

2021 Water and Wastewater Finance Strategies Workshop

February 24 – 26, 2021
Virtual



SCHOOL OF GOVERNMENT
Environmental Finance Center

www.efc.sog.unc.edu

Annual workshop providing utility practitioners with skills and up-to-date information on pricing, infrastructure planning strategies, and funding resources.

This year's workshop features new developments in

- Viability of utilities
- COVID-19's effects and response
- Affordability
- Integrated planning





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EFC's mission:

Dedicated to enhancing the ability of governments and other organizations to provide environmental programs and services in fair, effective and financially sustainable ways through:

- Direct advising
- Applied research
- Teaching and outreach

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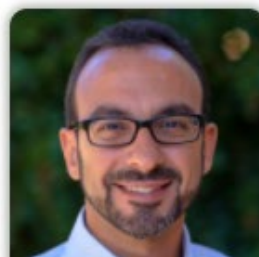
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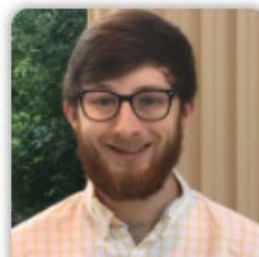
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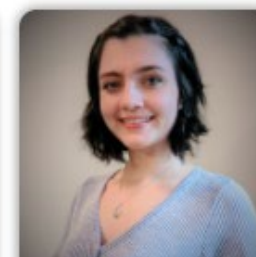
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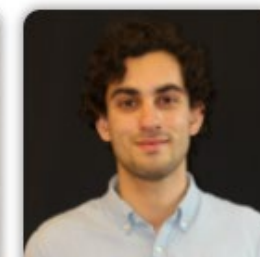
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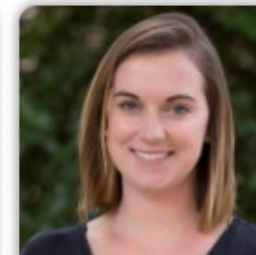
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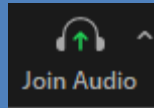
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How to Zoom in this Workshop

Join audio to listen



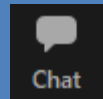
Keep yourself muted

(unless invited to ask a question after raising your hand)

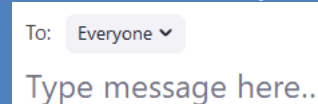
Webcams optional



Ask questions in the Chat
(at any time)



Use the Chat to share ideas
(privately to one person or send to "Everyone")



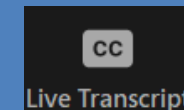
If you want to be unmuted to speak,
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Participate in the polls and other interactions

Avoid distractions

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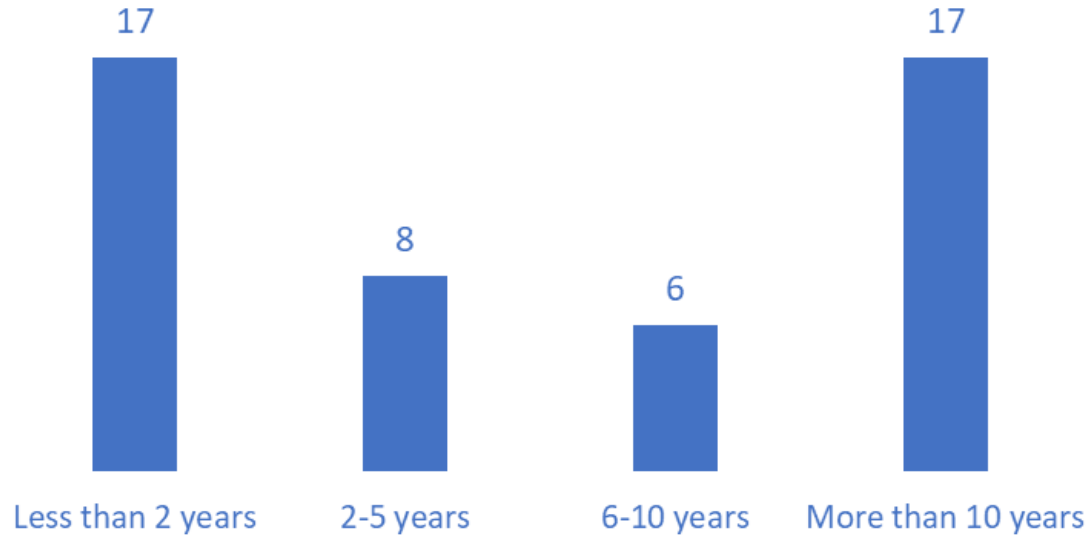
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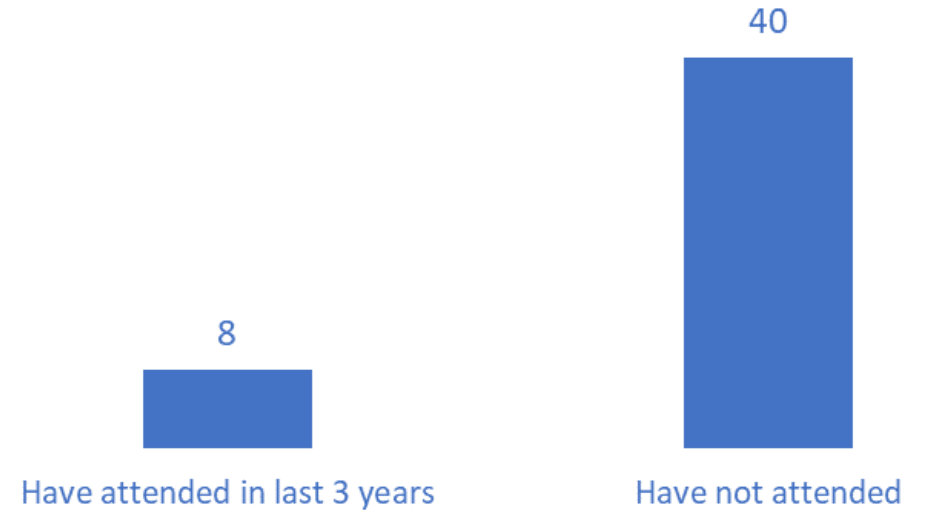
- 1 Go to **Pollev.com**
- 2 Enter **EFC SOG**
- 3 Respond to activity

