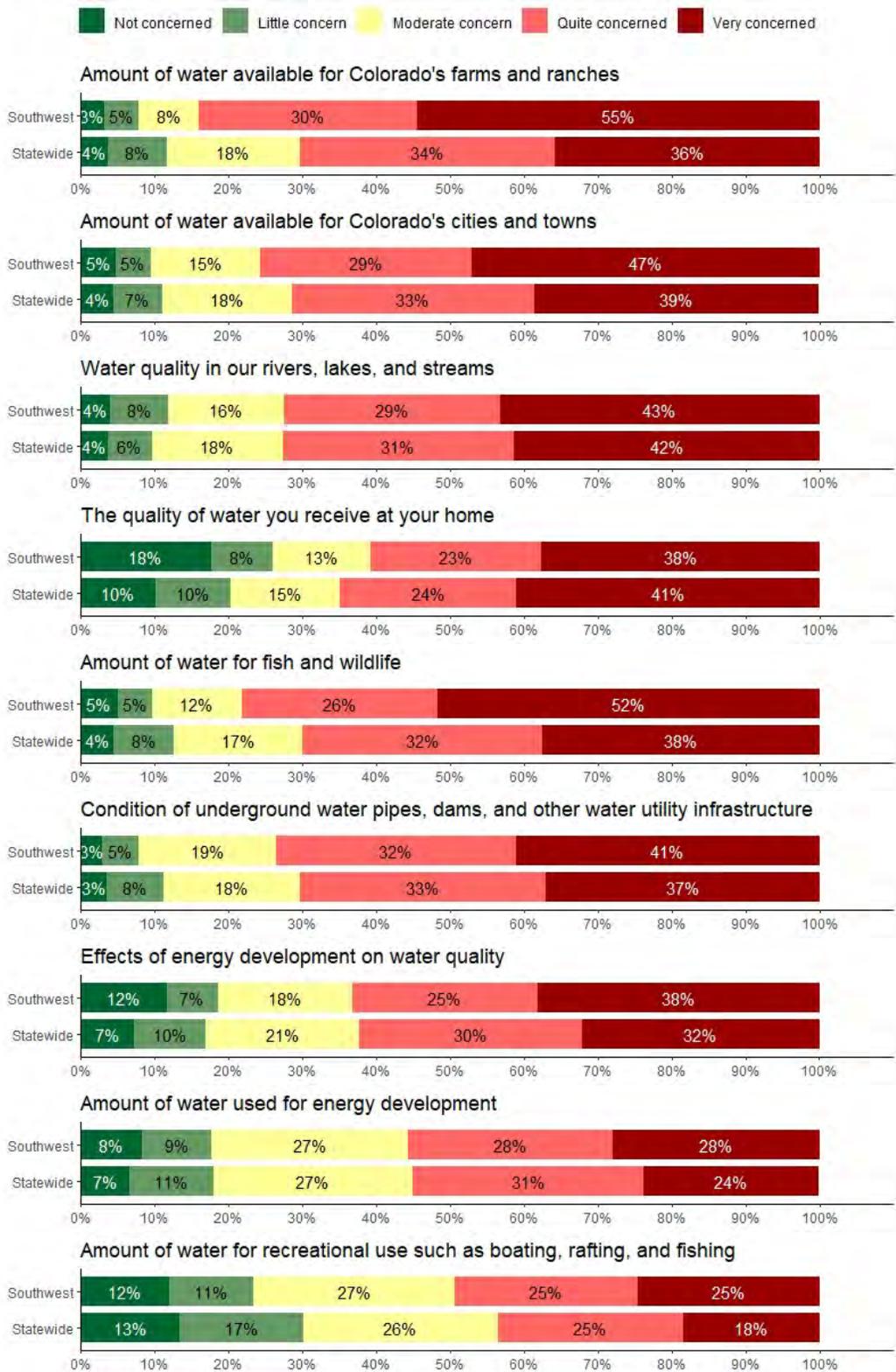
On average, the amount of water available for Colorado's farms and ranches received the highest rating of concern (8.2 out of 10) from Southwest respondents. This rating was higher than the statewide results (7.3 out of 10), and other issues rated higher in terms of level of concern among the statewide respondents (see Section II).

Among the nine areas of potential concern posed to the survey respondents, five topics had mean scores of 7.6 or higher, indicating the average respondent was quite concerned about them. In order, these highest scoring areas of concern among respondents from the Southwest region were:

- The amount of water available for Colorado's farms and ranches (mean score of 8.2),
- The amount of water for fish and wildlife (mean score of 7.9),
- The amount of water available for Colorado's cities and towns (mean score of 7.8),
- The condition of underground water pipes, dams and other water utility infrastructure (mean score of 7.7), and
- Water quality in our rivers, lakes and streams (mean score of 7.6).

As shown in Figure VII-7, Southwest respondents were more likely to indicate they were very concerned regarding each of the nine water issues than statewide respondents, except for the quality of water received at home.

Figure III-7. Concern about water-related issues



Note: Southwest region n's=300 to 324 (varied by issue). Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Willingness to pay. The survey asked participants whether they would be willing to pay an additional \$1, \$5, \$10, or \$25 per month to address potential water-related issues. Each participant was presented with only one dollar amount, and the amount presented to the participants was varied on a random basis.

Figure VII-8 presents those results for Southwest and statewide survey respondents. The figure reflects a conservative interpretation of respondents' willingness-to-pay by assuming the 9% of regional respondents who indicated either they did not want to answer or did not know were all not willing-to-pay each amount. An alternative interpretation, based on just those who responded either yes or no indicates a higher willingness to pay.

Based on these alternative interpretations of the data, between 52% and 66% of residents in the Southwest region would be willing to pay up to \$10 more per month to address water-related issues. These results are very similar to the statewide responses which show that 50% to 65% of all adults in Colorado would be willing-to-pay at least \$10 more per month. Central SE residents' willingness to pay to address water-related concerns was similar to or slightly higher than the statewide average across all potential price points except for the lowest amount (\$1 per month).

Figure VII-8.
Willingness to pay to address water-related issues

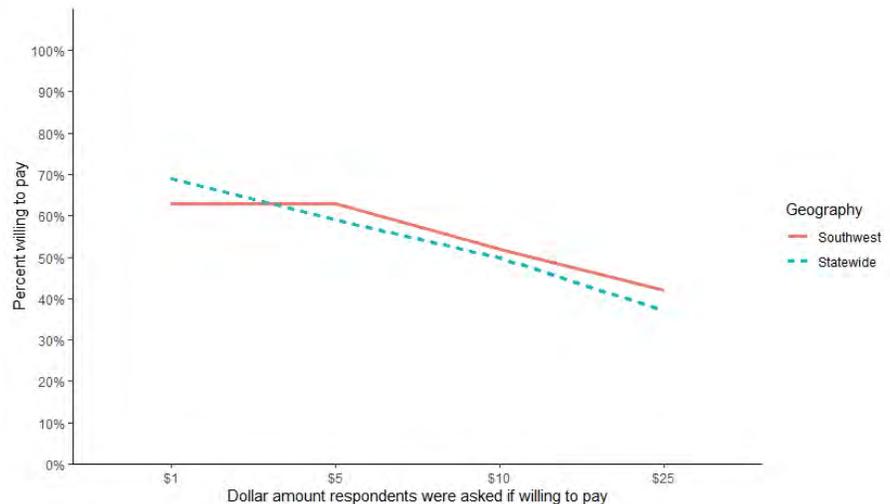
Note:

All "do not know" or "do not wish to answer" responses assumed to be unwilling to pay stated amounts.

Southwest region n=326.

Source:

BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted October-November 2021.



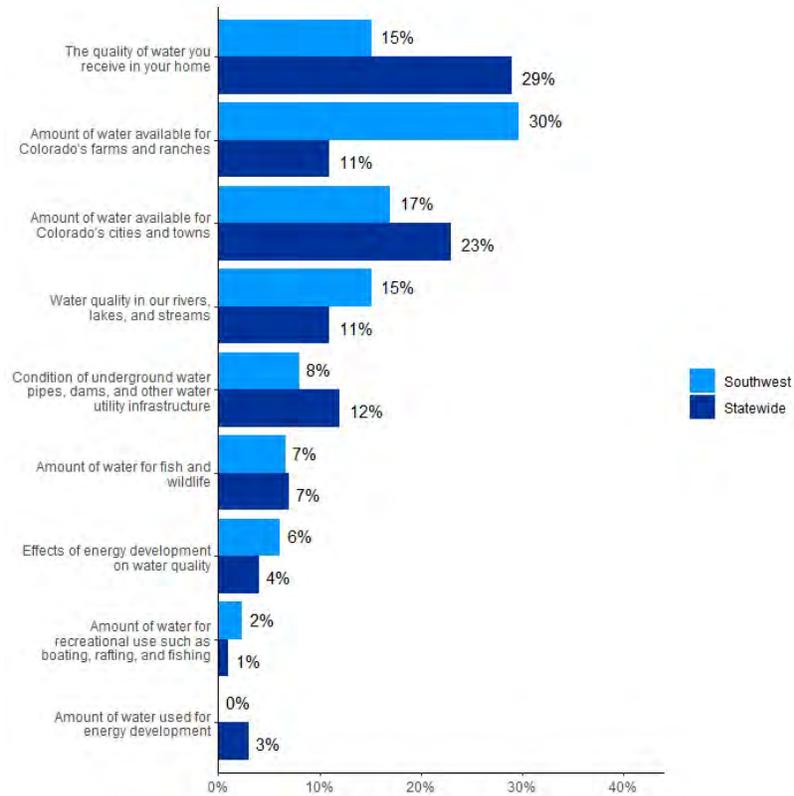
Most important water-related issue. Survey participants were also asked to identify which potential water-related issue is the most important issue that needs to be addressed. As shown in Figure VII-9, the most common response among Southwest region residents was the amount of water available for Colorado's farms and ranches, and this issue was selected as the most important much more frequently than across the statewide sample (30% versus 11% statewide). Water quality in our rivers, lakes and streams was also more likely to be selected as the most important issue by Southwest respondents (15%) than statewide respondents (11%).

In contrast, Southwest residents were less likely to identify home water quality as the most important issue (15% versus 29% statewide) or the amount of water available for Colorado's cities and towns (17% versus 23% statewide).

**Figure VII-9.
Most important water-related issue**

Note:
Southwest region n=212.

Source:
BBC Research & Consulting from
Colorado Water Conservation Board
statewide survey conducted October-
November 2021.



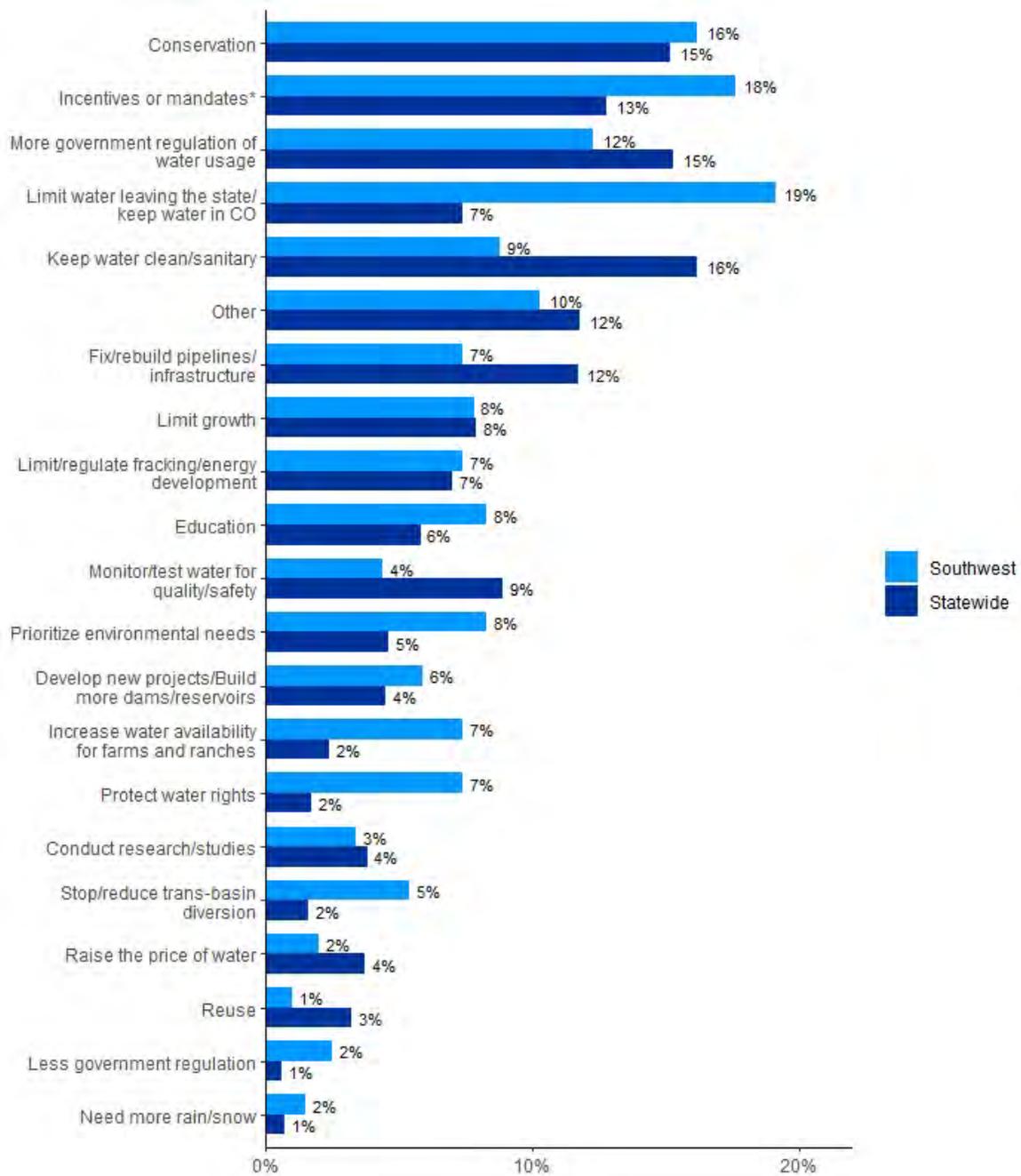
Addressing the most important water-related issues. Survey participants were asked what they thought should be done to address their most important concerns. That question was open-ended (unprompted), but responses (including some multiple responses) were coded by the surveyors. Figure VII-10 presents those results.

Overall, Southwest respondents most frequently indicated that their most important potential water-related issue should be addressed by limiting water leaving the state and keeping water in Colorado (19%). Southwest respondents also frequently indicated that their most important concerns should be addressed by:

- Incentives or mandates to reduce usage (18%); or
- Conservation (16%).

As noted in Section II regarding the statewide survey results, respondents' choices of what should be done to address their most important water-related concern varied depending on which concern they deemed to be the most important.

Figure VII-10. What should be done to address your most important water concern?



Note: *Incentives or mandates were recommended to promote water use efficiency through technology, efficient agricultural methods, efficient housing development and/or lower water use landscaping.

