

EPA 2020 COVID-19 WATER SECTOR SURVEY

Appendix E: Data Tables for American Indian Utilities

June 2021



810-R-21-001

Notes on Appendix E

Appendices C-G present tables with detailed findings from the EPA 2020 COVID-19 Water Sector Survey. This appendix, Appendix E, presents findings specifically for American Indian utilities. Each table includes findings for subgroups based on size (population served).

The order of presentation in this appendix follows the order of questions in the survey (see Appendix B). The title of each table generally includes the applicable survey question number and the text of the question itself (or a close paraphrase). EPA used financial data from Part D of the survey to generate some derived measures. The tables presenting these measures are labeled as “calculated” rather than labelled with a question number.

Some questions asked survey participants specifically about experiences from January 2020 to the present day, or from present day to December 2020. For these questions, “January to the Present” or “Present to December” is listed above each table to show the time period covered by the table.

In most cases, findings are presented as point estimates and 95 percent confidence intervals. For an explanation of confidence intervals, see the discussion of methodology in Appendix A.

Several questions asked respondents to provide responses on a scale. For example, questions B1.1.1 and B2.1.1 asked respondents to rank the severity of their treatment chemical shortages as “no impact,” “slight impact,” “moderate impact,” or “severe impact.” EPA calculated a mean score for each such question by assigning numeric values to the responses (for example, 0 for no impact, 1 for slight impact, 2 for moderate impact, and 3 for severe impact) and averaging the results.

Each table lists the number of observations, which is the number of responses received from survey participants to a given question or response option. The quantitative findings presented in the tables are weighted to provide national estimates, using weightings calculated and assigned to each utility type and size subgroup. For more information on the weightings, see the discussion of methodology in Appendix A.

Blank cells indicate that no applicable responses were received. “N/A” indicates that a confidence interval cannot be calculated because there was no variance in responses.

Table E.1. Question B1.1: What kinds of shortages or supply chain disruptions did your organization experience from January 2020 through present day?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Percentage Reporting by Population Served					
	< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Treatment Chemicals	12.9% 2.0% - 51.6%	15.2% 2.4% - 57.0%	13.6% 5.4% - 30.3%	0.0% N/A - N/A	19.7% 4.9% - 53.6%	13.3% 6.9% - 24.0%
PPE	35.3% 13.8% - 65.0%	36.7% 12.2% - 70.7%	68.1% 50.1% - 82.0%	39.9% 13.2% - 74.4%	68.7% 34.9% - 90.0%	56.2% 44.7% - 67.0%
Durable Goods and Other Equipment and Supplies	12.9% 2.0% - 51.6%	15.2% 2.4% - 57.0%	23.7% 12.1% - 41.3%	8.7% 1.7% - 34.9%	20.4% 5.3% - 54.0%	19.0% 11.4% - 30.0%
None	38.8% 14.6% - 70.3%	48.1% 18.9% - 78.6%	31.9% 18.0% - 49.9%	51.4% 20.6% - 81.1%	31.3% 10.0% - 65.1%	36.8% 26.3% - 48.7%
Observations	8	7	29	7	9	60

N/A: confidence interval could not be calculated.

Table E.2. Question B1.1.1: How severe were the treatment chemical shortages or supply chain disruptions that you experienced?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Carbon dioxide	Mean score (0 to 3)	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.081 -0.062 - 0.225	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.040 -0.032 - 0.111
	No impact (0)	100.0% N/A - N/A	100.0% N/A - N/A	95.9% 78.9% - 99.3%	100.0% N/A - N/A	100.0% N/A - N/A	98.0% 88.7% - 99.7%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.1%	0.0% N/A - N/A	0.0% N/A - N/A	2.0% 0.3% - 11.3%
	Severe (3)						
	Observations	8	7	29	7	8	59
Ferric chloride	Mean score (0 to 3)	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.120 -0.039 - 0.278	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.059 -0.021 - 0.138
	No impact (0)	100.0% N/A - N/A	100.0% N/A - N/A	92.1% 74.8% - 97.9%	100.0% N/A - N/A	100.0% N/A - N/A	96.1% 86.7% - 99.0%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	3.8% 0.6% - 21.1%	0.0% N/A - N/A	0.0% N/A - N/A	1.9% 0.3% - 11.1%
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.1%	0.0% N/A - N/A	0.0% N/A - N/A	2.0% 0.3% - 11.3%
	Severe (3)						
	Observations	8	7	29	7	8	59

Table E.2. Question B1.1.1: How severe were the treatment chemical shortages or supply chain disruptions that you experienced?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Fluoride	Mean score (0 to 3)	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.081 -0.062 - 0.225	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.040 -0.032 - 0.111
	No impact (0)	100.0% N/A - N/A	100.0% N/A - N/A	95.9% 78.9% - 99.3%	100.0% N/A - N/A	100.0% N/A - N/A	98.0% 88.7% - 99.7%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.1%	0.0% N/A - N/A	0.0% N/A - N/A	2.0% 0.3% - 11.3%
	Severe (3)						
	Observations	8	7	29	7	8	59
Gaseous chlorine	Mean score (0 to 3)	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.120 -0.039 - 0.278	0.000 0.000 - 0.000	0.139 -0.081 - 0.358	0.075 -0.008 - 0.158
	No impact (0)	100.0% N/A - N/A	100.0% N/A - N/A	92.1% 74.8% - 97.9%	100.0% N/A - N/A	93.1% 71.0% - 98.7%	95.3% 86.6% - 98.5%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	3.8% 0.6% - 21.1%	0.0% N/A - N/A	0.0% N/A - N/A	1.9% 0.3% - 11.1%
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.1%	0.0% N/A - N/A	6.9% 1.3% - 29.0%	2.8% 0.7% - 10.4%
	Severe (3)						
	Observations	8	7	29	7	8	59

Table E.2. Question B1.1.1: How severe were the treatment chemical shortages or supply chain disruptions that you experienced?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Liquid oxygen	Mean score (0 to 3)	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.081 -0.062 - 0.225	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.040 -0.032 - 0.111
	No impact (0)	100.0% N/A - N/A	100.0% N/A - N/A	95.9% 78.9% - 99.3%	100.0% N/A - N/A	100.0% N/A - N/A	98.0% 88.7% - 99.7%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.1%	0.0% N/A - N/A	0.0% N/A - N/A	2.0% 0.3% - 11.3%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	8	7	29	7	8	59
Lime	Mean score (0 to 3)	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.081 -0.062 - 0.225	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.040 -0.032 - 0.111
	No impact (0)	100.0% N/A - N/A	100.0% N/A - N/A	95.9% 78.9% - 99.3%	100.0% N/A - N/A	100.0% N/A - N/A	98.0% 88.7% - 99.7%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.1%	0.0% N/A - N/A	0.0% N/A - N/A	2.0% 0.3% - 11.3%
	Severe (3)						
	Observations	8	7	29	7	8	59

Table E.2. Question B1.1.1: How severe were the treatment chemical shortages or supply chain disruptions that you experienced?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Orthophosphate	Mean score (0 to 3)	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.081 -0.062 - 0.225	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.040 -0.032 - 0.111
	No impact (0)	100.0% N/A - N/A	100.0% N/A - N/A	95.9% 78.9% - 99.3%	100.0% N/A - N/A	100.0% N/A - N/A	98.0% 88.7% - 99.7%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.1%	0.0% N/A - N/A	0.0% N/A - N/A	2.0% 0.3% - 11.3%
	Severe (3)						
	Observations	8	7	29	7	8	59
Polymers	Mean score (0 to 3)	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.120 -0.039 - 0.278	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.059 -0.021 - 0.138
	No impact (0)	100.0% N/A - N/A	100.0% N/A - N/A	92.1% 74.8% - 97.9%	100.0% N/A - N/A	100.0% N/A - N/A	96.1% 86.7% - 99.0%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	3.8% 0.6% - 21.1%	0.0% N/A - N/A	0.0% N/A - N/A	1.9% 0.3% - 11.1%
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.1%	0.0% N/A - N/A	0.0% N/A - N/A	2.0% 0.3% - 11.3%
	Severe (3)						
	Observations	8	7	29	7	8	59

Table E.2. Question B1.1.1: How severe were the treatment chemical shortages or supply chain disruptions that you experienced?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Potassium permanganate	Mean score (0 to 3)	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.081 -0.062 - 0.225	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.040 -0.032 - 0.111
	No impact (0)	100.0% N/A - N/A	100.0% N/A - N/A	95.9% 78.9% - 99.3%	100.0% N/A - N/A	100.0% N/A - N/A	98.0% 88.7% - 99.7%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.1%	0.0% N/A - N/A	0.0% N/A - N/A	2.0% 0.3% - 11.3%
	Severe (3)						
	Observations	8	7	29	7	8	59
Sodium hydroxide	Mean score (0 to 3)	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.081 -0.062 - 0.225	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.040 -0.032 - 0.111
	No impact (0)	100.0% N/A - N/A	100.0% N/A - N/A	95.9% 78.9% - 99.3%	100.0% N/A - N/A	100.0% N/A - N/A	98.0% 88.7% - 99.7%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.1%	0.0% N/A - N/A	0.0% N/A - N/A	2.0% 0.3% - 11.3%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	8	7	29	7	8	59

Table E.2. Question B1.1.1: How severe were the treatment chemical shortages or supply chain disruptions that you experienced?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Sodium hypochlorite	Mean score (0 to 3)	0.129 -0.093 - 0.352	0.152 -0.106 - 0.410	0.162 -0.029 - 0.353	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.121 0.014 - 0.228
	No impact (0)	87.1% 48.4% - 98.0%	84.8% 43.0% - 97.6%	91.9% 75.8% - 97.6%	100.0% N/A - N/A	100.0% N/A - N/A	91.9% 81.8% - 96.6%
	Slight (1)	12.9% 2.0% - 51.6%	15.2% 2.4% - 57.0%	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 1.1% - 14.0%
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	8.1% 2.4% - 24.2%	0.0% N/A - N/A	0.0% N/A - N/A	4.0% 1.1% - 12.9%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	8	7	29	7	8	59

N/A: confidence interval could not be calculated.

Table E.3. Question B1.1.2: What contributed to each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Carbon dioxide	Unavailable from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Delayed / backordered from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Transportation / distribution difficulties			100.0% N/A - N/A			100.0% N/A - N/A
	Price			0.0% N/A - N/A			0.0% N/A - N/A
	Other			0.0% N/A - N/A			0.0% N/A - N/A
	Observations			1			1
Ferric chloride	Unavailable from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Delayed / backordered from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Transportation / distribution difficulties			100.0% N/A - N/A			100.0% N/A - N/A
	Price			0.0% N/A - N/A			0.0% N/A - N/A
	Other			0.0% N/A - N/A			0.0% N/A - N/A
	Observations			2			2

Table E.3. Question B1.1.2: What contributed to each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Fluoride	Unavailable from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Delayed / backordered from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Transportation / distribution difficulties			100.0% N/A - N/A			100.0% N/A - N/A
	Price			0.0% N/A - N/A			0.0% N/A - N/A
	Other			0.0% N/A - N/A			0.0% N/A - N/A
	Observations			1			1
Gaseous chlorine	Unavailable from supplier(s)			0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Delayed / backordered from supplier(s)			0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Transportation / distribution difficulties			100.0% N/A - N/A		0.0% N/A - N/A	82.5% 82.5% - 82.5%
	Price			0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Other			0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Observations			2		1	3

Table E.3. Question B1.1.2: What contributed to each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Liquid oxygen	Unavailable from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Delayed / backordered from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Transportation / distribution difficulties			100.0% N/A - N/A			100.0% N/A - N/A
	Price			0.0% N/A - N/A			0.0% N/A - N/A
	Other			0.0% N/A - N/A			0.0% N/A - N/A
	Observations			1			1
Lime	Unavailable from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Delayed / backordered from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Transportation / distribution difficulties			100.0% N/A - N/A			100.0% N/A - N/A
	Price			0.0% N/A - N/A			0.0% N/A - N/A
	Other			0.0% N/A - N/A			0.0% N/A - N/A
	Observations			1			1

Table E.3. Question B1.1.2: What contributed to each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Orthophosphate	Unavailable from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Delayed / backordered from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Transportation / distribution difficulties			100.0% N/A - N/A			100.0% N/A - N/A
	Price			0.0% N/A - N/A			0.0% N/A - N/A
	Other			0.0% N/A - N/A			0.0% N/A - N/A
	Observations			1			1
Polymers	Unavailable from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Delayed / backordered from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Transportation / distribution difficulties			100.0% N/A - N/A			100.0% N/A - N/A
	Price			0.0% N/A - N/A			0.0% N/A - N/A
	Other			0.0% N/A - N/A			0.0% N/A - N/A
	Observations			2			2

Table E.3. Question B1.1.2: What contributed to each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Potassium permanganate	Unavailable from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Delayed / backordered from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Transportation / distribution difficulties			100.0% N/A - N/A			100.0% N/A - N/A
	Price			0.0% N/A - N/A			0.0% N/A - N/A
	Other			0.0% N/A - N/A			0.0% N/A - N/A
	Observations			1			1
Sodium hydroxide	Unavailable from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Delayed / backordered from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Transportation / distribution difficulties			100.0% N/A - N/A			100.0% N/A - N/A
	Price			0.0% N/A - N/A			0.0% N/A - N/A
	Other			0.0% N/A - N/A			0.0% N/A - N/A
	Observations			1			1

Table E.3. Question B1.1.2: What contributed to each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Sodium hypochlorite	Unavailable from supplier(s)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A			0.0% N/A - N/A
	Delayed / backordered from supplier(s)	100.0% N/A - N/A	100.0% N/A - N/A	0.0% N/A - N/A			51.0% 12.2% - 88.6%
	Transportation / distribution difficulties	0.0% N/A - N/A	0.0% N/A - N/A	100.0% N/A - N/A			49.0% 11.4% - 87.8%
	Price	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A			0.0% N/A - N/A
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A			0.0% N/A - N/A
	Observations	1	1	2			4

N/A: confidence interval could not be calculated.

Table E.4. Question B1.1.3: How did you address each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Carbon dioxide	Found alternative supplier			0.0% N/A - N/A			0.0% N/A - N/A
	Drew down existing inventory			0.0% N/A - N/A			0.0% N/A - N/A
	Switched chemicals, procedures, or technologies			0.0% N/A - N/A			0.0% N/A - N/A
	Sought help from other utilities or mutual aid network (e.g., WARN)			100.0% N/A - N/A			100.0% N/A - N/A
	Coordinated with local or state emergency management agency	0.0% N/A - N/A		0.0% N/A - N/A			0.0% N/A - N/A
	Other			0.0% N/A - N/A			0.0% N/A - N/A
	Observations	1		1			2
Ferric chloride	Found alternative supplier			0.0% N/A - N/A			0.0% N/A - N/A
	Drew down existing inventory			48.7% 48.7% - 48.7%			48.7% 48.7% - 48.7%
	Switched chemicals, procedures, or technologies			0.0% N/A - N/A			0.0% N/A - N/A
	Sought help from other utilities or mutual aid network (e.g., WARN)			51.3% 51.3% - 51.3%			51.3% 51.3% - 51.3%
	Coordinated with local or state emergency management agency	0.0% N/A - N/A		0.0% N/A - N/A			0.0% N/A - N/A
	Other			0.0% N/A - N/A			0.0% N/A - N/A
	Observations	1		2			3

Table E.4. Question B1.1.3: How did you address each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Fluoride	Found alternative supplier			0.0% N/A - N/A			0.0% N/A - N/A
	Drew down existing inventory			0.0% N/A - N/A			0.0% N/A - N/A
	Switched chemicals, procedures, or technologies			0.0% N/A - N/A			0.0% N/A - N/A
	Sought help from other utilities or mutual aid network (e.g., WARN)			100.0% N/A - N/A			100.0% N/A - N/A
	Coordinated with local or state emergency management agency			0.0% N/A - N/A			0.0% N/A - N/A
	Other			0.0% N/A - N/A			0.0% N/A - N/A
	Observations			1			1
Gaseous chlorine	Found alternative supplier			0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Drew down existing inventory			48.7% 48.7% - 48.7%		0.0% N/A - N/A	40.2% 40.2% - 40.2%
	Switched chemicals, procedures, or technologies			0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Sought help from other utilities or mutual aid network (e.g., WARN)			51.3% 51.3% - 51.3%		0.0% N/A - N/A	42.3% 42.3% - 42.3%
	Coordinated with local or state emergency management agency			0.0% N/A - N/A			0.0% N/A - N/A
	Other			0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Observations			3		1	3

Table E.4. Question B1.1.3: How did you address each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Liquid oxygen	Found alternative supplier			0.0% N/A - N/A			0.0% N/A - N/A
	Drew down existing inventory			0.0% N/A - N/A			0.0% N/A - N/A
	Switched chemicals, procedures, or technologies			0.0% N/A - N/A			0.0% N/A - N/A
	Sought help from other utilities or mutual aid network (e.g., WARN)			100.0% N/A - N/A			100.0% N/A - N/A
	Coordinated with local or state emergency management agency			0.0% N/A - N/A			0.0% N/A - N/A
	Other			0.0% N/A - N/A			0.0% N/A - N/A
	Observations			1			1
Lime	Found alternative supplier			0.0% N/A - N/A			0.0% N/A - N/A
	Drew down existing inventory			0.0% N/A - N/A			0.0% N/A - N/A
	Switched chemicals, procedures, or technologies			0.0% N/A - N/A			0.0% N/A - N/A
	Sought help from other utilities or mutual aid network (e.g., WARN)			100.0% N/A - N/A			100.0% N/A - N/A
	Coordinated with local or state emergency management agency	0.0% N/A - N/A		0.0% N/A - N/A			0.0% N/A - N/A
	Other			0.0% N/A - N/A			0.0% N/A - N/A
	Observations	1		1			2

Table E.4. Question B1.1.3: How did you address each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Orthophosphate	Found alternative supplier			0.0% N/A - N/A			0.0% N/A - N/A
	Drew down existing inventory			0.0% N/A - N/A			0.0% N/A - N/A
	Switched chemicals, procedures, or technologies			0.0% N/A - N/A			0.0% N/A - N/A
	Sought help from other utilities or mutual aid network (e.g., WARN)			100.0% N/A - N/A			100.0% N/A - N/A
	Coordinated with local or state emergency management agency			0.0% N/A - N/A			0.0% N/A - N/A
	Other			0.0% N/A - N/A			0.0% N/A - N/A
	Observations			1			1
Polymers	Found alternative supplier			0.0% N/A - N/A			0.0% N/A - N/A
	Drew down existing inventory			48.7% 11.8% - 87.1%			48.7% 11.8% - 87.1%
	Switched chemicals, procedures, or technologies			0.0% N/A - N/A			0.0% N/A - N/A
	Sought help from other utilities or mutual aid network (e.g., WARN)			51.3% 12.9% - 88.2%			51.3% 12.9% - 88.2%
	Coordinated with local or state emergency management agency			0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A
	Other			0.0% N/A - N/A			0.0% N/A - N/A
	Observations			3	1		4

Table E.4. Question B1.1.3: How did you address each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Potassium permanganate	Found alternative supplier			0.0% N/A - N/A			0.0% N/A - N/A
	Drew down existing inventory			0.0% N/A - N/A			0.0% N/A - N/A
	Switched chemicals, procedures, or technologies			0.0% N/A - N/A			0.0% N/A - N/A
	Sought help from other utilities or mutual aid network (e.g., WARN)			100.0% N/A - N/A			100.0% N/A - N/A
	Coordinated with local or state emergency management agency			0.0% N/A - N/A			0.0% N/A - N/A
	Other			0.0% N/A - N/A			0.0% N/A - N/A
	Observations			1			1
Sodium hydroxide	Found alternative supplier			0.0% N/A - N/A			0.0% N/A - N/A
	Drew down existing inventory			0.0% N/A - N/A			0.0% N/A - N/A
	Switched chemicals, procedures, or technologies			0.0% N/A - N/A			0.0% N/A - N/A
	Sought help from other utilities or mutual aid network (e.g., WARN)			100.0% N/A - N/A			100.0% N/A - N/A
	Coordinated with local or state emergency management agency			0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A
	Other			0.0% N/A - N/A			0.0% N/A - N/A
	Observations			1	1		2

Table E.4. Question B1.1.3: How did you address each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Sodium hypochlorite	Found alternative supplier	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A			0.0% N/A - N/A
	Drew down existing inventory	100.0% N/A - N/A	100.0% N/A - N/A	0.0% N/A - N/A			51.0% 11.5% - 89.3%
	Switched chemicals, procedures, or technologies	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A			0.0% N/A - N/A
	Sought help from other utilities or mutual aid network (e.g., WARN)	0.0% N/A - N/A	0.0% N/A - N/A	100.0% N/A - N/A			49.0% 10.7% - 88.5%
	Coordinated with local or state emergency management agency	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A			0.0% N/A - N/A
	Observations	1	1	4	2		8

N/A: confidence interval could not be calculated.

Table E.5. Question B1.2.1: How severe were the personal protective equipment shortages or supply chain disruptions that you experienced?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
N95 masks and/or elastomeric respirators	Mean score (0 to 3)	0.586 0.085 - 1.087	0.215 -0.057 - 0.487	1.233 0.800 - 1.665	0.399 0.045 - 0.753	1.237 0.389 - 2.085	0.914 0.658 - 1.170
	No impact (0)	64.7% 34.9% - 86.2%	78.5% 42.2% - 94.8%	40.3% 24.5% - 58.4%	60.1% 25.6% - 86.8%	46.5% 18.7% - 76.7%	52.0% 40.6% - 63.1%
	Slight (1)	12.0% 2.0% - 48.0%	21.5% 5.2% - 57.8%	19.8% 9.3% - 37.4%	39.9% 13.2% - 74.4%	6.9% 1.3% - 29.0%	19.1% 11.3% - 30.5%
	Moderate (2)	23.3% 6.6% - 56.5%	0.0% N/A - N/A	16.2% 7.0% - 33.0%	0.0% N/A - N/A	22.8% 5.8% - 58.5%	14.5% 7.7% - 25.6%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	23.7% 12.0% - 41.4%	0.0% N/A - N/A	23.7% 6.2% - 59.4%	14.4% 7.9% - 24.9%
	Observations	8	7	29	7	8	59
Alternative mask options (surgical, cloth, etc.)	Mean score (0 to 3)	0.347 -0.065 - 0.758	0.152 -0.106 - 0.410	0.681 0.404 - 0.958	0.000 0.000 - 0.000	0.702 0.178 - 1.226	0.495 0.318 - 0.672
	No impact (0)	76.7% 43.5% - 93.4%	84.8% 43.0% - 97.6%	51.6% 34.1% - 68.7%	100.0% N/A - N/A	46.5% 18.7% - 76.7%	64.1% 51.6% - 74.9%
	Slight (1)	12.0% 2.0% - 48.0%	15.2% 2.4% - 57.0%	28.7% 15.2% - 47.6%	0.0% N/A - N/A	36.7% 13.9% - 67.6%	22.4% 13.6% - 34.6%
	Moderate (2)	11.3% 1.8% - 46.9%	0.0% N/A - N/A	19.7% 9.2% - 37.3%	0.0% N/A - N/A	16.8% 2.8% - 58.1%	13.5% 7.0% - 24.4%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	8	7	29	7	8	59

Table E.5. Question B1.2.1: How severe were the personal protective equipment shortages or supply chain disruptions that you experienced?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Face shield and/or protective eye wear	Mean score (0 to 3)	0.466 0.054 - 0.878	0.152 -0.106 - 0.410	1.100 0.689 - 1.512	0.599 0.003 - 1.195	0.543 0.004 - 1.082	0.758 0.517 - 0.999
	No impact (0)	64.7% 34.9% - 86.2%	84.8% 43.0% - 97.6%	44.5% 28.3% - 62.0%	60.1% 25.6% - 86.8%	62.4% 31.5% - 85.7%	56.7% 45.3% - 67.5%
	Slight (1)	23.9% 7.3% - 55.6%	15.2% 2.4% - 57.0%	17.3% 7.8% - 34.1%	20.0% 3.2% - 65.4%	20.8% 7.7% - 45.2%	18.8% 11.4% - 29.5%
	Moderate (2)	11.3% 1.8% - 46.9%	0.0% N/A - N/A	21.9% 10.4% - 40.3%	20.0% 3.2% - 65.4%	16.8% 2.8% - 58.1%	16.5% 9.2% - 27.7%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	16.3% 6.7% - 34.7%	0.0% N/A - N/A	0.0% N/A - N/A	8.0% 3.2% - 18.6%
	Observations	8	7	29	7	8	59
Nitrile and/or latex gloves	Mean score (0 to 3)	0.460 -0.129 - 1.050	0.341 -0.042 - 0.724	1.065 0.676 - 1.455	0.399 0.045 - 0.753	1.098 0.273 - 1.923	0.811 0.558 - 1.064
	No impact (0)	76.7% 43.5% - 93.4%	78.5% 42.2% - 94.8%	39.8% 24.2% - 57.7%	60.1% 25.6% - 86.8%	46.5% 18.7% - 76.7%	53.7% 41.7% - 65.2%
	Slight (1)	12.0% 2.0% - 48.0%	15.2% 2.4% - 57.0%	29.9% 16.4% - 48.1%	39.9% 13.2% - 74.4%	13.9% 4.2% - 37.0%	24.1% 15.1% - 36.1%
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	14.3% 5.6% - 31.8%	0.0% N/A - N/A	22.8% 5.8% - 58.5%	9.7% 4.5% - 19.7%
	Severe (3)	11.3% 1.8% - 46.9%	6.3% 1.2% - 26.3%	16.0% 6.8% - 33.1%	0.0% N/A - N/A	16.8% 2.8% - 58.1%	12.5% 6.5% - 22.8%
	Observations	8	7	29	7	8	59

Table E.5. Question B1.2.1: How severe were the personal protective equipment shortages or supply chain disruptions that you experienced?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Tyvek suite and/or disposable coveralls	Mean score (0 to 3)	0.347 -0.065 - 0.758	0.000 0.000 - 0.000	1.143 0.756 - 1.530	0.399 -0.248 - 1.047	0.613 0.052 - 1.174	0.728 0.482 - 0.974
	No impact (0)	76.7% 43.5% - 93.4%	100.0% N/A - N/A	41.8% 26.0% - 59.4%	80.0% 34.6% - 96.8%	62.4% 31.5% - 85.7%	61.2% 48.9% - 72.3%
	Slight (1)	12.0% 2.0% - 48.0%	0.0% N/A - N/A	18.1% 8.0% - 36.1%	0.0% N/A - N/A	13.9% 4.2% - 37.0%	12.5% 6.4% - 23.2%
	Moderate (2)	11.3% 1.8% - 46.9%	0.0% N/A - N/A	24.1% 12.1% - 42.3%	20.0% 3.2% - 65.4%	23.7% 6.2% - 59.4%	18.4% 10.6% - 30.0%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	16.0% 6.8% - 33.1%	0.0% N/A - N/A	0.0% N/A - N/A	7.8% 3.3% - 17.6%
	Observations	8	7	29	7	8	59
Sanitizing wipes, sprays for cleaning work offices, or gels for hand sanitizing	Mean score (0 to 3)	0.586 0.085 - 1.087	0.582 -0.207 - 1.371	1.324 0.903 - 1.744	0.399 0.045 - 0.753	1.098 0.273 - 1.923	0.990 0.721 - 1.260
	No impact (0)	64.7% 34.9% - 86.2%	78.5% 42.2% - 94.8%	35.9% 21.0% - 54.1%	60.1% 25.6% - 86.8%	46.5% 18.7% - 76.7%	49.8% 38.3% - 61.3%
	Slight (1)	12.0% 2.0% - 48.0%	0.0% N/A - N/A	16.0% 6.8% - 33.0%	39.9% 13.2% - 74.4%	13.9% 4.2% - 37.0%	15.2% 8.4% - 26.0%
	Moderate (2)	23.3% 6.6% - 56.5%	6.3% 1.2% - 26.3%	27.9% 14.7% - 46.5%	0.0% N/A - N/A	22.8% 5.8% - 58.5%	21.1% 12.8% - 32.8%
	Severe (3)	0.0% N/A - N/A	15.2% 2.4% - 57.0%	20.2% 9.1% - 38.9%	0.0% N/A - N/A	16.8% 2.8% - 58.1%	13.9% 7.2% - 25.0%
	Observations	8	7	29	7	8	59

N/A: confidence interval could not be calculated.