Who's Registered?

Registrants have a wide range of years of experience in water/wastewater finance





Most registrants are relatively new to this workshop



As of 2/22/2021





In 1 - 5 words, what are you hoping to hear about in this workshop?

Agenda: February 24 - 26, 2021

Wednesday, 1:00pm – 4:00pm

- 1:00pm **Introduction and Overview of Utility Finance**
- 1:30 **Viable Utilities Reserve and the State's Approach to Assisting Distressed Units**
- 2:30 **Break**
- 2:45 **Self-assessing Financial Performance**
- 3:30 **Strategies to Enhance the Resilience of Utility Finances**
- 4:00 **Adjourn**

Thursday, 1:00pm – 4:00pm

- 1:00pm **Financially Operating Under COVID-19 Conditions**
- 2:15 **COVID-19 Financial Relief Funds for Customers and Utilities**
- 2:30 **Break**
- 2:45 **Assessing Affordability and Equity Considerations**
- 3:30 **USDA Funding Programs**
- 4:00 **Adjourn**

Friday, 9:30am – 12:30pm

- 9:30am **Trends in Rates and Capital Needs**
- 10:30 **Updates to the Rates and Financial Sustainability Dashboard**
- 11:00 **Break**
- 11:15 **Integrated Planning**
- 12:00pm **DWI Funding Programs**
- 12:20 **Final Questions and Wrap up**
- 12:30 **Adjourn**

Credit hours for operators are still pending. We will follow up by email as soon as a determination is made.

Workshop Objectives

1. Improve understanding of water service finance strategies, practices, and funding sources
2. Improve understanding of evolving (current) trends and external drivers
3. Provide forum for sharing finance and management perspectives, ideas, and experiences



Thank you to our fantastic speakers!

NC DEQ DWI: Kim Colson, Jon Risgaard

NC DST LGC: Debbie Tomasko

USDA: Dennis Delong

EFC: Elsemarie Mullins, Evan Kirk, Christian Lutz,
Stephen Lapp



EFC Content for this Workshop Developed Thanks to...

- You
- NC DEQ DWI
- US EPA
- NC Policy Collaboratory

**Thank
you!**



Overview of Enterprise Funds in North Carolina

§ 160A-311. Public Enterprise Defined for Cities and Towns

§ 160A Article 16

- (1) **Electric** power generation, transmission, and distribution systems.
- (2) **Water** supply and distribution systems.
- (3) **Wastewater** collection, treatment, and disposal systems of all types, including septic tank systems or other on-site collection or disposal facilities or systems.
- (4) **Gas** production ...
- (5) **Public transportation** systems.
- (6) **Solid waste** collection and disposal systems and facilities.
- (7) **Cable television** systems.
- (8) **Off-street parking** facilities and systems.
- (9) **Airports**.
- (10) **Stormwater** management programs designed to protect water quality by controlling the level of pollutants in, and the quantity and flow of, stormwater and structural and natural stormwater and drainage systems of all types.

