

# Financially Operating Under COVID-19 Conditions

Changes to use and revenues, moratoriums, disconnections, payment plans. What's happening in North Carolina, and tools to assist your forecasting and decision-making.

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Water and Wastewater Finance Strategies Workshop  
Environmental Finance Center, UNC School of Government  
February 2021



SCHOOL OF GOVERNMENT  
Environmental Finance Center

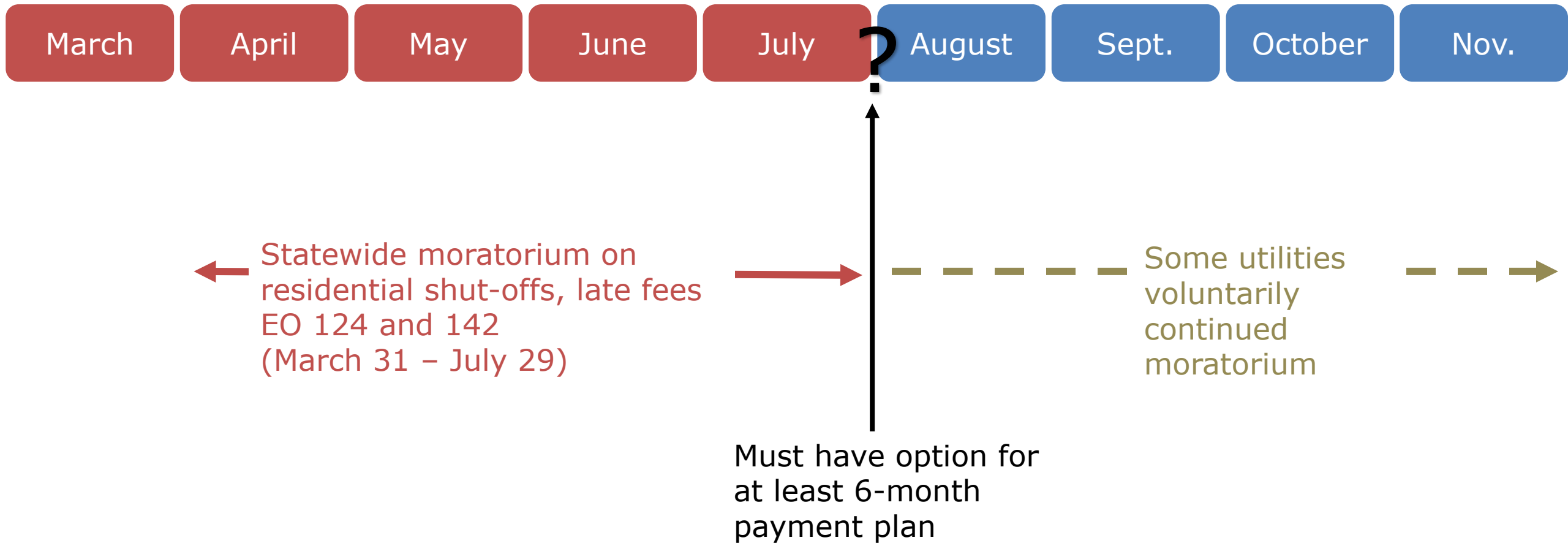
[www.efc.sog.unc.edu](http://www.efc.sog.unc.edu)

# Outline

- What happened, where are we now?
- Data collection efforts
- Diving into specific impacts with:
  - \*Questions to consider
- Opportunities
- Resources



# What happened?

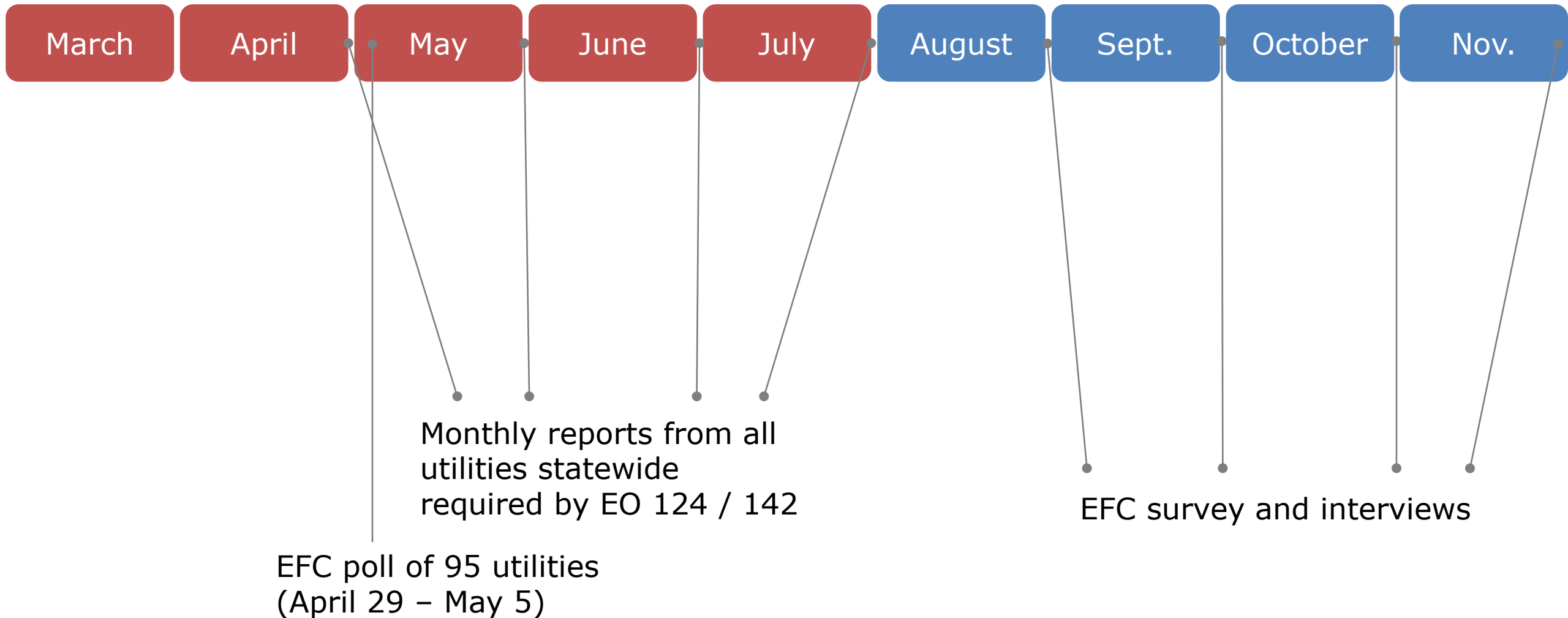


# Where are we now?



Many utilities have restarted disconnections and late fees  
Pandemic still affecting some operations  
Some payment plans are ending; most are still in place

# Data collection efforts throughout



# Key Themes and Impacts

COVID-19 highlighted already-existing vulnerabilities in utilities, and the impact it had varies greatly by utility.

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no more late fees  
more bills past due  
supportive payment plans



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schedule and workday changes  
work split into smaller teams

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More online payments  
Extra time to process payment plans  
In-person offices closed  
Field crew and day-to-day operations modified for safety  
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work split into smaller teams

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Increase in customer service outreach needs  
one-time customer assistance  
payment plan sign-up

More online payments

Extra time to process payment plans

In-person offices closed

Field crew and day-to-day operations modified for safety  
schedule and workday changes  
work split into smaller teams

## Operational

# Other common COVID-19 Issues Affecting Utility Finance

[efc.web.unc.edu](http://efc.web.unc.edu)



- Changes to plans for rate increases
  - Increase or decrease
  - Political appetite for increase affected
- Changes to capital projects/funding
- Difficulty forecasting usage in rate models
- Changes in system development fees
- Need to lay off/furlough employees

## Financial Implications of COVID-19 for Water and Wastewater Utilities

MARCH 26, 2020 / SHADI ESKAF / 4 COMMENTS

[Print](#) [PDF](#)

Water and wastewater utilities are adapting to the rapidly changing conditions imposed across the country and the world by the COVID-19 pandemic. With stay-at-home orders, closures of schools, restaurants, and other businesses, and major disruptions to the workforce and operations, utilities are changing practices and procedures every day to continue to operate and provide the general public with an essential public service. How will these changing conditions and operations affect utility finances? How will utilities accommodate these financial effects?

[nacwa.org](http://nacwa.org)

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### Recovering from Coronavirus

Mitigating the Economic Cost of Maintaining Water and Wastewater Service in the Midst of a Global Pandemic and National Economic Shut-Down

The COVID-19 pandemic underscores the critical importance of clean, safe water in ensuring proper sanitation and hygiene to protect public health. Families, businesses, hospitals and first responders around the country are counting on drinking water and clean water agencies to help save lives and keep people healthy. Utilities are working around the clock to ensure customers have safe and reliable water services while keeping their own essential workforce safe.

The drinking water and clean water sectors are facing major losses in revenue and significant costs for maintaining services to low income and financially vulnerable households during the pandemic. The sector is committed to providing service to all households during the pandemic regardless of ability to pay. But this does not come without cost—and as revenues fall, utilities may face hard decisions regarding how to address shortfalls including potentially delaying planned water infrastructure investments, impacts to staffing, and facing new pressures to raise rates at a time many households can ill-afford rate increases. As Congress responds to the COVID-19 crisis, significant funding should be allocated to help offset revenue losses by water and wastewater utilities and to support the continuation of services to all users.

Impacts to Drinking Water: Lost Utility Revenues & the Costs of Maintaining Water Access Are Estimated at \$13.9 Billion<sup>1</sup>



[awwa.org](http://awwa.org)

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## The Financial Impact of the COVID-19 Crisis on U.S. Drinking Water Utilities

APRIL 14, 2020

American Water Works Association  
Dedicated to the World's Most Important Resource<sup>®</sup>

ASSOCIATION OF METROPOLITAN WATER AGENCIES

This project was funded by the Water Industry Technical Action Fund of AWWA

[cifanet.org](http://cifanet.org)

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June 30, 2020

The Honorable Nancy Pelosi  
Speaker, U.S. House of Representatives  
Washington, D.C. 20515

The Honorable Kevin McCarthy  
Minority Leader, U.S. House of Representatives  
Washington, D.C. 20515

