BLX Group LLC
75 Arlington Street, Suite 500
Boston, MA 02116
ph: 781-239-8275
www.blxgroup.com

BLX
ADVISORS • ASSET MANAGEMENT • COMPLIANCE

THE IMPACTS OF ALTERING TAX-EXEMPT MUNICIPAL BOND FINANCING ON PUBLIC DRINKING WATER & WASTEWATER SYSTEMS

NACWA
A Clear Commitment to America's Waters

July 17, 2013

Presentation Topics

- Public Wastewater & Drinking Water Tax-Exempt Financing
- Current Tax Reform Proposals: Tax-Exempt Status of Municipal Bonds Being Threaten
- Who Holds Municipal Bonds?
- Analysis of Cost Impact of Reform Proposals
- Summary Points

WASTEWATER & DRINKING WATER TAX-EXEMPT FINANCING

- Aging public drinking water & wastewater infrastructure
- Desperate need for capital improvements
- EPA reports:
  - drinking water systems will require $384 billion of investment over next 20 years just to maintain current levels of service
  - wastewater system needs $298 billion over same time period
- Federal funding via clean water and drinking water state revolving funds has declined over last 4 years and 2014 budget proposals indicate a 5th year of declining federal funds
- Tax-exempt financing critical to financing these future capital investments
- Issuance of tax exempt bonds has been the primary financing tool for issuers for 100 years

BLX
ADVISORS • ASSET MANAGEMENT • COMPLIANCE

Wastewater & Drinking Water Tax-Exempt Financing – cont.

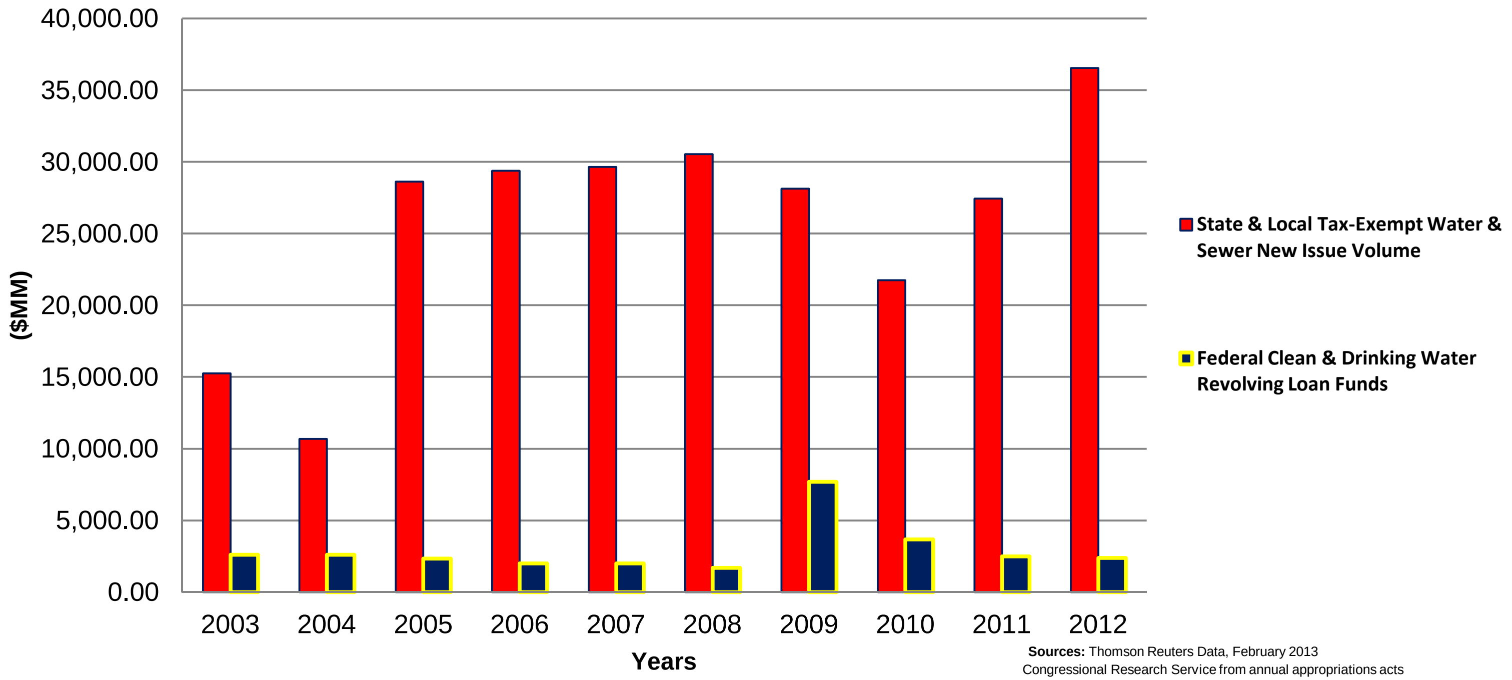
- "Essential service"- vital public purpose nature of water & sewer bonds continues to attract both retail and institutional investors- especially during the recent economic downturn- stable investor base