Southwest region n=204. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Knowledge of Important Water Concepts

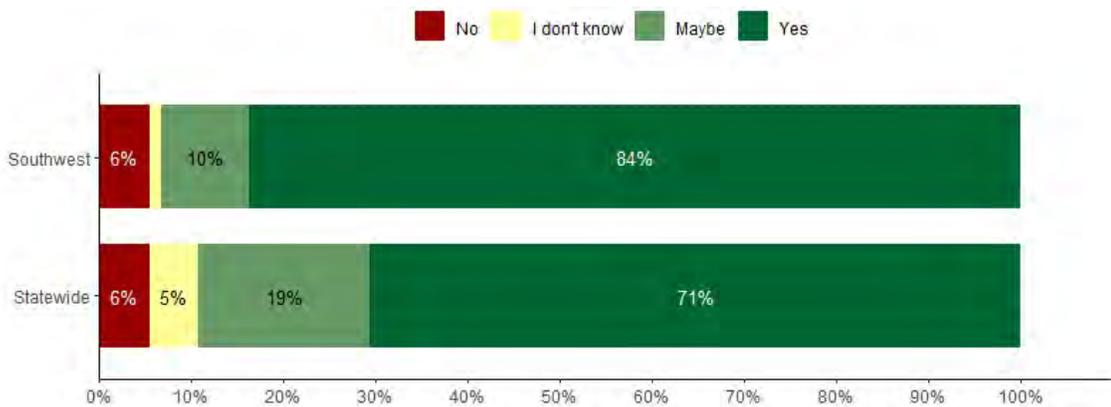
One of the major changes in the 2021 survey was the inclusion of several questions to test respondents understanding and opinion regarding important water concepts identified by CWCB and members of the water education community. These concepts included:

- The relationship between drought in the Colorado River Basin in Western Colorado and the availability of water supplies throughout Colorado;
- Public awareness of interstate agreements that establish limits on Colorado’s ability to use the water in our rivers and streams;
- The relationships between land use planning and climate change and the amount of water we will need in the future;
- Public confidence in their own knowledge and ability to take action to ensure we use our water wisely; and
- Public familiarity, knowledge and opinions regarding Colorado’s Water Plan.

Relationship between drought in Western Colorado and availability of water supply throughout Colorado. In view of the ongoing drought in the Colorado River Basin and record low water storage levels in Lake Powell and Lake Mead, it is important that Colorado residents – particularly those living in the major population centers along the Front Range – understand that their own water supply could be impacted by drought west of the Continental Divide. Survey respondents were specifically asked “Do you believe severe drought that impacts the Colorado River Basin and the Southwestern US could have an impact on the water supply for your own home or business?”

As shown in Figure VII-11, Southwest residents overwhelmingly answered yes to this question (84%), a higher proportion than statewide (71%). Six percent of Southwest residents responded with a definitive “no” – indicating they did not believe drought in the Colorado River Basin would affect their own water supply – the same proportion as in the statewide sample. Respondents from the Southwest region were less likely to indicate they did not know than statewide respondents (about 1% compared to 5% statewide).

Figure VII-11. Do you believe severe drought that impacts the Colorado River Basin and the Southwestern US could have an impact on the water supply for your own home or business?



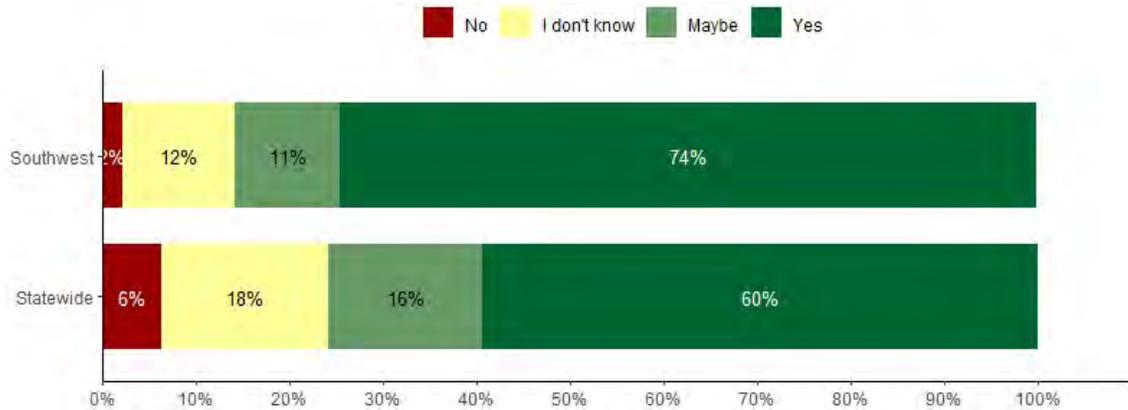
Note: Southwest region n=326. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Understanding that interstate agreements limit Colorado’s use of water from our rivers. Survey respondents were specifically asked “Do you think that legal agreements with neighboring states limit the amount of water Colorado can use from its rivers?” Once again, as

shown in Figure VII-12, Southwest respondents were more likely to correctly answer yes to this question (74%) than statewide respondents (60%). About 3% of Southwest respondents indicated they did not think our water use was limited by interstate legal agreements, compared to 6% of statewide respondents.

Figure VII-12. Do you think that legal agreements with neighboring states limit the amount of water Colorado can use from its rivers?

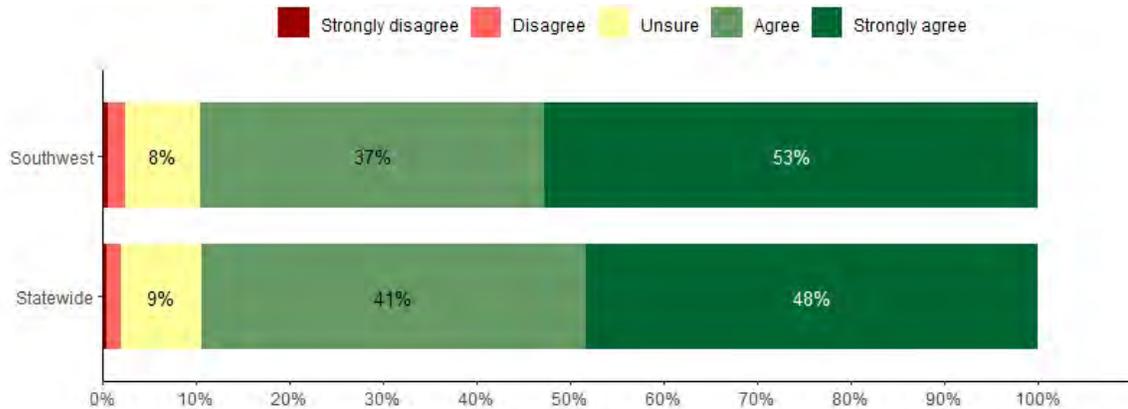


Note: Southwest region n=326. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Recognition of relationship between land use and development planning and future water needs. Survey respondents were next asked whether they agreed or disagreed with the following statement: “We can help manage Colorado’s future water use by carefully planning how we develop new homes, businesses and infrastructure.” As shown in Figure VII-13, Southwest residents were slightly more likely to strongly agree with this concept than those across the state (53% versus 48%), though the total proportion of respondents indicating either strongly agree or agree (90%) was essentially the same as across the statewide sample.

Figure VII-13. Agreement that we can help manage Colorado’s future water use by carefully planning how we develop new homes, businesses and infrastructure?



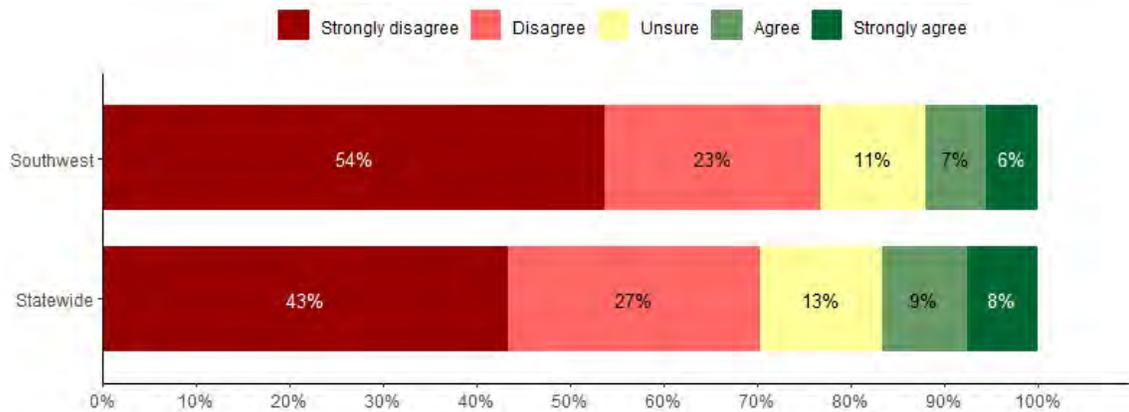
Note: Southwest region n=324. Totals may not add to 100% due to rounding. Percentages less than 2% are not labeled.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Recognition of potential impact of rising temperatures on future water needs. The following question tested awareness that overall increases in temperatures may affect the amount of water we need in the future. This statement was deliberately posed in the negative to break up the pattern in the survey questions that agreement was the correct response.

Respondents were specifically asked whether they agreed or disagreed with the following statement: “The trend of rising temperatures is unlikely to affect Colorado’s future water needs.” As shown in Figure VII-14, a higher proportion of Southwest residents (54%) strongly disagreed with this statement – indicating they believe rising temperatures will impact our future water needs – than respondents across the state as a whole (43%). Approximately 13% of respondents from the Southwest region, and 17% of statewide respondents, agreed or strongly agreed with the statement indicating they do not believe rising temperatures will affect our future water needs,

Figure VII-14. Agreement with statement that the trend of rising temperatures is unlikely to affect Colorado’s future water needs?

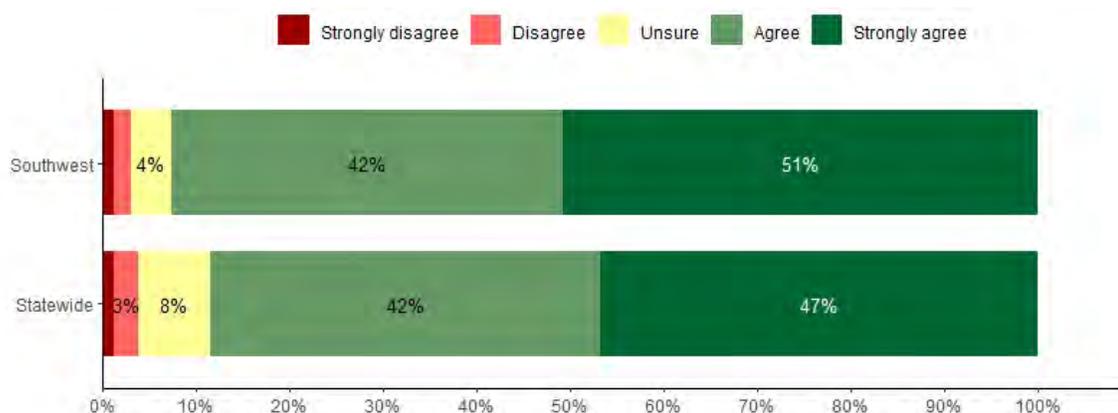


Note: Southwest region n=322. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Recognition of relationship between proactive efforts to meet future water needs and Colorado’s economy. Survey respondents were specifically asked whether they agreed or disagreed with the following statement: “We need to take action in advance to reduce water use and/or increase water supply to continue to grow Colorado’s economy in the future.” As shown in Figure VII-15, 93% of both Southwest respondents agreed or strongly agreed with the statement supporting the need for proactive efforts, a slightly higher proportion than statewide (89%). Only 3% disagreed or strongly disagreed with the statement, while 4% were unsure.

Figure VII-15. Agreement that we need to take action in advance to reduce water use and/or increase water supply to continue to grow Colorado’s economy in the future?



Note: Southwest region n=323. Totals may not add to 100% due to rounding. Percentages less than 2% are not labeled.

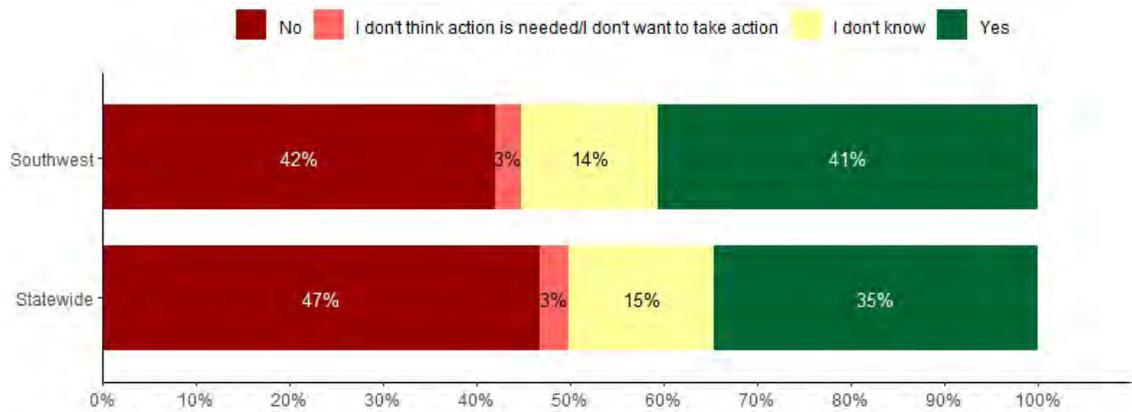
Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Respondents’ confidence in having the knowledge necessary to take an active role in water stewardship. Survey respondents were asked if they had enough information about Colorado’s water situation and potential future water issues to be able to confidently take action or support actions to use our water wisely. This question corresponded to one of the metrics in the Statewide Water Education Action Plan developed by Water Education Colorado.³

As shown in Figure VII-16, a higher proportion of survey respondents in the Southwest region (41%) than statewide (35%) indicated they were confident that they have the necessary information. A smaller proportion of Southwest residents (42%) than statewide (47%) indicated they did not have enough information to be able to take action. The remaining respondents most frequently indicated they either did not know if they had enough information (14%). Very few respondents in either the Southwest region or statewide indicated that they felt that no action was needed or did not want to take action (3%).

³ Outcome 3, page 18. Statewide Water Education Action Plan for Colorado 2020-2025. Water Education Colorado.

Figure VII-16. Do you have enough information about Colorado’s water situation and potential future water issues to be able to confidently take action or support actions to use our water wisely?



Note: Southwest region n=324. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Trusted Sources of Information

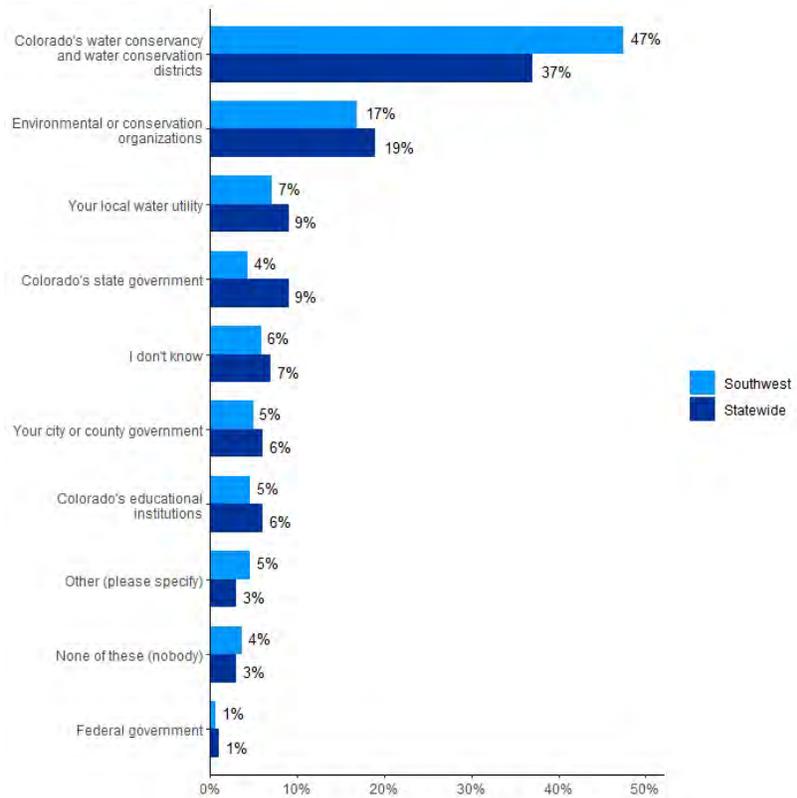
Immediately following the question about respondents’ confidence that they had enough information to be able to take action or support actions regarding water issues, the survey asked respondents to identify which organizations they would most trust to provide reliable information about Colorado’s water situation and potential issues. Figure VII-17 presents those results.

