

HOW AMERICANS RELATE TO WATER

A QUALITATIVE STUDY FOR THE
WATER MAIN

November 2018



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WATER MAIN

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Executive Summary

This study of how Americans relate to water was conducted by Wilder Research and the APM Research Lab. Results from this exploratory, qualitative study with 201 respondents collectively from 11 locales around the United States will inform programming and the research agenda of American Public Media's Water Main. We believe that it will also be useful to other efforts to engage the public with issues related to water.

The Perception Gap

When U.S. residents first think about the role of water in their lives and in society, the **importance and value of water for survival and well-being** come to their minds. This was the most common theme to surface from interview participants' responses to open-ended questions about both the role of water in their lives and in society.

We also found that **more than one-quarter of respondents are uninterested in growing their knowledge of water**, with 18 percent saying there is nothing more they would like to know about water, and eight percent saying they already know enough about the topic. One-fifth of respondents would like to learn more about protecting water resources.

However, when asked what they feel *others* should know about water, all respondents were able to answer the question. **Nearly half of respondents said others need to know about the importance and value of water to their lives**, such as quality of life, daily activities, and its importance for future generations. The second most common topic respondents mentioned is ways to protect water resources, with 36 percent saying this.

These findings reveal that there may be a perception gap: respondents understand the connection to water for their personal survival and well-being; however, they do not think others share this understanding. Paradoxically, what respondents feel "others need to know" is already at the forefront of the many respondents' minds: the importance and value of water to life and survival.

Water talk: Water in conversations and in the news

When asked about water-related stories they had most recently heard about in the news, more than half of respondents (54%) had recently heard a **news story about water as it related to the environment**, including natural disasters, pollution, and climate change. Next most common were stories about high-profile water-related crises and events, such as Hurricane Maria or the water crisis in Flint, Michigan.

For those who found the news stories interesting, these are their main reasons: **the reporting elicited emotion** (either positive or negative), related to their concerns or topical interests, or addressed an issue that affects them or their family.

Similar to the most recent news story they heard, respondents' last water-related conversations were most commonly related to the topic of the environment (32%). This is followed by health-related conversations, including topics such as hygiene, hydration, drinking water.

Recommendation

Given that 1) respondents prefer reporting that engages them emotionally, and 2) what they are talking about is similar to what they remember hearing on the news, **the Water Main and others interested in connecting with the public on water-related issues may be most successful with programming that strives for deeper emotional connection.**

Connections to water beyond environment

When it comes to broader societal topics and their relationships to water, **most respondents strongly relate water to the environment** (92%), followed by natural disasters (87%), and climate change (86%). Though a smaller share, a majority of respondents also see a strong relationship between water and the economy (60%), electricity (59%), and human rights (51%).

When it comes to their personal lives, the highest share of **respondents sees a strong relationship between water and their personal hygiene** (94%), followed by health (92%) and food (89%). Again, though a smaller share, a majority of respondents strongly relates water to their homes (74%), safety (55%), and recreational activities (51%).

Though it may seem obvious to solely focus on the topics that a majority of respondents strongly connect to water, it may also be beneficial for the Water Main to explore pertinent topics beyond environment that garnered interest among a “substantial minority” of respondents. At the societal level, this could include, for example, water’s connection to job creation (40%). At the personal level, this could include, for example, spirituality or religion (35%).

Recommendation

By connecting through the full range of these topics, the Water Main may engage new respondents who had not previously interested in water issues.

Personal connections to bodies of water

Nearly 8 in 10 respondents indicate that they have a personal connection to a body of water. These connections were largely positive and based on proximity, time spent recreating and enjoying the water, or memories of quality time with loved ones near or on the water.

Recommendation

Engaging with individuals about a body of water they feel connected to may be an effective way to start a conversation about water.

Water policy: Tradeoffs

Respondents were given three sets of tradeoffs and asked to choose which align more closely to their beliefs. Most respondents indicate that they would be willing to pay slightly higher taxes to ensure clean drinking water (83%) and believe protecting water is more important than protecting jobs (81%). However, opinions differ about how water resources should be protected. Some feel that government regulation would be effective (55%), while

others feel that the goodwill and innovation of individuals and businesses will protect our water resources (45%).

Interest groupings and core values

We identified three interest groupings through an exploratory factor analysis:

- 1) Outdoor recreation and sports
- 2) Health, food, and education
- 3) Arts, science, and culture

The responses of those very interested in a given grouping often varied from those less interested in them. For example, those with a high level of interest in outdoor recreation and sports are more likely than those with less interest in those areas to say that defending the country from terrorist attacks and strengthening the economy should be a high national priority. The demographic makeup of the high interest groupings was often different compared with those less interested in the topics within each grouping.

Based on the analysis, we identified a core value for those with stronger interests in each grouping. We defined those with strong interests in outdoor recreation and sports as **Recreationalists, who derive value from water mainly through the outdoors**. We called those with a high interest in health, food, and education **Day-to-Day Users, who emphasize the personal value of water**, valuing its importance and use mainly at the individual and household level. And, lastly, those with a high interest in arts, science, and culture are defined as **Social Impact Citizens, who value water at the societal level**, focusing more on the broader systems-level impact and overall well-being value of water.

Note on generalizability

Findings from this study cannot be generalized to the public as this was not a representative sample. Findings from this study only represent interview participants. However, these findings allow for better understanding of what types of connections, values, and interests are on the minds of Americans who live in various regions of the country and have different relationships with water itself. This study offers the Water Main and others a new way to understand water: through the eyes and lives of the ordinary citizen.

Further recommendations

In addition to the recommendations **in bold** above, several other findings emerged from this study that may be useful to the Water Main and others working to raise consciousness about water related issues. Ultimately the recommendations emerging from these findings should be validated through additional research.

- The primary ways respondents think about water in their lives and in society are around the issues of health, personal hygiene, the environment, and climate. Developing programming that expands individuals thinking about how water relates to their lives and other broad societal topics may be helpful in educating people about water.
- Respondents who are willing to pay slightly higher taxes to ensure people in the United States have clean drinking water are more likely to be interested in science in general. Respondents who feel it is not their responsibility via paying taxes to make sure people in the United States have clean drinking water are more likely to be interested in how water relates to the economy. Therefore, science-related programming may be more effective at engaging those individuals who tend towards a willingness to pay taxes, while making connections between water and the economy may be more effective at engaging those who tend to feel less personal responsibility.
- Respondents who believe it is more important to protect water than it is to provide jobs were more likely to see relationship connection between water and human rights. They are also more likely than others to say they have a personal connection to a body of water. These respondents may be further engaged through programming that explores human rights issues and programming that connects them to a body of water they care about (often a local body of water).
- Those who believe it is more important to provide jobs than it is to protect water are more likely to be very interested in sports. They are also more likely to see a connection between water and their recreational activities and cost of living. Respondents who may prioritize other things over water may be more interested in programming related to water sports and outdoor recreation or how water issues influence their cost of living.
- Most respondents have a personal connection to a body of water, and the connections they have are largely positive. Asking people about a body of water they feel a connection to may be a promising way to get people involved in water-related issues.
- Many respondents had a connection to a body of water that is built around memories with family and friends. Relating stories about water or a particular body of water to childhood memories or meaningful time with family is a potential strategy to engage people in water issues. Providing opportunities for families to spend time together near a body of water to build those personal could also be a way to get people to care about or engage in water issues.
- Programming that elicits an emotional response from and has personal relevance creates more interest than programming that is perceived as being educational or informative.
- Many respondents may not be aware of water-related issues in their own backyard. The news stories people had heard most recently were often nationally broadcasted stories about something happening outside of their community (e.g., lead contamination in Flint, Michigan or Hurricane Maria). Simultaneously, the data show that people are more interested in a water-related news story if it has personal relevance. This suggests that programming opportunities include water stories that are unique to local communities and explicitly connect people with the ways the issue has a direct impact on the people that live there.

- Respondents think other people need to know precisely the things that come most readily to their own minds when they think about water; namely the importance of water to health and hygiene. Regardless of the topic that is covered during programming about water (e.g., relating water to the economy), it may be effective for the lead of the story to be more personally relatable or based on connections that people already readily make to water, such as talking about getting a glass of water to drink or going swimming with their friends or family.
- Respondents interested in outdoor recreation and sports are less likely to be interested in efforts to cleaning and protection water and are more interested in science-related information (e.g., natural features and facts about a body of water). The Water Main and others might consider developing programming for this type of person by talking about a body of water at the local level, how its features are changing, and then transition into or incorporate why and how that might affect recreational or sporting activities associated with the body of water.
- Those with a high interest in health, food, and education think more deeply about the important role water plays in their lives. Programming targeted at these personal care interests may not need to spend time on the broad importance of water in our lives, and instead might consider making connections to the practical uses of water in our daily lives as well as its relationship to environmental issues.
- Those with strong interest in health, food, and education may be more responsive to programs that are about learning and information as they are more likely to name this as the reason why they chose a tag-line about water that made them want to learn more.
- Respondents with a higher level of interest in arts, science, and culture also think more deeply about the important role water plays in their lives and are more likely to see the role of water in environmental issues. The Water Main and others might consider developing programming about environmental issues that goes more in-depth on these topics for audiences with strong societal core values. These same people may also be receptive to more programming in issues related to equity as they were more likely to have heard a news story related to access to, cost of, or competition for water resources.

Introduction

This report is the result of a study conducted by Wilder Research and the APM Research Lab on behalf of the Water Main to understand the various ways ordinary citizens in the United States think about water and its role in their lives. The Water Main aims to help the public better understand the value of clean, abundant water to society, and to 1) to raise understanding and awareness of water issues and potential solutions, and 2) to increase personal connection and relevance of water as a valuable resource.

