



COVID-19 Impact on Utilities

Survey Results
April 2020

Report prepared in cooperation with
WaterOperator.org at the Illinois
State Water Survey, University of Illinois
Urbana-Champaign

ISAWWA Survey Regarding COVID-19 – Current Impact on Utilities

Introduction

As a result of the ongoing coronavirus pandemic, many water and wastewater systems have significantly altered the ways that they operate and maintain their systems. In order to understand the approaches systems have adopted to manage the pandemic as well as to understand their primary concerns, the Illinois Section of the American Water Works Association (ISAWWA) sent out a utility survey to their membership via email on April 3rd. Available for one week, the survey yielded 141 responses with all but three respondents representing public water or wastewater systems in Illinois. The survey consisted of 14 questions, 11 related to the subject matter and 3 regarding system demographics. One of the three demographic questions asked systems to identify their population size, 5000 or less, between 5,001 and 50,000, or 50,001 and greater. The questions were a mix of open-ended responses to answer in their own words or check a box for the answers applicable to their system. All of the check the box questions also allowed utilities to add qualitative information to explain their answers. These qualitative responses provided much needed insight into how utilities are dealing with the pandemic and planning ahead.

The survey questions focused on operational, managerial, and financial changes already implemented as well as system concerns and needs moving forward. Results from the survey will help ISAWWA to better assist systems dealing with this crisis and inform the Section's activities moving forward.

Survey Questions

The responses below provide an overview of the activities systems are implementing in response to COVID-19, what their concerns are moving forward, and the struggles some systems have experienced financially, managerially, and operationally. The responses elucidate how system size can impact the capacity to fulfill ongoing responsibilities and prepare for future challenges.

Steps Taken and Concerns (Q1-Q2)

The first question (Figure 1) provides an overview of challenges systems are currently facing to sustain staff health, provide a safe working environment, manage system finances, and utilize technology in substitute of face-to-face working needs.

Many respondents have indicated that their utility has implemented shift changes or split shifts to reduce exposure between employees. Where necessary, some systems have also adopted minimum staffing policies. Of those systems, some noted that minimal staffing hinders their ability to supply adequate services while continuing preventative maintenance. Other steps systems noted in their comments include postponing residential visits or water appointments, and delaying non-essential maintenance that would require outside contractors or vendors.

Q1 Since the pandemic, what human resources steps has your utility taken? Please check all that apply.