§ 153A-274. Public Enterprise Defined for Counties

§ 153A Article 15

- (1) **Water** supply and distribution systems.
- (2) **Wastewater** collection, treatment, and disposal systems of all types, including septic tank systems or other on-site collection or disposal facilities or systems.
- (6) **Public transportation** systems.
- (3) **Solid waste** collection and disposal systems and facilities.
- (5) **Off-street parking** facilities and systems.
- (4) **Airports**.
- (7) **Stormwater** management programs designed to protect water quality by controlling the level of pollutants in, and the quantity and flow of, stormwater and structural and natural stormwater and drainage systems of all types.

A Guiding Principle for Enterprise Funds

Self-sufficiency

Revenues collected = Costs expended

Avoid or minimize transfers



General Authority Behind User Fees

§ 160A-314. Authority to fix and enforce rates

(a) A city may establish and revise from time to time schedules of rents, rates, fees, charges, and penalties for **the use of or the services furnished or to be furnished by any public enterprise**. Schedules of rents, rates, fees, charges, and penalties **may vary according to classes of service, and different schedules may be adopted for services provided outside the corporate limits of the city.**

Similar to § 153A-277 for Counties. Similar authority to other forms of local government under different statutes.

Some Fees Have More Precise Statutory Guidance

- Water/wastewater availability charge
- Water/wastewater system development fee (Article 8 of Chapter 162A)
- Stormwater fee

Transfers out would disqualify you from funding

§ 159G-37. Application to CWSRF, Wastewater Reserve, DWSRF, and Drinking Water Reserve.

(b) Certification. - The Division of Water Infrastructure shall require all local governments applying for loans or grants for water or wastewater purposes to certify that no funds received from water or wastewater utility operations have been transferred to the local government's general fund for the purpose of supplementing the resources of the general fund. The prohibition in this section shall not be interpreted to include payments made to the local government to reimburse the general fund for expenses paid from that fund that are reasonably allocable to the regular and ongoing operations of the utility, including, but not limited to, rent and shared facility costs, engineering and design work, plan review, and shared personnel costs. (2005-454, s. 3; 2011-145, s. 13.3(kkk); 2013-360, s. 14.21(i); 2013-413, s. 57(u); 2014-100, s. 14.17; 2014-115, s. 17.)

Since July 1, 2014



Multiple Faces of Transfers

- Cost reimbursements
 - E.g. Part of city manager's time
 - Fraction of fleet maintenance costs
 - Percentage of shared building operating costs
 - Procedural transfers
 - Moving funds from operating to capital project fund
 - General Transfers
 - No documentation at all
 - Plug a hole in General Fund or Enterprise Fund
 - Reduce need for property tax/fee increase (i.e. subsidize)
 - Paying a dividend or profit
-
- Document these
- Avoid these (including PILOTs) if plan to access DWI funding programs

A Balanced Budget?

Budget Expenses

	Account	Budget
19	30-810-01 W/S PROF. SERVICES	\$500.00
20	30-810-02 TOWN MANAGER SALARY	\$28,499.99
21	30-810-03 W/S EMPLOYEE SALARY	\$57,200.00
22	30-810-04 CLERK SALARY	\$37,251.88
23	30-810-05 FICA EXPENSE	\$8,703.00
24	30-810-06 W/S EMPLOYMENT TAX	\$975.00
25	30-810-07 W/S OVERTIME	\$4,500.00
26	30-810-08 MERIT BONUS	\$3,000.00
27	30-810-09 HOLIDAY/EMPLOYEE APREC	\$1,200.00
28	30-810-10 POSTAGE	\$2,700.00
29	30-810-11 Office Supplies/Repairs	\$4,700.00
30	30-810-12 PHONE	\$3,400.00
31	30-810-13 W/S UTILITES	\$30,000.00
32	30-810-14 TRAINING	\$2,400.00
33	30-810-15 Employee Screening	\$105.00
34	30-810-16 MAINT/REPAIR:SYST-EQUIP	\$30,000.00
35	30-810-17 Mayor Salary	\$1,800.00
36	30-810-18 Board Salary	\$10,500.00
37	30-810-20 W/S UNIFORMS	\$2,000.00
38	30-810-30 GAS AND OIL FOR VEHICLES	\$4,500.00
39	30-810-31 TIRES FOR VEHICLES	\$600.00
40	30-810-32 REPAIRS TO VEHICLES	\$1,000.00
41	30-810-33 SUPPLIES & MATERIALS	\$3,000.00
42	30-810-34 CHEMICALS AND SALT	\$20,000.00
43	30-810-45 CONTRACTED SERVICES	\$36,500.00
44	30-810-46 STATE PERMITS	\$1,700.00
45	30-810-48 DUES/SUBSCRIPTIONS	\$1,500.00
46	30-810-50 DEPRECIATION	\$0.00
47	30-810-54 INSURANCE	\$13,608.00
48	30-810-55 HOSPITAL INSURANCE	\$22,443.00
49	30-810-57 MISC EXPENSE	\$500.00
50	30-810-60 W/S - LGERS	\$9,272.00
51	30-810-70 WATER STUDY EXPENSES	\$24,000.00
52	30-810-74 Online Payments SVC	\$1,600.00
53	30-810-75 ARRA LOAN PRINCIPAL	\$8,875.00
54	30-810-76 PURCHASE WATER BILL	\$2,400.00
55	30-810-79 Banking Fees	\$500.00
56	30-810-89 CAPITAL OUTLAY NEW EQUIP	\$0.00
57	30-810-90 TRANSFER TO OTHER FUND	\$0.00
58	30-810-95 FINES AND PENALTIES	\$1,500.00
		\$382,932.87