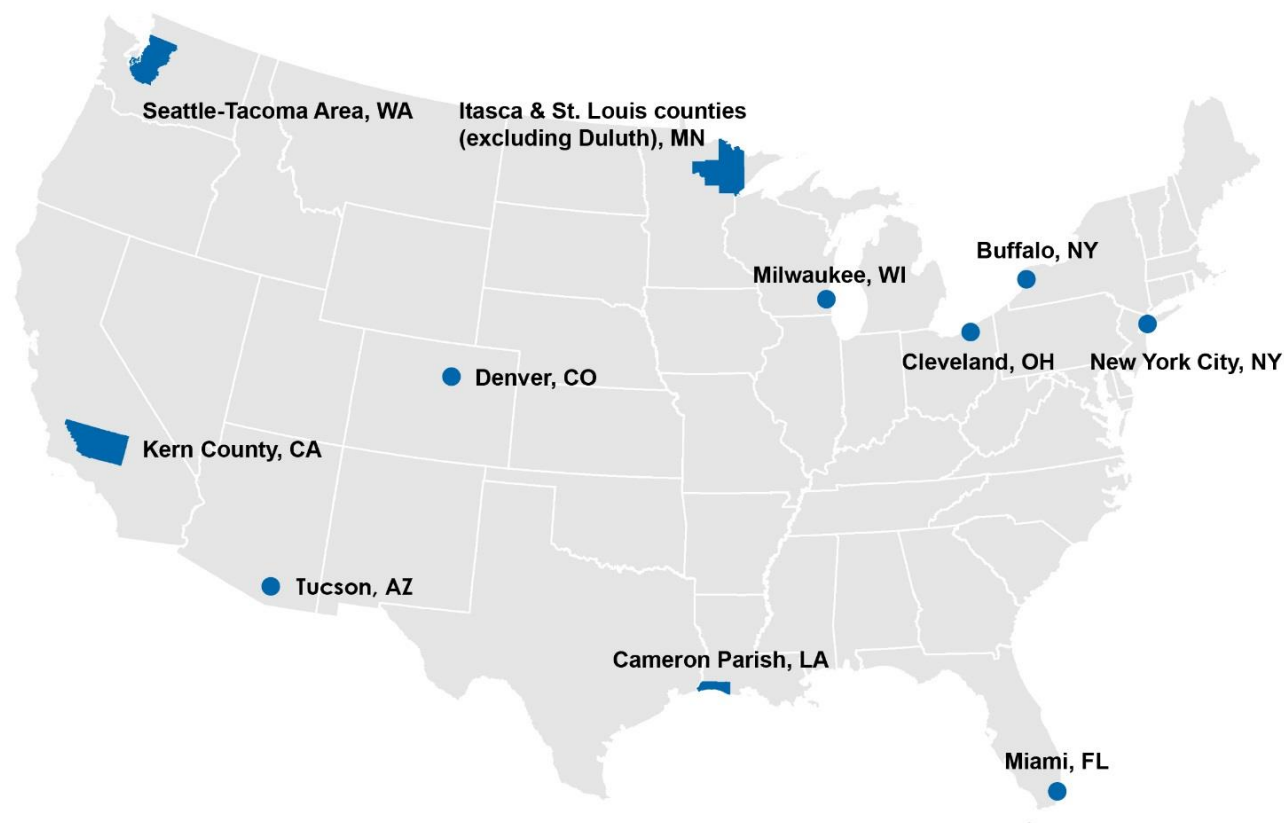
The results of the study will be used to inform and guide the work of the Water Main and the broader field of those interested in communicating with the public about water-related issues. Additionally, findings from this study will be used to inform the Water Main's on-going research agenda.

The Water Main and APM Research Lab strategically identified a diverse set of locations to include in the study. Attributes considered when selecting locations included geographic characteristics (e.g., rural vs. urban, proximity to body of water), places with or without historical challenges with water management (e.g., water quality or quantity), and demographic characteristics (e.g., age, race). Communities were also selected to reflect various geographic regions throughout the United States. Wilder Research purchased the sample from Marketing Systems Group, specifying that the sample should overrepresent people of color, younger adults, and lower-income households. Figure 1 includes more information about the sampling locations.

A total of 201 interviews were completed between February 23, 2018 and April 15, 2018, with respondents from the 11 selected regions. Respondents were offered a \$50 gift card as an incentive to participate in the interview, and the overall response rate was 5.5 percent. Eight regions had 20 respondents or more. More than half of the respondents were female. Slightly over half of respondents were age 55 or older. The education level of respondents varied; however, almost half had a bachelor's degree or higher. More than one-third of respondents were people of color. Income levels varied greatly among survey respondents and one-third have children living in the home. Slightly less than half of respondents were from an urban area, nearly one-quarter were from a suburban area, and the remainder were from a town or rural area.

The following sections of this report include findings from interview respondents overall and differences both regionally and demographically. The differences that are noted across groups were not tested for statistical significance because the sample is not representative of the U.S. population. "More" or "less" should not be interpreted as statistically significant population-level differences, but rather notable differences across the subgroups of the respondents we interviewed. See the Appendix for detailed information about the sampling methods, data collection, respondent demographics, and a copy of the interview protocol.

Figure I. Sampling locations and demographic characteristics of participants



Of those who complete and interview:

Location	% female	% people of color	% with annual household income below \$50,000	% under age 40	Number of completed interviews
Buffalo, NY	38%	38%	35%	18%	21
Cameron Parish, LA	33%	14%	25%	20%	15
Cleveland, OH	65%	75%	65%	43%	20
Denver, CO	67%	24%	60%	14%	21
Itasca & St. Louis counties (excluding Duluth), MN	55%	0%	45%	25%	20
Kern County, CA	64%	36%	54%	18%	11
Miami, FL	90%	60%	N/A	20%	10
Milwaukee, WI	70%	60%	43%	45%	21
New York City, NY	52%	65%	31%	36%	21
Seattle-Tacoma metro area, WA	65%	10%	18%	5%	20
Tucson, AZ	59%	27%	48%	41%	22

Source: Wilder Research | APM Research Lab 2018 Qualitative Study for the Water Main: How Americans Relate to Water.

Note: There were not enough respondents from Miami, Florida, to report percentages from that area.

The role of water in our lives

The Water Main wanted to discern how respondents see the role of water distinctly in their lives and in society. By answering open-ended questions on this topic, respondents were able to answer freely, and we were able to identify common themes that emerged from their responses, giving us more insight into what is on respondents' minds when it comes to water.

The following open-ended questions were posed to all respondents, *"First, when you think about the role of water in your life, what is the first thing that comes to mind?"* and, *"When you think about the role of water in society, what is the first thing that comes to mind?"*

The percentages in the text below describe the proportion of respondents whose comments aligned with a given theme. Themes were identified by reviewing all respondents' comments; they were not determined prior to reviewing the data.

Water as a necessity

"You need water to live. You need water to stay hydrated. You need water to be clean, otherwise you get sick. You need water for plant life and plant life provides oxygen in the world... I mean everything needs water."

"If we don't have it, we die."

"I've shrimped in the past and made money off of it and used it to feed our family and what have you. So, it's always been very important in my life for fun, recreational, the sport of it. Between my son, friends, family, and grandkids. We've all enjoyed it."

Water as a necessity contd.

"I wish it was all clean. I take it for granted. I wish they would stop polluting it - industries mostly. I live by a big mine and they're being investigated for polluting more than they said they would."

"[It is a] necessity. We all need it to survive, more so than food. Water is first on the list. So we have to treat it like gold. We need it for our survival."

"People do not think about environmental protection, recycling, taking care of the environment. All this environment affects the water. It's all connected. All this bad stuff goes into the ground and penetrates the water system. So when I think about society, I think about environment protection all over the world. What will be next for our kids and grandkids? It's a little bit scary to think about it."

Water as a necessity

For a majority of respondents (60%), the first thing that comes to mind when thinking about the role of water in their *personal lives* is its importance for survival and health, including its necessity for plants and animals. **The next most common theme to emerge is drinking water (40%); followed by water use in daily lives (35%),** such as personal hygiene, recreation, cooking, and cleaning; **and environmental issues (27%),** such as water conservation, contamination, and access to clean water.

When respondents think about the role of water in *society*, the themes that first come to their minds mirror those that surfaced from their responses about the role of water in their personal lives. **A majority of respondents (62%) first think about its importance for survival and health,** including agriculture, hygiene, quality, and hydration. **Environmental issues (35%) was the next most common theme** to surface in responses, which includes conservation and the need to reduce water waste; followed by **the quality of drinking water (16%); water equity issues (14%),** such as water scarcity and access; and use of **water in industry or trade (10%),** such as food production or agriculture.

What respondents want to know about water

Are respondents curious about water? Do they feel there is room for growth in their water-related knowledge? To find out, we asked the following questions to interview participants: *“What more do you want to know about water?”* Learning about what respondents are curious about—or if they are curious at all—is a direct way of identifying topics that the Water Main and others in the field could further develop.

Responses from the open-end question were coded and analyzed. Percentages described in this section are based on coded open-end responses.

Many respondents had a difficult time thinking of something they wanted to know about water. Twenty-six percent did not offer a response, including 18 percent who said “nothing” and another 8 percent who say they already know a sufficient amount and do not need or want to learn more.

One-fifth of respondents (20%) want to know about the protection of water resources. They want to know how to maintain and conserve water as well as better understand current and future efforts to do these activities as well.

Fifteen percent of respondents want to know about water safety. Specifically, they want to understand the cleanliness of water and whether it is safe for use.

