



The Impacts of Altering Tax-Exempt Municipal Bond Financing on Public Drinking Water & Wastewater Systems

— A NACWA/AMWA White Paper —



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Introduction and Background

Each day, the scope of our nation's water and wastewater infrastructure challenge continues to widen. The Environmental Protection Agency's (EPA) just-released 2011 Drinking Water Needs Survey reports the nation's drinking water systems require \$384 billion worth of investments over the next 20 years just to maintain current levels of service – an increase of \$50 billion from just four years earlier. Similarly, EPA reports the nation's wastewater systems require \$298 billion in infrastructure improvements over the same period of time – without taking into account additional expenditures necessary to address expansion due to population growth.

Other studies carried out by water and wastewater utility organizations paint an even more dire picture. The American Water Works Association estimates that communities will require at least \$1 trillion in new spending over the next 25 years just to repair the country's buried network of drinking water pipes. The National Association of Clean Water Agencies and the Association of Metropolitan Water Agencies have identified other emerging costs – such as adapting infrastructure to extreme weather and changing hydrological conditions – that could cost water and wastewater systems a similar amount by 2040. And the American Society of Civil Engineers gave the country's water and wastewater infrastructure an overall D grade in its most recent report card. No matter how you measure it, replacing and rehabilitating water infrastructure will cost cities, towns, and their residents hundreds of billions of dollars over the coming decades.

Today, local taxpayers pay for 95 percent of water and sewer infrastructure development, rehabilitation, and operating costs, an investment that the U.S. Conference of Mayors found totaled \$111.4 billion in 2010. Much of this investment is financed through tax-exempt municipal bonds. Communities can sell tax-exempt municipal bonds to investors at low interest rates, because for 100 years federal law has exempted investors' interest earnings on these bonds from federal income tax. These low interest rates benefit communities that are able to stretch ratepayer dollars further, and as a result have become the primary method of paying for water and wastewater investments. One recent study reported that cities and towns have issued \$258 billion worth of municipal bonds to fund water and wastewater infrastructure since 2003 – representing approximately 16 percent of all municipal bond issuance for infrastructure projects over this period.

The low rates offered by tax-exempt municipal bonds are particularly critical today, as federal funding for the Clean Water and Drinking Water State Revolving Funds (SRFs) – the main federal programs that help cities and towns pay for water infrastructure improvements – has largely flattened out. Since reaching the stimulus-aided highs of 2009, appropriations to the SRFs have declined for four straight years – and 2014 budget proposals indicate a fifth straight year of reductions is likely. In fact, federal support for water and wastewater infrastructure could end up below the levels of 10 years ago.

In spite of these challenges, lawmakers are currently contemplating proposals that would limit or eliminate the federal income tax exemption for interest earned on municipal bonds. While these proposals are often promoted in the context of simplifying the tax code, they would have the effect of increasing the interest rates cities and towns must pay when they issue bonds to finance critical water and wastewater improvements. Rather than merely simplifying the tax code, adjusting the 100-year-

old municipal bond tax exemption would cost local water system ratepayers millions of dollars per year in new interest costs, and would make it even more difficult for communities to address their daunting water infrastructure challenges.

This report will explain the vital role of tax-exempt municipal bonds in funding water and wastewater infrastructure, examine how this exemption has benefitted states across the country, review the four major scenarios that are being discussed on Capitol Hill, and point out some real-world examples to demonstrate how these reforms would have increased costs for several communities that recently issued municipal bonds.