Table E.6. Question B1.2.2: What contributed to each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
N95 masks and/or elastomeric respirators	Unavailable from supplier(s)	0.0% N/A - N/A	70.7% 15.9% - 96.9%	65.1% 43.1% - 82.1%	50.0% 5.7% - 94.3%	87.0% 46.2% - 98.1%	59.2% 41.7% - 74.6%
	Delayed / backordered from supplier(s)	100.0% N/A - N/A	0.0% N/A - N/A	49.9% 27.0% - 72.9%	50.0% 5.7% - 94.3%	44.3% 11.2% - 83.4%	52.4% 34.4% - 69.8%
	Transportation / distribution difficulties	0.0% N/A - N/A	0.0% N/A - N/A	13.2% 3.5% - 39.4%	0.0% N/A - N/A	31.3% 5.3% - 78.8%	12.2% 4.1% - 30.9%
	Price	0.0% N/A - N/A	0.0% N/A - N/A	13.6% 4.0% - 37.1%	0.0% N/A - N/A	31.3% 5.3% - 78.8%	12.4% 4.8% - 28.7%
	Other	0.0% N/A - N/A	0.0% N/A - N/A	6.4% 1.0% - 32.8%	0.0% N/A - N/A	0.0% N/A - N/A	3.9% 0.6% - 22.3%
	Observations	3	2	17	2	5	29
Alternative mask options (surgical, cloth, etc.)	Unavailable from supplier(s)	0.0% N/A - N/A	0.0% N/A - N/A	8.4% 1.2% - 40.0%		31.3% 5.3% - 79.0%	11.1% 3.1% - 32.4%
	Delayed / backordered from supplier(s)	100.0% N/A - N/A	0.0% N/A - N/A	83.7% 53.2% - 95.9%		100.0% N/A - N/A	83.7% 60.4% - 94.5%
	Transportation / distribution difficulties	0.0% N/A - N/A	0.0% N/A - N/A	16.3% 4.1% - 46.8%		31.3% 5.3% - 79.0%	16.3% 5.5% - 39.6%
	Price	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A		31.3% 5.3% - 79.0%	5.5% 0.8% - 30.3%
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Observations	2	1	13		5	21

Table E.6. Question B1.2.2: What contributed to each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Face shield and/or protective eye wear	Unavailable from supplier(s)	33.9% 4.5% - 84.7%	0.0% N/A - N/A	36.4% 15.4% - 64.2%	50.0% 5.2% - 94.8%	0.0% N/A - N/A	31.8% 15.8% - 53.8%
	Delayed / backordered from supplier(s)	66.1% 15.3% - 95.5%	0.0% N/A - N/A	56.7% 31.2% - 79.1%	50.0% 5.2% - 94.8%	100.0% N/A - N/A	59.3% 38.6% - 77.1%
	Transportation / distribution difficulties	0.0% N/A - N/A	0.0% N/A - N/A	6.9% 1.0% - 35.2%	0.0% N/A - N/A	0.0% N/A - N/A	4.4% 0.6% - 24.8%
	Price	0.0% N/A - N/A	0.0% N/A - N/A	7.3% 1.1% - 35.8%	0.0% N/A - N/A	44.6% 9.5% - 86.1%	9.2% 2.5% - 28.2%
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	3	1	16	2	4	26
Nitrile and/or latex gloves	Unavailable from supplier(s)	48.7% 6.2% - 93.1%	0.0% N/A - N/A	27.1% 10.4% - 54.3%	0.0% N/A - N/A	29.7% 4.9% - 77.8%	25.4% 11.8% - 46.4%
	Delayed / backordered from supplier(s)	51.3% 6.9% - 93.8%	29.3% 3.1% - 84.2%	63.7% 38.3% - 83.3%	100.0% N/A - N/A	70.3% 22.2% - 95.1%	64.4% 44.4% - 80.4%
	Transportation / distribution difficulties	0.0% N/A - N/A	0.0% N/A - N/A	13.7% 3.3% - 42.4%	0.0% N/A - N/A	0.0% N/A - N/A	8.7% 2.1% - 29.4%
	Price	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	31.3% 5.3% - 79.0%	4.3% 0.6% - 24.3%
	Other	0.0% N/A - N/A	0.0% N/A - N/A	2.8% 0.5% - 14.4%	0.0% N/A - N/A	0.0% N/A - N/A	1.8% 0.3% - 9.5%
	Observations	2	2	17	2	5	28

Table E.6. Question B1.2.2: What contributed to each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Tyvek suite and/or disposable coveralls	Unavailable from supplier(s)	0.0% N/A - N/A		28.1% 10.4% - 56.8%	0.0% N/A - N/A	44.6% 9.4% - 86.2%	25.8% 11.1% - 49.3%
	Delayed / backordered from supplier(s)	100.0% N/A - N/A		50.3% 26.6% - 73.8%	100.0% N/A - N/A	100.0% N/A - N/A	63.4% 42.0% - 80.5%
	Transportation / distribution difficulties	0.0% N/A - N/A		6.6% 0.9% - 34.4%	0.0% N/A - N/A	0.0% N/A - N/A	4.9% 0.7% - 27.5%
	Price	0.0% N/A - N/A		14.5% 3.4% - 44.9%	0.0% N/A - N/A	44.6% 9.4% - 86.2%	15.8% 5.2% - 39.2%
	Other	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	2		16	1	4	23
Sanitizing wipes, sprays for cleaning work offices, or gels for hand sanitizing	Unavailable from supplier(s)	33.9% 4.4% - 85.0%	70.7% 15.9% - 96.9%	26.0% 10.0% - 52.8%	0.0% N/A - N/A	74.1% 35.4% - 93.7%	33.6% 18.4% - 53.0%
	Delayed / backordered from supplier(s)	66.1% 15.0% - 95.6%	29.3% 3.1% - 84.1%	74.8% 48.4% - 90.4%	100.0% N/A - N/A	57.3% 17.5% - 89.5%	70.9% 51.2% - 85.0%
	Transportation / distribution difficulties	0.0% N/A - N/A	0.0% N/A - N/A	6.0% 0.9% - 31.0%	0.0% N/A - N/A	0.0% N/A - N/A	3.8% 0.6% - 21.4%
	Price	0.0% N/A - N/A	70.7% 15.9% - 96.9%	6.3% 1.0% - 32.0%	0.0% N/A - N/A	31.3% 5.3% - 78.8%	11.9% 4.6% - 27.5%
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	3	2	18	2	5	30

N/A: confidence interval could not be calculated.

Table E.7. Question B1.2.3: How did you address each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
N95 masks and/or elastomeric respirators	Found alternative supplier	0.0% N/A - N/A	29.3% 3.1% - 84.1%	51.3% 28.2% - 73.9%	0.0% N/A - N/A	13.0% 1.9% - 53.8%	34.7% 20.0% - 53.0%
	Drew down existing inventory	33.9% 4.4% - 85.0%	0.0% N/A - N/A	28.1% 13.1% - 50.4%	0.0% N/A - N/A	31.3% 5.3% - 78.8%	25.4% 13.0% - 43.6%
	Switched chemicals, procedures, or technologies	0.0% N/A - N/A	0.0% N/A - N/A	6.8% 1.0% - 33.9%	0.0% N/A - N/A	31.3% 5.3% - 78.8%	8.3% 2.3% - 25.5%
	Sought help from other utilities or mutual aid network (e.g., WARN)	33.9% 4.4% - 85.0%	70.7% 15.9% - 96.9%	20.9% 7.0% - 48.2%	0.0% N/A - N/A	0.0% N/A - N/A	21.0% 10.0% - 39.0%
	Coordinated with local or state emergency management agency	32.2% 4.8% - 81.6%	0.0% N/A - N/A	39.7% 22.1% - 60.4%	100.0% N/A - N/A	0.0% N/A - N/A	36.0% 22.0% - 52.7%
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	55.7% 16.6% - 88.8%	7.3% 2.3% - 21.2%
	Observations	3	2	17	2	5	29
Alternative mask options (surgical, cloth, etc.)	Found alternative supplier	51.3% 6.7% - 93.9%	0.0% N/A - N/A	46.2% 20.8% - 73.8%		87.0% 42.8% - 98.4%	51.4% 29.5% - 72.8%
	Drew down existing inventory	0.0% N/A - N/A	0.0% N/A - N/A	36.8% 14.6% - 66.4%		31.3% 5.3% - 79.0%	29.8% 12.9% - 54.9%
	Switched chemicals, procedures, or technologies	0.0% N/A - N/A	0.0% N/A - N/A	9.1% 1.2% - 45.8%		31.3% 5.3% - 79.0%	11.5% 2.7% - 37.5%
	Sought help from other utilities or mutual aid network (e.g., WARN)	0.0% N/A - N/A	0.0% N/A - N/A	17.0% 3.9% - 51.0%		0.0% N/A - N/A	11.2% 2.7% - 36.8%
	Coordinated with local or state emergency management agency	48.7% 6.1% - 93.3%	0.0% N/A - N/A	44.0% 24.3% - 65.9%		13.0% 1.6% - 57.2%	36.6% 20.3% - 56.7%
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Observations	2	1	13		5	21

Table E.7. Question B1.2.3: How did you address each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Face shield and/or protective eye wear	Found alternative supplier	33.9% 4.5% - 84.7%	0.0% N/A - N/A	47.7% 24.2% - 72.2%	50.0% 5.2% - 94.8%	81.5% 32.6% - 97.6%	47.3% 28.5% - 66.9%
	Drew down existing inventory	32.2% 4.7% - 82.0%	0.0% N/A - N/A	16.0% 6.1% - 35.9%	0.0% N/A - N/A	63.1% 20.4% - 91.9%	20.9% 9.9% - 38.8%
	Switched chemicals, procedures, or technologies	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	44.6% 9.5% - 86.1%	4.6% 0.7% - 25.3%
	Sought help from other utilities or mutual aid network (e.g., WARN)	0.0% N/A - N/A	0.0% N/A - N/A	15.2% 3.6% - 46.3%	0.0% N/A - N/A	0.0% N/A - N/A	9.6% 2.3% - 31.9%
	Coordinated with local or state emergency management agency	0.0% N/A - N/A	0.0% N/A - N/A	36.4% 15.4% - 64.2%	50.0% 5.2% - 94.8%	0.0% N/A - N/A	27.2% 12.6% - 49.2%
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	3	1	16	2	4	26
Nitrile and/or latex gloves	Found alternative supplier	51.3% 6.9% - 93.8%	70.7% 15.8% - 96.9%	48.4% 25.9% - 71.6%	50.0% 5.5% - 94.5%	70.3% 22.2% - 95.1%	53.1% 36.0% - 69.6%
	Drew down existing inventory	0.0% N/A - N/A	29.3% 3.1% - 84.2%	38.5% 19.1% - 62.3%	0.0% N/A - N/A	61.1% 24.5% - 88.4%	34.7% 19.2% - 54.2%
	Switched chemicals, procedures, or technologies	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	31.3% 5.3% - 79.0%	4.3% 0.6% - 24.3%
	Sought help from other utilities or mutual aid network (e.g., WARN)	0.0% N/A - N/A	0.0% N/A - N/A	7.3% 1.0% - 38.7%	0.0% N/A - N/A	0.0% N/A - N/A	4.6% 0.6% - 26.6%
	Coordinated with local or state emergency management agency	48.7% 6.2% - 93.1%	0.0% N/A - N/A	26.2% 11.3% - 49.8%	100.0% N/A - N/A	0.0% N/A - N/A	28.9% 16.2% - 46.2%
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	2	2	17	2	5	28

Table E.7. Question B1.2.3: How did you address each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Tyvek suite and/or disposable coveralls	Found alternative supplier	51.3% 6.7% - 93.9%		38.5% 17.1% - 65.5%	100.0% N/A - N/A	100.0% N/A - N/A	49.8% 28.9% - 70.8%
	Drew down existing inventory	48.7% 6.1% - 93.3%		19.0% 7.6% - 39.9%	0.0% N/A - N/A	44.6% 9.4% - 86.2%	24.0% 11.3% - 43.8%
	Switched chemicals, procedures, or technologies	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A	44.6% 9.4% - 86.2%	5.1% 0.7% - 28.3%
	Sought help from other utilities or mutual aid network (e.g., WARN)	0.0% N/A - N/A		7.0% 1.0% - 35.6%	0.0% N/A - N/A	0.0% N/A - N/A	5.1% 0.7% - 28.3%
	Coordinated with local or state emergency management agency	0.0% N/A - N/A		34.7% 14.6% - 62.2%	0.0% N/A - N/A	0.0% N/A - N/A	25.5% 10.6% - 49.8%
	Other	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	2		16	1	4	23
Sanitizing wipes, sprays for cleaning work offices, or gels for hand sanitizing	Found alternative supplier	67.8% 18.4% - 95.2%	29.3% 3.1% - 84.1%	42.1% 22.8% - 64.3%	50.0% 5.7% - 94.3%	70.3% 22.4% - 95.1%	48.6% 33.1% - 64.3%
	Drew down existing inventory	32.2% 4.8% - 81.6%	0.0% N/A - N/A	25.9% 13.1% - 44.6%	0.0% N/A - N/A	31.3% 5.3% - 78.8%	23.9% 12.7% - 40.4%
	Switched chemicals, procedures, or technologies	0.0% N/A - N/A	0.0% N/A - N/A	12.8% 3.1% - 40.4%	0.0% N/A - N/A	31.3% 5.3% - 78.8%	12.0% 3.8% - 32.0%
	Sought help from other utilities or mutual aid network (e.g., WARN)	0.0% N/A - N/A	70.7% 15.9% - 96.9%	6.8% 0.9% - 36.9%	0.0% N/A - N/A	0.0% N/A - N/A	8.2% 2.0% - 27.9%
	Coordinated with local or state emergency management agency	0.0% N/A - N/A	0.0% N/A - N/A	28.1% 11.7% - 53.6%	100.0% N/A - N/A	0.0% N/A - N/A	25.1% 12.1% - 45.0%
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	29.7% 4.9% - 77.6%	3.8% 0.6% - 21.4%
	Observations	3	2	18	2	5	30

N/A: confidence interval could not be calculated.

Table E.8. Question B1.3.1: How severe were the shortages or supply chain disruptions involving durable goods and other critical equipment that you experienced?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Filter media	Mean score (0 to 3)	0.000 0.000 - 0.000	0.152 -0.106 - 0.410	0.301 0.036 - 0.565	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.164 0.030 - 0.298
	No impact (0)	100.0% N/A - N/A	84.8% 43.0% - 97.6%	86.2% 70.8% - 94.1%	100.0% N/A - N/A	100.0% N/A - N/A	91.4% 82.7% - 95.9%
	Slight (1)	0.0% N/A - N/A	15.2% 2.4% - 57.0%	1.7% 0.4% - 7.6%	0.0% N/A - N/A	0.0% N/A - N/A	2.8% 0.7% - 10.2%
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	8.1% 2.4% - 24.2%	0.0% N/A - N/A	0.0% N/A - N/A	3.9% 1.1% - 12.6%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.1%	0.0% N/A - N/A	0.0% N/A - N/A	2.0% 0.3% - 11.1%
	Observations	8	7	29	7	9	60
Granular/ Powdered Activated Carbon (GAC/ PAC)	Mean score (0 to 3)	0.000 0.000 - 0.000	0.152 -0.106 - 0.410	0.138 -0.017 - 0.293	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.086 0.005 - 0.167
	No impact (0)	100.0% N/A - N/A	84.8% 43.0% - 97.6%	90.2% 75.1% - 96.6%	100.0% N/A - N/A	100.0% N/A - N/A	93.3% 84.8% - 97.2%
	Slight (1)	0.0% N/A - N/A	15.2% 2.4% - 57.0%	5.7% 1.5% - 19.9%	0.0% N/A - N/A	0.0% N/A - N/A	4.7% 1.6% - 12.9%
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.1%	0.0% N/A - N/A	0.0% N/A - N/A	2.0% 0.3% - 11.1%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	8	7	29	7	9	60

Table E.8. Question B1.3.1: How severe were the shortages or supply chain disruptions involving durable goods and other critical equipment that you experienced?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Membrane modules	Mean score (0 to 3)	0.129 -0.093 - 0.352	0.152 -0.106 - 0.410	0.234 0.027 - 0.441	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.153 0.040 - 0.266
	No impact (0)	87.1% 48.4% - 98.0%	84.8% 43.0% - 97.6%	86.4% 69.7% - 94.6%	100.0% N/A - N/A	100.0% N/A - N/A	89.4% 79.0% - 95.0%
	Slight (1)	12.9% 2.0% - 51.6%	15.2% 2.4% - 57.0%	3.8% 0.6% - 20.9%	0.0% N/A - N/A	0.0% N/A - N/A	5.9% 2.0% - 16.0%
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	9.8% 3.4% - 24.9%	0.0% N/A - N/A	0.0% N/A - N/A	4.7% 1.6% - 12.9%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	8	7	29	7	9	60
Pumps	Mean score (0 to 3)	0.129 -0.093 - 0.352	0.304 -0.211 - 0.820	0.492 0.192 - 0.792	0.000 0.000 - 0.000	0.494 -0.213 - 1.201	0.363 0.176 - 0.550
	No impact (0)	87.1% 48.4% - 98.0%	84.8% 43.0% - 97.6%	76.3% 58.7% - 87.9%	100.0% N/A - N/A	79.6% 46.0% - 94.7%	81.8% 70.7% - 89.3%
	Slight (1)	12.9% 2.0% - 51.6%	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	6.0% 1.2% - 25.4%	2.9% 0.7% - 10.9%
	Moderate (2)	0.0% N/A - N/A	15.2% 2.4% - 57.0%	22.1% 10.8% - 39.9%	0.0% N/A - N/A	0.0% N/A - N/A	12.6% 6.5% - 23.1%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	1.7% 0.4% - 7.6%	0.0% N/A - N/A	14.5% 2.4% - 53.3%	2.8% 0.7% - 10.2%
	Observations	8	7	29	7	9	60

Table E.8. Question B1.3.1: How severe were the shortages or supply chain disruptions involving durable goods and other critical equipment that you experienced?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Motors	Mean score (0 to 3)	0.000 0.000 - 0.000	0.304 -0.211 - 0.820	0.411 0.126 - 0.696	0.000 0.000 - 0.000	0.494 -0.213 - 1.201	0.303 0.123 - 0.483
	No impact (0)	100.0% N/A - N/A	84.8% 43.0% - 97.6%	80.3% 62.7% - 90.8%	100.0% N/A - N/A	79.6% 46.0% - 94.7%	85.8% 75.5% - 92.2%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	6.0% 1.2% - 25.4%	0.8% 0.2% - 3.7%
	Moderate (2)	0.0% N/A - N/A	15.2% 2.4% - 57.0%	18.0% 7.9% - 35.9%	0.0% N/A - N/A	0.0% N/A - N/A	10.6% 5.0% - 21.0%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	1.7% 0.4% - 7.6%	0.0% N/A - N/A	14.5% 2.4% - 53.3%	2.8% 0.7% - 10.2%
	Observations	8	7	29	7	9	60
Pipes	Mean score (0 to 3)	0.000 0.000 - 0.000	0.152 -0.106 - 0.410	0.376 0.136 - 0.616	0.000 0.000 - 0.000	0.349 -0.125 - 0.823	0.247 0.112 - 0.382
	No impact (0)	100.0% N/A - N/A	84.8% 43.0% - 97.6%	76.3% 58.7% - 87.9%	100.0% N/A - N/A	79.6% 46.0% - 94.7%	83.9% 73.5% - 90.7%
	Slight (1)	0.0% N/A - N/A	15.2% 2.4% - 57.0%	9.9% 3.2% - 26.5%	0.0% N/A - N/A	6.0% 1.2% - 25.4%	7.5% 3.1% - 16.9%
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	13.8% 5.9% - 29.2%	0.0% N/A - N/A	14.5% 2.4% - 53.3%	8.6% 4.1% - 17.3%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	8	7	29	7	9	60

Table E.8. Question B1.3.1: How severe were the shortages or supply chain disruptions involving durable goods and other critical equipment that you experienced?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Valves	Mean score (0 to 3)	0.000 0.000 - 0.000	0.152 -0.106 - 0.410	0.393 0.147 - 0.639	0.000 0.000 - 0.000	0.349 -0.125 - 0.823	0.255 0.118 - 0.393
	No impact (0)	100.0% N/A - N/A	84.8% 43.0% - 97.6%	76.3% 58.7% - 87.9%	100.0% N/A - N/A	79.6% 46.0% - 94.7%	83.9% 73.5% - 90.7%
	Slight (1)	0.0% N/A - N/A	15.2% 2.4% - 57.0%	9.9% 3.2% - 26.5%	0.0% N/A - N/A	6.0% 1.2% - 25.4%	7.5% 3.1% - 16.9%
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	12.2% 4.7% - 27.9%	0.0% N/A - N/A	14.5% 2.4% - 53.3%	7.8% 3.5% - 16.6%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	1.7% 0.4% - 7.6%	0.0% N/A - N/A	0.0% N/A - N/A	0.8% 0.2% - 3.7%
	Observations	8	7	29	7	9	60
Fuel	Mean score (0 to 3)	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.179 -0.014 - 0.372	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.086 -0.010 - 0.182
	No impact (0)	100.0% N/A - N/A	100.0% N/A - N/A	90.2% 75.1% - 96.6%	100.0% N/A - N/A	100.0% N/A - N/A	95.3% 87.1% - 98.4%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	1.7% 0.4% - 7.6%	0.0% N/A - N/A	0.0% N/A - N/A	0.8% 0.2% - 3.7%
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	8.1% 2.4% - 24.2%	0.0% N/A - N/A	0.0% N/A - N/A	3.9% 1.1% - 12.6%
	Severe (3)						
	Observations	8	7	29	7	9	60

Table E.8. Question B1.3.1: How severe were the shortages or supply chain disruptions involving durable goods and other critical equipment that you experienced?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Vehicles	Mean score (0 to 3)	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.196 -0.002 - 0.393	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.094 -0.004 - 0.193
	No impact (0)	100.0% N/A - N/A	100.0% N/A - N/A	90.2% 75.1% - 96.6%	100.0% N/A - N/A	100.0% N/A - N/A	95.3% 87.1% - 98.4%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	9.8% 3.4% - 24.9%	0.0% N/A - N/A	0.0% N/A - N/A	4.7% 1.6% - 12.9%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	8	7	29	7	9	60

N/A: confidence interval could not be calculated.

