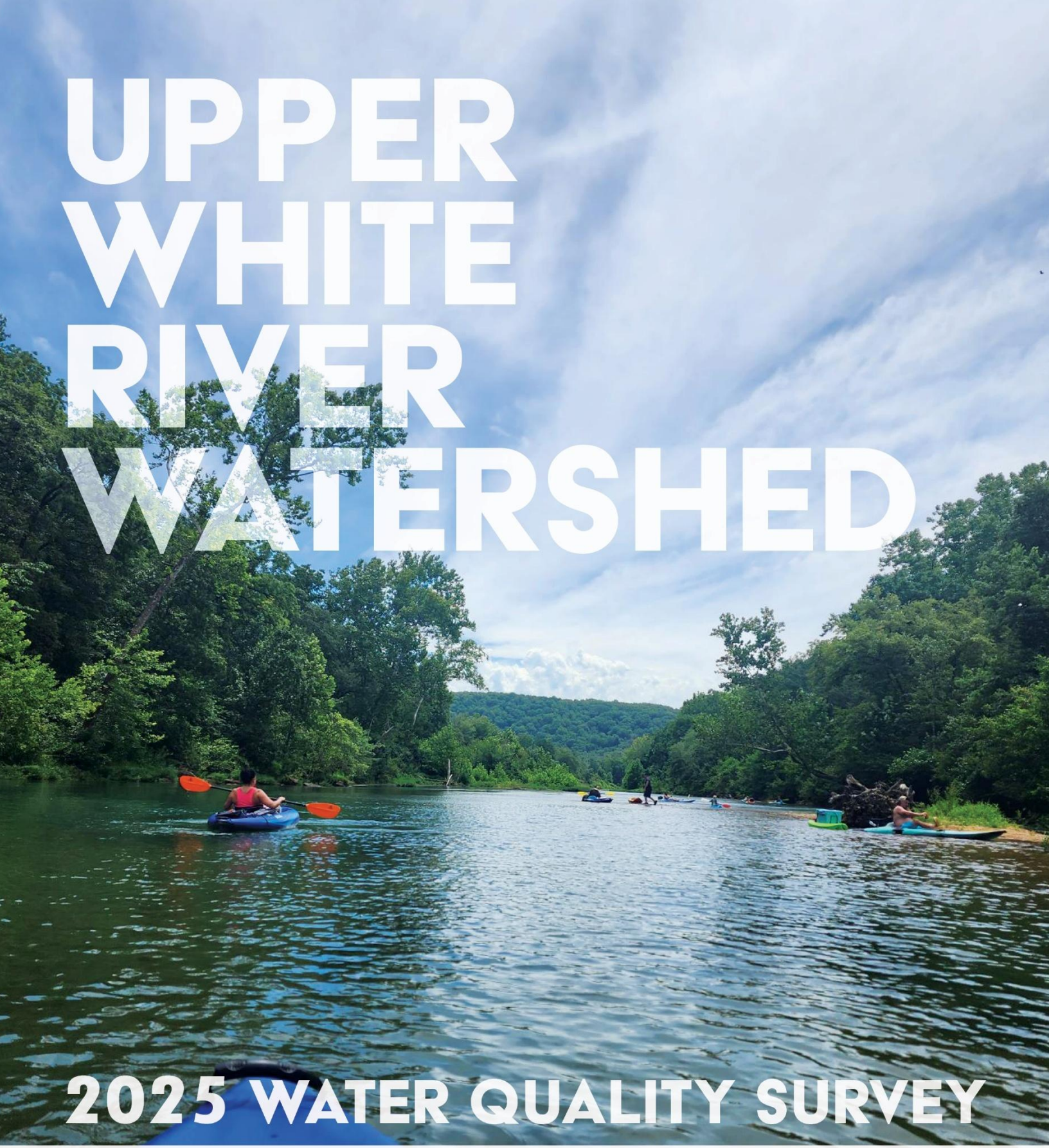


UPPER WHITE RIVER WATERSHED

2025 WATER QUALITY SURVEY

H2Ozarks
Cleaner Water Together!

SMCOG Southwest Missouri COUNCIL OF GOVERNMENTS

TABLE OF CONTENTS

INTRODUCTION

Water Quality Survey for Upper White River Watershed

The **Southwest Missouri Council of Governments (SMCOG, pronounced 'sim-cog')**, in partnership with **H2Ozarks** and other regional organizations, launched an online survey to gather public input about the condition of area lakes, rivers, and streams.

"Our rivers and lakes aren't just beautiful - they're essential to our economy, public health, and the Ozarkian way of life," said Jason Ray, Executive Director of SMCOG. "Whether you float the James, fish on Table Rock, or simply enjoy knowing we have clean water, your voice can help shape efforts to protect these resources for generations to come."

The Upper White River watershed includes major parts of **Greene, Christian, Stone, Taney, Barry, Webster, Douglas, and Ozark counties in Missouri**, as well as parts of **Carroll, Boone, Marion, Madison, Benton, and Washington counties in Arkansas**. These areas are home to treasured waterways such as Table Rock Lake, Lake Taneycomo, Bull Shoals Lake, Buffalo National River, the James River, and the Finley River.

Tourism, agriculture, and outdoor recreation - key drivers of the regional economy - all depend on clean water. The survey asks residents about their perceptions of water quality, potential threats, and the actions they take to protect it.

The survey results will help local leaders, conservation groups, and regional planners prioritize future programs, community education, and resource protection efforts. All responses will remain confidential, and results will be presented in aggregate form.

Survey Design and Methodology

Survey results are based on 390 completed online survey forms with 182 Southwest Missouri residents from urban areas (Springfield, Branson, Nixa, Ozark, Republic, and Battlefield), 26 Northwest Arkansas urban residents (Fayetteville, Bentonville, Springdale, and Rogers), 154 residents from various counties (non-urban areas) within the 19-county area of the Upper White River Basin region, and 28 residents from counties outside the region. There were 95 unique communities from 37 different counties represented in the responses.

The survey was open from May 10 to October 20, 2025, and was distributed throughout the Ozarks through social media advertising, flyers at major community centers, and the channels of SMCOG's regional partners. To incentivize completion of the survey, respondents could opt into a raffle for a chance to win one of three outdoor recreational items.

About SMCOG:

The Southwest Missouri Council of Governments (SMCOG) is a regional planning commission serving 10 counties in Southwest Missouri. SMCOG supports local communities with planning, research, grant development, and public engagement to build a stronger, more resilient region.