What respondents think others need to know about water

Interview participants were then asked, *“What do you think other people need to know about water?”*

Responses from the open-end question were coded and analyzed. Percentages described in this section are based on coded open-end responses.

As noted above, the largest share of respondents (26%) are uninterested in further growing their knowledge on water. **While respondents struggled to think of something more they would like to know about water themselves, they had an easier time thinking of what other people should know about water.** When asked what other people need to know about water, all respondents were able to give an answer.

Nearly half of respondents (45%) feel people need to know about the importance of water and its value in our lives. Specifically, respondents would like others to know about how important water is for quality of life, daily activities, and future generations.

Over one-third of respondents (36%) feel it is important for people to know ways to protect water resources. Specifically, respondents think others should know how to conserve water, prevent water waste, and reduce

What respondents want to learn

“I guess the most effective things that I can do to keep our water clean, not just for drinking, but for the environment and the critters and everything.”

“Personally, I know quite a bit about water. If I want to know more, I will look it up.”

“I want to know what is in it. Really! [I would like to know] where our water comes from that goes into our homes. I'm concerned about the water, like at public swimming pools. Is it safe water from the beginning? I know they use cleansers in it.”

What respondents think others should know about water

"I think people in general need to understand the connection to the health and safety of water being the health and safety of our planet. I think they need to understand how it impacts us in the most elemental ways and that things have to be given up to make sure it's healthy and safe for everyone; it's important because it's for everyone. I think people need to understand that it's not just going to take care of itself; that it has to be shepherded just like anything else in our world does."

"People need to know about the pollution by whom and where. Then how to utilize in-home water resources properly by using gray water and waste water properly at your home for your grass and plants. People need to be made aware that ships are dumping in the oceans—it is not a highly regulated or monitored issue. Corporations are making a profit, but not returning it in kind to keep water resources maintained."

"I just think they need to be more educated on what's actually in the water. All of it actually, swimming, etcetera. What makes it safe to swim in some waters?"

pollution. An additional 11 percent of respondents think it is important for people to know about pollution and contamination, including from households and industry, corporate practices, climate change, and their consequences and associated risks.

Another 15 percent of respondents feel that water safety issues, such as drinking water and swimming, are important for people to know about. This includes awareness of contaminants in the water, such as lead or other additives in the municipal water supply.

Water talk

To better grasp *how* people talk about water, we asked respondents about their last water-related conversation and the last water-related news story they encountered.

Two initial open-ended questions were presented related to this topic: 1) *“Think about the last time you had a conversation that involved the subject of water; what was it about?”* 2) *“Think about the last news story you encountered about a water-related issue; what was it about?”*

Understanding what people are talking about and paying attention to can help the Water Main and others interested in engaging with the public on water-related issues develop programming that is of interest to people.

Responses from these questions were coded into categories during analysis. Percentages below are based on this coding and analysis.

Water conversations

Nearly one-third of respondents (32%) said their most recent conversations about water were related to environmental issues. The “environmental issues” theme encompasses pollution or contamination, natural disasters or weather, climate change and global warming, environmental policies and procedures, the impact of pollution on wildlife, and issues related to invasive species.

Health-related topics was the second most common theme, surfacing in one-fifth of responses. This theme includes topics such as hygiene, cleanliness, hydration, and drinking water. **A close third, water quality and safety** emerged in the responses of 16 percent of respondents.

Water in the news

When asked about the last time they encountered a story about water in the news, **54 percent of respondents had encountered a news story related to environmental issues**—similar to their last water-related conversation. Although it is unclear whether what they are hearing on the news is specifically what they are talking about, we can say that the most common topic of respondents’ last water-related conversations and the last water-related news reporting they encountered are similar.

The second most common theme surfacing from the last news story respondents encountered is **major water-related events in the news (27%)**, such as the water crisis in Flint, Michigan or Hurricane Maria. It is important to note that responses to this question may be affected by timeliness and the news events in the media at the time of the survey. Few respondents (6%) said their last conversation was about weather-related stories in the news.

Water in the news

“Well, I guess [I heard] about the storms in the northeast of the U.S. The last three storms, the nor'easters in New England along the coast with near hurricane force winds in the winter and the resultant flooding and damage to power lines, trees, and buildings.”

“Again, because I live in Cleveland, Lake Erie is an essential part of my life. It was about limiting fishing because of the pollution problem.”

“That was the Flint one. It was an update, that the children of Flint, Michigan have high levels of lead. And like I said before, I have my two children, so my concern being I'm sympathetic to them, their families, and what they must be going through with all that lead in their blood.”

“The devastation for the people [affected by Hurricane Harvey] to see how hard it was for people who had nowhere to go, nowhere to live. They had to get to the shelters. Some people had to get out of the places by helicopter. It's hard when this stuff happens because how do they get out of it? How do they get help? What could they do to be safe? That's terrible. What can you do? Of course, they say go to higher ground. How do you get to higher ground when the water is getting higher? It's good to know how to save yourself and help others.”

For a deeper understanding of what captivates respondents in water-related reporting, we asked whether respondents found that news story interesting and why or why not. The open-ended responses were then coded and analyzed.

The percentages described in this section are based on coded open-ended responses.

Of respondents who were interested in the news story they encountered (N=175), **the largest percentage found the story interesting because it elicited either positive or negative emotion (42%), it was related to their concerns or topical interests (32%), or because it was an issue that personally affected them or their family (21%).** Fewer respondents (11%) found the news story of interest because they learned something from it or because it was educational or informative. Thus, it seems a personal relevance and connection may be more important than general knowledge to keep respondents interested.

Connections to water

To what degree are societal issues or topics associated with water in the minds of Americans? How can programming or messaging around less obvious connections with water increase engagement? To gauge this, we asked respondents to rate the strength of the relationship to water and 1) broader societal topics (e.g. the economy and human rights) and 2) aspects of their personal lives (e.g. their homes and heritage).

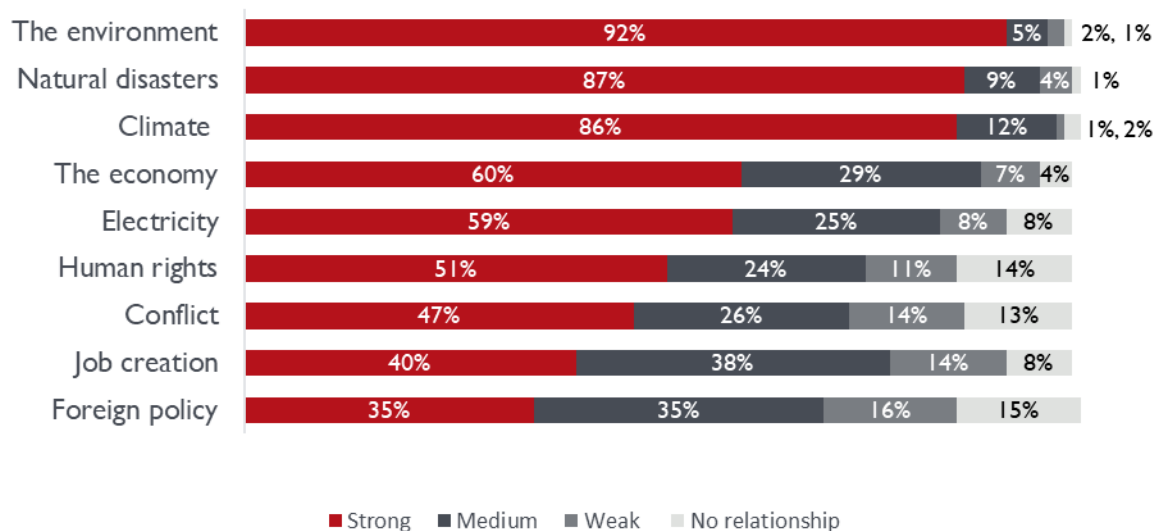
Water and society

Water shows up in our society in various ways, from less obvious areas, such foreign policy, to more obvious areas, such as the environment. To learn how respondents associate water to different societal topics, we asked, “Tell me how strongly these topics relate to water in your mind...How strong is the relationship between ____ and water?” Our analysis revealed strong relationships between water and some obvious as well as some more surprising topics.

The environment, natural disasters, and climate are topics interview respondents perceive most strongly related to water. More than 85 percent of respondents recognize a strong relationship between water and each of these topics (Figure 2). This finding is less surprising given the current discourse around water and environmental issues.

More surprising is that a majority of respondents also perceive a strong relationship between water and the economy (60%), electricity (59%), and human rights (51%). This reveals that there may be other avenues to connect with these respondents to further engage them with water issues.

Figure 2. Respondents' perceived strength of relationship between water and societal topics



Source: Wilder Research/ APM Research Lab 2018 Qualitative Study for the Water Main: How Americans Relate to Water.