Table E.9. Question B1.3.2: What contributed to each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Filter media	Unavailable from supplier(s)		100.0% N/A - N/A	29.3% 2.7% - 86.0%			45.3% 8.9% - 87.5%
	Delayed / backordered from supplier(s)		0.0% N/A - N/A	41.4% 6.6% - 87.7%			32.0% 5.4% - 79.4%
	Transportation / distribution difficulties		0.0% N/A - N/A	29.3% 2.7% - 86.0%			22.7% 2.1% - 80.0%
	Price		0.0% N/A - N/A	0.0% N/A - N/A			0.0% N/A - N/A
	Other		0.0% N/A - N/A	58.6% 12.3% - 93.4%			45.3% 8.9% - 87.5%
	Observations		1	4			5
Granular/ Powdered Activated Carbon (GAC/ PAC)	Unavailable from supplier(s)		0.0% N/A - N/A	0.0% N/A - N/A			0.0% N/A - N/A
	Delayed / backordered from supplier(s)		100.0% N/A - N/A	17.1% 6.8% - 37.1%			41.4% 5.3% - 89.9%
	Transportation / distribution difficulties		0.0% N/A - N/A	41.4% 3.1% - 94.1%			29.3% 2.1% - 88.9%
	Price		0.0% N/A - N/A	41.4% 3.1% - 94.1%			29.3% 2.1% - 88.9%
	Other		0.0% N/A - N/A	0.0% N/A - N/A			0.0% N/A - N/A
	Observations		1	3			4

Table E.9. Question B1.3.2: What contributed to each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Membrane modules	Unavailable from supplier(s)	0.0% N/A - N/A	0.0% N/A - N/A	12.3% 6.4% - 22.4%			7.6% 7.6% - 7.6%
	Delayed / backordered from supplier(s)	100.0% N/A - N/A	100.0% N/A - N/A	58.0% 12.6% - 92.9%			74.0% 27.3% - 95.6%
	Transportation / distribution difficulties	0.0% N/A - N/A	0.0% N/A - N/A	42.0% 7.1% - 87.4%			26.0% 4.4% - 72.7%
	Price	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A			0.0% N/A - N/A
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A			0.0% N/A - N/A
	Observations	1	1	4			6
Pumps	Unavailable from supplier(s)	0.0% N/A - N/A	0.0% N/A - N/A	41.7% 17.7% - 70.5%		70.7% 14.1% - 97.3%	36.8% 13.0% - 69.4%
	Delayed / backordered from supplier(s)	0.0% N/A - N/A	100.0% N/A - N/A	35.5% 9.4% - 74.5%		100.0% N/A - N/A	48.1% 18.7% - 78.9%
	Transportation / distribution difficulties	100.0% N/A - N/A	0.0% N/A - N/A	58.8% 23.8% - 86.7%		70.7% 14.1% - 97.3%	59.1% 32.6% - 81.2%
	Price	0.0% N/A - N/A	0.0% N/A - N/A	7.1% 1.0% - 37.1%		0.0% N/A - N/A	4.4% 0.6% - 25.1%
	Other	0.0% N/A - N/A	0.0% N/A - N/A	17.1% 2.2% - 65.2%		0.0% N/A - N/A	10.7% 1.4% - 50.6%
	Observations	1	1	7		2	11

Table E.9. Question B1.3.2: What contributed to each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Motors	Unavailable from supplier(s)		0.0% N/A - N/A	50.3% 25.6% - 74.9%		70.7% 13.9% - 97.3%	47.4% 22.2% - 74.0%
	Delayed / backordered from supplier(s)		100.0% N/A - N/A	30.8% 14.7% - 53.4%		100.0% N/A - N/A	53.8% 23.9% - 81.2%
	Transportation / distribution difficulties		0.0% N/A - N/A	70.9% 29.0% - 93.6%		70.7% 13.9% - 97.3%	61.1% 28.6% - 86.1%
	Price		0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Other		0.0% N/A - N/A	20.6% 2.9% - 69.3%		0.0% N/A - N/A	13.8% 1.7% - 60.0%
	Observations		1	6		2	9
Pipes	Unavailable from supplier(s)		0.0% N/A - N/A	0.0% N/A - N/A		70.7% 14.0% - 97.3%	12.1% 1.5% - 54.9%
	Delayed / backordered from supplier(s)		100.0% N/A - N/A	51.7% 23.2% - 79.1%		100.0% N/A - N/A	65.8% 33.7% - 87.9%
	Transportation / distribution difficulties		0.0% N/A - N/A	42.6% 16.5% - 73.5%		70.7% 14.0% - 97.3%	42.3% 17.7% - 71.4%
	Price		0.0% N/A - N/A	7.1% 1.0% - 36.3%		0.0% N/A - N/A	5.0% 0.7% - 27.8%
	Other		0.0% N/A - N/A	17.1% 2.3% - 64.3%		0.0% N/A - N/A	12.1% 1.5% - 54.9%
	Observations		1	7		2	10

Table E.9. Question B1.3.2: What contributed to each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Valves	Unavailable from supplier(s)		0.0% N/A - N/A	7.1% 1.0% - 36.3%		70.7% 14.1% - 97.3%	17.1% 3.4% - 54.7%
	Delayed / backordered from supplier(s)		100.0% N/A - N/A	51.7% 23.3% - 79.1%		100.0% N/A - N/A	65.8% 33.7% - 87.9%
	Transportation / distribution difficulties		0.0% N/A - N/A	42.6% 16.5% - 73.5%		70.7% 14.1% - 97.3%	42.3% 17.7% - 71.4%
	Price		0.0% N/A - N/A	7.1% 1.0% - 36.3%		0.0% N/A - N/A	5.0% 0.7% - 27.8%
	Other		0.0% N/A - N/A	17.1% 2.3% - 64.2%		0.0% N/A - N/A	12.1% 1.5% - 54.9%
	Observations		1	7		2	10
Fuel	Unavailable from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Delayed / backordered from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Transportation / distribution difficulties			58.6% 4.0% - 98.0%			58.6% 4.0% - 98.0%
	Price			0.0% N/A - N/A			0.0% N/A - N/A
	Other			41.4% 2.0% - 96.0%			41.4% 2.0% - 96.0%
	Observations			3			3

Table E.9. Question B1.3.2: What contributed to each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Vehicles	Unavailable from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Delayed / backordered from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Transportation / distribution difficulties			58.6% 4.5% - 97.7%			58.6% 4.5% - 97.7%
	Price			0.0% N/A - N/A			0.0% N/A - N/A
	Other			41.4% 2.3% - 95.5%			41.4% 2.3% - 95.5%
	Observations			3			3

N/A: confidence interval could not be calculated.

Table E.10. Question B1.3.3: How did you address each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Filter media	Found alternative supplier		0.0% N/A - N/A	0.0% N/A - N/A			0.0% N/A - N/A
	Drew down existing inventory		100.0% N/A - N/A	12.1% 6.6% - 21.3%			32.0% 5.4% - 79.4%
	Switched chemicals, procedures, or technologies		0.0% N/A - N/A	0.0% N/A - N/A			0.0% N/A - N/A
	Sought help from other utilities or mutual aid network (e.g., WARN)		0.0% N/A - N/A	29.3% 2.7% - 86.0%			22.7% 2.1% - 80.0%
	Coordinated with local or state emergency management agency		0.0% N/A - N/A	0.0% N/A - N/A			0.0% N/A - N/A
	Other		0.0% N/A - N/A	58.6% 12.3% - 93.4%			45.3% 8.9% - 87.5%
	Observations		1	4			5
Granular/ Powdered Activated Carbon (GAC/ PAC)	Found alternative supplier		0.0% N/A - N/A	41.4% 3.1% - 94.1%			29.3% 2.1% - 88.9%
	Drew down existing inventory		100.0% N/A - N/A	17.1% 6.8% - 37.1%			41.4% 5.3% - 89.9%
	Switched chemicals, procedures, or technologies		0.0% N/A - N/A	0.0% N/A - N/A			0.0% N/A - N/A
	Sought help from other utilities or mutual aid network (e.g., WARN)		0.0% N/A - N/A	41.4% 3.1% - 94.1%			29.3% 2.1% - 88.9%
	Coordinated with local or state emergency management agency		0.0% N/A - N/A	0.0% N/A - N/A			0.0% N/A - N/A
	Other		0.0% N/A - N/A	0.0% N/A - N/A			0.0% N/A - N/A
	Observations		1	3			4

Table E.10. Question B1.3.3: How did you address each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Membrane modules	Found alternative supplier	100.0% N/A - N/A	0.0% N/A - N/A	58.0% 12.6% - 92.9%			55.7% 20.5% - 85.9%
	Drew down existing inventory	0.0% N/A - N/A	100.0% N/A - N/A	28.2% 14.0% - 48.6%			35.8% 9.3% - 75.3%
	Switched chemicals, procedures, or technologies	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A			0.0% N/A - N/A
	Sought help from other utilities or mutual aid network (e.g., WARN)	0.0% N/A - N/A	0.0% N/A - N/A	29.7% 2.8% - 86.1%			18.4% 1.6% - 75.2%
	Coordinated with local or state emergency management agency	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A			0.0% N/A - N/A
	Other	0.0% N/A - N/A	0.0% N/A - N/A	12.3% 6.4% - 22.4%			7.6% 7.6% - 7.6%
	Observations	1	1	4			6
Pumps	Found alternative supplier	0.0% N/A - N/A	0.0% N/A - N/A	51.7% 20.2% - 81.9%		0.0% N/A - N/A	32.4% 10.6% - 65.9%
	Drew down existing inventory	100.0% N/A - N/A	100.0% N/A - N/A	25.5% 6.2% - 63.9%		29.3% 2.7% - 85.9%	42.7% 23.1% - 64.8%
	Switched chemicals, procedures, or technologies	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Sought help from other utilities or mutual aid network (e.g., WARN)	0.0% N/A - N/A	0.0% N/A - N/A	17.1% 2.2% - 65.2%		0.0% N/A - N/A	10.7% 1.4% - 50.6%
	Coordinated with local or state emergency management agency	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Other	0.0% N/A - N/A	0.0% N/A - N/A	24.1% 4.8% - 66.6%		70.7% 14.1% - 97.3%	25.8% 8.0% - 58.1%
	Observations	1	1	7		2	11

Table E.10. Question B1.3.3: How did you address each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Motors	Found alternative supplier		0.0% N/A - N/A	50.3% 25.6% - 74.9%		0.0% N/A - N/A	33.6% 23.8% - 45.1%
	Drew down existing inventory		100.0% N/A - N/A	22.3% 13.3% - 34.9%		29.3% 2.7% - 86.1%	34.3% 12.8% - 65.1%
	Switched chemicals, procedures, or technologies		0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Sought help from other utilities or mutual aid network (e.g., WARN)		0.0% N/A - N/A	20.6% 2.9% - 69.3%		0.0% N/A - N/A	13.8% 1.7% - 60.0%
	Coordinated with local or state emergency management agency		0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Other		0.0% N/A - N/A	29.1% 6.4% - 71.0%		70.7% 13.9% - 97.3%	33.2% 10.3% - 68.3%
	Observations		1	6		2	9
Pipes	Found alternative supplier		0.0% N/A - N/A	35.5% 12.8% - 67.4%		70.7% 14.0% - 97.3%	37.3% 15.0% - 66.7%
	Drew down existing inventory		100.0% N/A - N/A	41.7% 23.6% - 62.3%		100.0% N/A - N/A	58.7% 29.3% - 83.0%
	Switched chemicals, procedures, or technologies		0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Sought help from other utilities or mutual aid network (e.g., WARN)		0.0% N/A - N/A	17.1% 2.3% - 64.3%		0.0% N/A - N/A	12.1% 1.5% - 54.9%
	Coordinated with local or state emergency management agency		0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Other		0.0% N/A - N/A	24.1% 5.1% - 65.2%		70.7% 14.0% - 97.3%	29.2% 8.8% - 63.7%
	Observations		1	7		2	10

Table E.10. Question B1.3.3: How did you address each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Valves	Found alternative supplier		0.0% N/A - N/A	42.6% 16.5% - 73.5%		70.7% 14.1% - 97.3%	42.3% 17.7% - 71.4%
	Drew down existing inventory		100.0% N/A - N/A	16.2% 10.5% - 24.2%		100.0% N/A - N/A	40.6% 16.5% - 70.3%
	Switched chemicals, procedures, or technologies		0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Sought help from other utilities or mutual aid network (e.g., WARN)		0.0% N/A - N/A	17.1% 2.3% - 64.2%		0.0% N/A - N/A	12.1% 1.5% - 54.9%
	Coordinated with local or state emergency management agency		0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Other		0.0% N/A - N/A	24.1% 5.1% - 65.2%		70.7% 14.1% - 97.3%	29.2% 8.8% - 63.7%
	Observations		1	7		2	10
Fuel	Found alternative supplier			0.0% N/A - N/A			0.0% N/A - N/A
	Drew down existing inventory			17.1% 17.1% - 17.1%			17.1% 17.1% - 17.1%
	Switched chemicals, procedures, or technologies			0.0% N/A - N/A			0.0% N/A - N/A
	Sought help from other utilities or mutual aid network (e.g., WARN)			41.4% 2.0% - 96.0%			41.4% 2.0% - 96.0%
	Coordinated with local or state emergency management agency			0.0% N/A - N/A			0.0% N/A - N/A
	Other			41.4% 2.0% - 96.0%			41.4% 2.0% - 96.0%
	Observations			3			3

Table E.10. Question B1.3.3: How did you address each shortage or supply chain disruption? (select all that apply)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Vehicles	Found alternative supplier			0.0% N/A - N/A			0.0% N/A - N/A
	Drew down existing inventory			17.1% 17.1% - 17.1%			17.1% 17.1% - 17.1%
	Switched chemicals, procedures, or technologies			0.0% N/A - N/A			0.0% N/A - N/A
	Sought help from other utilities or mutual aid network (e.g., WARN)			41.4% 2.3% - 95.5%			41.4% 2.3% - 95.5%
	Coordinated with local or state emergency management agency			0.0% N/A - N/A			0.0% N/A - N/A
	Other			41.4% 2.3% - 95.5%			41.4% 2.3% - 95.5%
	Observations			3			3

N/A: confidence interval could not be calculated.

Table E.11 Question B2.1: What kinds of shortages or supply chain disruptions are you most concerned about from present day through December 2020?

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Percentage Reporting by Population Served					
	< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Treatment Chemicals	25.9% 7.3% - 60.8%	15.2% 2.4% - 57.0%	24.8% 12.6% - 43.1%	43.7% 14.2% - 78.4%	18.1% 3.0% - 61.1%	24.6% 15.3% - 37.0%
PPE	23.3% 6.6% - 56.5%	6.3% 1.2% - 27.6%	43.6% 27.0% - 61.8%	43.7% 14.2% - 78.4%	53.5% 23.3% - 81.3%	36.4% 25.6% - 48.9%
Durable Goods and Other Equipment and Supplies	12.9% 2.0% - 51.6%	45.6% 17.5% - 76.8%	22.1% 10.8% - 39.9%	53.3% 20.2% - 83.7%	57.7% 26.0% - 84.1%	30.7% 20.4% - 43.4%
None	37.9% 13.6% - 70.3%	48.1% 18.9% - 78.7%	44.6% 27.9% - 62.5%	46.7% 16.3% - 79.8%	28.4% 7.9% - 64.7%	42.1% 30.4% - 54.8%
Observations	8	7	28	6	8	57

Table E.12. Question B2.1.1: How severe are your concerns about treatment chemical shortages or supply chain disruptions?

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Carbon dioxide	Mean score (0 to 3)	0.259 -0.185 - 0.703	0.000 0.000 - 0.000	0.082 -0.063 - 0.228	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.084 -0.023 - 0.191
	None (0)	87.1% 48.4% - 98.0%	100.0% N/A - N/A	95.9% 78.6% - 99.3%	100.0% N/A - N/A	100.0% N/A - N/A	95.8% 85.8% - 98.8%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Moderate (2)	12.9% 2.0% - 51.6%	0.0% N/A - N/A	4.1% 0.7% - 21.4%	0.0% N/A - N/A	0.0% N/A - N/A	4.2% 1.2% - 14.2%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	8	7	28	6	8	57
Ferric chloride	Mean score (0 to 3)	0.259 -0.185 - 0.703	0.000 0.000 - 0.000	0.100 -0.049 - 0.248	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.092 -0.015 - 0.200
	None (0)	87.1% 48.4% - 98.0%	100.0% N/A - N/A	94.2% 79.7% - 98.5%	100.0% N/A - N/A	100.0% N/A - N/A	95.0% 85.6% - 98.3%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	1.7% 0.3% - 8.2%	0.0% N/A - N/A	0.0% N/A - N/A	0.8% 0.2% - 4.1%
	Moderate (2)	12.9% 2.0% - 51.6%	0.0% N/A - N/A	4.1% 0.7% - 21.4%	0.0% N/A - N/A	0.0% N/A - N/A	4.2% 1.2% - 14.2%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	8	7	28	6	8	57

Table E.12. Question B2.1.1: How severe are your concerns about treatment chemical shortages or supply chain disruptions?

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Fluoride	Mean score (0 to 3)	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.082 -0.063 - 0.228	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.040 -0.032 - 0.113
	None (0)	100.0% N/A - N/A	100.0% N/A - N/A	95.9% 78.6% - 99.3%	100.0% N/A - N/A	100.0% N/A - N/A	98.0% 88.6% - 99.7%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.4%	0.0% N/A - N/A	0.0% N/A - N/A	2.0% 0.3% - 11.4%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	8	7	28	6	8	57
Gaseous chlorine	Mean score (0 to 3)	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.166 -0.011 - 0.343	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.081 -0.008 - 0.171
	None (0)	100.0% N/A - N/A	100.0% N/A - N/A	87.5% 68.9% - 95.7%	100.0% N/A - N/A	100.0% N/A - N/A	93.9% 83.4% - 97.9%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	8.4% 2.3% - 26.5%	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 1.1% - 14.1%
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.4%	0.0% N/A - N/A	0.0% N/A - N/A	2.0% 0.3% - 11.4%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	8	7	28	6	8	57

Table E.12. Question B2.1.1: How severe are your concerns about treatment chemical shortages or supply chain disruptions?

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Liquid oxygen	Mean score (0 to 3)	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.082 -0.063 - 0.228	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.040 -0.032 - 0.113
	None (0)	100.0% N/A - N/A	100.0% N/A - N/A	95.9% 78.6% - 99.3%	100.0% N/A - N/A	100.0% N/A - N/A	98.0% 88.6% - 99.7%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.4%	0.0% N/A - N/A	0.0% N/A - N/A	2.0% 0.3% - 11.4%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	8	7	28	6	8	57
Lime	Mean score (0 to 3)	0.129 -0.093 - 0.352	0.000 0.000 - 0.000	0.082 -0.063 - 0.228	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.062 -0.020 - 0.145
	None (0)	87.1% 48.4% - 98.0%	100.0% N/A - N/A	95.9% 78.6% - 99.3%	100.0% N/A - N/A	100.0% N/A - N/A	95.8% 85.8% - 98.8%
	Slight (1)	12.9% 2.0% - 51.6%	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	2.2% 0.4% - 12.3%
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.4%	0.0% N/A - N/A	0.0% N/A - N/A	2.0% 0.3% - 11.4%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	8	7	28	6	8	57

Table E.12. Question B2.1.1: How severe are your concerns about treatment chemical shortages or supply chain disruptions?

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Orthophosphate	Mean score (0 to 3)	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.082 -0.063 - 0.228	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.040 -0.032 - 0.113
	None (0)	100.0% N/A - N/A	100.0% N/A - N/A	95.9% 78.6% - 99.3%	100.0% N/A - N/A	100.0% N/A - N/A	98.0% 88.6% - 99.7%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.4%	0.0% N/A - N/A	0.0% N/A - N/A	2.0% 0.3% - 11.4%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	8	7	28	6	8	57
Polymers	Mean score (0 to 3)	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.166 -0.011 - 0.343	0.219 -0.134 - 0.571	0.000 0.000 - 0.000	0.101 0.005 - 0.196
	None (0)	100.0% N/A - N/A	100.0% N/A - N/A	87.5% 68.9% - 95.7%	78.1% 31.3% - 96.6%	100.0% N/A - N/A	92.0% 81.3% - 96.8%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	8.4% 2.3% - 26.5%	21.9% 3.4% - 68.7%	0.0% N/A - N/A	6.0% 2.1% - 16.0%
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.4%	0.0% N/A - N/A	0.0% N/A - N/A	2.0% 0.3% - 11.4%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	8	7	28	6	8	57

Table E.12. Question B2.1.1: How severe are your concerns about treatment chemical shortages or supply chain disruptions?

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Potassium permanganate	Mean score (0 to 3)	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.082 -0.063 - 0.228	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.040 -0.032 - 0.113
	None (0)	100.0% N/A - N/A	100.0% N/A - N/A	95.9% 78.6% - 99.3%	100.0% N/A - N/A	100.0% N/A - N/A	98.0% 88.6% - 99.7%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.4%	0.0% N/A - N/A	0.0% N/A - N/A	2.0% 0.3% - 11.4%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	8	7	28	6	8	57
Sodium hydroxide	Mean score (0 to 3)	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.082 -0.063 - 0.228	0.219 -0.134 - 0.571	0.000 0.000 - 0.000	0.060 -0.021 - 0.140
	None (0)	100.0% N/A - N/A	100.0% N/A - N/A	95.9% 78.6% - 99.3%	78.1% 31.3% - 96.6%	100.0% N/A - N/A	96.1% 86.5% - 98.9%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	21.9% 3.4% - 68.7%	0.0% N/A - N/A	1.9% 0.3% - 11.3%
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.4%	0.0% N/A - N/A	0.0% N/A - N/A	2.0% 0.3% - 11.4%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	8	7	28	6	8	57

Table E.12. Question B2.1.1: How severe are your concerns about treatment chemical shortages or supply chain disruptions?

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Sodium hypochlorite	Mean score (0 to 3)	0.259 -0.185 - 0.703	0.152 -0.106 - 0.410	0.312 0.025 - 0.599	0.437 0.058 - 0.817	0.000 0.000 - 0.000	0.255 0.084 - 0.427
	None (0)	87.1% 48.4% - 98.0%	84.8% 43.0% - 97.6%	85.3% 67.7% - 94.1%	56.3% 21.6% - 85.8%	100.0% N/A - N/A	84.7% 72.8% - 92.0%
	Slight (1)	0.0% N/A - N/A	15.2% 2.4% - 57.0%	4.5% 0.7% - 22.9%	43.7% 14.2% - 78.4%	0.0% N/A - N/A	8.0% 3.2% - 18.7%
	Moderate (2)	12.9% 2.0% - 51.6%	0.0% N/A - N/A	4.1% 0.7% - 21.4%	0.0% N/A - N/A	0.0% N/A - N/A	4.2% 1.2% - 14.2%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	6.2% 1.5% - 21.6%	0.0% N/A - N/A	0.0% N/A - N/A	3.0% 0.8% - 11.4%
	Observations	8	7	28	6	8	57

N/A: confidence interval could not be calculated.

Table E.13. Question B2.1.2: For each item, what are you most concerned about? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Carbon dioxide	Unavailable from supplier(s)	0.0% N/A - N/A		0.0% N/A - N/A			0.0% N/A - N/A
	Delayed / backordered from supplier(s)	100.0% N/A - N/A		100.0% N/A - N/A			100.0% N/A - N/A
	Transportation / distribution difficulties	0.0% N/A - N/A		0.0% N/A - N/A			0.0% N/A - N/A
	Price	0.0% N/A - N/A		0.0% N/A - N/A			0.0% N/A - N/A
	Other						
	Observations	1		1			2
Ferric chloride	Unavailable from supplier(s)	0.0% N/A - N/A		0.0% N/A - N/A			0.0% N/A - N/A
	Delayed / backordered from supplier(s)	100.0% N/A - N/A		100.0% N/A - N/A			100.0% N/A - N/A
	Transportation / distribution difficulties	0.0% N/A - N/A		0.0% N/A - N/A			0.0% N/A - N/A
	Price	0.0% N/A - N/A		0.0% N/A - N/A			0.0% N/A - N/A
	Other						
	Observations	1		2			3

Table E.13. Question B2.1.2: For each item, what are you most concerned about? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Fluoride	Unavailable from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Delayed / backordered from supplier(s)			100.0% N/A - N/A			100.0% N/A - N/A
	Transportation / distribution difficulties			0.0% N/A - N/A			0.0% N/A - N/A
	Price			0.0% N/A - N/A			0.0% N/A - N/A
	Other						
	Observations			1			1
Gaseous chlorine	Unavailable from supplier(s)			31.3% 31.3% - 31.3%			31.3% 31.3% - 31.3%
	Delayed / backordered from supplier(s)			64.3% 64.3% - 64.3%			64.3% 64.3% - 64.3%
	Transportation / distribution difficulties			31.3% 31.3% - 31.3%			31.3% 31.3% - 31.3%
	Price			0.0% N/A - N/A			0.0% N/A - N/A
	Other						
	Observations			3			3

Table E.13. Question B2.1.2: For each item, what are you most concerned about? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Liquid oxygen	Unavailable from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Delayed / backordered from supplier(s)			100.0% N/A - N/A			100.0% N/A - N/A
	Transportation / distribution difficulties			0.0% N/A - N/A			0.0% N/A - N/A
	Price			0.0% N/A - N/A			0.0% N/A - N/A
	Other						
	Observations			1			1
Lime	Unavailable from supplier(s)	0.0% N/A - N/A		0.0% N/A - N/A			0.0% N/A - N/A
	Delayed / backordered from supplier(s)	100.0% N/A - N/A		100.0% N/A - N/A			100.0% N/A - N/A
	Transportation / distribution difficulties	0.0% N/A - N/A		0.0% N/A - N/A			0.0% N/A - N/A
	Price	0.0% N/A - N/A		0.0% N/A - N/A			0.0% N/A - N/A
	Other						
	Observations	1		1			2

Table E.13. Question B2.1.2: For each item, what are you most concerned about? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Orthophosphate	Unavailable from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Delayed / backordered from supplier(s)			100.0% N/A - N/A			100.0% N/A - N/A
	Transportation / distribution difficulties			0.0% N/A - N/A			0.0% N/A - N/A
	Price			0.0% N/A - N/A			0.0% N/A - N/A
	Other						
	Observations			1			1
Polymers	Unavailable from supplier(s)			31.3% 6.0% - 76.4%	100.0% N/A - N/A		47.7% 47.7% - 47.7%
	Delayed / backordered from supplier(s)			100.0% N/A - N/A	0.0% N/A - N/A		76.2% 19.5% - 97.7%
	Transportation / distribution difficulties			31.3% 6.0% - 76.4%	0.0% N/A - N/A		23.8% 2.3% - 80.5%
	Price			0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A
	Other						
	Observations			3	1		4

Table E.13. Question B2.1.2: For each item, what are you most concerned about? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Potassium permanganate	Unavailable from supplier(s)			0.0% N/A - N/A			0.0% N/A - N/A
	Delayed / backordered from supplier(s)			100.0% N/A - N/A			100.0% N/A - N/A
	Transportation / distribution difficulties			0.0% N/A - N/A			0.0% N/A - N/A
	Price			0.0% N/A - N/A			0.0% N/A - N/A
	Other						
	Observations			1			1
Sodium hydroxide	Unavailable from supplier(s)			0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A
	Delayed / backordered from supplier(s)			100.0% N/A - N/A	100.0% N/A - N/A		100.0% N/A - N/A
	Transportation / distribution difficulties			0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A
	Price			0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A
	Other						
	Observations			1	1		2

Table E.13. Question B2.1.2: For each item, what are you most concerned about? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Sodium hypochlorite	Unavailable from supplier(s)	0.0% N/A - N/A	0.0% N/A - N/A	11.6% 5.0% - 24.5%	50.0% 2.0% - 98.0%		18.0% 4.0% - 53.7%
	Delayed / backordered from supplier(s)	100.0% N/A - N/A	100.0% N/A - N/A	88.4% 75.5% - 95.0%	50.0% 2.0% - 98.0%		82.0% 46.3% - 96.0%
	Transportation / distribution difficulties	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A
	Price	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A
	Other						
	Observations	1	1	4	2		8

N/A: confidence interval could not be calculated.