Wastewater; Drinking Water; and Tax-Exempt Financing

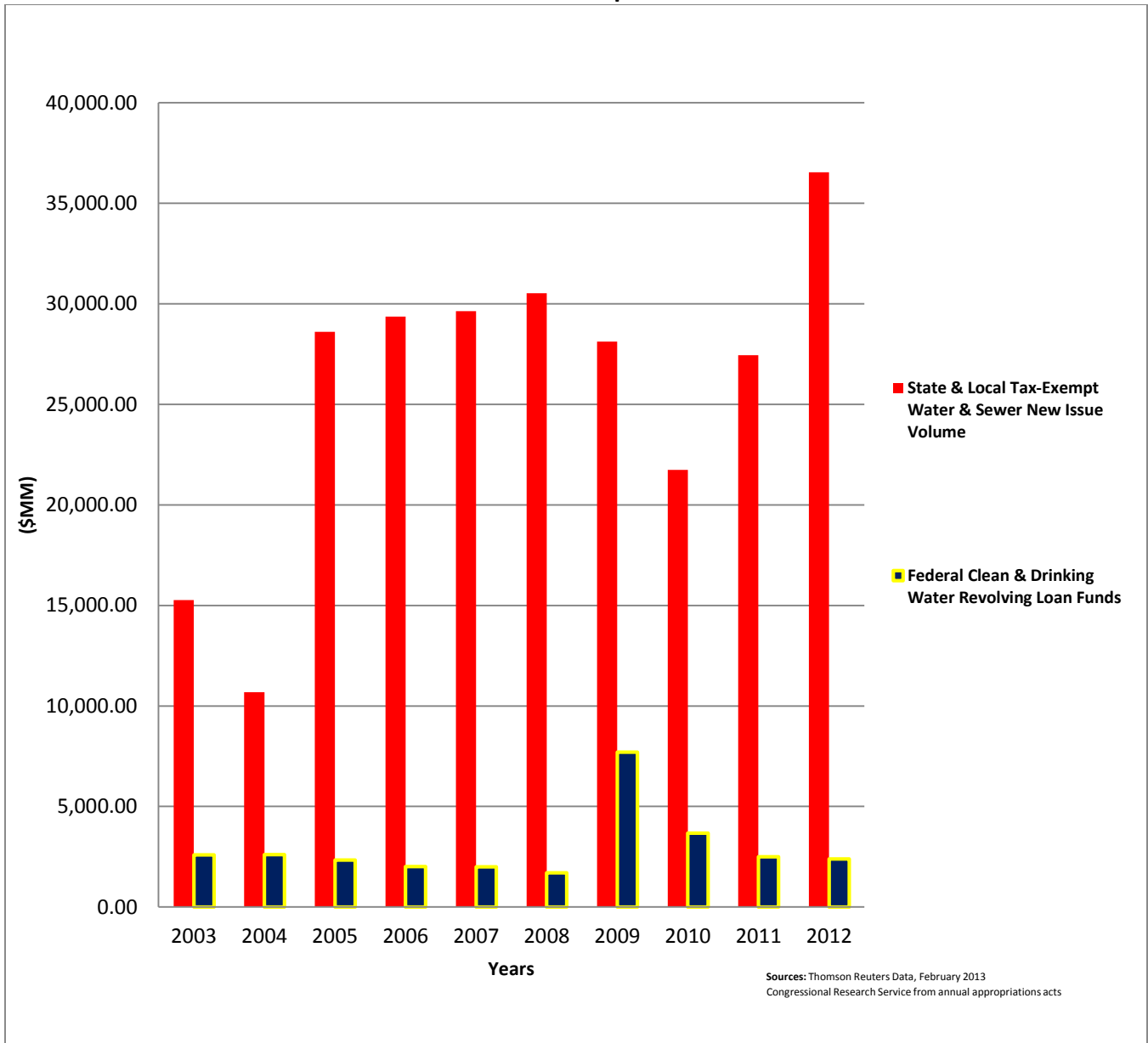
The tax-exempt bond market has historically been a primary source of capital at attractive interest rates for the water and sewer sector. The “essential service” nature of water and sewer bonds continues to attract both retail and institutional investors, especially during the recent economic downturn where investors have pursued safety and liquidity in their tax-exempt bond purchases. Investors have flocked to essential service bonds as a result of this “flight to quality” and have shunned riskier tax-exempt sectors and other investment alternatives.

Tax-exempt municipal bonds have provided eligible issuers, including drinking water and wastewater issuers, the lowest cost of capital and the maximum amount of financing flexibility. But proposals circulating in Washington would put these benefits at risk by capping or eliminating the tax-exemption of municipal bonds and other “tax expenditures” in an effort to address the federal budget deficit. Other proposals would replace traditional municipal bonds with taxable bonds that have a direct pay interest rate subsidy from the federal government, similar to the former Build America Bond (BAB) program.

At a time when aging wastewater and drinking water infrastructure is in desperate need of capital improvements, tinkering with the incentive for investors to buy tax-exempt bonds will negatively impact the interest costs associated with financing infrastructure improvements and negatively impact utility ratepayers.

