

Funding and Financing Strategies to Address Coronavirus Impact

INTRODUCTION

The Novel Coronavirus pandemic is resulting in unprecedented impacts on public health and economic vitality. In financial terms, while the water and wastewater sector is relatively financially strong and resilient, pandemic impacts are anticipated to be profound. For example, potential drinking water sector impacts were estimated at \$15.5 billion on an annualized basis (inclusive of deferred rate increases).¹ These estimates, scaled based on wastewater sector revenue levels, suggest annualized impacts for wastewater systems in the \$12.5 to \$16.8 billion range. Financial impacts are anticipated to stem from a number of factors ranging from changes in water usage patterns and revenue collection rates to new expenses associated with pandemic responses, as well as to deferrals of planned construction projects and rate increases.

The impacts will vary across individual systems depending on each community's economic base, the financial position of the serving water and wastewater systems, and the economic circumstances of the populations served. Accordingly, water sector advocates, including NACWA, are advocating for an array of different mechanisms for providing relief and promoting economic stimulus through water infrastructure investments. These mechanisms include direct relief to absorb revenue losses that could compromise the financial integrity and stability of individual systems. Specific appropriations to fund capital investments and help offset lost revenues may also leverage the well-documented multiplier effects of water infrastructure investments.

This paper outlines a set of complementary strategies, in addition to direct federal financial assistance, that could unleash the power of the capital markets to provide water sector relief. These strategies are designed to limit potential federal and state budget impacts by minimizing appropriation requirements. They call for limited changes to rules governing municipal capital financing and leverage Federal Reserve Bank commitments to backstop the municipal credit market.

NACWA expresses its deep appreciation to Eric Rothstein for his work on this paper and his commitment to advancing these innovative financing approaches on behalf of the water sector. NACWA members with questions or comments on this document can contact [Nathan Gardner-Andrews](#), NACWA's General Counsel & Chief Advocacy Officer.

¹ *The Financial Impact of the COVID-19 Crisis* (April 14, 2020), prepared by Raftelis for the American Water Works Association (AWWA) and Association of Metropolitan Water Agencies (AMWA).

CONTEXT

The water and wastewater sector is among the most financially strong. It is composed not only of structurally resilient infrastructure, but also of financially resilient enterprises² – particularly those serving urban and suburban communities. The water and wastewater sector is also among the most capital intensive,³ and as a result, expenses related to capital financing typically represent a significant share of overall system revenue requirements. Nationwide, the sector holds more than \$300B in outstanding municipal bond debt and \$65B in federally-funded, state-issued low-interest loans.⁴ Urban and suburban debt issuers, who primarily incurred this debt, now face acute revenue impacts of the Coronavirus pandemic.

Key Water Sector Credit Statistics

The water and wastewater sector’s financial strength and resilience are evidenced by credit statistics demonstrating that the sector was characterized, pre-pandemic, by high levels of liquidity and relatively high net operating revenues relative to debt burdens (debt service coverage). The sector comprises natural monopolies delivering life essential services – the value of which has only been spotlighted by the pandemic.

Water and Sewer Credits by System Size: Key Statistics

	Very Large	Large	Medium	Small	Very Small
Annual Operating Revenues	More than \$150M	\$150M - \$75M	\$75M - \$25M	\$25M - \$5M	Below \$5M

Liquidity

Available Reserves (\$000s)	190,681	80,942	34,946	9,414	1,684
Days cash on hand	451	514	456	470	438

Capital Structure

Debt to Capitalization	47	32	31	35	44
Debt Service Coverage (All Debt)	1.87	2.09	2.01	1.93	1.60

² With noteworthy and troubling exceptions, particularly in economically disadvantaged communities. This resilience too often does not apply in underserved or unserved rural, tribal, and other communities. See, for example, *Closing the Water Access Gap in the United States: A National Action Plan* (2019), United States Water Alliance.

³ *Improving Water Utility Capital Efficiency* (2009), prepared by Black & Veatch Corporation and The Eisenhardt Group, sponsored by Water Research Foundation and US Environmental Protection Agency.

