The State of Resilience Media, field, and opinion research

"Resilience" is a big idea with the potential to <u>bridge political divides</u> and unite water, climate and conservation groups around a common cause.¹ It offers a way to talk about climate preparedness without wading into hyperpartisan territory. And, if we're doing it right, investing in resilience could redress a lot of historic wrongs.

This ability to encompass so many environmental and social imperatives has made resilience a popular rallying cry for political leaders and advocates. But has widespread use shifted resilience from helpful shorthand to a meaningless platitude? To date, there hasn't been much research to answer that question.²

Generally, it's best practice in communications to unpack terms like resilience rather than relying on your audience to conjure meaning. At the Water Hub, we recommend groups working on resilience start by describing the state of thriving they are aiming for, paint a picture of its building blocks, and explain how vibrant landscapes and green neighborhoods can weather heat, storms, fires and more. But we recognize the hard work shorthand terms do in advocacy and organizing. To better understand how resilience is being used across the water, climate and conservation movements, and how voters perceive it, the Water Hub conducted a field scan, media audit, and national voter poll.

Big picture insights

Resilience first appeared in <u>psychology</u> and <u>ecology texts</u> in the 1970's, and slowly made its way from academia into the popular discourse in the early 2000s, in part <u>through climate</u> <u>conversations</u>. Google searches for "<u>resilience</u>" have risen exponentially since 2004 (the earliest date for which search data is available), but searches for "<u>climate resilience</u>" really picked up about a decade ago. Our media analysis platform can not reach as far back, but we were able to look at press mentions dating back to 2020, and found a steady increase over that period, with daily mentions of the word resilience in news stories about water, climate and conservation nearly quadrupling from 2020 to 2024.

While the term is growing in popularity, not everyone has embraced it, and some audiences are unclear on what "resilience" means. Our research showed:

¹ This issue brief from Pacific Institute does a good job defining water resilience alongside water security and sustainability.

² Note: <u>Walton Family Foundation's 2024 poll</u> did include some questions about resilience, as did <u>this 2021 Data for Progress poll.</u>

- Big green groups are more likely to use "resilience" in their websites and social feeds than frontline organizations, which often emphasize "joy," "justice," "wellness," or other aspirations.³
 - While this project's scope did not include formal interviews, we have heard from some frontline organizers that avoid the term because of <u>negative perceptions in communities that</u> <u>have endured repeat crises</u>.
- Reporters often avoid the word "resilience" except in quotes or proper nouns, instead using more descriptive language around specific climate/water problems and solutions.
- The term "climate resilience" is much more widely used than "water resilience," and is often used to describe the ability to withstand water crises like droughts and floods.
- "Resilience" appears frequently in op-eds and letters to the editor, especially from government officials, advocates and academics.
- Voters generally support resilience efforts, and a strong majority respond positively to the word, but they respond even more favorably to alternatives like "preparedness" and "protection."
- When voters are asked to define "resilience," most use terms such as "bouncing back," "recovering," "strength," and "withstanding," but nine percent say they don't know.

Field scan

To understand how groups across the water, climate, and conservation movements are using the terms "resilient" and "resilience," the Water Hub team scanned the websites of <u>25 organizations</u>, from large national nonprofits to local grassroots groups. We consulted Water Foundation in developing this list, and tried to include a range of sizes and geographies, and cover the spectrum from more mainstream environmental and water groups to environmental justice organizations. We also used our social listening tool Meltwater to look at how these same groups were using the term "resilience" on Twitter/X (the only social media platform that allows external tools like Meltwater to analyze posts).

We wanted to understand more about which organizations are leading the conversation on "resilience," which are choosing other words, and the kinds of issues, projects and policies where this term comes up the most. Below, we share our key takeaways:

³ Climate communications scholar Genevieve Guenther <u>recommends talking about transformation rather than resilience</u> "because [resilience] elides the urgent need for systemic change." Our field scan picked up ~3,500 mentions of "transform/ation" from both <u>frontline</u> and <u>mainstream groups</u>, about a third as many as "resilient/ce."