About H_2Ozarks:

H_2Ozarks is a nonprofit organization dedicated to protecting water quality throughout the Upper White River Basin. Through education, advocacy, and hands-on programming, H_2Ozarks works to ensure clean water for current and future generations.

*****

EXECUTIVE SUMMARY

This Executive Summary presents an overview of the 2025 Water Quality Survey. Overall survey results are based on online responses from 382 residents of Southwest Missouri and Northwest Arkansas, 8 from outlying states, and 3 from an unknown area.

Perceptions of Water Quality

Sixty-seven percent of survey respondents perceive the overall water quality of lakes and rivers in the Upper White River Watershed as good. However, compared to 25 years ago, many believe water quality has declined, citing murkier water, algal blooms, and litter as primary concerns. Conversely, 23% of respondents feel that water quality has improved, with 46% noting visibly clearer water. These differences reflect geographic variability in water quality across the region.

Future Concerns

Looking ahead, respondents identified erosion and sediment runoff, along with urban development–related runoff, as the most significant threats to water quality. Industrial discharge was also cited as a major concern.

Responsibility for Clean Water

One-third of respondents believe government entities bear the greatest responsibility for promoting clean water, followed by businesses, industries, and environmental organizations. Some participants questioned whether the survey was referring to promoting clean water through awareness efforts or encouraging direct action.

Actions and Attitudes Toward Water Quality

Supporting legislation to improve water quality remains important to most respondents. Many also take personal action by practicing proper waste disposal, reducing single-use plastics, minimizing runoff, and maintaining or upgrading septic systems. However, 19% of respondents indicated uncertainty about what actions to take, and 5% expressed doubt that individual efforts would make a difference.

Sources of Information and Regulation Awareness

The Missouri Department of Conservation and the Missouri Department of Natural Resources are the primary sources of information about water quality and related regulations, such as the Clean Water Act. While respondents are generally aware of these efforts, 23% believe such regulations are not very effective.

Perceived Pollution Issues

Seventy-two percent of respondents view pollution in lakes and rivers as a major concern. Key worries include agricultural runoff (e.g., agrichemicals, hog farms) and chemical contamination (e.g., algal blooms caused by runoff, microplastics, and litter).

Recreation and Residency

A large majority of respondents visit local lakes and rivers, with more than one-third participating in recreational activities on or in the water. Thirty-eight percent have lived in the Upper White River watershed for 31–60 years, and 7% have resided there for over 60 years. Nearly half of respondents have lived in the area for more than 30 years, while 19% have lived there between 21–30 years.

Engagement and Stewardship

Most respondents lack formal education or professional experience in natural resource management; nevertheless, a majority actively promote water quality. Of the 387 individuals who answered this question, 72% reported taking personal action to protect or improve water quality. The most common activities include pollution prevention and personal stewardship, such as trash collection, fertilizer management, and septic maintenance. Many respondents engage in multiple forms of action, including sustainable landscaping, community cleanup, and adopting environmentally responsible behaviors such as reducing chemical use, following *Leave No Trace* principles, and conserving water.

Awareness of Water Organizations

Sixty percent of respondents are aware of regional or local water organizations, including H2Ozarks, the James River Basin Partnership, and the Watershed Committee of the Ozarks.

Among those familiar with H2Ozarks (42% of respondents), 78% expressed a positive or very positive perception of the organization.

The best way to learn about local water organizations? Word of mouth.

*****

SURVEY RESPONDENT PROFILE

Demographics of Respondents by Region

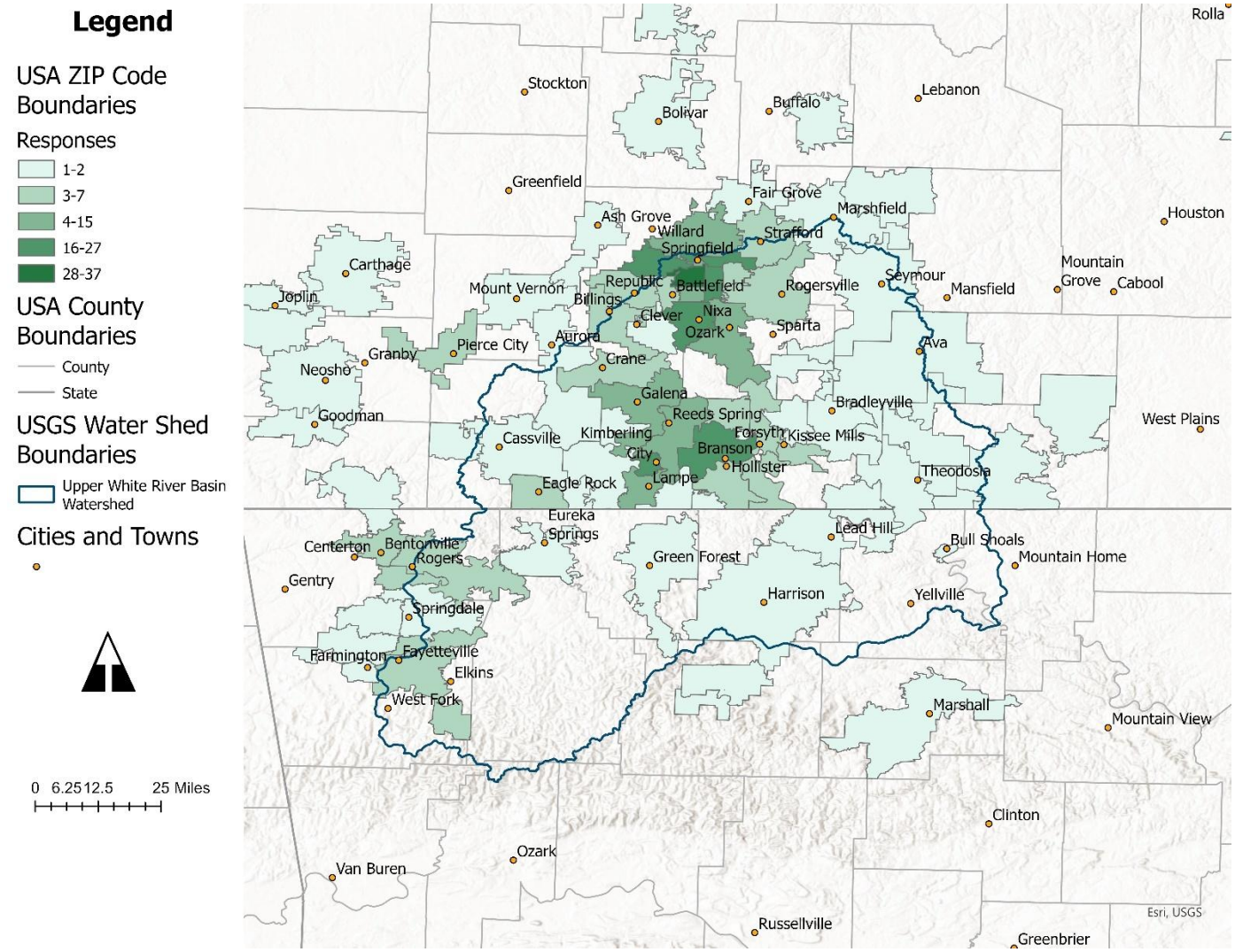
"SW Missouri" = respondents located within the cities of Springfield, Branson, Nixa, Ozark, Republic, and Battlefield.