⁴ Bloomberg Barclays Municipal Bond Index, as of 09/04/2019; US EPA web site (www.epa.gov/dwsrf & www.epa.gov/cwsrf)

Concentration

Top 10 customers as % of operating revenues	6.1	6.3	8.5	10.3	11.2
Top Customer as a % of operating revenue	1.7	1.6	2.3	3.0	3.4

Source: S&P Global Ratings, US Municipal Water and Sewer Utility Sector is Stable as Median Ratios Show Improved Finances, August 2019

A review of liquidity metrics from the financials of more than 1,500 water sector issuers of varying sizes demonstrates that the municipal water utility sector was in large part characterized as having strong or even exceptional levels of liquidity before the coronavirus pandemic. The data indicates that, on average even very small utilities had more than 14 months of cash on hand with larger utilities having a greater cash reserve. These metrics highlight that for most systems the crisis is less related to immediate cash requirements but instead related to the ability to withstanding cash-flow challenges over the next 1 to 3 years. This points to the opportunity to provide meaningful relief through restructuring of debt obligations. Most profoundly for the sector’s largest and smallest systems, but universally true, as shown by the capital structure metrics, debt represents a significant share of overall capitalization. The solid operational performance of utilities pre-pandemic provided strong positive cashflows and debt service coverage of those obligations. For all but the smallest of systems, and with notable exceptions, concentration risk is fairly limited such that most systems are relatively less subject to revenue shocks from payment delays or loss from larger customers (even though all utilities will suffer from delayed payments and revenue losses).

Basic Financial Coping Measures

The sector’s strength is also underscored by the availability of several basic coping measures that can be implemented, irrespective of federal and state intervention. The severity of consequences for individual systems will depend on service area economic bases and circumstances; but for the vast majority of the sector, viable coping measures amount to different combinations of the four fundamentals described below. These measures, already at hand, will be required irrespective of the extent to which relief may be garnered from the credit markets or direct government aid:

- **Access liquidity.** As indicated by the liquidity metrics shown above, the water sector approached the pandemic with substantial fund balances and reserves developed through fiscally conservative policies. While depletion is uncomfortable, an economic crisis is the soundest of reasons to employ reserves.

- **Revenue resilience.** Though rate increases may be anathema in a time of economic hardship, utilities may have success in limiting revenue collection challenges (especially with shutoff moratoria in place) through payment plans, partial payment options, and other measures to secure recovery of, at least, variable expenses.
- **O&M expense management.** In addition to expense reductions due to pandemic restrictions (e.g., travel expenses), economic crisis warrants reduction or deferral of non-essential operating expenditures, to the extent practical, without compromising continuity and quality of service delivery.
- **Capital expense deferral or financing.** As clearly indicated by the capital structure and debt service coverage statistics above, the sector typically funds a share of annual capital project spending using current revenues. Deferrals of PAYGO capital spending or use of debt to fund such projects may reduce near-term system revenue requirements dollar-for-dollar.

Direct Federal Funding Assistance

While the water sector is girded by relative financial strength and may use these coping measures to forestall service delivery failures on an interim basis, it is critically important to note that both short-term and sustained direct federal funding assistance is warranted. Federal funds would provide an important immediate complement to the assistance through the credit markets discussed below – and would recognize that securing water system integrity could not be more urgent. Public water and wastewater systems are anchor economic institutions in their communities. They deliver arguably the most essential of services: safe drinking water and sanitation. Health systems, food services, and other systems required to respond to the Coronavirus pandemic rely on water services.

In light of growing water affordability concerns amplified by the Coronavirus pandemic, implementation of a federal Low-Income Water and Sewer Assistance Program could provide direct assistance for water sector providers' most vulnerable populations. Though similar in concept to the established Low-Income Home Energy Assistance Program, this program could employ administrative procedures to leverage the large number of water sector providers and provide important opportunities to engage communities in direct assistance. In so doing, federal action could recognize the critical importance of universal access and service affordability to sustain public health.

Yet, federal investment in the water sector infrastructure investment has declined more precipitously than in other public infrastructure systems,⁵ necessitating annual increases in water and sewer rates that have far outstripped inflation.⁶ In many communities, this pattern of

⁵ *The Economic Benefits of Investing in Water Infrastructure* (2017), United States Water Alliance Value of Water Campaign. p. 4.