Budget Revenues

	Account	Budget
1	30-329-00 W/S INTEREST EARNED DEPOS	\$0.00
2	30-334-00 CONTRIBUTIONS/DONATIONS	\$0.00
3	30-335-00 W/S MISC. REVENUE	\$700.00
4	30-336-00 FUND BALANCE APPROPRIATED	\$9,187.87
5	30-345-01 SALES TAX REFUND	\$0.00
6	30-371-01 W/S CHARGES	\$344,445.00
7	30-371-02 W/S ADJUSTMENTS	\$0.00
8	30-373-00 TAP CONNECTIONS	\$1,500.00
9	30-373-02 SERVICE CHARGES/CUT OFFS	\$12,500.00
10	30-373-04 IMPACT FEES	\$1,000.00
11	30-373-05 CAPITAL CONTRIBUTIONS	\$0.00
12	30-374-00 Online W/S Payment Fee	\$1,600.00
13	30-375-80 Contributed Capital - G.R.S.P.	\$0.00
14	30-375-81 Contributed Capital Fund	\$0.00
15	30-377-00 RBEG - Pump Station	\$0.00
16	30-378-00 I&I Study Grant - Commerce	\$12,000.00
17	30-385-00 SALE OF ASSETS	\$0.00
18	30-386-00 TRANSFER FROM OTHER FUND	\$0.00
		\$382,932.87

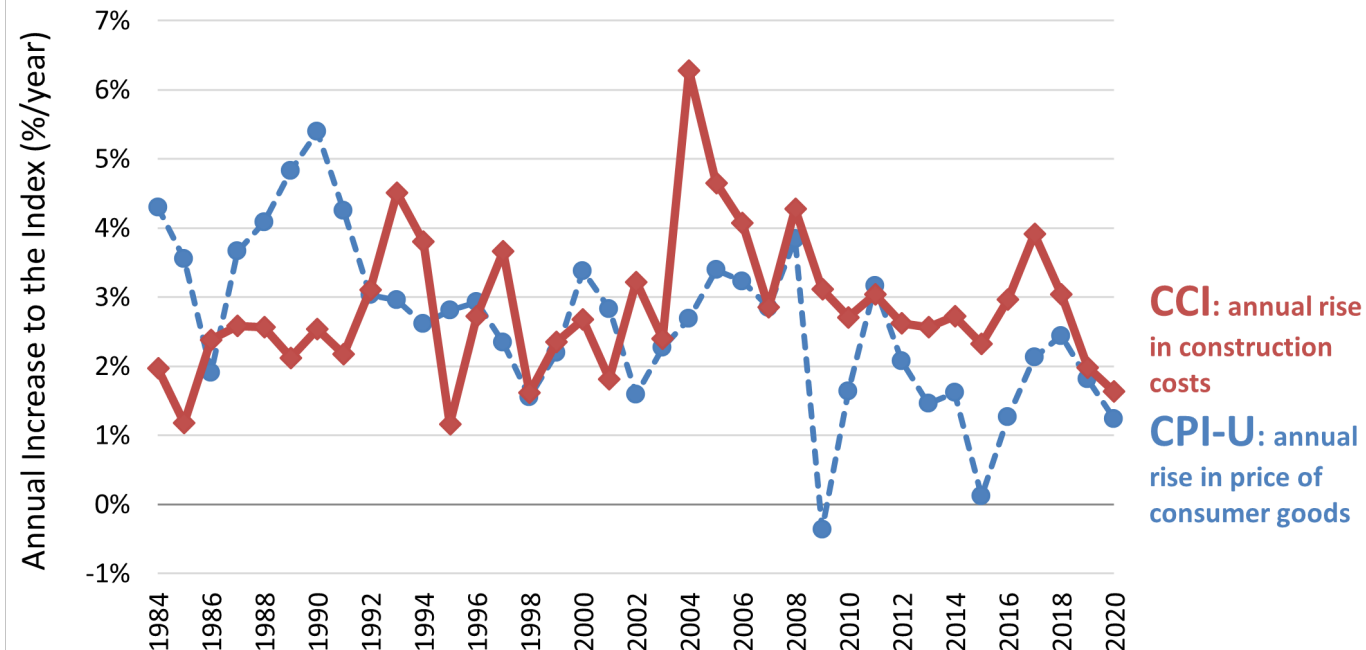
\$382,933 = \$382,933

Recent Trends and Outlook

Costs of Infrastructure Projects Continue to Rise

The **Construction Cost Index (CCI)** has been rising faster than the **Consumer Price Index-Urban (CPI-U)** in recent years.