Table E.14. Question B2.1.3: What steps have you taken or are you taking to prepare for potential shortages and supply chain disruptions? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Carbon dioxide	Seek alternative supplier	0.0% N/A - N/A		0.0% N/A - N/A			0.0% N/A - N/A
	Increase purchasing / maintain a larger than typical inventory	100.0% N/A - N/A		0.0% N/A - N/A			52.0% 52.0% - 52.0%
	Switch chemicals, procedures, or technologies	0.0% N/A - N/A		0.0% N/A - N/A			0.0% N/A - N/A
	Make arrangements with neighboring utilities or mutual aid network	0.0% N/A - N/A		100.0% N/A - N/A			48.0% 48.0% - 48.0%
	Other						
	Observations	1		1			2
Ferric chloride	Seek alternative supplier	0.0% N/A - N/A		0.0% N/A - N/A			0.0% N/A - N/A
	Increase purchasing / maintain a larger than typical inventory	100.0% N/A - N/A		29.3% 29.3% - 29.3%			59.9% 59.9% - 59.9%
	Switch chemicals, procedures, or technologies	0.0% N/A - N/A		0.0% N/A - N/A			0.0% N/A - N/A
	Make arrangements with neighboring utilities or mutual aid network	0.0% N/A - N/A		70.7% 70.7% - 70.7%			40.1% 40.1% - 40.1%
	Other						
	Observations	1		2			3

Table E.14. Question B2.1.3: What steps have you taken or are you taking to prepare for potential shortages and supply chain disruptions? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Fluoride	Seek alternative supplier			0.0% N/A - N/A			0.0% N/A - N/A
	Increase purchasing / maintain a larger than typical inventory			0.0% N/A - N/A			0.0% N/A - N/A
	Switch chemicals, procedures, or technologies			0.0% N/A - N/A			0.0% N/A - N/A
	Make arrangements with neighboring utilities or mutual aid network			100.0% N/A - N/A			100.0% N/A - N/A
	Other						
	Observations			1			1
Gaseous chlorine	Seek alternative supplier			31.3% 31.3% - 31.3%			31.3% 31.3% - 31.3%
	Increase purchasing / maintain a larger than typical inventory			31.3% 31.3% - 31.3%			31.3% 31.3% - 31.3%
	Switch chemicals, procedures, or technologies			0.0% N/A - N/A			0.0% N/A - N/A
	Make arrangements with neighboring utilities or mutual aid network			33.0% 33.0% - 33.0%			33.0% 33.0% - 33.0%
	Other						
	Observations			3			3

Table E.14. Question B2.1.3: What steps have you taken or are you taking to prepare for potential shortages and supply chain disruptions? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Liquid oxygen	Seek alternative supplier			0.0% N/A - N/A			0.0% N/A - N/A
	Increase purchasing / maintain a larger than typical inventory			0.0% N/A - N/A			0.0% N/A - N/A
	Switch chemicals, procedures, or technologies			0.0% N/A - N/A			0.0% N/A - N/A
	Make arrangements with neighboring utilities or mutual aid network			100.0% N/A - N/A			100.0% N/A - N/A
	Other						
	Observations			1			1
Lime	Seek alternative supplier	0.0% N/A - N/A		0.0% N/A - N/A			0.0% N/A - N/A
	Increase purchasing / maintain a larger than typical inventory	100.0% N/A - N/A		0.0% N/A - N/A			52.0% 52.0% - 52.0%
	Switch chemicals, procedures, or technologies	0.0% N/A - N/A		0.0% N/A - N/A			0.0% N/A - N/A
	Make arrangements with neighboring utilities or mutual aid network	0.0% N/A - N/A		100.0% N/A - N/A			48.0% 48.0% - 48.0%
	Other						
	Observations	1		1			2

Table E.14. Question B2.1.3: What steps have you taken or are you taking to prepare for potential shortages and supply chain disruptions? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Orthophosphate	Seek alternative supplier			0.0% N/A - N/A			0.0% N/A - N/A
	Increase purchasing / maintain a larger than typical inventory			0.0% N/A - N/A			0.0% N/A - N/A
	Switch chemicals, procedures, or technologies			0.0% N/A - N/A			0.0% N/A - N/A
	Make arrangements with neighboring utilities or mutual aid network			100.0% N/A - N/A			100.0% N/A - N/A
	Other						
	Observations			1			1
Polymers	Seek alternative supplier			31.3% 6.0% - 76.4%	100.0% N/A - N/A		47.7% 47.7% - 47.7%
	Increase purchasing / maintain a larger than typical inventory			67.0% 44.8% - 83.5%	0.0% N/A - N/A		51.0% 13.8% - 87.1%
	Switch chemicals, procedures, or technologies			0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A
	Make arrangements with neighboring utilities or mutual aid network			33.0% 16.5% - 55.2%	0.0% N/A - N/A		25.1% 25.1% - 25.1%
	Other						
	Observations			3	1		4

Table E.14. Question B2.1.3: What steps have you taken or are you taking to prepare for potential shortages and supply chain disruptions? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Potassium permanganate	Seek alternative supplier			0.0% N/A - N/A			0.0% N/A - N/A
	Increase purchasing / maintain a larger than typical inventory			0.0% N/A - N/A			0.0% N/A - N/A
	Switch chemicals, procedures, or technologies			0.0% N/A - N/A			0.0% N/A - N/A
	Make arrangements with neighboring utilities or mutual aid network			100.0% N/A - N/A			100.0% N/A - N/A
	Other						
	Observations			1			1
Sodium hydroxide	Seek alternative supplier			0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A
	Increase purchasing / maintain a larger than typical inventory			0.0% N/A - N/A	100.0% N/A - N/A		48.7% 48.7% - 48.7%
	Switch chemicals, procedures, or technologies			0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A
	Make arrangements with neighboring utilities or mutual aid network			100.0% N/A - N/A	0.0% N/A - N/A		51.3% 51.3% - 51.3%
	Other						
	Observations			1	1		2

Table E.14. Question B2.1.3: What steps have you taken or are you taking to prepare for potential shortages and supply chain disruptions? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Sodium hypochlorite	Seek alternative supplier	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	50.0% 2.0% - 98.0%		12.6% 1.5% - 57.4%
	Increase purchasing / maintain a larger than typical inventory	100.0% N/A - N/A	100.0% N/A - N/A	72.0% 23.6% - 95.5%	50.0% 2.0% - 98.0%		74.2% 30.8% - 94.9%
	Switch chemicals, procedures, or technologies	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A
	Make arrangements with neighboring utilities or mutual aid network	0.0% N/A - N/A	0.0% N/A - N/A	28.0% 4.5% - 76.4%	0.0% N/A - N/A		13.2% 1.6% - 59.2%
	Other						
	Observations	1	1	4	2		8

N/A: confidence interval could not be calculated.

Table E.15. Question B2.2.1: How severe are your concerns about personal protective equipment shortages or supply chain disruptions?

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
N95 masks and/or elastomeric respirators	Mean score (0 to 3)	0.466 -0.053 - 0.985	0.189 -0.118 - 0.496	0.720 0.365 - 1.076	0.437 0.058 - 0.817	0.931 0.289 - 1.572	0.607 0.385 - 0.830
	None (0)	76.7% 43.5% - 93.4%	93.7% 72.4% - 98.8%	60.5% 41.9% - 76.4%	56.3% 21.6% - 85.8%	46.5% 18.7% - 76.7%	65.6% 53.2% - 76.1%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	12.8% 4.6% - 31.2%	43.7% 14.2% - 78.4%	13.9% 4.1% - 37.8%	11.8% 5.9% - 22.2%
	Moderate (2)	23.3% 6.6% - 56.5%	0.0% N/A - N/A	20.9% 9.4% - 40.0%	0.0% N/A - N/A	39.6% 14.2% - 72.3%	18.9% 10.8% - 31.0%
	Severe (3)	0.0% N/A - N/A	6.3% 1.2% - 27.6%	5.8% 1.5% - 20.3%	0.0% N/A - N/A	0.0% N/A - N/A	3.7% 1.2% - 10.7%
	Observations	8	7	28	6	8	57
Alternative mask options (surgical, cloth, etc.)	Mean score (0 to 3)	0.347 -0.065 - 0.758	0.189 -0.118 - 0.496	0.511 0.231 - 0.792	0.656 0.014 - 1.298	0.702 0.178 - 1.226	0.476 0.299 - 0.653
	None (0)	76.7% 43.5% - 93.4%	93.7% 72.4% - 98.8%	64.9% 46.0% - 80.1%	56.3% 21.6% - 85.8%	46.5% 18.7% - 76.7%	67.8% 55.7% - 77.8%
	Slight (1)	12.0% 2.0% - 48.0%	0.0% N/A - N/A	19.0% 8.6% - 36.9%	21.9% 3.4% - 68.7%	36.7% 13.8% - 67.7%	17.7% 10.1% - 29.1%
	Moderate (2)	11.3% 1.8% - 46.9%	0.0% N/A - N/A	16.1% 6.6% - 34.0%	21.9% 3.4% - 68.7%	16.8% 2.8% - 58.1%	13.7% 7.3% - 24.3%
	Severe (3)	0.0% N/A - N/A	6.3% 1.2% - 27.6%	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.8% 0.2% - 4.1%
	Observations	8	7	28	6	8	57

Table E.15. Question B2.2.1: How severe are your concerns about personal protective equipment shortages or supply chain disruptions?

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Face shield and/or protective eye wear	Mean score (0 to 3)	0.227 -0.162 - 0.616	0.000 0.000 - 0.000	0.573 0.267 - 0.879	0.437 0.058 - 0.817	0.474 -0.066 - 1.014	0.415 0.231 - 0.598
	None (0)	88.7% 53.1% - 98.2%	100.0% N/A - N/A	64.9% 46.0% - 80.1%	56.3% 21.6% - 85.8%	69.4% 36.3% - 90.0%	73.4% 61.2% - 82.8%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	12.8% 4.6% - 31.2%	43.7% 14.2% - 78.4%	13.9% 4.1% - 37.8%	11.8% 5.9% - 22.2%
	Moderate (2)	11.3% 1.8% - 46.9%	0.0% N/A - N/A	22.2% 10.6% - 40.9%	0.0% N/A - N/A	16.8% 2.8% - 58.1%	14.8% 7.9% - 26.2%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	8	7	28	6	8	57
Nitrile and/or latex gloves	Mean score (0 to 3)	0.466 -0.053 - 0.985	0.189 -0.118 - 0.496	0.803 0.443 - 1.162	0.656 0.014 - 1.298	1.029 0.209 - 1.849	0.679 0.440 - 0.918
	None (0)	76.7% 43.5% - 93.4%	93.7% 72.4% - 98.8%	56.4% 38.2% - 73.0%	56.3% 21.6% - 85.8%	46.5% 18.7% - 76.7%	63.6% 51.1% - 74.4%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	12.8% 4.6% - 31.2%	21.9% 3.4% - 68.7%	20.8% 7.6% - 45.6%	10.7% 5.2% - 20.8%
	Moderate (2)	23.3% 6.6% - 56.5%	0.0% N/A - N/A	25.0% 12.3% - 44.3%	21.9% 3.4% - 68.7%	15.9% 2.6% - 57.5%	20.0% 11.8% - 32.0%
	Severe (3)	0.0% N/A - N/A	6.3% 1.2% - 27.6%	5.8% 1.5% - 20.3%	0.0% N/A - N/A	16.8% 2.8% - 58.1%	5.7% 2.2% - 13.8%
	Observations	8	7	28	6	8	57

Table E.15. Question B2.2.1: How severe are your concerns about personal protective equipment shortages or supply chain disruptions?

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Tyvek suite and/or disposable coveralls	Mean score (0 to 3)	0.466 -0.053 - 0.985	0.000 0.000 - 0.000	0.501 0.213 - 0.789	0.219 -0.134 - 0.571	0.543 0.004 - 1.083	0.409 0.228 - 0.589
	None (0)	76.7% 43.5% - 93.4%	100.0% N/A - N/A	69.4% 50.3% - 83.5%	78.1% 31.3% - 96.6%	62.4% 31.4% - 85.8%	74.6% 62.6% - 83.8%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	12.8% 4.6% - 31.2%	21.9% 3.4% - 68.7%	20.8% 7.6% - 45.6%	10.7% 5.2% - 20.8%
	Moderate (2)	23.3% 6.6% - 56.5%	0.0% N/A - N/A	16.1% 6.6% - 34.0%	0.0% N/A - N/A	16.8% 2.8% - 58.1%	13.8% 7.3% - 24.6%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	1.7% 0.3% - 8.2%	0.0% N/A - N/A	0.0% N/A - N/A	0.8% 0.2% - 4.1%
	Observations	8	7	28	6	8	57
Sanitizing wipes, sprays for cleaning work offices, or gels for hand sanitizing	Mean score (0 to 3)	0.466 -0.053 - 0.985	0.000 0.000 - 0.000	0.726 0.371 - 1.081	0.656 0.014 - 1.298	1.257 0.307 - 2.207	0.644 0.396 - 0.891
	None (0)	76.7% 43.5% - 93.4%	100.0% N/A - N/A	60.5% 41.9% - 76.4%	56.3% 21.6% - 85.8%	46.5% 18.7% - 76.7%	66.4% 54.0% - 76.9%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	12.3% 4.3% - 30.3%	21.9% 3.4% - 68.7%	13.9% 4.1% - 37.8%	9.6% 4.5% - 19.2%
	Moderate (2)	23.3% 6.6% - 56.5%	0.0% N/A - N/A	21.4% 9.9% - 40.2%	21.9% 3.4% - 68.7%	6.9% 1.3% - 30.4%	17.2% 9.4% - 29.3%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	5.8% 1.5% - 20.3%	0.0% N/A - N/A	32.7% 9.9% - 68.2%	6.8% 2.7% - 16.3%
	Observations	8	7	28	6	8	57

N/A: confidence interval could not be calculated.

Table E.16. Question B2.2.2: For each item, what are you most concerned about? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
N95 masks and/or elastomeric respirators	Unavailable from supplier(s)	100.0% N/A - N/A	0.0% N/A - N/A	31.6% 9.4% - 67.2%	0.0% N/A - N/A	44.3% 10.5% - 84.3%	37.5% 19.1% - 60.5%
	Delayed / backordered from supplier(s)	100.0% N/A - N/A	100.0% N/A - N/A	70.3% 47.6% - 86.1%	100.0% N/A - N/A	87.0% 42.7% - 98.4%	80.9% 60.7% - 92.0%
	Transportation / distribution difficulties	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Price	0.0% N/A - N/A	0.0% N/A - N/A	30.2% 11.3% - 59.4%	0.0% N/A - N/A	57.3% 16.6% - 90.0%	27.7% 12.6% - 50.5%
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	2	1	10	2	5	20
Alternative mask options (surgical, cloth, etc.)	Unavailable from supplier(s)	100.0% N/A - N/A	0.0% N/A - N/A	11.8% 1.7% - 50.9%	0.0% N/A - N/A	31.3% 5.1% - 79.4%	24.7% 11.9% - 44.4%
	Delayed / backordered from supplier(s)	51.3% 6.6% - 94.0%	0.0% N/A - N/A	88.8% 51.4% - 98.4%	100.0% N/A - N/A	87.0% 42.7% - 98.4%	82.9% 61.6% - 93.6%
	Transportation / distribution difficulties	0.0% N/A - N/A	0.0% N/A - N/A	11.2% 1.6% - 48.6%	0.0% N/A - N/A	0.0% N/A - N/A	5.9% 0.8% - 32.2%
	Price	0.0% N/A - N/A	0.0% N/A - N/A	11.8% 1.7% - 50.9%	0.0% N/A - N/A	57.3% 16.6% - 90.0%	17.7% 7.1% - 37.7%
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	2	1	9	2	5	19

Table E.16. Question B2.2.2: For each item, what are you most concerned about? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Face shield and/or protective eye wear	Unavailable from supplier(s)	100.0% N/A - N/A		24.5% 5.2% - 65.8%	50.0% 4.9% - 95.1%	54.7% 12.3% - 91.2%	37.8% 15.7% - 66.4%
	Delayed / backordered from supplier(s)	0.0% N/A - N/A		88.8% 50.8% - 98.4%	50.0% 4.9% - 95.1%	100.0% N/A - N/A	78.4% 55.0% - 91.5%
	Transportation / distribution difficulties	0.0% N/A - N/A		11.2% 1.6% - 49.2%	0.0% N/A - N/A	0.0% N/A - N/A	7.2% 1.0% - 37.7%
	Price	0.0% N/A - N/A		11.8% 1.6% - 52.2%	0.0% N/A - N/A	77.4% 20.2% - 97.9%	18.3% 7.2% - 39.2%
	Other	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	1		9	2	3	15
Nitrile and/or latex gloves	Unavailable from supplier(s)	100.0% N/A - N/A	0.0% N/A - N/A	19.7% 4.4% - 56.4%	0.0% N/A - N/A	31.3% 5.2% - 79.2%	27.9% 12.5% - 51.1%
	Delayed / backordered from supplier(s)	100.0% N/A - N/A	100.0% N/A - N/A	82.1% 55.0% - 94.5%	100.0% N/A - N/A	100.0% N/A - N/A	89.5% 68.4% - 97.1%
	Transportation / distribution difficulties	48.7% 6.1% - 93.3%	0.0% N/A - N/A	9.0% 1.3% - 41.8%	0.0% N/A - N/A	0.0% N/A - N/A	10.5% 2.9% - 31.6%
	Price	48.7% 6.1% - 93.3%	0.0% N/A - N/A	18.4% 4.7% - 50.7%	0.0% N/A - N/A	57.3% 16.7% - 90.0%	26.2% 11.7% - 48.6%
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	2	1	11	2	5	21

Table E.16. Question B2.2.2: For each item, what are you most concerned about? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Tyvek suite and/or disposable coveralls	Unavailable from supplier(s)	100.0% N/A - N/A		13.5% 1.9% - 55.4%	0.0% N/A - N/A	44.6% 9.6% - 85.9%	31.4% 14.7% - 55.0%
	Delayed / backordered from supplier(s)	51.3% 6.5% - 94.1%		74.4% 41.5% - 92.3%	100.0% N/A - N/A	81.5% 28.3% - 98.0%	74.1% 51.8% - 88.4%
	Transportation / distribution difficulties	0.0% N/A - N/A		12.8% 1.7% - 54.9%	0.0% N/A - N/A	0.0% N/A - N/A	7.6% 1.0% - 39.5%
	Price	0.0% N/A - N/A		26.3% 6.4% - 64.8%	0.0% N/A - N/A	81.5% 28.3% - 98.0%	30.1% 12.1% - 57.3%
	Other	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	2		8	1	4	15
Sanitizing wipes, sprays for cleaning work offices, or gels for hand sanitizing	Unavailable from supplier(s)	100.0% N/A - N/A		21.7% 4.9% - 59.9%	0.0% N/A - N/A	31.3% 5.2% - 79.1%	30.3% 14.3% - 53.0%
	Delayed / backordered from supplier(s)	100.0% N/A - N/A		80.2% 51.5% - 93.9%	100.0% N/A - N/A	100.0% N/A - N/A	88.6% 66.1% - 96.9%
	Transportation / distribution difficulties	48.7% 6.0% - 93.4%		9.9% 1.5% - 44.8%	0.0% N/A - N/A	0.0% N/A - N/A	11.4% 3.1% - 33.9%
	Price	0.0% N/A - N/A		20.3% 5.3% - 53.7%	0.0% N/A - N/A	57.3% 16.4% - 90.2%	22.7% 9.6% - 45.0%
	Other	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	2		10	2	5	19

N/A: confidence interval could not be calculated.

Table E.17. Question B2.2.3: What steps have you taken or are you taking to prepare for potential shortages and supply chain disruptions? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
N95 masks and/or elastomeric respirators	Seek alternative supplier	51.3% 6.6% - 94.0%	100.0% N/A - N/A	42.9% 15.5% - 75.5%	50.0% 5.2% - 94.8%	25.9% 6.0% - 65.7%	42.9% 21.9% - 66.8%
	Increase purchasing / maintain a larger than typical inventory	100.0% N/A - N/A	0.0% N/A - N/A	58.5% 26.8% - 84.5%	50.0% 5.2% - 94.8%	87.0% 42.7% - 98.4%	66.2% 41.2% - 84.6%
	Switch chemicals, procedures, or technologies	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Make arrangements w/ neighboring utilities or mutual aid network	0.0% N/A - N/A	0.0% N/A - N/A	42.0% 17.1% - 71.9%	0.0% N/A - N/A	0.0% N/A - N/A	23.7% 8.9% - 49.4%
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	2	1	10	2	5	20
Alternative mask options (surgical, cloth, etc.)	Seek alternative supplier	51.3% 6.6% - 94.0%	100.0% N/A - N/A	35.6% 10.2% - 73.0%	50.0% 5.2% - 94.8%	13.0% 1.6% - 57.3%	36.4% 16.4% - 62.5%
	Increase purchasing / maintain a larger than typical inventory	100.0% N/A - N/A	0.0% N/A - N/A	64.4% 27.0% - 89.8%	50.0% 5.2% - 94.8%	100.0% N/A - N/A	72.5% 44.8% - 89.5%
	Switch chemicals, procedures, or technologies	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Make arrangements w/ neighboring utilities or mutual aid network	0.0% N/A - N/A	0.0% N/A - N/A	36.2% 12.5% - 69.2%	0.0% N/A - N/A	0.0% N/A - N/A	19.3% 6.6% - 45.0%
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	2	1	9	2	5	19

Table E.17. Question B2.2.3: What steps have you taken or are you taking to prepare for potential shortages and supply chain disruptions? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Face shield and/or protective eye wear	Seek alternative supplier	0.0% N/A - N/A		24.5% 5.2% - 65.8%	0.0% N/A - N/A	22.6% 2.1% - 79.8%	18.9% 5.1% - 50.2%
	Increase purchasing / maintain a larger than typical inventory	100.0% N/A - N/A		88.2% 47.8% - 98.4%	50.0% 4.9% - 95.1%	100.0% N/A - N/A	85.2% 53.9% - 96.6%
	Switch chemicals, procedures, or technologies	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Make arrangements w/ neighboring utilities or mutual aid network	0.0% N/A - N/A		36.2% 13.1% - 68.1%	50.0% 4.9% - 95.1%	0.0% N/A - N/A	30.6% 11.6% - 59.6%
	Other	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	1		9	2	3	15
Nitrile and/or latex gloves	Seek alternative supplier	100.0% N/A - N/A	0.0% N/A - N/A	39.3% 15.4% - 69.8%	0.0% N/A - N/A	13.0% 1.6% - 57.3%	36.2% 18.3% - 59.0%
	Increase purchasing / maintain a larger than typical inventory	100.0% N/A - N/A	100.0% N/A - N/A	70.9% 38.6% - 90.4%	100.0% N/A - N/A	100.0% N/A - N/A	82.9% 58.8% - 94.3%
	Switch chemicals, procedures, or technologies	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Make arrangements w/ neighboring utilities or mutual aid network	48.7% 6.1% - 93.3%	0.0% N/A - N/A	29.1% 9.6% - 61.4%	0.0% N/A - N/A	0.0% N/A - N/A	22.3% 8.3% - 47.7%
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	2	1	11	2	5	21

Table E.17. Question B2.2.3: What steps have you taken or are you taking to prepare for potential shortages and supply chain disruptions? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Tyvek suite and/or disposable coveralls	Seek alternative supplier	51.3% 6.5% - 94.1%		26.3% 6.4% - 64.8%	0.0% N/A - N/A	18.5% 2.0% - 71.7%	26.8% 9.8% - 55.0%
	Increase purchasing / maintain a larger than typical inventory	100.0% N/A - N/A		73.7% 35.2% - 93.6%	100.0% N/A - N/A	100.0% N/A - N/A	84.5% 52.1% - 96.5%
	Switch chemicals, procedures, or technologies	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Make arrangements w/ neighboring utilities or mutual aid network	0.0% N/A - N/A		26.9% 10.1% - 54.9%	0.0% N/A - N/A	0.0% N/A - N/A	15.9% 4.8% - 41.5%
	Other	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	2		8	1	4	15
Sanitizing wipes, sprays for cleaning work offices, or gels for hand	Seek alternative supplier	51.3% 6.6% - 94.0%		42.9% 15.5% - 75.5%	50.0% 5.2% - 94.8%	44.3% 10.4% - 84.6%	45.0% 23.9% - 68.0%
	Increase purchasing / maintain a larger than typical inventory	100.0% N/A - N/A		68.4% 32.8% - 90.6%	50.0% 5.2% - 94.8%	100.0% N/A - N/A	76.1% 48.7% - 91.4%
	Switch chemicals, procedures, or technologies	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A	31.3% 5.2% - 79.1%	6.0% 0.8% - 33.1%
	Make arrangements w/ neighboring utilities or mutual aid network	0.0% N/A - N/A		32.1% 11.5% - 63.4%	0.0% N/A - N/A	0.0% N/A - N/A	18.5% 6.3% - 43.3%
	Other	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	2		10	2	5	19

N/A: confidence interval could not be calculated.

Table E.18. Question B2.3.1: How severe are your concerns about shortages or supply chain disruptions involving durable goods and other critical equipment and supplies, etc.?

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Filter media	Mean score (0 to 3)	0.000 0.000 - 0.000	0.152 -0.106 - 0.410	0.197 -0.038 - 0.432	0.000 0.000 - 0.000	0.168 -0.102 - 0.437	0.137 0.014 - 0.260
	None (0)	100.0% N/A - N/A	84.8% 43.0% - 97.6%	90.3% 73.8% - 96.8%	100.0% N/A - N/A	83.2% 41.9% - 97.2%	91.2% 81.4% - 96.1%
	Slight (1)	0.0% N/A - N/A	15.2% 2.4% - 57.0%	3.9% 0.6% - 21.5%	0.0% N/A - N/A	16.8% 2.8% - 58.1%	6.0% 2.1% - 15.7%
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	1.7% 0.3% - 8.2%	0.0% N/A - N/A	0.0% N/A - N/A	0.8% 0.2% - 4.1%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.4%	0.0% N/A - N/A	0.0% N/A - N/A	2.0% 0.3% - 11.4%
	Observations	8	7	28	6	8	57
Granular/ Powdered Activated Carbon (GAC/ PAC)	Mean score (0 to 3)	0.000 0.000 - 0.000	0.152 -0.106 - 0.410	0.197 -0.038 - 0.432	0.437 -0.267 - 1.142	0.168 -0.102 - 0.437	0.175 0.035 - 0.315
	None (0)	100.0% N/A - N/A	84.8% 43.0% - 97.6%	90.3% 73.8% - 96.8%	78.1% 31.3% - 96.6%	83.2% 41.9% - 97.2%	89.3% 79.0% - 94.8%
	Slight (1)	0.0% N/A - N/A	15.2% 2.4% - 57.0%	3.9% 0.6% - 21.5%	0.0% N/A - N/A	16.8% 2.8% - 58.1%	6.0% 2.1% - 15.7%
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	1.7% 0.3% - 8.2%	21.9% 3.4% - 68.7%	0.0% N/A - N/A	2.8% 0.7% - 10.4%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.4%	0.0% N/A - N/A	0.0% N/A - N/A	2.0% 0.3% - 11.4%
	Observations	8	7	28	6	8	57

Table E.18. Question B2.3.1: How severe are your concerns about shortages or supply chain disruptions involving durable goods and other critical equipment and supplies, etc.?

