An Update on New Jersey Opinions on the State of Our Water Systems, the Environment, and Infrastructure

Conducted for

Jersey Water Works

New Jersey Future

Conducted by New Jersey Future in consultation with Associate Professor Rachael Shwom, Rutgers University

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Note: The opinions expressed in this report are those of the author(s) and do not necessarily reflect the views of Spring Point Partners LLC.

About New Jersey Future

Founded in 1987, New Jersey Future is a nonprofit, nonpartisan organization that promotes sensible growth, redevelopment and infrastructure investments to foster vibrant cities and towns, protect natural lands and waterways, enhance transportation choices, provide access to safe, affordable and aging-friendly neighborhoods and fuel a strong economy. The organization does this through original research, innovative policy development, coalition-building, advocacy, and hands-on strategic assistance. Embracing differences and advancing fairness is central to New Jersey Future's mission and operations. New Jersey Future is firmly committed to pursuing greater justice, equity, diversity, and inclusion through its programs, internal operations, and external communications.

About Jersey Water Works

<u>Jersey Water Works</u> is a collaborative that is working to transform New Jersey's inadequate water infrastructure through sustainable, cost-effective solutions that provide communities with clean water and waterways; healthier, safer neighborhoods; local jobs; flood and climate resilience; and economic growth.

About Jersey WaterCheck

Water and wastewater infrastructure are essential to the health and wellbeing of our communities. <u>Jersey WaterCheck</u>, an initiative of Jersey Water Works, brings together information on water and wastewater systems from multiple sources in one easy-to-use website. This online resource connects New Jerseyans to their water systems and helps depict the story of New Jersey's water.

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Executive Summary

Jersey Water Works and New Jersey Future conducted a representative online survey of 1,176 residents in New Jersey, which served as an abridged follow-up to a survey conducted in 2017. The results of the past survey were reported in "New Jersey Opinions on the State of Our Water Systems, the Environment and Infrastructure." This follow-up survey was fielded by Qualtrics in December 2020 and January 2021. The goal of this abridged follow-up was to get an update regarding New Jerseyans' concerns about and priorities for water, the environment, and infrastructure. Results from this study also informed Jersey WaterCheck, an online resource that connects New Jerseyans to their water systems and helps depict the story of New Jersey's water, specifically one of its metrics about public support for additional investment in water infrastructure. Furthermore, these results will help refine Jersey Water Works' strategies.

Residents' Priorities and Concerns

Similar to what was found in 2017, the survey respondents indicated that their highest environmental concern is the quality of their drinking water and that they want elected officials to prioritize water infrastructure improvements and investments. A majority (80%) said that ensuring all people have safe drinking water should be a top priority for our governor and Legislature. In the 2017 survey, this figure was 78%. Also similar to the 2017 results, more than half of the respondents rated removing lead from drinking water in homes and schools, and investing in repairing leaky pipes and our infrastructure as top priorities. In 2017, more than half of the respondents (55%) indicated concern about the quality of their drinking water and about a quarter (23%) indicated little to no concern. In this survey, less than half of respondents (46%) reported being worried about water quality and almost a third (30%) reported little to no concern at all.

Residents' Awareness and Knowledge

When asked to rank the shape of New Jersey's water infrastructure in 2017, only one in 33 survey respondents rated it as "very good." The corresponding result from this survey was one in 12. However, like in 2017, one in five said that they don't know what shape our water infrastructure is in, which suggests a need for better awareness about water infrastructure. When rating the shape of New Jersey's water infrastructure, only 39% of respondents said it was in either somewhat good or very good shape, compared to 60% saying the same for the state's transportation infrastructure. This finding, also similar to the one in 2017, suggests there may be corresponding support for potential state funding towards water infrastructure. Additionally, this survey found that most respondents were supportive of solutions to water infrastructure issues like green infrastructure (86%). In 2017, this figure was 82%.

Investment in Water Infrastructure as a Means for Economic Growth

As in 2017, the survey results show support for seeing investment in our water infrastructure as a means for economic growth. Seventy-five percent of respondents agreed with the statement that increased government spending on water infrastructure, like fixing pipes and water mains, will create jobs, as opposed to the statement that cutting back on government spending will generate economic growth for the state. In 2017, this figure was 63%.

Detailed Findings

Detailed findings from the 2017 survey can be found here.