Figure 1 compares the state and local water and sewer tax-exempt debt issuance to the EPA’s Clean Water and Drinking Water SRF appropriations since 2003. State and local funding for infrastructure projects has far exceeded the federal revolving loan fund appropriations. Since the federal stimulus injection in 2009, federal revolving loan funds have steadily decreased. While it is appropriate that localities bear the primary responsibility of funding their own water infrastructure improvements, the decrease in federal support combined with the prospect of higher interest rates on municipal bonds has the potential to impose a severe financial burden on utilities and their ratepayers.

Figure 1: Clean Water and Drinking Water SRF Appropriations Compared to State & Local Tax-Exempt Debt Issuance



The tax-exempt municipal bond financing tool currently available to water and sewer issuers is essential to help fund infrastructure maintenance, improvements, and new facilities, as well as to satisfy federal mandates. Table 1 displays the amount of tax-exempt debt issued by each state for the financing of water and sewer projects in 2012 – which totaled more than \$39 billion nationally.

48 of the 50 states utilized tax exempt financing in 2012 to fund water and sewer projects. Altering or eliminating the current tax-exempt status of municipal bonds will impact virtually all the states in funding water and sewer capital projects (see Table 1 below).

Table 1: 2012 Water & Sewer Tax-Exempt Debt Issuance by State**2012 Water & Sewer Tax-Exempt Debt Issuance by State***

State	Par Amount \$ in millions	State	Par Amount \$ in millions
CALIFORNIA	7,108.2	ALABAMA	384.2
TEXAS	5,854.9	MARYLAND	382.1
NEW YORK	3,839.1	HAWAII	350.8
PUERTO RICO	2,095.7	OKLAHOMA	347.7
FLORIDA	1,630.9	ARKANSAS	313.7
WASHINGTON	1,187.2	KENTUCKY	291.3
MICHIGAN	1,170.1	NORTH CAROLINA	284.9
COLORADO	1,112.2	WISCONSIN	276.1
ILLINOIS	905.5	NEBRASKA	255.1
INDIANA	867.8	OREGON	212.3
MASSACHUSETTS	856.9	IOWA	180.5
PENNSYLVANIA	832.1	KANSAS	151.1
NEW JERSEY	825.0	NEW HAMPSHIRE	150.6
VIRGINIA	812.8	CONNECTICUT	150.4
MINNESOTA	719.6	NORTH DAKOTA	144.2
MISSOURI	654.8	MISSISSIPPI	142.7
GEORGIA	603.9	SOUTH DAKOTA	140.6
ARIZONA	580.8	WEST VIRGINIA	135.1
NEVADA	556.9	IDAHO	127.8
TENNESSEE	537.7	RHODE ISLAND	117.8
SOUTH CAROLINA	519.8	LOUISIANA	62.9
D. OF COLUMBIA	440.6	MAINE	41.2
OHIO	439.7	NEW MEXICO	14.3
UTAH	387.6	MONTANA	5.8
		INDUSTRY TOTAL	39,203.1