In both the Southwest region and the state as a whole, the majority of respondents identified either Colorado’s regional water conservancy and water conservation districts (47% within region, 37% statewide) or environmental or conservation organizations (17% within region, 19% statewide) as the sources they would most trust to provide information about water-related issues. Colorado state government was less likely to be identified as the most trusted source of information in the Southwest region (4%) than statewide (9%). In both the Southwest region and statewide, the least trusted source of information about Colorado’s water-related issues was the Federal government (about 1%). The rank ordering of the various sources of information was very similar to the results from the 2012-2013 survey.

Figure VII-17.
Most trusted sources of information

Note:
 Southwest region n=325. Totals may not add to 100% due to rounding.

Source:
 BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted October-November 2021.



Awareness of the Colorado Water Plan

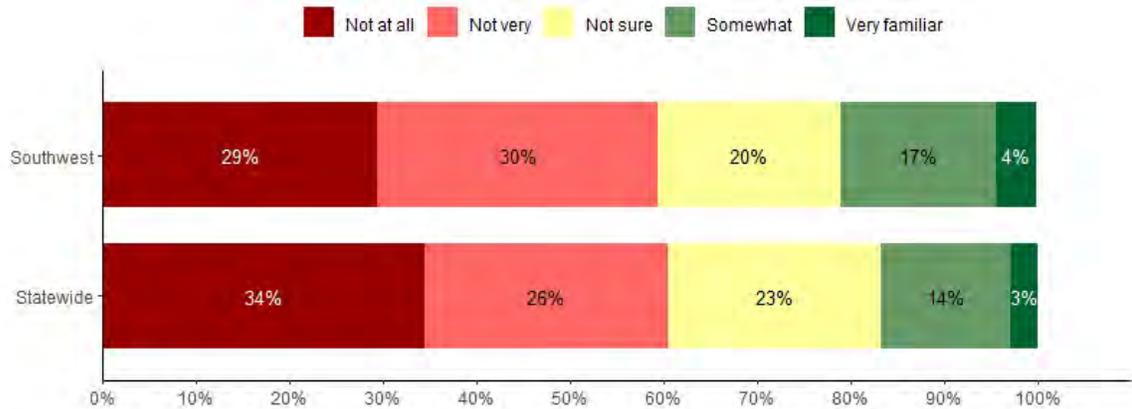
The final section of the survey, prior to gathering demographic information, was designed to gauge awareness of the Colorado Water Plan. The first edition of the Water Plan was issued in 2015, and the second edition is expected to be issued during 2022 or 2023.

Familiarity with the Water Plan. Survey respondents were initially asked “How familiar are you with Colorado’s Water Plan?” The following choices were provided to them:

- Not sure. That is, you don’t know if you have ever seen or heard of the Plan.
- Not at all. That is, you know that you have not heard of or seen the Plan.
- Not very. That is, you remember hearing about or seeing the Plan, but don’t know what it says.
- Somewhat. That is, you have seen or heard about the Plan and have a general idea of what it says.
- Very familiar. That is, you know about the Plan and what it says.

As shown in Figure VII-18, most respondents from the Southwest region indicated they were either not familiar with the Water Plan at all (29%) or not very familiar with it (30%). However, a slightly higher proportion of regional respondents (21%) than statewide respondents (17%) described themselves as either somewhat familiar or very familiar with the Water Plan.

Figure VII-18. Familiarity with Colorado’s Water Plan?

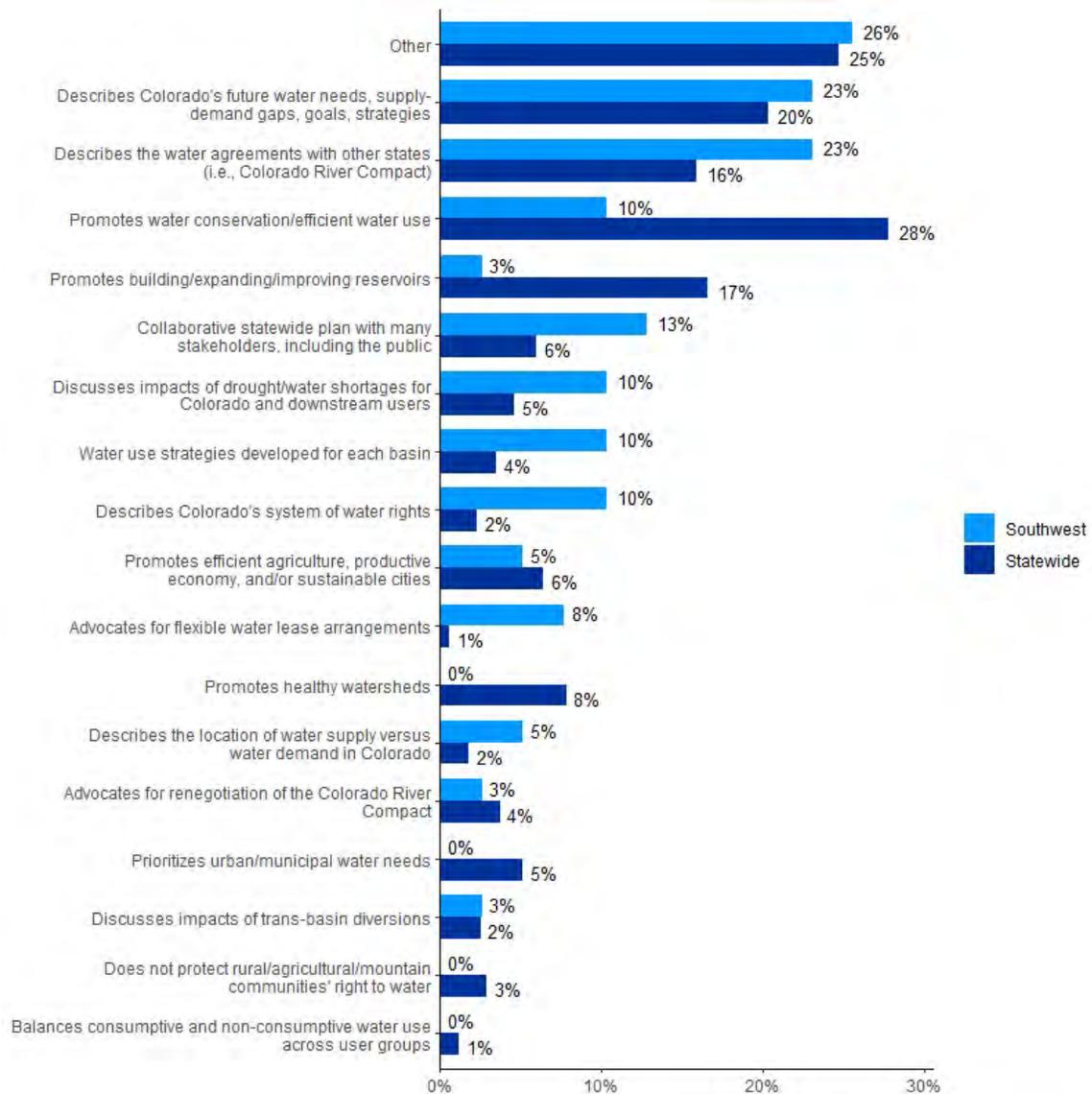


Note: Southwest region n=323. Totals may not add to 100% due to rounding. Percentages less than 2% are not labeled.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

What can you recall about the Water Plan? Survey respondents were next asked an open-ended question about what they remembered about the Water Plan. Given the relative low proportion of respondents who indicated they were familiar with the Plan in the previous question, only 39 Southwest respondents – or about 12% of the total from the Southwest region – provided a relevant response to this question. As shown in Figure VII-19, for the most part these respondents correctly recalled many of the important takeaways from the Plan, although some recollections were not accurate. Responses coded as “other” in Figure VII-19 ranged from negative comments about government (and the Plan) in general, to concerns that the Plan was not approachable or accessible to the average Coloradan or is underfunded or unenforceable. Since some of the responses included multiple aspects, the percentages shown in Figure VII-19 total more than 100%.

Figure VII-19. What do you recall from the Water Plan?



Note: Southwest region n=39. Totals may not add to 100% due to rounding.

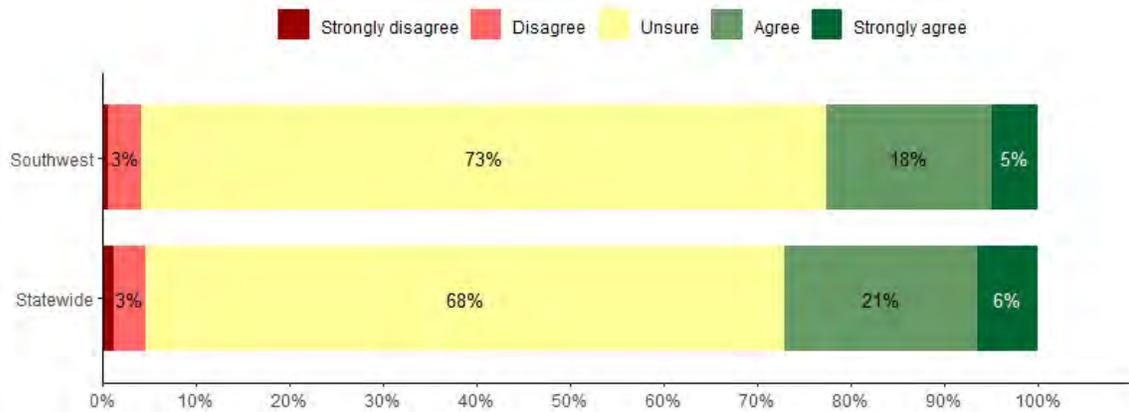
Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Agreement that the Water Plan will help us address our water-related challenges.

Respondents then were asked whether they agreed or disagreed with the following statement: “I think the Colorado Water Plan will help our state to address our water-related challenges in the future.” Given the relatively low awareness and knowledge regarding the Water Plan, the most common answer to this question (73% of Southwest respondents) was “unsure.”

While more Southwest respondents indicated at least some confidence in the utility of the Water Plan (23% agreed or strongly agreed) than not (4% disagreed or strongly disagreed with the statement), confidence in the efficacy of the Water Plan within the Southwest region appears to be a little lower than it is statewide. These results are shown in Figure VII-20.

Figure VII-20. Colorado’s Water Plan will help Colorado meet our future water challenges?

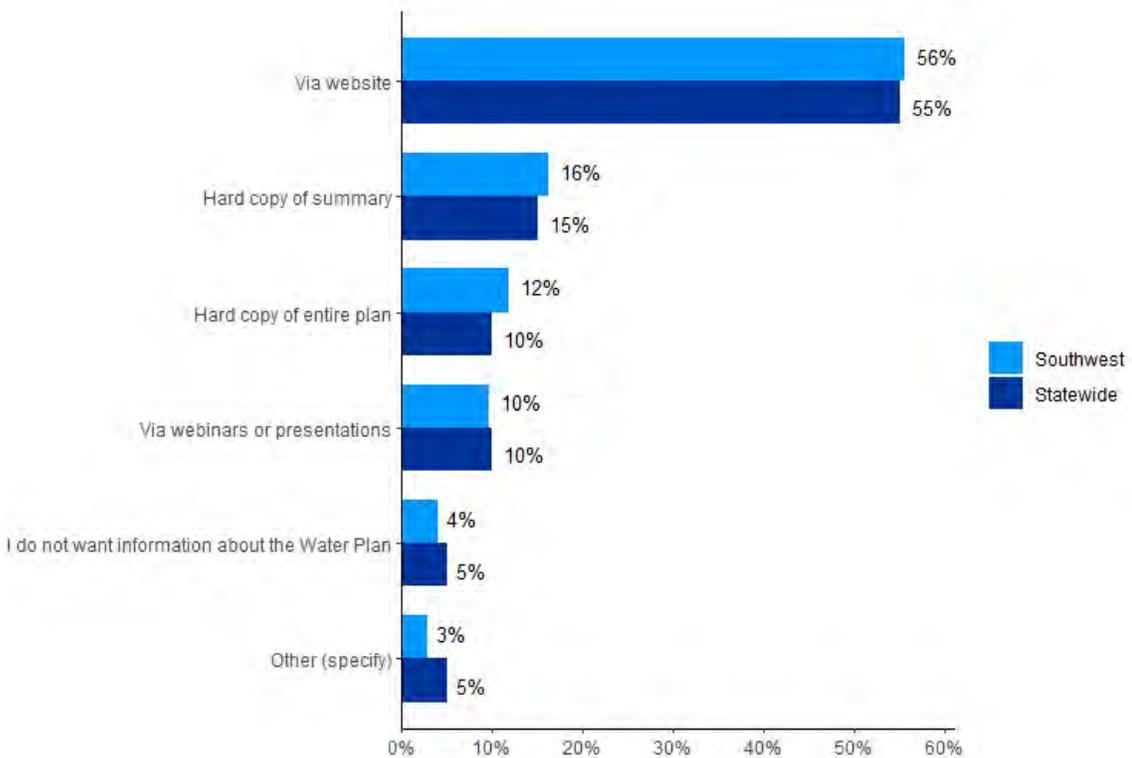


Note: Southwest region n=318. Totals may not add to 100% due to rounding. Percentages less than 2% are not labeled.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Preferred Ways to Learn About Colorado’s Water Plan. Respondents were asked how they would prefer to receive information about the Water Plan. As show in Figure VII-21, by far the most common response among Southwest residents (and among statewide respondents) was via a website. Hard copies of a summary of the Water Plan were a more popular method than hard copies of the full document. Only 4% of Southwest respondents indicated they did not want any information about the Water Plan.

Figure VII-21. How would you prefer to get information about Colorado’s Water Plan?



Note: Southwest region n=321. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

SECTION VIII.

Survey Results from West/NW Region

This section provides detailed information about West/Northwest (West NW) survey responses.¹ Surveys were completed with 348 participants who reside in the West NW region of Colorado. The survey collected responses on key topics, including:

- Knowledge of Colorado water use and awareness of water issues;
- Performance of government agencies;
- Scarcity perceptions;
- Water-related concerns;
- Knowledge of key water-related concepts;
- Awareness and opinion of the Colorado Water Plan;
- Need for more information and most trusted sources; and
- Demographics.