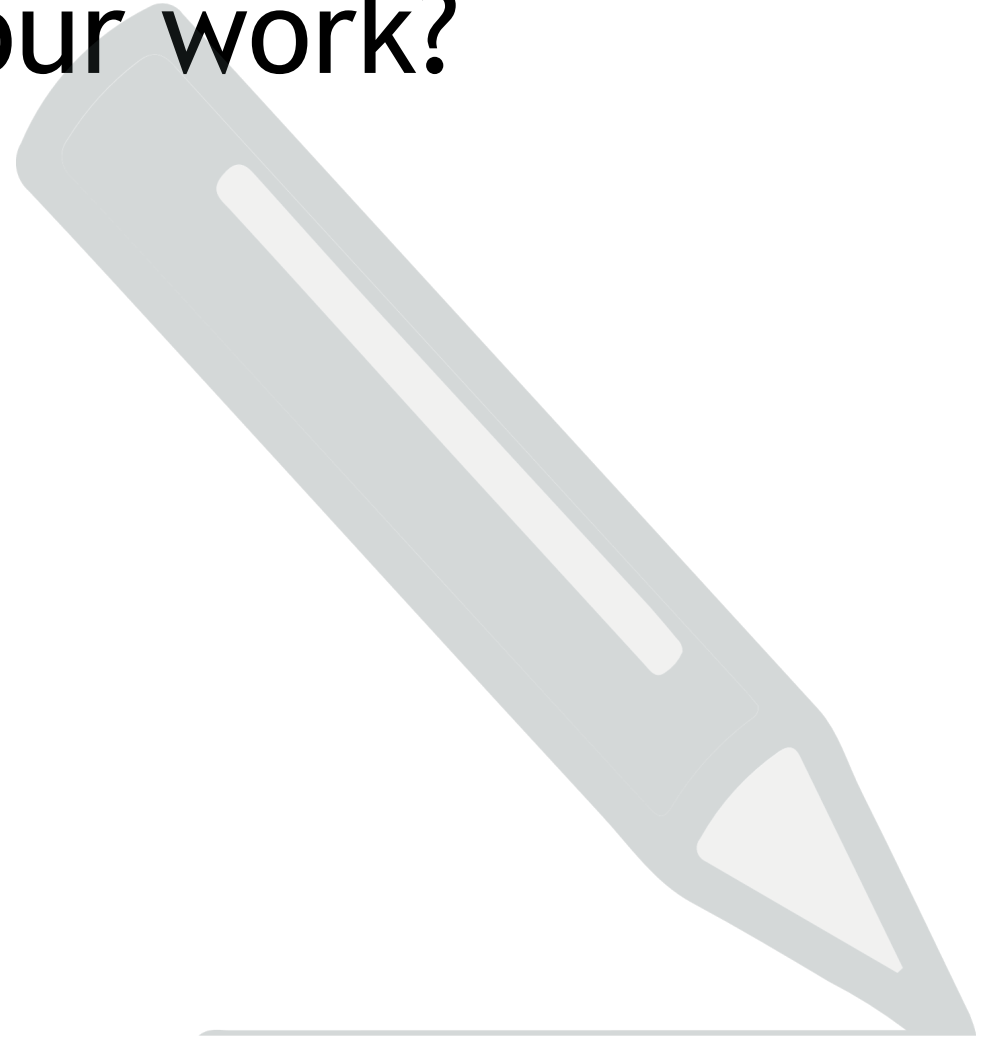
Dear Speaker Pelosi and Leader McCarthy,

Thank you for your long-standing support of the Clean Water and Drinking Water State Revolving Funds (SRFs), the nation's premier programs for financing water infrastructure that protects public health and the environment. During the last three decades, \$68 billion in federal funding to the SRFs has generated a total investment of \$179 billion in water infrastructure. An estimated \$75 billion in loan repayments remain revolving in these subsidized loan programs, funding water infrastructure projects that may never have been built if the SRFs were established as a traditional federal grant program.



# What were the big impacts of COVID on your utility and your work?

- Put your answers in the chat



# Deeper Dive into Impacts

# Operational impacts

- Splitting field crews
- Finance staff → Work from home; collections shift
- Operations here: changing staff responsibilities: cars take home, use personal cars, and more.
- Extra costs for PPE, laptops, cleaning supplies.

\*How can you continue to implement save and/or efficient practices?

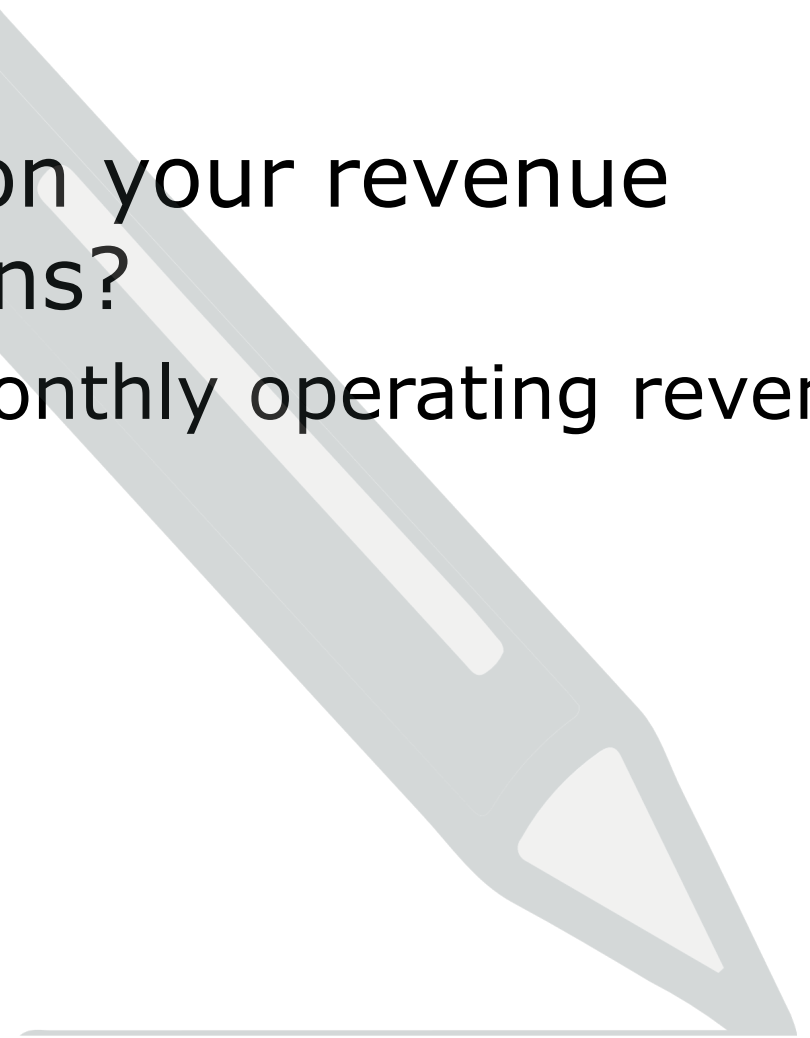
# Lost and delayed revenues

- Changes in consumption
  - No late fees
  - Bills past due
  - Waiving or reimbursing for online payments
- } Not recoverable
- } Some may be recoverable

\*How do your revenues compare to pre-pandemic conditions?

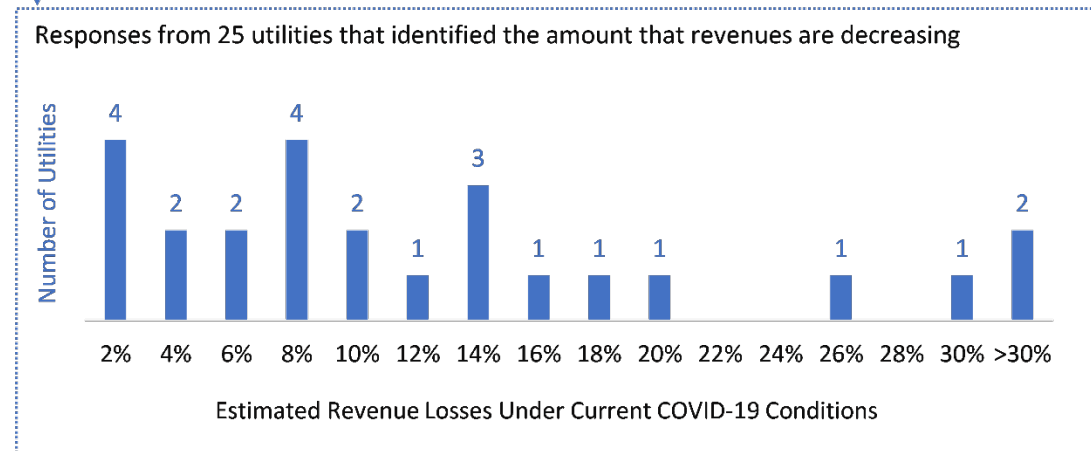
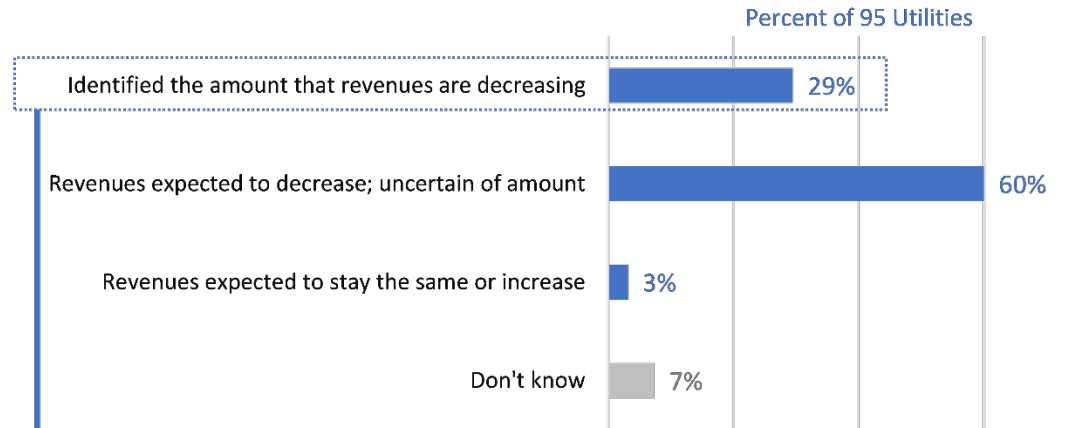
# Revenue Impact: Poll

- Did you experience any impacts on your revenue relative to pre-pandemic conditions?
  - Yes- decrease of 10% or more of monthly operating revenue
  - Yes- decrease of less than 10%
  - No- about the same total revenue
  - Yes- increase of less than 10%
  - Yes- increase of 10% or more
  - Not sure
  - Not applicable



# Early Evidence and Fears of Net Revenue Losses

*Nearly all utilities expected revenues to decrease, even if those decreases had not yet been realized*



Results from utilities responding to a poll by the UNC Environmental Finance Center between April 29 - May 5, 2020. The first graph displays the full response of 95 utilities. The second graph displays summary data from text responses provided by 25 utilities that responded "Identified the amount that revenues are decreasing". Midpoints of reported ranges are displayed. Where dollar amounts of losses were reported, their percentage relative to FY2019 total operating revenues are calculated and displayed.

# Change in consumption patterns

- YVSA- loss of 30% for a few weeks

- Tighten budget
- Increase rate increase
- Get help



- Others, residential focused increase 1-5%
- Reopening happened sooner than expected



\*How may consumption permanently change?