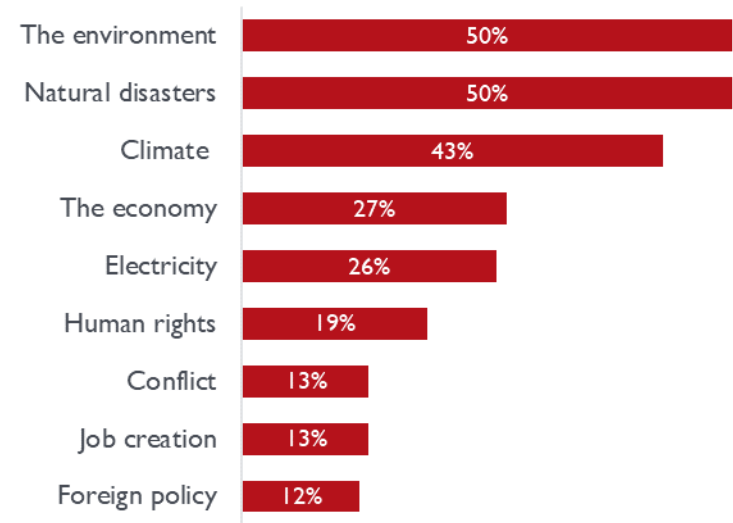
Note: The number of respondents ranged from 190-201 across these questions. Totals may not add to 100% due to rounding

Interests in Water and Society

After being asked about how strongly they relate water with different aspects of society and their personal lives, interview participants were asked to identify up to three topics from those listed in the last question that are of most interest to them. Their answers show that respondents are most interested in the same topics that they most strongly relate to water.

For the broad societal topics, **respondents are most interested in the environment (50%), climate (50%), and natural disasters (42%)**. One-quarter of respondents are most interested in human rights and the economy, respectively. These may be topics the Water Main could further develop to interest more respondents in water-related issues.

Figure 3. Societal topics respondents are most curious about in relation to water (N=191)



Source: Wilder Research/ APM Research Lab 2018 Qualitative Study for the Water Main: How Americans Relate to Water.

Demographic differences

Some geographic and demographic differences across respondents exist. Below we highlight instances where the difference is 20 percentage points or more between a subgroup and the respondents overall or between two demographic subgroups.

Geography

Connections: Water and Society

- Respondents from **Cameron Parish** are **less likely** to perceive a strong relationship between **water and conflict, human rights, and climate**. **Cameron Parish** respondents are also **more likely** to perceive a strong relationship between **water and foreign policy**.
- Respondents from **Kern County** are **less likely** to perceive a strong relationship between **water and climate** and are **more likely** to perceive a strong relationship between **water and job creation**.

- Respondents from **New York City** are **less likely** to perceive a strong relationship between **water and electricity**.
- Respondents from the **Seattle-Tacoma metro area** are **more likely** to perceive a strong relationship between **water and conflict and electricity**.
- Respondents from **Tucson** are **less likely** to perceive a strong relationship between **water and foreign policy**.
- Respondents living in an **urban area** are **more likely** than respondents living in other areas to perceive a strong relationship between **water and human rights** and **more likely** than respondents living in a rural area to perceive a strong relationship between **water and conflict**.

Interests in water and society

- Respondents from **Cameron Parish** are **more interested** in the relationship between **water and the economy**. They are **less interested** in the relationship between **water and human rights**.
- Respondents from **Cleveland** are **more interested** in the relationship between **water and human rights**.
- Respondents from **Denver** are **more interested** in the relationship between **water and the environment**.
- Respondents from **Itasca & St. Louis counties (excluding Duluth)** are **more interested** in the relationship between **water and natural disasters**.
- Respondents from **Kern County** are **more interested** in the relationship and between water and the economy. **They are less interested** in the relationship between **water and natural disasters** and between **water and the environment**.
- Respondents from the **Seattle-Tacoma metro area** are **more interested** in the relationship between **water and foreign policy**.
- Respondents living in an **urban area** are **more interested** than respondents living in rural areas in **human rights** and are **more interested** than respondents living in all other areas in **natural disasters**.

Age

- Respondents **age 55 and older** are **more likely** than younger respondents to perceive a strong relationship between **water and the economy** and between **water and foreign policy**. Respondents **age 35 and older** are **more likely** than younger respondents to perceive a strong relationship between **water and electricity**.

Education

- Respondents with a **bachelor's degree or higher** are **more likely** than respondents with a high school diploma/GED or less to perceive a strong relationship between **water and conflict**. Respondents with **some college education or more** are **more likely** than respondents with less education to perceive a strong relationship between **water and human rights**.

- Respondents with a **bachelor's degree or higher** are **more interested** than respondents with a high school diploma/GED or less in **foreign policy**.

Gender

- **Male respondents** are **more interested** than female respondents in **recreational activities** as they relate to water.

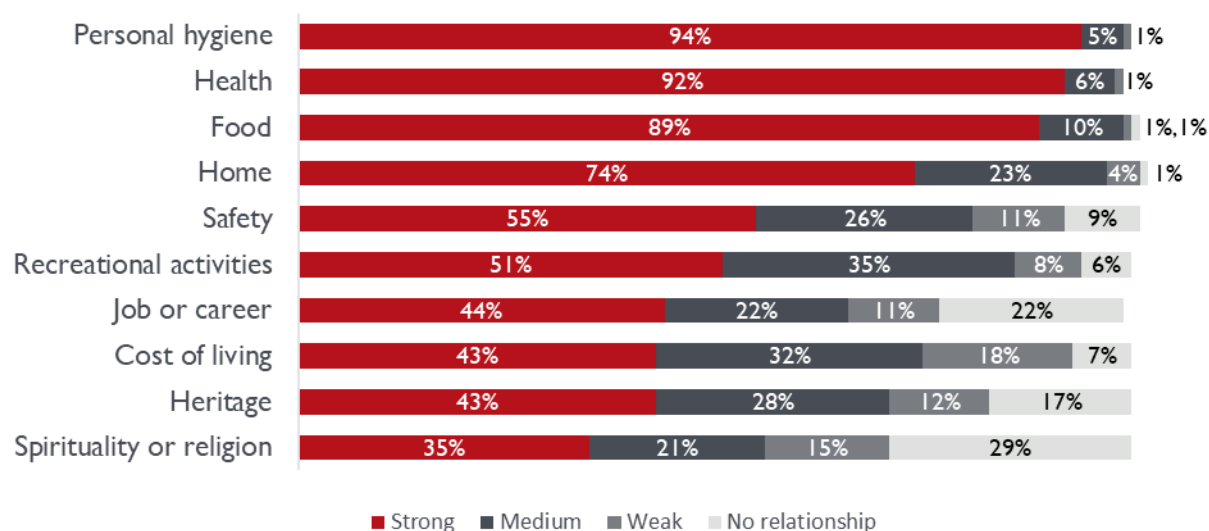
Water and personal life

Many daily activities and elements of our personal lives, like our health, safety, and home, can be associated with water. To learn how strongly respondents associate water to different aspects of their personal lives, we asked them, “Now I would like to ask you about the relationship between water and aspects of your life...How strong is the relationship between your _____ and water?” Responses to these questions may help us engage respondents more deeply by meeting them where they see a connection between water and their lives.

Respondents’ personal hygiene, health, and food are aspects of their lives they perceive as most strongly related to water, with about 9 in 10 respondents seeing this “strong” connection (Figure 4). Additionally, 3 in 4 respondents see a strong relationship between their home and water, while just over half of respondents perceive a strong relationship between water and their safety as well as water and recreational activities.

Approximately 4 in 10 respondents strongly relate water to their heritage, spirituality, job or career, and cost of living. While not securing a majority of respondents, these topics may be areas for the Water Main to further probe and develop—potentially connecting to a segment of respondents that is being overlooked.

Figure 4. Respondents’ perceived strength of relationship between water and their personal life



Source: Wilder Research | APM Research Lab 2018 Qualitative Study for the Water Main: How Americans Relate to Water.

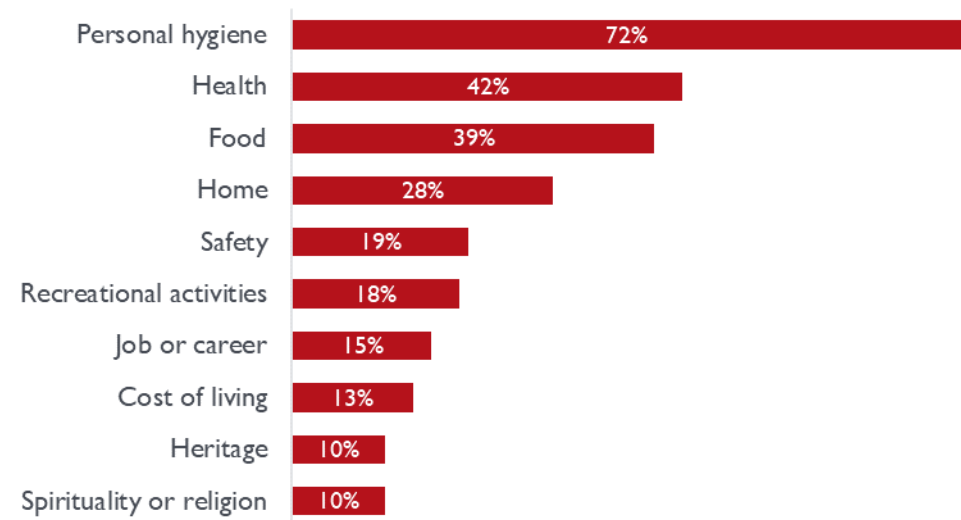
Note. The number of respondents ranged from 183-201 across these questions. Totals may not add to 100% due to rounding.

Interests in water and personal life

For the topics related to their personal lives, respondents are most interested in health (72%). Other popular topics of interest include personal hygiene (42%) and food (39%). A little more than one-quarter of respondents are interested in water in relation to the home.

Thus, hygiene, health, and food may be places for the Water Main to target messaging around the importance of water in our lives.

Figure 5. Personal topics respondents are most curious about in relation to water (N=194)



Source: Wilder Research| APM Research Lab 2018 Qualitative Study for the Water Main: How Americans Relate to Water.

Demographic differences

There were some geographic and demographic differences across respondents. Below we highlight instances where the difference is 20 percentage points or more between a subgroup and the respondents overall or between two demographic subgroups.