⁶ 2018 Cost of Clean Water Index, National Association of Clean Water Agencies, p.2.

rate increases now imposes affordability challenges, particularly for low-income customers who, in the current context, face the most acute risks of Coronavirus exposure.

Ironically, at the same time, water sector infrastructure investment with its profound public health benefits has also been found to provide economic multiplier effects comparable to other infrastructure systems.⁷ Going forward, these benefits are amplified by the criticality of safe and reliable water and wastewater services to enable basic economic activities to resume. Shuttered factories may not re-start without appropriate flushing and testing of water and wastewater system connections. Workers may not be called back to employment without continuous access to water services at home and at work. Direct and immediate investment in the sector presents an important opportunity to provide immediate relief, catalyze post-pandemic economic rebound, and mitigate community hardships.

And in contrast to other forms of potential relief and economic stimulus, direct investment in the water sector will not only provide multiplier benefits, it also amounts to investment in systems whose underlying strengths will help ensure that federal funds are not placed at undue risk but rather are assured to yield returns in terms of equitable job creation and economic stimulus. “Collectively, the water workforce fills 212 different occupations... that are found everywhere, from big metropolitan markets to smaller rural areas. [There is a] sizable economic opportunity offered by water jobs, including the variety of occupations found across the country, the equitable wages paid, the lower educational barriers to entry, and the need for more diverse, young talent.”⁸ The sector, while it can solve many of its short-term problems, is in need of innovative funding solutions that include direct grants to underserved communities, higher levels of federal support for infrastructure projects, and creative mechanisms to increase direct investment from new capital sources.

FINANCING STRATEGIES FOR CORONAVIRUS IMPACTS

The sector’s existing debt burdens and prospective capital financing needs provide critical opportunities to secure relief from the Coronavirus pandemic’s financial impacts on the sector (without requiring difficult to secure additional federal appropriations). Several strategies could be implemented at the national level to leverage the power of the credit markets to provide relief and support for water infrastructure reinvestment:

- 1. Restore and Accelerate Advance Refunding**
- 2. Establish a Targeted Water Sector Liquidity Facility**

⁷ *The Economic Benefits of Investing in Water Infrastructure* (2017), United States Water Alliance Value of Water Campaign. p. 7.

⁸ *Renewing the Water Workforce: Improving water infrastructure and creating a pipeline to opportunity*, Joseph Kane and Adie Tomer, Metropolitan Policy Program at Brookings Institution, June 2018.

3. **Expand State Revolving Fund Lending with Short-Term Loans**
4. **Expand and Improve Access to Bank Qualified (BQ) Debt**
5. **Establish a New Taxable, Interest-Subsidized, Infrastructure Bond (TIIB)**

Provided in the following pages is a brief explanation of how each of these credit market strategies⁹ address the financial impacts of the pandemic and the magnitude of potential savings or impacts, as well as a review of implementation requirements and potential barriers. These strategies address the various needs of different components of the water and wastewater sector and they complement NACWA's advocacy centered on the economic stimulus benefits of water infrastructure investment.

STRATEGY #1: RESTORE AND ACCELERATE ADVANCE REFUNDING

Definition

An advance refunding occurs when a credit issuer issues a new bond whose proceeds are placed into an escrow account, which is used to pay off an existing bond when that debt obligation is callable. The new bond is issued at lower interest rates and thereby yields savings to the issuer. Advance refunding was effectively eliminated from the suite of financing tools available to municipal credits when the Tax Cuts and Jobs Act of 2017 (TCJA) eliminated the tax-exempt status of advanced refunded bonds. Simple legislation is needed to restore the availability of advance refunding; complimentary provisions may enhance savings potential.

Coronavirus Impact Relief

Restoring the tax-exemption of advanced refunded bonds, in combination with the Federal Reserve's commitment to support the municipal credit market, would enable utilities to effectively refinance portions of their debt portfolio, reducing debt payment obligations that, as noted, represent a significant share of revenue requirements. The resultant lower debt service payment requirements would help utilities absorb revenue losses.¹⁰ By structuring the refunding bonds to the extent practicable so as to minimize near-term obligations (via

⁹ Laws and local policies regarding utilities' borrowing practices vary across different states including limits on borrowing for operating costs and debt service coverage requirements – and must be considered with regard to each of the enumerated strategies. However, unless a system is already borrowing to cover 100% of its capital expenditures, opportunities to address pandemic impacts may be realized through borrowing for capital items while directing current cash flow to pay for current operating cost.