# Aggregated Statewide Effects After Four Months of a Moratorium

	Reported (not all utilities reported )	Estimated for Entire State	Aggregated % of Operating Revenues
Late fees and penalties forfeited	\$ 20.1 million	\$ 23.2 - \$30.8 million	< 1%

Results vary widely across individual utilities.  
\*\*note caveat of the late fees inflated\*\*

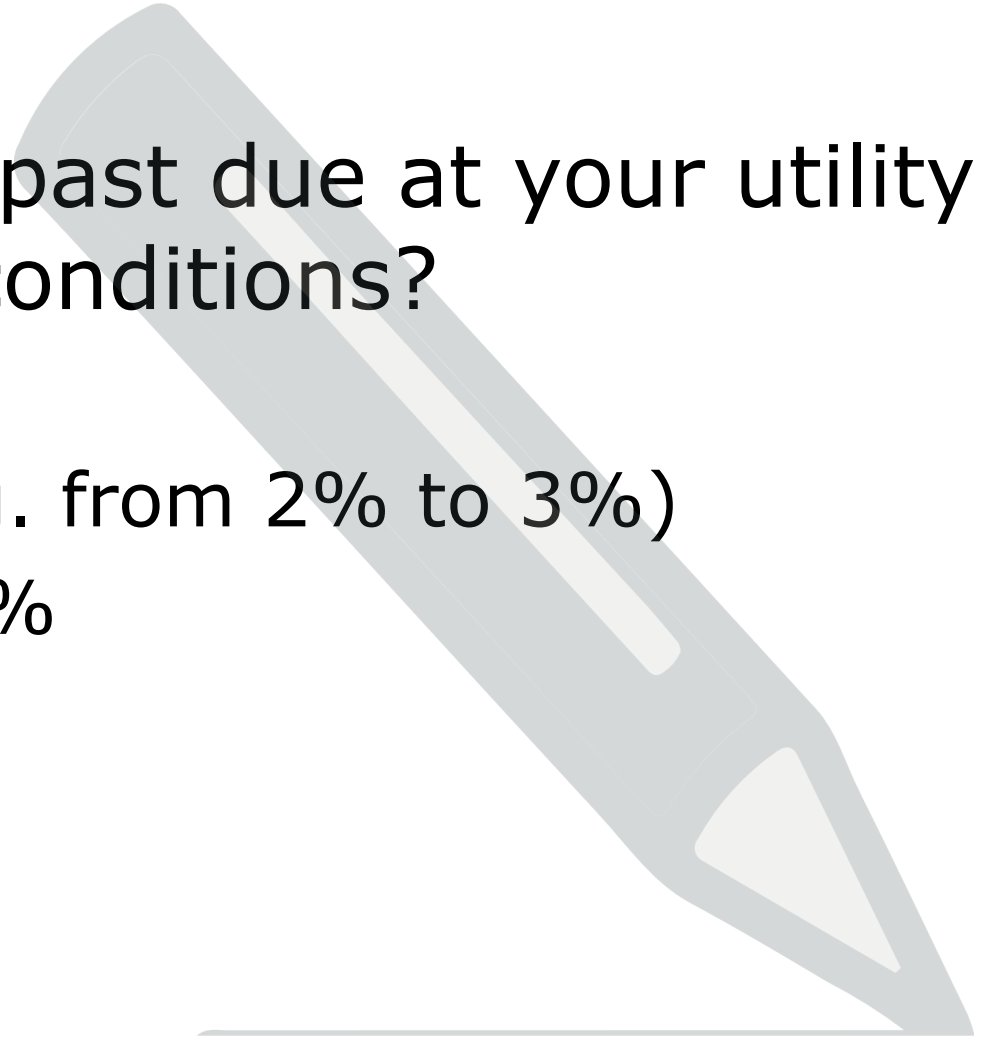
**\*Have you  
revisited your  
late fee policy?**





# Accounts past due: Poll

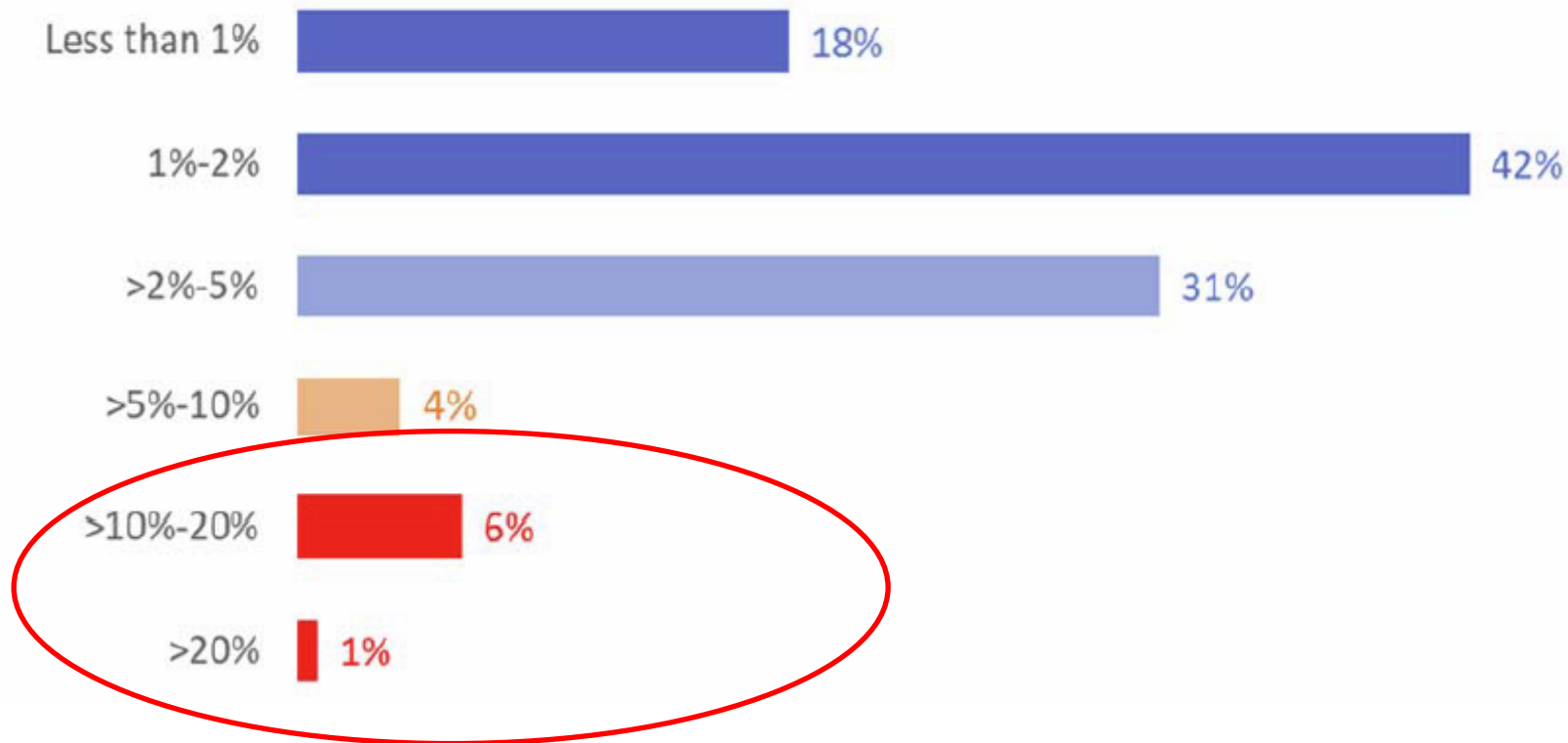
- How does the % of accounts past due at your utility now compare to pre-COVID conditions?
  - The same
  - Increased by less than 5% (e.g. from 2% to 3%)
  - Increased between 5% and 10%
  - Increased by more than 10%
  - Decreased
  - Not sure
  - Not applicable



# Pre-COVID: Disconnections for Non-Payment (2018)

39) At any given time, on average, what approximate percentage of customers are typically cut off from service due to non-payment?

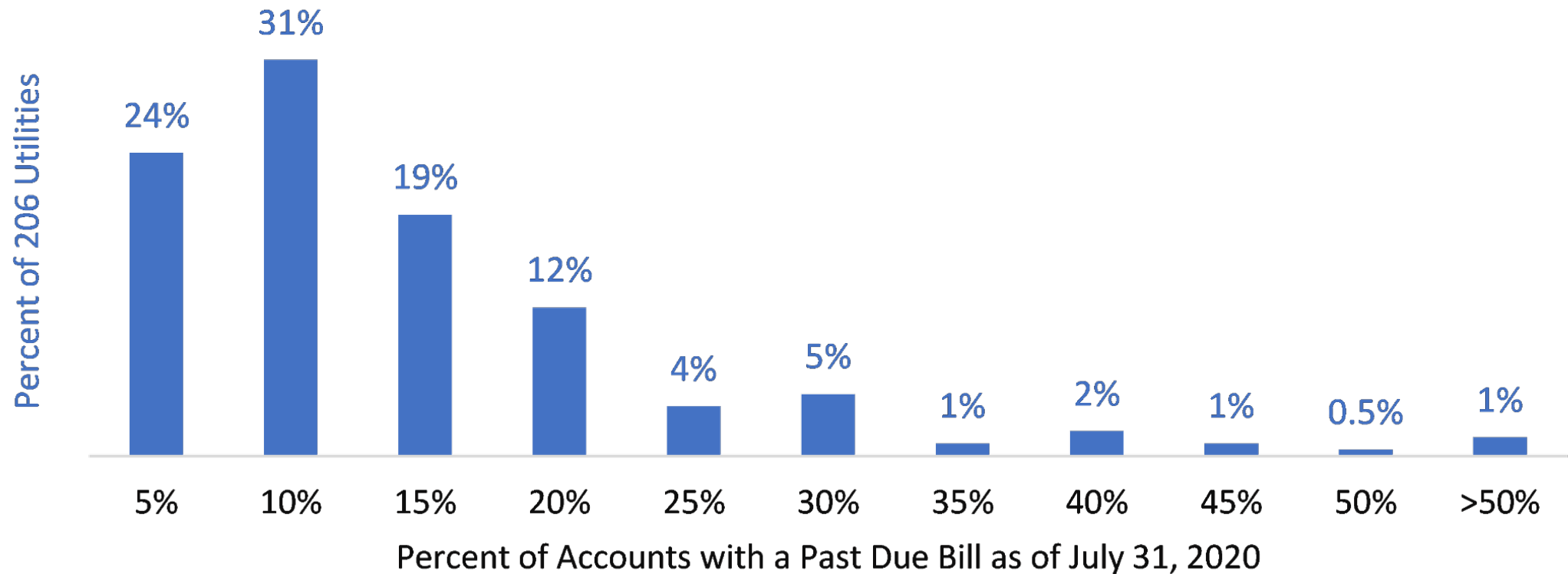
Forty-two percent of utilities report that they routinely have one to two percent of customers cut off due to non-payment (n = 137).



Source: 2017-18 NC Utility Management Survey conducted by UNC EFC and the NC League of Municipalities.

# Accounts with Past Due Bills (End of July 2020)

*Nearly 15% of utilities reported more than 20% of their customers had past due bills as of July 31*



Assessing data from 206 utilities that reported at least one account with past due bills as of July 31, 2020.