For comparisons between the results from this survey and the one conducted in 2017, differences in the relative survey samples must be noted. The largest difference is that the 2017 survey oversampled 21 New Jersey communities with combined sewer overflows (CSOs), whereas this survey sample had a more even geographic distribution. Thus, any differences between the survey results (2017 versus 2020-2021) may be affected by the differences in the samples of respondents and do not reflect a significant change (or lack thereof) in opinion. Accordingly, any interpretation related to results that are similar to or different from the corresponding 2017 results should be made with this caveat in mind.

Clean Drinking Water Is a Top Priority

Survey results indicate that clean drinking water is a top issue of concern for New Jerseyans, similar to the finding in 2017. When asked about a range of environmental issues, 39% of respondents said that protecting our drinking water is their most important concern. This was rated about twice as high of a concern as cleaning up toxic spills and waste sites (16%). Though the percentage of respondents who chose "protecting our drinking water" was roughly the same as in the 2017 survey, the share of respondents who chose "reducing greenhouse gas emissions that lead to climate change" was 22%, whereas it was 15% in the 2017 survey. Given the impact that climate change has on our water systems, concern about climate change reflects concern about an issue that will likely affect our drinking water.

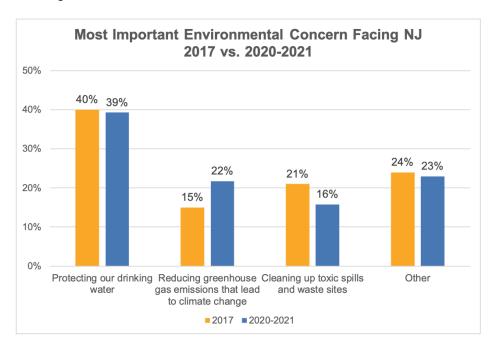


Figure 1. Which is the most important environmental concern facing New Jersey? (2017 vs. 2020-2021)

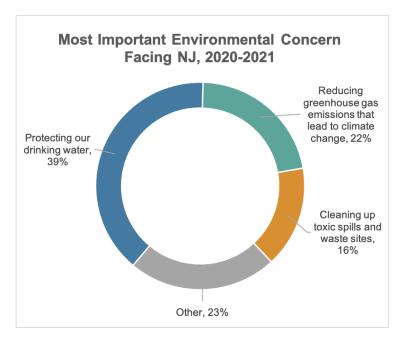


Figure 2. Which is the most important environmental concern facing New Jersey? (2020-2021)

When asked about the importance of drinking water issues for New Jersey's governor and Legislature, 80% of respondents said ensuring that all people have safe drinking water should be a top priority. In the 2017 survey, the corresponding result was 78%. Another 13% ranked it as important, which is similar to 14% in 2017. Roughly 77% of respondents ranked removing lead from drinking water in both schools and homes as top priorities as well. Slightly more than half of respondents (54%) said investing in repairing old leaky pipes and other water infrastructure is a top priority. The aforementioned findings are similar to the 2017 results.

Table 1. How would you rank these priorities for the governor of New Jersey and legislature? (2020-2021)

	Top Priority	Important	Low Priority	Should not be done
Make sure all people have safe drinking water	80%	13%	2%	3%
Removing lead from drinking water in homes	78%	15%	2%	3%
Removing lead from drinking water in schools	77%	17%	2%	3%
Improve water quality in our lakes, rivers and oceans	62%	29%	5%	1%
Invest in repairing old leaky pipes and other water infrastructure	54%	36%	5%	2%
Help low-income people pay their water bills	42%	38%	12%	3%
Take steps to reduce flooding	33%	52%	11%	2%
Lower the price of water	32%	45%	17%	2%

Drinking Water Quality Concern Is Moderate

In the 2017 survey, more than half of respondents (55%) indicated either a great deal or a lot of concern about the quality of their drinking water and 23% indicated a little or no concern. In this survey, slightly less than half of respondents (46%) reported concern about drinking water quality, with 22% saying a "great deal" and 24% saying "a lot." About 22% had a moderate amount of concern, while 30% said they have little or no concern at all.

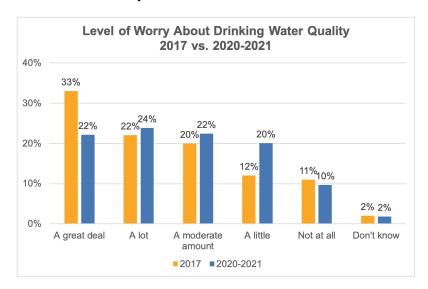


Figure 3. Thinking about you and your family's health, how much do you personally worry about the quality of the water you drink? (2017 vs. 2020-2021)

More than half of respondents (68%) rated the drinking water coming from their faucet as "good" or "fair," as was the case in 2017. Fifteen percent of respondents chose "excellent" and the corresponding share was 10% in 2017. This survey included an additional water-related question that was not in the 2017 survey that asked about the source of water that respondents drink from when at home. More than half of respondents (60%) said they drink water from their faucet, either filtered or unfiltered, which roughly corresponds with the aforementioned positive ratings on faucet water. However, 37% of respondents said they drink bottled water over water from their faucets, which points to the work that needs to be done to mitigate water quality concerns.