¹⁰ A holiday on arbitrage rebate payments would provide further relief by allowing utilities to retain rather than rebate earnings on bond proceeds held in escrow accounts.

capitalized interest, back-loaded, or deferred principal), utilities may give themselves breathing room to meet overall system revenue requirements.^{11 12}

This option would not provide relief for systems that do not have debt portfolios that include bonds that may be refunded for savings in the event that the federal tax exemption is restored, nor for utilities that issued callable debt at sufficiently low rates where advance refunding would not generate adequate savings. However, advance refunding could benefit the substantial universe of water and wastewater municipal bond credit issuers (and NACWA Members) who have bonds that are callable in the next 1 to 3 years.

Financial Impact Potential: Cost Savings and/or Funding Support

To quantify the savings available to utilities if tax-exempt advanced refunding were allowed in the current environment, an analysis was conducted of over 1 million discreet CUSIP¹³ numbers for new money water and sewer bonds with sale dates between January 2010 and December 2014 and having a call date within the next three years. The universe of CUSIPs was screened to eliminate any commercial paper or variable rate bonds, as well as exclude non-investment grade bonds.

Key results of this research indicate that a relaxed advanced refunding regime, which restores tax exemption on refunding issues, would allow for roughly \$9 billion in potential advance refunding of issues across the country. This refunding of water and sewer credits could realize approximately \$3 billion in coupon savings.¹⁴ The net present value (NPV) savings of these market activities will be dependent on the specific terms and yields of the refunding issues with savings likely to well exceed most issuers' refunding criteria.¹⁵

The data showed that in many cases it was smaller issues with less than \$20 million in potential refundable bonds that had the largest coupon savings – enabling potential issuers the option to secure meaningful savings without the wholesale restructuring of their existing portfolios.

To test these findings, the debt portfolio of a specific utility in the southeast was examined. This utility would be classified as very large, with revenues in excess of \$150 million and a debt portfolio that requires roughly \$65 million in annual debt service (principal and interest)

¹¹ And, if combined with new money issues similarly structured to defer near term requirements, utility systems may continue to implement their capital programs largely as planned (notwithstanding the advance refunding's lowering of debt service coverage requirements that provide for pay-as-you-go funding of selected capital projects).

¹² A supplement for this option could also be developed for the relatively limited volume of Water Infrastructure Finance and Innovation Act (WIFA) loans issued annually. Under this supplement, water sector utilities could effectively refinance existing debt obligations with WIFA loans issued at low interest rates. While the mechanics may require a defeasance of outstanding debt and a new issuance, opportunities may be made available to revise debt repayment schedules through flexible WIFA terms.

¹³ A CUSIP number is a unique identification number assigned to all stocks and registered bonds in the United States. It is used to distinguish securities that are traded on public markets. CUSIP refers to the Committee on Uniform Securities Identification Procedures which oversees the CUSIP system.

¹⁴ The available coupon saving of the \$9 billion in potential refunding candidates was estimated by comparing the sale date coupons with coupons currently in the markets for debt with similar durations.

¹⁵ Additional near-term cash-flow relief may also be provided by structuring the refunding debt payment schedules to defer or minimize debt service payments in the initial years of the debt repayments schedule, subject to tax considerations.

payment during the most recent fiscal year. A simple advanced refunding of certain debt, which would otherwise be callable in 2021, yielded almost \$57 million in net present value savings and was structured in a manner that provided over \$20 million in savings in the first two years post refunding. This \$20 million savings could be used to provide immediate relief to this utility in order to address the cost associated with a robust COVID-19 response.

Implementation Options / Requirements

Advance refunding with tax-exempt revenue bond debt was available to water and wastewater credits until the 2017 TCJA and the municipal market has extensive expertise executing transactions at high volume. Accordingly, relatively simple authorizing legislation could catalyze a wave of transactions, given historically low interest rates and Federal Reserve commitment, to support the municipal market. Enabling legislation could provide a renewal provision for tax-exempt advanced refunding and allow a temporary 24- to 36-month holiday on arbitrage bonds/rebates,¹⁶ which could in turn help municipal issuers accelerate access to the municipal markets, address any existing restrictive indenture provisions, and allow municipalities the option to use either taxable and tax-exempt advanced refunding to capture savings to offset financial impacts of the pandemic.