Geography

Connections: Water and personal life

- Respondents from **Cameron Parish** are **more likely** to perceive a strong relationship between **water and their heritage**.
- Respondents from **Miami** are **less likely** to perceive a strong relationship between **water and their recreational activities**.
- Respondents from **Milwaukee** are **more likely** to perceive a strong relationship between **water and cost of living**.
- Respondents from the **Seattle-Tacoma metro area** are **less likely** to perceive a strong relationship between **water and cost of living**.

- Respondents living in an **urban area** are **more likely** than respondents living in a rural or suburban area to perceive a strong relationship between **water and their cost of living**.
- Respondents living in a **rural area** are **more likely** than respondents living in a suburban area to perceive a strong relationship between **water and their job or career** and between **water and their safety**.
- Respondents living in a **rural area** are **more likely** than respondents living in other areas to perceive a strong relationship between **water and their recreational activities** and between **water and their heritage**.

Interests in water and personal life

- Respondents from **Cameron Parish** are **more interested** in the relationship between **water and job or career**.
- Respondents from **Cleveland** are **more interested** in the relationship between **water and home**.
- Respondents from **Itasca & St. Louis counties (excluding Duluth)** are **more interested** in the relationship between **water and recreational activities**.
- Respondents from **Kern County** are **more interested** in the relationship between **water and cost of living**.
- Respondents from the **Seattle-Tacoma metro area** are **more interested** in the relationship between **water and heritage**.
- Respondents living in **rural areas** are **more interested** than respondents living in all other areas in **recreational activities**.

Gender

- **Female respondents** are **more likely** than male respondents to perceive a strong relationship between **water and their home**.

Race

- **People of color** are **more likely** than white respondents to perceive a strong relationship between **water and their cost of living**.
- **White respondents** are **more interested** than people of color in **recreational activities**.

Religiosity

- Respondents who **attend religious services more frequently** are **more likely** to perceive a strong relationship between **water and their spirituality or religion** and between **water and their home**.

Personal connections to a body of water

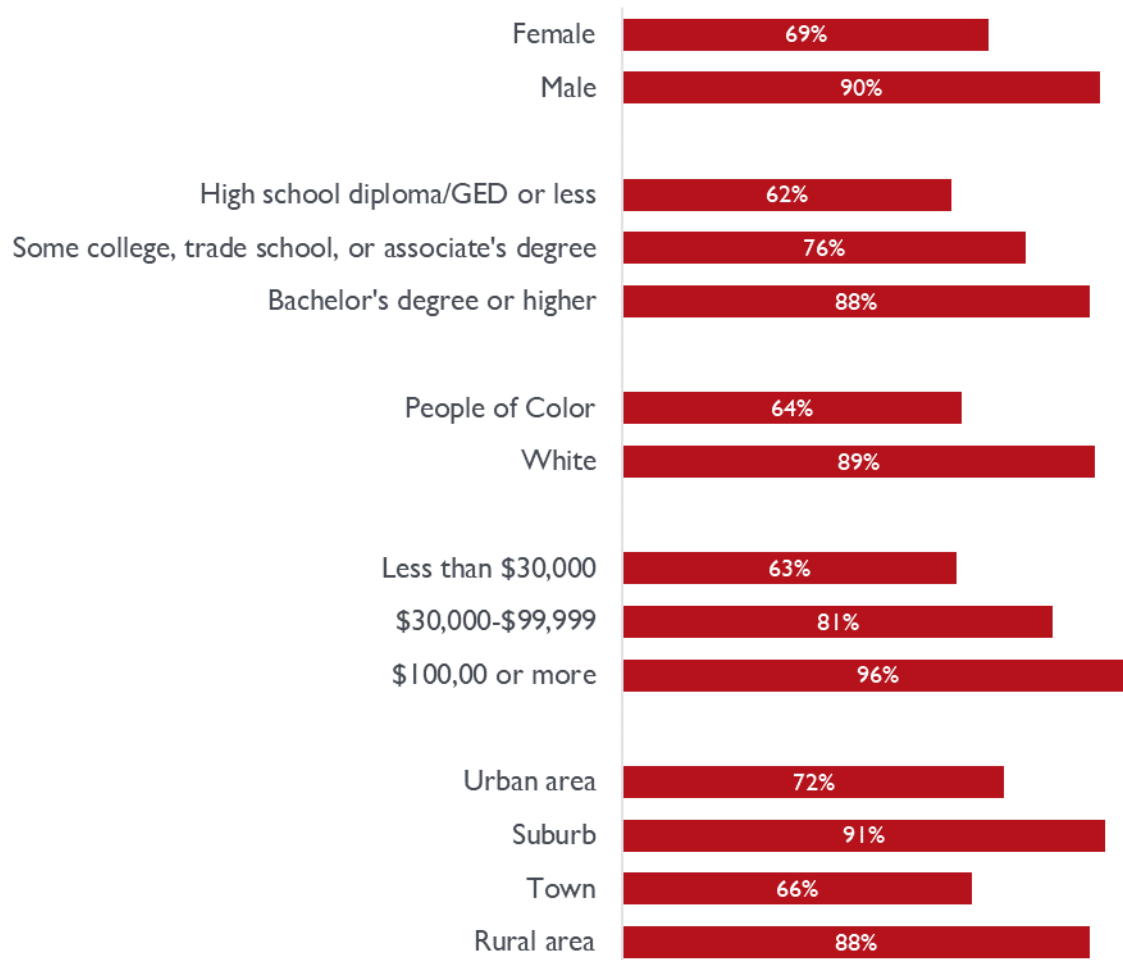
Understanding respondents' personal connections to a body of water may allow the Water Main and others interested in engaging the public with water-related issues to tap into specific types of storytelling toward which respondents may gravitate. We asked interview participants, *"Is there a body of water, such as a lake, river, or ocean that you feel a personal connection to?"*

More than three-quarters of respondents (78%) feel a personal connection to a specific body of water.

Although the majority of respondents feel a personal connection to a body of water, some respondents were more likely to have this connection than others.

Respondents from the Seattle-Tacoma metro area are the most likely (95%) to have a personal connection to a body of water, while respondents from Milwaukee are the least likely (60%), despite being located right on Lake Michigan. Respondents who are more likely to have a personal connection to a body of water are more likely to be male, highly educated, white, higher-income, and live in a suburban or rural (versus urban or town) area (Figure 6).

Figure 6. Demographic differences in personal connection to a body of water (N=200)



Source: Wilder Research | APM Research Lab 2018 Qualitative Study for the Water Main: How Americans Relate to Water.

For those who responded that they did have a connection to a body of water, three open-ended follow-up questions were asked: 1) Which body of water? 2) What is the connection? and 3) What more would you like to know? Responses were then coded and analyzed. The following percentages are based on open-ended responses coded into themes, with some responses fitting into more than one theme.

Just over half of respondents feel connected to a lake (52%), while a full one-quarter of respondents feel connected to an ocean, and just under one-fifth of respondents feel connected to a river. Interestingly, 28 percent of respondents mentioned feeling connected to a lake that no other respondent mentioned, while 14 percent mentioned feeling connected to a river, stream, or creek not mentioned by other respondents. The Water Main may benefit from connecting with respondents on a more local, personal level.

Respondents' descriptions of their connections to bodies of water are largely positive. Respondents are most likely to feel a connection to these bodies of water for the following reasons: 1) proximity (50%): they live or own property near or on the body of water, grew up near or on the body of water, or lived near it in the past; 2) recreational activities (36%): they participate in activities like fishing, swimming, boating, or running nearby; 3) they have memories there from the past (25%); or 4) they have positive associations with the body of water (23%): they have fun there, enjoy the beauty, or find it relaxing.

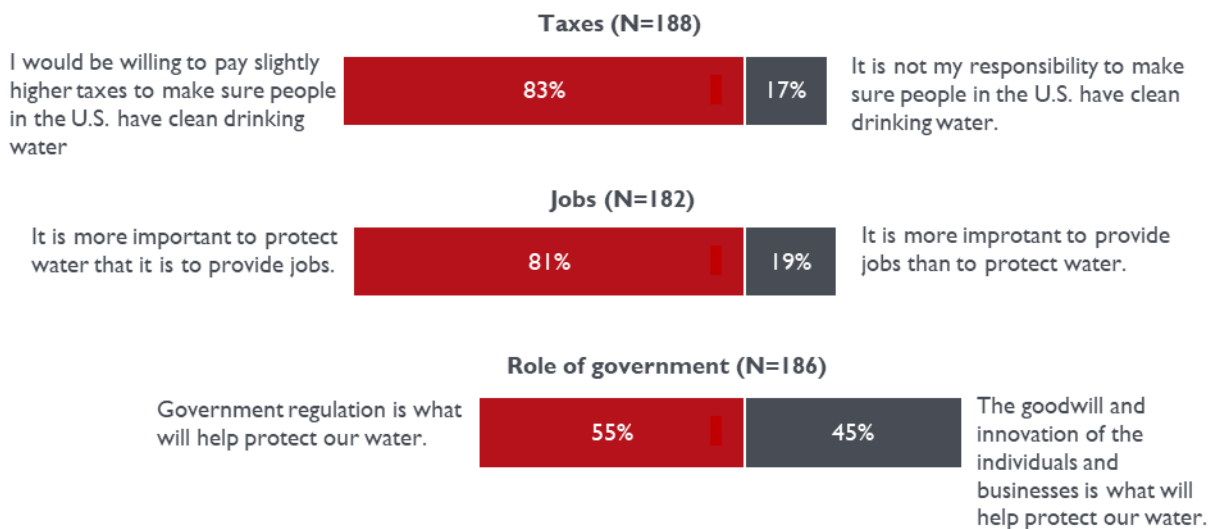
Nearly 20 percent of respondents feel a connection to a body of water due to its connection to the surrounding area and the ways in which its status affects the ecosystem in which it exists. This includes concerns about pollution or contamination of the body of water or natural disasters, such as hurricanes or flooding and the impact on their lives.