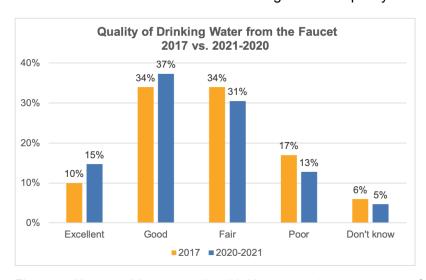


Figure 4. How would you rate the drinking water that comes out of your faucet? (2017 vs. 2020-2021)

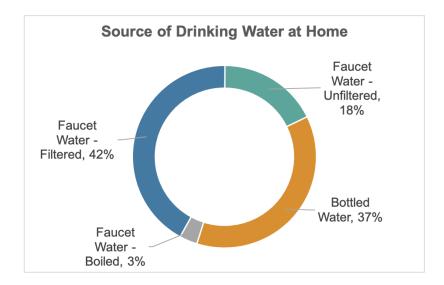


Figure 5. What type of water do you drink when at home?

The Shape of New Jersey's Water Infrastructure Is Unclear

Roughly one in five New Jerseyans said they don't know the condition of our water infrastructure. This is a similar finding to the 2017 survey report. When rating the shape of New Jersey's water infrastructure, only 39% of respondents said it was in somewhat good or very good shape. As seen with the 2017 survey, the state's transportation infrastructure received higher ratings, with nearly 60% saying it was in very good or somewhat good shape. Given that more respondents rated water infrastructure as in poor shape, this might translate into more support for water-related infrastructure funding.

Table 2. How would you rank the shape of New Jersey's infrastructure? (2020-2021)

Condition of our:	Very good shape	Somewhat good shape	Somewhat bad shape	Very bad shape	Don't know
Public transportation (such as trains and buses)	12%	47%	24%	7%	9%
Water infrastructure (such as sewers and pipes)	8%	31%	32%	7%	21%

As seen in Figure 7, only 3% of respondents rated the shape of water infrastructure as in very good shape. In the recent survey, 8% of respondents chose the same rating. In the 2017 survey, half of respondents rated water infrastructure as in bad shape and only a third of respondents rated it in good shape. In the recent survey, just as many respondents rated water infrastructure as in bad shape as those who rated it in good shape (39% each). With 21% of respondents claiming that they don't know the state of our water infrastructure, it seems that more robust communication is needed to educate the public about this topic.

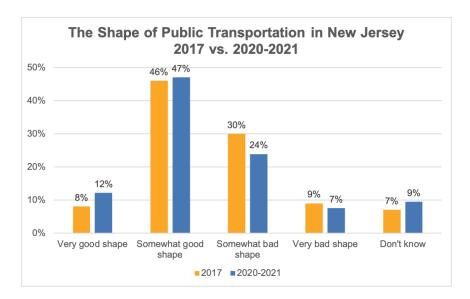


Figure 6. What shape is New Jersey public transportation (such as trains and buses) in? (2017 vs. 2020-2021)

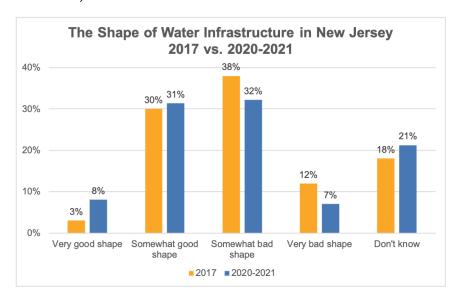


Figure 7. What shape is New Jersey water infrastructure (such as pipes and sewers) in? (2017 vs. 2020-2021)

Support for Green Infrastructure Is Very Strong

The definition of green infrastructure was provided before a question asking about whether respondents would support or oppose it in the area where they lived. In this survey, 49% would "strongly" support green infrastructure projects near where they lived, and another 37% said they would "somewhat" support it. These figures are similar to the ones in the 2017 survey. It is encouraging that total support is around 85% and that strong support was indicated by about half of the survey respondents.