Generally, individual utility issuers are also well versed in accessing the credit markets and are practiced in assembling financing teams to orchestrate market transactions. While issuers will undoubtedly need to address uncertainties related to prospective financial performance, demonstrations of credit-worthiness may rely on the same fundamentals that have always undergirded the sector's financial strength (see sector credit statistics). Conveying a utility's coping strategies for managing through potential financial impacts will generally involve different combinations of options for managing through crisis (as outlined above) that leverage the sector's credit fundamentals.¹⁷

STRATEGY #2: ESTABLISH A TARGETED WATER SECTOR LIQUIDITY FACILITY

Definition

A targeted Water System Liquidity Facility (WSLF), similar to the Federal Reserve's recently announced Municipal Liquidity Facility,¹⁸ would provide short-term liquidity support for the

¹⁶ Arbitrage occurs when tax-exempt bond proceeds are invested in higher yield taxable securities resulting in returns to the debt issuer. Current regulations require these returns to be rebated back to the federal government. As these amounts can be significant, a holiday on rebate requirements could be used to offset revenue losses.

¹⁷ Water and sewer credits may also, under certain circumstances, use a variety of debt structuring options to further reduce near-term debt payment obligations and thereby absorb pandemic related impacts. These structural options may include capitalized interest on new money components, wrap-around payment schedules, use of derivatives to be assessed by qualified Municipal Advisors that hold a fiduciary duty to the issuer.

¹⁸ The Coronavirus Aid, Relief, and Economic Security Act (CARES) included appropriations to the Department of Treasury's Exchange Stabilization Fund to provide credit protection for Federal Reserve Bank lending to various special purpose vehicles ("SPV"). For the Municipal Liquidity Facility, the SPV is to purchase short-term debt instruments (Eligible Notes) from States, Counties and Municipalities (Eligible Issuers) to help these entities manage the cash-flow impacts of the pandemic. Similar

water and wastewater sector. A targeted water system facility could provide direct access to Federal Reserve lending to help utilities manage short-term cash flow issues. A Federal Reserve Bank-supported Special Purpose Vehicle would purchase short-term (12- to 36-month) water system revenue and bond anticipation notes (BAN), providing the water systems financial resources to absorb ongoing revenue impacts of the Coronavirus pandemic. These notes may be readily converted to long-term instruments, potentially in concert with advance refunding (see Strategy #1). A targeted facility, funded at levels consistent with support for other services like transit (\$25 billion) or airport grants (\$10 billion), could provide critical liquidity (see example below) yet impose lower credit risk exposure given that water systems are natural monopoly enterprise funds with exceptional long-term credit fundamentals and are predominantly publicly owned.

Coronavirus Impact Relief

The various liquidity facilities that have been established through the CARES legislation by the Federal Reserve Bank are all oriented toward helping households, businesses, and government entities manage cash-flow impacts of the Coronavirus pandemic. For the water sector, these impacts are primarily in the form of lower revenues, lower revenue collection rates, and some new operating expenses. An example of how relief could be rendered is as follows:

- A “AA” rated utility with \$200M in annual revenues sells \$40M¹⁹ in revenue and bond anticipation notes to the WSLF, payable in full at the term of a 24-month period.
- Based on a 2-year Yield to Maturity of 1.275 percent (scale as of April 25, 2020) and a 0.1 percent issuance fee, annual carrying costs on the note would be \$550,000. So, for the next 2 years, this utility would have approximately \$38.9 million in proceeds available to absorb Coronavirus-related financial impacts.
- In 2 years, the utility would then need to retire the revenue and bond anticipation notes (initially purchased by the WSLF) from improved post-pandemic revenue performance or through issuance of a long-term revenue bond.²⁰
- While this debt issue could be structured in a variety of ways to provide near-term debt service relief, a traditional fixed rate, 20-year level debt repayment schedule would

liquidity facilities have been established to support small and medium sized businesses through the Federal Reserve’s Main Street Lending Program, to support the Small Business Administration’s Paycheck Protection Program, and to support the capital markets serving business through Primary and Secondary Market Corporate Credit Facilities (PMCCF and SMCCF) as well as the Term Asset-Backed Securities Loan Facility (TALF). For more information, see the Federal Reserve web site at: <https://www.federalreserve.gov/newsevents/pressreleases/monetary20200409a.htm>

¹⁹ The \$40 million par amount is based on a 20 percent of revenue limit that was used by the Federal Reserve for other liquidity facilities.