Answered: 140 Skipped: 1

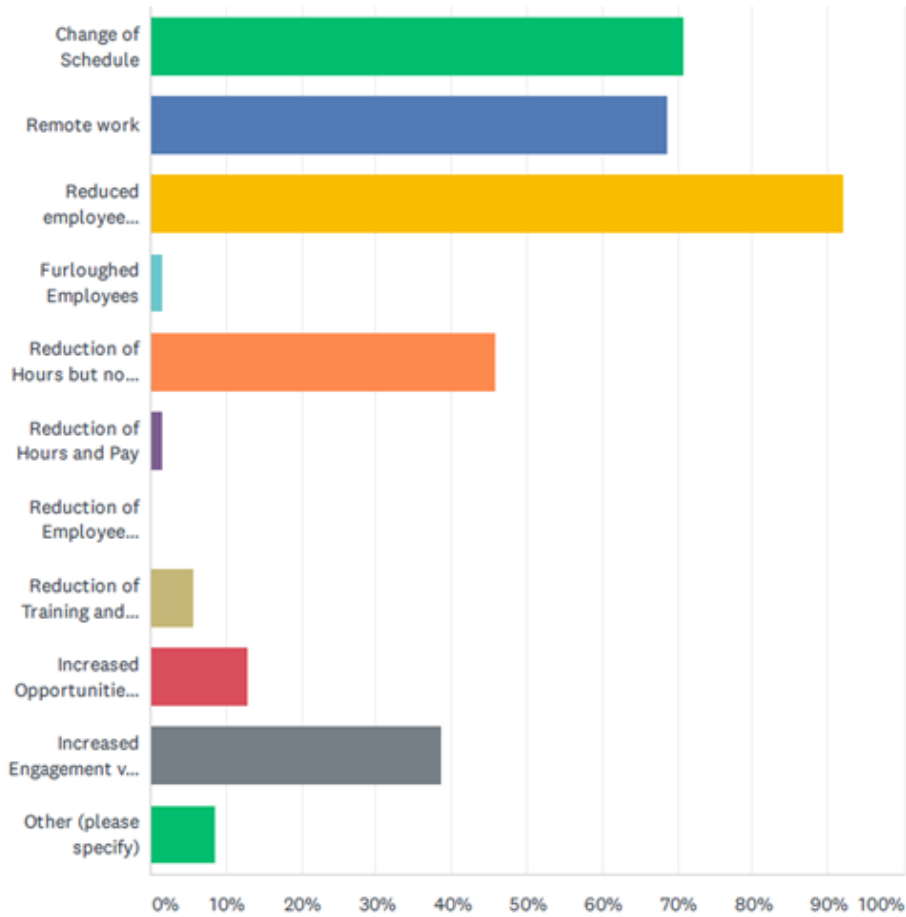


Figure 1

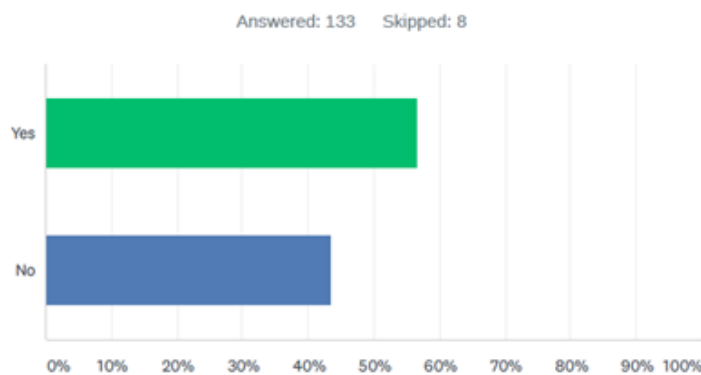
When asked about their concerns, respondents indicate that staff health is the top concern for systems along with staff availability and the continuity of operations. Many systems have expressed that not only are healthy staff needed to continue operations, but the skills and knowledge of their operators are difficult to both find and replace. Other concerns listed focus on challenges related to public and employee contact, finances, billing, supply chain implications, availability of safety and cleaning equipment, and employee morale.

ICC Shutoffs and Reconnections (Q3-Q6):

Recently, the Illinois Commerce Commission put out an order to discontinue water shutoffs due to non-payment. The ISAWWA asked several questions to gauge utility concerns pertaining to the issue. When asked about following the ICC mandate, responses indicate that all utilities plan to abide by the order.

As a follow up, the ISAWWA asked if utilities plan to reconnect customers that were previously shut off. The response was that nearly 44% do not plan to reconnect customers (Figure 2). This chart is misleading, however. Reviewing the comments from those that responded 'No' to reconnecting customers, only seven indicated that they specifically do NOT plan to reconnect customers unless their bill is paid. The vast majority of the remaining participants with a 'No' response commented that they do not have current customers with shut offs or their only shut offs are vacant homes.

Q5 Are you proactively working on reconnecting customers whose water has been shut-off?



ANSWER CHOICES	RESPONSES
Yes	56.39% 75
No	43.61% 58
TOTAL	133

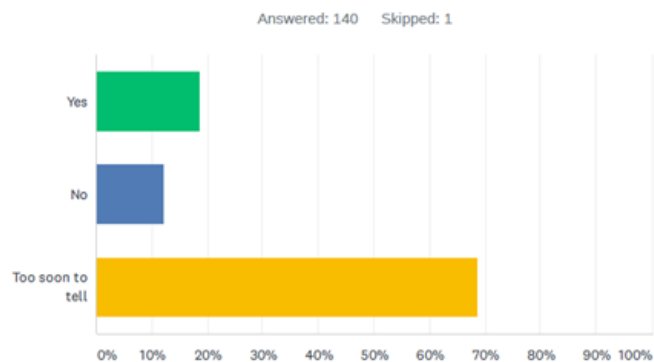
Figure 2

Revenue (Q7-Q8):

Utilities were asked if they have seen any impacts to sales or revenue since the emergence of the pandemic. The suspension of water shutoffs and the varying impacts from community shut downs are expected to influence customer payments and water use. Approximately 69% of respondents felt it was too early to tell, 19% responded yes, and 12% responded no (Figure 3).

Of the 'Yes' responses, a few systems noted positive changes such as increased water use or more time to catch up on administrative work, such as updating standard operating procedures. The majority of the comments, however, were negative, listing decreased water use from large commercial users, an increase in non-payments, capital project cuts, or hiring freezes. The results reveal that lowered commercial water use affects some communities more than others. Systems supplying water mostly for residential use are experiencing little change or an increase in demand. Utilities are seeing the most significant reductions in water use from their largest customers.