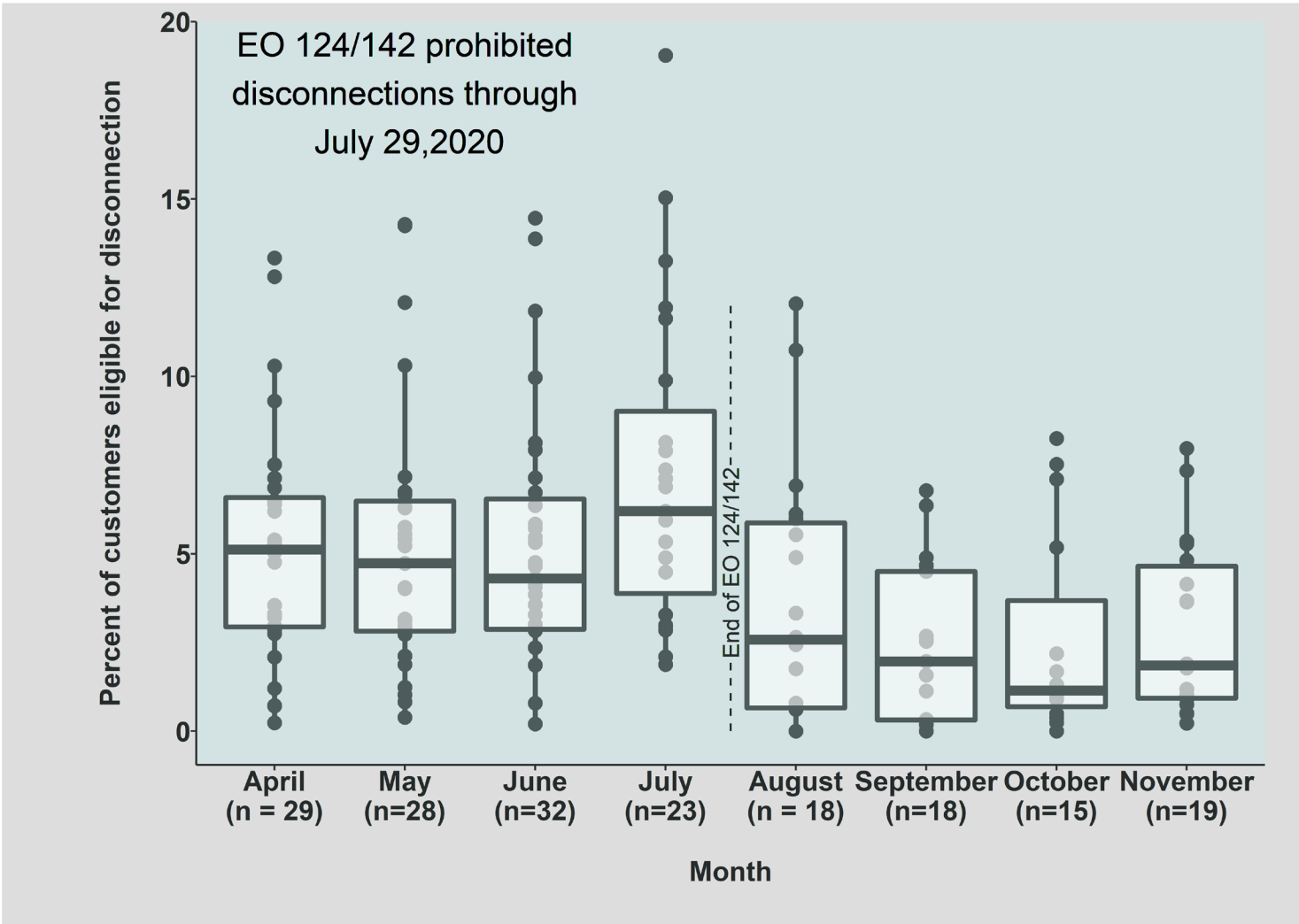
# Aggregated Statewide Effects After Four Months of a Moratorium

	<b>Reported (not all utilities reported)</b>	<b>Estimated for Entire State</b>	<b>Aggregated % of Operating Revenues</b>
Total arrears as of end of July	\$ 52.9 million	\$ 61.7 - \$81.5 million	~ 2.5%

Results vary widely across individual utilities.

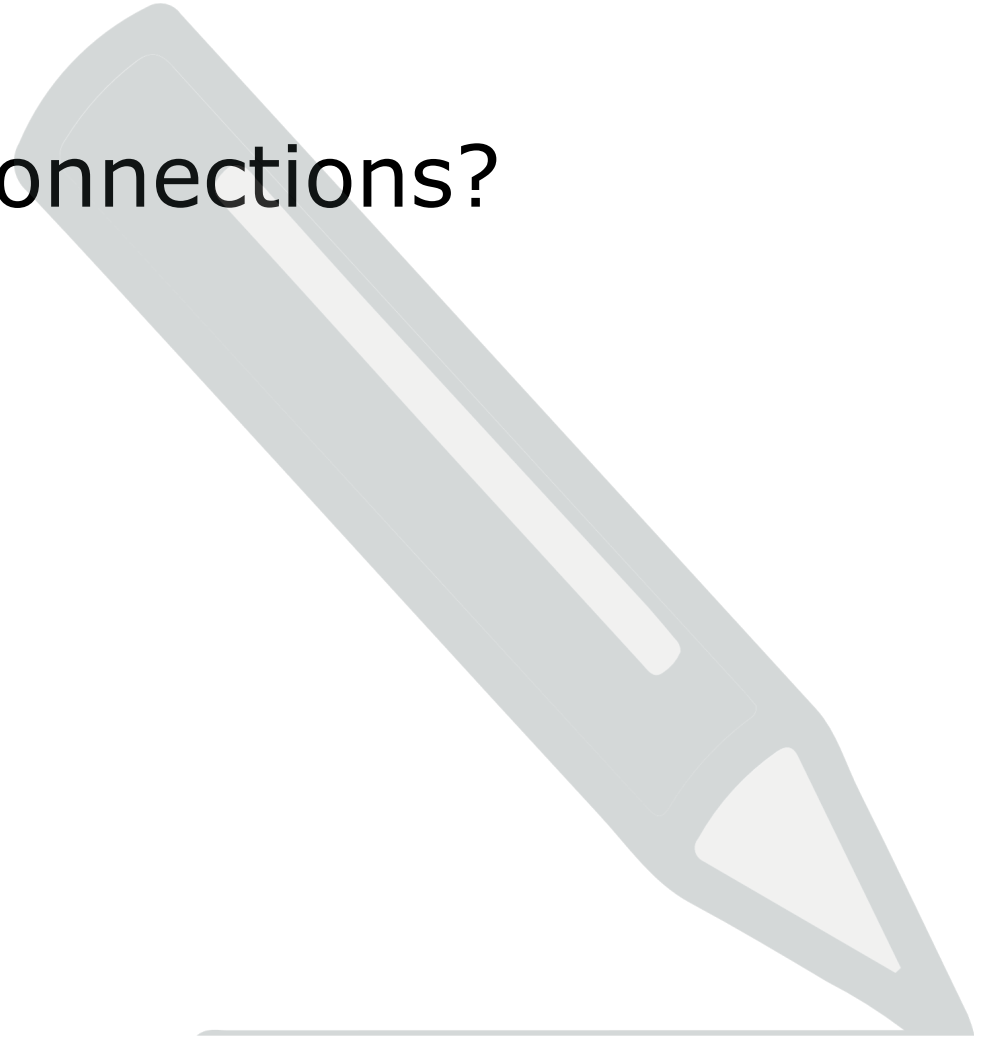


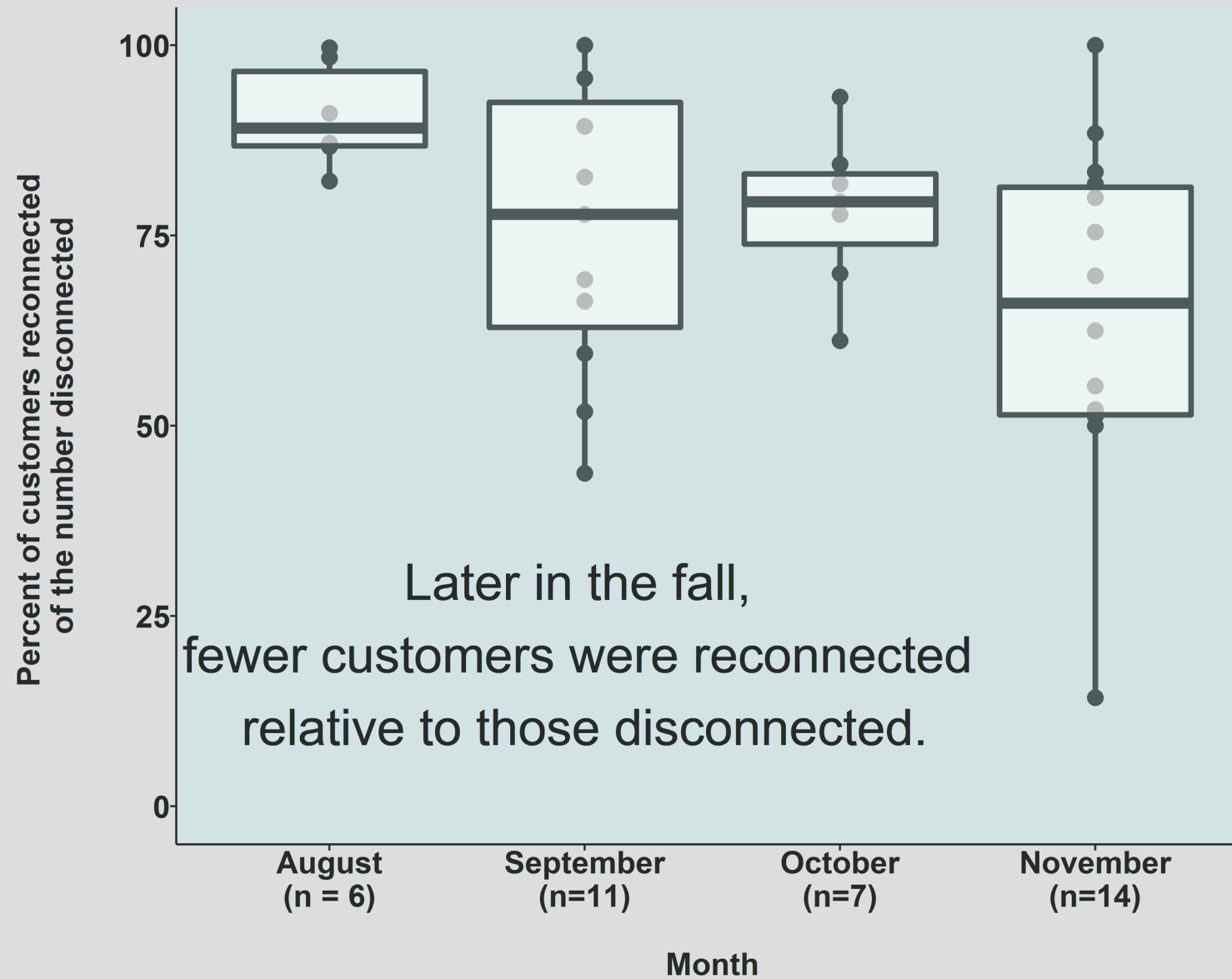
# Accounts that were Eligible for Disconnection April- November