²⁰ For utilities requiring only short-term access to capital, note that there is no penalty for early BAN repayment via a deposit to the trustee. For utilities seeking to draw funds at different points in their capital program, a utility could borrow the maximum allowed, deposit the funds into an (interest bearing) commercial bank liquidity account, draw down funds as necessary, and use either accumulated cash flows (deposited into the liquidity account) or a long-term debt issue to pay the outstanding BAN at term.

impose approximately \$2.5M in annual debt service payment obligations, representing about a 1.2 percent increase in system revenue requirements.

Financial Impact Potential: Cost Savings and/or Funding Support

In aggregate, based on a 10:1 leverage ratio (as used to estimate potential Municipal Liquidity Facility volume²¹), a WSLF could provide up to \$100B in liquidity support with the same level of investment as what has been allocated to the airline industry through direct appropriation.

Importantly, unlike traditional debt instruments used in the water sector for fixed capital assets, utilities could use proceeds of their Eligible Notes purchased by the SPV (WSLF) to help manage the cash flow impact of deferrals or reductions of revenues, or increases in expenses, resulting from the pandemic. These proceeds may help ensure utilities make payments of principal and interest on existing obligations; the outstanding principal of the Eligible Notes could likewise be subject to long-term refinancing without association to specific capital infrastructure assets.

Implementation Options / Requirements

As demonstrated by the Federal Reserve's other liquidity facilities, a targeted WSLF could be relatively easily put in place upon appropriation of the initial equity investment required for the Federal Reserve to establish a dedicated water sector Special Purpose Vehicle. In practical terms, it would involve tailoring the requisite policies and procedures employed for other liquidity facilities to water sector needs. These needs include, for example, addressing that both the short-term notes and subsequent longer-term bonds involved would not be associated with physical infrastructure.

For individual utility issuers, the process involved would be similar to that of other short-term borrowing, though hopefully expedited. Requisite offering statements, as with advancing refunding, would need to outline anticipated pandemic impacts and planned coping strategies but otherwise would be similar to pre-pandemic borrowing.

STRATEGY #3: EXPAND STATE REVOLVING FUND LENDING WITH SHORT-TERM LOANS

Definition

State financing authorities that administer the well-established Drinking Water State Revolving Fund (DWSRF) and Clean Water State Revolving Fund (CWSRF) programs (which are provided

²¹ Per Federal Reserve Bank, Municipal Liquidity Facility Term Sheet, <https://www.federalreserve.gov/newsevents/pressreleases/files/monetary20200409a3.pdf> - accessed 4/25/20.

initial capital through EPA grants) could be used to supplement their lending programs with short-term low- or no-interest loans to be repaid or forgiven after 5 years.

Coronavirus Impact Relief

The supplemental SRF lending program could be structured to enable utilities to meet demonstrated short-term working capital shortfalls caused by pandemic-related revenue decreases and related costs. This mechanism for short-term borrowing may be particularly suited to systems that largely or exclusively borrow from SRF programs for capital project financing. The SRF programs may be able to expedite loan approvals for utilities already in their portfolios thereby limiting burdensome and time-consuming loan qualification and approval procedures or compilation of offering statements for debt issues.

Financial Impact Potential: Cost Savings and/or Funding Support

Expanding the SRF programs nationally by \$2 billion to support a short-term borrowing component could, with leverage, provide an additional \$10 billion in support for utilities. This could be accomplished without requiring individual state or local governments to act as a conduit, as is the case under the MLF program.

For an individual utility, it could borrow up to \$10 million or 20% of system billed revenues from the SRF for a period of up to 5 years without a matching requirement. The interest rate would be based on the credit rating of the utility, but under most circumstances would be lower than that available in the municipal market. Rather than funding specific capital projects on a reimbursement basis, the proceeds could be used to address proximate cash-flow issues, thereby enabling the utility to weather the pandemic induced financial impacts.