Q7 Have you seen any impacts (positive or negative) on your water utility sales/revenues due to the COVID-19 pandemic?



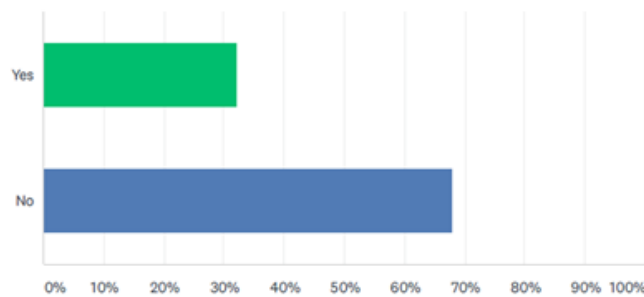
ANSWER CHOICES	RESPONSES
Yes	18.57% 26
No	12.14% 17
Too soon to tell	68.57% 96
TOTAL	140

Figure 3

Utilities were also asked if they have begun planning for any worst-case scenarios regarding budgeting and revenue streams. Only 32% had started those conversations with their financial departments (Figure 4). Comments for those who responded 'Yes' suggest the most common issues of concern are a delay or cancellation in capital improvement projects, as well as a loss of revenue. Some of these respondents are planning for budget cuts and limitations on non-essential spending.

Q8 Has your utility finance division advised you of any worst-case scenarios related to budgeting and/or revenue stream looking ahead in the near, or longer-term (6-12 months)?

Answered: 134 Skipped: 7



ANSWER CHOICES	RESPONSES	
Yes	32.09%	43
No	67.91%	91
TOTAL		134

Figure 4

Training Needs (Q9)

ISAWWA aimed to learn how they can better support their systems during this time, and asked systems specifically to identify any training needs they might have related to COVID-19.

The most common response requested training on safety and the proper use of personal protective equipment (PPE). Other responses covered a wide range of interests including continued COVID-19 updates, guidance on facility disinfection, and training in customer communication.

Of the most notable comments, several utilities stated that their mayor and/or board members did not support the need for training during this difficult time. As such, they were not being allowed the time to participate in training events. One comment made it clear how much utilities rely on the annual conference for their CEU's for their staff, and they were concerned about how to meet continuing education requirements for license renewal.

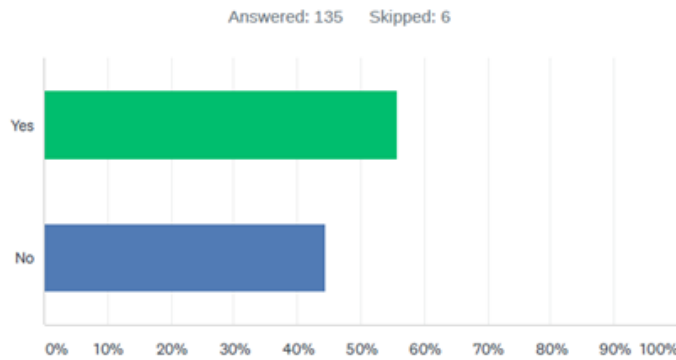
Respondents also shared how the pandemic has altered the way they look for training opportunities to obtain continuing education credit. Many respondents have turned to the webinar opportunities offered through the ISAWWA and mentioned how grateful they were for those opportunities. According to the staff at WaterOperator.org, who track events nationwide, for the last several years ISAWWA has been a leader among technical assistance providers in providing webinar trainings for their constituents.

Emergency Response Plans (Q10)

An effective emergency response plan is key to prepare utilities for challenges that may include absenteeism, disruptions in the supply chain, loss in revenue, and operational interruptions. COVID-19 challenges are community specific and must be planned for accordingly. ISAWWA wanted to know who has developed a COVID-19 related ERP that addresses staffing issues they might have.

Results from Q10 (Figure 5) indicated that 56% of respondents have developed an emergency response plan and 44% have not. Of those who responded 'No', only a few noted that they have intentions to develop a plan in the future. A few negative responses indicated that developing a plan was deemed unnecessary by management, was beyond their job description, or was unnecessary given the size of the system.

Q10 ISAWWA is accumulating and posting staffing and operational emergency response plans utilities are making to address the needs of the community. Has your community developed an Emergency Response Plan (ERP) addressing staffing issues as it relates to the COVID-19 crisis?