*long & short term debt

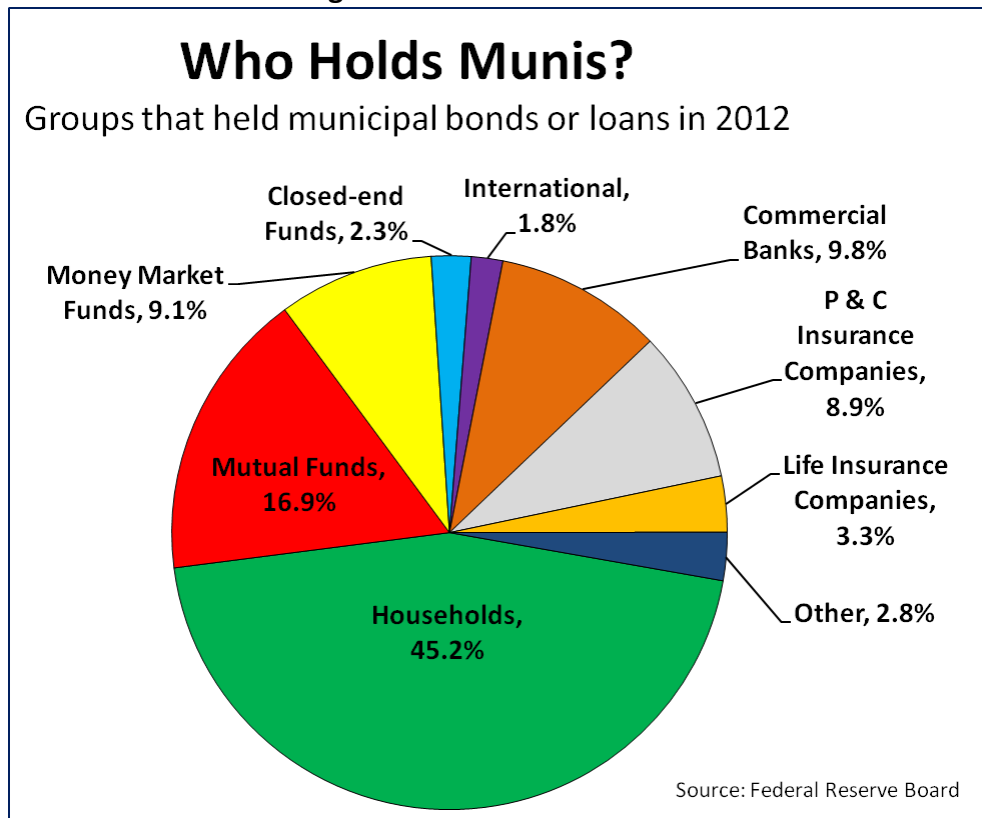
Source: Thomson Reuters

As shown below in Figure 2, 71.2% of total outstanding municipal debt is currently held by individuals/households directly or via mutual funds and money market funds. Should the incentive for a significant amount of individual investors to hold tax-exempt bonds be altered, there is no source of capital ready to emerge to fill this void in the investor base.* The other surviving investor groups would require higher yields to take on this larger amount of municipal bond supply. This demand gap will translate into higher financing costs for water and sewer borrowers and ultimately their ratepayers.

Also, it is important to note that any changes to the tax-exemption of municipal bonds will impact all Americans, both as investors in municipal bonds and as ratepayers paying the debt of water and sewer bonds.

* Recent IRS data suggests that more than 40% of this sector is individuals and families with gross income in excess of \$200,000 for individuals and \$250,000 for families and would not have an incentive to buy tax-exempt municipal bonds with a 28% cap on the value of tax preferences.

Figure 2: Who Holds Munis?



Current Reform Proposals

Municipal bonds have provided eligible issuers the lowest costs of capital and the maximum amount of financing flexibility. Because interest income earned on municipal bonds is exempt from federal income tax, bond buyers accept a lower interest rate than they otherwise would have – savings that are passed on to local communities and their ratepayers.

But current proposals circulating in Washington would seek to streamline the federal tax code by capping or eliminating “tax expenditures,” including the tax-exemption of municipal bonds. The four major options on the table include:

1. Maintaining the current eligibility and tax-exempt status of bond issuers
2. Making all municipal bonds taxable
3. Creating taxable “America Fast Forward” bonds with direct pay 28% federal subsidy – similar to the expired Build America Bond (BAB) program
4. Instituting a tax-exempt bond exclusion capped at the 28% tax bracket.

Recently the 28% cap seems to have gained the most momentum, as President Obama, in his FY 2014 budget, proposed capping the value of many tax preferences, including the tax-exempt interest exclusion at 28% for individuals and families exceeding adjusted gross income thresholds of \$200,000 for individuals

and \$250,000 for families. As currently framed, this proposal not only impacts new issue bonds going forward, but also negatively impacts outstanding bonds, as it would apply to outstanding bonds owned currently in investor portfolios. This would reduce the value of the bonds held by investors and many investors would no longer have the tax incentive to continue to hold these bonds. These investors will then become sellers and flood the secondary market with bonds, pushing interest rates higher. Should this 28% cap apply to all outstanding bonds, it would violate the traditional assumption that policy makers will not change the terms governing the taxability of interest for bonds already issued. As a precedent, Congress has never applied a retroactive tax on outstanding bonds already held by investors in the 100-year history of the tax-exemption.

Another proposal from the Obama Administration's FY 2014 budget is America Fast Forward (AFF) bonds, which is similar to the BABs direct pay program that expired at the end of 2010. AFF bonds would be taxable, but issuers would receive a direct payment from the federal government equal to 28% of their interest costs. While such direct pay bonds offer an opportunity to expand the investor base for taxable municipal debt and therefore hold some appeal as an additional tool for financing infrastructure projects, they are not an adequate replacement for traditional tax-exempt bonds. Most concerning, the expired BAB program was tarnished with issuers and investors when the federal government's budget sequestration reduced the federal interest subsidy payments on outstanding BABs by 8.7% in early 2013. This action cost community issuers millions of dollars in anticipated revenues, and has led to skepticism about proposed new programs like AFF bonds that once again promise direct subsidy payments to issuers.