Implementation Options / Requirements

The SRF authorities could package (syndicate) multiple loans together to provide diversification of credit risk. This type of investment could be attractive to short and intermediate tax-exempt investment funds. If combined with additional credit support from the SRF in the form of a put option or limited debt service insurance pledge, the credit rating would be higher than a smaller utility could get on a standalone basis, thus lowering the cost of capital to the utilities.

Through employing existing lending facilities commonly accessed by sector utilities, short-term lending would require SRF program administrators to pivot their policies and procedures. SRF loans are typically structured to provide project expense reimbursements where this type of lending would not be associated with specific capital projects. Application and approval processes would need to be modified and leveraging capacity estimates recalibrated, if disbursements of proceeds were to be accelerated to meet near-term liquidity needs.

STRATEGY #4: EXPAND AND IMPROVE ACCESS TO BANK QUALIFIED (BQ) DEBT

Definition

Local banks under the tax code may not deduct the carrying cost of tax-exempt municipal bonds, which has the effect of eliminating their tax-exempt benefit. An exception was included in the 1986 Tax Reform Act that allows banks to deduct 80 percent of the carrying cost of qualified tax-exempt obligations, up to a designated annual issuance limit. These Bank Qualified bonds (BQ debt) were created to encourage banks to invest in tax-exempt bonds from smaller, less-frequent municipal bond issuers and to provide municipalities access to lower cost borrowing. Local governments issuing \$30 million²² or less in bonds per calendar year can designate those bonds as bank-qualified, which allows them to bypass the traditional underwriting system²³ and sell their tax-exempt bonds directly to local banks at a cost savings of 25 to 40 basis points (bps).

Coronavirus Impact Relief

Especially for smaller systems that may not have issued municipal bond obligations and may have limited administrative capacity, legislation to modify requirements on bank qualified debt could help banks sustain their local water and sewer systems through the challenges presented by the Coronavirus pandemic. Such legislation could:

- increase current limits on BQ debt to \$40 million²⁴ and index to inflation,
- facilitate loan repayment structures that limit near-term requirements,
- allow debt to be used for operational and capital expenditures to address COVID-19 issues, and
- expedite administrative procedures to accelerate access to proceeds.

Through these changes, local banks could individually or in syndicate invest in bonds issued by smaller utilities and provide those utilities with expedited access to low-cost capital needed to weather the pandemic impacts.

²² The limit on Bank Qualified debt was initially set at \$10 million in the Tax Reform Act of 1986. Under the American Recovery and Reinvestment Act of 2009, the bond limit was changed for a two-year period to \$30 million.

²³ BQ debt does not require a published Notice of Sale in The Bond Buyer, underwriting, or placement agents. Documentation does not involve Official Statements, continuing disclosure or book-entry registration.

²⁴ The \$40 million limit is suggested as this issuance amount is below the vast majority of issuance amounts traded through national and regional investment banks.

Financial Impact Potential: Cost Savings and/or Funding Support

Many smaller localities are a solid credit risk, particularly their utilities, but do not have the need nor capacity to access the capital markets with \$40+ million transactions²⁵. At the same time, local community banks understand the infrastructure needs of local issuers and are willing to purchase their bonds. Historically, about 15% of municipal bonds or \$560 billion are in bank portfolios. Increasing the BQ limit to \$40 million could enable local governments to increase the amount of bank-qualified bonds that they could issue and could expand bank investments in projects by \$30 billion, given the correct rates and incentives. In doing so, professional fees, which can make smaller deals uneconomical, could be substantially reduced.

Implementation Requirements

Given that BQ debt is already available, an increase in the issuance limit could involve a relatively simple legislative fix. Legislative language could also address needs to expedite administrative processes to help ensure timely relief. This could be combined with credit support from SRF's to create a stronger security package when necessary to overcome short-term credit or cash flow challenges of utilities.

For individual utility issuers, the debt issuance process would be similar (though potentially less time-consuming) to that required to access the BQ debt market pre-pandemic. However, the current environment may impose additional requirements to coordinate with other units of local government that may similarly need cash infusions to sustain service delivery.