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Membrane modules	Mean score (0 to 3)	0.000 0.000 - 0.000	0.152 -0.106 - 0.410	0.197 -0.038 - 0.432	0.000 0.000 - 0.000	0.349 0.007 - 0.691	0.159 0.030 - 0.287
	None (0)	100.0% N/A - N/A	84.8% 43.0% - 97.6%	90.3% 73.8% - 96.8%	100.0% N/A - N/A	65.1% 29.3% - 89.4%	89.0% 78.2% - 94.8%
	Slight (1)	0.0% N/A - N/A	15.2% 2.4% - 57.0%	3.9% 0.6% - 21.5%	0.0% N/A - N/A	34.9% 10.6% - 70.7%	8.1% 3.3% - 18.9%
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	1.7% 0.3% - 8.2%	0.0% N/A - N/A	0.0% N/A - N/A	0.8% 0.2% - 4.1%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.4%	0.0% N/A - N/A	0.0% N/A - N/A	2.0% 0.3% - 11.4%
	Observations	8	7	28	6	8	57
Pumps	Mean score (0 to 3)	0.259 -0.185 - 0.703	0.304 -0.212 - 0.820	0.361 0.093 - 0.629	0.656 -0.401 - 1.713	0.890 0.049 - 1.731	0.426 0.200 - 0.651
	None (0)	87.1% 48.4% - 98.0%	84.8% 43.0% - 97.6%	82.4% 65.4% - 92.1%	78.1% 31.3% - 96.6%	60.4% 27.7% - 85.8%	80.5% 68.7% - 88.6%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	8.4% 2.3% - 26.5%	0.0% N/A - N/A	6.9% 1.3% - 30.4%	4.9% 1.6% - 14.2%
	Moderate (2)	12.9% 2.0% - 51.6%	15.2% 2.4% - 57.0%	0.0% N/A - N/A	0.0% N/A - N/A	15.9% 2.6% - 57.5%	6.1% 2.1% - 16.6%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	9.2% 3.6% - 21.7%	21.9% 3.4% - 68.7%	16.8% 2.8% - 58.1%	8.5% 3.9% - 17.5%
	Observations	8	7	28	6	8	57

Table E.18. Question B2.3.1: How severe are your concerns about shortages or supply chain disruptions involving durable goods and other critical equipment and supplies, etc.?

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Motors	Mean score (0 to 3)	0.259 -0.185 - 0.703	0.304 -0.212 - 0.820	0.361 0.093 - 0.629	0.656 -0.401 - 1.713	1.253 0.451 - 2.055	0.469 0.233 - 0.706
	None (0)	87.1% 48.4% - 98.0%	84.8% 43.0% - 97.6%	82.4% 65.4% - 92.1%	78.1% 31.3% - 96.6%	42.3% 15.9% - 74.0%	78.3% 66.1% - 87.0%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	8.4% 2.3% - 26.5%	0.0% N/A - N/A	6.9% 1.3% - 30.4%	4.9% 1.6% - 14.2%
	Moderate (2)	12.9% 2.0% - 51.6%	15.2% 2.4% - 57.0%	0.0% N/A - N/A	0.0% N/A - N/A	34.0% 10.2% - 70.2%	8.3% 3.3% - 19.3%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	9.2% 3.6% - 21.7%	21.9% 3.4% - 68.7%	16.8% 2.8% - 58.1%	8.5% 3.9% - 17.5%
	Observations	8	7	28	6	8	57
Pipes	Mean score (0 to 3)	0.259 -0.185 - 0.703	0.304 -0.212 - 0.820	0.322 0.061 - 0.582	0.875 -0.089 - 1.838	0.890 0.049 - 1.731	0.426 0.200 - 0.651
	None (0)	87.1% 48.4% - 98.0%	84.8% 43.0% - 97.6%	86.3% 70.9% - 94.2%	56.3% 21.6% - 85.8%	60.4% 27.7% - 85.8%	80.5% 68.7% - 88.6%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	4.5% 0.7% - 22.9%	21.9% 3.4% - 68.7%	6.9% 1.3% - 30.4%	4.9% 1.6% - 14.2%
	Moderate (2)	12.9% 2.0% - 51.6%	15.2% 2.4% - 57.0%	0.0% N/A - N/A	0.0% N/A - N/A	15.9% 2.6% - 57.5%	6.1% 2.1% - 16.6%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	9.2% 3.6% - 21.7%	21.9% 3.4% - 68.7%	16.8% 2.8% - 58.1%	8.5% 3.9% - 17.5%
	Observations	8	7	28	6	8	57

Table E.18. Question B2.3.1: How severe are your concerns about shortages or supply chain disruptions involving durable goods and other critical equipment and supplies, etc.?

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Valves	Mean score (0 to 3)	0.259 -0.185 - 0.703	0.456 -0.317 - 1.230	0.322 0.061 - 0.582	0.875 -0.089 - 1.838	1.253 0.451 - 2.055	0.490 0.243 - 0.737
	None (0)	87.1% 48.4% - 98.0%	84.8% 43.0% - 97.6%	86.3% 70.9% - 94.2%	56.3% 21.6% - 85.8%	42.3% 15.9% - 74.0%	78.3% 66.1% - 87.0%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	4.5% 0.7% - 22.9%	21.9% 3.4% - 68.7%	6.9% 1.3% - 30.4%	4.9% 1.6% - 14.2%
	Moderate (2)	12.9% 2.0% - 51.6%	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	34.0% 10.2% - 70.2%	6.3% 2.2% - 16.6%
	Severe (3)	0.0% N/A - N/A	15.2% 2.4% - 57.0%	9.2% 3.6% - 21.7%	21.9% 3.4% - 68.7%	16.8% 2.8% - 58.1%	10.5% 5.2% - 20.0%
	Observations	8	7	28	6	8	57
Fuel	Mean score (0 to 3)	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.360 0.027 - 0.692	0.437 -0.267 - 1.142	0.069 -0.045 - 0.183	0.223 0.040 - 0.406
	None (0)	100.0% N/A - N/A	100.0% N/A - N/A	88.0% 72.0% - 95.5%	78.1% 31.3% - 96.6%	93.1% 69.6% - 98.7%	91.4% 81.8% - 96.1%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	6.9% 1.3% - 30.4%	0.8% 0.2% - 4.1%
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	21.9% 3.4% - 68.7%	0.0% N/A - N/A	1.9% 0.3% - 11.3%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	12.0% 4.5% - 28.0%	0.0% N/A - N/A	0.0% N/A - N/A	5.9% 2.2% - 14.8%
	Observations	8	7	28	6	8	57

Table E.18. Question B2.3.1: How severe are your concerns about shortages or supply chain disruptions involving durable goods and other critical equipment and supplies, etc.?

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Vehicles	Mean score (0 to 3)	0.000 0.000 - 0.000	0.000 0.000 - 0.000	0.209 -0.028 - 0.446	0.219 -0.134 - 0.571	0.069 -0.045 - 0.183	0.130 0.006 - 0.253
	None (0)	100.0% N/A - N/A	100.0% N/A - N/A	92.5% 79.3% - 97.5%	78.1% 31.3% - 96.6%	93.1% 69.6% - 98.7%	93.6% 85.4% - 97.3%
	Slight (1)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	21.9% 3.4% - 68.7%	6.9% 1.3% - 30.4%	2.8% 0.7% - 10.4%
	Moderate (2)	0.0% N/A - N/A	0.0% N/A - N/A	1.7% 0.3% - 8.2%	0.0% N/A - N/A	0.0% N/A - N/A	0.8% 0.2% - 4.1%
	Severe (3)	0.0% N/A - N/A	0.0% N/A - N/A	5.8% 1.5% - 20.3%	0.0% N/A - N/A	0.0% N/A - N/A	2.9% 0.7% - 10.6%
	Observations	8	7	28	6	8	57

N/A: confidence interval could not be calculated.

Table E.19. Question B2.3.2: For each item, what are you most concerned about? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Filter media	Unavailable from supplier(s)		100.0% N/A - N/A	82.5% 63.2% - 92.8%		0.0% N/A - N/A	67.6% 21.1% - 94.2%
	Delayed / backordered from supplier(s)		0.0% N/A - N/A	57.7% 16.1% - 90.7%		0.0% N/A - N/A	31.2% 31.2% - 31.2%
	Transportation / distribution difficulties		0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Price		0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Other		0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Observations		1	3		1	5
Granular/ Powdered Activated Carbon (GAC/ PAC)	Unavailable from supplier(s)		100.0% N/A - N/A	82.5% 53.5% - 95.1%	100.0% N/A - N/A	0.0% N/A - N/A	73.4% 28.9% - 94.9%
	Delayed / backordered from supplier(s)		0.0% N/A - N/A	57.7% 10.8% - 93.9%	0.0% N/A - N/A	0.0% N/A - N/A	25.7% 5.0% - 69.2%
	Transportation / distribution difficulties		0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Price		0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Other		0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations		1	3	1	1	6

Table E.19. Question B2.3.2: For each item, what are you most concerned about? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Membrane modules	Unavailable from supplier(s)		100.0% N/A - N/A	82.5% 62.5% - 93.0%		0.0% N/A - N/A	54.2% 20.9% - 84.1%
	Delayed / backordered from supplier(s)		0.0% N/A - N/A	57.7% 15.3% - 91.2%		0.0% N/A - N/A	25.0% 25.0% - 25.0%
	Transportation / distribution difficulties		0.0% N/A - N/A	0.0% N/A - N/A		52.0% 12.5% - 89.1%	19.9% 19.9% - 19.9%
	Price		0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Other		0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Observations		1	3		2	6
Pumps	Unavailable from supplier(s)	0.0% N/A - N/A	100.0% N/A - N/A	80.6% 46.5% - 95.2%	0.0% N/A - N/A	42.3% 6.1% - 89.3%	56.3% 27.6% - 81.4%
	Delayed / backordered from supplier(s)	100.0% N/A - N/A	0.0% N/A - N/A	66.9% 24.1% - 92.8%	100.0% N/A - N/A	100.0% N/A - N/A	75.0% 48.7% - 90.5%
	Transportation / distribution difficulties	0.0% N/A - N/A	0.0% N/A - N/A	22.2% 3.3% - 70.7%	0.0% N/A - N/A	42.3% 6.1% - 89.3%	20.2% 4.3% - 58.4%
	Price	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	1	1	6	1	3	12

Table E.19. Question B2.3.2: For each item, what are you most concerned about? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Motors	Unavailable from supplier(s)	0.0% N/A - N/A	100.0% N/A - N/A	80.6% 46.5% - 95.2%	0.0% N/A - N/A	29.0% 4.1% - 79.8%	50.7% 25.9% - 75.1%
	Delayed / backordered from supplier(s)	100.0% N/A - N/A	0.0% N/A - N/A	66.9% 24.1% - 92.8%	100.0% N/A - N/A	100.0% N/A - N/A	77.5% 53.1% - 91.3%
	Transportation / distribution difficulties	0.0% N/A - N/A	0.0% N/A - N/A	22.2% 3.3% - 70.7%	0.0% N/A - N/A	29.0% 4.1% - 79.8%	18.1% 4.0% - 54.2%
	Price	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	1	1	6	1	4	13
Pipes	Unavailable from supplier(s)	0.0% N/A - N/A	100.0% N/A - N/A	42.5% 9.3% - 84.2%	0.0% N/A - N/A	42.3% 6.1% - 89.3%	35.3% 27.8% - 43.6%
	Delayed / backordered from supplier(s)	100.0% N/A - N/A	0.0% N/A - N/A	57.5% 15.8% - 90.7%	100.0% N/A - N/A	100.0% N/A - N/A	75.0% 48.7% - 90.5%
	Transportation / distribution difficulties	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	42.3% 6.1% - 89.3%	10.3% 1.3% - 50.0%
	Price	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	1	1	5	2	3	12

Table E.19. Question B2.3.2: For each item, what are you most concerned about? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Valves	Unavailable from supplier(s)	0.0% N/A - N/A	100.0% N/A - N/A	42.5% 9.3% - 84.2%	0.0% N/A - N/A	29.0% 4.1% - 79.8%	31.8% 25.1% - 39.3%
	Delayed / backordered from supplier(s)	100.0% N/A - N/A	0.0% N/A - N/A	57.5% 15.8% - 90.7%	100.0% N/A - N/A	100.0% N/A - N/A	77.5% 53.1% - 91.3%
	Transportation / distribution difficulties	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	29.0% 4.1% - 79.8%	9.3% 1.2% - 46.5%
	Price	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	1	1	5	2	4	13
Fuel	Unavailable from supplier(s)			48.6% 27.0% - 70.7%	0.0% N/A - N/A	100.0% N/A - N/A	42.8% 26.0% - 61.4%
	Delayed / backordered from supplier(s)			51.4% 29.3% - 73.0%	100.0% N/A - N/A	100.0% N/A - N/A	66.9% 46.8% - 82.3%
	Transportation / distribution difficulties			37.2% 27.8% - 47.7%	0.0% N/A - N/A	0.0% N/A - N/A	25.3% 25.3% - 25.3%
	Price			0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Other			0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations			4	1	1	6

Table E.19. Question B2.3.2: For each item, what are you most concerned about? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Vehicles	Unavailable from supplier(s)			54.7% 31.7% - 75.9%	100.0% N/A - N/A	0.0% N/A - N/A	61.1% 61.1% - 61.1%
	Delayed / backordered from supplier(s)			45.3% 24.1% - 68.3%	0.0% N/A - N/A	100.0% N/A - N/A	38.9% 38.9% - 38.9%
	Transportation / distribution difficulties			0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Price			0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Other			0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations			3	1	1	5

N/A: confidence interval could not be calculated.

Table E.20. Question B2.3.3: What steps have you taken or are you taking to prepare for potential shortages and supply chain disruptions? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Filter media	Seek alternative supplier		0.0% N/A - N/A	40.2% 14.3% - 72.9%		0.0% N/A - N/A	21.7% 21.7% - 21.7%
	Increase purchasing / maintain a larger than typical inventory		100.0% N/A - N/A	57.7% 16.1% - 90.7%		0.0% N/A - N/A	54.2% 16.2% - 87.9%
	Switch chemicals, procedures, or technologies		0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Make arrangements with neighboring utilities or mutual aid network		0.0% N/A - N/A	42.3% 9.4% - 83.9%		0.0% N/A - N/A	22.9% 2.3% - 79.1%
	Other		0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Observations		1	3		1	5
Granular/ Powdered Activated Carbon (GAC/ PAC)	Seek alternative supplier		0.0% N/A - N/A	40.2% 5.5% - 88.5%	100.0% N/A - N/A	0.0% N/A - N/A	35.7% 35.7% - 35.7%
	Increase purchasing / maintain a larger than typical inventory		100.0% N/A - N/A	57.7% 10.8% - 93.9%	0.0% N/A - N/A	0.0% N/A - N/A	44.5% 9.0% - 86.7%
	Switch chemicals, procedures, or technologies		0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Make arrangements with neighboring utilities or mutual aid network		0.0% N/A - N/A	42.3% 6.1% - 89.2%	0.0% N/A - N/A	0.0% N/A - N/A	18.8% 2.0% - 72.8%
	Other		0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations		1	3	1	1	6

Table E.20. Question B2.3.3: What steps have you taken or are you taking to prepare for potential shortages and supply chain disruptions? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Membrane modules	Seek alternative supplier		0.0% N/A - N/A	40.2% 13.8% - 73.7%		52.0% 12.5% - 89.1%	37.3% 37.3% - 37.3%
	Increase purchasing / maintain a larger than typical inventory		100.0% N/A - N/A	57.7% 15.3% - 91.2%		0.0% N/A - N/A	43.4% 14.4% - 77.7%
	Switch chemicals, procedures, or technologies		0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Make arrangements with neighboring utilities or mutual aid network		0.0% N/A - N/A	42.3% 8.8% - 84.7%		52.0% 12.5% - 89.1%	38.2% 11.4% - 74.9%
	Other		0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Observations		1	3		2	6
Pumps	Seek alternative supplier	100.0% N/A - N/A	0.0% N/A - N/A	31.9% 6.9% - 74.8%	0.0% N/A - N/A	17.5% 2.1% - 68.1%	29.6% 8.9% - 64.4%
	Increase purchasing / maintain a larger than typical inventory	0.0% N/A - N/A	100.0% N/A - N/A	66.9% 24.1% - 92.8%	0.0% N/A - N/A	40.2% 5.5% - 88.5%	49.7% 18.8% - 80.9%
	Switch chemicals, procedures, or technologies	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Make arrangements with neighboring utilities or mutual aid network	100.0% N/A - N/A	0.0% N/A - N/A	23.4% 3.5% - 72.0%	100.0% N/A - N/A	0.0% N/A - N/A	31.4% 8.2% - 70.1%
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	42.3% 6.1% - 89.3%	10.3% 1.3% - 50.0%
	Observations	1	1	6	1	3	12

Table E.20. Question B2.3.3: What steps have you taken or are you taking to prepare for potential shortages and supply chain disruptions? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Motors	Seek alternative supplier	100.0% N/A - N/A	0.0% N/A - N/A	31.9% 6.9% - 74.7%	100.0% N/A - N/A	43.4% 9.2% - 85.4%	45.5% 21.7% - 71.5%
	Increase purchasing / maintain a larger than typical inventory	0.0% N/A - N/A	100.0% N/A - N/A	66.9% 24.1% - 92.8%	0.0% N/A - N/A	27.5% 3.8% - 78.7%	44.7% 17.7% - 75.2%
	Switch chemicals, procedures, or technologies	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Make arrangements with neighboring utilities or mutual aid network	100.0% N/A - N/A	0.0% N/A - N/A	23.4% 3.5% - 72.0%	0.0% N/A - N/A	31.4% 4.5% - 81.6%	29.4% 10.4% - 60.0%
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	29.0% 4.1% - 79.8%	9.3% 1.2% - 46.5%
	Observations	1	1	6	1	4	13
Pipes	Seek alternative supplier	100.0% N/A - N/A	0.0% N/A - N/A	12.5% 1.4% - 58.0%	100.0% N/A - N/A	0.0% N/A - N/A	35.1% 12.6% - 66.9%
	Increase purchasing / maintain a larger than typical inventory	0.0% N/A - N/A	100.0% N/A - N/A	57.5% 15.8% - 90.7%	0.0% N/A - N/A	57.7% 10.7% - 93.9%	44.2% 15.5% - 77.4%
	Switch chemicals, procedures, or technologies	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Make arrangements with neighboring utilities or mutual aid network	100.0% N/A - N/A	0.0% N/A - N/A	30.1% 4.7% - 78.9%	0.0% N/A - N/A	0.0% N/A - N/A	21.5% 4.5% - 61.3%
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	42.3% 6.1% - 89.3%	10.3% 1.3% - 50.0%
	Observations	1	1	5	2	3	12

Table E.20. Question B2.3.3: What steps have you taken or are you taking to prepare for potential shortages and supply chain disruptions? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Valves	Seek alternative supplier	100.0% N/A - N/A	0.0% N/A - N/A	12.5% 1.4% - 58.0%	100.0% N/A - N/A	31.4% 4.5% - 81.6%	41.6% 19.1% - 68.4%
	Increase purchasing / maintain a larger than typical inventory	0.0% N/A - N/A	100.0% N/A - N/A	57.5% 15.8% - 90.7%	0.0% N/A - N/A	39.6% 8.1% - 83.0%	39.8% 14.6% - 71.9%
	Switch chemicals, procedures, or technologies	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Make arrangements with neighboring utilities or mutual aid network	100.0% N/A - N/A	0.0% N/A - N/A	30.1% 4.7% - 78.9%	0.0% N/A - N/A	31.4% 4.5% - 81.6%	29.4% 10.4% - 60.0%
	Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	29.0% 4.1% - 79.8%	9.3% 1.2% - 46.5%
	Observations	1	1	5	2	4	13
Fuel	Seek alternative supplier			14.2% 2.0% - 57.0%	100.0% N/A - N/A	100.0% N/A - N/A	41.6% 25.0% - 60.3%
	Increase purchasing / maintain a larger than typical inventory			51.4% 29.3% - 73.0%	0.0% N/A - N/A	0.0% N/A - N/A	35.0% 19.3% - 54.8%
	Switch chemicals, procedures, or technologies			0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Make arrangements with neighboring utilities or mutual aid network			34.4% 25.7% - 44.2%	0.0% N/A - N/A	0.0% N/A - N/A	23.4% 23.4% - 23.4%
	Other			0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations			4	1	1	6

Table E.20. Question B2.3.3: What steps have you taken or are you taking to prepare for potential shortages and supply chain disruptions? (select all that apply)

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Supply Chain Issue	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Vehicles	Seek alternative supplier			0.0% N/A - N/A	100.0% N/A - N/A	100.0% N/A - N/A	42.7% 21.3% - 67.2%
	Increase purchasing / maintain a larger than typical inventory			22.6% 3.0% - 73.4%	0.0% N/A - N/A	0.0% N/A - N/A	13.0% 1.6% - 57.3%
	Switch chemicals, procedures, or technologies			0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Make arrangements with neighboring utilities or mutual aid network			54.7% 31.7% - 75.9%	0.0% N/A - N/A	0.0% N/A - N/A	31.3% 31.3% - 31.3%
	Other			22.6% 3.0% - 73.4%	0.0% N/A - N/A	0.0% N/A - N/A	13.0% 1.6% - 57.3%
	Observations			3	1	1	5

N/A: confidence interval could not be calculated.

Table E.21. Question B3: Has your organization made any requests for personnel, supplies, or equipment to your tribal, local, or state emergency operations center (EOC), primacy agency, or similar organization?

American Indian Utilities

Estimates and 95 Percent Confidence Intervals

Response	Percentage Reporting by Population Served					
	< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Yes, entirely fulfilled	49.8% 21.5% - 78.2%	45.6% 17.5% - 76.8%	32.9% 18.9% - 50.8%	25.5% 4.4% - 71.9%	10.3% 1.9% - 40.6%	34.1% 23.7% - 46.4%
Yes, partly fulfilled	12.9% 2.0% - 51.6%	0.0% N/A - N/A	26.0% 13.3% - 44.7%	48.3% 15.4% - 82.8%	23.7% 6.1% - 59.6%	21.9% 13.2% - 33.9%
Yes, not fulfilled	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	6.9% 1.3% - 30.4%	0.8% 0.2% - 4.1%
No, support was not needed	37.2% 13.4% - 69.4%	16.4% 2.7% - 57.9%	19.0% 9.3% - 35.0%	26.2% 7.0% - 62.7%	41.0% 14.4% - 74.1%	25.0% 16.4% - 36.0%
No, but we would have used it if it had been available or if we had known of it	0.0% N/A - N/A	15.2% 2.4% - 57.0%	14.0% 5.4% - 31.7%	0.0% N/A - N/A	0.0% N/A - N/A	9.0% 3.9% - 19.5%
Do not know	0.0% N/A - N/A	22.7% 5.7% - 58.7%	8.1% 2.4% - 24.2%	0.0% N/A - N/A	18.1% 3.0% - 61.1%	9.2% 4.0% - 19.8%
Observations	8	7	29	5	8	57

N/A: confidence interval could not be calculated.