ANSWER CHOICES	RESPONSES	
Yes	55.56%	75
No	44.44%	60
TOTAL		135

Figure 5

Several comments by those who responded 'Yes' referenced staffing plans, schedule and shift changes, or the informal collaboration with neighboring communities as their entire emergency response plan, suggesting that not everyone understands the value of having a fully developed ERP. Hopefully our current situation will increase the focus on developing and maintaining these plans, and the availability of training related to emergency response. Moreover, we hope utilities will use the pandemic to focus interest in emergency response planning for their elected officials, first responders, and utility staff through events like table top exercises.

Additional Comments Regarding COVID-19 (Q11)

Lastly, respondents were asked if they had anything else to share regarding COVID-19 operations. Responses covered a wide-range of issues, most notably discussing sampling concerns, improving utility morale, proactive emergency response preparation, community collaboration, and the return to normal operations after the pandemic.

One respondent noted that best practices should be developed now to prepare utilities for continued operations and maintenance assuming it will be well over a year before COVID-19 is not such an issue. Best practices, guides, and FAQ's should specifically address how to continue required operations while the pandemic continues. One respondent specifically mentioned protective measures for activities such as jetting sewer lines or pulling a pump that could expose a worker. This guidance can also assist facilities struggling to access sampling sites, a concern brought forth by two respondents. A few participants also noted the importance of planning for the return of normal operations after the crisis. The public will need to be reminded to flush all water lines when returning to buildings that have been closed during the shelter-in-place orders.

In regards to emergency response planning, several comments indicated concern that their system is not taking appropriate measures to plan for the pandemic. One comment noted that they have no plans in place to respond if a staff member becomes sick. While several respondents indicated that they have been collaborating with neighboring communities to offer assistance if needed, the development and implementation of more concrete emergency response plans are important for the continuity of operations.

The Impact of System Size on COVID-19 Operations and Concerns

The survey results were evaluated based on system size to look for trends in responses to specific questions. Respondents were asked if they were a system with a population of a. 5,000 or fewer (small), b. 5,001 to 50,000 (medium), or c. greater than 50,000 (large).

Based on survey response in Q1, the steps utilities have taken to respond to the pandemic vary with system size. While reducing employee exposure to staff and the public was the most popular action taken by all utility sizes, remote work was taking place almost twice as often among medium and large systems compared to smaller systems. Large and medium systems were also more likely to increase employee engagement during the pandemic through technology. Small systems were less likely to implement changes in work schedule as compared to large and medium systems. All of these differences point to small systems having less staff, having a single person responsible for a specific part of their system, and fewer resources to pull from when an emergency situation like this occurs.

Similarly, when asked about concerns, while the primary concerns of all systems focused on staff health, continuity of operations, and staff availability, additional concerns varied by system size. Larger systems were more concerned about financial impact, employee morale, and maintaining sufficient PPE and cleaning supplies. Small systems rarely mentioned these secondary concerns and put more emphasis on impacts to their supply chain and customer billing.

Regarding financial planning and worst-case projections, almost half of the larger utility respondents had already looked at these possibilities, versus only 14% of small systems. Why this is the case was not determined, but the likely reasons are being too busy and short staffed to deal with anything but the day to day, and not having dedicated financial planning staff to assist in looking at this issue. Similarly, we see that when asked about having emergency response plans, only 40% of small systems had ERP's, versus 57% of medium systems and 69% of large systems.

These trends ultimately reflect that while larger systems have a greater capacity to address pandemic challenges based on system size, they must also address the challenges that result from managing more staff members. Small systems have less capacity to respond to the pandemic, and while they have less challenges pertaining to adjusting schedule changes, they must also plan for absenteeism more carefully and will likely have to seek help outside of their utility when staff are not able to be at work.

Acknowledgements

The Illinois Section of AWWA would like to thank our members who participated in the survey for providing such valuable insight into their operations, needs, and concerns related to the pandemic.

This is just one of several surveys that have been completed within the industry, two others we reference here are the COVID-19 Water Sector Impact Surveys put out March 10-16th and March 25-30th by the American Water Works Association (AWWA). Both surveys assess the impact the pandemic has had on participating members. Results from all three surveys offer insight into how varying water and wastewater systems have chosen to manage the COVID-19 pandemic. We encourage you to review all three.

Questions? Contact John Dillon, Education Manager, ISAWWA at jdillon@isawwa.org.

The Illinois Section AWWA provides resources for the advocacy of safe and sustainable water through enriching membership, mentoring, and increasing public awareness.

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