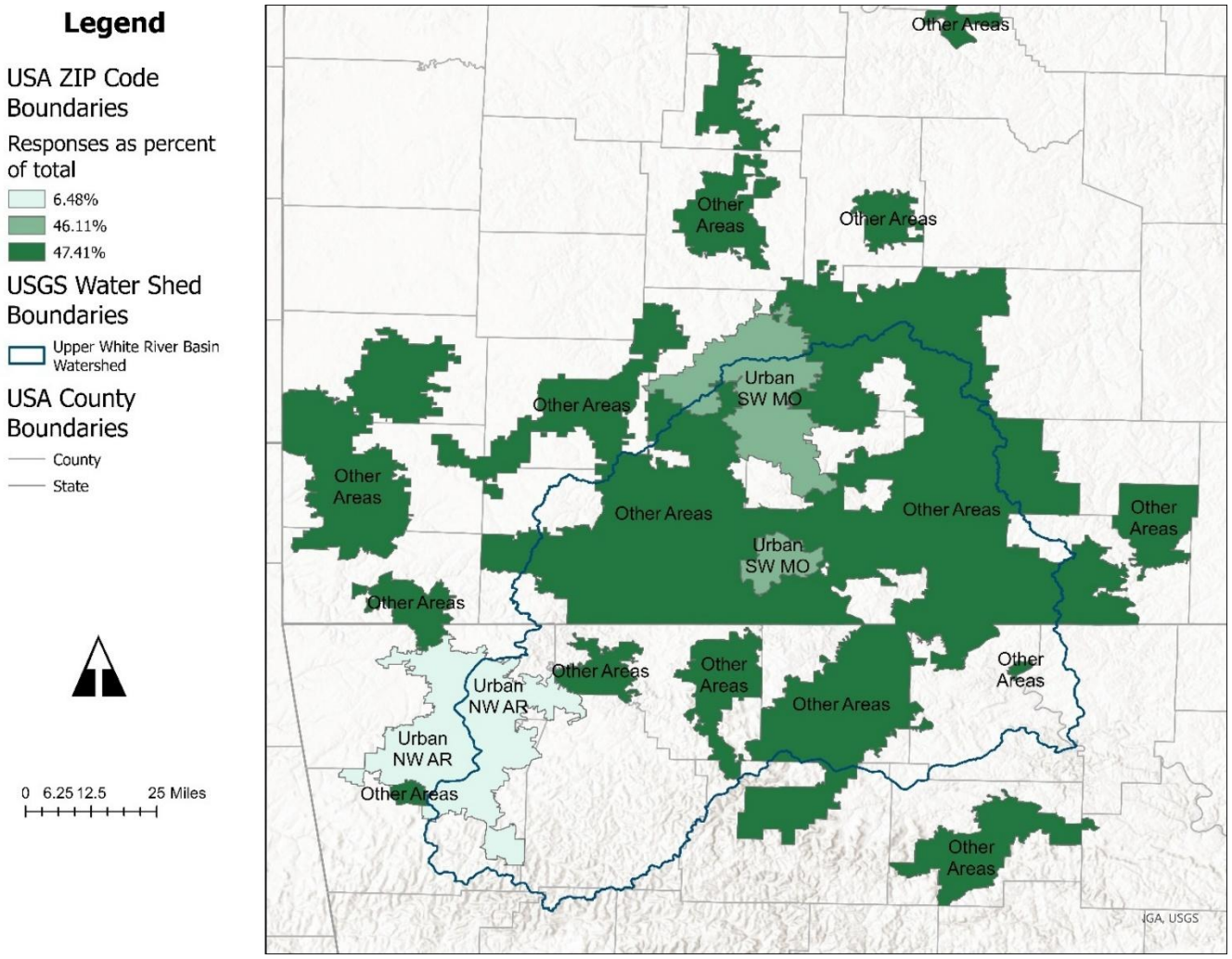
"NW Arkansas" – respondents located within the cities of Fayetteville, Bentonville, Springdale, and Rogers.

"Counties" = respondents not located in the cities named above.

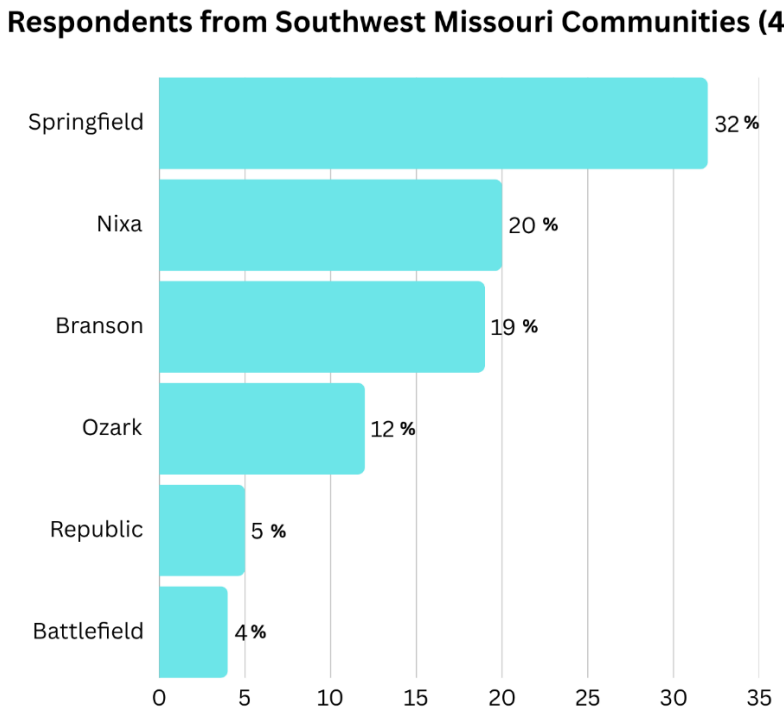
	SW Missouri	NW Arkansas	Counties	ALL
Age				
Under 19 Years	2	0	4	6
20-29 Years	43	9	13	65
30-39 Years	32	6	16	54
40-49 Years	24	2	32	58
50-59 Years	33	2	33	68
60-64 Years	15	0	28	43
65+ Years	33	5	56	94
Educational Level				
High Schoool or Less	10	5	14	29
Some College/Associates/Vo-Tech	59	3	73	135
College Graduate	68	7	50	125
Post-Graduate	45	9	45	99
Years of Residency				
Resident <15 Years	34	12	50	96
Resident 15-39 Years	73	17	60	150
Resident 40+ Years	44	22	90	156
Have Used Area Lakes or Rivers in the Past Year				
Yes	82	96	90	268
No	18	5	10	33