When asked what more they would like to know about the body of water they feel a personal connection to, nearly one-third of respondents (30%) want information about water quality. Respondents want to know about pollution or contamination in that body of water, including the impact on wildlife. One-quarter of respondents (26%) want to know science-related information, such as information about natural features of the body of water, about wildlife, and about the effect of human practices and climate change on the body of water. Nearly one-quarter of respondents (22%) want to know what can or will be done to clean and protect that body of water.

Water policy: Tradeoffs

Interview respondents were presented three sets of tradeoffs and asked to indicate which statement from each pair of opposing statements is closer to their beliefs (Figure 7). It is important to reiterate that these results are not meant to represent the opinions of the broader population but are a basis from which start to explore how people with differing values and beliefs may have varying interests in and connections to water.

Figure 7. Respondents' preferred policy option given a tradeoff



Source: Wilder Research | APM Research Lab 2018 Qualitative Study for the Water Main: How Americans Relate to Water.

The majority of respondents (83%) would be willing to pay slightly higher taxes to make sure people in the United States have clean drinking water. These respondents are more likely than other respondents to indicate that they are very interested in science. They are also more likely to see a strong relationship between water and broad societal topics: climate, job creation, natural disasters, and foreign policy.

Conversely, respondents who feel less personally responsible are less likely to have an interest in knowing more about water. These respondents are also more likely to say they are very interested in the topic of the economy.

The majority of respondents (81%) believe it is more important to protect water than it is to provide jobs. These respondents are more likely to see a strong relationship between water and human rights and have a personal connection to a body of water. However, respondents from Cleveland and Milwaukee are more likely than respondents overall to believe that providing jobs is more important than protecting water (44% and 40%, respectively, versus 19% overall).

Respondents who prioritized providing jobs over protecting water are more likely to see a strong relationship between water and certain personal aspects of their lives, including their recreational activities and cost of living. Thus, it is unsurprising that these respondents are more likely to be very interested in sports.

Over half of respondents (55%) believe government regulation is what will help protect our water rather than the goodwill and innovation of individuals and businesses. Respondents from Miami are more likely than respondents overall to believe that government regulation is what will help protect our water (90% versus 55% overall). Respondents age 65 and older are more likely than respondents age 18-34 to believe government regulation will protect water (68% versus 42%).

Respondent interest groupings and core values

In the interest of developing water-related programming that meets the listener where they are at, we sought to identify potential audience segments among respondents.

To do so we conducted an exploratory factor analysis of respondents’ interests in to a series of nine topics. As shown in Table 1, respondent interests clustered together around three sets of topics. In analysis, the high-interest grouping, or the top one-third of respondents most interested in the topic set, is compared to those with less interest in those topics, or the bottom two-thirds of respondents in each topic set.

Comparing those with more interest in each topic set to those with less interest and then examining their responses to other questions throughout the survey revealed some meaningful differences. We also assigned names to those with high interest in each topic set (see Table 1).

We then compared responses of each high interest grouping and identified three preliminary water-related values from this analysis: outdoor, personal, societal. From these values, a *core* value emerged for each interest grouping.

The core value highlights the avenue through which each interest grouping derives the most value from water. Recreationalists, Day-to-Day Users, and Social Impact Citizens all recognize the outdoor, personal, and societal values of water in some capacity, but to different degrees—each emphasizes one, their core value, more than the others.

Table 1. Respondent interest groupings

Topic set	High interest grouping name	Core Value
Outdoor recreation Sports	Recreationalists	Outdoor
Cooking or food Health and wellness Education	Day-to-Day Users	Personal
The arts Science Culture and heritage	Social Impact Citizens	Societal

Source: Wilder Research | APM Research Lab 2018 Qualitative Study for the Water Main: How Americans Relate to Water.

These groupings deserve further exploration in order to confirm that they are meaningful beyond the 201-person sample included in this study. Additional research should also explore how interest levels interact between these topic areas to provide a holistic picture of audience segments.

To find out how the Water Main and others interested in communicating with the public about water-related issues might leverage these apparent groupings, we looked at their answers to a range of other questions in the interview.

Unlike the rest of the report where differences of 20 percentage points or more are highlighted, for this analysis we used differences of 10 percentage points or more to determine notable variations in responses.

Outdoor recreation and sports interests

Respondents with a high interest in outdoor recreation and sports, who we are calling **Recreationalists**, are more likely than respondents less interested in these topics to be male, less likely to live in a town, and less educated (specifically, less likely to have a graduate degree or higher).

Of several potential U.S. government priorities, Recreationalists are more likely to say that defending the country from terrorist attacks and strengthening the economy should be high priorities than are those less interested in outdoor recreation and sports. They are also more likely to indicate that protecting the environment should be a high priority.

Recreationalists are more likely to see a strong relationship between water and their heritage. This might be attributed to responses from people living in Cameron Parish who have spent their lives surrounded by water and grew up with activities like fishing, shrimping, crabbing, swimming, and boating.

As opposed to those with less interest in recreation and sports, Recreationalists are also more likely to indicate that they have a personal connection to a body of water and to attribute that connection to recreational activities they participate in at or on the water. With regards to the body of water they feel a connection to, Recreationalists are more likely than those less interested in outdoors recreation and sports to be interested in science-related information, such as natural features or changes in the body of water. They are less interested in information about efforts to protect or clean it.

Core Value

This analysis revealed Recreationalists, unsurprisingly, emphasize the outdoor core value. Underscoring this core value is that they are more likely to have a personal connection to water through recreational activities and are curious about the science behind water, such as understanding the changing nature or natural features of water.

Health, food, and education interests

Respondents with a high interest in health, food, and education, who we are calling **Day-to-Day Users**, were more likely to be female and Hispanic/Latinx or African American and were less likely to be white.

As opposed to those with less interest in health, food, and education, these respondents are more likely to say social issues like reducing crime and addressing race relations should be a high priority for the U.S. government, but are also more likely to say that reducing the budget deficit and defending the country from terrorist attacks should be high priorities as well.

When asked about the role of water in their lives, Day-to-Day Users are more likely to think of water as of significant importance to one's health and survival and are less likely to think simply about water for drinking. This group is less likely to think of issues related to equity when thinking about the role of water in society (i.e., inequitable access to and competition for water resources).

Day-to-Day Users are more likely to see a strong relationship between several aspects of their life and water than those less interested in health, food, and education. They are more likely to see a strong relationship between water and health, spirituality or religion, cost of living, job or career, recreational activities, safety, home, and heritage.

When it comes to interest in the relationship between water and aspects of their life, Day-to-Day Users are less likely to be interested in or curious about how recreational activities relate to water.

Additional differences between Day-to-Day Users and those less interested in the topics of health, food, and education:

- More likely to see a strong relationship between water and the economy, conflict, electricity, and job creation
- Less likely to have a personal connection to a body of water
- More likely to think it is important for others to know about safety-related issues associated with water

Core Value

From this analysis, we identified Day-to-Day Users see value in water mainly through a personal value lens, emphasizing water's importance to survival and health. Underscoring this core value is their strong connection between water with more personal aspects of their lives such as food, education, safety, spirituality, heritage, job and career, recreation, and the home. The Day-to-Day User focuses on water more at the individual and household level, highlighting the personal core value.

Arts, science, and culture interests

Respondents with a high interest in the arts, science, and culture, who we are calling ***Social Impact Citizens***, are more likely to live in an urban area and are less likely to live in a rural area. They are also more likely to be female and are more likely to attend religious services more than once a week. They are less likely to be white.

These respondents are more likely to think social issues like addressing race relations should be a priority for the U.S. government. Additionally, they are more likely than respondents less interested in arts, science, and culture to say they would be willing to pay slightly higher taxes to make sure people in the United States have clean drinking water.

Like Day-to-Day Users, Social Impact Citizens are more likely to think deeply about the role of water in their lives, describing it as of significant importance to one's health and survival and were less likely to think simply about water for drinking and how it is used in daily life. Additionally, they are more likely than people less interested in arts, science, and culture to see the role of water in their lives as it relates to environmental issues, including pollution, conservation, and climate change.

Those with strong interests in arts, science, and culture tend to have stronger interests in the role of water in society, which is, in part, why we dubbed them "Social Impact Citizens."

Social Impact Citizens are more likely than those less interested in arts, science, and culture to see a strong relationship between water and their spirituality or religion, job or career, safety, and heritage.

On the other hand, Social Impact Citizens are less likely to be interested in how food relates to water.

Additional differences between Social Impact Citizens and those less interested in arts, science, and culture:

- More likely to see a strong relationship between water and societal topics, including the economy, conflict, human rights, job creation, and foreign policy
- Those who have a personal connection to a body of water are more likely to describe that connection as based on a memory or positive association and were less likely to describe it as due to proximity
- More likely to have heard a recent water-related news story about water access, availability, or cost
- Regarding interest in recent water-related news story they heard: less likely to be interested because it has personal relevance, and more likely to be interested due to its educational or informative quality
- Less likely to say “nothing” when asked what more they would like to know about water

Core Value

Based on this analysis, we identified those with high interest in arts, science, and culture as having their water-related core value rooted in society. Thus, we classified them as the “Social Impact Citizen.” Though Social Impact Citizens describe water’s importance to health in survival, they also are more interested in broader systems-level water issues such as conservation and climate change. They see a connection between water and human rights as well as water and foreign policy. Additionally, the Social Impact Citizen is more likely to have heard a water-related news story about access, availability, or cost and is more interested in news stories because of their educational quality as opposed to personal relevance.