STRATEGY #5: ESTABLISH A NEW TAXABLE, INTEREST-SUBSIDIZED, INFRASTRUCTURE BOND (TIIB)

Definition

Taxable municipal bonds that feature federal tax credits or subsidies for bondholders or state and local government bond issuers. These credits or subsidies would make the debt competitive with traditional tax-exempt municipal bond offerings while attracting new investor communities (that may further reduce costs of borrowing). Based on prior taxable municipal debt instruments,²⁶ TIIBs could provide bondholders and lenders a federal subsidy of the interest paid through refundable tax credits, reducing the bondholder's tax liability. Direct payment TIIBs could offer a similar subsidy but paid to the bond issuer. Other favorable tax

²⁵ Transactions that are below approximately \$40 million are somewhat less tenable for execution in the generally traded municipal market both because issuance costs are not entirely scaled for small size issues and because the population of bond purchasers is less robust, leading to higher yield requirements.

²⁶ Build America Bonds (BABs) were authorized in response to the 2008 credit crisis as part of the American Recovery and Reinvestment Act (ARRA) and were structured with similar parameters. In the 2009-2010 period when BABs were available, approximately \$181 billion in BABs were issued to provide critical funding for infrastructure reinvestment

treatments, such as interest earnings being exempt from the Alternative Minimum Tax, could further coax new investor classes to deploy capital into a relatively safe asset class with solid risk adjusted returns.

Coronavirus Impact Relief

Taxable interest subsidized bonds were proven in the context of the 2008 financial crisis to provide much needed lending support to local governments for infrastructure spending. TIIBs thereby represent an important potential vehicle to support water system infrastructure spending in the post-pandemic period. These are new money debt instruments and thereby not oriented toward providing relief for revenue losses, but rather may be a particular useful measure to catalyze capital spending on water system infrastructure – with its inherent economic stimulus benefits – in the post-pandemic period.

Financial Impact Potential: Cost Savings and/or Funding Support

With a conservative 8:1 leverage ratio, a \$50 billion federal injection could result in \$400 billion in water sector investment. This level of investment may only be realized however if the interest subsidies are not subject to sequestration in the federal budget process. Sequestration, whereby budget reductions are uniformly applied across federal budget line items if Congress is unable to resolve a budget impasse, has been imposed on prior taxable municipal bonds issues. These benefit reductions have dampened the marketability of outstanding issues and compromised the appeal of potential new instruments.

On the other hand, federal appropriation requirements may be reduced – or the leverage ratio increased – through market analysis, whereby subsidy levels would be optimized. Based on preliminary analysis, interest rate subsidies that are 15 – 20 percent lower than those employed for prior taxable municipal debt issues may be sufficient to clear the market and engage new investor communities.

Implementation Requirements

Because of the relatively recent historical experience with a form of TIIB, the U.S. Treasury already has experience with development and implementation of the requisite policies and procedures for this form of instrument; the credit markets are practiced in developing requisite offering statements, pricing and selling the products. With the global impact of the pandemic, the appeal of this form of debt issue is likely to be enhanced as investors are prompted toward a flight to safety.

CONCLUSIONS

The Novel Coronavirus pandemic has underscored the criticality of the nation's water and wastewater systems and further highlighted the importance of reinvestment, both to protect

public health and to stimulate economic recovery. Targeted direct federal funding is now more warranted than ever to help ensure continuity and reliability of services on which the nation’s “essential” institutions and industries rely. Yet even in the face of long-term declines in federal support, the sector is characterized by strong credit fundamentals owing to its commitment to financial as well as infrastructure resiliency. These strong credit fundamentals provide an opportunity to leverage the power of the credit markets for financial support to help weather the impacts of the pandemic.

Relatively simple legislative fixes – to restore tax-exempt advance refundings, facilitate access to Federal Reserve liquidity facilities, and raise the limit on bank qualified debt – would enable utilities to restructure their costs without requiring direct federal appropriations. Proven lending programs, like EPA-administered revolving loans or taxable interest-subsidized bond offerings, can help catalyze economic stimulus through desperately needed reinvestment in water system infrastructure.

The strategies outlined here are designed to navigate the challenge of rendering critical support for arguably the most essential of sectors, while limiting claims on already strained federal resources. By leveraging the power of the credit markets, the proposed legislation will empower the water sector to restructure its cost profile so that it may continue to ensure service reliability and quality.