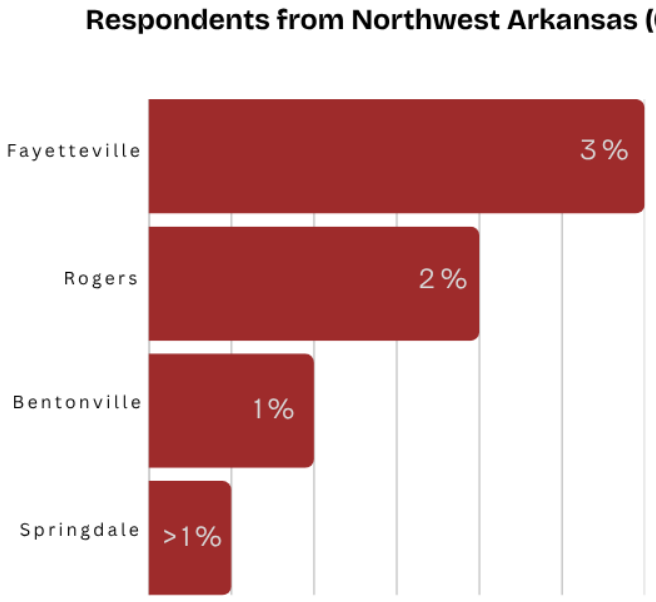
Respondent Location Maps



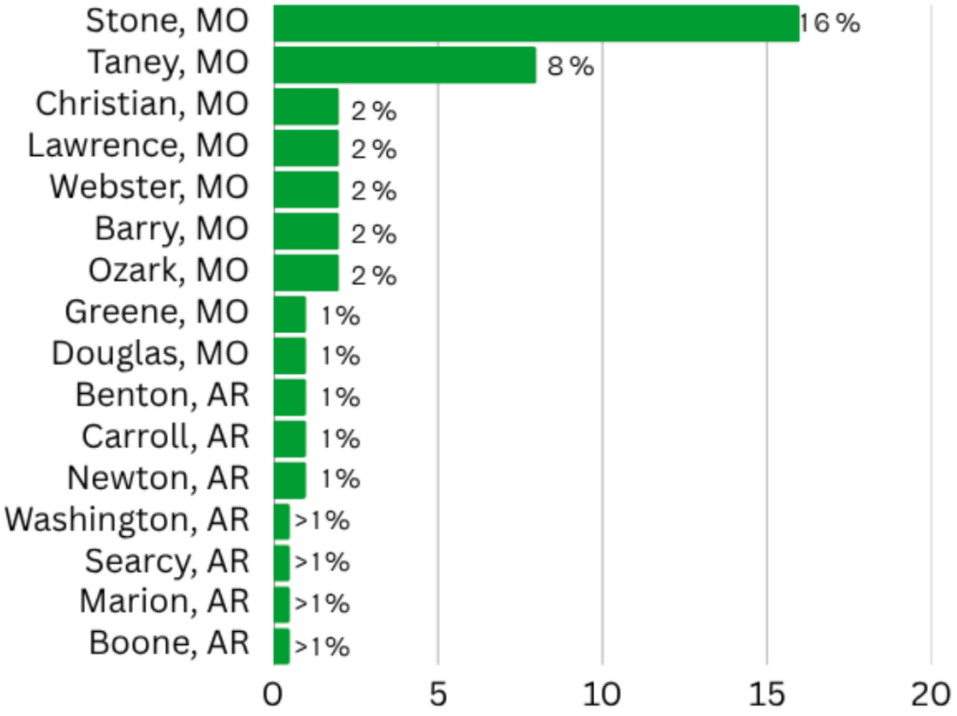

Legend
USA ZIP Code Boundaries
Responses as percent of total
6.48%
46.11%
47.41%
USGS Water Shed Boundaries
Upper White River Basin Watershed
USA County Boundaries
County
State
0 6.25 12.5 25 Miles
Other Areas
Other Areas
Other Areas
Urban SW MO
Other Areas
Other Areas
Other Areas
Other Areas
Urban SW MO
Other Areas
Other Areas
Other Areas
Other Areas
Other Areas
Urban NW AR
Urban NW AR
Other Areas
Other Areas
Other Areas
GA, USGS

Survey Respondents by Region and Community/County

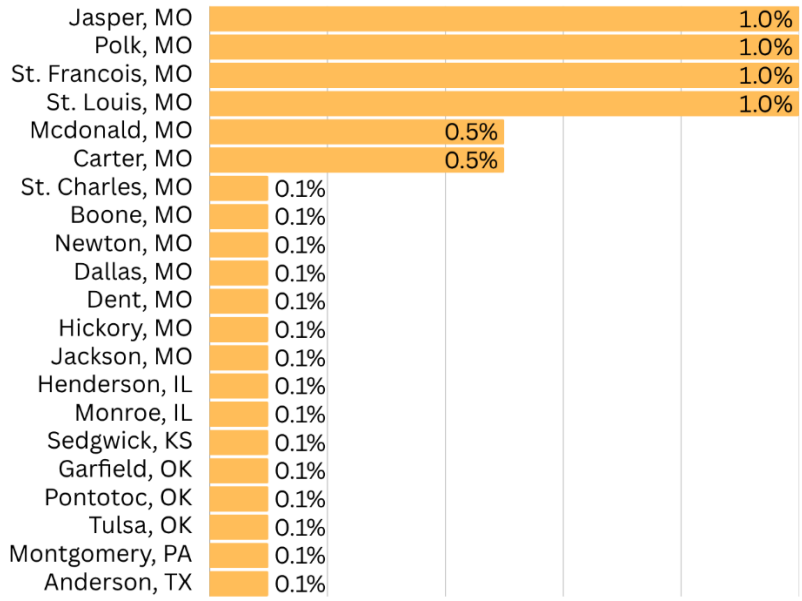




Counties in the UWRB (39%)