- Most groups we looked at use "resilient/ce" in their online materials at least occasionally, and national nonprofits use it extensively, to talk about watersheds, communities, coastlines, infrastructure, and more.⁴
- Volume varied hugely based on the size and scope of the group. The
 big green groups that we looked at wrote about resilience a lot,
 while smaller environmental justice organizations use it far less
 frequently, instead centering concepts like "thriving," "joy," "renewal," "livability,"
 "wellness," and "safety," to describe what they are working towards.
- Often, groups use adjectives such as "just," "healthy," or "equitable" alongside resilient when describing systems, places or policies.
- The idea of "climate resilience" seems to cut across movements, appearing on the websites and in social posts from climate, conservation, and water groups, both mainstream and frontline. But, we also see groups with more of a community focus using terms like "climate justice," "climate readiness," "climate transformation," and "climate preparedness." 350.org uses the term "climate wellness" occasionally.
- Other phrases we noticed that seem to be getting at a similar idea are "strong and healthy communities," "greening and building communities," "places of promise," and "helping people and nature thrive."
- The term "water resilience" is only used by a handful of the groups in our scan, mostly the national environmental nonprofits. "Drought" and "flood" resilience are used slightly more widely, but we noticed more groups talking about drought or flood "relief," "recovery," "preparedness," "prevention," "safety," etc.
- Our Twitter/X analysis showed similar trends, with big green groups accounting for most of the 187 mentions of "resilient/ce" in tweets from the past year.⁵
- The keywords appearing most often in tweets about resilience included "community," "climate," and "clean water."
 - Interestingly, we noticed frontline groups tweeting about community or individual resilience around events and observances like the <u>HBCU Climate Conference</u>, <u>Labor Day</u>, <u>Pride</u>, and <u>Black History</u> and <u>Native American History</u> months.

⁴ You can read notes about how each group we looked at uses resilience here. In total, our scan found 9470 mentions across the websites of these 25 organizations. TNC, NWF and NRDC each accounted for 2000-2700 of those mentions, which makes sense, given the huge amount of content on their websites. Blue Green Alliance and 350.org each accounted for about 1000, Groundwork and American Rivers about 300 each, and the rest used the term less than 100 times, with Milwaukee Water Commons and Taproot Earth mostly avoiding it. Each used the term just twice—once in the bio of a board member, and once in a blog post.

⁵ It's worth noting that only about half of the organizations we looked at are currently tweeting regularly (many groups have moved away from X in the years since Elon Musk's acquisition).

Resilience in the press

For this scan, we wanted to zoom in on media coverage that is relevant to the water, climate, and conservation movements, so we built custom searches that included keywords such as water, climate, flood, drought, heat, fire, and landscape (and later searched those results for stories that mentioned infrastructure laws, nature-based solutions, equity, and more). We looked at news coverage across 22 months, from January 1, 2023 through October 4, 2024, and used a combination of automated text analysis and randomized spot reading to identify trends and themes. Below, we share our topline takeaways:

- "Climate resilient/ce" is a term that appears fairly frequently in the news (our scan picked up 41 mentions per day, often focused on energy or housing), but "<a href="water resilient/ce" is rarely used, averaging just one mention per day.
 - Rather than using "water resilience," reporters typically describe specific challenges such as "<u>shrinking</u>" or "<u>dwindling</u>" water supplies and "<u>stronger storms</u>," and solutions like "<u>a more reliable water supply</u>" or "<u>reducing flood damage and protecting important infrastructure like roads."
 </u>
- "Flood/drought resilience" get more mentions (about six per day, on average), but these
 terms are most often used in <u>op-eds</u> or direct quotes. Again here, reporters tend to prefer
 more descriptive language, writing about "flood-proof streets and subways" and "water
 sources that are less susceptible to drought."
 - While <u>government officials</u>, <u>advocates</u>, <u>practitioners</u>, and <u>academics</u> often refer to "resilience," residents often talked instead about <u>being "strong</u>," "<u>prepared</u>," or "<u>safe</u>."
- Far more reporters write about "resilience to" <u>droughts</u>, <u>flooding</u>, <u>storms</u>, <u>extreme</u> <u>weather</u>, etc. Looking for these keywords NEAR each other turned up 39 stories per day.
- Perhaps unsurprisingly, agricultural trade publications such as <u>Oklahoma Farm Report</u>, <u>Heartland News Feed</u>, <u>Meat and Poultry</u>, and <u>AgriNews</u> are also writing about "water" and "drought resilience." Our scan picked up about two stories per week in agricultural publications.
- About five percent of stories that have mentioned "resilience" over the past two years have also mentioned the Bipartisan Infrastructure Law/Infrastructure Investment and Jobs Act or Inflation Reduction Act.
 - These are often triggered by <u>federal funding news</u>, and typically take the form of brief <u>wire stories</u> that get published online in several places.
- We see spikes around climate disasters (and anniversaries of past disasters (like Hurricanes <u>Katrina</u> and <u>Sandy</u>), but just one to two percent of stories around each disaster mention "resilience." For example, there were more than 70,000 stories about Hurricane Helene in the course of a week, and just 1,180 of those included "resilience."
- About 80 percent of stories that mention climate/water/flood resilience also mention green or <u>nature-based</u> solutions such <u>rain gardens</u>, <u>parks</u>, <u>street trees</u>, <u>floodplains</u> and

<u>wetlands</u>. These articles are often covering <u>funding announcements</u>, <u>planning processes</u>, or <u>milestones</u> in specific projects.

- While most of the stories about green infrastructure focus on <u>benefits</u>, we noticed several that raise <u>concerns</u> around <u>climate gentrification</u> and <u>displacement</u>.
- Close to 10 percent of stories that mention "climate/water/flood resilience" also discuss "justice" or "equity," often describing disproportionate vulnerability or impacts (the Fifth National Climate Assessment—which included a chapter on Social Systems and Justice—drove a big spike in coverage on this topic), and reporting on government funding (and, occasionally, challenges in accessing or fairly allocating it), academic or nonprofit reports, or statements from elected leaders.
- Additionally, our scan surfaced a few stories about "<u>resilience</u>" <u>fatigue</u> in <u>frontline</u>
 <u>communities</u>, and <u>some critiques</u> that argue a focus on resilience addresses symptoms of
 the climate crisis without confronting its root causes.

Voter perceptions

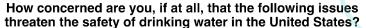
To better understand how voters across the country perceive "resilience," the Water Hub included a series of questions in our annual voter poll. We surveyed 2,007 registered voters on October 1 and 2, 2024. The surveys were conducted on the heels of Hurricane Helene, so it's likely the storm impacted people's views on climate resilience programs and policies (an <u>April 2025 CBS/YouGov Poll</u> found that experiencing or hearing about extreme weather can strengthen support for climate action). However, <u>Walton Family Foundation's April 2024 National Poll</u> showed numbers quite close to ours in terms of voter support for action on climate resilience.

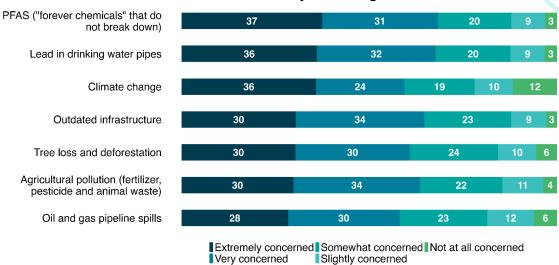
Below, we share key insights on voters' water concerns and resilience opinions. You can access the full toplines here and we'll be releasing a narrative report in November 2024.

Voter concerns

- 78% of voters are concerned about the impact of climate change on water in the U.S.⁶
- When asked about current water challenges, voters are most concerned about pollution of lakes and rivers (88%), drinking water contamination (88%), and declining lake, river, and reservoir levels (84%).
- When asked, specifically, about issues that threaten the safety of drinking water in the U.S., voters are most concerned about the threat of PFAS (88%), lead (88%), and climate change (79%).

⁶ When we ask about threats to the *safety of drinking* water (versus just about impacts of water, generally as we did here), the overall number of voters that are at least somewhat concerned is similar-- 79%--but the intensity of concern is higher. You can read all the questions and results <u>here</u>.