Construction costs (CCI) rose on average of **2.7%/year** in the last five years, while consumer goods (CPI-U) only rose an average of **1.8%/year** in the same period.



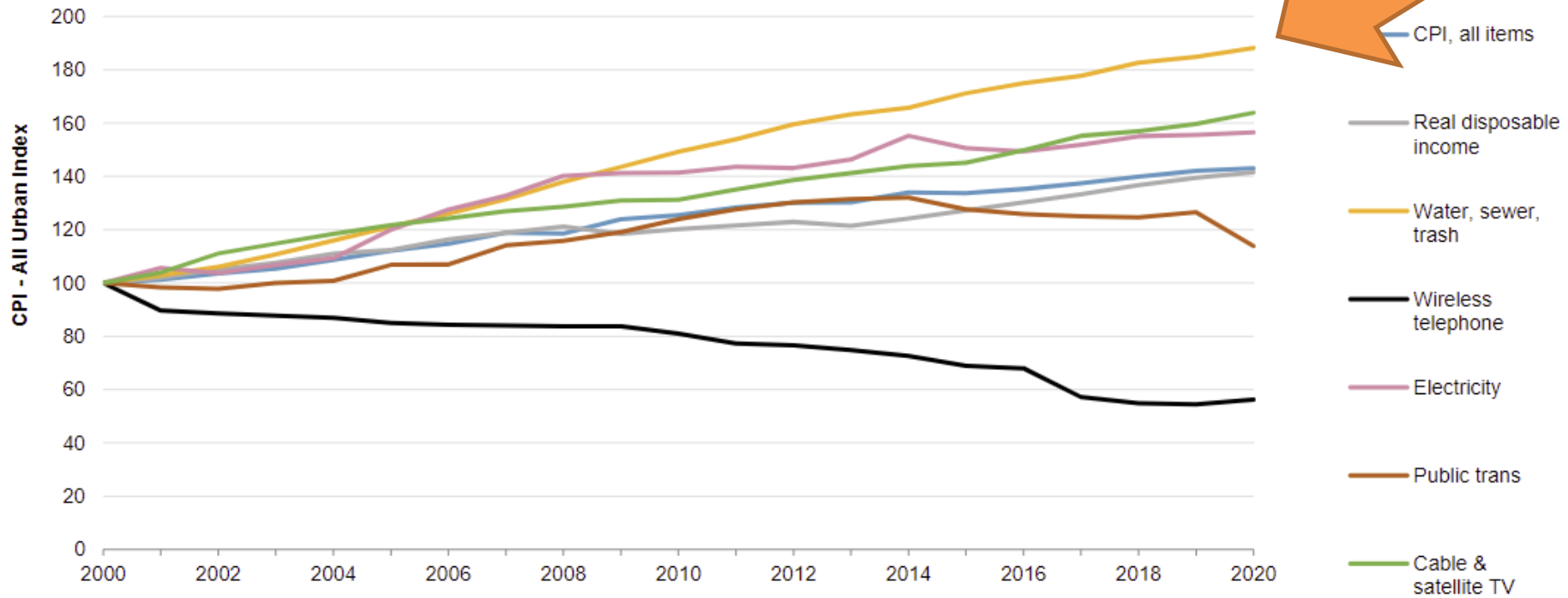
Data graphed by the Environmental Finance Center at the University of North Carolina, Chapel Hill.

Data sources: Bureau of Labor Statistics (CPI-U), Engineering News-Record ENR.com (CCI), InflationData.com (CPI-U), USDA Natural Resources Conservation Services (spreadsheet containing CCI and CPI-U).

Water/Sewer Rates Rising Faster than in Most Sectors

Chart 2

Selected Inflation Rates, 2000-2020 (2000=100)



Source: Bureau of Labor Statistics.