Counties not in the UWRB (7%)

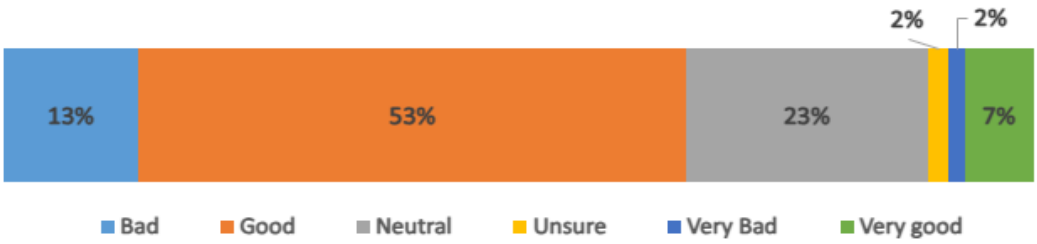


SURVEY RESULTS

This Executive Summary presents an overview of the 2025 Water Quality Survey. Overall survey results are based on online responses from 382 residents of Southwest Missouri and Northwest Arkansas, 8 from outlying states, and 3 from an unknown area.

Overall Water Quality of Area Lakes and Rivers

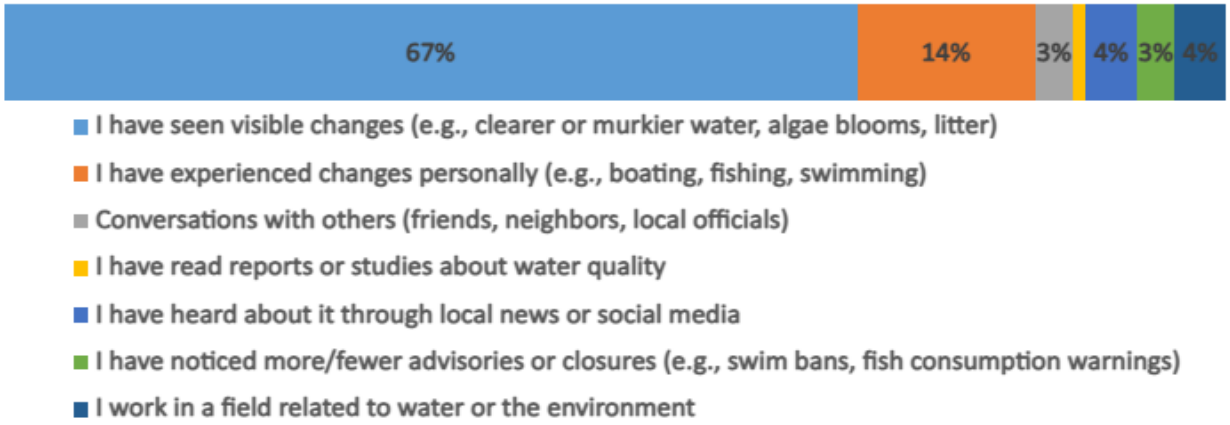
Over half of the Respondents (60%) perceive the overall water quality of lakes and rivers as good or very good. Only 15% have a negative perception of water quality.



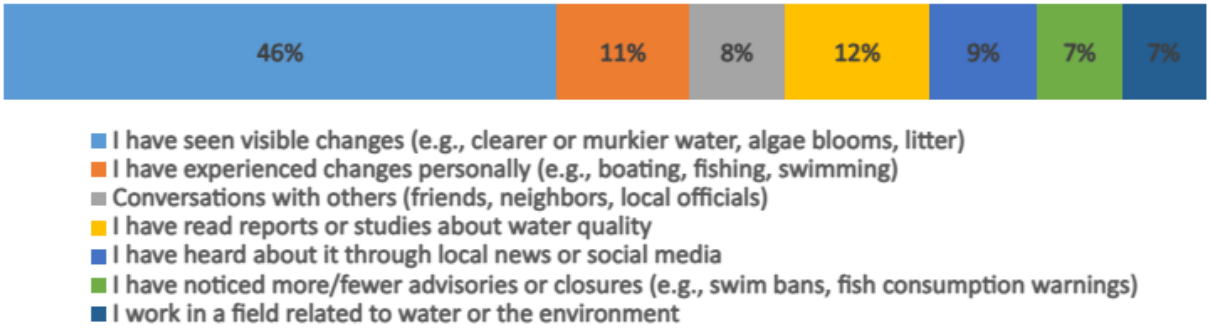
Overall Water Quality of Area Lakes and Rivers Compared to 25 Years Ago? What experiences, observations, or information influenced your opinion about how water quality has changed?

Forty percent of **all Respondents** believe that compared to 25 years ago, overall water quality of lakes and rivers has **gotten worse**:

Of that cohort, 67% of those noticed that conditions such as murkier water, algae blooms, and litter have become more visible.



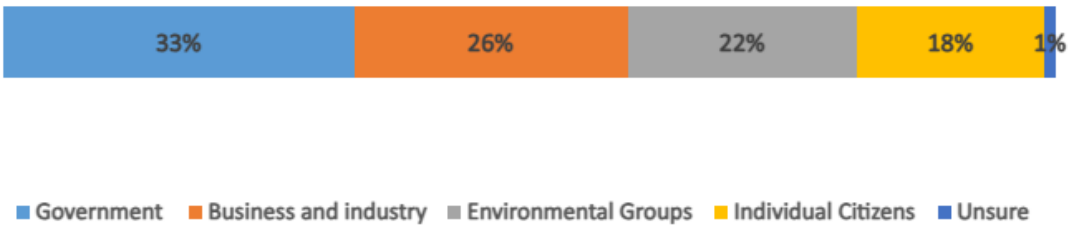
Twenty-three percent of **all Respondents** believe the overall water quality has **improved**; 46% of that cohort noting visibly clearer water.



The variations in these observations denote the swings in water quality by geography.