- Tax-exempt financing has been the source of the lowest cost of capital at attractive borrowing rates and flexibility

- In 2012 48 of the 50 states utilized tax-exempt financing for water and sewer projects totaling more than $39 billion short term and long term tax-exempt debt issued

STATE & LOCAL FUNDING DWARFS FEDERAL SRF FUNDS

Federal EPA SRF Appropriations & Tax-Exempt State/Local Long Term Debt Issuance



Sources: Thomson Reuters Data, February 2013
Congressional Research Service from annual appropriations acts

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

Current Tax Reform Proposals

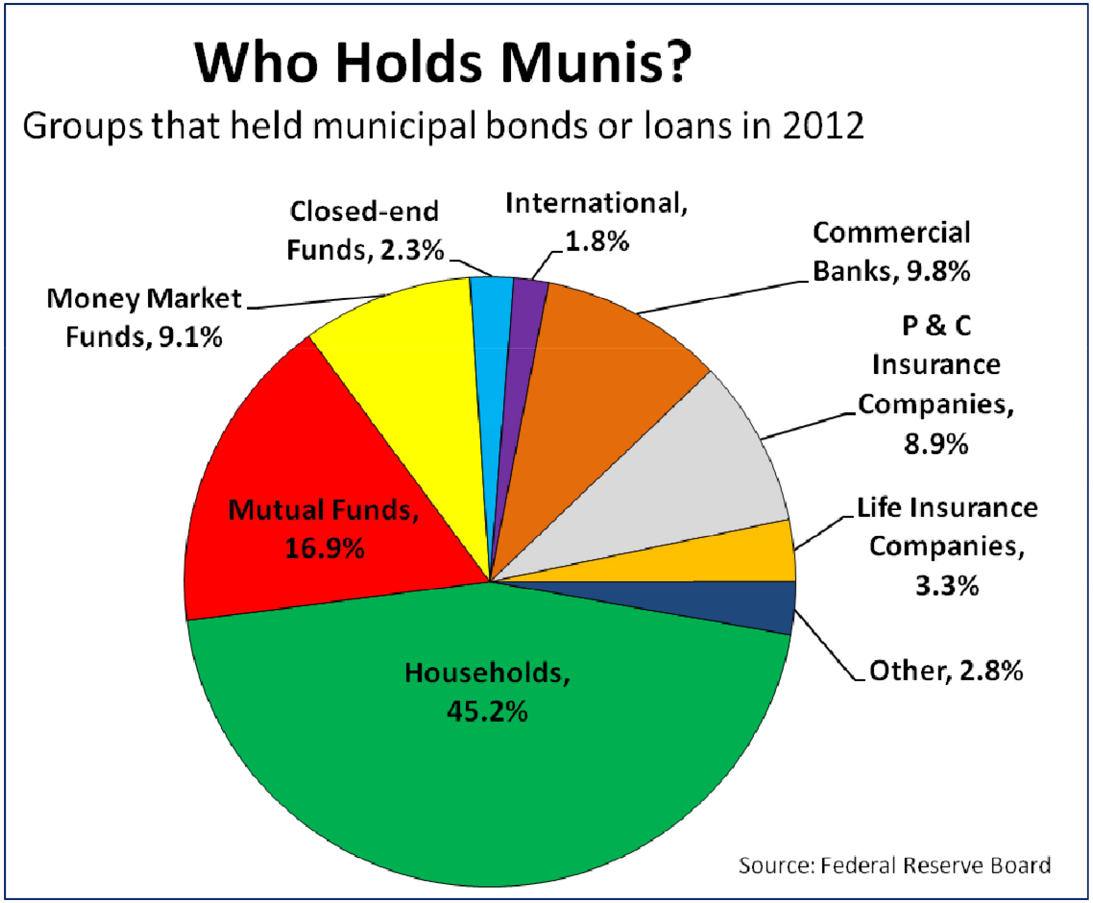
- Washington is trying to eliminate the federal deficit and streamline the federal tax code by eliminating or capping “tax expenditures” including the tax-exemption of municipal bonds
- Last major tax reform overhaul 1986- much more complicated today
- Proposals are promoted in the context of simplifying the tax code, but would in effect increase interest rates paid by issuers
  - the increased financing costs would be passed on to utility ratepayers
- **4 Options Being Debated**
  - Maintain the current eligibility and tax-exempt status of bond issuers
  - Make all municipal bonds taxable
  - Create taxable bonds with a direct pay 28% federal subsidy America Fast Forward Bonds (“AFF”)- similar to the expired Build America Bond (“BAB”) program in 2009-2010 (35% subsidy)
  - Limit the value of certain tax expenditures including tax-exempt municipal bonds to 28% percent for taxpayers in the top three individual income tax brackets