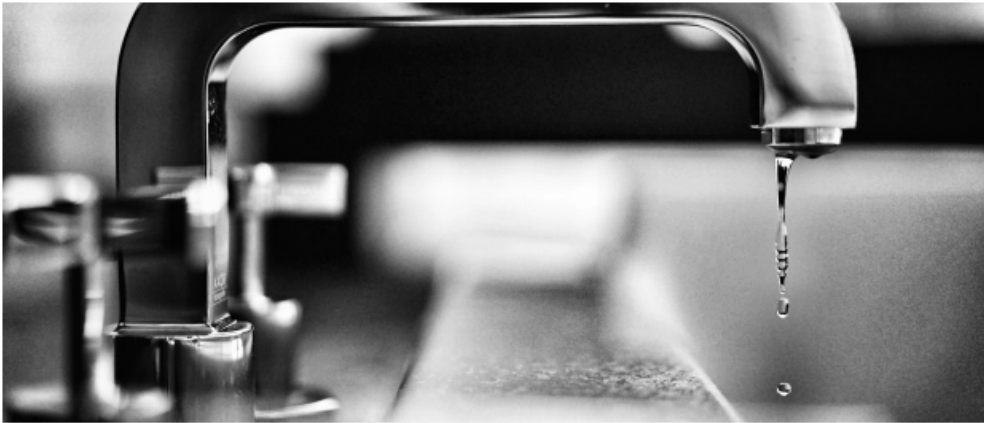
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<https://www.spglobal.com/ratings/en/research/articles/210119-outlook-for-u-s-water-and-sewer-utilities-2021-provides-2020-hindsight-11799268>

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Avoiding Punishment? Electoral Accountability for Local Fee Increases

Posted on February 9, 2021 by [urbanaffairseditor](#) in [local politics](#), [public services](#), [Urban](#), [water](#) // 0 Comments



By [Katy Hansen](#) (Duke University), [Shadi Eskaf](#) (UNC-Chapel Hill), and [Megan Mullin](#) (Duke University)

Many elected officials expect to be punished at the ballot box for increasing taxes and fees. At a recent city council meeting in Westminster, Colorado, one council member acknowledged potential retaliation for supporting a 10% water rate increase, [telling a constituent](#), “I have to do what I think is best for the long term health of my city [...] and if it costs me my job on council [...], that is a consequence I’m willing to pay.” Both scholars and policy practitioners consider the fear of electoral punishment to be an important explanation for local decision making about public services.

Do elected officials get voted out of office after water rate increases?

On average, in NC, no.

<https://urbanaffairsreview.com/2021/02/09/avoiding-punishment-electoral-accountability-for-local-fee-increases/>

In the news this week

U.S. House budget committee approves \$1.9 trillion covid-19 aid bill

By Reuters Staff

1 MIN READ



WASHINGTON (Reuters) - The U.S. House of Representatives budget committee approved Monday a bill with \$1.9 trillion in coronavirus relief, backed by President Joe Biden.