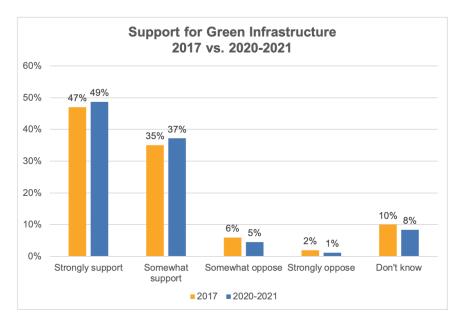


Figure 8. Knowing the definition of green infrastructure, would you support or oppose green infrastructure projects in the area where you live? (2017 vs. 2020-2021)

Support for Water Infrastructure Investment Is Strong

In 2017, 63% of respondents agreed with the statement that increased government spending on water infrastructure, like fixing pipes and water mains, will create jobs in New Jersey, compared to about 37% who agreed with the statement that cutting back on government spending will generate economic growth. In the 2020-2021 survey, 75% of respondents agreed with the former statement and 25% with the latter. These findings that most New Jerseyans see investment in our water infrastructure as a means for economic growth.

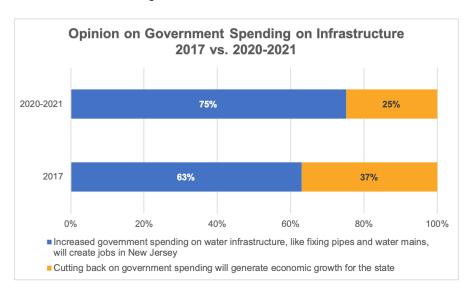


Figure 9. Which of the following statements about government spending come closest to your opinion? (2017 vs. 2020-2021)

Survey Methodology

The questionnaire for the 2017 survey was written by New Jersey Future staff in consultation with Rutgers University Associate Professor Rachael Shwom, with technical assistance from Allison Kopicki and guidance from the Jersey Water Works Community Engagement Committee. The 2017 report, which includes the 2017 survey questions, can be found here.

The survey for this report was fielded online from December 2020 to January 2021, and has a margin of error of +/- 3 percentage points. A representative online panel sample of New Jersey residents over the age of 18 years was purchased from Qualtrics. From that sample, 1,176 respondents were drawn randomly.

Differences from the 2017 Survey

The questionnaire for this abridged follow-up survey included a subset of the 2017 survey questions and two additional ones. The 2017 survey reported the results of 28 questions (five of which were demographic related), whereas this survey reported the results of 17 questions (eight of which were demographic related). Questions that were added or modified are noted in the following questionnaire section.

Unlike the 2017 survey, this survey did not oversample from the 21 cities that have combined sewer overflow systems and instead, had a reasonably balanced geographic distribution. Additionally, young females were overrepresented in the 2017 survey respondents, which required a weighting procedure to account for it. This statistical procedure compared New Jersey population figures for age and sex based on Census data with those of the sample. In this survey, the distribution of age-sex groups (e.g., young females) more closely matched the state's distribution, and thus, no weighting procedure was done.

In 2017, the male to female ratio was 48:52, whereas in this survey, there was an even split by sex. According to the 2019 American Community Survey 1-year estimate, the New Jersey male to female ratio is 49:51.

An Update on New Jersey Opinions on the State of Our Water Systems, the Environment and Infrastructure

Questionnaire

Survey questions were fielded online from December 2020 to January 2021.

Q1. Which of the following do you think is the most important environmental concern facing New Jersey?

Reducing greenhouse gas emissions that lead to climate change	22%
Protecting our drinking water	39%
Cleaning up toxic spills and waste sites	16%
Creating more open space and parks	8%
Protecting endangered species	5%
Don't know	8%
Something else	2%

Q2. Here are some of the priorities that the governor of New Jersey and the legislature might have concerning water issues in the state. Please indicate how important you think each action should be.

	Should not be done	Low Priority	Important, but not top priority	Top Priority	Don't Know
Make sure all people have safe drinking water	3%	2%	13%	80%	2%
Removing lead from drinking water in schools	3%	2%	17%	77%	2%
Removing lead from drinking water in homes	3%	2%	15%	78%	2%
Invest in repairing old leaky pipes and other water infrastructure	2%	5%	36%	54%	3%
Take steps to reduce flooding	2%	11%	52%	33%	3%
Lower the price of water	2%	17%	45%	32%	3%
Help low-income people pay their water bills	3%	12%	38%	42%	4%
Improve the quality of water in our lakes, rivers and oceans	1%	5%	29%	62%	2%

[†]Indicates an additional question compared to the 2017 version of the survey.