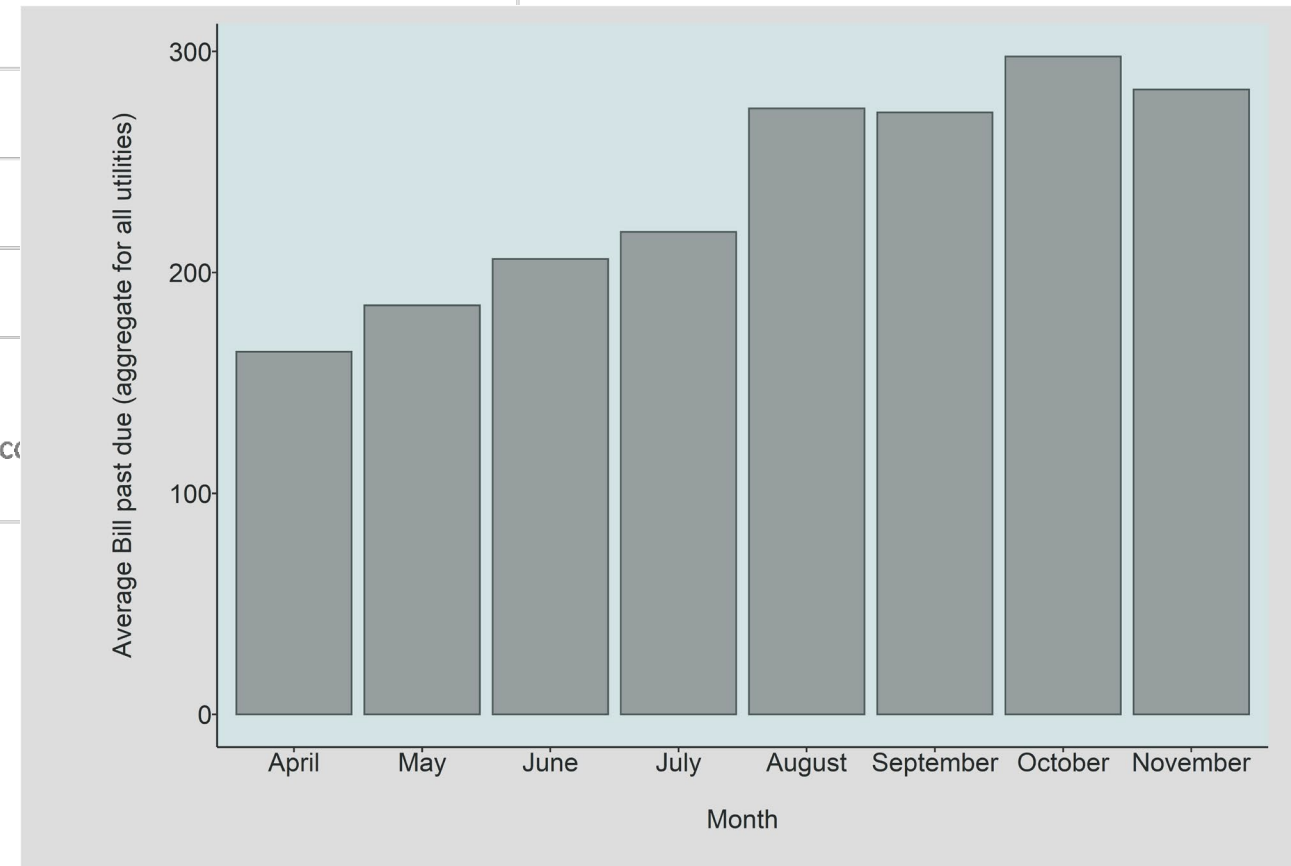
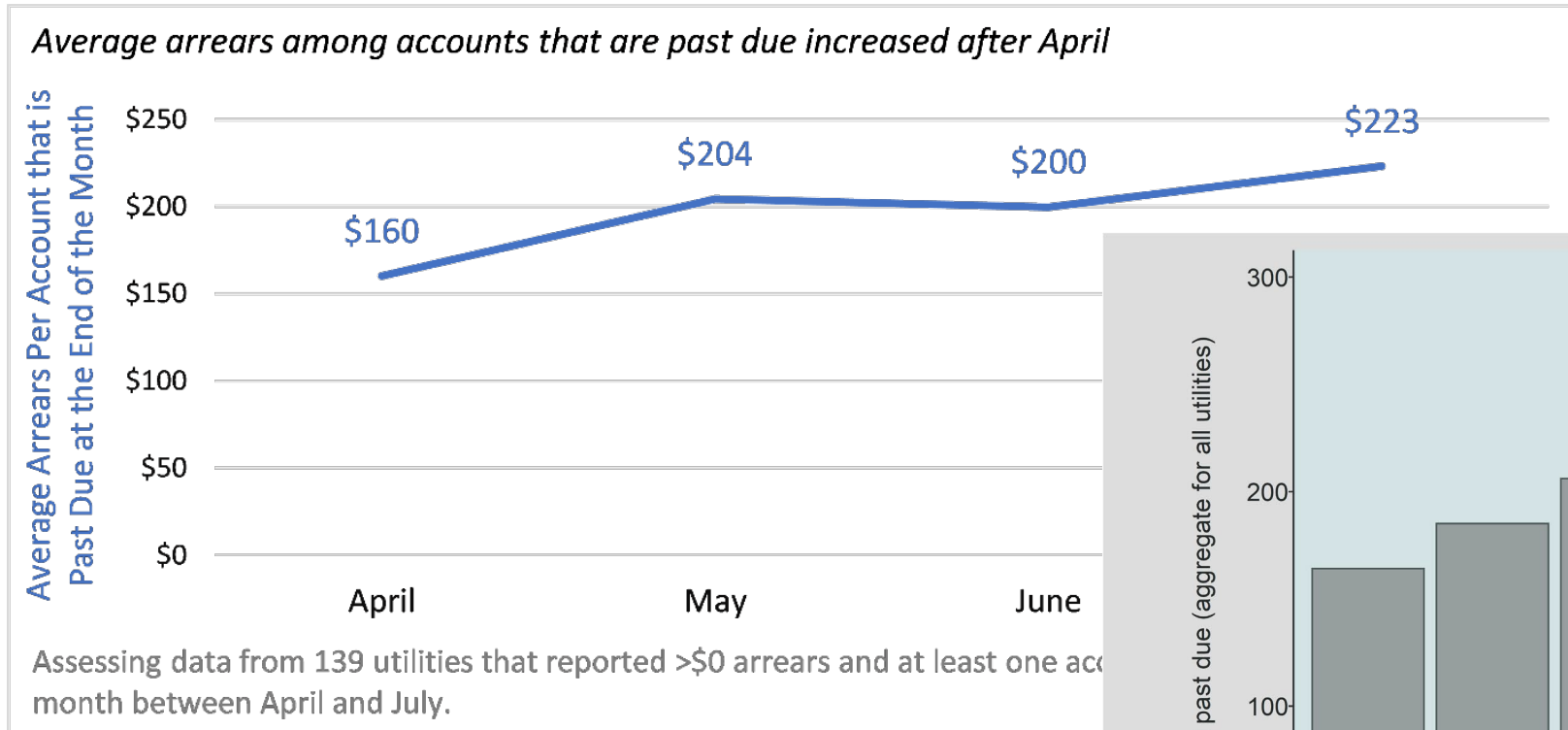
# Disconnections: Poll

- Has your utility resumed disconnections?
  - Yes
  - No
  - Not sure
  - Not applicable



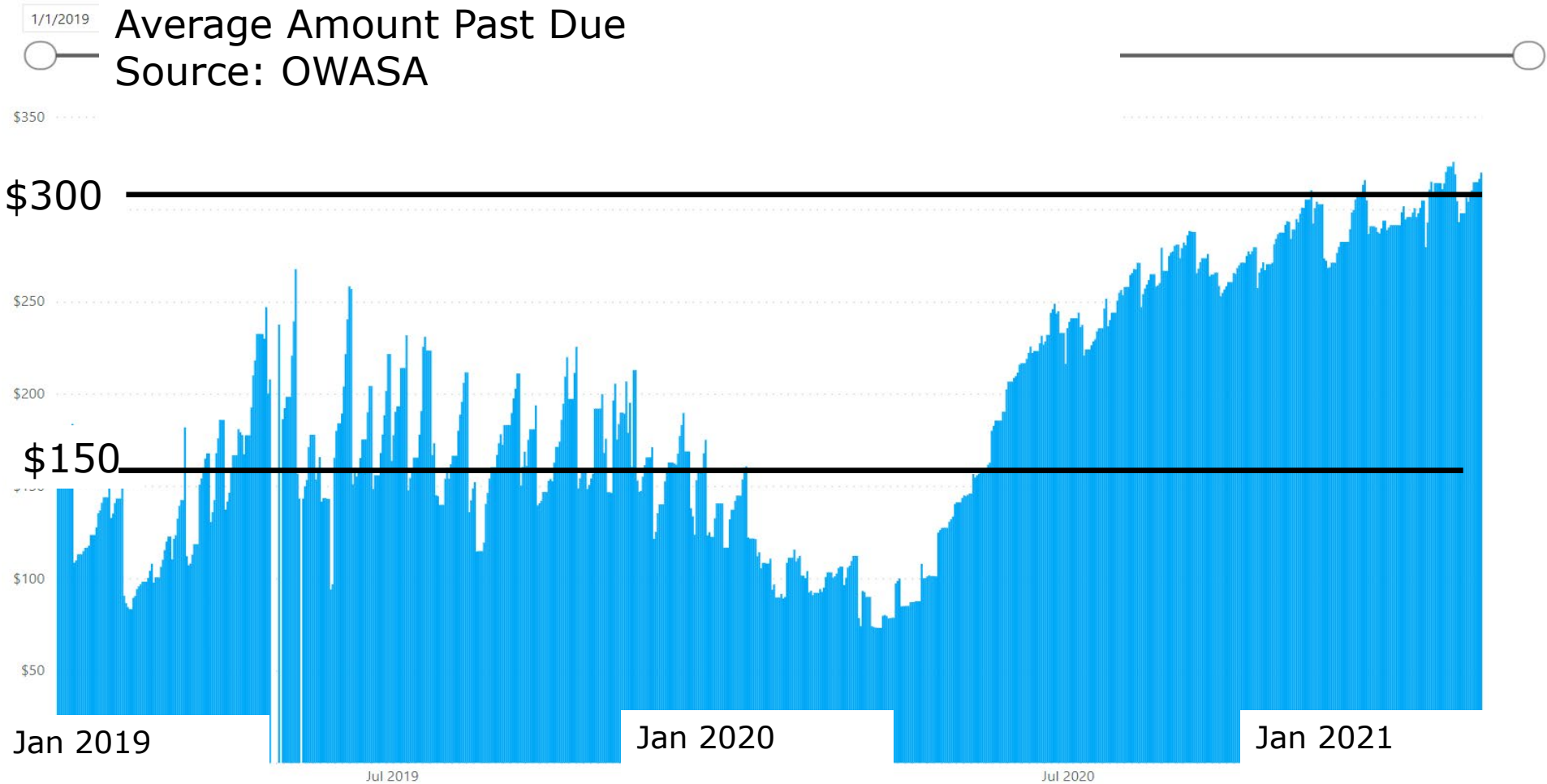


# Average bills past due increasing





# Average bills past due increasing



\*How can you evaluate policies and/or connect customers with resources to help with large amounts of bills past due?