The analyses contained in this report provide a perspective on the direct effect each of these proposals would have on municipal bond financing costs, showing that bonds issued under each alternative would face higher costs than if issued under traditional tax-exempt financing. These generic issuer analyses rely on existing market data and existing income tax rates (both as May 22, 2013), rather than on projections on what the market and tax rates might look like at some future date. Because the model relies on existing market data, it provides a robust "snapshot" of how these alternatives would perform in today's market.

Also, this study will look back at some real-world examples of drinking water and wastewater bond issues, apply the three proposed changes to the tax-exempt status of municipal bonds, and estimate the increased debt service cost.

Market Overview

In reviewing the scenarios put forth in this analysis, it is worthwhile to place the current interest rate environment and tax-exempt bond market in perspective. Interest rates are still abnormally low, and the scenarios and assumptions today may look materially different in a future interest rate environment and economic cycle. In a more typical, higher interest rate environment, the cost impact of the proposals to restrict or eliminate tax-exempt financing described in this report would be greater.

The "flight to quality" during the last four years to U.S. treasury securities has distorted the historical relationships of treasury bonds, corporate bonds and tax-exempt municipal bonds. The interest rate

basis point spread differential between tax-exempt bonds and their taxable counterparts has become compressed. Historically, municipals have traded at about 90% of U.S. treasuries. For extended periods over the last four years, municipal bond yields have exceeded those of treasuries (100%+). Credit quality spreads, the difference between highly rated issuers - AAA and lower rated issuers - BAA, have also compressed in the current low rate environment, as investors have lowered their investment risk parameters and “reached” for the added yield of lower quality bonds. Recently these tight spread relationships have begun to widen.

A variety of factors have impacted the credit markets and dampened the basis point spread differences and associated borrowing costs between taxable and tax-exempt debt. The economic crisis and credit concerns about wide ranging municipal defaults are some of the factors that have led to these nontraditional spread relationships. The Federal Reserve’s stated objective to hold short term rates at “exceptionally low rates” until mid-2015 and their execution of quantitative easing, to put downward pressure on long term rates, have also exacerbated these distorted basis point spread relationships. Recently the Fed has begun to articulate their plan to begin to reduce their pace of bond-buying later this year and this has resulted in a rise in long term rates off their historic lows.

If the market returns to “normal” without changes to tax policy, then traditional trading relationships should reappear. In this context, “normal” would mean that municipal bonds trade closer to 90% of U.S. treasuries. In such a market, the interest cost of the alternatives to tax-exempt bonds that are considered in this report would also increase relative to the cost of traditional municipal bonds. It is important to note, that supply and demand in the municipal market will also impact these spread relationships on a daily basis, and tax policy changes will have a direct influence on these components that help drive borrowing costs for issuers.

Assumptions for Comparative Analysis of Generic Issuer

For purposes of demonstrating the impact of modifying the tax-exempt status of municipal bonds, the following generic comparisons highlight typical municipal structures used in the market and are generally reflective of water and wastewater utility borrowers, including:

1. “A” credit rating
2. Serial bonds to 20 years and term bond in 30 years
3. Level debt service
4. Large borrower - \$250+ million and small borrower - \$25+ million
5. Call Feature- The call feature utilized in all the scenarios is a 10 year optional call. This call feature is used to model all the scenarios for a consistent comparative analysis, even though most taxable debt issues employ a “make whole” call feature.
6. The “All Inclusive Cost” reflects the aggregate cost to the issuer inclusive of issuance costs.

Observations of Analysis

Because water and wastewater utilities issue municipal bonds in widely varying amounts, the analysis runs scenarios for both large and small borrowers. The smaller borrower does have a higher cost, reflective of the smaller market for their bonds. Many institutional buyers, particularly taxable institutional buyers, only participate in new issues of \$100 million or more. The summary page reflects that the tax-exempt structure is the cheapest cost and the taxable scenario is the highest cost. The summary page also shows the more significant savings that the tax-exempt structure provides to small issuers.

Because the dynamics of the market change daily, the results of this analysis with respect to the most attractive financing option and the spread relationships and differentials between each option may vary.