Table E.22. Question C.1: To what extent did your organization experience shortages of key personnel, including contractors performing critical functions to maintain operations, from January 2020 through present day?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Personnel Type	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Licensed or certified operators	Mean Score (0-3)	0.85 0.09 - 1.62	0.99 0.13 - 1.84	0.56 0.28 - 0.83	1.40 0.36 - 2.45	1.30 0.53 - 2.08	0.82 0.56 - 1.09
	No Shortage (0)	63.7% 31.6% - 87.0%	50.0% 17.9% - 82.1%	63.7% 45.4% - 78.8%	34.7% 8.2% - 75.9%	35.3% 11.7% - 69.3%	56.2% 43.2% - 68.4%
	Slight Shortage (1)	0.0% N/A - N/A	17.6% 2.9% - 60.3%	18.4% 8.1% - 36.7%	15.6% 2.7% - 54.8%	15.9% 2.6% - 57.5%	14.6% 7.7% - 25.9%
	Moderate Shortage (2)	23.3% 6.6% - 56.5%	16.2% 2.5% - 59.4%	16.1% 7.0% - 32.9%	24.2% 3.7% - 72.4%	32.0% 10.1% - 66.4%	20.0% 11.8% - 31.8%
	Severe Shortage (3)	12.9% 2.0% - 51.6%	16.2% 2.5% - 59.4%	1.7% 0.3% - 8.7%	25.5% 4.4% - 71.9%	16.8% 2.8% - 58.1%	9.2% 4.1% - 19.5%
Laboratory technicians/ sample analysts	Mean Score (0-3)	0.37 0.06 - 0.69	0.49 -0.07 - 1.05	0.34 0.11 - 0.58	0.00 0.00 - 0.00	0.68 -0.10 - 1.47	0.38 0.21 - 0.55
	No Shortage (0)	62.8% 30.6% - 86.6%	67.6% 30.1% - 91.0%	79.8% 62.9% - 90.2%	100.0% N/A - N/A	65.1% 29.2% - 89.4%	75.1% 62.8% - 84.4%
	Slight Shortage (1)	37.2% 13.4% - 69.4%	16.2% 2.5% - 59.4%	6.2% 1.5% - 21.8%	0.0% N/A - N/A	18.1% 3.0% - 61.1%	13.7% 7.0% - 25.3%
	Moderate Shortage (2)	0.0% N/A - N/A	16.2% 2.5% - 59.4%	14.1% 6.0% - 29.7%	0.0% N/A - N/A	0.0% N/A - N/A	9.1% 4.3% - 18.2%
	Severe Shortage (3)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	16.8% 2.8% - 58.1%	2.1% 0.3% - 11.6%

Table E.22. Question C.1: To what extent did your organization experience shortages of key personnel, including contractors performing critical functions to maintain operations, from January 2020 through present day?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Personnel Type	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Field Workers (meter reading, sampling, maintenance, etc.)	Mean Score (0-3)	0.75 0.10 - 1.40	1.13 0.53 - 1.72	0.80 0.46 - 1.15	1.15 0.36 - 1.94	1.00 0.37 - 1.62	0.89 0.65 - 1.12
	No Shortage (0)	50.8% 21.8% - 79.3%	32.9% 10.5% - 67.2%	51.8% 34.0% - 69.1%	34.7% 8.3% - 75.8%	42.3% 15.8% - 74.0%	46.6% 34.6% - 58.9%
	Slight Shortage (1)	36.3% 13.0% - 68.4%	21.5% 5.1% - 58.0%	20.4% 9.4% - 38.6%	15.6% 2.7% - 54.8%	15.9% 2.6% - 57.5%	22.3% 13.4% - 34.7%
	Moderate Shortage (2)	0.0% N/A - N/A	45.6% 17.5% - 76.8%	23.7% 11.8% - 41.9%	49.7% 15.0% - 84.6%	41.8% 14.9% - 74.7%	26.9% 17.4% - 39.1%
	Severe Shortage (3)	12.9% 2.0% - 51.6%	0.0% N/A - N/A	4.1% 0.7% - 21.4%	0.0% N/A - N/A	0.0% N/A - N/A	4.2% 1.2% - 14.3%
Engineering/design/construction personnel	Mean Score (0-3)	0.23 -0.16 - 0.62	0.54 -0.06 - 1.13	0.35 0.02 - 0.68	0.97 0.15 - 1.79	1.04 0.49 - 1.60	0.49 0.26 - 0.71
	No Shortage (0)	88.7% 53.1% - 98.2%	64.1% 26.9% - 89.7%	84.1% 66.5% - 93.4%	51.7% 17.2% - 84.6%	28.4% 7.9% - 64.8%	73.0% 60.8% - 82.5%
	Slight Shortage (1)	0.0% N/A - N/A	17.9% 2.8% - 62.7%	5.6% 1.4% - 20.2%	0.0% N/A - N/A	38.9% 14.3% - 70.9%	9.7% 4.6% - 19.3%
	Moderate Shortage (2)	11.3% 1.8% - 46.9%	17.9% 2.8% - 62.7%	1.7% 0.3% - 8.4%	48.3% 15.4% - 82.8%	32.7% 9.8% - 68.3%	12.9% 6.7% - 23.4%
	Severe Shortage (3)	0.0% N/A - N/A	0.0% N/A - N/A	8.6% 2.4% - 26.6%	0.0% N/A - N/A	0.0% N/A - N/A	4.3% 1.2% - 14.7%

Table E.22. Question C.1: To what extent did your organization experience shortages of key personnel, including contractors performing critical functions to maintain operations, from January 2020 through present day?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Personnel Type	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Critical equipment repair	Mean Score (0-3)	0.49 -0.07 - 1.04	0.67 0.02 - 1.32	0.65 0.29 - 1.01	1.49 0.60 - 2.38	1.12 0.41 - 1.83	0.75 0.50 - 1.00
	No Shortage (0)	75.7% 40.9% - 93.3%	63.3% 29.2% - 87.8%	63.6% 44.9% - 78.9%	26.2% 6.9% - 62.8%	28.4% 7.9% - 64.8%	58.3% 46.0% - 69.7%
	Slight Shortage (1)	0.0% N/A - N/A	6.3% 1.1% - 28.2%	16.4% 6.6% - 35.2%	24.2% 3.7% - 72.4%	47.9% 18.9% - 78.4%	16.7% 9.4% - 27.9%
	Moderate Shortage (2)	24.3% 6.7% - 59.1%	30.4% 8.6% - 66.9%	11.4% 4.3% - 27.2%	24.2% 3.7% - 72.4%	6.9% 1.2% - 31.1%	16.6% 9.3% - 28.0%
	Severe Shortage (3)	0.0% N/A - N/A	0.0% N/A - N/A	8.6% 2.4% - 26.5%	25.5% 4.4% - 71.9%	16.8% 2.8% - 58.1%	8.3% 3.5% - 18.6%
Administrative	Mean Score (0-3)	0.47 -0.13 - 1.07	0.45 0.06 - 0.83	0.51 0.21 - 0.80	0.48 -0.29 - 1.26	0.79 0.25 - 1.34	0.53 0.31 - 0.75
	No Shortage (0)	75.7% 40.9% - 93.3%	55.3% 20.6% - 85.5%	68.0% 50.7% - 81.4%	75.8% 27.6% - 96.3%	44.3% 16.6% - 76.1%	65.5% 52.7% - 76.4%
	Slight Shortage (1)	12.9% 2.0% - 51.6%	44.7% 14.5% - 79.4%	17.6% 8.1% - 34.1%	0.0% N/A - N/A	32.0% 10.1% - 66.4%	20.3% 12.4% - 31.4%
	Moderate Shortage (2)	0.0% N/A - N/A	0.0% N/A - N/A	10.3% 3.4% - 27.2%	24.2% 3.7% - 72.4%	23.7% 6.1% - 59.9%	10.1% 4.6% - 20.7%
	Severe Shortage (3)	11.3% 1.8% - 46.9%	0.0% N/A - N/A	4.1% 0.7% - 21.6%	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 1.1% - 13.9%

Table E.22. Question C.1: To what extent did your organization experience shortages of key personnel, including contractors performing critical functions to maintain operations, from January 2020 through present day?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Personnel Type	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Customer Service	Mean Score (0-3)	0.23 -0.16 - 0.62	0.21 -0.06 - 0.49	0.42 0.16 - 0.68	0.48 -0.29 - 1.26	0.56 0.18 - 0.94	0.38 0.22 - 0.54
	No Shortage (0)	88.7% 53.1% - 98.2%	78.5% 42.0% - 94.9%	72.2% 53.6% - 85.3%	75.8% 27.6% - 96.3%	51.2% 21.0% - 80.6%	73.6% 61.5% - 82.9%
	Slight Shortage (1)	0.0% N/A - N/A	21.5% 5.1% - 58.0%	14.0% 5.4% - 31.5%	0.0% N/A - N/A	41.8% 14.9% - 74.7%	14.9% 7.9% - 26.3%
	Moderate Shortage (2)	11.3% 1.8% - 46.9%	0.0% N/A - N/A	13.9% 5.5% - 30.9%	24.2% 3.7% - 72.4%	6.9% 1.2% - 31.1%	11.6% 5.8% - 21.7%
	Severe Shortage (3)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
Other	Mean Score (0-3)	3.00 3.00 - 3.00	0.00 0.00 - 0.00	2.52 2.02 - 3.01			2.00 0.48 - 3.52
	No Shortage (0)	0.0% N/A - N/A	100.0% N/A - N/A	0.0% N/A - N/A			25.5% 2.3% - 83.0%
	Slight Shortage (1)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A			0.0% N/A - N/A
	Moderate Shortage (2)	0.0% N/A - N/A	0.0% N/A - N/A	48.0% 11.3% - 87.0%			23.6% 23.6% - 23.6%
	Severe Shortage (3)	100.0% N/A - N/A	0.0% N/A - N/A	52.0% 13.0% - 88.7%			51.0% 12.1% - 88.7%
	Observations	8	7	28	5	8	56

N/A: confidence interval could not be calculated.

Table E.23. Question C.2: To what extent do you expect to experience shortages of key personnel, including contractors performing critical functions to maintain operations, from present day through December 2020?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Personnel Type	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Licensed or certified operators	Mean Score (0-3)	0.48 0.04 - 0.93	1.14 0.26 - 2.01	0.58 0.30 - 0.87	1.25 0.13 - 2.36	1.12 0.39 - 1.85	0.75 0.55 - 0.96
	No Shortage (0)	63.7% 31.6% - 87.0%	51.3% 19.9% - 81.8%	61.7% 43.6% - 77.0%	50.3% 15.4% - 85.0%	35.3% 11.7% - 69.3%	56.6% 44.6% - 67.8%
	Slight Shortage (1)	24.3% 6.7% - 59.1%	0.0% N/A - N/A	22.6% 10.7% - 41.5%	0.0% N/A - N/A	34.0% 10.1% - 70.2%	19.6% 11.3% - 31.8%
	Moderate Shortage (2)	12.0% 2.0% - 48.0%	32.4% 9.0% - 69.9%	11.7% 4.6% - 26.5%	24.2% 3.7% - 72.4%	13.9% 4.0% - 38.5%	15.6% 9.1% - 25.5%
	Severe Shortage (3)	0.0% N/A - N/A	16.2% 2.5% - 59.4%	4.1% 0.7% - 21.4%	25.5% 4.4% - 71.9%	16.8% 2.8% - 58.1%	8.2% 3.7% - 17.4%
Laboratory technicians/ sample analysts	Mean Score (0-3)	0.24 -0.03 - 0.52	0.49 -0.08 - 1.05	0.30 0.02 - 0.57	0.24 -0.15 - 0.63	0.84 0.10 - 1.59	0.38 0.19 - 0.57
	No Shortage (0)	75.7% 40.9% - 93.3%	67.6% 29.9% - 91.0%	85.0% 67.2% - 94.0%	75.8% 27.5% - 96.3%	49.2% 20.0% - 79.0%	75.9% 63.0% - 85.3%
	Slight Shortage (1)	24.3% 6.7% - 59.1%	16.2% 2.5% - 59.8%	4.7% 0.8% - 23.7%	24.2% 3.7% - 72.5%	34.0% 10.1% - 70.2%	14.9% 7.6% - 27.0%
	Moderate Shortage (2)	0.0% N/A - N/A	16.2% 2.5% - 59.8%	6.1% 1.5% - 21.3%	0.0% N/A - N/A	0.0% N/A - N/A	5.1% 1.7% - 13.9%
	Severe Shortage (3)	0.0% N/A - N/A	0.0% N/A - N/A	4.3% 0.7% - 22.3%	0.0% N/A - N/A	16.8% 2.8% - 58.4%	4.2% 1.2% - 13.6%

Table E.23. Question C.2: To what extent do you expect to experience shortages of key personnel, including contractors performing critical functions to maintain operations, from present day through December 2020?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Personnel Type	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Field Workers (meter reading, sampling, maintenance, etc.)	Mean Score (0-3)	0.98 0.25 - 1.72	1.13 0.30 - 1.95	0.64 0.32 - 0.96	0.48 -0.29 - 1.26	0.87 0.09 - 1.65	0.78 0.53 - 1.03
	No Shortage (0)	50.8% 21.8% - 79.3%	48.1% 18.9% - 78.7%	58.6% 40.4% - 74.6%	75.8% 27.6% - 96.3%	53.5% 23.2% - 81.3%	56.6% 43.9% - 68.5%
	Slight Shortage (1)	12.9% 2.0% - 51.6%	6.3% 1.1% - 28.2%	27.4% 14.5% - 45.5%	0.0% N/A - N/A	22.8% 5.8% - 58.9%	19.3% 11.4% - 30.8%
	Moderate Shortage (2)	23.3% 6.6% - 56.5%	30.4% 8.6% - 66.9%	5.8% 1.5% - 20.3%	24.2% 3.7% - 72.4%	6.9% 1.2% - 31.1%	13.7% 7.3% - 24.1%
	Severe Shortage (3)	12.9% 2.0% - 51.6%	15.2% 2.4% - 57.0%	8.2% 2.4% - 24.5%	0.0% N/A - N/A	16.8% 2.8% - 58.1%	10.4% 4.9% - 20.7%
Engineering/design/construction personnel	Mean Score (0-3)	0.11 -0.08 - 0.31	0.37 -0.15 - 0.89	0.37 0.11 - 0.63	0.24 -0.14 - 0.63	0.70 0.18 - 1.23	0.36 0.19 - 0.52
	No Shortage (0)	88.7% 53.1% - 98.2%	78.5% 42.0% - 94.9%	75.3% 57.8% - 87.2%	75.8% 27.6% - 96.3%	46.5% 18.7% - 76.7%	74.5% 62.6% - 83.7%
	Slight Shortage (1)	11.3% 1.8% - 46.9%	6.3% 1.1% - 28.2%	16.5% 7.1% - 33.6%	24.2% 3.7% - 72.4%	36.7% 13.8% - 67.7%	17.3% 10.1% - 28.1%
	Moderate Shortage (2)	0.0% N/A - N/A	15.2% 2.4% - 57.0%	4.1% 0.7% - 21.4%	0.0% N/A - N/A	16.8% 2.8% - 58.1%	6.1% 2.3% - 15.2%
	Severe Shortage (3)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.4%	0.0% N/A - N/A	0.0% N/A - N/A	2.0% 0.3% - 11.5%

Table E.23. Question C.2: To what extent do you expect to experience shortages of key personnel, including contractors performing critical functions to maintain operations, from present day through December 2020?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Personnel Type	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Critical equipment repair	Mean Score (0-3)	0.36 -0.07 - 0.78	0.82 0.21 - 1.44	0.46 0.15 - 0.76	0.76 -0.39 - 1.92	1.19 0.47 - 1.91	0.61 0.39 - 0.82
	No Shortage (0)	75.7% 40.9% - 93.3%	48.1% 18.8% - 78.8%	74.8% 56.6% - 87.1%	74.5% 27.9% - 95.7%	28.4% 7.9% - 64.8%	65.5% 53.5% - 75.8%
	Slight Shortage (1)	12.9% 2.0% - 51.6%	21.5% 5.1% - 58.3%	9.0% 2.5% - 27.5%	0.0% N/A - N/A	41.0% 14.4% - 74.2%	14.6% 7.5% - 26.4%
	Moderate Shortage (2)	11.3% 1.8% - 47.0%	30.4% 8.5% - 67.2%	11.9% 4.5% - 28.2%	0.0% N/A - N/A	13.9% 4.0% - 38.2%	13.6% 7.4% - 23.8%
	Severe Shortage (3)	0.0% N/A - N/A	0.0% N/A - N/A	4.3% 0.7% - 22.3%	25.5% 4.3% - 72.1%	16.8% 2.8% - 58.4%	6.2% 2.4% - 15.5%
Administrative	Mean Score (0-3)	0.23 -0.16 - 0.62	0.43 -0.17 - 1.04	0.39 0.11 - 0.66	0.00 0.00 - 0.00	0.63 0.07 - 1.19	0.36 0.18 - 0.55
	No Shortage (0)	88.7% 53.0% - 98.2%	74.7% 35.6% - 94.0%	75.5% 57.0% - 87.8%	100.0% N/A - N/A	60.4% 27.6% - 85.9%	77.8% 65.6% - 86.6%
	Slight Shortage (1)	0.0% N/A - N/A	7.4% 1.3% - 32.7%	14.5% 5.7% - 32.3%	0.0% N/A - N/A	15.9% 2.6% - 57.5%	10.2% 4.7% - 20.7%
	Moderate Shortage (2)	11.3% 1.8% - 47.0%	17.9% 2.8% - 62.7%	5.8% 1.5% - 20.5%	0.0% N/A - N/A	23.7% 6.1% - 59.9%	9.9% 4.7% - 19.8%
	Severe Shortage (3)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.6%	0.0% N/A - N/A	0.0% N/A - N/A	2.1% 0.3% - 11.9%

Table E.23. Question C.2: To what extent do you expect to experience shortages of key personnel, including contractors performing critical functions to maintain operations, from present day through December 2020?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Personnel Type	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Customer Service	Mean Score (0-3)	0.23 -0.16 - 0.62	0.37 0.03 - 0.70	0.42 0.15 - 0.70	0.00 0.00 - 0.00	0.47 0.09 - 0.84	0.35 0.19 - 0.52
	No Shortage (0)	88.7% 53.1% - 98.2%	63.3% 29.2% - 87.8%	71.6% 52.7% - 85.1%	100.0% N/A - N/A	60.4% 27.7% - 85.9%	74.3% 62.1% - 83.6%
	Slight Shortage (1)	0.0% N/A - N/A	36.7% 12.2% - 70.8%	18.4% 8.1% - 36.7%	0.0% N/A - N/A	32.7% 9.9% - 68.3%	18.0% 10.1% - 30.0%
	Moderate Shortage (2)	11.3% 1.8% - 46.9%	0.0% N/A - N/A	5.8% 1.5% - 20.3%	0.0% N/A - N/A	6.9% 1.2% - 31.1%	5.7% 2.1% - 14.2%
	Severe Shortage (3)	0.0% N/A - N/A	0.0% N/A - N/A	4.1% 0.7% - 21.4%	0.0% N/A - N/A	0.0% N/A - N/A	2.0% 0.3% - 11.5%
Other	Mean Score (0-3)						
	No Shortage (0)						
	Slight Shortage (1)						
	Moderate Shortage (2)						
	Severe Shortage (3)						
Observations		8	7	28	5	8	56

N/A: confidence interval could not be calculated.

Table E.24. Question C.3: What factors contribute to personnel shortages you identified in questions C.1 and C.2? (check all that apply)

American Indian Utilities

Estimates and 95 Percent Confidence Intervals

Factor	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Absenteeism (illness, care of family members, daycare closure, virtual schooling, etc.)	Mean Score (0-2)	1.42 1.00 - 1.84	1.00 0.19 - 1.81	1.51 1.28 - 1.74	0.99 0.26 - 1.71	1.32 0.94 - 1.70	1.36 1.18 - 1.55
	Does Not Contribute (0)	0.0% N/A - N/A	29.3% 4.1% - 80.1%	0.0% N/A - N/A	28.5% 4.6% - 76.7%	0.0% N/A - N/A	6.1% 1.7% - 19.4%
	Contributes Somewhat (1)	58.3% 19.8% - 88.8%	41.4% 8.7% - 84.0%	49.0% 28.0% - 70.4%	44.5% 10.4% - 84.8%	68.1% 27.2% - 92.4%	51.7% 36.0% - 67.1%
	Contributes Significantly (2)	41.7% 11.2% - 80.2%	29.3% 4.1% - 80.1%	51.0% 29.6% - 72.0%	27.0% 3.8% - 77.6%	31.9% 7.6% - 72.8%	42.2% 27.8% - 58.1%
Layoffs or furloughs	Mean Score (0-2)	0.72 -0.04 - 1.48	0.99 0.28 - 1.69	0.85 0.45 - 1.25	0.27 -0.18 - 0.72	0.79 0.15 - 1.44	0.78 0.52 - 1.04
	Does Not Contribute (0)	50.6% 12.5% - 88.0%	37.9% 10.3% - 76.5%	45.8% 24.9% - 68.2%	73.0% 22.0% - 96.3%	42.8% 12.7% - 79.3%	47.8% 32.5% - 63.5%
	Contributes Somewhat (1)	26.3% 3.5% - 77.7%	25.7% 5.6% - 66.8%	23.5% 8.3% - 51.1%	27.0% 3.7% - 78.0%	35.0% 8.4% - 76.1%	26.4% 14.0% - 44.1%
	Contributes Significantly (2)	23.1% 3.4% - 71.8%	36.4% 9.6% - 75.5%	30.7% 13.2% - 56.3%	0.0% N/A - N/A	22.2% 3.4% - 69.6%	25.8% 14.5% - 41.7%
Reduced work hours of current staff	Mean Score (0-2)	1.47 0.58 - 2.37	1.24 0.51 - 1.98	0.88 0.51 - 1.24	0.54 -0.35 - 1.43	0.97 0.28 - 1.65	0.97 0.70 - 1.24
	Does Not Contribute (0)	26.3% 3.4% - 78.2%	17.1% 2.4% - 63.4%	37.7% 18.7% - 61.5%	73.0% 22.0% - 96.3%	35.0% 8.3% - 76.2%	38.3% 24.8% - 53.9%
	Contributes Somewhat (1)	0.0% N/A - N/A	41.4% 5.7% - 89.2%	37.0% 17.1% - 62.6%	0.0% N/A - N/A	33.1% 7.9% - 74.1%	26.6% 13.8% - 45.0%
	Contributes Significantly (2)	73.7% 21.8% - 96.6%	41.4% 5.7% - 89.2%	25.3% 9.8% - 51.3%	27.0% 3.7% - 78.0%	31.9% 7.5% - 73.0%	35.1% 20.7% - 52.9%

Table E.24. Question C.3: What factors contribute to personnel shortages you identified in questions C.1 and C.2? (check all that apply)

American Indian Utilities

Estimates and 95 Percent Confidence Intervals

Factor	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Delayed or cancelled plans to hire staff	Mean Score (0-2)	0.35 -0.22 - 0.91	1.75 1.33 - 2.17	1.09 0.72 - 1.45	1.11 0.53 - 1.69	0.95 0.16 - 1.74	1.08 0.90 - 1.27
	Does Not Contribute (0)	65.2% 13.5% - 95.8%	0.0% N/A - N/A	31.8% 14.9% - 55.5%	17.5% 2.7% - 61.8%	47.5% 15.0% - 82.3%	31.6% 20.2% - 45.8%
	Contributes Somewhat (1)	34.8% 4.2% - 86.5%	25.0% 3.5% - 75.5%	27.8% 11.0% - 54.5%	54.0% 16.2% - 87.7%	9.7% 1.4% - 44.9%	28.7% 15.8% - 46.2%
	Contributes Significantly (2)	0.0% N/A - N/A	75.0% 24.5% - 96.5%	40.4% 21.7% - 62.4%	28.5% 4.6% - 76.5%	42.8% 12.7% - 79.4%	39.7% 29.4% - 51.1%
Lack of backup certified personnel	Mean Score (0-2)	1.40 0.66 - 2.14	1.75 1.34 - 2.16	1.00 0.70 - 1.30	1.11 0.14 - 2.08	0.92 0.24 - 1.59	1.17 0.95 - 1.39
	Does Not Contribute (0)	20.8% 2.7% - 71.2%	0.0% N/A - N/A	21.9% 8.8% - 44.8%	44.5% 10.1% - 85.2%	41.6% 12.2% - 78.5%	24.2% 14.7% - 37.1%
	Contributes Somewhat (1)	18.3% 2.8% - 63.6%	25.0% 3.6% - 75.0%	56.3% 32.4% - 77.7%	0.0% N/A - N/A	25.3% 4.1% - 73.1%	34.8% 20.5% - 52.4%
	Contributes Significantly (2)	60.9% 20.4% - 90.5%	75.0% 25.0% - 96.4%	21.8% 7.8% - 47.8%	55.5% 14.8% - 89.9%	33.1% 8.0% - 73.8%	41.0% 26.5% - 57.3%
Operators unable to obtain or maintain needed certification due to lack of in-person training	Mean Score (0-2)	1.23 0.37 - 2.09	1.68 1.28 - 2.08	0.76 0.44 - 1.08	1.11 0.53 - 1.69	0.52 0.04 - 1.01	0.97 0.75 - 1.18
	Does Not Contribute (0)	26.3% 3.4% - 78.2%	0.0% N/A - N/A	42.3% 23.4% - 63.9%	17.5% 2.7% - 61.8%	57.2% 20.7% - 87.3%	33.0% 23.0% - 44.9%
	Contributes Somewhat (1)	24.3% 3.8% - 72.3%	32.0% 7.1% - 74.4%	39.5% 20.0% - 63.0%	54.0% 16.2% - 87.7%	33.1% 8.0% - 73.8%	37.1% 24.2% - 52.2%
	Contributes Significantly (2)	49.4% 11.8% - 87.7%	68.0% 25.6% - 92.9%	18.1% 6.2% - 42.4%	28.5% 4.6% - 76.5%	9.7% 1.4% - 44.0%	29.9% 17.6% - 46.0%

Table E.24. Question C.3: What factors contribute to personnel shortages you identified in questions C.1 and C.2? (check all that apply)

American Indian Utilities

Estimates and 95 Percent Confidence Intervals

Factor	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Restrictions on travel	Mean Score (0-2)	1.20 0.34 - 2.06	1.33 0.26 - 2.41	1.16 0.76 - 1.56	1.08 0.18 - 1.98	1.05 0.23 - 1.87	1.16 0.85 - 1.47
	Does Not Contribute (0)	40.1% 10.1% - 79.9%	33.3% 4.3% - 84.8%	29.9% 12.6% - 55.8%	46.0% 12.2% - 83.9%	47.5% 15.0% - 82.3%	36.5% 21.9% - 54.2%
	Contributes Somewhat (1)	0.0% N/A - N/A	0.0% N/A - N/A	24.2% 9.8% - 48.4%	0.0% N/A - N/A	0.0% N/A - N/A	11.1% 4.2% - 25.9%
	Contributes Significantly (2)	59.9% 20.1% - 89.9%	66.7% 15.2% - 95.7%	45.8% 25.8% - 67.3%	54.0% 16.1% - 87.8%	52.5% 17.7% - 85.0%	52.4% 36.6% - 67.7%
Lack of I.T. infrastructure (e.g., equipment, network capacity)	Mean Score (0-2)	0.63 -0.37 - 1.62	1.33 0.80 - 1.87	0.90 0.49 - 1.32	0.56 0.07 - 1.04	0.52 0.04 - 1.01	0.81 0.56 - 1.07
	Does Not Contribute (0)	68.7% 17.9% - 95.7%	0.0% N/A - N/A	40.3% 19.3% - 65.5%	44.5% 10.2% - 85.0%	57.2% 20.4% - 87.4%	42.3% 27.5% - 58.6%
	Contributes Somewhat (1)	0.0% N/A - N/A	66.7% 15.2% - 95.7%	29.1% 11.7% - 56.0%	55.5% 15.0% - 89.8%	33.1% 7.8% - 74.2%	34.2% 19.8% - 52.3%
	Contributes Significantly (2)	31.3% 4.3% - 82.1%	33.3% 4.3% - 84.8%	30.7% 13.3% - 56.1%	0.0% N/A - N/A	9.7% 1.4% - 45.0%	23.5% 12.1% - 40.7%
Other	Mean Score (0-2)				0.00 0.00 - 0.00		0.00 0.00 - 0.00
	Does Not Contribute (0)				100.0% N/A - N/A		100.0% N/A - N/A
	Contributes Somewhat (1)				0.0% N/A - N/A		0.0% N/A - N/A
	Contributes Significantly (2)				0.0% N/A - N/A		0.0% N/A - N/A
Observations		5	6	19	4	6	38

N/A: confidence interval could not be calculated.