The study team compared West NW regional responses to statewide responses, as appropriate, for each survey question.²

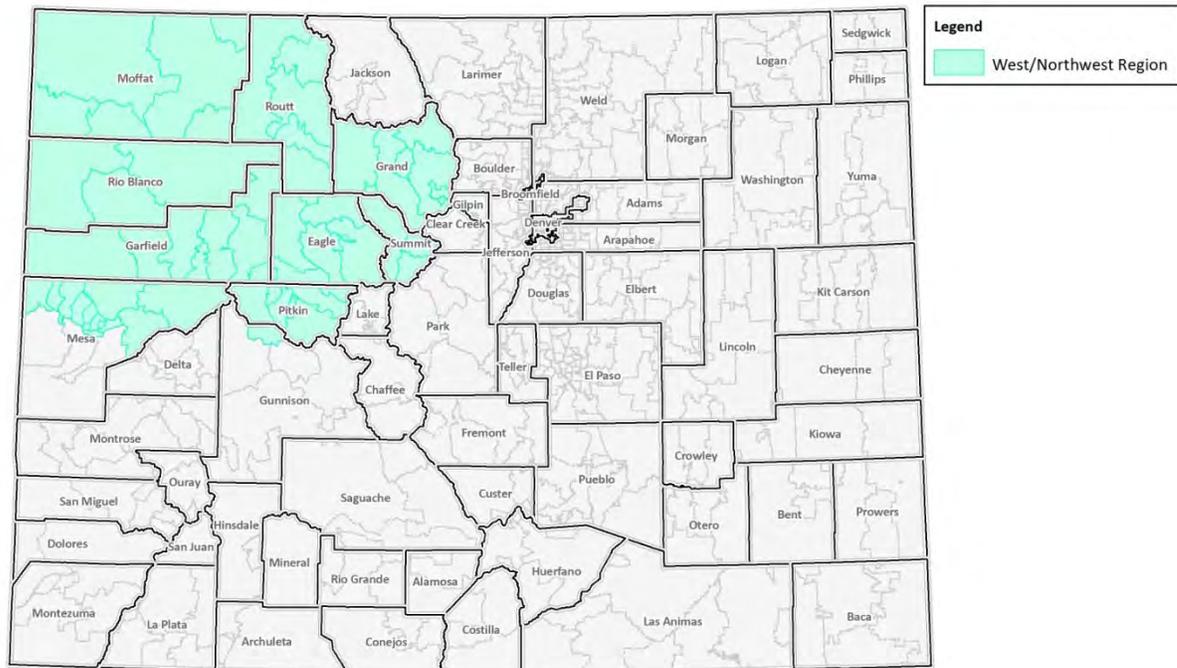
West NW Region

The West NW region includes the Colorado River Basin and the Yampa, White and Green River Basins, located in northwestern Colorado. The region had approximately 289,000 adult (age 18 and over) residents in 2020. Grand Junction is the largest city in the region and the largest city in Colorado that is not located in the Front Range. Figure VIII-1 presents a map of the West NW region, as defined in this report.

¹ In this study, the West NW region of Colorado is defined as the Colorado, Yampa, White and Green River basins.

² Statewide survey responses are reported in Section II.

Figure VIII-1. West NW Region



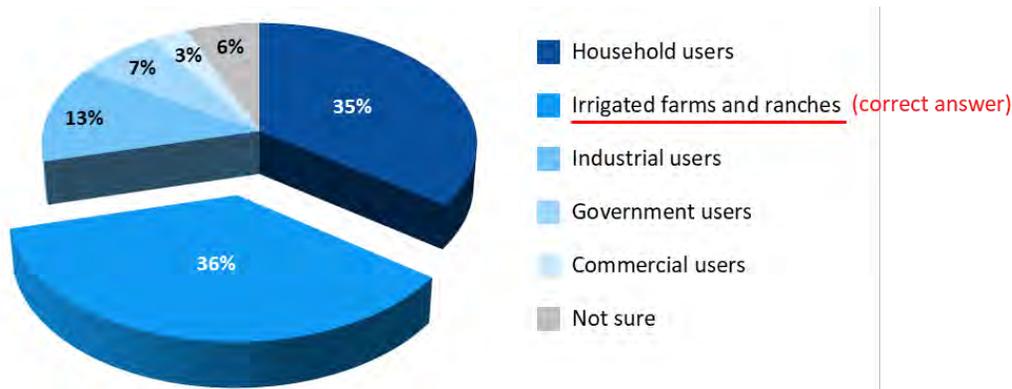
Source: BBC Research & Consulting from Colorado Water Conservation Board.

General Knowledge of Colorado Water Use and Issues

The survey asked several questions to gauge respondents' knowledge of Colorado water use and water-related issues. Initially, respondents were asked to identify which Colorado sector uses the most water. Later in the survey, respondents were also asked "Has any part of your education, work or volunteer experience involved water or water-related issues?"

Sector that uses the most water. When asked which sector uses the most water in Colorado, West NW respondents most often correctly identified farms and ranches as the sector that uses the most water (36%), though nearly as many identified households (35%), as shown in Figure VIII-2. About 16% of Central SE respondents believed that industrial or commercial businesses use the most water in Colorado, while 7% thought that government used the most water.

Figure VIII-2. Which sector uses the most water in Colorado?



Note: West NW region n=347. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Involvement with water and water issues. Survey respondents were asked: “Has any part of your education, work or volunteer experience involved water or water-related issues?” Among the 348 respondents in the West NW region, 302 provided a yes or no answer to this question. Thirty-five percent of those respondents indicated some prior involvement with water-issues. This proportion of respondents with prior water-related experience of some type was substantially greater than the overall statewide proportion of 23 percent.

Performance of Government Agencies

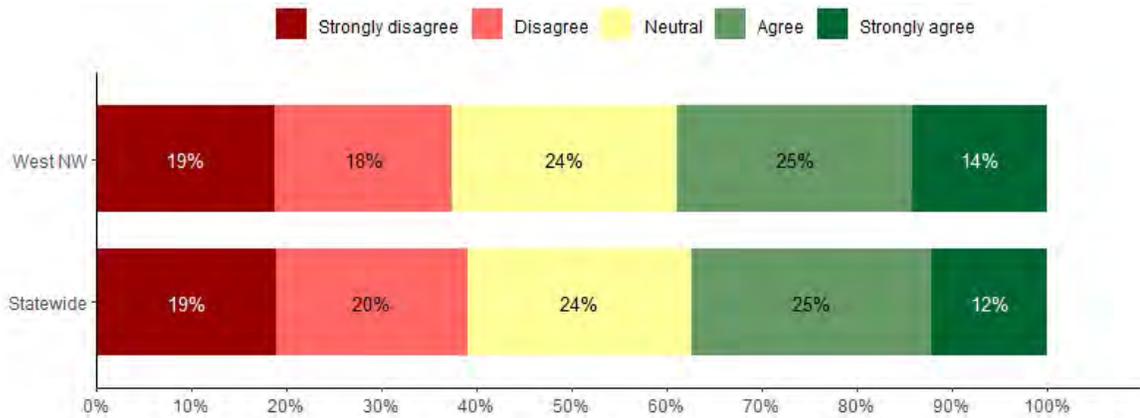
Respondents were asked two questions regarding current regulation and management of water in Colorado. Using a scale of a one to ten, where one means “completely disagree” and ten means “completely agree,” respondents were asked to rate their level of agreement with the following statements:

- Government agencies are doing enough to protect the quality of your drinking water; and
- Government agencies are doing enough to protect the quality of water in Colorado streams, rivers, and lakes.

Figures VIII-3 and VIII-4 presents those results, respectively.

Overall, about 39% of West NW respondents agreed or strongly agreed with the statement that “government agencies are doing enough to protect the quality of your drinking water,” though there was not strong support for the statement. This is a lower approval rate than in the 2012-2013 survey (about 48%), but a slightly higher approval rate than the statewide results (about 37%).

Figure VIII-3. Government agencies are doing enough to protect the quality of your drinking water.



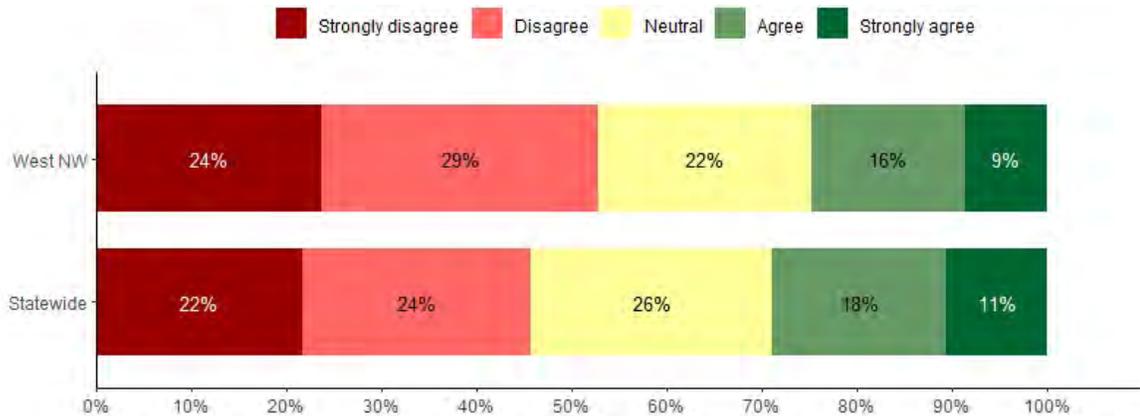
Note: West NW region n=324. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

West NW resident responses to the statement “government agencies are doing enough to protect quality of water in Colorado’s streams, rivers and lakes” was more negative. Twenty-five percent of respondents agreed or strongly agreed with that statement, while 53% of respondents indicated that they disagreed or strongly disagreed with that statement. Twenty-two percent of respondents provided a neutral response. Those results were somewhat more negative than the statewide results, as shown in Figure VIII-4, and also indicate a considerably lower approval rating than in the 2012-2013 survey (43% of West NW respondents agreed or strongly agreed with the same statement).

The reasons for the more negative results regarding the regulatory performance of government agencies are not entirely clear. The 2021 survey reached a larger proportion of younger adults (ages 18 to 34) and a larger proportion of recent migrants to Colorado (within the past 10 years) than in 2012-2013. It is also possible that the increasingly antagonistic political climate over the past nine years has had a general negative impact on public perceptions regarding government performance.

Figure VIII-4. Government agencies are doing enough to protect the quality of water in Colorado streams, rivers, and lakes.



Note: West NW region n=322. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Scarcity Perceptions

The survey asked two questions about perceptions of water scarcity in Colorado. Using a one to ten scale, where one means “completely disagree” and ten means “completely agree,” respondents were asked to rate their level agreement with the following statements:

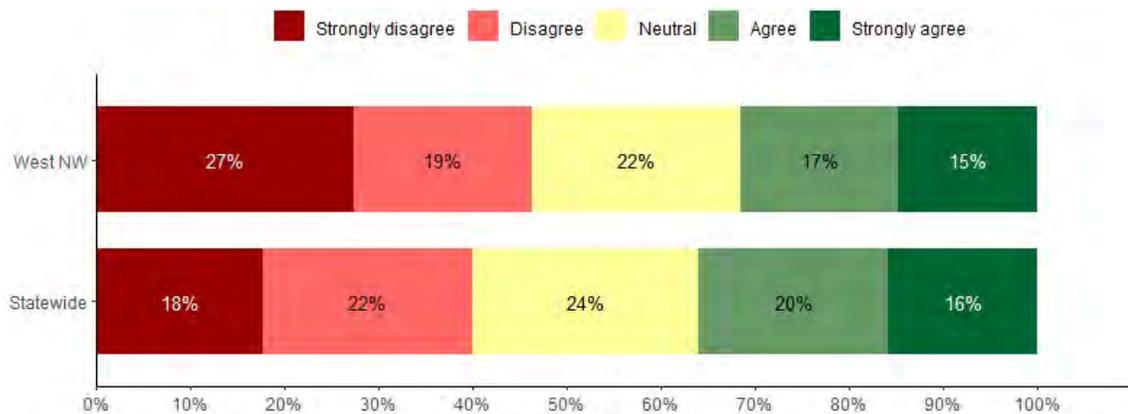
- Colorado has enough water available to meet our current needs; and
- Colorado has enough water available to meet our needs for the next 40 years.

Results from these questions are presented below.

Current water needs. Figure VIII-5 shows that West NW respondents were more likely than statewide respondents to disagree or strongly disagree that Colorado has enough water to meet its current needs (46% versus 40%), indicating a greater perception of current water scarcity. A correspondingly smaller proportion of West NW respondents (32%) than statewide respondents (36%) agreed or strongly agreed with the statement.

2021 responses from the West NW region were very similar to regional responses from the 2012-13 survey where 46% of respondents also disagreed or strongly disagreed with the same statement. In contrast, statewide responses in the current survey were more likely to agree that we have enough water to meet our current needs than in the previous survey (36% in 2021 versus 29% in 2012-2013) – indicating less perceived current water scarcity than nine years ago.

Figure VIII-5. Colorado has enough water to meet our current needs.



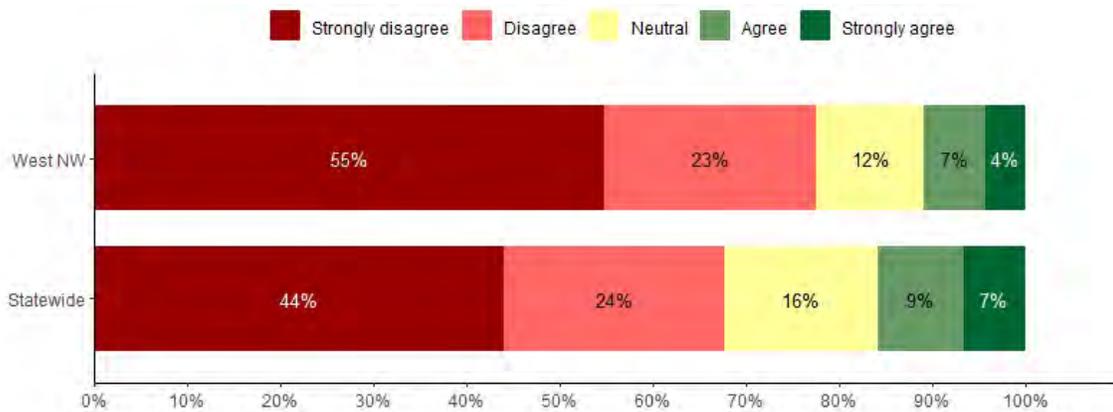
Note: West NW region n= 333. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Water needs for the next 40 years. Figure VIII-6 shows that West NW respondents were much more likely to disagree with the statement that “Colorado has enough water available to meet our needs for the next 40 years” than that we have enough water to meet our current needs. Seventy-eight percent of West NW respondents disagreed or strongly disagreed that we have enough water for the next 40 years, compared to only 11% who agreed or strongly agreed with that statement. There is a greater sense of future water scarcity among residents of the West NW region than statewide in Figure VIII-6. The proportion of West NW residents

disagreeing or strongly disagreeing with the statement that Colorado has enough water for the next 40 years was also somewhat higher than in the 2012-13 survey (78% versus 70%).

Figure VIII-6. Colorado has enough water for the next 40 years.