Reasonable payment plans  
required



For residential customers

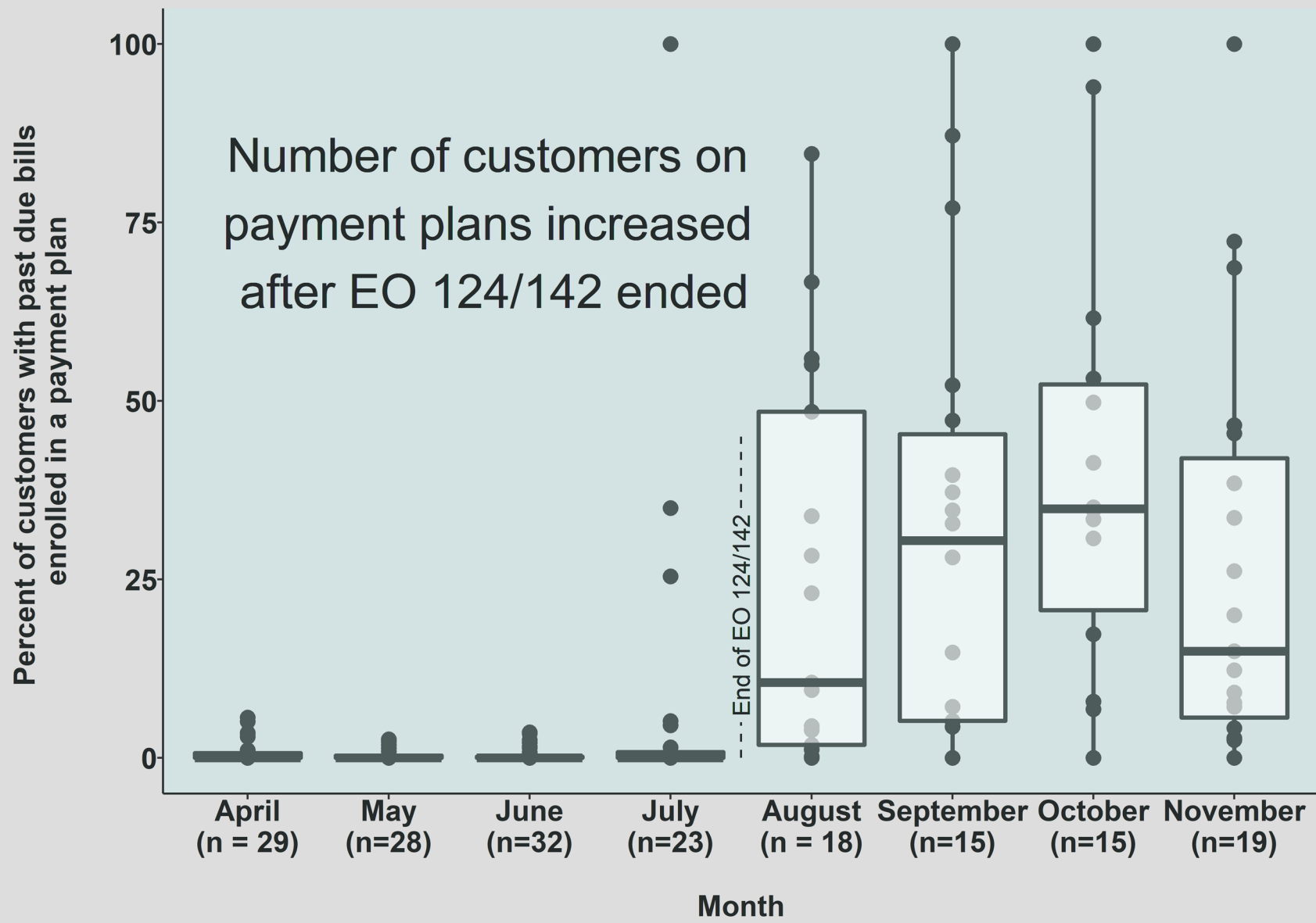


Who accrued arrearages from  
March 31, 2020 through July 29,  
2020



Must give until January 30, 2021  
to pay, as long as customer  
honoring terms of payment plan

# Payment Plans Required Under EO 124/142



# Payment plans

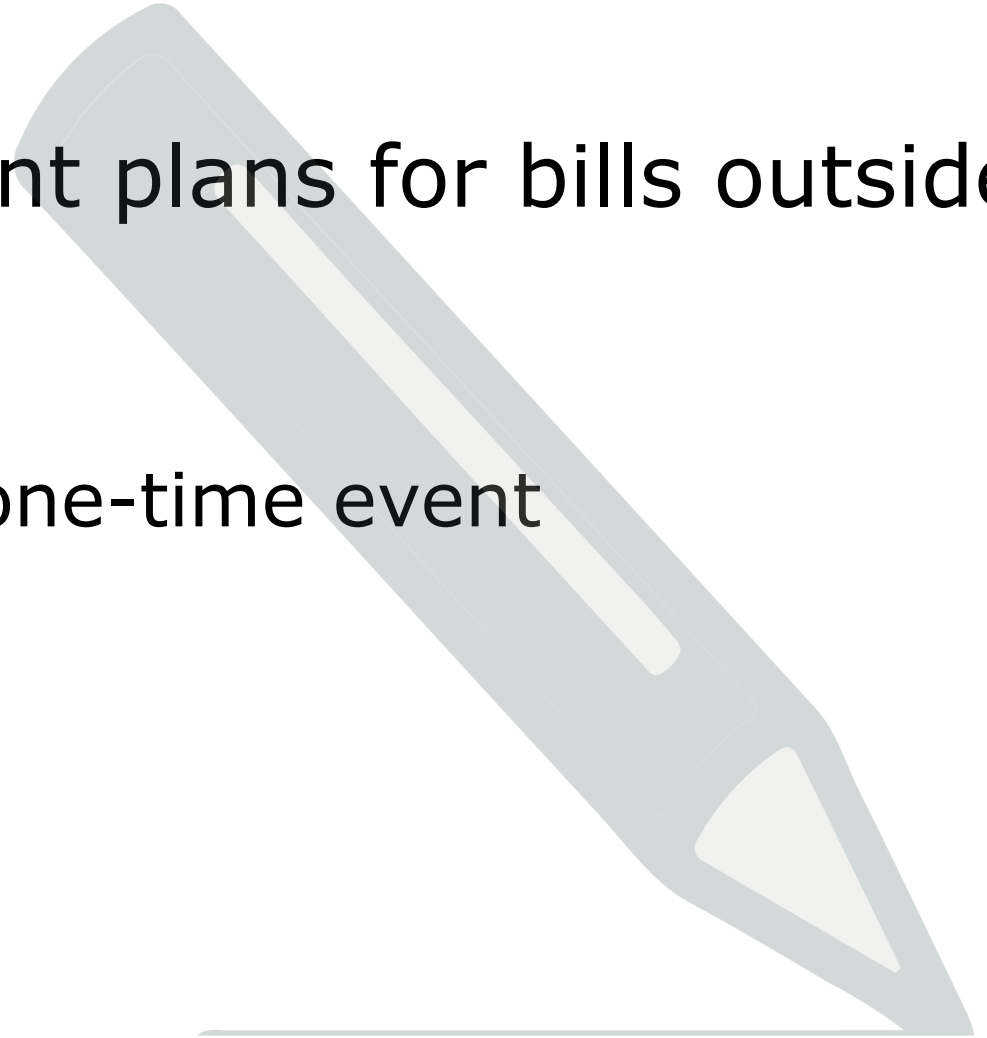
- LOTS of admin work
- Policy creation/revision
- Communication is key!

\*Do you have a payment plan for standard and/or emergency circumstances?



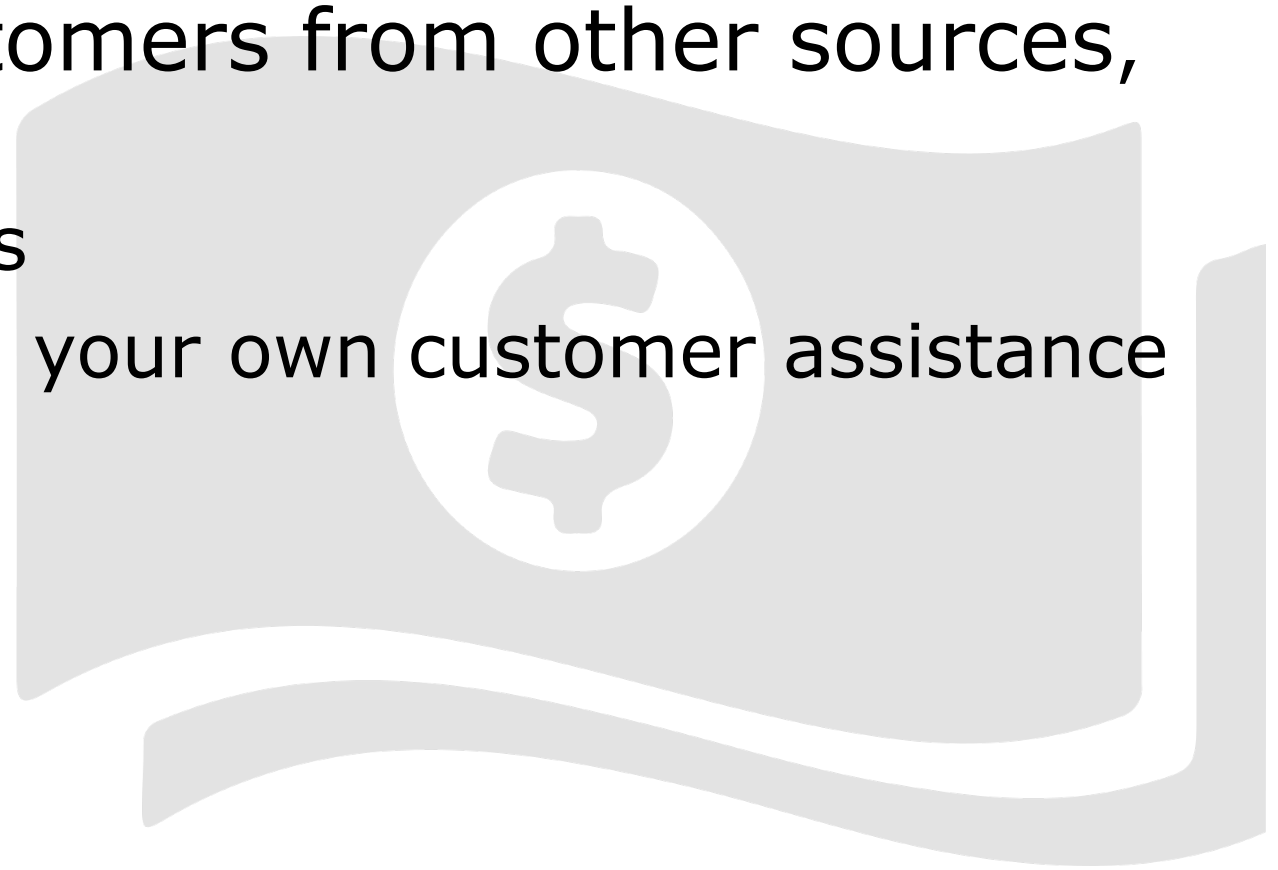
# Payment plans: Poll

- Does your utility offer payment plans for bills outside of pandemic circumstances?
  - Yes-under any circumstance
  - Yes-only for a leak or another one-time event
  - No
  - Not sure
  - Not applicable

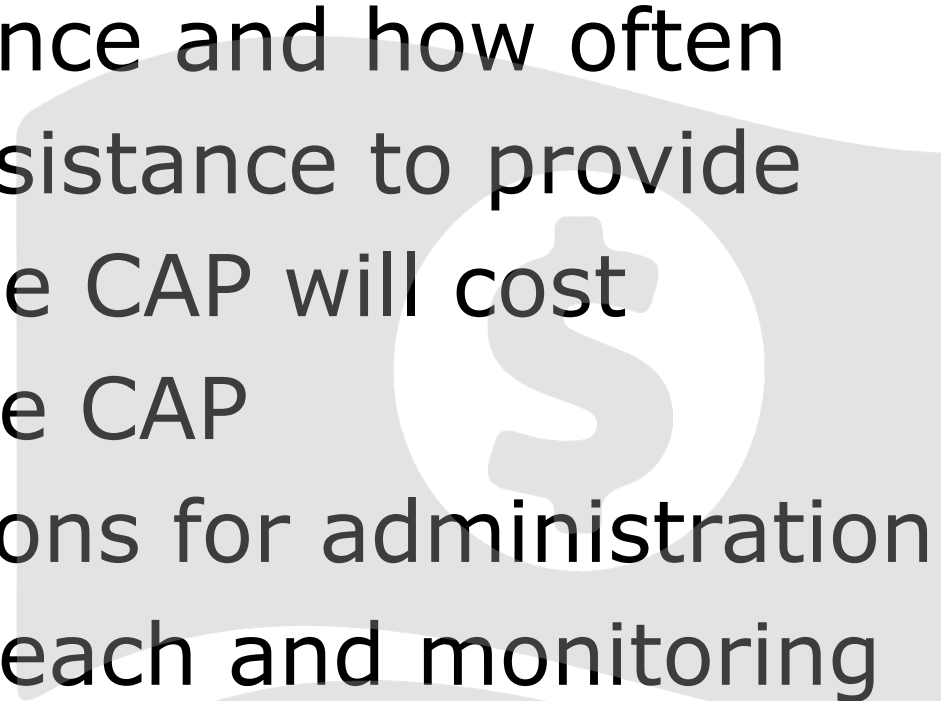


# Financial Assistance

- The more \$\$ you get to customers from other sources, the more your bills are paid!
- Relationships with non-profits
- Look into creating/promoting your own customer assistance program