Appendix

Methods

Wilder Research and the APM Research Lab developed an interview protocol with four sections: 1) What do people think and care about broadly? 2) How do people relate to water? 3) What do people think others (or they themselves) should know about water? and 4) Demographic questions. The interview took 20-30 minutes to complete, depending on how much the respondent had to say. The instrument includes questions with both closed-ended and open-ended responses. The interview was conducted over the phone and responses are recorded by the interviewer in Acuity, a web-survey software tool.

Sampling

The APM Research Lab, in consultation with the Water Main, identified a diverse set of locations, a strategic convenience sample, to include in the study. The sampling areas represent the variety of geography in the United States. The Research Lab and the Water Main took several characteristics into consideration when selecting locations, including geographic characteristics (e.g., rural vs. urban, proximity to body of water), places with or without historical challenges with water management (e.g., water quality or quantity), and demographic characteristics (e.g., age, race). Additionally, though this is not a scientifically representative survey, locations were also selected in an effort to reach various regions throughout the United States (e.g., north, south). See Figure 1.

As shown in table A1, seven of the selected areas are cities. One area is a metropolitan statistical area (MSA) (Seattle-Tacoma). Two are counties (Kern County, CA and Cameron Parish, LA), and another is a county plus part of another county, excluding a major city (Itasca and St. Louis counties, excluding Duluth).

Table AI. Geographic areas for sampling

Area	Definition
Minnesota's Iron Range	Itasca and St. Louis counties, excluding the city of Duluth, MN
Milwaukee, WI	City
Cleveland, OH	City
Buffalo, NY	City
New York City, NY	The 5 boroughs: Brooklyn, Staten Island, Manhattan, Queens, The Bronx
Miami, FL	City
Rural area in Gulf Coast	Cameron Parish, LA
Tucson, AZ	City
Central Valley area of CA	Kern County, CA
Seattle-Tacoma metro area, WA	The metropolitan statistical area, or MSA, which includes 3 counties: King, Snohomish, and Pierce
Denver, CO	City

Source: Wilder Research | APM Research Lab 2018 Qualitative Study for the Water Main: How Americans Relate to Water

Note: For city locations, the respondent defined whether they live in the city area (i.e., the Denver area).

To ensure that there would be diversity in each area's respondents Wilder Research worked closely with Marketing Systems Group (MSG) to develop the sample of potential survey respondents.

Based on Wilder Research's specifications, MSG initially provided a sample of 300 phone numbers for each of the 11 areas, for a total of 3,300 phone numbers. Half of the cases (1,650) were landline numbers and half (1,650) were cell phone numbers. Within each area, one-third of the cases targeted low-income individuals (from households with incomes below the area's median household income, based on American Community Survey data); one-third persons of color; and one-third persons under age 40. Wilder Research eventually purchased an additional 1,995 pieces of sample for nine areas where we had a more difficult time completing interviews.

Interview respondents

Participant demographics

Interview respondents were from 11 different regions. Eight regions had 20 respondents or more. Table A2 includes details about the respondent characteristics.

Table A2. Sampling locations and demographic characteristics of participants

Of those who completed an interview:

Location	% female	% people of color	% with annual household income below \$50,000	% under age 40	Number of completed interviews
Buffalo, NY	38%	38%	35%	18%	21
Cameron Parish, LA	33%	14%	25%	20%	15
Cleveland, OH	65%	75%	65%	43%	20
Denver, CO	67%	24%	60%	14%	21
Itasca & St. Louis counties (excluding Duluth), MN	55%	0%	45%	25%	20
Kern County, CA	64%	36%	54%	18%	11
Miami, FL	90%	60%	N/A	20%	10
Milwaukee, WI	70%	60%	43%	45%	21
New York City, NY	52%	65%	31%	36%	21
Seattle-Tacoma metro area, WA	65%	10%	18%	5%	20
Tucson, AZ	59%	27%	48%	41%	22

Source: Wilder Research | APM Research Lab 2018 Qualitative Study for the Water Main: How Americans Relate to Water.

Note: There were not enough respondents from Miami, Florida, to report percentages from that area.

Table A3. Respondent characteristics

Characteristics	N	%
Gender		
Females	118	59%
Males	83	41%
Age		
18-34	28	14%
35-44	40	21%
45-54	25	13%
55-64	42	22%
65+	60	31%
Education level		
HS diploma/GED or less	38	19%
Some college, trade school, or associate degree	74	37%
Bachelor's degree or higher	88	44%
Race/ethnicity		
All people of color	80	40%
White	113	56%
Household income		
Less than \$30,000	52	26%
\$30,000 – under \$70,000	60	30%
\$70,000 – under \$100,000	27	13%
\$100,000 or more	46	23%
Home location		
Urban area	90	45%
Suburban area	47	23%
Town	32	16%
Rural area	32	16%
Children in household		
No children	134	67%
Children	66	33%

Source: Wilder Research | APM Research Lab 2018 Qualitative Study for the Water Main: How Americans Relate to Water.

Data collection

Wilder Research managed the sample to ensure that we were only opening up enough cases to obtain the targeted number of completes, without using so much sample that the response rate is negatively impacted. Interviewers contacted potential respondents up to six times by phone at different times of the day and days of the week, including weekends. Interviewers allowed respondents to schedule an appointment at a time that worked for them to complete the interview. Interviewers recorded all call attempts and standard American Association for Public Opinion Research call outcome dispositions were used to calculate the agreed upon response and cooperation rates.

To ensure interviewer efficiency and accuracy, Wilder Research routinely reviewed the record of calls, and monitored staff during live and recorded interviews. Project leads monitored five percent of all completed interviews and reviewed all interview transcripts during the coding process. Monitoring was emphasized in the early stages of calling to ensure interviewers were screening respondents effectively, encouraging respondents' cooperation, and administering the interview protocol correctly. Data collection staff were monitored and re-trained as needed throughout data collection to ensure that effective probing was used to gather in-depth information without leading respondents.

Throughout the data collection period, Wilder Research provided APM Research Lab with weekly information about the number of completed interviews obtained and other relevant project statistics.

Respondents were offered a \$50 gift card as an incentive to participate in the interview. We attempted to obtain 20 completes in each of the 11 selected geographic areas. Due to language barriers in Miami, Florida and Kern County, California, lack of sufficient sample for residents in Cameron Parish, Louisiana, and general project time constraints we were not able to obtain 20 completes in three locations. Ultimately, we completed 201 interviews, with an overall response rate of 5.5 percent and yielding the demographic characteristics shown in Figure A1.

Analysis

Open-end responses were analyzed using grounded theory, where codes are developed based on emerging themes. Quality control checks were conducting using interrater reliability. Three Wilder staff coded open-end responses. The coding team met several times to discuss their interpretation of the codes and to compare coding of the same responses to ensure consistency and reliability. Closed-ended responses were analyzed for frequencies and cross-tabulations using Statistical Package for Social Science (SPSS). For the section in the report about potential audience segments, an exploratory factor analysis was conducted on the items in question #2 (How interested are you in the following topics?). The preliminary results revealed three potential groupings by general interest areas that, due to a lack of statistical power, should be explored further to confirm:

1. Outdoor recreation and Sports (2A/2E)
2. Health, Food, and Education (2B/2C/2D)
3. Arts, Science, and Culture (2F/2G/2H)

For each interest area we determined which respondents were, roughly, the top one-third of respondents most interested in that topic area. First, we computed the mean of the items in the interest area, then grouped together as close as possible to the top one-third, as the data allowed. Two important caveats should be described to put this analysis process in context:

- The mean score required to be in the top third is different across the different interest areas. Overall, people indicated a higher level of interest in Health, Food, and Education than they did in Outdoor recreation & Sports. To capture the top one-third in both groups required using different criteria in the topic areas.
- A single person could be in the top one-third of interested respondents in more than one interest area (or alternatively, in none of them). More than one third (37.5%) of respondents were not in any “top one-third” group while almost 3 in 10 (28.5%) were in two or more.
- This is a preliminary investigation into what could be potential groupings. These groupings, as well as how they interact and overlap should be explored further using a statistically representative sample to confirm validity.

Limitations

As an exploratory, qualitative study, intended to probe thoughts and explore possible themes, this study is not designed to represent the thoughts of all American, or even the communities that we sampled. There are a number of limitations associated with this study that should be considered when interpreting the findings. The major limitations of this study are similar to almost any qualitative study:

- Convenience sample – While the sampling strategy increased the diversity of respondents, the sample is not representative of the U.S. population. This means that the responses to any given question in this study may differ substantially from nationally representative surveys
- Sample size – The sample only includes 201 people and only 10-22 people from each sampling area. This is not a large enough sample to have enough statistical power to show significance. Instead of defining differences according to significance, we exercised professional discretion to describe notable or interesting differences in the data. However, a representative study is needed to confirm these differences.
- Priming effect – In an effort to be transparent, interview participants were told in the invitation language and the introduction to the interview that the interview was about the role water plays in

people's lives. This priming, although slight, may have influenced who chose to participate in the interview.

- Social desirability bias – Knowing that the interview is about water may have caused interview respondents to answer questions in a manner that they think will be viewed favorably by others.

Despite these limitations, we believe this exploratory, qualitative study to be path-breaking in the depth of new insights it provides about how those interviewed think about a wide range of topics, specifically as they relate to water. We look forward to collaborating with others on research that further solidifies our understanding of these topics.