Note: West NW region n= 320. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Water-Related Concerns

The survey asked a series of questions to gauge Coloradans’ perceptions of water-related concerns. Using a scale of a one to ten scale, where one means “not concerned at all” and ten means “very concerned,” respondents were asked to rate their level of concern with the following potential water-related issues:

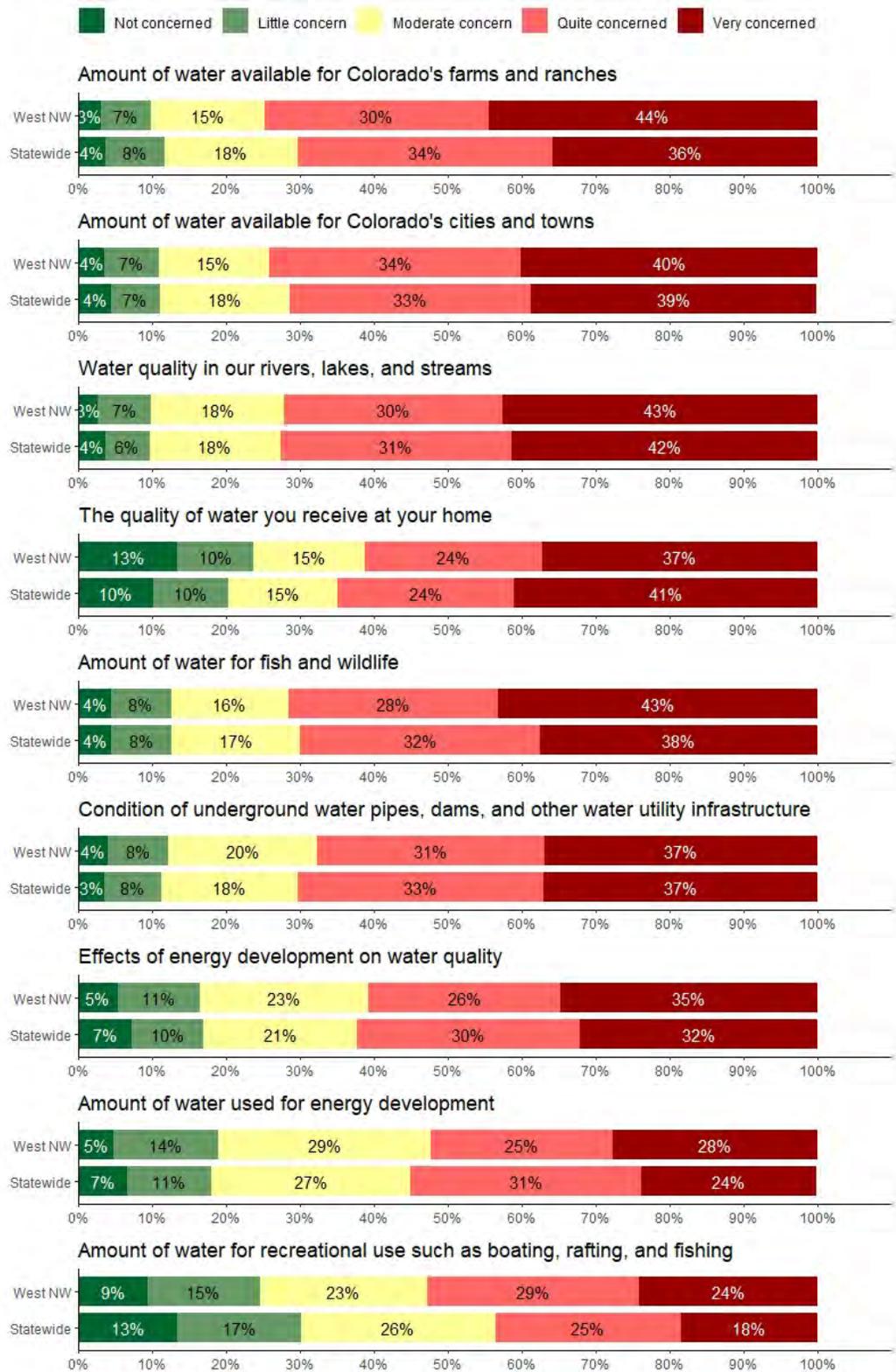
- Water quality in our rivers, lakes and streams;
- Amount of water available for Colorado’s cities and towns;
- Amount of water available for Colorado’s farms and ranches;
- Amount of water for recreational use such as boating, rafting, and fishing;
- Amount of water for fish and wildlife;
- Condition of underground water pipes, dams, and other water utility infrastructure;
- The quality of the water you receive at your home;
- Amount of water used for energy development; and
- Effects of energy development on water quality.

The order in which the potential areas of concern was presented was randomized to avoid potential issues with “starting point bias”, as was also done when the 2012-2013 survey was conducted. Figure VIII-7 on page VIII-8 presents the reported level of concern for each issue.

Among respondents from the West NW region, the amount of water available for Colorado's farms and ranches and water quality in our rivers lakes and streams received the highest ratings of concern (both with mean responses of 7.7 out of 10). Three other issues also received mean responses of 7.4 or higher, indicating relatively high levels of concern. Overall, the five issues of greatest concern within the NW region were:

- The amount of water available for Colorado's farms and ranches (mean score of 7.7),
- Water quality in our rivers, lakes and streams (also mean score of 7.7)
- The amount of water available for Colorado's cities and towns (mean score of 7.6),
- The amount of water for fish and wildlife (mean score of 7.5), and
- The condition of underground water pipes, dams, and other water utility infrastructure (mean score of 7.4).

Figure VIII-7. Concern about water-related issues



Note: West NW region n's=317 to 345 (varied by issue). Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Willingness to pay. The survey asked participants whether they would be willing to pay an additional \$1, \$5, \$10, or \$25 per month to address potential water-related issues. Each participant was presented with only one dollar amount, and the amount presented to the participants was varied on a random basis.

Figure VIII-8 presents those results for West NW and statewide survey respondents. The figure reflects a conservative interpretation of respondents' willingness-to-pay by assuming the 26% of regional respondents who indicated either they did not want to answer or did not know were all not willing-to-pay each amount. An alternative interpretation, based on just those who responded either yes or no indicates a higher willingness to pay.

Based on these alternative interpretations of the data, between 49% and 69% of residents in the West NW region would be willing to pay up to \$10 more per month to address water-related issues. This indicates similar willingness-to-pay than the statewide responses which show that 50% to 65% of all adults in Colorado would be willing-to-pay at least \$10 more per month. West NW residents' willingness to pay to address water-related concerns was generally similar to that of statewide respondents, as shown in Figure VIII-8.

Figure VIII-8.
Willingness to pay to address water-related issues

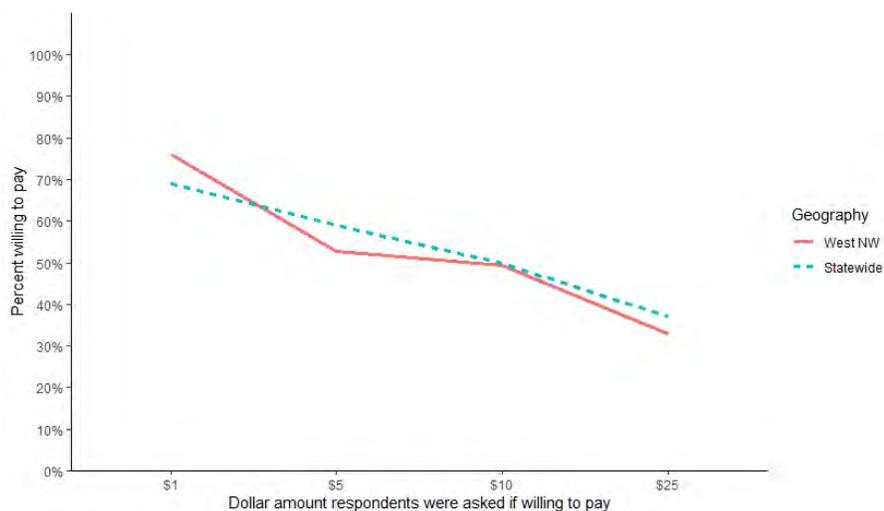
Note:

All "do not know" or "do not wish to answer" responses assumed to be unwilling to pay stated amounts.

West NW region n=348.

Source:

BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted October-November 2021.



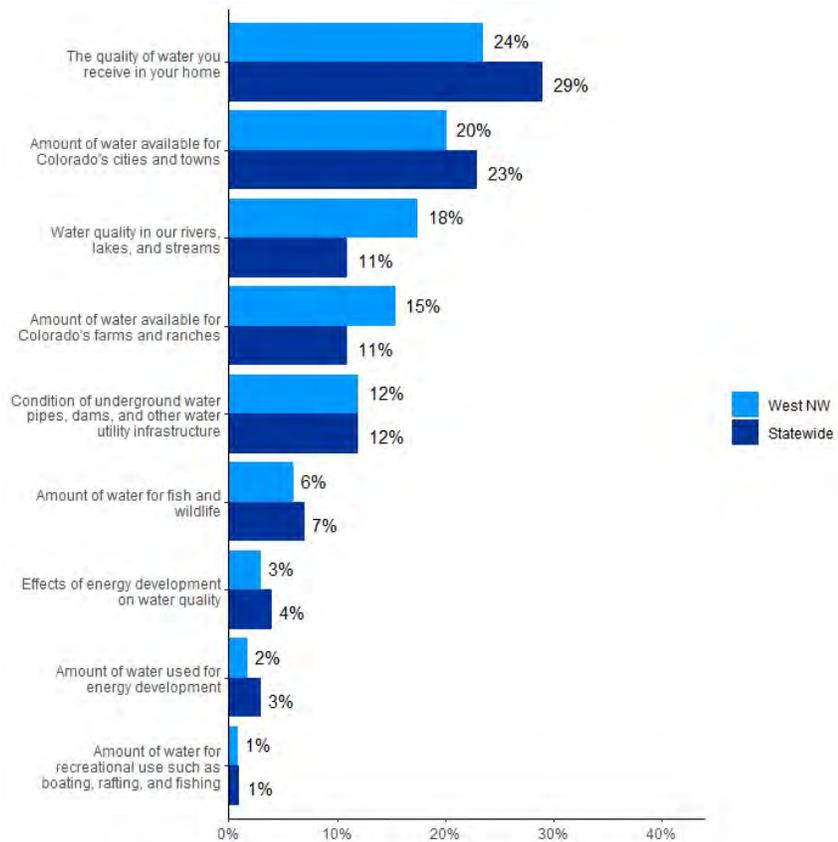
Most important water-related issue. Survey participants were also asked to identify which potential water-related issue is the most important issue that needs to be addressed. As shown in Figure VIII-9, West NW respondents — like other respondents across the state — most frequently indicated that the quality of water they receive in their homes was the most important potential water-related issue that needs to be addressed (24%). Some of the likely reasons for selecting this issue as the most important were discussed in the previous section on statewide survey results, on pages II-13 and II-14.

In general, the sequence of the nine issues – ranked in terms of frequency of being selected as the most important water-related issue – was similar among West NW residents to other statewide residents. West NW residents were somewhat more likely to identify the water quality in our rivers, lakes and streams (18% versus 11%) or the quantity of water available for farms and ranches (15% versus 11%) as the most important issue than statewide respondents.

**Figure VIII-9.
Most important
water-related issue**

Note:
West NW region n=234.

Source:
BBC Research & Consulting from
Colorado Water Conservation
Board statewide survey
conducted October-November
2021.



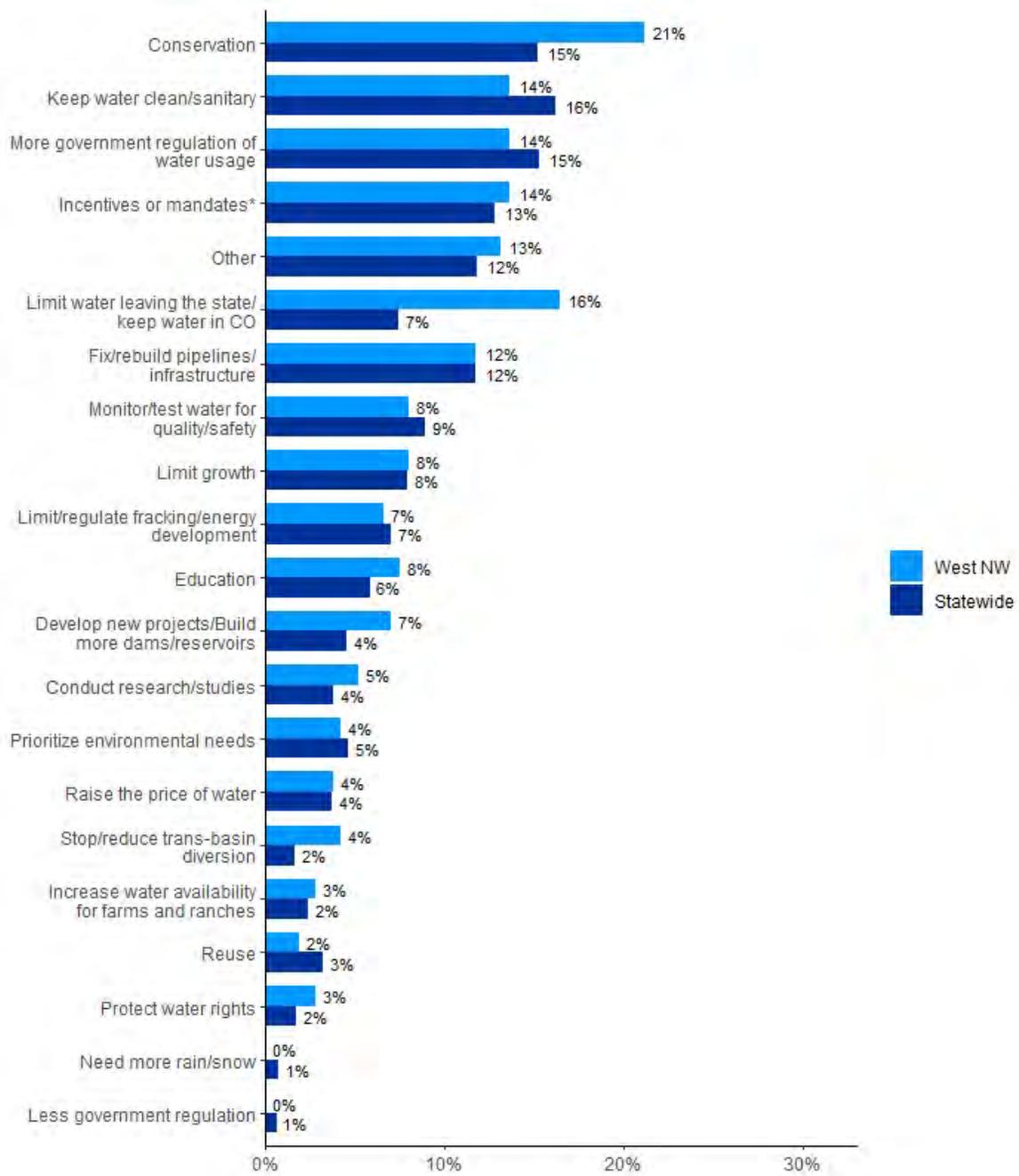
Addressing the most important water-related issues. Survey participants were asked what they thought should be done to address their most important concerns. That question was open-ended (unprompted), but responses (including some multiple responses) were coded by the surveyors. Figure VIII-10 presents those results.

Overall, West NW respondents most frequently indicated that their most important potential water-related issue should be addressed through conservation (21%). Compared to statewide respondents, West NW residents were more likely to state that their most important issue should be addressed by limiting the amount of water leaving the state (16% versus 7%). Like the participants statewide, West NW respondents also frequently indicated that their most important concerns should be addressed by:

- Keeping water clean and sanitary (14%);
- More government regulation of water usage (14%), or
- Incentives or mandates (14%).

As noted in Section II regarding the statewide survey results, respondents' choices of what should be done to address their most important water-related concern varied depending on which concern they deemed to be the most important.

Figure VIII-10. What should be done to address your most important water concern?



Note: *Incentives or mandates were recommended to promote water use efficiency through technology, efficient agricultural methods, efficient housing development and/or lower water use landscaping.