Table E.25. Question C.4: What strategies or resources has your organization used to address potential shortages of certified operators, laboratory staff, or other trained personnel during the COVID-19 pandemic? (select all that apply)

American Indian Utilities

Estimates and 95 Percent Confidence Intervals

Strategy or Resource	Percentage Reporting by Population Served					
	< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Used technology to allow some operational tasks to be performed remotely	49.8% 18.2% - 81.5%	30.4% 8.6% - 67.0%	31.2% 17.2% - 49.8%	49.7% 14.9% - 84.7%	67.3% 31.6% - 90.2%	40.0% 28.1% - 53.2%
Used telework for job functions that could be performed remotely	47.6% 18.3% - 78.7%	16.4% 2.6% - 58.8%	33.8% 19.1% - 52.6%	0.0% N/A - N/A	35.3% 11.4% - 69.9%	30.5% 19.7% - 43.9%
Decreased staffing/changed shift work while maintaining core operations	32.8% 8.9% - 71.0%	48.1% 18.8% - 78.7%	52.6% 34.0% - 70.5%	24.2% 3.7% - 72.5%	64.7% 30.1% - 88.6%	48.4% 35.4% - 61.5%
Delayed non-critical work	48.9% 17.2% - 81.5%	68.3% 30.8% - 91.3%	73.2% 55.6% - 85.7%	39.8% 10.3% - 79.2%	81.9% 38.0% - 97.1%	67.4% 53.8% - 78.6%
Increased use of contractors	17.5% 2.7% - 62.2%	21.5% 5.1% - 58.1%	15.9% 6.3% - 34.6%	15.6% 2.5% - 57.3%	23.7% 6.1% - 59.9%	17.9% 10.0% - 30.0%
Accessed operators from nearby utilities, via WARN or other mutual aid networks	0.0% N/A - N/A	0.0% N/A - N/A	4.4% 0.7% - 22.8%	0.0% N/A - N/A	0.0% N/A - N/A	2.2% 0.4% - 12.4%
Utilized backup laboratory services	0.0% N/A - N/A	15.2% 2.4% - 57.0%	8.9% 2.6% - 26.1%	0.0% N/A - N/A	16.8% 2.8% - 58.2%	8.8% 3.9% - 18.7%
Other	17.5% 2.7% - 62.2%	15.2% 2.4% - 57.0%	7.9% 2.5% - 22.1%	10.5% 1.8% - 43.2%	16.8% 2.8% - 58.2%	11.7% 5.6% - 22.8%
Observations	6	7	26	5	8	52

N/A: confidence interval could not be calculated.

Table E.26. Question C.4.1: Did the strategies you implemented help mitigate staffing shortages?

American Indian Utilities

Estimates and 95 Percent Confidence Intervals

Strategy or Resource	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Used technology (e.g., live video feeds) to allow some operational tasks to be performed remotely	Strategy Did Not Help	0.0% N/A - N/A	50.0% 6.7% - 93.3%	11.7% 3.4% - 33.2%	0.0% N/A - N/A	10.3% 1.7% - 42.7%	12.4% 4.7% - 28.9%
	Strategy Helped	100.0% N/A - N/A	50.0% 6.7% - 93.3%	88.3% 66.8% - 96.6%	100.0% N/A - N/A	79.4% 47.2% - 94.3%	85.3% 69.4% - 93.7%
	Not Sure	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	10.3% 1.7% - 42.7%	2.3% 0.4% - 11.3%
Used telework for job functions that could be performed remotely	Strategy Did Not Help	0.0% N/A - N/A	0.0% N/A - N/A	5.4% 1.0% - 25.1%		0.0% N/A - N/A	3.0% 0.6% - 14.6%
	Strategy Helped	67.8% 18.8% - 95.0%	100.0% N/A - N/A	81.5% 48.2% - 95.4%		80.4% 33.2% - 97.1%	79.8% 56.2% - 92.4%
	Not Sure	32.2% 5.0% - 81.2%	0.0% N/A - N/A	13.1% 2.1% - 51.2%		19.6% 2.9% - 66.8%	17.2% 5.6% - 41.8%
Decreased staffing/changed shift work while maintaining core operations	Strategy Did Not Help	0.0% N/A - N/A	0.0% N/A - N/A	19.7% 6.5% - 46.3%	0.0% N/A - N/A	24.6% 3.9% - 72.3%	14.9% 5.7% - 33.8%
	Strategy Helped	53.3% 7.9% - 93.8%	100.0% N/A - N/A	63.9% 38.9% - 83.1%	100.0% N/A - N/A	75.4% 27.7% - 96.1%	72.0% 52.2% - 85.8%
	Not Sure	46.7% 6.2% - 92.1%	0.0% N/A - N/A	16.4% 4.5% - 44.7%	0.0% N/A - N/A	0.0% N/A - N/A	13.1% 4.5% - 32.6%
Delayed non-critical work	Strategy Did Not Help	0.0% N/A - N/A	0.0% N/A - N/A	8.2% 2.1% - 27.8%	0.0% N/A - N/A	27.9% 7.0% - 66.4%	9.2% 3.6% - 21.6%
	Strategy Helped	68.7% 18.9% - 95.4%	59.6% 17.8% - 90.9%	73.1% 49.6% - 88.2%	100.0% N/A - N/A	50.0% 18.7% - 81.2%	68.6% 51.8% - 81.7%
	Not Sure	31.3% 4.6% - 81.1%	40.4% 9.1% - 82.2%	18.6% 6.7% - 42.4%	0.0% N/A - N/A	22.1% 3.8% - 67.4%	22.1% 11.2% - 39.0%

Table E.26. Question C.4.1: Did the strategies you implemented help mitigate staffing shortages?

American Indian Utilities

Estimates and 95 Percent Confidence Intervals

Strategy or Resource	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Increased use of contractors	Strategy Did Not Help	0.0% N/A - N/A	29.3% 3.5% - 82.4%	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	5.1% 0.9% - 23.7%
	Strategy Helped	100.0% N/A - N/A	70.7% 17.6% - 96.5%	72.0% 24.1% - 95.4%	100.0% N/A - N/A	100.0% N/A - N/A	82.5% 50.4% - 95.7%
	Not Sure	0.0% N/A - N/A	0.0% N/A - N/A	28.0% 4.6% - 75.9%	0.0% N/A - N/A	0.0% N/A - N/A	12.3% 2.0% - 49.3%
Accessed operators from nearby utilities, including via WARN or other mutual aid networks	Strategy Did Not Help			0.0% N/A - N/A			0.0% N/A - N/A
	Strategy Helped			0.0% N/A - N/A			0.0% N/A - N/A
	Not Sure			100.0% N/A - N/A			100.0% N/A - N/A
Utilized backup laboratory services	Strategy Did Not Help		0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Strategy Helped		100.0% N/A - N/A	0.0% N/A - N/A		100.0% N/A - N/A	50.0% 13.4% - 86.6%
	Not Sure		0.0% N/A - N/A	100.0% N/A - N/A		0.0% N/A - N/A	50.0% 13.4% - 86.6%
Other	Strategy Did Not Help	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Strategy Helped	0.0% N/A - N/A	100.0% N/A - N/A	0.0% N/A - N/A		100.0% N/A - N/A	49.6% 14.2% - 85.4%
	Not Sure	100.0% N/A - N/A	0.0% N/A - N/A	100.0% N/A - N/A		0.0% N/A - N/A	50.4% 14.6% - 85.8%
Observations		3	4	18	2	7	34

N/A: confidence interval could not be calculated.

Table E.27. Question C.5: What is the greatest concern your organization has associated with maintaining staffing during the pandemic? (select one)

American Indian Utilities

Estimates and 95 Percent Confidence Intervals

Concern	Percentage Reporting by Population Served					
	< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Availability of testing for illness	0.0% N/A - N/A	0.0% N/A - N/A	18.7% 8.1% - 37.3%	0.0% N/A - N/A	0.0% N/A - N/A	9.4% 4.0% - 20.5%
Availability of PPE	0.0% N/A - N/A	15.2% 2.4% - 57.0%	10.3% 3.4% - 27.2%	0.0% N/A - N/A	17.2% 4.8% - 46.2%	9.4% 4.3% - 19.3%
Ability to house personnel on site	13.0% 2.1% - 51.5%	0.0% N/A - N/A	12.5% 4.3% - 31.2%	0.0% N/A - N/A	0.0% N/A - N/A	8.3% 3.3% - 19.3%
Cross-training personnel	43.5% 15.6% - 76.2%	31.7% 8.8% - 69.0%	8.0% 2.2% - 25.6%	15.6% 2.7% - 54.8%	6.9% 1.2% - 31.1%	17.1% 9.3% - 29.3%
Protecting high-risk employees	28.6% 7.8% - 65.5%	16.4% 2.7% - 58.2%	38.3% 22.7% - 56.6%	25.5% 4.4% - 71.9%	25.1% 6.2% - 62.8%	31.1% 20.5% - 44.1%
Adhering to changing local and state	14.9% 2.3% - 56.4%	21.5% 5.1% - 58.0%	12.3% 4.7% - 28.2%	58.9% 21.4% - 88.3%	50.8% 20.9% - 80.1%	22.5% 13.6% - 34.9%
Other	0.0% N/A - N/A	15.2% 2.4% - 57.0%	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	2.1% 0.3% - 11.8%
Observations	7	7	28	5	8	55

N/A: confidence interval could not be calculated.

Table E.28. Question D1.1.2: Please indicate the state of your organization's operating budget from January 2020 to the present

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Parameter	Average Operating Budget by Population Served (Dollars)					
	< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Budgeted	\$13,500	\$60,000	\$693,001	\$206,541	\$2,197,895	\$548,508
Revenue	\$3,458 - \$23,542	\$60,000 - \$60,000	\$96,571 - \$1,289,431	\$55,941 - \$357,140	\$725,145 - \$3,670,645	\$126,281 - \$970,735
Actual	\$13,362	\$60,000	\$672,467	\$206,541	\$2,176,349	\$538,043
Revenue	\$3,215 - \$23,510	\$60,000 - \$60,000	\$73,758 - \$1,271,176	\$55,941 - \$357,140	\$444,812 - \$3,907,885	\$105,629 - \$970,458
Budgeted	\$25,333	\$60,000	\$673,135	\$554,486	\$1,632,509	\$591,883
Expenses	\$6,152 - \$44,515	\$60,000 - \$60,000	\$57,976 - \$1,288,294	\$198,602 - \$910,371	\$793,285 - \$2,471,733	\$175,684 - \$1,008,082
Actual	\$24,273	\$60,000	\$660,172	\$488,270	\$1,093,004	\$519,079
Expenses	\$6,224 - \$42,322	\$60,000 - \$60,000	\$45,434 - \$1,274,909	\$46,818 - \$929,723	\$593,322 - \$1,592,686	\$105,954 - \$932,203
Observations	3	1	5	2	2	13

Table E.29. Average Budgeted and Actual Net Revenue (Calculated)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Parameter	Average Net Revenue by Population Served (Dollars)					
	< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Budgeted Net Revenue	-\$11,833 -\$35,481 - \$11,815	\$0 N/A - N/A	\$19,866 -\$82,834 - \$122,566	-\$347,946 -\$854,430 - \$158,538	\$565,386 -\$68,140 - \$1,198,912	-\$43,375 -\$262,338 - \$175,588
Actual Net Revenue	-\$10,911 -\$33,154 - \$11,332	\$0 N/A - N/A	\$12,295 -\$86,363 - \$110,953	-\$281,730 -\$873,782 - \$310,323	\$1,083,345 -\$148,510 - \$2,315,200	\$18,965 -\$251,473 - \$289,402
Observations	3	1	5	2	2	13

Table E.30. Percentage of Utilities with a Deficit/Loss, and Total Deficit/Loss at Those Utilities (Calculated)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Parameter	Utility Deficits by Population Served (Dollars in Millions)					
	< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Percentage of Utilities with Deficit/Loss	33% 4% - 87%	0% N/A - N/A	18% 5% - 50%	47% 5% - 93%	42% 5% - 91%	30% 10% - 62%
Total Deficit/Loss (Utilities with Deficit/Loss)	\$0.6 \$0.6 - \$0.6		\$4.6 -\$1.9 - \$11.0	\$32.2 \$32.2 - \$32.2	\$0.2 -\$0.2 - \$0.6	\$37.6 \$31.4 - \$43.8
Observations	3	1	5	2	2	13

Table E.31. Average Difference between Actual and Budgeted Net Revenue, Percentage of Utilities with a Shortfall, and Total Shortfall at Those Utilities (Calculated)

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Parameter	Difference between Actual and Budgeted Net Revenue by Population Served					
	< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Average Difference in Net Revenue (Actual Minus Budgeted Net Revenue)	\$922 -\$498 - \$2,343	\$0 \$0 - \$0	-\$7,571 -\$25,438 - \$10,297	\$66,216 -\$19,352 - \$151,784	\$517,959 -\$80,370 - \$1,116,287	\$62,340 -\$34,473 - \$159,153
Percentage of Utilities with Shortfall	0% N/A - N/A	0% N/A - N/A	9% 1% - 49%	0% N/A - N/A	42% 5% - 91%	7% 3% - 18%
Total Shortfall in Utilities with Shortfall (Millions of Dollars)	\$0.0 N/A - N/A	\$0.0 N/A - N/A	\$1.1 -\$1.0 - \$3.3	\$0.0 N/A - N/A	\$0.2 -\$0.2 - \$0.6	\$1.3 -\$0.5 - \$3.1
Observations	3	1	5	2	2	13

N/A: confidence interval could not be calculated.

Table E.32. Question D.1.2: Your answers indicate that actual operating revenue was lower than budgeted during the January to present period. What COVID-19-related factors contributed to this?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Factor	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Nonpayment of bills	Mean Score (0 to 2)	0.00 N/A - N/A		1.55 1.17 - 1.94		1.00 N/A - N/A	0.88 0.74 - 1.03
	Not a Contributor (0)	100.0% N/A - N/A		14.9% 2.2% - 58.1%		0.0% N/A - N/A	48.1% 34.1% - 62.5%
	Contributor (1)	0.0% N/A - N/A		14.9% 2.2% - 58.1%		100.0% N/A - N/A	15.5% 5.7% - 35.8%
	Significant Contributor (2)	0.0% N/A - N/A		70.2% 47.8% - 85.8%		0.0% N/A - N/A	36.4% 36.4% - 36.4%
	Do Not Know	0.0% N/A - N/A		0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
Decreased use	Mean Score (0 to 2)	0.00 N/A - N/A		0.85 0.59 - 1.11		0.00 N/A - N/A	0.44 0.30 - 0.59
	Not a Contributor (0)	100.0% N/A - N/A		14.9% 2.2% - 58.1%		100.0% N/A - N/A	55.9% 41.2% - 69.6%
	Contributor (1)	0.0% N/A - N/A		85.1% 41.9% - 97.8%		0.0% N/A - N/A	44.1% 30.4% - 58.8%
	Significant Contributor (2)	0.0% N/A - N/A		0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Do Not Know	0.0% N/A - N/A		0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A

Table E.32. Question D.1.2: Your answers indicate that actual operating revenue was lower than budgeted during the January to present period. What COVID-19-related factors contributed to this?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Factor	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Reduction in rates/fees	Mean Score (0 to 2)	0.00 N/A - N/A		0.23 -0.17 - 0.63		0.00 N/A - N/A	0.10 -0.08 - 0.27
	Not a Contributor (0)	100.0% N/A - N/A		49.1% 26.7% - 71.8%		100.0% N/A - N/A	73.6% 56.8% - 85.5%
	Contributor (1)	0.0% N/A - N/A		14.9% 2.2% - 58.1%		0.0% N/A - N/A	7.7% 1.1% - 39.2%
	Significant Contributor (2)	0.0% N/A - N/A		0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Do Not Know	0.0% N/A - N/A		36.0% 26.6% - 46.6%		0.0% N/A - N/A	18.7% 18.7% - 18.7%
Observations		2		4		1	7

N/A: confidence interval could not be calculated.

Table E.33. Question D.1.3: Your answers indicate that actual operating expenses were higher than budgeted during the January to present period. What COVID-19-related factors contributed?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Factor	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Personnel Costs	Mean Score (0 to 2)			1.31 1.31 - 1.31			1.31 1.31 - 1.31
	Not a Contributor (0)			34.5% 34.5% - 34.5%			34.5% 34.5% - 34.5%
	Contributor (1)			0.0% N/A - N/A			0.0% N/A - N/A
	Significant Contributor (2)			65.5% 65.5% - 65.5%			65.5% 65.5% - 65.5%
	Do Not Know			0.0% N/A - N/A			0.0% N/A - N/A
Consumables	Mean Score (0 to 2)			0.98 0.34 - 1.62			0.98 0.34 - 1.62
	Not a Contributor (0)			34.5% 34.5% - 34.5%			34.5% 34.5% - 34.5%
	Contributor (1)			32.7% 2.6% - 90.0%			32.7% 2.6% - 90.0%
	Significant Contributor (2)			32.7% 2.6% - 90.0%			32.7% 2.6% - 90.0%
	Do Not Know			0.0% N/A - N/A			0.0% N/A - N/A

Table E.33. Question D.1.3: Your answers indicate that actual operating expenses were higher than budgeted during the January to present period. What COVID-19-related factors contributed?

American Indian Utilities

January to the Present

Estimates and 95 Percent Confidence Intervals

Factor	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Utilities Costs	Mean Score (0 to 2)			0.65 -0.63 - 1.94			0.65 -0.63 - 1.94
	Not a Contributor (0)			67.3% 10.0% - 97.4%			67.3% 10.0% - 97.4%
	Contributor (1)			0.0% N/A - N/A			0.0% N/A - N/A
	Significant Contributor (2)			32.7% 2.6% - 90.0%			32.7% 2.6% - 90.0%
	Do Not Know			0.0% N/A - N/A			0.0% N/A - N/A
PPE	Mean Score (0 to 2)			0.65 0.65 - 0.65			0.65 0.65 - 0.65
	Not a Contributor (0)			34.5% 34.5% - 34.5%			34.5% 34.5% - 34.5%
	Contributor (1)			65.5% 65.5% - 65.5%			65.5% 65.5% - 65.5%
	Significant Contributor (2)			0.0% N/A - N/A			0.0% N/A - N/A
	Do Not Know			0.0% N/A - N/A			0.0% N/A - N/A
Observations				3			3

N/A: confidence interval could not be calculated.

Table E.34. Question D.2.1: Do you expect your financial situation for the remainder of the year to improve, to worsen, or to stay about the same, compared with the January to present timeframe?

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Value Type	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Operating Revenue	Mean Score (0 to 2)	1.27 0.97 - 1.57	1.00 N/A - N/A	1.24 1.01 - 1.46	1.00 N/A - N/A	0.69 0.21 - 1.18	1.14 1.00 - 1.28
	Improve (0)	0.0% N/A - N/A	0.0% N/A - N/A	6.8% 1.7% - 24.0%	0.0% N/A - N/A	30.5% 8.3% - 68.2%	7.4% 2.9% - 17.7%
	Stay About the Same (1)	73.2% 37.6% - 92.5%	55.3% 20.4% - 85.6%	50.4% 31.9% - 68.7%	100.0% N/A - N/A	37.5% 11.1% - 74.1%	56.6% 43.2% - 69.0%
	Worsen (2)	26.8% 7.5% - 62.4%	0.0% N/A - N/A	26.5% 14.3% - 43.9%	0.0% N/A - N/A	7.5% 1.2% - 34.4%	18.9% 11.4% - 29.7%
	Do Not Know	0.0% N/A - N/A	44.7% 14.4% - 79.6%	16.3% 6.4% - 35.5%	0.0% N/A - N/A	24.5% 6.0% - 62.4%	17.2% 9.1% - 30.0%
Operating Expenses	Mean Score (0 to 2)	1.29 0.96 - 1.61	1.29 0.83 - 1.74	1.19 1.02 - 1.36	1.32 0.84 - 1.79	0.93 0.22 - 1.64	1.20 1.05 - 1.34
	Improve (0)	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	30.5% 8.3% - 68.2%	3.9% 1.0% - 13.6%
	Stay About the Same (1)	71.4% 34.3% - 92.3%	44.7% 14.4% - 79.6%	64.3% 44.3% - 80.3%	68.1% 19.8% - 94.9%	19.5% 3.2% - 64.1%	57.5% 43.6% - 70.3%
	Worsen (2)	28.6% 7.7% - 65.7%	17.9% 2.8% - 62.7%	15.1% 5.8% - 33.7%	31.9% 5.1% - 80.2%	25.5% 6.4% - 63.1%	20.2% 11.5% - 33.0%
	Do Not Know	0.0% N/A - N/A	37.3% 10.3% - 75.5%	20.6% 8.9% - 40.9%	0.0% N/A - N/A	24.5% 6.0% - 62.4%	18.4% 9.8% - 31.8%
Observations		7	6	25	4	7	49

N/A: confidence interval could not be calculated.

Table E.35. Question D.2.2: To what COVID-19-related factors do you attribute the worsening outlook for operating revenue in the remainder of 2020?

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Factor	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Nonpayment of bills	Mean Score (0 to 2)	1.00 N/A - N/A		1.53 0.85 - 2.21		1.00 N/A - N/A	1.43 0.84 - 2.01
	Not a Contributor (0)	0.0% N/A - N/A		23.4% 4.6% - 65.9%		0.0% N/A - N/A	16.6% 3.3% - 53.6%
	Contributor (1)	51.3% 6.4% - 94.2%		0.0% N/A - N/A		100.0% N/A - N/A	17.3% 3.3% - 55.9%
	Significant Contributor (2)	0.0% N/A - N/A		76.6% 34.1% - 95.4%		0.0% N/A - N/A	54.5% 21.7% - 83.8%
	Do Not Know	48.7% 5.8% - 93.6%		0.0% N/A - N/A		0.0% N/A - N/A	11.6% 1.5% - 53.6%
Decreased use	Mean Score (0 to 2)	0.49 0.00 - 0.97		0.91 0.01 - 1.82		0.00 N/A - N/A	0.72 0.14 - 1.30
	Not a Contributor (0)	51.3% 6.4% - 94.2%		32.6% 8.1% - 72.6%		100.0% N/A - N/A	40.5% 12.5% - 76.4%
	Contributor (1)	48.7% 5.8% - 93.6%		7.1% 1.0% - 35.7%		0.0% N/A - N/A	16.6% 3.3% - 53.6%
	Significant Contributor (2)	0.0% N/A - N/A		26.8% 6.7% - 65.0%		0.0% N/A - N/A	19.1% 5.3% - 50.0%
	Do Not Know	0.0% N/A - N/A		33.5% 8.4% - 73.5%		0.0% N/A - N/A	23.8% 4.9% - 65.4%

Table E.35. Question D.2.2: To what COVID-19-related factors do you attribute the worsening outlook for operating revenue in the remainder of 2020?

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Factor	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Reduction in rates/fees	Mean Score (0 to 2)	0.00 N/A - N/A		0.49 0.02 - 0.96		1.00 N/A - N/A	0.37 0.01 - 0.73
	Not a Contributor (0)	100.0% N/A - N/A		33.9% 10.2% - 69.9%		0.0% N/A - N/A	47.9% 17.0% - 80.6%
	Contributor (1)	0.0% N/A - N/A		32.6% 8.1% - 72.6%		100.0% N/A - N/A	28.2% 8.6% - 62.2%
	Significant Contributor (2)	0.0% N/A - N/A		0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Do Not Know	0.0% N/A - N/A		33.5% 8.4% - 73.5%		0.0% N/A - N/A	23.8% 4.9% - 65.4%
Observations		2		7		1	10

N/A: confidence interval could not be calculated.

Table E.36. Question D.2.3: To what COVID-19-related factors do you attribute the worsening outlook for operating expenses in the remainder of 2020?

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Factor	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Personnel Costs	Mean Score (0 to 2)	0.00 N/A - N/A		1.70 1.25 - 2.15	2.00 N/A - N/A	1.00 N/A - N/A	1.15 0.88 - 1.42
	Not a Contributor (0)	100.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	23.8% 8.4% - 51.4%
	Contributor (1)	0.0% N/A - N/A	0.0% N/A - N/A	30.2% 4.9% - 78.4%	0.0% N/A - N/A	100.0% N/A - N/A	27.6% 8.9% - 59.7%
	Significant Contributor (2)	0.0% N/A - N/A	0.0% N/A - N/A	69.8% 21.6% - 95.1%	100.0% N/A - N/A	0.0% N/A - N/A	37.2% 28.7% - 46.7%
	Do Not Know	0.0% N/A - N/A	100.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	11.4% 1.4% - 53.5%
Consumables	Mean Score (0 to 2)	0.48 0.00 - 0.96	1.00 N/A - N/A	1.57 1.14 - 2.01	1.00 N/A - N/A	1.00 N/A - N/A	1.09 0.88 - 1.30
	Not a Contributor (0)	52.0% 13.5% - 88.2%	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	12.4% 12.4% - 12.4%
	Contributor (1)	48.0% 11.8% - 86.5%	100.0% N/A - N/A	42.7% 11.2% - 81.5%	100.0% N/A - N/A	100.0% N/A - N/A	66.0% 43.0% - 83.3%
	Significant Contributor (2)	0.0% N/A - N/A	0.0% N/A - N/A	57.3% 18.5% - 88.8%	0.0% N/A - N/A	0.0% N/A - N/A	21.7% 7.4% - 49.0%
	Do Not Know	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A

Table E.36. Question D.2.3: To what COVID-19-related factors do you attribute the worsening outlook for operating expenses in the remainder of 2020?

American Indian Utilities

Present to December

Estimates and 95 Percent Confidence Intervals

Factor	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Utilities Costs	Mean Score (0 to 2)	0.00 N/A - N/A	1.00 N/A - N/A	1.45 0.91 - 1.98	1.00 N/A - N/A	1.00 N/A - N/A	0.93 0.61 - 1.25
	Not a Contributor (0)	100.0% N/A - N/A	0.0% N/A - N/A	12.5% 1.7% - 54.8%	0.0% N/A - N/A	0.0% N/A - N/A	28.5% 11.0% - 56.3%
	Contributor (1)	0.0% N/A - N/A	100.0% N/A - N/A	30.2% 4.9% - 78.4%	100.0% N/A - N/A	100.0% N/A - N/A	49.8% 21.7% - 78.1%
	Significant Contributor (2)	0.0% N/A - N/A	0.0% N/A - N/A	57.3% 18.5% - 88.8%	0.0% N/A - N/A	0.0% N/A - N/A	21.7% 7.4% - 49.0%
	Do Not Know	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
PPE	Mean Score (0 to 2)	0.48 0.00 - 0.96	0.00 N/A - N/A	1.29 0.76 - 1.82	1.00 N/A - N/A	0.71 0.14 - 1.27	0.82 0.50 - 1.14
	Not a Contributor (0)	52.0% 13.5% - 88.2%	100.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	29.3% 2.6% - 86.4%	28.5% 11.0% - 56.3%
	Contributor (1)	48.0% 11.8% - 86.5%	0.0% N/A - N/A	71.4% 15.6% - 97.1%	100.0% N/A - N/A	70.7% 13.6% - 97.4%	60.7% 28.8% - 85.5%
	Significant Contributor (2)	0.0% N/A - N/A	0.0% N/A - N/A	28.6% 2.9% - 84.4%	0.0% N/A - N/A	0.0% N/A - N/A	10.8% 1.3% - 52.1%
	Do Not Know	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
Observations		2	1	4	1	2	10

N/A: confidence interval could not be calculated.