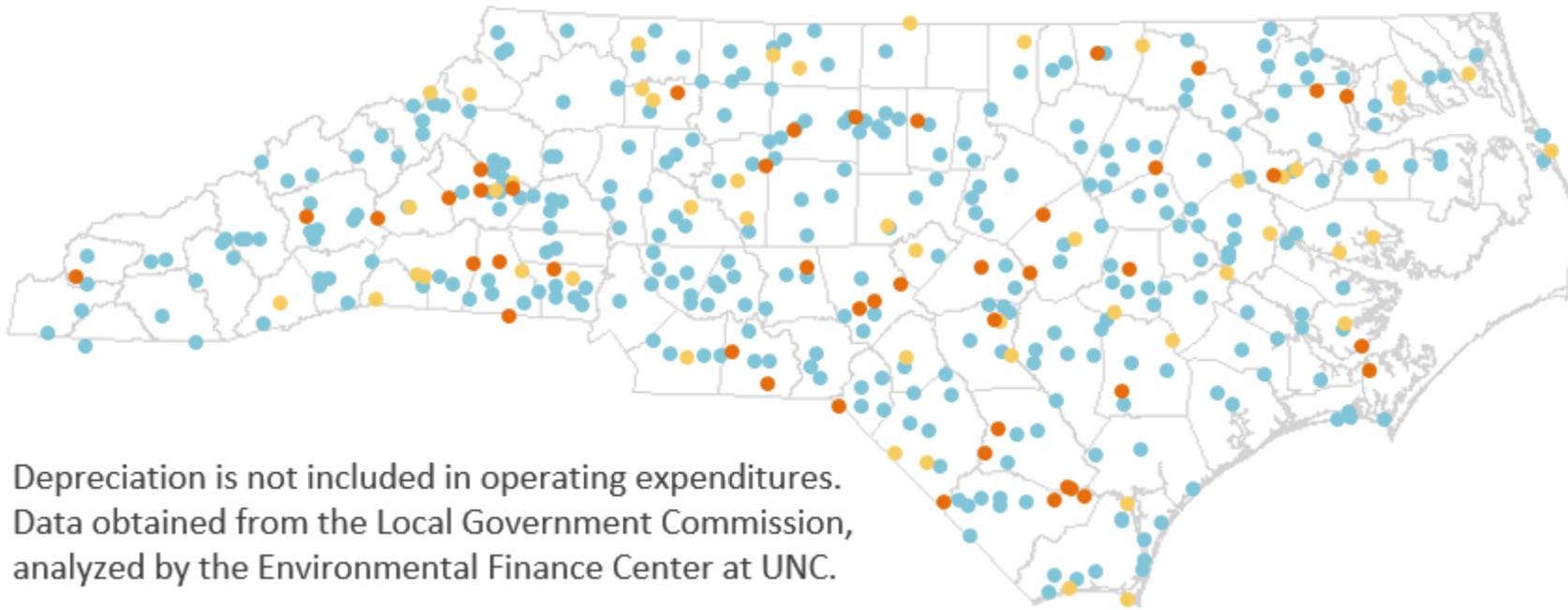
Source: Reuters

<https://www.reuters.com/article/us-health-coronavirus-usa-congress/u-s-house-budget-committee-approves-1-9-trillion-covid-19-aid-bill-idUSKBN2AM2EN>

Cost Recovery in 398 Local Government-owned Water and Wastewater Utilities during FY2019

Local Government-Owned Water and Wastewater Utilities' Cost Recovery in FY 2019

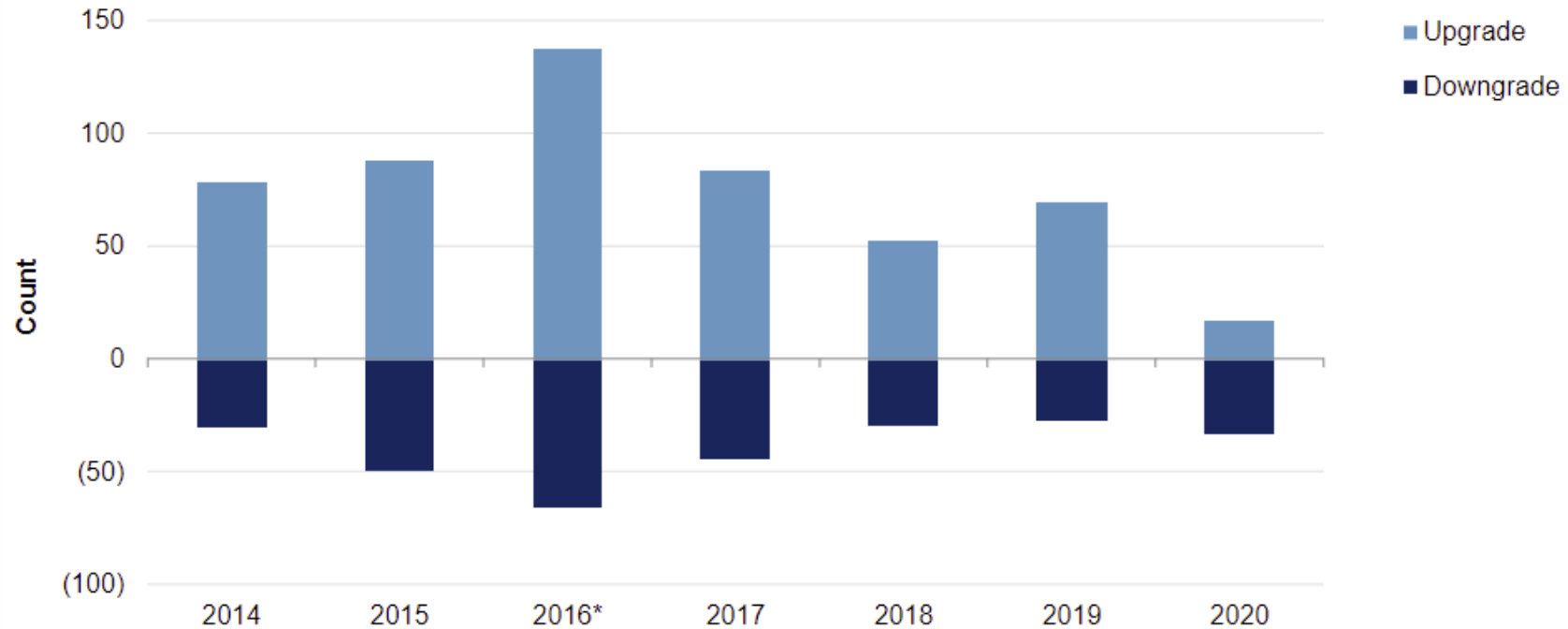
- Operating revenues < operating expenditures (11%)
- Operating revenues < operating expenditures + principal + interest on long-term debt (12%)
- Operating revenues > operating expenditures + principal + interest on long-term debt (77%)



S&P Sector Evaluation

Chart 4

Sector Downgrades and Upgrades, Last Five Years



*New criteria in January 2016. Data as of Dec. 31, 2020.