West NW region n=213. Totals may not equal 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Knowledge of Important Water Concepts

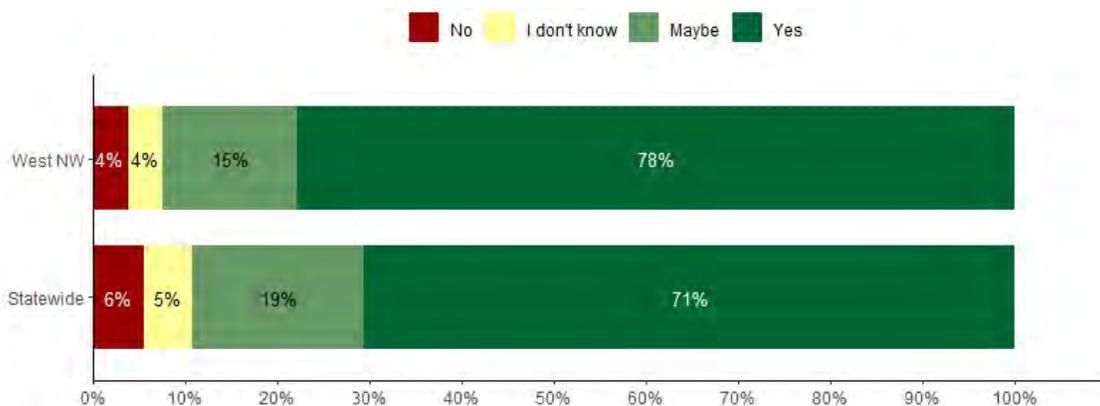
One of the major changes in the 2021 survey was the inclusion of several questions to test respondents understanding and opinion regarding important water concepts identified by CWCB and members of the water education community. These concepts included:

- The relationship between drought in the Colorado River Basin in Western Colorado and the availability of water supplies throughout Colorado;
- Public awareness of interstate agreements that establish limits on Colorado’s ability to use the water in our rivers and streams;
- The relationships between land use planning and climate change and the amount of water we will need in the future;
- Public confidence in their own knowledge and ability to take action to ensure we use our water wisely; and
- Public familiarity, knowledge and opinions regarding Colorado’s Water Plan.

Relationship between drought in Western Colorado and availability of water supply throughout Colorado. In view of the ongoing drought in the Colorado River Basin and record low water storage levels in Lake Powell and Lake Mead, it is important that Colorado residents – particularly those living in the major population centers along the Front Range – understand that their own water supply could be impacted by drought west of the Continental Divide. Survey respondents were specifically asked “Do you believe severe drought that impacts the Colorado River Basin and the Southwestern US could have an impact on the water supply for your own home or business?”

As shown in Figure VIII-11, West NW residents were more likely than other statewide respondents to answer this question with a definitive yes (78% versus 71%). Only 4% of West NW residents and 6% of statewide residents responded with a definitive “no” – indicating they did not believe drought in the Colorado River Basin would affect their own water supply.

Figure VIII-11. Do you believe severe drought that impacts the Colorado River Basin and the Southwestern US could have an impact on the water supply for your own home or business?



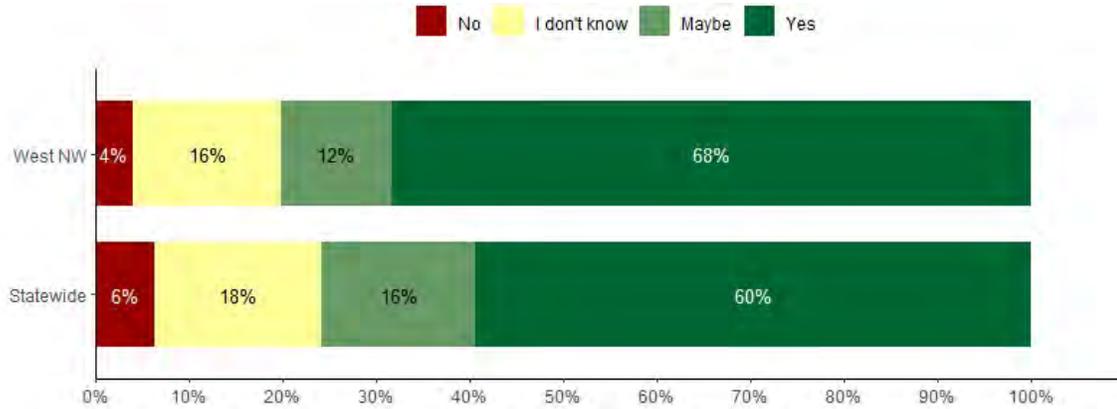
Note: West NW Region n=348. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Understanding that interstate agreements limit Colorado’s use of water from our rivers. Survey respondents were specifically asked “Do you think that legal agreements with neighboring states limit the amount of water Colorado can use from its rivers?” Once again, as shown in Figure VIII-12, West NW residents were more likely to provide a definitive “yes” response to this question (68%) than statewide respondents (60%). Approximately 4% of

regional respondents indicated they did not think our water use was limited by interstate legal agreements, compared to 6% statewide.

Figure VIII-12. Do you think that legal agreements with neighboring states limit the amount of water Colorado can use from its rivers?

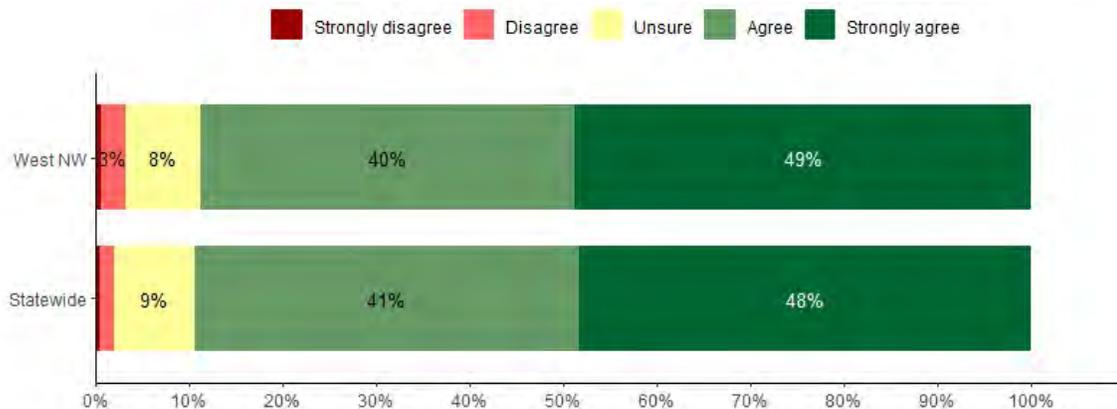


Note: West NW Region n=348. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Recognition of relationship between land use and development planning and future water needs. Survey respondents were next asked whether they agreed or disagreed with the following statement: “We can help manage Colorado’s future water use by carefully planning how we develop new homes, businesses and infrastructure.” As shown in Figure VIII-13, responses among the West NW residents were nearly identical to those across the state. Approximately 89% of survey respondents among both groups agreed or strongly agreed with the statement that careful planning can help manage our future water needs. Three percent or less of the respondents (among each of the two groups) disagreed or strongly disagreed with the statement, though eight to nine percent indicated they were unsure whether they agreed or disagreed.

Figure VIII-13. Agreement that we can help manage Colorado’s future water use by carefully planning how we develop new homes, businesses and infrastructure?



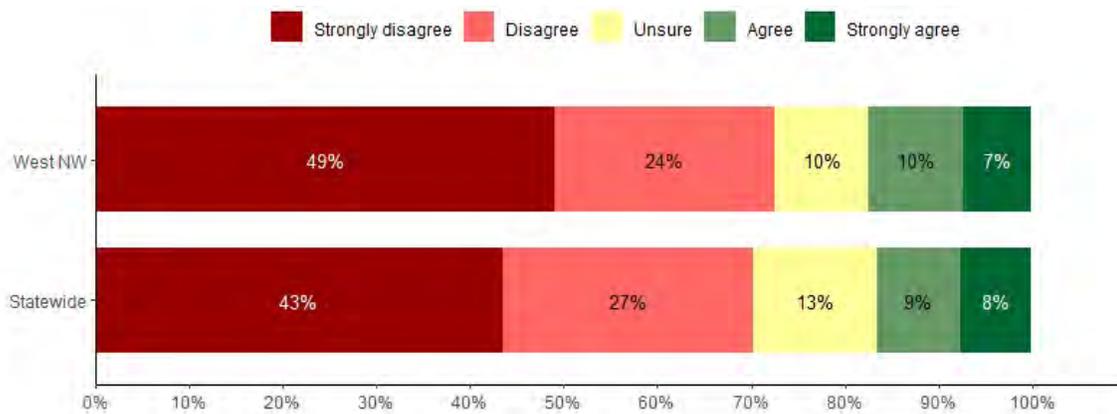
Note: West NW region n=346. Totals may not add to 100% due to rounding. Percentages less than 2% are not labeled.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Recognition of potential impact of rising temperatures on future water needs. The following question tested awareness that overall increases in temperatures may affect the amount of water we need in the future. This statement was deliberately posed in the negative to break up the pattern in the survey questions that agreement was the correct response.

Respondents were specifically asked whether they agreed or disagreed with the following statement: “The trend of rising temperatures is unlikely to affect Colorado’s future water needs.” As shown in Figure VIII-14, about 73% of West NW residents, and 70% of Colorado residents as a whole, disagreed or strongly disagreed with this statement – indicating they believe rising temperatures will impact our future water needs. Approximately 17% (about one in six respondents) in both the West NW region and statewide agreed or strongly agreed with the statement, while 10 percent of West NW respondents were unsure.

Figure VIII-14. Agreement with statement that the trend of rising temperatures is unlikely to affect Colorado’s future water needs?

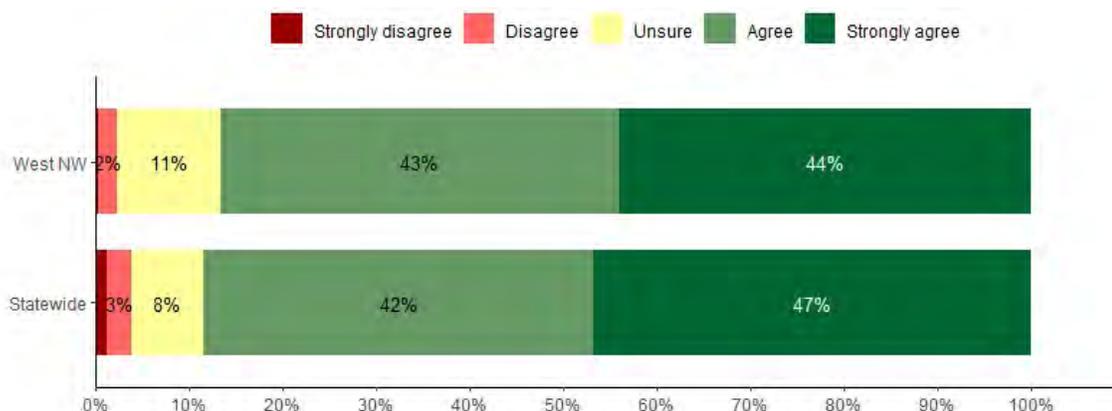


Note: West NW region n=345. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Recognition of relationship between proactive efforts to meet future water needs and Colorado’s economy. Survey respondents were specifically asked whether they agreed or disagreed with the following statement: “We need to take action in advance to reduce water use and/or increase water supply to continue to grow Colorado’s economy in the future.” As shown in Figure VIII-15, 87% of West NW respondents and 89% of statewide respondents agreed or strongly agreed with the statement supporting the need for proactive efforts. Less than 3% disagreed or strongly disagreed with the statement, while 8% to 11% were unsure.

Figure VIII-15. Agreement that we need to take action in advance to reduce water use and/or increase water supply to continue to grow Colorado’s economy in the future?



Note: West NW Region n=345. Totals may not add to 100% due to rounding. Percentages less than 2% are not labeled.

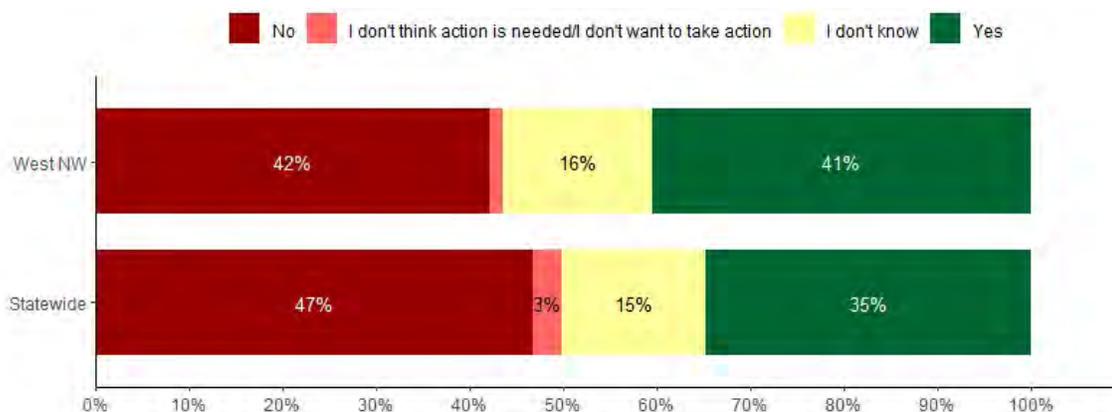
Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Respondents’ confidence in having the knowledge necessary to take an active role in water stewardship. Survey respondents were asked if they had enough information about Colorado’s water situation and potential future water issues to be able to confidently take action or support actions to use our water wisely. This question corresponded to one of the metrics in the Statewide Water Education Action Plan developed by Water Education Colorado.³

As shown in Figure VIII-16, a higher proportion of survey respondents in the West NW region (41%) than statewide (35%) indicated they were confident that they have the necessary information. Forty-two percent of respondents from the region, and 47% of respondents across the state, indicated they did not have enough information to be able to take action. The remaining respondents most frequently indicated they either did not know if they had enough information (15% to 16%). Very few respondents in either the West NW region or statewide indicated that they felt that no action was needed or did not want to take action (1% to 3%).

³ Outcome 3, page 18. Statewide Water Education Action Plan for Colorado 2020-2025. Water Education Colorado.

Figure VIII-16. Do you have enough information about Colorado’s water situation and potential future water issues to be able to confidently take action or support actions to use our water wisely?