Land and water protection

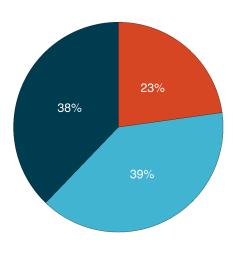
- 82% of voters say the U.S. should protect more of its lands and waters.
- 84% favor a national goal of protecting at least 30% of U.S. lands, ocean areas and inland waters by 2030.
 - When asked about the most important reasons to protect more lands and waters, nearly twice as many voters chose "protecting the sources of drinking water" as "soaking up carbon to slow climate change," "protecting communities from flooding, droughts and other disasters," or "providing habitat for fish and wildlife."
- Voters say they care a lot about candidates' support for conservation, clean water and climate resilience when considering their November ballots:
 - 95% of voters say a candidate's support for funding and policies to protect clean water is important in determining how they will vote (75% extremely or very.)
 - 95% say a candidate's support for protecting forests, meadows and other natural areas is important (68% extremely or very).
 - 92% say a candidate's support for investments that help communities prepare for extreme weather is important (68% extremely or very).

Resilience

- Without receiving any context or explanation, a strong majority of voters (74%) have a positive view of the term "resilience," but they respond even more positively to alternative terms like protection (80%), preparedness (78%), and conservation (76%).
- When asked what "resilience" means to them, voters often mention words such as "bounce back," "strong," "recover," and "withstand," but nine percent say they don't know what it means. You can see the full list here, and a word cloud below in the appendix.

• When asked to choose among three definitions, voters are nearly split between thinking of resilience as "bouncing back" (39%) or "recovering stronger" (38%). Fewer think of resilience as "strong or healthy enough to avoid a crisis" (23%).

Thinking again about the term 'resilience', which description best matches what it means to you?



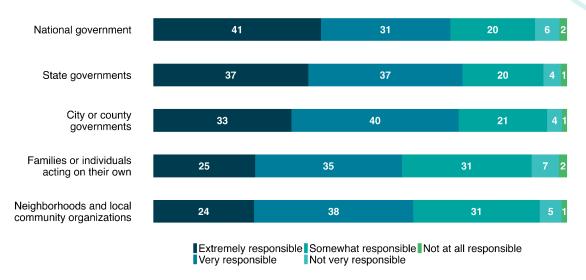
Recovering stronger after a crisis or disaster

Bouncing back to how things were before a crisis or disaster

Strong or healthy enough to avoid a crisis or disaster

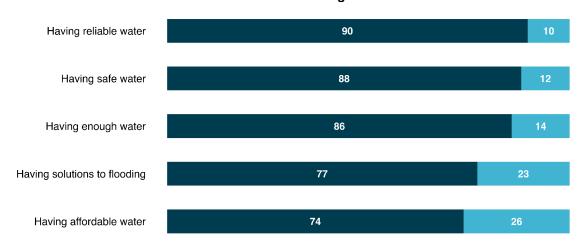
- When we split the sample after telling voters about communities preparing for weather-related disasters, and asked how important it was to invest in either "climate resilience" or "disaster resilience," the responses broke down along party lines, with Republicans and Independents responding more favorably to the term "disaster resilience," and Democrats responding more positively to "climate resilience."
 - Regardless of the language, more than 70% of voters across party lines say it is "extremely" or "very important" to invest in climate/disaster resilience.
- When asked what term other than "resilience" they would use to describe a community's ability to handle weather-related disasters, voters mention "prepared," "strong" and "together" most frequently. See the full list here and a word cloud in the appendix.
- When asked which of several terms best describe a community that planned ahead to manage climate-related disasters, voters ranked "climate prepared," "climate resilient," and "climate ready" as the top three.
- Voters think governments at the national (72%), state (74%), and local (73%) level are most responsible for helping to build resilience to weather related disasters.

How responsible do you think the following groups are for helping to build resilience to extreme weather and weather-related disasters?