Who Owns Municipal Bonds?

- Important to understand who owns municipal bonds and why they own them
- Majority of investors investing in municipal bonds do so for the tax-exemption
- 71.2% of total outstanding tax-exempt municipal debt is held by individuals/households, either directly or via mutual funds and money market funds
- IRS data suggests that more than 40% of the individual/household investor group would have little incentive to buy municipal bonds with 28% cap on value of tax preferences
- If changes eliminate the incentive for a significant part of this investor group, it will require higher yields/rates paid by issuers to attract other investor types and/or encouraging the existing investor base to take on more bond supply

Note: any changes in tax-exemption will impact all Americans, both as investors and/or ratepayers paying the higher debt service costs of water & sewer bonds

Municipal Bond Investors By Sector



Examples of the Cost Impact of Tax Reform Scenarios

- Modeled to isolate "total net debt service" cost

- Financing costs increased in all the proposed scenarios
    1. largest cost increase: fully taxable scenario
    2. second largest cost increase: 28% cap
    3. third largest cost increase: taxable direct pay bonds with 28% federal subsidy (there is uncertainty that the federal government will honor this subsidy- BAB subsidy was decreased by 8.7% with sequestration earlier this year)

EXAMPLES OF COST IMPACT OF TAX REFORM SCENARIOS

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.

BLX
ADVISORS • ASSET MANAGEMENT • COMPLIANCE

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 for 100 years
- Capping or eliminating various tax provisions in the tax code will increase financing costs for drinking water and wastewater issuers, ultimately raising utility rates and placing the added cost burden on ratepayers
- 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 issuers at a critical time when renewed infrastructure investment is needed

Summary Points – cont.

- Federal funding for Clean Water and Drinking Water State Revolving Funds has declined since 2009
- Tax-exempt financing, as a cost efficient funding source, helps mitigate fee increases for utility ratepayers
- Tax-exempt financing is vital to eliminate the funding gap for the massive capital needs of public drinking water and wastewater systems in the next 20 years