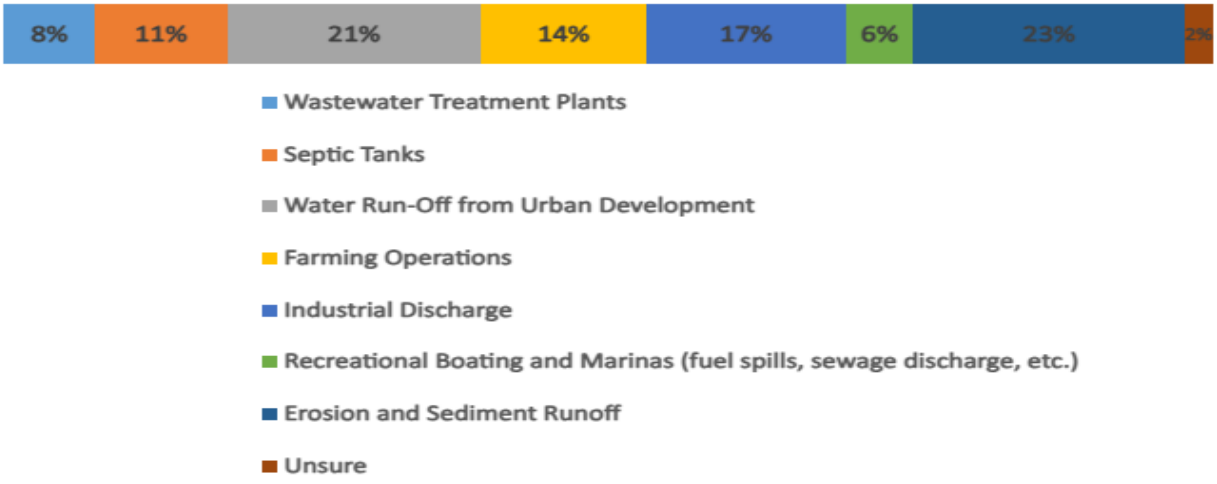
Group Most Responsible for Promoting Clean Water in Area Lakes and Rivers

One third of the Respondents claimed that it is the government's responsibility to promote clean water, with Business/Industry and Environmental Groups listed next. Some respondents questioned whether the survey was asking whose responsibility it is to simply "promote" clean water or to instill awareness and action?



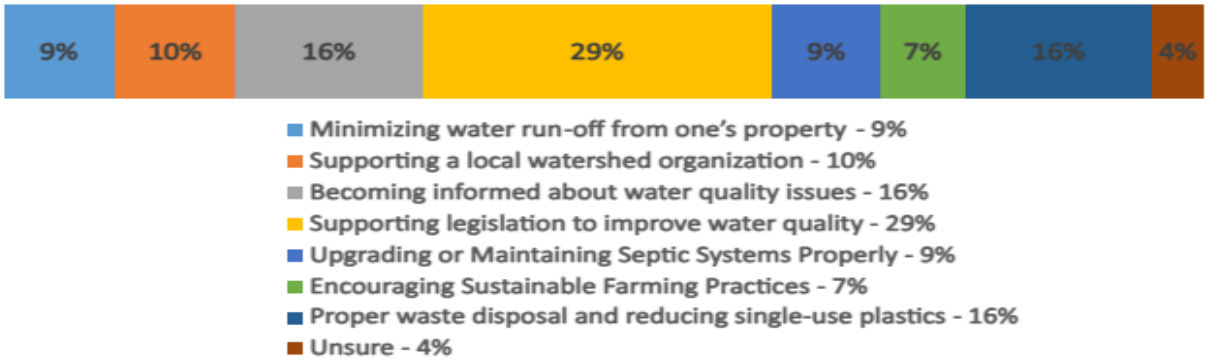
Which Factor Poses the Greatest Threat to Water Quality in Area Lakes and Rivers?

A balanced number of respondents believed that Erosion/Sediment Runoff and Water Run-off from Urban Development pose the greatest threat to water quality, at 21%. This was closely followed by Industrial Discharge, as selected by 17% of respondents.



What is the Most Effective Way a Person Could Help Promote Clean Water? What prevents you from taking actions on your property that protect or improve water quality (e.g., maintaining septic systems, planting native vegetation, reducing fertilizer use)?

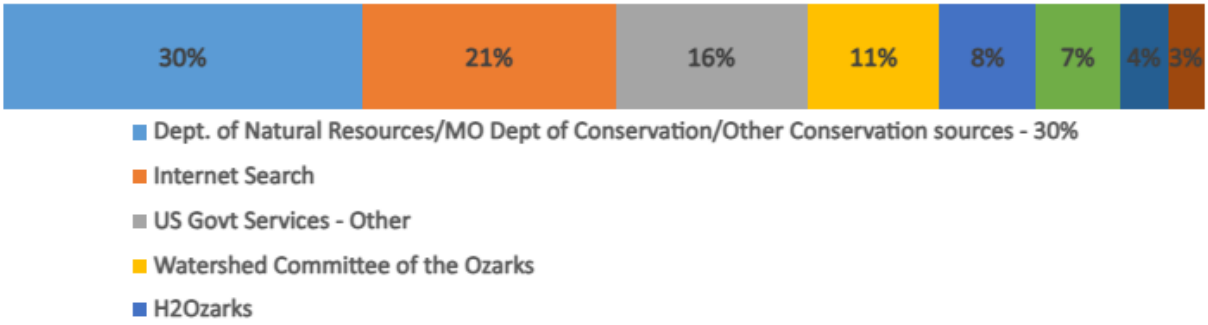
In line with the above theme that it is the government's responsibility to promote clean water, the single response with the highest collective votes (29%) was that the most effective way to help promote is to support legislation to improve water quality. 34% of Respondents choose to take a more active role by utilizing proper waste disposal, reducing single-use plastics, minimizing water run-off, and upgrading or proper maintenance of septic systems.



In addition, 48% of respondents believe that they are already doing everything they can to improve water quality on their own property (the following survey question). Notably, nineteen percent of the respondents don't know what actions to take, and 5% don't think their actions would make a difference.

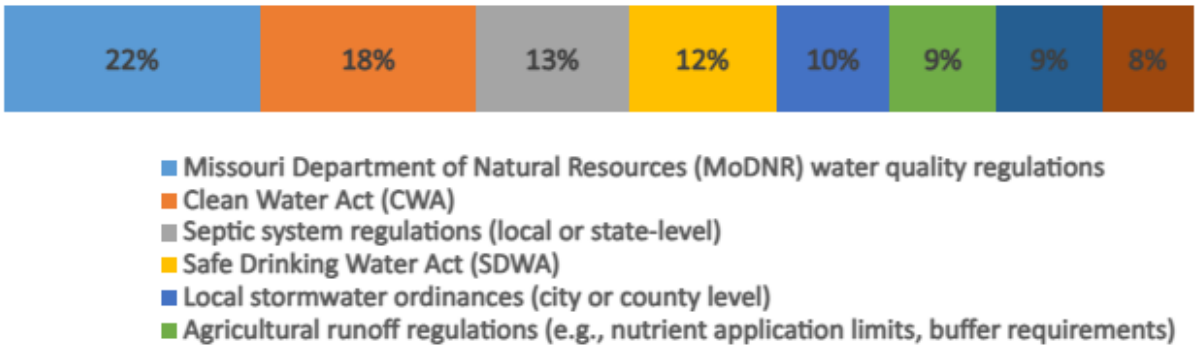
Sources Used to Gather Information About Water Quality Issues

Missouri Department of Conservation and Missouri Department of Natural Resources, combined, were respondents' (30%) first source to gather information about water quality issues. 21% of respondents opted for a general Internet search as their main information gathering source.