Note: West NW region n=340. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Trusted Sources of Information

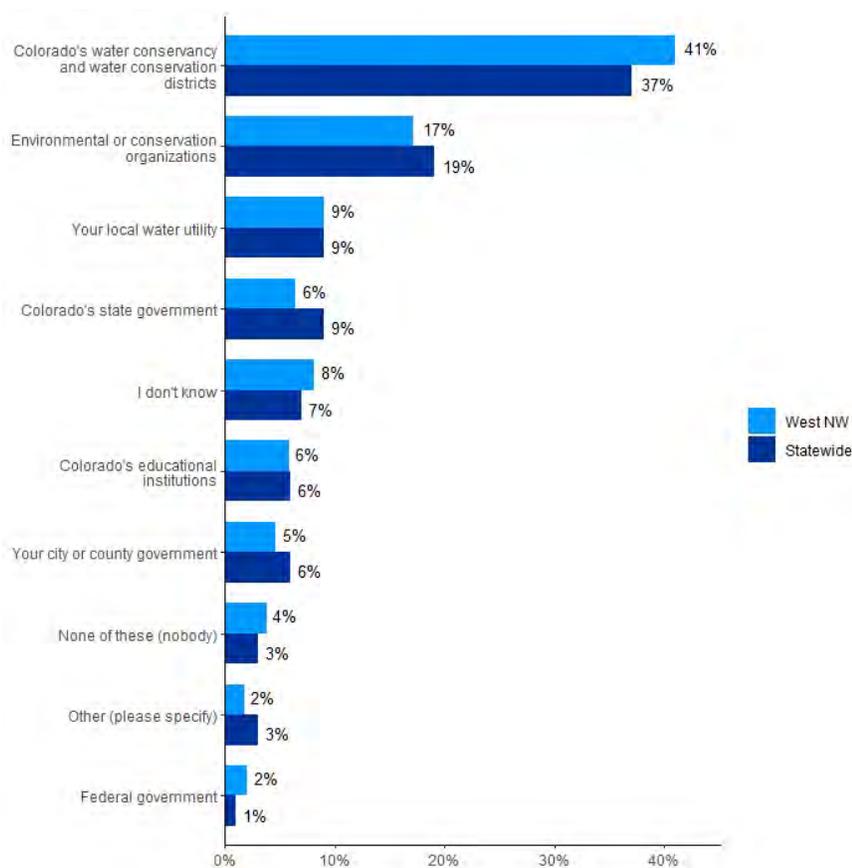
Immediately following the question about respondents’ confidence that they had enough information to be able to take action or support actions regarding water issues, the survey asked respondents to identify which organizations they would most trust to provide reliable information about Colorado’s water situation and potential issues. Figure VIII-17 presents those results.

In both the West NW region and the state as a whole, the majority of respondents identified either Colorado’s regional water conservancy and water conservation districts (37% to 41%) or environmental or conservation organizations (17% to 19%) as the sources they would most trust to provide information about water-related issues. Local water utilities were the next most trusted sources. The least trusted source of information about Colorado’s water-related issues was the Federal government (1% to 2%). The rank ordering of the various sources of information was very similar to the results from the 2012-2013 survey.

Figure VIII-17.
Most trusted sources of information

Note:
 West NW region n=345. Totals may not add to 100% due to rounding.

Source:
 BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted October-November 2021.



Awareness of the Colorado Water Plan

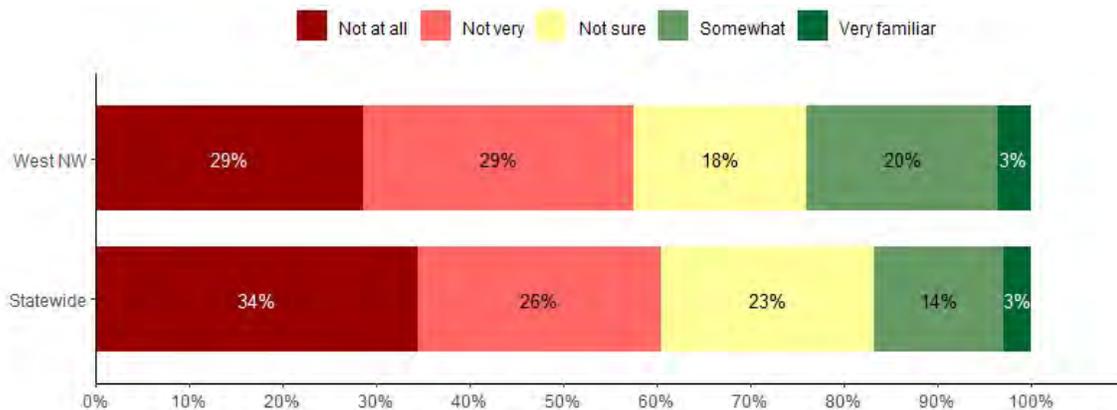
The final section of the survey, prior to gathering demographic information, was designed to gauge awareness of the Colorado Water Plan. The first edition of the Water Plan was issued in 2015, and the second edition is expected to be issued during 2022 or 2023.

Familiarity with the Water Plan. Survey respondents were initially asked “How familiar are you with Colorado’s Water Plan?” The following choices were provided to them:

- Not sure. That is, you don’t know if you have ever seen or heard of the Plan.
- Not at all. That is, you know that you have not heard of or seen the Plan.
- Not very. That is, you remember hearing about or seeing the Plan, but don’t know what it says.
- Somewhat. That is, you have seen or heard about the Plan and have a general idea of what it says.
- Very familiar. That is, you know about the Plan and what it says.

As shown in Figure VIII-18, most respondents from the West NW region indicated they were either not familiar with the Water Plan at all (29%) or not very familiar with it (29%). However, the proportion of West NW respondents indicating they were somewhat or very familiar with the Water Plan (23%) was higher than average across the state (17%).

Figure VIII-18. Familiarity with Colorado’s Water Plan?

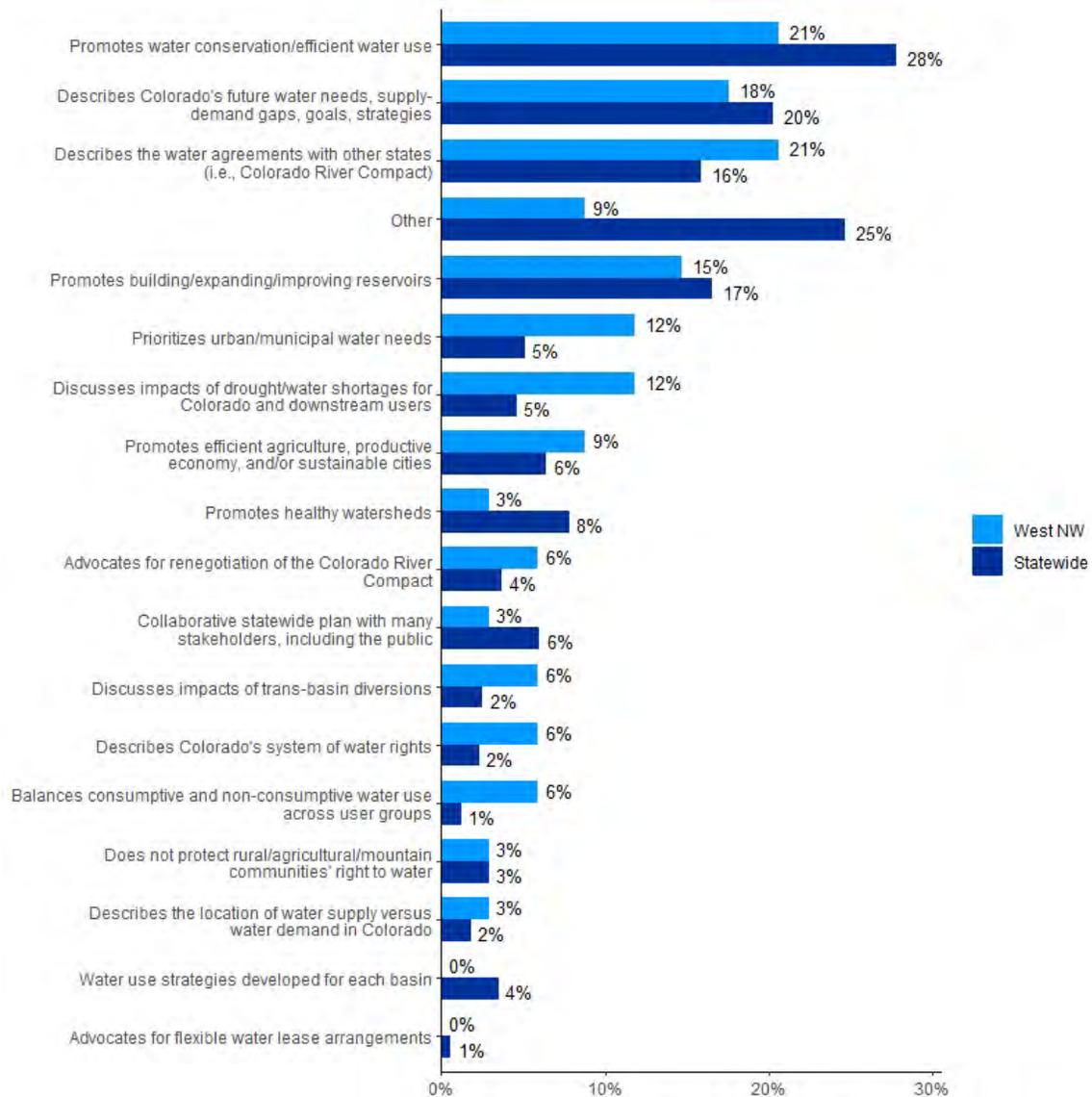


Note: West NW Region n=346. Totals may not add to 100% due to rounding. Percentages less than 2% are not labeled.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

What can you recall about the Water Plan? Survey respondents were next asked an open-ended question about what they remembered about the Water Plan. Given the relative low proportion of respondents who indicated they were familiar with the Plan in the previous question, only 34 West NW respondents – or about 10% of the total from the West NW region – provided a relevant response to this question. As shown in Figure VIII-19, for the most part these respondents correctly recalled many of the important takeaways from the Plan, although some recollections were not accurate. Responses coded as “other” in Figure VIII-19 ranged from negative comments about government (and the Plan) in general, to concerns that the Plan was not approachable or accessible to the average Coloradan or is underfunded or unenforceable. Since some of the responses included multiple aspects, the percentages shown in Figure VIII-19 total more than 100%.

Figure VIII-19. What do you recall from the Water Plan?



Note: West NW region n=34. Totals may not add to 100% due to rounding.

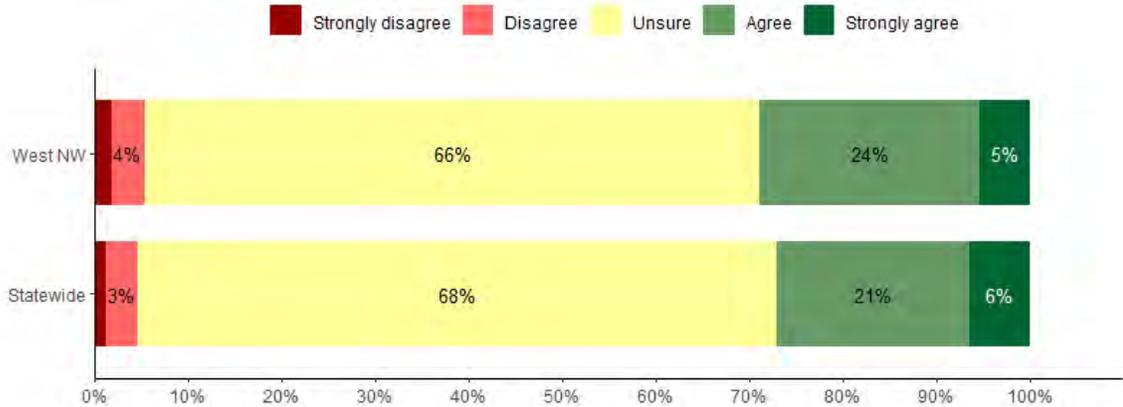
Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Agreement that the Water Plan will help us address our water-related challenges.

Respondents then were asked whether they agreed or disagreed with the following statement: “I think the Colorado Water Plan will help our state to address our water-related challenges in the future.” Given the relatively low awareness and knowledge regarding the Water Plan, the most common answer to this question (66% of Central SE respondents) was “unsure.”

More West NW respondents indicated at least some confidence in the utility of the Water Plan (29% agreed or strongly agreed) than not (5% disagreed or strongly disagreed with the statement). Regional and statewide results are shown in Figure VIII-20.

Figure VIII-20. Colorado’s Water Plan will help Colorado meet our future water challenges?

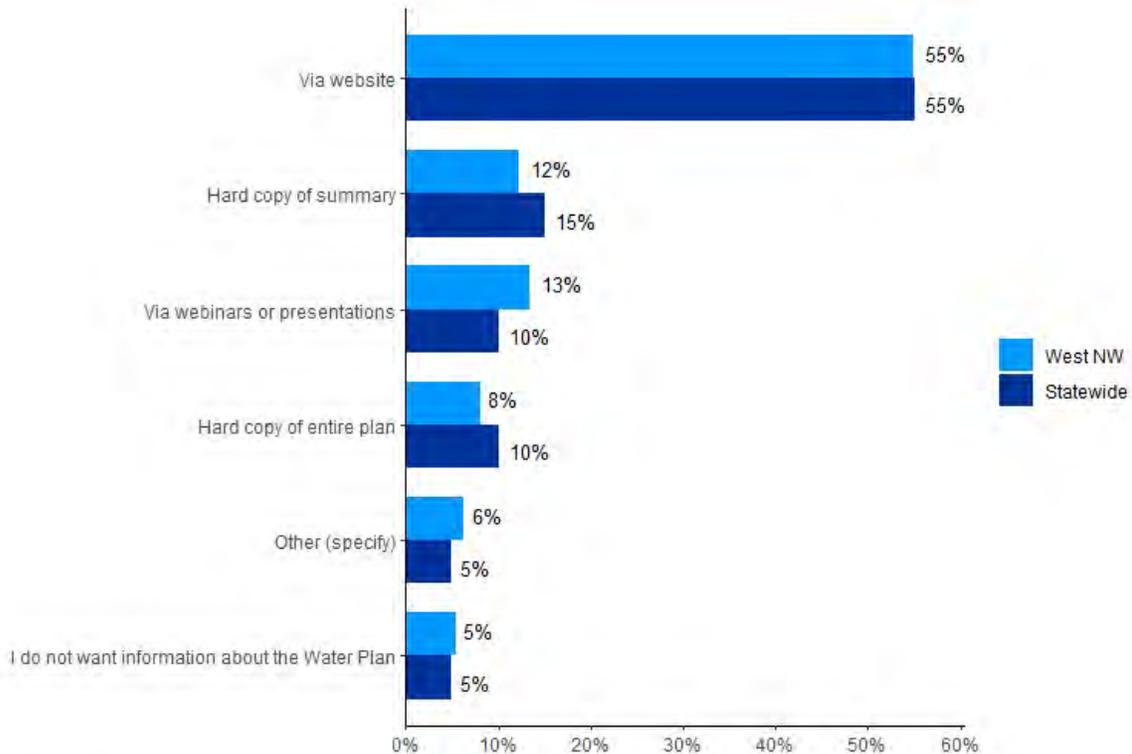


Note: West NW region n=335. Totals may not add to 100% due to rounding. Percentages less than 2% are not labeled.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

Preferred Ways to Learn About Colorado’s Water Plan. Respondents were asked how they would prefer to receive information about the Water Plan. As show in Figure VIII-21, by far the most common response among West NW residents (and among statewide respondents) was via a website. Hard copies of a summary of the Water Plan were a more popular method than hard copies of the full document. Only 5% of West NW respondents indicated they did not want any information about the Water Plan.

Figure VIII-21. How would you prefer to get information about Colorado’s Water Plan?



Note: West NW region n=337. Totals may not add to 100% due to rounding.

Source: BBC Research & Consulting from Colorado Water Conservation Board statewide survey conducted in October and November 2021.

APPENDIX A

Survey Instrument



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Denver, Colorado 80202-9750
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www.bbcresearch.com
bbc@bbcresearch.com

DRAFT CWCB SURVEY INSTRUMENT

October 11, 2021

Introduction

Hello, this is _____ calling from _____ on behalf of the State of Colorado. We are conducting a short survey with Colorado residents about water in Colorado. This is not a sales call – the State of Colorado would sincerely appreciate your participation.¹

Your individual responses to these questions will be kept confidential.