# Some Elements of Designing a Bill Paying CAP

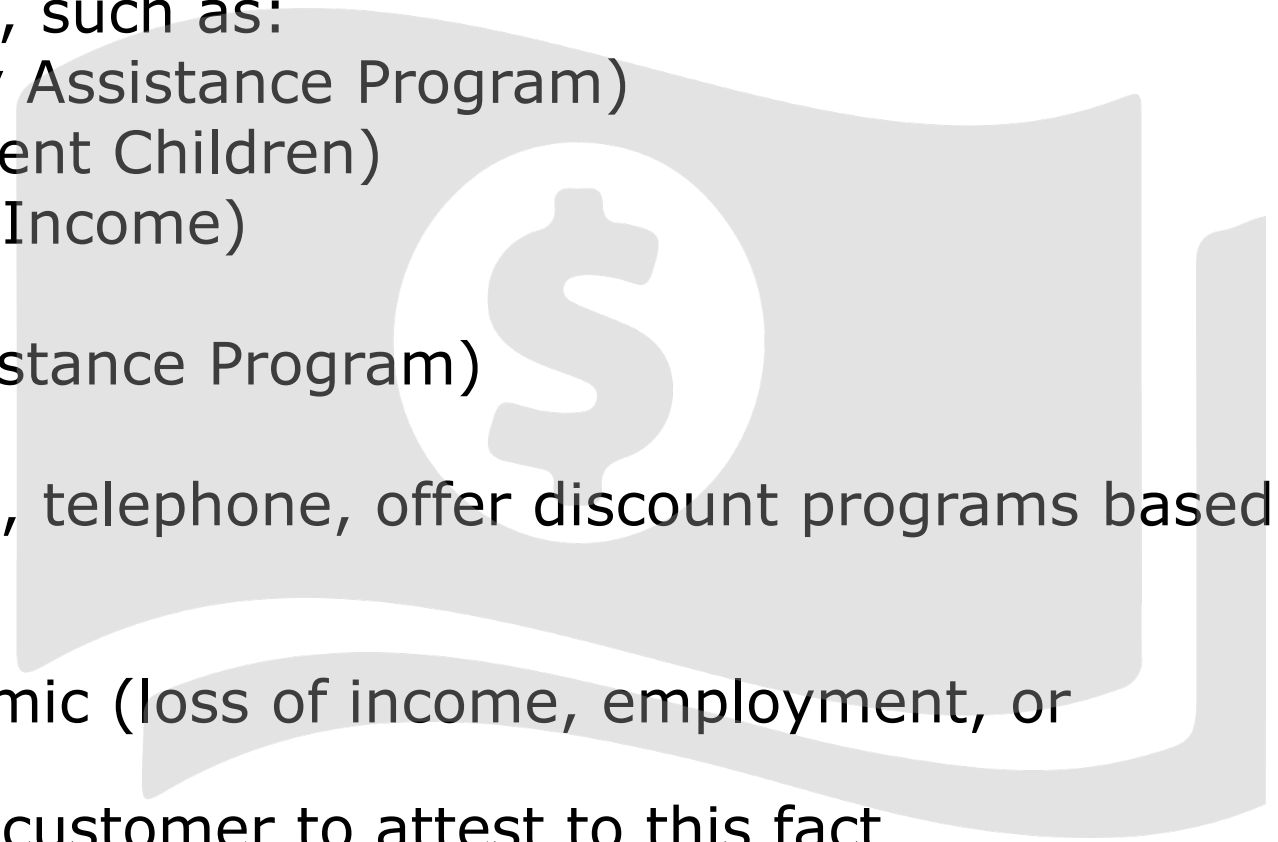
- Deciding who gets assistance and how often
  - Deciding what types of assistance to provide
  - Determining how much the CAP will cost
  - Devising a plan to fund the CAP
  - Partnering with organizations for administration
  - Planning for program outreach and monitoring
- 



# Who Gets Assistance?

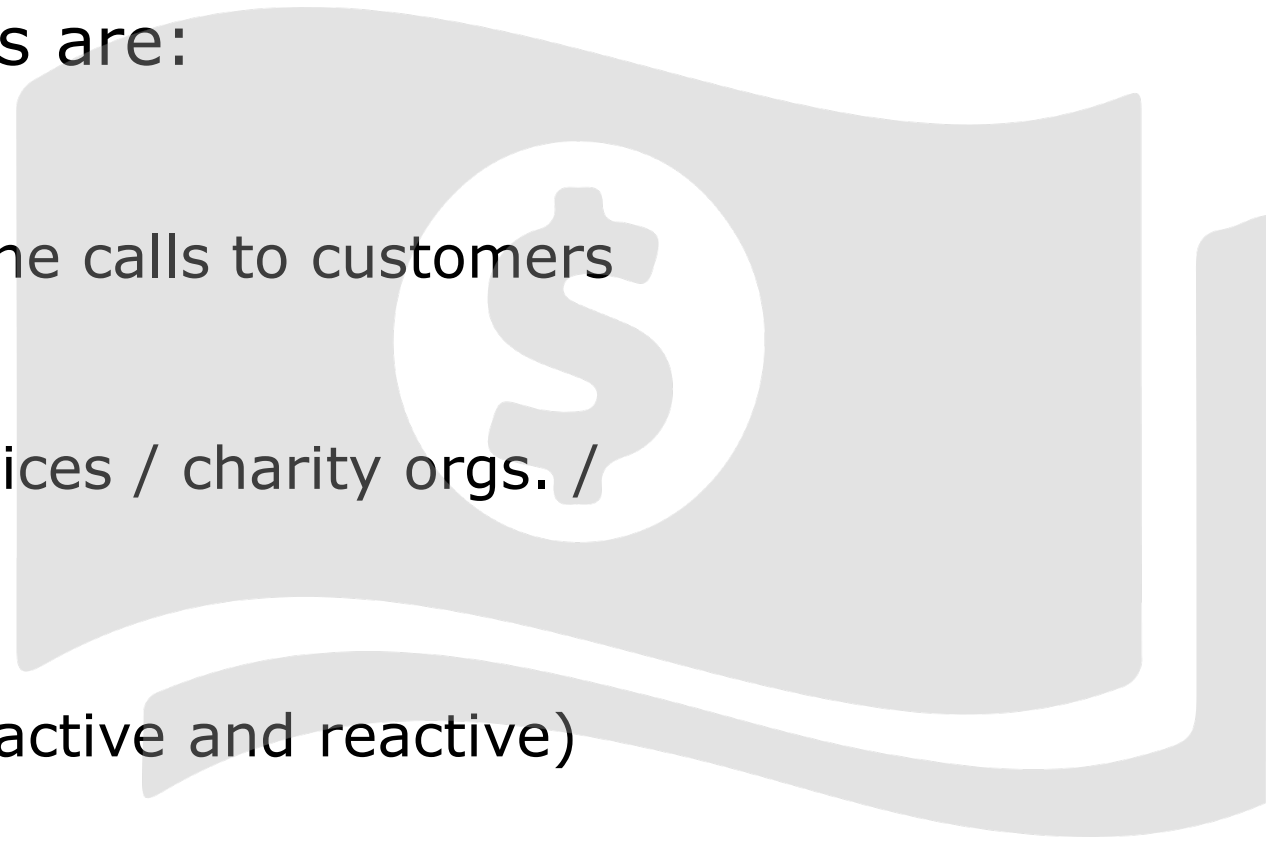
## Common Practices in Eligibility Verification

- Partnering with another organization that focuses on assisting residents with bills (low-income, senior citizens, other needs, etc.)
- Proof of eligibility in related programs, such as:
  - LIHEAP (Low Income Home Energy Assistance Program)
  - AFDC (Aid to Families with Dependent Children)
  - SSI (Supplemental Social Security Income)
  - Medicaid
  - SNAP (Supplemental Nutrition Assistance Program)
  - Local property tax assistance; and
  - Other utilities (electric, natural gas, telephone, offer discount programs based on income)
- During COVID, affected by the pandemic (loss of income, employment, or health)
  - May require documentation or ask customer to attest to this fact



# Program Outreach and Monitoring

- Getting the message to eligible customers is critical
- Common outreach mechanisms are:
  - Bill stuffers
  - Door hangers
  - Emails, mail, or automated phone calls to customers
  - Public meetings
  - Community fairs
  - Inform non-profits / Social Services / charity orgs. / community groups
  - Local media announcements
  - Websites
  - Customer Service referrals (proactive and reactive)

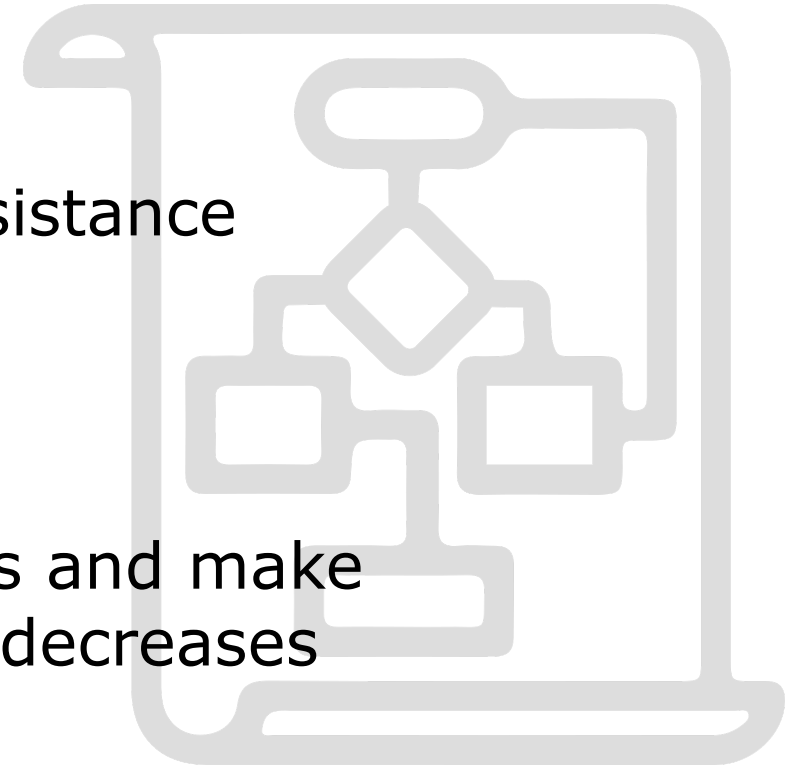


# Opportunities



# Opportunities from COVID-19

- Increased attention to the vital public service of providing drinking water and treating wastewater
- Increased interest in more robust customer assistance plans—better for customers, better for utility
- Opportunity to take a hard look at expenditures and make sure costs that don't affect level of service are decreases



# Policy Takeaways

## Pre-developed programs

Bill payment assistance program established before it is needed

System in place for distributing one-time funds

Develop partnerships between agencies, non-profits, and other organizations

## Better legislative clarity

Need for rules of assistance programs, clarity on what relief funds can be used for (ie. CARES Act), and guidance on any EOs that display knowledge of utilities

Beneficial to have consistent interpretation of public enterprise laws

## Long-term solutions

Helpful to have deadline extensions and avoid use-it-or-lose-it program requirements for relief funds

Permanent state-funded program or ability to fund assistance programs with rate revenue

Continued funding for programs such as the Viable Utility Reserve

## Bill Payment Assistance Programs

Programs to help customers of utilities need to be developed before the need is highest. The work already done during the COVID-19 pandemic will be beneficial in developing long-term programs, but more funding is necessary, as well as clearer directions for how to set them up and with whom to partner.