Which of the following regulations are you aware of that help protect water quality in Southwest Missouri or Northwest Arkansas? How effective do you believe current regulations are in protecting water quality in the area?

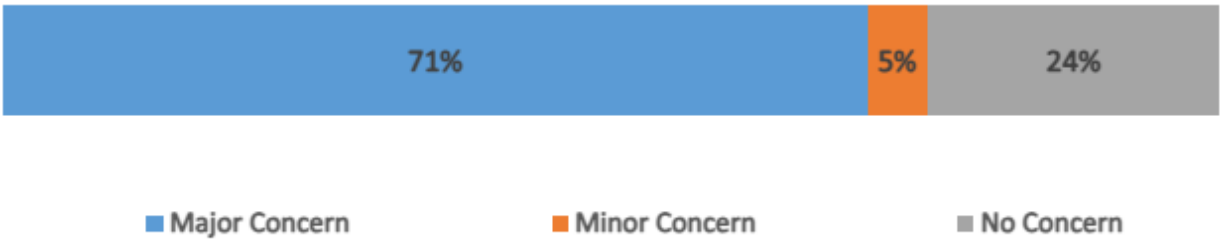
Missouri Department of Natural Resources water quality regulations in general is the choice for 22% of the respondents. Clean Water Act is most familiar to 18% of respondents. While there was no overwhelming acknowledgement of a specific regulation, 13% of respondents recognize that state and local septic system regulations are important to protecting water quality.

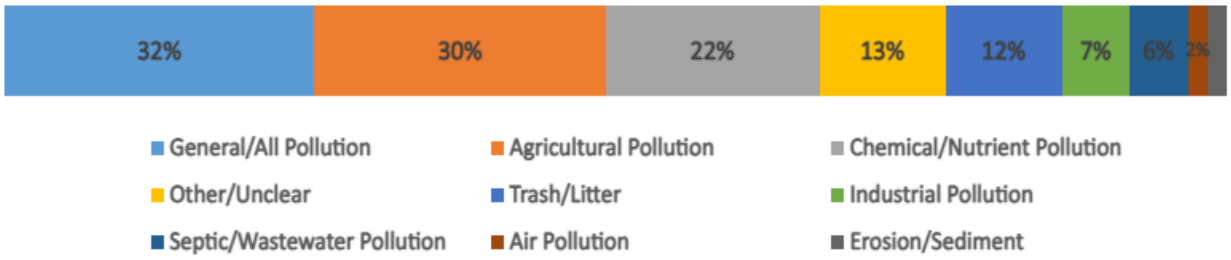


When asked if current regulations were effective, 57% responded with "somewhat effective" but 23% believed that they were not very effective.

How much of a concern to you, if any, is pollution in area lakes and rivers? What type of pollution is concerning?

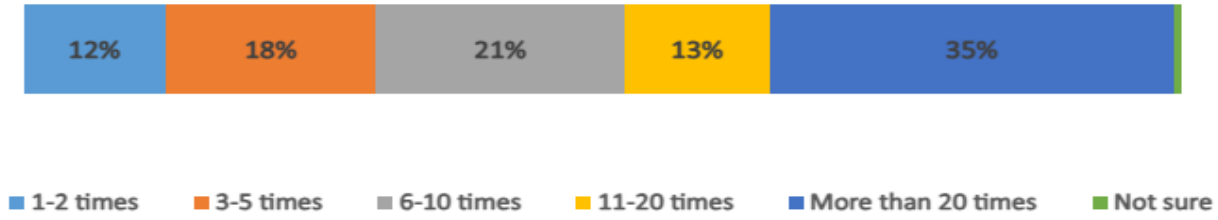
Of the overall respondents, 71% believe that pollution in the lakes and rivers is a major concern, while 5% responded that pollution is not a problem. Of the 71%, 32% feel that all pollution is a concern, 30% are most concerned with agricultural pollution, followed by 22% concerned about chemical pollution of area lakes and rivers. Acid rain from old lead mine sites, agrichemicals and lack of oversight on corporate hog farm waste management; algea bloom from chemical runoff; microplastics; and general trash are the main contributing factors according to the respondents.





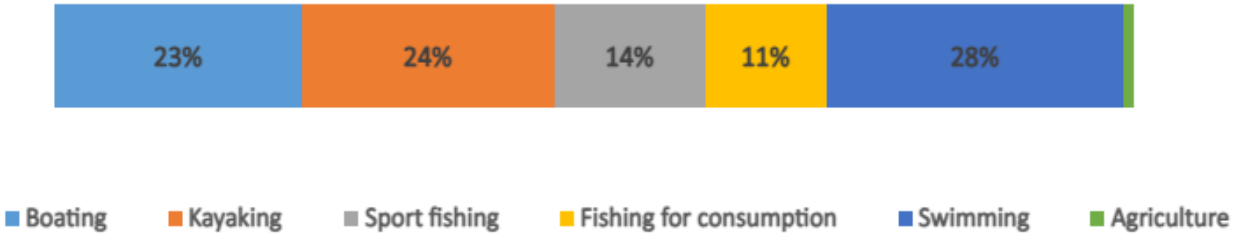
In the past year, have you used any of the area lakes or rivers for recreational purposes? In the past year, approximately how many times have you visited or spent time on the area lakes or rivers?

Of the overwhelming 86% of respondents who visit area lakes and rivers, over one third of them visited more than 20 times in the past year.



What is your primary reason for visiting the area lakes or rivers?

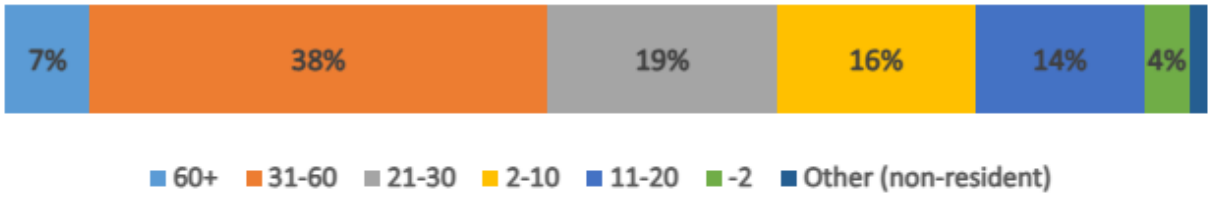
Of the 86% who visit area lakes and rivers, three activities were the most popular: swimming (28%), kayaking (24%), and boating (23%).