Table E.37. Question D.3.1: If your organization has experienced or anticipates a decrease in cash flow due to COVID-19, what mitigating actions are you taking or planning? (select all that apply)

American Indian Utilities

Estimates and 95 Percent Confidence Intervals

Response	Percentage Reporting by Population Served					
	< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Drawing down days cash on hand	0.0% N/A - N/A	0.0% N/A - N/A	19.7% 7.9% - 41.4%	0.0% N/A - N/A	0.0% N/A - N/A	10.4% 4.1% - 24.0%
Drawing on reserve funds	28.6% 7.6% - 66.1%	0.0% N/A - N/A	52.7% 33.2% - 71.5%	0.0% N/A - N/A	0.0% N/A - N/A	33.1% 21.1% - 47.8%
Delaying maintenance	42.8% 15.3% - 75.5%	28.0% 4.4% - 76.5%	48.4% 30.0% - 67.3%	54.2% 14.8% - 88.9%	0.0% N/A - N/A	40.2% 27.6% - 54.3%
Reducing staff hours	14.9% 2.3% - 56.8%	58.2% 16.5% - 90.8%	28.6% 14.4% - 48.7%	47.5% 11.8% - 86.0%	36.8% 9.9% - 75.5%	31.2% 19.3% - 46.1%
Reducing staff pay and/or benefits	0.0% N/A - N/A	0.0% N/A - N/A	10.2% 2.8% - 31.2%	0.0% N/A - N/A	23.5% 3.8% - 70.5%	8.1% 2.8% - 21.3%
Laying off staff	14.9% 2.3% - 56.8%	0.0% N/A - N/A	4.6% 0.7% - 25.8%	0.0% N/A - N/A	13.3% 2.4% - 49.3%	6.8% 2.3% - 18.8%
Incurring additional debt	14.9% 2.3% - 56.8%	0.0% 0.0% - 0.0%	11.3% 3.8% - 29.4%	0.0% N/A - N/A	0.0% N/A - N/A	8.7% 3.4% - 20.8%
Refinancing debt and/or deferring debt payments	0.0% N/A - N/A	0.0% N/A - N/A	13.3% 5.1% - 30.7%	0.0% N/A - N/A	0.0% N/A - N/A	7.0% 2.7% - 16.9%
Delaying/canceling capital improvement projects	13.0% 2.0% - 52.4%	0.0% N/A - N/A	33.2% 17.9% - 53.1%	20.6% 3.4% - 65.5%	13.3% 2.4% - 49.3%	23.0% 14.4% - 34.7%
Adjusting rates higher than originally planned	0.0% N/A - N/A	0.0% N/A - N/A	6.7% 1.6% - 24.4%	31.9% 5.1% - 80.4%	9.0% 1.4% - 40.7%	7.0% 2.7% - 16.9%
Not applicable (no decrease in cash flow)	28.6% 7.6% - 66.1%	30.2% 4.6% - 79.4%	15.9% 6.1% - 35.2%	0.0% N/A - N/A	45.2% 13.8% - 81.0%	21.8% 12.4% - 35.5%
Observations	7	4	23	4	6	44

N/A: confidence interval could not be calculated.

Table E.38. Question D.3.2: What type of impact do you think these actions are making or will make in mitigating the decrease in your organization's cash flow?

American Indian Utilities

Estimates and 95 Percent Confidence Intervals

Action	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Drawing down days cash on hand	Mean Score (1 to 2)			1.00 N/A - N/A			1.00 N/A - N/A
	Small Impact (1)			100.0% N/A - N/A			100.0% N/A - N/A
	Large Impact (2)			0.0% N/A - N/A			0.0% N/A - N/A
	Do Not Know			0.0% N/A - N/A			0.0% N/A - N/A
	Observations			4			4
Drawing on reserve funds	Mean Score (1 to 2)	1.00 N/A - N/A		1.34 1.01 - 1.66			1.30 1.02 - 1.59
	Small Impact (1)	48.0% 5.7% - 93.3%		54.3% 26.5% - 79.7%			53.3% 28.5% - 76.6%
	Large Impact (2)	0.0% 0.0% - 0.0%		27.6% 9.2% - 59.1%			23.2% 7.6% - 52.5%
	Do Not Know	52.0% 6.7% - 94.3%		18.1% 4.1% - 53.4%			23.6% 6.7% - 56.9%
	Observations	2		12			14
Delaying maintenance	Mean Score (1 to 2)	1.00 N/A - N/A	1.00 1.00 - 1.00	1.43 1.12 - 1.74	1.62 1.01 - 2.23		1.35 1.08 - 1.61
	Small Impact (1)	69.5% 21.0% - 95.1%	100.0% 0.0% - 0.0%	46.1% 21.0% - 73.3%	38.0% 4.4% - 89.1%		53.4% 30.8% - 74.6%
	Large Impact (2)	0.0% N/A - N/A	0.0% 0.0% - 0.0%	34.3% 13.8% - 62.9%	62.0% 10.9% - 95.6%		28.1% 11.1% - 55.0%
	Do Not Know	30.5% 4.9% - 79.0%	0.0% 0.0% - 0.0%	19.7% 4.5% - 55.8%	0.0% N/A - N/A		18.5% 6.2% - 44.0%
	Observations	3	1	11	2		17

Table E.38. Question D.3.2: What type of impact do you think these actions are making or will make in mitigating the decrease in your organization's cash flow?

American Indian Utilities

Estimates and 95 Percent Confidence Intervals

Action	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Reducing staff hours	Mean Score (1 to 2)	2.00 N/A - N/A	1.00 1.00 - 1.00	1.50 1.05 - 1.94	2.00 N/A - N/A	1.00 N/A - N/A	1.52 1.21 - 1.84
	Small Impact (1)	0.0% N/A - N/A	48.0% 5.6% - 93.5%	50.4% 14.7% - 85.7%	0.0% N/A - N/A	36.2% 7.4% - 80.1%	37.6% 17.3% - 63.5%
	Large Impact (2)	100.0% N/A - N/A	0.0% 0.0% - 0.0%	49.6% 14.3% - 85.3%	70.7% 25.9% - 94.3%	0.0% N/A - N/A	41.1% 16.6% - 71.0%
	Do Not Know	0.0% N/A - N/A	52.0% 6.5% - 94.4%	0.0% N/A - N/A	29.3% 5.7% - 74.1%	63.8% 19.9% - 92.6%	21.3% 8.7% - 43.4%
	Observations	1	2	6	2	2	13
Reducing staff pay and/or benefits	Mean Score (1 to 2)			1.00 N/A - N/A			1.00 N/A - N/A
	Small Impact (1)			52.0% 12.5% - 89.2%		0.0% N/A - N/A	34.2% 2.3% - 91.9%
	Large Impact (2)			0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Do Not Know			48.0% 10.8% - 87.5%		100.0% N/A - N/A	65.8% 8.1% - 97.7%
	Observations			2		1	3
Laying off staff	Mean Score (1 to 2)	2.00 N/A - N/A		2.00 N/A - N/A		1.00 N/A - N/A	1.77 N/A - N/A
	Small Impact (1)	0.0% N/A - N/A		0.0% N/A - N/A		100.0% N/A - N/A	23.2% N/A - N/A
	Large Impact (2)	100.0% N/A - N/A		100.0% N/A - N/A		0.0% N/A - N/A	76.8% N/A - N/A
	Do Not Know	0.0% N/A - N/A		0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A
	Observations	1		1		1	3

Table E.38. Question D.3.2: What type of impact do you think these actions are making or will make in mitigating the decrease in your organization's cash flow?

American Indian Utilities

Estimates and 95 Percent Confidence Intervals

Action	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Incurring additional debt	Mean Score (1 to 2)			2.00 N/A - N/A			2.00 N/A - N/A
	Small Impact (1)	0.0% N/A - N/A		0.0% N/A - N/A			0.0% N/A - N/A
	Large Impact (2)	0.0% N/A - N/A		100.0% N/A - N/A			68.1% 68.1% - 68.1%
	Do Not Know	100.0% N/A - N/A		0.0% N/A - N/A			31.9% 31.9% - 31.9%
	Observations	1		3			4
Refinancing debt and/or deferring debt payments	Mean Score (1 to 2)			1.59 0.77 - 2.41			1.59 0.77 - 2.41
	Small Impact (1)			34.8% 2.5% - 91.9%			34.8% 2.5% - 91.9%
	Large Impact (2)			50.0% 4.7% - 95.3%			50.0% 4.7% - 95.3%
	Do Not Know			15.2% 1.8% - 64.2%			15.2% 1.8% - 64.2%
	Observations			4			4
Delaying/canceling capital improvement projects	Mean Score (1 to 2)	2.00 N/A - N/A		1.65 1.37 - 1.94	1.00 N/A - N/A	2.00 N/A - N/A	1.67 1.42 - 1.92
	Small Impact (1)	0.0% N/A - N/A		34.8% 13.3% - 65.1%	100.0% N/A - N/A	0.0% N/A - N/A	33.2% 14.0% - 60.4%
	Large Impact (2)	100.0% N/A - N/A		65.2% 34.9% - 86.7%	0.0% N/A - N/A	100.0% N/A - N/A	66.8% 39.6% - 86.0%
	Do Not Know	0.0% N/A - N/A		0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	1		9	1	1	12

Table E.38. Question D.3.2: What type of impact do you think these actions are making or will make in mitigating the decrease in your organization's cash flow?

American Indian Utilities

Estimates and 95 Percent Confidence Intervals

Action	Response	Percentage Reporting by Population Served					
		< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Adjusting rates higher than originally planned	Mean Score (1 to 2)			2.00 N/A - N/A	1.00 N/A - N/A		1.50 0.51 - 2.49
	Small Impact (1)			0.0% N/A - N/A	100.0% N/A - N/A	0.0% N/A - N/A	34.8% 2.6% - 91.6%
	Large Impact (2)			69.6% 12.7% - 97.3%	0.0% N/A - N/A	0.0% N/A - N/A	34.8% 2.6% - 91.6%
	Do Not Know			30.4% 2.7% - 87.3%	0.0% N/A - N/A	100.0% N/A - N/A	30.4% 30.4% - 30.4%
	Observations			2	1	1	4

N/A: confidence interval could not be calculated.

Table E.39. Question D.4: Which of the following is your organization considering regarding capital infrastructure projects due to COVID-19?

(select all that apply)

American Indian Utilities

Estimates and 95 Percent Confidence Intervals

Changes	Percentage Reporting by Population Served					
	< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Not applicable (no projects planned)	13.7% 2.2% - 53.0%	37.3% 10.2% - 75.7%	20.7% 9.6% - 39.1%	47.5% 12.0% - 85.8%	0.0% N/A - N/A	20.9% 11.9% - 34.1%
No changes to current or planned projects	0.0% N/A - N/A	17.9% 2.8% - 62.7%	15.9% 6.1% - 35.3%	20.6% 3.4% - 65.3%	38.0% 12.1% - 73.1%	16.6% 9.0% - 28.9%
Pausing/slowng a project for which construction has begun	0.0% N/A - N/A	19.4% 3.1% - 64.3%	25.8% 12.2% - 46.8%	0.0% N/A - N/A	0.0% N/A - N/A	15.3% 7.5% - 28.7%
Delaying starting a project	42.8% 15.4% - 75.5%	17.9% 2.8% - 62.7%	27.6% 14.2% - 46.6%	0.0% N/A - N/A	62.0% 26.9% - 87.9%	31.5% 20.2% - 45.6%
Accelerating starting a project	14.9% 2.3% - 56.8%	0.0% 0.0% - 0.0%	10.0% 2.7% - 30.5%	0.0% N/A - N/A	0.0% N/A - N/A	7.5% 2.6% - 19.6%
Reducing the scope or funding for a project for which construction has begun	0.0% N/A - N/A	17.9% 2.8% - 62.7%	4.5% 0.7% - 25.0%	0.0% N/A - N/A	54.6% 22.0% - 83.7%	11.8% 5.2% - 24.6%
Increasing the scope or funding for a project (current or planned)	14.9% 2.3% - 56.8%	0.0% N/A - N/A	7.2% 1.7% - 25.2%	31.9% 5.1% - 80.2%	0.0% N/A - N/A	8.3% 3.2% - 20.1%
Delaying applying for a subsidized loan/grant by at least six months	14.9% 2.3% - 56.8%	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	2.6% 0.4% - 14.5%
Accelerating interest in applying for a subsidized loan/grant for a shovel-ready project	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	31.9% 5.1% - 80.2%	0.0% N/A - N/A	2.2% 0.3% - 13.5%
Other	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
Do not know	13.7% 2.2% - 53.0%	7.4% 1.2% - 34.0%	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	3.3% 0.8% - 12.5%
Observations	7	6	24	4	7	48

N/A: confidence interval could not be calculated.

Table E.40. Question D.5: In response to COVID-19, what actions has your organization taken to help alleviate economic impacts on customers? (select all that apply)

American Indian Utilities

Estimates and 95 Percent Confidence Intervals

Actions	Percentage Reporting by Population Served					
	< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Suspended service shutoffs	42.8% 15.4% - 75.5%	17.9% 2.8% - 62.7%	52.1% 32.9% - 70.7%	54.2% 15.1% - 88.8%	26.9% 6.5% - 66.2%	42.8% 29.7% - 57.0%
Waived late payment fees	42.8% 15.4% - 75.5%	17.9% 2.8% - 62.7%	39.8% 22.6% - 59.9%	33.6% 5.8% - 80.7%	26.9% 6.5% - 66.2%	35.3% 23.2% - 49.6%
Provided extensions on bill payment	42.8% 15.4% - 75.5%	35.9% 10.3% - 73.1%	43.1% 25.3% - 62.9%	33.6% 5.8% - 80.7%	26.9% 6.5% - 66.2%	39.3% 26.6% - 53.7%
Expanded customer assistance programs	28.6% 7.7% - 65.8%	17.9% 2.8% - 62.7%	13.9% 4.8% - 33.8%	33.6% 5.8% - 80.7%	0.0% N/A - N/A	16.5% 8.5% - 29.6%
Expanded water conservation programs	14.9% 2.3% - 56.8%	17.9% 2.8% - 62.7%	13.9% 4.8% - 33.8%	0.0% N/A - N/A	7.5% 1.2% - 34.4%	12.8% 5.9% - 25.4%
Delayed or eliminated planned rate adjustment	14.9% 2.3% - 56.8%	0.0% N/A - N/A	23.0% 10.5% - 43.4%	0.0% N/A - N/A	7.5% 1.2% - 34.4%	14.9% 7.5% - 27.5%
Lowered rates	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
Other	14.9% 2.3% - 56.8%	0.0% N/A - N/A	2.0% 0.4% - 10.3%	0.0% N/A - N/A	26.9% 6.5% - 66.2%	7.1% 2.7% - 17.4%
None (no actions taken)	28.6% 7.7% - 65.8%	56.7% 22.3% - 85.7%	21.4% 9.4% - 41.8%	31.9% 5.1% - 80.2%	46.1% 17.1% - 78.1%	31.3% 19.8% - 45.7%
Do not know	0.0% N/A - N/A	7.4% 1.2% - 34.0%	9.7% 2.6% - 30.6%	13.9% 2.1% - 54.5%	0.0% 0.0% - 0.0%	6.8% 2.5% - 17.2%
Observations	7	6	24	4	7	48

N/A: confidence interval could not be calculated.

Table E.41. Question E1: What COVID-19-related conditions have interfered with your organization's ability to complete the required sampling needed to operate your system and to determine compliance with regulations?

American Indian Utilities

Estimates and 95 Percent Confidence Intervals

Response	Percentage Reporting by Population Served					
	< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Lack of available personnel for sample collection	14.9% 2.3% - 56.8%	0.0% N/A - N/A	21.7% 9.5% - 42.2%	0.0% N/A - N/A	0.0% N/A - N/A	13.1% 6.0% - 26.0%
Lack of available supplies for sampling and/or shipping	14.9% 2.3% - 56.8%	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	18.0% 3.0% - 61.3%	5.0% 1.4% - 17.1%
Lack of available personal protective equipment	0.0% N/A - N/A	0.0% N/A - N/A	6.9% 1.6% - 24.7%	0.0% N/A - N/A	18.0% 3.0% - 61.3%	5.7% 1.8% - 16.6%
Lack of access to approved monitoring locations	0.0% N/A - N/A	0.0% N/A - N/A	18.2% 8.0% - 36.1%	0.0% N/A - N/A	18.0% 3.0% - 61.3%	11.2% 5.4% - 21.8%
Other	0.0% N/A - N/A	0.0% N/A - N/A	5.0% 0.8% - 25.8%	0.0% N/A - N/A	0.0% N/A - N/A	2.4% 0.4% - 13.8%
None	56.5% 23.5% - 84.6%	100.0% N/A - N/A	65.1% 46.1% - 80.3%	100.0% N/A - N/A	82.0% 38.7% - 97.0%	73.1% 59.5% - 83.4%
Do not know	13.7% 2.2% - 53.3%	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	2.4% 0.4% - 13.8%
Observations	7	6	23	4	7	47

N/A: confidence interval could not be calculated.

Table E.42. Question E2: What COVID-19-related conditions have interfered with your organization's ability to complete required laboratory analyses needed to operate your system and to determine compliance with regulations?

American Indian Utilities

Estimates and 95 Percent Confidence Intervals

Response	Percentage Reporting by Population Served					
	< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Lack of available laboratory personnel	0.0% N/A - N/A	0.0% N/A - N/A	5.0% 0.8% - 25.8%	0.0% N/A - N/A	18.0% 3.0% - 61.3%	4.8% 1.4% - 15.6%
Lack of available supplies for sampling and/or shipping	0.0% N/A - N/A	0.0% N/A - N/A	5.0% 0.8% - 25.8%	0.0% N/A - N/A	18.0% 3.0% - 61.3%	4.8% 1.4% - 15.6%
Lack of available personal protective equipment	0.0% N/A - N/A	0.0% N/A - N/A	6.9% 1.6% - 24.7%	0.0% N/A - N/A	18.0% 3.0% - 61.3%	5.7% 1.8% - 16.6%
Internal laboratory capacity shortages that delay timely analysis	0.0% N/A - N/A	0.0% N/A - N/A	5.0% 0.8% - 25.8%	0.0% N/A - N/A	0.0% N/A - N/A	2.4% 0.4% - 13.8%
Decreased access to external laboratory services	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	18.0% 3.0% - 61.3%	2.4% 0.4% - 13.8%
Delays in external laboratory services	0.0% N/A - N/A	0.0% N/A - N/A	10.1% 2.9% - 29.3%	0.0% N/A - N/A	18.0% 3.0% - 61.3%	7.3% 2.7% - 18.0%
Sample transport delays	14.9% 2.3% - 56.8%	0.0% N/A - N/A	9.8% 2.6% - 30.8%	0.0% N/A - N/A	19.5% 3.1% - 64.4%	10.0% 3.9% - 23.1%
Travel restrictions	0.0% N/A - N/A	0.0% N/A - N/A	26.7% 13.1% - 46.9%	0.0% N/A - N/A	37.5% 11.0% - 74.3%	17.9% 9.5% - 31.1%
Revenue interruption	0.0% N/A - N/A	0.0% N/A - N/A	4.8% 0.7% - 26.1%	0.0% N/A - N/A	19.5% 3.1% - 64.4%	4.9% 1.3% - 17.0%
Other	13.7% 2.2% - 53.3%	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	2.4% 0.4% - 13.8%
None	71.4% 34.0% - 92.3%	92.6% 66.0% - 98.8%	68.5% 48.6% - 83.3%	100.0% N/A - N/A	62.5% 25.7% - 89.0%	73.7% 59.8% - 84.1%
Do not know	0.0% N/A - N/A	7.4% 1.2% - 34.0%	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	1.0% 0.2% - 5.3%
Observations	7	6	23	4	7	47

N/A: confidence interval could not be calculated.

Table E.43. Question F1: Has your organization experienced any issues or concerns related to cybersecurity during the pandemic? (Yes/No)

American Indian Utilities

Estimates and 95 Percent Confidence Intervals

Response	Percentage Reporting by Population Served					
	< 101	101 - 500	501 - 3,300	3,301 - 10,000	> 10,000	All
Percentage of Systems	0.0%	0.0%	4.8%	0.0%	7.5%	3.3%
with Cybersecurity Concerns	0.0% - 0.0%	0.0% - 0.0%	0.7% - 26.1%	0.0% - 0.0%	1.2% - 34.4%	0.8% - 12.7%
Observations	7	6	23	4	7	47

Table E.44. G1. Looking ahead to the next several months, please indicate your level of concern about topics covered in this survey.

American Indian Utilities

Estimates and 95 Percent Confidence Intervals

Topics of Concern	Response	Percentage Reporting by Population Served					
		< 101	> 10,000	501 - 3,300	3,301 - 10,000	> 10,000	All
Supply Chain	Mean Score	1.00 0.45 - 1.55	1.07 0.46 - 1.68	1.21 0.99 - 1.44	0.79 0.47 - 1.12	1.12 0.51 - 1.73	1.12 0.94 - 1.29
	No Concern	28.6% 7.6% - 66.1%	23.6% 3.7% - 71.2%	7.9% 2.1% - 25.6%	20.6% 3.4% - 65.4%	30.5% 8.2% - 68.4%	17.5% 9.5% - 29.8%
	Mild Concern	42.8% 15.3% - 75.5%	45.5% 12.4% - 83.1%	62.9% 42.4% - 79.6%	79.4% 34.6% - 96.6%	26.9% 6.5% - 66.2%	53.5% 39.5% - 67.1%
	Serious Concern	28.6% 7.6% - 66.1%	30.9% 7.1% - 72.4%	29.2% 14.3% - 50.5%	0.0% N/A - N/A	42.5% 14.7% - 76.1%	29.0% 18.1% - 42.9%
	Do Not Know	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	7	5	23	4	7	46
Workforce	Mean Score	1.28 0.65 - 1.91	1.18 0.61 - 1.75	1.25 1.02 - 1.47	1.46 0.99 - 1.93	1.12 0.51 - 1.73	1.24 1.05 - 1.43
	No Concern	28.6% 7.6% - 66.1%	17.9% 2.7% - 63.1%	8.0% 1.9% - 27.6%	0.0% 0.0% - 0.0%	30.5% 8.1% - 68.6%	15.6% 7.8% - 28.9%
	Mild Concern	14.9% 2.2% - 57.2%	46.2% 17.0% - 78.3%	59.4% 38.8% - 77.1%	54.2% 15.0% - 88.8%	26.9% 6.4% - 66.4%	44.6% 31.4% - 58.6%
	Serious Concern	56.5% 23.4% - 84.7%	35.9% 10.2% - 73.3%	32.7% 17.3% - 53.0%	45.8% 11.2% - 85.0%	42.5% 14.7% - 76.0%	39.8% 27.8% - 53.1%
	Do Not Know	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A
	Observations	7	6	22	4	7	46

Table E.44. G1. Looking ahead to the next several months, please indicate your level of concern about topics covered in this survey.

American Indian Utilities

Estimates and 95 Percent Confidence Intervals

Topics of Concern	Response	Percentage Reporting by Population Served					
		< 101	> 10,000	501 - 3,300	3,301 - 10,000	> 10,000	All
Financial	Mean Score	0.99 0.22 - 1.76	1.00 1.00 - 1.00	1.20 0.87 - 1.54	1.48 1.00 - 1.95	0.93 0.22 - 1.64	1.14 0.91 - 1.36
	No Concern	40.7% 10.6% - 79.9%	0.0% N/A - N/A	27.0% 13.2% - 47.4%	0.0% N/A - N/A	30.5% 8.0% - 69.0%	23.9% 13.9% - 37.9%
	Mild Concern	19.6% 2.9% - 66.1%	91.0% 59.8% - 98.6%	25.6% 11.5% - 47.6%	52.5% 14.1% - 88.1%	19.5% 3.0% - 65.3%	34.1% 21.2% - 49.9%
	Serious Concern	39.7% 10.7% - 78.4%	0.0% 0.0% - 0.0%	47.4% 28.4% - 67.2%	47.5% 11.9% - 85.9%	25.5% 6.3% - 63.4%	37.2% 24.4% - 52.0%
	Do Not Know	0.0% N/A - N/A	9.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	24.5% N/A - N/A	4.8% N/A - N/A
	Observations	5	5	22	4	7	43
Analytical Support	Mean Score	0.66 0.06 - 1.27	0.74 0.33 - 1.16	0.53 0.26 - 0.79	0.69 0.23 - 1.15	0.69 0.35 - 1.04	0.61 0.43 - 0.79
	No Concern	51.1% 18.1% - 83.2%	23.6% 3.6% - 71.8%	58.1% 38.8% - 75.2%	20.6% 3.4% - 65.4%	30.5% 8.0% - 68.8%	45.9% 33.3% - 59.0%
	Mild Concern	31.5% 8.6% - 69.2%	67.3% 25.6% - 92.5%	31.3% 16.1% - 52.0%	45.8% 11.1% - 85.1%	69.5% 31.2% - 92.0%	42.3% 29.7% - 56.1%
	Serious Concern	17.5% 2.6% - 62.6%	0.0% N/A - N/A	10.6% 3.1% - 30.8%	0.0% N/A - N/A	0.0% 0.0% - 0.0%	8.1% 2.8% - 21.2%
	Do Not Know	0.0% N/A - N/A	9.0% N/A - N/A	0.0% N/A - N/A	33.6% N/A - N/A	0.0% N/A - N/A	3.7% N/A - N/A
	Observations	6	5	22	4	7	44

Table E.44. G1. Looking ahead to the next several months, please indicate your level of concern about topics covered in this survey.

American Indian Utilities

Estimates and 95 Percent Confidence Intervals

Topics of Concern	Response	Percentage Reporting by Population Served					
		< 101	> 10,000	501 - 3,300	3,301 - 10,000	> 10,000	All
Cybersecurity	Mean Score	0.59 0.17 - 1.02	0.72 -0.01 - 1.45	0.47 0.18 - 0.76	0.46 -0.02 - 0.93	0.94 0.41 - 1.47	0.58 0.39 - 0.78
	No Concern	40.7% 10.6% - 79.9%	47.3% 14.9% - 82.1%	64.0% 42.4% - 81.1%	54.2% 14.9% - 88.9%	30.5% 8.0% - 69.0%	52.9% 38.8% - 66.6%
	Mild Concern	59.3% 20.1% - 89.4%	21.8% 3.3% - 69.6%	25.3% 11.9% - 46.0%	45.8% 11.1% - 85.1%	44.9% 15.1% - 78.9%	34.2% 21.8% - 49.2%
	Serious Concern	0.0% N/A - N/A	21.8% 3.3% - 69.6%	10.6% 3.1% - 30.8%	0.0% N/A - N/A	24.5% 6.0% - 62.5%	11.8% 5.2% - 24.5%
	Do Not Know	0.0% N/A - N/A	9.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	0.0% N/A - N/A	1.1% N/A - N/A
	Observations	5	5	22	4	7	43

N/A: confidence interval could not be calculated.