- More voters view built infrastructure (79%) as extremely or very important to a community's disaster resilience than social (68%) or nature-based (63%) infrastructure.
- A majority of voters see urban green spaces (55%) and wild space outside of towns (67%) as somewhat or very effective at building water and weather resilience.
- Just 42% of voters are at least somewhat familiar with the term "water resilience" (11% very familiar) and when asked what comes to mind with that term, having reliable or safe water topped the list for voters.

Thinking now about the term "water resilience," which of the following comes to mind?



■Yes, comes to mind No, does not come to mind

Infrastructure spending

- 55% of voters have heard at least some about recent infrastructure spending by the U.S. government (17% have heard a lot).
- 71% of voters say infrastructure investments benefit their community (28% a lot).
- When asked how much they have heard about specific spending on clean water and climate preparedness:
 - 54% have heard at least some about spending for lead pipe replacement, PFAS testing and treatment, and river restoration (18% a lot).
 - 48% have heard at least some about spending to help communities prepare for extreme weather and related disasters (15% a lot).

Conclusion

Resilience has been embraced by officials at all levels of government, and many environmental and justice advocates. Voters have a favorable view of the term, and strongly support investments designed to increase community/climate/water resilience. But, some frontline groups are asserting a more radical vision for the future that centers on <u>liberation</u> and <u>abundance</u>, <u>loving</u> and <u>healing water</u>, <u>#WaterBack</u>, and <u>energy democracy</u>, and some <u>scholars argue</u> that resilience is <u>too modest a goal</u> for the crises we are facing, and that a <u>focus on individual and community resilience lets government off the hook</u> for keeping people safe. Interviews and focus groups would allow us to dig into these questions and concerns and inform a narrative framework that will resonate from the halls of Congress to the streets of vulnerable communities.

Appendix

Field scan

We searched Google to learn how many times each of <u>25 groups</u> mentioned "resilience/ce" on their websites and then spot read a handful of pages and posts from each group to learn more about the context in which they use the term. To learn which groups are tweeting about resilience, we used <u>Meltwater's Social Media Monitoring tool</u> to find and analyze all posts by the groups for the period from October 17, 2023 to October 16, 2024 (only one year of historic data is available).

Media scan

We used <u>Meltwater's Media Intelligence Tool</u> to analyze news coverage from January 1, 2023 through October 16, 2024. The basic query we searched for included the keywords climate, flood, drought, extreme weather, super storm, climate disaster, natural disaster, heat, landscape, conservation, and water appearing within five words of resilient or resilience.

Polling

Methodology

Interview Dates: October 1-2, 2024

Sample Population: 2007 registered voters in the United States.

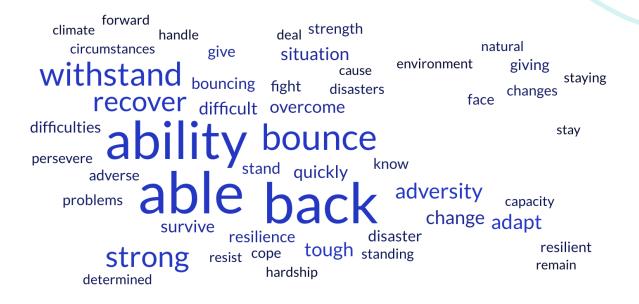
Sample Selection: Scientific online poll - stratified sample of panel respondents.

Weighting Parameters: The sample was weighted based on the U.S. Census Bureau's Voting and Registration Supplement to the Current Population Survey for registered voters in the United States based on age, gender, race, educational attainment, census region, and Hispanic ethnicity. This topline provides weighted percentages, as well as the unweighted N-size for the total sample. Due to the effects of weighting and rounding, figures may or may not add up to 100%. The standard deviation of the weights was: 0.056692. The maximum weight was: 1.2383373. The minimum weight was: 0.8289296. 95% of the weights were between 0.8911343, 1.1211662.

Margin of Error: The 95% credibility interval for this survey is +/- 2.2%, which includes the square root of the design effect (DEFT): 1.0016049.

Open-ended questions

What does the term "resilience" mean to you? (full list of responses)



What term other than "resilience" would you use to describe a community's ability to handle extreme weather and weather-related disasters? (full list of responses)