How many years have you lived in SW Missouri or NW Arkansas?

Thirty-eight percent of respondents have lived in the Upper White River watershed for 31-60 years, with 7% living in the area for over 60 years. Nearly half of the respondents have lived

in the area for more than thirty years! Coming in second is the 19% of residents that have lived in the area 21-30 years.



Do you have professional experience, education, or expertise in natural resources or a related field?

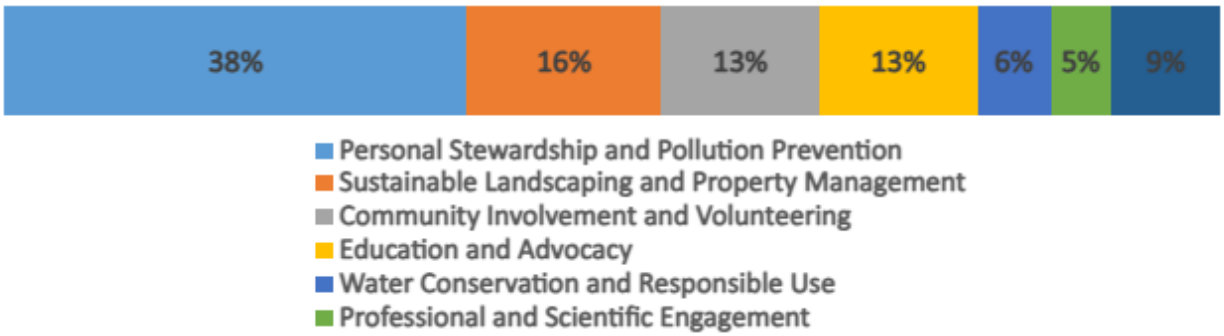
Sixty-five percent of respondents have no professional or educational experience in a natural resources related field. But even so, 73% take action to promote water quality.

Do you personally take any actions to protect or promote water quality?

Of the 387 respondents that answered this question, **72%** said they personally take action to protect or promote water quality.

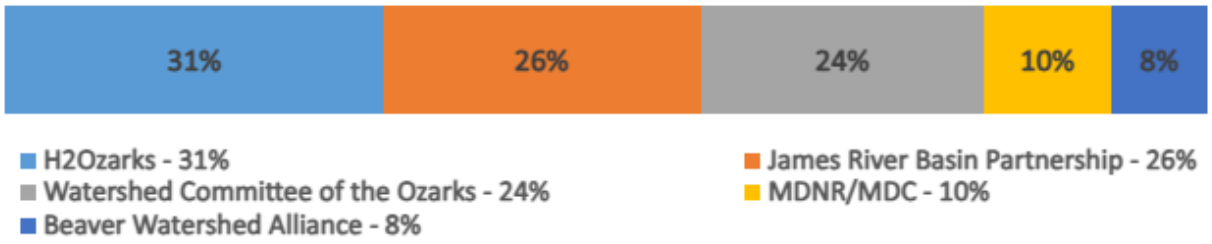
Please describe any actions you take to protect or promote water quality.

The largest grouping of the 72% is Personal Stewardship and Pollution Prevention at 38%, reflecting hands-on actions like trash pickup, managing fertilizers, and septic maintenance. Many responses overlap categories, e.g., someone planting native vegetation while volunteering in cleanup activity (Sustainable Landscaping and Community Involvement). Ethical and lifestyle choices are significant, reflecting behavioral shifts like reducing chemicals, following Leave No Trace principles, and conscientious water use.



Can you name any local or regional organizations that are working to improve water quality in Southwest Missouri or Northwest Arkansas? What organizations are working to improve water quality in Southwest Missouri or Northwest Arkansas?

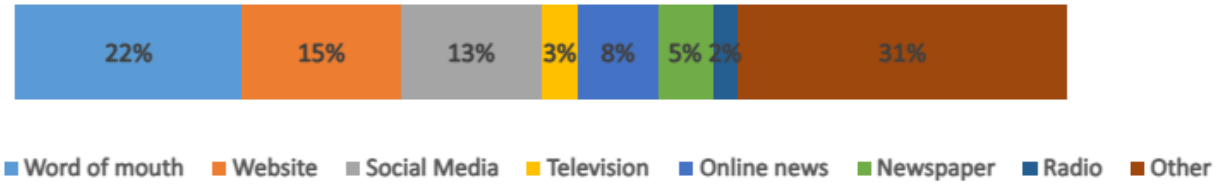
Awareness of regional or local water quality organizations was reported by 60% of respondents. Of those aware, 31% specifically mentioned H2Ozarks, followed by 26% who cited the James River Basin Partnership and 24% who identified the Watershed Committee of the Ozarks.



Before taking this survey, had you heard of H2Ozarks? If you have heard of H2Ozarks, what is your perception of the organization? How did you hear about them?

Prior to taking this survey, **42%** of the respondents had prior knowledge of H2Ozarks. Of that cohort, 78% had a positive or very positive perception of H2Ozarks. While Social Media is popular, word of mouth is the consensus for the best way to communicate information about H2Ozarks.

How did you hear about them?



******

Conclusion

Survey responses reveal strong regional pride in Ozarks waterways and a shared recognition of their environmental and economic importance. A majority of respondents perceive current water quality as generally good, though many believe it has declined compared to 25 years ago – particularly in areas experiencing increased development and runoff.

Erosion, sedimentation, and urban runoff emerged as the top perceived threats to water quality, underscoring the need for continued investment in watershed management and stormwater practices. While government agencies are most often viewed as responsible for promoting clean water, a large portion of residents report taking personal steps to reduce pollution and protect waterways. However, nearly one in five respondents expressed uncertainty about what actions are most effective, suggesting a continued need for public education and outreach.

Awareness of local water organizations is relatively strong, with H2Ozarks, the James River Basin Partnership, and the Watershed Committee of the Ozarks most frequently identified. Public trust in these organizations and state agencies remains generally positive, though some skepticism exists regarding the effectiveness of current regulations.

Overall, the findings suggest that while awareness and stewardship are high, opportunities remain to strengthen education, collaboration, and visible outcomes that connect individual actions with measurable improvements in water quality across the Upper White River watershed.

******