Interview protocol

APM's Water Main Interview Protocol

Hello, my name is _____, from Wilder Research. We are working with American Public Media to conduct a study to learn about the role water plays in people's lives. We're calling to invite you to participate in a survey about what's important to you and your thoughts and experiences with water. The results of this study will be used by American Public Media to inform their programming on water-related topics and to improve their information and communication to the public. If you are eligible for and complete the survey you will receive a gift card to thank you for your time.

[SCREENING QUESTION]: Are you age 18 or older? Do you live in the [insert area noted in the sample file] area?

[If NO to either question] I'm sorry, but you are not eligible for this survey. We are looking for people who are 18 years of age or older and live in the area. Thank you so much for your time.

[If respondent asks for more detail: American Public Media, the largest station-based public radio organization in the U.S., has a new initiative called the Water Main which is aimed at developing programming that reports on water issues. They want their programming to be meaningful to their listeners, not just those who think of themselves as environmentalists. They are conducting this study to better understand the interests of the public when it comes to water.]

Great, you are eligible for the survey. If you complete the interview, you will receive a \$50 gift card to your choice of either Amazon, Target, or Walmart to thank you for your time. This survey will take about 20-30 minutes, depending on how much you have to say.

This survey is completely confidential, and your name will not be shared in any reports. All the answers from everyone who is surveyed will be combined to identify key themes. The survey is voluntary, and if there is any question that you do not want to answer or that you do not have an answer for, we can skip to the next question. There are no right or wrong answers. We want to know your opinions.

Do you have time to do the survey now?

[If NO] When would be a more convenient time for us to call you back to complete the survey?

[Record the interview appointment time on the R's face sheet]

Before we begin please be aware this call may be monitored or recorded for quality control purposes.

SECTION A. What do people think and care about broadly?

I will begin by asking you a few questions to get a sense of the things you care about.

1. I'd like to ask you about the U.S. government's priorities this year. As I read from a list, tell me if you think each should be a high priority, medium priority, low important, or not a priority. **[RANDOMIZE ORDER]**

	High priority	Medium priority	Low priority	Not a priority	Refused/ DK
a. Defending the country from terrorist attacks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Improving the educational system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Strengthening the economy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Reducing health care costs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Taking steps to make the Social Security system financially sustainable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Taking steps to make the Medicare system financially sustainable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Protecting the environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Helping people experiencing poverty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Reducing crime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Addressing race relations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Improving roads, bridges, and public transportation systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. Reducing the budget deficit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Dealing with immigration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. Protecting water resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. In general, how interested are you in the following topics? As I read from the list, tell me if you are very interested, somewhat interested, not too interested, or not at all interested.

[RANDOMIZE ORDER]

	Very interested	Somewhat interested	Not too interested	Not at all interested	Refused/ DK
a. Outdoor recreation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cooking or food, in general	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Health and wellness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Sports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. The arts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Culture and heritage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Science	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Spirituality or religion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SECTION B. How do people relate to water?

Now I'm going to ask you a question about the role of water in your life and the role of water in society.

3. First, when you think about the role of water in your life, what is the first thing that comes to mind? (*Probe: What else comes to mind?*)
4. When you think about the role of water in society, what is the first thing that comes to mind? (*Probe: What else comes to mind?*)

- 5A. Now I would like to ask you about the relationship between water and aspects of your life. As I read from the list, tell me whether you think the relationship is strong, medium, weak, or is there no relationship. How strong is the relationship between your _____ and water?
[RANDOMIZE ORDER]

	Strong	Medium	Weak	No relationship	N/A	Refused/ DK
a. Health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Spirituality or religion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Personal hygiene	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Cost of living	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Job or career	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Food	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Recreational activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Heritage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5B. What was the first item they responded "Strong", to? _____

5C. How do you see them as related?

6. Of the topics I just listed, which topics, as they relate to water, are you most interested in or curious about? Please choose up to three. *(Read the list again for respondent)*

- ☐ Health
- ☐ Spirituality or religion
- ☐ Personal hygiene
- ☐ Cost of living
- ☐ Job or career
- ☐ Food
- ☐ Recreational activities
- ☐ Safety
- ☐ Home
- ☐ Heritage
- ☐ Refused/Don't know

7. Why are those the items you are most interested in or curious about?

8. Now I'll list some broader topics. Tell me how strongly these topics relate to water in your mind. Is the relationship strong, medium, weak, or is there no relationship? How strong is the relationship between _____ and water? **[RANDOMIZE ORDER]**

	Strong	Medium	Weak	No relationship	N/A	Refused/ DK
a. The economy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Conflict	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Electricity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Climate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Human rights	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Job creation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Natural disasters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Foreign policy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. The environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. Of the topics I just listed, which topics, as they relate to water, are you most interested in or curious about? Please choose up to three. *(Read the list again for respondent)*

- ☐ The economy
- ☐ Conflict
- ☐ Electricity
- ☐ Climate
- ☐ Human rights
- ☐ Job creation
- ☐ Natural disasters
- ☐ Foreign policy
- ☐ The environment
- ☐ Refused/Don't know

10. Why are those the items you are most interested in or curious about?

11. Is there a body of water, such as a lake, river, or ocean that you feel a personal connection to?

- ☐ Yes

[If YES] What body of water do you feel connected to?

[If YES] What is the connection you have to that body of water?

[If YES] What information would you like to know about that body of water?

- ☐ No

12. Think about the last time you had a conversation that involved the subject of water; what was it about?

13. Think about the last news story you encountered about a water-related issue; what was it about?

a. Was the story interesting?

☐ Yes [If YES] What made it interesting?

☐ No [If NO] Why didn't it interest you?

14. Which of these statements is closer to your beliefs?

a. ☐ I would be willing to pay slightly higher taxes to make sure people in the U.S. have clean drinking water

OR

☐ It is not my responsibility to make sure people in the U.S. have clean drinking water

b. ☐ It is more important to protect water than it is to provide jobs

OR

☐ It is more important to provide jobs than to protect water

c. ☐ Government regulation is what will help protect our water

OR

☐ The goodwill and innovation of individuals and businesses is what will help protect our water

15. I am going to read a phrase describing a new project. Tell me which statement makes you want to learn more. Choose one out of the following three options.

☐ First project: "Making sense of the complex world of water and what it means to you."

☐ Second project: "Bringing people together, move conversations forward and create meaningful connections that help sustain clean, abundant water for all."

☐ Third project: "Helping Americans understand the value of water in our lives."

a. Why did that statement make you want to learn more?

SECTION C. What do people think people (or they themselves) should know about water?

16. What more do you want to know about water?
17. What do you think other people need to know about water?

SECTION D. Demographic questions

Now I'm going to ask some questions about you, so that we can make sure we are talking to a wide variety of people. Remember, everything you say is confidential.

18. Is your place of residence in...?
- ☐ An urban area,
 - ☐ A suburb,
 - ☐ A town, or
 - ☐ A rural area?
19. How many adults age 18 or older, including yourself, live in your household? _____
20. How many children under age 18 live in your household? _____
21. What is your gender?
- ☐ Female
 - ☐ Male
 - ☐ Another gender identity (please specify: _____)
22. If I may ask, what is your age? _____
23. What is the highest degree or level of school you have completed...?
- ☐ 8th grade or less,
 - ☐ Some high school,
 - ☐ High school graduate or GED,
 - ☐ Trade school (Vocational, Technical, or Business School),
 - ☐ Some college or Associate's degree (including community college),
 - ☐ Bachelor's degree, or
 - ☐ Graduate or professional degree?

24. Aside from weddings and funerals, how often do you attend religious services? Would you say...
- ☐ More than once a week,
 - ☐ Once a week,
 - ☐ Once or twice a month,
 - ☐ A few times a year,
 - ☐ Seldom, or
 - ☐ Never?
25. Are you Hispanic or Latinx?
- ☐ Yes
 - ☐ No
26. Which one or more of the following would you say is your race? How about...
- ☐ Asian or Asian American,
 - ☐ Black or African American,
 - ☐ Native American or Alaskan Native,
 - ☐ Native Hawaiian or Other Pacific Islander,
 - ☐ White or Caucasian, or
 - ☐ Some other race, please specify: _____
27. What was your 2017 annual gross household income from all members of your household and all sources? Stop me when I read the correct range. Was it...
- ☐ Less than \$15,000
 - ☐ \$15,000 – under \$30,000
 - ☐ \$30,000 – under \$50,000
 - ☐ \$50,000 – under \$70,000
 - ☐ \$70,000 – under \$100,000
 - ☐ \$100,000 – under \$125,000
 - ☐ \$125,000 – under \$150,000
 - ☐ \$150,000 or more
- a. How many people does this income support? _____

Thank you for completing the interview. Would you prefer to receive an Amazon e-card delivered via email or a Target or Walmart gift card delivered via U.S. mail?

- ☐ Amazon e-card
- ☐ Target card
- ☐ Walmart card
- ☐ I do not want a gift card

Lastly, what is your name? What address would you like the gift card to be delivered to?

Name _____

Street _____

City _____

State _____

Zip _____

Would you like to receive your gift card via certified or non-certified mail?

Certified mail means someone will need to be home to sign for the gift card, or they will leave a note for you to pick it up at the post office. If we send it regular mail, we cannot resent another gift card if it is lost or stolen in the mail

- ☐ Certified mail
- ☐ Non-certified mail

If you are interested, you can find out more at the Water Main website which is watermain.org. Would you like to be sent a postcard from American Public Media when information from this study is available?

- ☐ Yes
- ☐ No

Thank you! You should receive your gift card in the next couple weeks.



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