Table 2: Summary of Generic Bond Financing Models: Large Borrower

Assumes an "A" Credit Rating
Rates as of May 22, 2013

Large Borrower: Bond Financing for a \$250,000,000 Project over a 30 Year Term				
	Scenario #1	Scenario #2	Scenario #3	Scenario #4
Description	Tax-Exempt Bond Issue	Taxable Bond Issue	Taxable Direct Pay Bond Issue 28% Subsidy	Tax-Exempt Bond Issue - Exclusion Limited to 28% Bracket
All Inclusive Cost	3.464%	4.622%	3.634%	4.277%
Total Net Debt Service	\$410,596,087	\$473,358,666	\$419,549,673	\$454,238,070
Increased Debt Service Cost*		\$62,762,579	\$8,953,586	\$43,641,983
Percentage Increase in DS Cost		15.3%	2.2%	10.6%

Table 3: Summary of Generic Bond Financing Models: Small Borrower

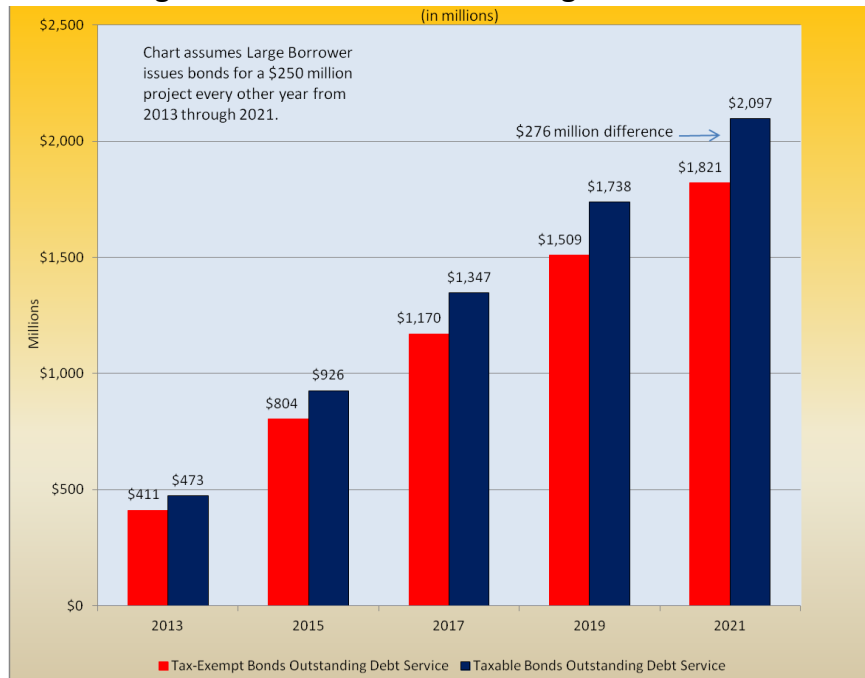
Small Borrower: Bond Financing for a \$25,000,000 Project over a 30 Year Term				
Description	Scenario #1	Scenario #2	Scenario #3	Scenario #4
	Tax-Exempt Bond Issue	Taxable Bond Issue	Taxable Direct Pay Bond Issue 28% Subsidy	Tax-Exempt Bond Issue - Exclusion Limited to 28% Bracket
All Inclusive Cost	3.768%	4.983%	3.929%	4.668%
Total Net Debt Service	\$42,671,520	\$49,380,367	\$43,529,589	\$47,592,697
Increased Debt Service Cost*		\$6,708,847	\$858,069	\$4,921,177
Percentage Increase in DS Cost		15.7%	2.0%	11.5%

*Incremental debt service costs a borrower would have to pay over the life of the bond issue in Scenarios #2, #3, and #4 compared to a Tax-Exempt Bond Issue in Scenario #1.

The most important result of the analysis is the increased “total debt service” in each scenario over the current tax-exempt financing tool utilized by large and small borrowers in scenario #1. The difference for the large borrower (\$250 million) between financing an issue in the current tax-exempt market and a financing under the 28% cap scenario is \$43.6 million. The increased “total debt service” for the small borrower (\$25 million) would be \$4.9 million. These are significant added costs that will have to be absorbed by local water utilities and their ratepayers.

Figure 3 illustrates the cumulative difference in the aggregate debt service between tax-exempt issues and taxable issues of five bond transactions, assuming uniform interest rates and bond structure, respectively.

Figure 3: Cumulative Outstanding Debt Service



Data Sources and Assumptions

All rates as of May 22, 2013

Scenario 1

These interest rates are provided by Thomson Reuters-Municipal Market Data for a benchmark generic “A” tax-exempt rated municipal issuer.