# Resources





# Blog Post Summaries

<http://efc.web.unc.edu>



## Financial Implications of COVID-19 for Water and Wastewater Utilities

MARCH 26, 2020 / SHADI ESKAF / 4 COMMENTS



## Ongoing Impacts of the COVID-19 Pandemic Conditions on North Carolina's Water and Wastewater Utilities

FEBRUARY 5, 2021 / ELSEMARIE MULLINS / 3 COMMENTS



## How are North Carolina Utilities Faring During the Pandemic? Four Key Insights from Survey Results

JUNE 18, 2020 / RADHIKA KATTULA / 0 COMMENTS

## COVID-19 and North Carolina Utilities: Impact Assessment of the Coronavirus Pandemic on North Carolina Water and Wastewater Utilities

AUGUST 27, 2020 / ELSEMARIE MULLINS / 0 COMMENTS



## Water Bill Payment Assistance in Multiple Federal Coronavirus Relief Programs

FEBRUARY 22, 2021 / SHADI ESKAF / 0 COMMENTS

## Water System Reserves During the COVID-19 Pandemic

APRIL 16, 2020 / CHRISTIAN LUTZ / 0 COMMENTS



# Financial Resilience tool

- Use unrestricted cash to see how much revenue loss a system can withstand
- How long will your unrestricted cash and reserves offset different levels of revenue losses and still cover expenditures on O&M?

<http://efc.sog.unc.edu/financialresiliencedashboard>

FINANCIAL RESILIENCE DASHBOARD

A GLIMPSE INTO THE EFFECTS OF COVID-19  
FOR WATER AND WASTEWATER UTILITIES

Please input the values below utilizing the *most up to date information* on the utility's finances.

Operating Revenues

\$1,000,000

Unrestricted Cash

\$250,000

Operating Expenses

\$900,000

Percent of Revenues Anticipated to Lose

30%

Based on these inputs, the utility can expect to have the following financial outcomes:

Days Cash on Hand	101
Days the Utility can Operate by Supplementing Revenue Loss with Unrestricted Cash	456

\*These values assume that ALL of the unrestricted cash at the utility will be use to supplement revenue loss and not to buffer other short-term expenses. Unrestricted cash often has many uses for the utility, including covering emergency expenses.

< Click to View Landing Pg

Click to View Inputs >

+ a b l e a u



# For North Carolina:

- Inserted data for North Carolina utilities
- 2019 Financials
- 10% decrease in revenue
- No depreciation

***Even including debt service coverage, most utilities have enough cash on hand to cover 10% revenue losses for more than 365 days (n=433).***

Number of Days Utility Can Cover Operations	Just Operating Expenses	Operating Expenses and Debt Service
<180	5%	7%
180-364	5%	9%
365 or more	91%	84%

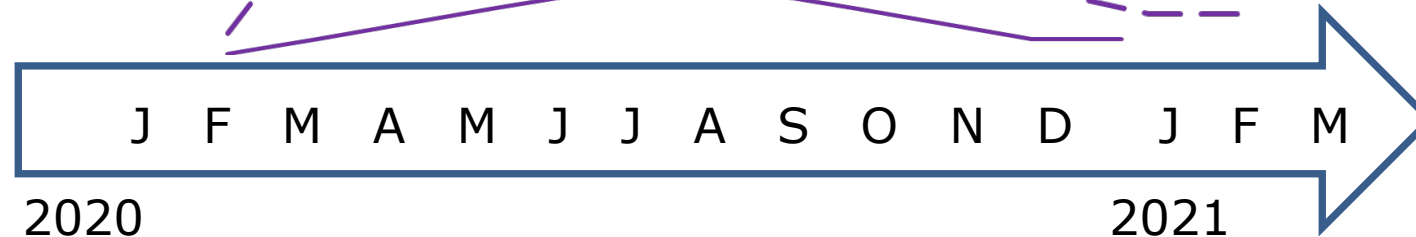
# Case Study: Yadkin Valley Sewer Authority

## Scenario 1 and 2 Inputs

Large  
industrial  
customer  
usage

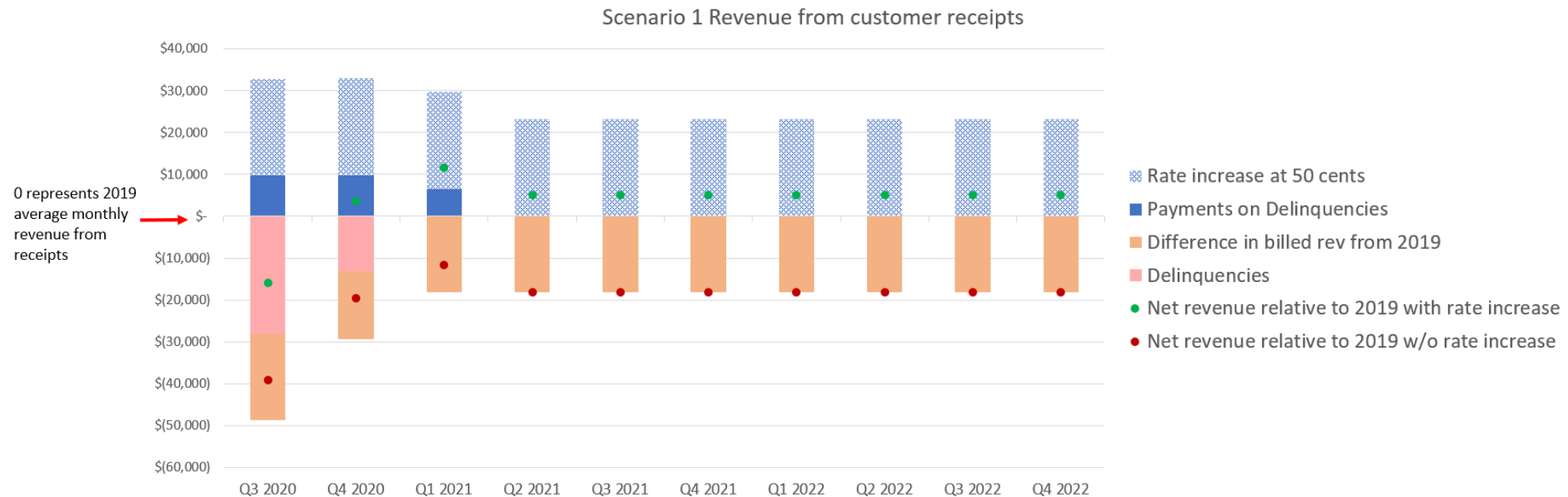
Commercial  
usage

Delinquencies

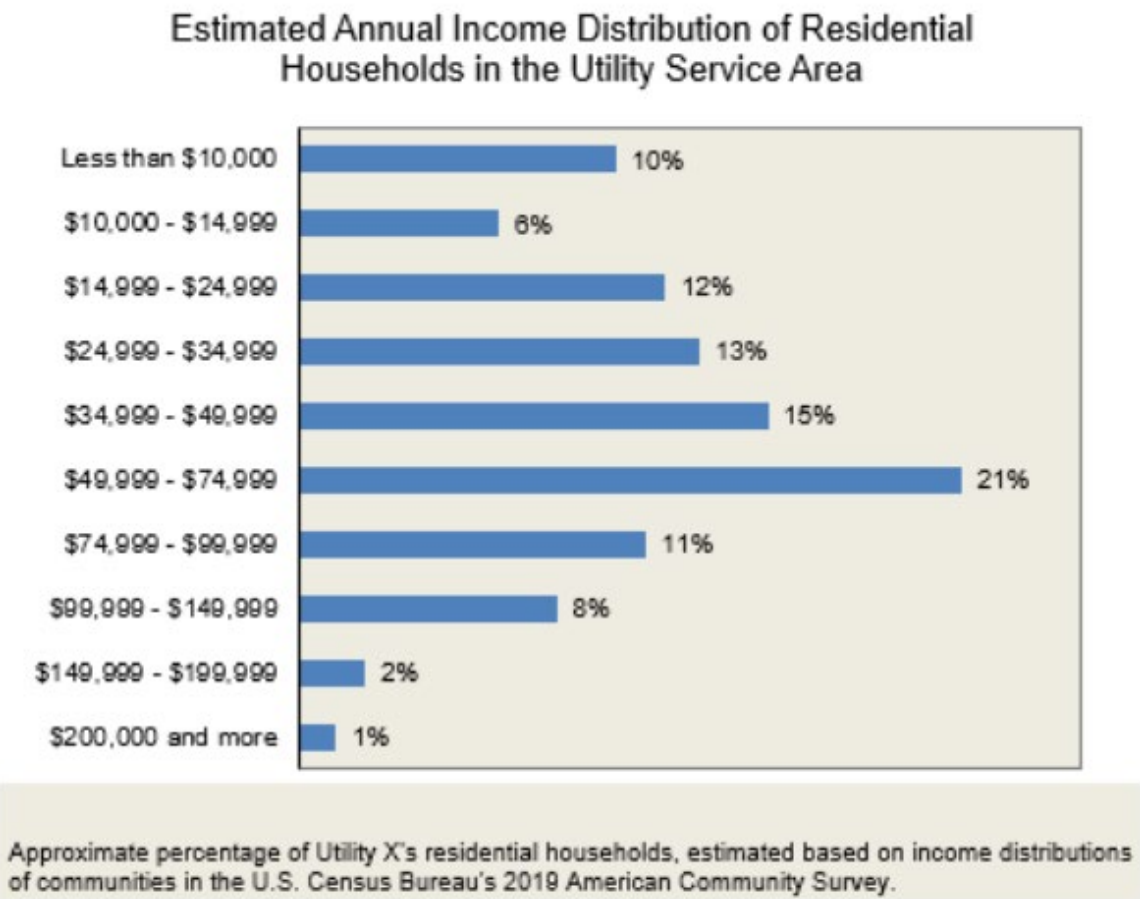


# Case Study: Yadkin Valley Sewer Authority

- Deficit going into FY21; tightened O&M budget
- 50c/Base, 75c/Volumetric rate increase



# Bill Payment Assistance Program Cost Estimation



*Screenshot from Tool: Bill Payment Assistance Program Cost Estimation For Water Utilities*

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