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<https://www.spglobal.com/ratings/en/research/articles/210119-outlook-for-u-s-water-and-sewer-utilities-2021-provides-2020-hindsight-11799268>

S&P Outlook

Chart 1

U.S. Municipal Water & Sewer Utility Sector: By The Numbers

3.0% 

Percent of utility ratings in 2020 that changed. In 2012 considered the high water mark for Great Recession rating transitions, it was 8.7%

2010 to 2012 

Period of one of the worst La Niña weather patterns on records. By summer 2012, more than 80% of the lower 48 states were in at least some stage of drought. Meteorologists believe La Niña conditions have returned.

\$7.8 bil.


Federal credit assistance provided since 2018 by the Water Infrastructure Finance and Innovation Act for 41 different projects 

157 days 


Median days cash of BBB- utilities over the last three years, indicating that even the lowest investment grade-rated systems were reasonably well situated heading into 2020

\$467 bil.

Estimated revenue lost by state and local governments between fiscals 2020 and 2022 

4.9 

Average score, on a 1 to 7 basis with 7 being the most favorable, in the annual America Water Works Association's 2020 survey of water professionals about their current state of the water industry. This marked a 16-year high score

Beyond 2023? 

S&P Global Economics' baseline forecast projects that spending by state and local governments will decline in 2021 then grow at only 0.6% in 2022 and 2023, much less than the average projected inflation rate of 1.9%. So it could be several more years before public sector spending even keeps up at least with CPI

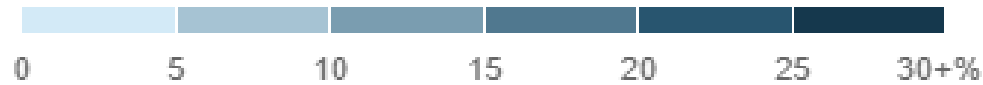
Sources: S&P Global Ratings; National Oceanic and Atmospheric Administration; United States Environmental Protection Agency. S&P Global Economics; Brookings Institute; American Water Works Association. Copyright © 2021 by Standard & Poor's Financial Services LLC. All rights reserved.

<https://www.spglobal.com/ratings/en/research/articles/210119-outlook-for-u-s-water-and-sewer-utilities-2021-provides-2020-hindsight-11799268>

Floods in N.C.

Where People Are At Risk For Flood Damage

Percent of residential properties at risk by county, 2020



Source: First Street Foundation <https://www.npr.org/2021/02/22/966428165/a-looming-disaster-new-data-reveal-where-flood-damage-is-an-existential-threat>



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After Fair Bluff Flooded

Flooded by hurricanes twice in three years, the small town of Fair Bluff, North Carolina, is a poster child for the devastation.

The town's struggle to recover from those storms reflects demographic, economic, and technological changes that are reshaping the South.

A Special Report

By Brett Walton, Circle of Blue



Two Hurricanes, Two Floods: North Carolina Town Fights To Stay Alive

<https://www.circleofblue.org/fair-bluff/>

Developments in NC

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Town of Kingstown

The North Carolina Local Government Commission (LGC) assumed control of the financial affairs of the Town of Kingstown on December 1, 2020 under North Carolina General Statute 159-181(c). Information on this page is intended to keep the general public informed about the town's finances and other developments.

Source: NC Dept of State Treasurer <https://www.nctreasurer.com/links/state-and-local-government-finance/lgc/information-public/town-kingstown>

Carteret County agrees to sell water system to private company for \$7M

ELISE CLOUSER Feb 22, 2021 Updated 44 min ago 4



This map shows the boundaries of Carteret County's county-owned water system, which serves approximately 1,200 customers. The County Board of Commissioners decided Feb. 15 to sell the system to Aqua North Carolina, a private-owned company. (Carteret County map)



BEAUFORT — Carteret County commissioners agreed to a \$7 million offer from Aqua North Carolina to purchase the county-owned and maintained water system serving around 1,200 customers.

The Carteret County Board of Commissioners met Feb. 15 to consider offers from two privately-owned water companies to purchase the system. Aqua N.C. was the high bidder over Carolina Water System's offer of \$4.9 million. Since the board accepted an offer, the county will proceed with an upset bid process, giving other companies a 10-day window to submit competing offers.

**NEVER
OUT OF
DRINKING**

for you and your family. Purify your water system. Purify your water. Affordable and certified from your tap water. PS - A Kinetico system and reduce all known Coronavirus too!

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MUN
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A Third Generation
has always been
for memorials

In the news this week

Source: Carteret County News-Times, February 22, 2021

https://www.carolinacoastonline.com/news_times/article_20833ed0-72fc-11eb-aab0-43ac93d67298.html

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