^{*}Indicates a modified question compared to the 2017 version of the survey.

Very bad shape

Don't know

Q3. Thinking about you and your family's health, how much do you personally worry about the quality of the water you drink?

A great deal	22%
A lot	24%
A moderate amount	22%
A little	20%
Not at all	10%
Don't know	2%
Q4. When at home do you usually:	
Drink bottled water that does not come from your faucet	37%
Drink water from your faucet boiled	3%
	42%
Drink water from your faucet filtered	42%
Drink water from your faucet filtered Drink water from your faucet unfiltered	
	.?
Drink water from your faucet unfiltered 25. How would you rate the drinking water that comes out of your faucet	18% ? 15%
Drink water from your faucet unfiltered 25. How would you rate the drinking water that comes out of your faucet Excellent	18% ? 15% 37%
Drink water from your faucet unfiltered 25. How would you rate the drinking water that comes out of your faucet Excellent Good	18% ? 15% 37% 31%
Drink water from your faucet unfiltered 25. How would you rate the drinking water that comes out of your faucet Excellent Good Fair	18% ? 15% 37% 31%
Drink water from your faucet unfiltered 25. How would you rate the drinking water that comes out of your faucet Excellent Good Fair Poor	18% ? 15% 37% 31% 13%
Drink water from your faucet unfiltered 25. How would you rate the drinking water that comes out of your faucet Excellent Good Fair Poor Don't know 210. To the best of your knowledge, in what shape is public transportation.	18% 37% 31% 13% 5% on (such as trains and buses) i
Drink water from your faucet unfiltered Q5. How would you rate the drinking water that comes out of your faucet Excellent Good Fair Poor Don't know Q10. To the best of your knowledge, in what shape is public transportation of the public tran	18% 27 15% 37% 31% 13% 5%

7%

9%

Q11. To the best of your knowledge in what shape is the <u>water infrastructure</u> (such as pipes and sewers) in New Jersey?

Very good shape	8%
Somewhat good shape	31%
Somewhat bad shape	32%
Very bad shape	7%
Don't know	21%

Q16. As you may also know, green infrastructure is a way to manage rainfall and stormwater runoff that protects, restores, or imitates the natural water cycle.

<u>Green infrastructure</u> uses plants, grasses, trees, and soils to soak up water, offer protection from flooding and filter trash and chemicals from the water. Rain barrels that collect water to be used later are also an example.

Knowing the definition of green infrastructure, would you support or oppose green infrastructure projects in the area where you live?

Strongly support	49%
Somewhat support	37%
Somewhat oppose	5%
Strongly oppose	1%
Don't know	8%

Q27. Which of the following statements come closest to your opinion?

Increased government spending on water infrastructure, like fixing pipes and water mains, will create jobs in New Jersey	75%
Cutting back on government spending will generate economic growth for the state	25%

Demographic Questions

Q32. Are you

Male	50%
Female	50%

No

Q33. How old are you? 18-34 31% 35-50 33% 51-64 21% 65+ 15% Q34. What is the highest grade of school you completed? 2% Not a high school graduate 18% High school Some college 28% 4-year college degree 31% Post-graduate work or degree 21% Q35. Are you currently: 86% Registered to vote in my current place of residence Not registered to vote in my current place of residence 12% Don't know 2% Q37. Do you currently own or rent your home? 60% Own Rent 33% Something else 7% Q38. Do you have a child under 18 years old living at home or not? 36% Yes

64%

*Q60. What race do you identify as? (Check all that apply.)

White	73%
Black or African American	13%
American Indian or Alaskan Native	1%
Chinese	2%
Filipino	1%
Korean	1%
Asian Indian	2%
Vietnamese	0%
Other Asian	1%
Native Hawaiian	0%
Samoan	0%
Chamorro	0%
Other Pacific Islander	0%
Some other race	5%
Multiracial (i.e., selected more than one of the above)	4%

^{*}Modified to include more options and the ability to select more than one option, commensurate with the way the Census asks about race and ethnicity.

[⁺]Q61. Are you of Hispanic, Latino or Spanish origin?

No, not of Hispanic, Latino or Spanish origin	85%
Yes, Mexican, Mexican American, Chicano	2%
Yes, Cuban	1%
Yes, Puerto Rican	5%
Yes, another Hispanic, Latino or Spanish origin	6%