Scenario 2

These interest rates are provided by Thomson Reuters- Municipal Market Data for a benchmark generic “A” rated taxable municipal issuer.

Scenario 3

These interest rates were based on scenario 2 and adjusted higher to reflect the “Build America Bond” yields to other “A” rated taxable municipal bonds and the Thomson Reuters-Municipal Market Data benchmark generic “A” rated taxable municipal scale (scenario 2). Relative trades and market evaluations were reviewed from Electronic Municipal Market Access and Interactive Data.

Scenario 4

These interest rates were based on tax-exempt scenario 1 and derived from historical trading relationships that tax-exempt bonds have traded at approximately 90% of U.S. treasuries. Additional inputs are based on the computation of the 28% cap on individuals/families and the market interpretation of these estimated impacts on interest rates. For the large borrower, the modeling reflects a negative impact of 81 basis points on the “all inclusive cost” over scenario #1, a traditional tax-exempt issue. For the small borrower, the modeling reflects a negative impact of 90 basis points on the “all inclusive cost” over scenario #1, a traditional tax-exempt issue.

Large (\$250 million) versus Small (\$25 million) Issuers

These issue sizes were chosen to better illustrate the impacts of tax reform proposals for a cross section of water and wastewater utilities. The market does differentiate between large and small issues, particularly in the taxable market, where many large institutional investors such as pension funds, insurance companies and foreign institutions require large blocks of bonds for liquidity and performance. In all instances, smaller, less frequent issuers pay an interest rate premium, as the potential market for their bonds is smaller than larger more recognizable and frequent issuers.

Impacts on 2012 New Issue Water & Sewer Volume

According to Thomson Reuters Data, a total of \$36.5 billion state/local tax-exempt water and sewer long term debt was issued in 2012. If this combined total debt was issued based on the same assumptions used in the Generic Bond Financing Models, the total estimated increased debt service cost in 2012 for each scenario would have been:

- Scenario #2 taxable bonds: \$9.0 billion
- Scenario #3 taxable direct pay 28% subsidy bonds: \$1.2 billion
- Scenario #4 tax-exempt bonds exclusion limited to 28% cap: \$6.0 billion

Added Debt Service Cost of Proposed Tax Reform Scenarios on Past Transactions

Table 4 shares specific examples of water and sewer issues from AMWA and NACWA members that have been priced in the market since January of 2012. The analysis of these bond issues was modeled to determine the estimated increased debt service costs that would have to be absorbed by these issuers' ratepayers. The analysis isolates the "total net debt service" or the added debt service cost to the financing, if any of the three tax reform proposals had been in place when these issues were priced.

The analysis finds that financing costs would increase for every surveyed utility under each of the proposed reform scenarios. While the amount of the increase varies from case to case, making municipal bond interest fully taxable would be most expensive to local water systems, raising aggregate costs in our examples by 6.5%. Instituting a tax-exempt bond exclusion capped at the 28% tax bracket would cost communities nearly as much, with our examples showing an aggregate cost increase of 5.6%. Taxable bonds with direct pay 28% federal subsidy would increase costs in our examples by nearly 2%, but would also bring uncertainty as to whether the government will ultimately honor this subsidy commitment.