I will begin with a few introductory questions.

1. To ensure we have a representative mix of the state of Colorado, may I have your age?
_____ TERMINATE IF YOUNGER THAN 18

88 = I don't know. ☐ TERMINATE

99 = I prefer not to respond. ☐ GO TO 1a.

1a. ASK ONLY IF REFUSED TO ANSWER QUESTION 1: Which of the following categories best describes your age?

1 = 18 to 24

2 = 25 to 34

3 = 35 to 44

4 = 45 to 54

5 = 55 to 64

6 = 65 to 74

7 = 75 or older

99 = Refused

2. In which zip code is your primary residence located? _____ TERMINATE IF NOT COLORADO

88 = I don't know. ☐ TERMINATE

99 = I prefer not to respond. ☐ TERMINATE

¹ Should be able to provide name, email and phone number for a designated contact at CWCB if participant wants to verify survey legitimacy.

3. There are five main types of water users in Colorado. They are (READ CHOICES; RANDOMIZE CHOICES). Which of these groups of users do you think uses the most water in Colorado?

1 = Industrial Users

2 = Household Users

3 = Irrigated Farms and Ranches

4 = Government Uses such as Parks and Ball Fields

5 = Commercial Uses such as Offices and Retail Stores

On a scale from 1 to 10, please tell me your level of agreement with the following statements, where 1 means “completely disagree” and 10 means “completely agree.” Again, you should feel free to use any number from 1 to 10:

4. Government agencies are doing enough to protect the quality of your drinking water.

ENTER 1-10

88 = I don't know

99 = Refused

5. Government agencies are doing enough to protect the quality of water in Colorado streams, rivers, and lakes.

ENTER 1-10

88 = I don't know

99 = Refused

6. Colorado has enough water available to meet our current needs.

ENTER 1-10

88 = I don't know

99 = Refused

7. Colorado has enough water available to meet our needs **for the next 40 years**.

ENTER 1-10

88 = I don't know

99 = Refused

8. Now I'm going to read you a list of possible current or future issues regarding water in Colorado. After I read each one, please rate your level of concern about that issue on a scale of 1 to 10, where 1 means "you are not concerned at all" and 10 means "you are very concerned." Again, please use any number on the scale that best reflects how concerned you are about the specific issue.

RANDOMIZE ORDER OF QUESTIONS 8a – 8i

a. Water quality in our rivers, lakes and streams

ENTER 1-10

88 = I don't know

99 = Refused

b. Amount of water available for Colorado's cities and towns

ENTER 1-10

88 = I don't know

99 = Refused

c. Amount of water available for Colorado's farms and ranches

ENTER 1-10

88 = I don't know

99 = Refused

d. Amount of water for recreational use such as boating, rafting and fishing

ENTER 1-10

88 = I don't know

99 = Refused

e. Amount of water for fish and wildlife

ENTER 1-10

88 = I don't know

99 = Refused

f. Condition of underground water pipes, dams, and other water utility infrastructure

ENTER 1-10

88 = I don't know

99 = Refused

g. The quality of the water you receive at your home

ENTER 1-10

88 = I don't know

99 = Refused

h. Amount of water used for energy development

ENTER 1-10

88 = I don't know

99 = Refused

i. Effects of energy development on water quality

ENTER 1-10

88 = I don't know

99 = Refused

FOR QUESTION 9, RANDOMIZE \$1, \$5, \$10, \$25 AS DOLLAR AMOUNT TO PAY – PLEASE RECORD WHAT DOLLAR AMOUNT WAS ASKED OF EACH RESPONDENT

9. Would you be willing to pay an additional \$____ [RANDOMIZE \$1, \$5, \$10, \$25] per month in your water bill, rent or HOA payment to address any or all of the potential issues we just discussed?

1 = YES

2 = NO

88 = I don't know

99 = Refused

10. I'm going to reread the list of potential issues that we just discussed. Please tell me which is the MOST IMPORTANT issue that needs to be addressed:

PLEASE SELECT ONE; READ CHOICES; RANDOMIZE ORDER OF CHOICES TO REFLECT
RANDOMIZED ORDER OF QUESTIONS 8a – 8i

- 1 = Water quality in our rivers, lakes and streams
- 2 = Amount of water available for Colorado's cities and towns
- 3 = Amount of water available for Colorado's farms and ranches
- 4 = Amount of water for recreational use such as boating, rafting and fishing
- 5 = Amount of water for fish and wildlife
- 6 = Condition of underground water pipes, dams and other water utility infrastructure
- 7 = The quality of water you receive in your home
- 8 = Amount of water used for energy development
- 9 = Effects of energy development on water quality

DO NOT READ

55 = Other (please specify): _____

66 = All of these

77 = None of these □ go to QUESTION 14

88 = I don't know □ go to QUESTION 14

99 = Refused □ go to QUESTION 14

11. What should be done to address [INSERT RESPONSE FROM Q9]?

OPEN-ENDED – CODE THIS TO CLOSE IT

88 = I don't know

99 = Refused

12. How many years have you lived in Colorado?

ENTER YEARS LIVED IN COLORADO; LESS THAN 1 YEAR = 0 AND PARTIAL YEARS
ROUND DOWN

88 = I don't know

99 = Refused

13. Do you believe severe drought that impacts the Colorado River Basin and the Southwestern US could have an impact on the water supply for your own home or business?

1 = YES

2 = NO

3 = Maybe

88 = I don't know

99 = Refused

14. Do you think that legal agreements with neighboring states limit the amount of water Colorado can use from its rivers?

- 1 = YES
- 2 = NO
- 3 = Maybe
- 88 = I don't know
- 99 = Refused

15. For this next section I am going to read you a short series of statements. After I reach each statement, please tell me if you agree or disagree with the statement. The first statement is...

a. We can help manage Colorado's future water use by carefully planning how we develop new homes, businesses and infrastructure.

[INTERVIEWER: Probe with, "Is that strongly agree/disagree or somewhat agree/disagree?"]

- 1 = Strongly Agree
- 2 = Agree
- 3 = Unsure
- 4 = Disagree
- 5 = Strongly Disagree
- 99 = Refused

b. The trend of rising temperatures is unlikely to affect Colorado's future water needs.

[INTERVIEWER: Probe with, "Is that strongly agree/disagree or somewhat agree/disagree?"]

- 1 = Strongly Agree
- 2 = Agree
- 3 = Unsure
- 4 = Disagree
- 5 = Strongly Disagree
- 99 = Refused

c. We need to take action in advance to reduce water use and/or increase water supply to continue to grow Colorado's economy in the future.

[INTERVIEWER: Probe with, "Is that strongly agree/disagree or somewhat agree/disagree?"]

- 1 = Strongly Agree
- 2 = Agree
- 3 = Unsure
- 4 = Disagree
- 5 = Strongly Disagree
- 99 = Refused

16. Do you think you have enough information about Colorado's water situation and potential future water issues to be able to confidently take action or support actions to use our water wisely?

- 1 = YES
- 2 = NO
- 3 = I don't think action is needed
- 4 = I don't want to take action
- 88 = I don't know
- 99 = Refused

17. Among the following types of organizations, who would you most trust to provide reliable information about Colorado's water situation and water issues?

RANDOMIZE – READ RESPONSES 1 THROUGH 7

- 1 = Your local water utility
- 2 = Your city or county government
- 3 = Colorado's water conservancy and water conservation districts*
- 4 = Environmental or conservation organizations
- 5 = Colorado's state government
- 6 = Federal government
- 7 = Colorado's educational institutions
- 55 = Other (please specify): _____
- 77 = None of these (nobody)
- 88 = I don't know
- 99 = Refused

*NOTE TO SURVEYORS: IF RESPONDENT ASKS FOR CLARIFICATION ABOUT THESE DISTRICTS □ RESPOND "FOR EXAMPLE, THE COLORADO RIVER WATER CONSERVATION DISTRICT OR THE NORTHERN COLORADO WATER CONSERVANCY DISTRICT"

18. How familiar are you with Colorado's Water Plan (read choices)?

- 1 = Not sure. That is, you don't know if you have ever seen or heard of the Plan.
- 2 = Not at all. That is, you know that you have not heard of or seen the Plan.
- 3 = Not very. That is, you remember hearing about or seeing the Plan, but don't know what it says.
- 4 = Somewhat. That is, you have seen or heard about the Plan and have a general idea of what it says.
- 5 = Very familiar. That is, you know about the Plan and what it says.
- 99 = Refused

IF RESPONSE IS 1, 2, 3 OR 99 SKIP TO QUESTION 19

19. What can you recall about the Colorado Water Plan?

OPEN-ENDED – CODE THIS TO CLOSE IT

88 = I don't know

99 = Refused

20. Please tell me if you agree or disagree with the following statement:

a. I think the Colorado Water Plan will help our state to address our water-related challenges in the future.

[INTERVIEWER: Probe with, "Is that strongly agree/disagree or somewhat agree/disagree?"]

1 = Strongly Agree

2 = Agree

3 = Unsure

4 = Disagree

5 = Strongly Disagree

99 = Refused

21. How would you prefer to get information about Colorado's Water Plan?

[INTERVIEWER: Do not read options]

1 = Hard copy of entire plan

2 = Hard copy of summary

3 = Via website

4 = Via webinars or presentations

5 = Other: _____

6 = Do not want information about the Water Plan

99 = Refused

22. We are almost done. I just have a few questions left to ask for demographic purposes.

What is your race or ethnicity?

ACCEPT MULTIPLE RESPONSES; DO NOT READ CHOICES

1 = White

2 = Hispanic

3 = Black, African American, or Negro

4 = American Indian or Alaska Native

5 = Asian Pacific

6 = Subcontinent Asian

7 = Mixed race

55 = Other race (please specify): _____

88 = I don't know

99 = Refused

IF RESPONSE DOES NOT INCLUDE 2, ASK "ARE YOU OF HISPANIC OR LATINO ORIGIN?"

1 = Yes

2 = No

88 = I don't know

99 = Refused

23. Which of the following categories best represents your total household income for last year?

1 = Less than \$25,000

2 = \$25,000 to \$49,999

3 = \$50,000 to \$74,999

4 = \$75,000 to \$99,999

5 = \$100,000 to \$200,000

6 = \$200,000 or more

88 = I don't know

99 = Refused

24. Record Gender (do not ask)

1 = Male

2 = Female

3 = Unknown

25. Has any part of your education, work or volunteer experience involved water or water-related issues?

1 = Yes

2 = No

Thank you very much for participating in this survey!

APPENDIX B

Focus Group Summary



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MEMORANDUM

To: Colorado Water Conservation Board
From: BBC Research & Consulting
Re: CWCB Statewide Water Awareness Survey – Focus Groups
Date: October 25, 2021

As part of the Colorado Water Conservation Board (CWCB) 2021 Statewide Water Awareness Survey, BBC Research & Consulting (BBC) conducted focus groups with the general public and water education leaders across the state to collect insights and feedback related to water issues and potential survey questions. This memorandum summarizes BBC's focus group process, including methodology and summary findings.

Methodology

BBC conducted three focus groups as part of the 2021 Statewide Water Awareness Survey, two with the general public and one with water education leaders across Colorado.

General public. BBC conducted one general public focus group in Grand Junction and one in Denver. We worked with Davis Research to recruit Colorado residents who demographically represent the state in terms of race/ethnicity and gender. By design, we oversampled younger Colorado residents (those under the age of 40) to capture meaningful insights and feedback from the younger population. Residents who currently or have previously worked for, served on a board, or volunteered with an organization that does work directly related to water issues in Colorado were not eligible to participate in the general public focus groups. In total, 19 people participated in the focus groups. Each of the general public focus groups lasted 90 minutes and covered a variety of topics, including:

- Water knowledge and concerns to understand perceptions related to water supply and issues in Colorado;
- Communication and engagement to learn about ways to effectively engage and communicate with residents; and
- Survey questions to test the design and functionality of proposed questions for the 2021 Statewide Water Awareness Survey.

Education leaders. BBC conducted one virtual focus group with water education leaders across the state to test the design and functionality of proposed questions for the 2021

Statewide Water Awareness Survey and better understand how water-related organizations might use information resulting from the survey. CWCB developed a list of individuals representing various organizations across Colorado and invited them to participate in the focus group. The education leaders focus group lasted 90 minutes, and nine people participated.

Summary Findings

Several themes and insights emerged from the general public focus groups:

- **Community concerns:** Although many participants indicated that water supply was a statewide concern, few indicated that it was the most pressing concern within their own communities. Most participants said that economic conditions, homelessness, or housing were the most pressing concerns within their communities.
- **Water use:** Most participants indicated that their household water use has decreased over the past few years as a result of elevated water concerns and consciousness. However, several participants said their water use has stayed the same or increased because of HOA requirements related to lawn maintenance or because they are billed equally to other units within multi-unit housing complexes regardless of their own use. Some participants suggested providing incentives for xeriscaping; changing city codes related to subdivision and development requirements for lawns and plants; and working with HOAs to help them move towards drought-tolerant landscaping.
- **Water compacts:** The general public's understanding of interstate water compacts varied widely across participants, as did opinions related to their implications for water supply within Colorado and downstream states. Some participants indicated they disagree with the compacts and that "Colorado has the right to keep [our] water" while others consider water supply to be a regional matter and that we should not "[cut] people off" from water supply downstream but rather focus on conservation both within Colorado and regionally. A few participants recognized that water compacts are legally binding agreements that cannot be easily altered.
- **Communication and engagement:** Residents in Grand Junction and Denver both indicated they largely trust state organizations, including the State of Colorado, and schools to provide reliable information. However, residents in Grand Junction appear to be more connected into their local community and organizations and suggested working with the Western Colorado Farming Alliance, local universities, community festivals and events, and other local organizations to engage the public. In contrast, residents in Denver indicated they typically get information from a trusted friend or other individuals or from social media. Commonalities did emerge across both focus groups in terms of effective messaging and media content:
 - Illustrating the larger, long-term context is important. Participants agreed that communicating how today's actions impact Colorado's water conditions 40 years from now, and using imagery, may create a stronger sense of urgency.

- Providing what people perceive as “opinions” or suggestions for “lifestyle changes” may be divisive. Providing consistent data-driven facts may be more effective.
- Creating a sense of agency by providing information to help residents make individual decisions around water use and actions is important for promoting personal buy-in. Ways to do that include providing:
 - Fact-based information about the comparative use of water for everyday activities (e.g., taking a shower versus a bath);
 - Information about how residents’ household water use compares to neighbors or similar households; and
 - Information about what various industries are required to do to reduce water use and how individual behaviors can affect an industry’s water use (e.g., how much water buying used rather than new clothes might save in terms of manufacturing).

Survey implications and timing. Education leaders provided feedback related to how their organizations may use survey results in the future and how frequently the survey should be conducted to provide timely information:

- Although some organizations said they found little value in results from the 2013 Statewide Water Awareness surveys, other organizations said survey results from this and future iterations of the survey are useful for planning and focusing education and outreach efforts, including for the 2022 Water Plan. One participant said survey results could help inform the focus of Headwaters Magazine in particular.
- Several participants indicated that repeating the survey every three to five years would provide information to help organizations make strategic decisions and implement new strategies. One participant also said that timeframe would allow results to reflect meaningful changes in resident perceptions and opinions.
- One participant indicated that another iteration of the survey at the end of 2025 would be particularly helpful because it would correspond with the end of the current Statewide Water Education Action Plan and planning for the next one.

Survey questions. As part of all three focus groups, BBC also tested potential survey questions. Feedback and insights related to survey questions were incorporated into the final survey instrument.