Table 4: Estimated Increased Debt Service Cost

Original Issue				Hypothetical Models		
Sale Date	Par Amount	Borrower	Tax-Exempt	Taxable	Taxable Direct Pay 28% Subsidy	Tax-Exempt Exclusion 28% Cap
1/11/2012	\$380,000,000	Metro Wastewater Reclamation District, CO				
		Total Debt Service	\$676,757,441	\$737,594,477	\$683,840,061	\$730,607,279
		Est. Increase in Debt Service Cost*		\$60,837,036	\$7,082,620	\$53,849,838
		Est. Percentage Increase in DS Cost		9.0%	1.0%	8.0%
1/18/2012	\$129,625,000	Metro Gov of Nashville & Davidson Co, TN				
		Total Debt Service	\$175,565,367	\$198,195,853	\$188,425,571	\$196,023,110
		Est. Increase in Debt Service Cost*		\$22,630,486	\$12,860,204	\$20,457,743
		Est. Percentage Increase in DS Cost		12.9%	7.3%	11.7%
7/31/2012	\$360,000,000	Las Vegas Valley Water District				
		Total Debt Service	\$692,259,872	\$717,954,364	\$696,983,089	\$712,021,950
		Est. Increase in Debt Service Cost*		\$25,694,492	\$4,723,217	\$19,762,078
		Est. Percentage Increase in DS Cost		3.7%	0.7%	2.9%
10/24/2012	\$70,370,000	Philadelphia Water & Wastewater				
		Total Debt Service	\$119,607,800	\$129,153,598	\$122,971,887	\$126,866,287
		Est. Increase in Debt Service Cost*		\$9,545,798	\$3,364,087	\$7,258,487
		Est. Percentage Increase in DS Cost		8.0%	2.8%	6.1%
11/2/2012	\$358,620,000	East Bay Municipal Utility District, CA				
		Total Debt Service	\$469,585,860	\$489,245,117	\$480,987,935	\$487,859,898
		Est. Increase in Debt Service Cost*		\$19,659,257	\$11,402,075	\$18,274,038
		Est. Percentage Increase in DS Cost		4.2%	2.4%	3.9%
5/14/2013	\$7,265,000	Cedar Rapids, Iowa, Water Revenue Bonds				
		Total Debt Service	\$9,944,463	\$10,452,923	\$10,128,713	\$10,376,903
		Est. Increase in Debt Service Cost*		\$508,460	\$184,250	\$432,440
		Est. Percentage Increase in DS Cost		5.1%	1.9%	4.3%
*Incremental debt service costs the borrower would have had to pay over the life of the bond issue in each hypothetical model.						

The estimated increased debt service cost in the table above was derived from each issuer’s credit rating, debt amortization schedule and bond issue size. In the earlier modeling done in this study, a large and small generic hypothetical issuer was created to calculate the estimated increased debt service.

Certain bond market dynamics and bond issue assumptions were applied in modeling the scenarios above, leading to the calculation of total debt service and the increased debt service cost.

Summary Points

- Tax-exempt municipal bonds have been the most important source of funding for infrastructure projects in the United States, including water and sewer infrastructure since the early 20th century.
- Capping or eliminating various tax provisions in the tax code will significantly increase financing costs for drinking water and wastewater issuers – by as much as 15% based on our generic bond financing models. The cost estimates in our real-world examples vary, but demonstrate that each proposal would generally increase the price of financing water infrastructure by several percentage points – and could ultimately raise utility rates for customers.
- The 28% cap proposal would be retroactive, applying a tax to bonds already held by investors, compelling many of these investors to sell their bonds, flooding the secondary market and resulting in higher interest rates for borrowers.
- Replacing, limiting, or eliminating the tax-exempt status of municipal bonds will negatively impact the primary source of funding for drinking water and wastewater issuers at a critical time when renewed infrastructure investment is needed.
- Federal funding for Clean Water and Drinking Water State Revolving Funds has declined since 2009 and 2014 budget proposals indicate a fifth straight year of reductions.
- Supporting the investment in the upgrade and replacement of aging water and sewer infrastructure, by not altering the current status of tax-exempt financing, is critical to the cost-effective financing for future capital projects.
- Tax-exempt financing, coupled with other financing tools and sources of funds, is vital to state and local drinking and wastewater issuers to eliminate the funding gap for the massive water and sewer capital needs in the next 20 years.
- Tax-exempt financing, as a cost efficient funding source for drinking and wastewater projects, helps mitigate rate increases for utility ratepayers.
- The sequester in March has raised credibility issues with direct pay bonds as to whether Congress will honor federal interest subsidy commitments for qualified issuers going forward.
- Direct pay bonds could serve as an additional financing tool for drinking water and wastewater issuers (especially for issuers of \$100 million or more in bonds). But they are not an adequate replacement for traditional tax-exempt financing and questions over whether the federal government would again backtrack on its interest subsidy commitment would make utilities unlikely to have faith in a new program.



The National Association of Clean Water Agencies (NACWA) is the leading advocate for responsible national policies that advance clean water and a healthy environment. NACWA represents the collective interests of America's clean water utilities – dedicated public servants and true environmental champions. For over 40 years, NACWA has been the clean water community's voice in Congress, at the U.S. Environmental Protection Agency, in the media and in the courts. Find out more at www.nacwa.org.

The Association of Metropolitan Water Agencies (AMWA) is the unified and definitive voice for the nation's largest publicly owned drinking water systems on regulatory, legislative and security issues. The association represents a membership that serves more than 130 million Americans with clean and safe drinking water from Alaska to Puerto Rico. Find out more at www.amwa.net.