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To: Muni Field Hearings

Subject: SEC feedback on Munis: The incentives to issue municipal debt override the sound principles of infrastructure management

The Incentives to Issue Municipal Debt Override the Sound Principles of Infrastructure Management.

The majority of municipal issuers fall into a dangerous trap of funding capital projects through issuing large amounts of debt based on the paradigm of unbalanced incentives that currently exist. The municipal's consulting engineer's are trying to build large capital replacement programs and the financial team are using best case projections to demonstrate short-term financial strength in order to attain the highest amount of new debt at the lowest cost of capital. The maladjusted incentives which are in play include engineering firms that promote large capital outlays to maintain good profit margins and the finance community that normally may only be paid when that next debt is issued thus creating an incentive for the municipal to issue debt to solve all of its problems so the engineers, financial advisors, underwriters, bond councils, and credit agencies can be paid. Both sides of the formula have the unconstrained drive to have the municipality issue debt. This pressure to issue more debt leads to some form of due diligence process in which all parties benefit if the financial projections and underlying assumptions are rosy and robust and the highest amount of debt is issued. In this atmosphere, true sensitivity testing and various risk events scenario testing is either left undone or unincorporated into any public discussion. The process is wholly completed without a tough peer review or counter balance argument in which many pertinent concerns can be addressed. Even for revenue bonds, municipal finance directors may take an advantage of enriching the general fund from the enterprise funds by overcharging the cost of issuance and left unchecked.

The key due diligence issues left unattended include 1) Municipalities have not completed infrastructure asset management plans including financial plans which develop and estimate short-term and long-term projections of real levels of required maintenance and capital repair and replacement funding necessary to adjust rates and fees or adequate reserve levels. 2) a lack of long-term projections (An Operating Statement only discloses 5 years of historical and 5 years of future projections for 30 year issuances) 3) GASB 34 fell short on having municipalities calculate the unfunded liability of aging infrastructure and as a result future estimates of maintenance and true replacement costs are not disclosed.

Municipal issuers, as a result, have exacerbated their current economic condition. A majority of municipal issuers were not correctly projecting their long term infrastructure costs and have not had revenue which was sustainable into the future or adequate reserve polices necessary to prevent single worst case events. The current economic downturn is exposing all of these issues simultaneously, yet still without plans to make any adjustments or corrections.

Suggestions to address the concerns:

- 1) Require an independent financial peer review prior to credit agency presentation/POS.**
- 2) Audit of issuance costs.**
- 3) Require municipalities to select and pay for financial advisors based on annual contracts and not as part of debt issuances.**
- 3) Asset Management practices and principles as currently promoted by the USEPA can help extend the life of capital assets to avoid excessive or premature capital outlays. Tie the available State Revolving Loans SFR funding to infrastructure asset management requirements.**
- 4) Require infrastructure asset management plans and long-term financial plans every 5 years as a reporting disclosure item. These financial plans should extend 20-30 years and have a mitigation risk section outlining a municipalities financial strategy.**
- 5) Require a majority of the approving authority to sign off on or adopt risk mitigation strategies.**
- 6) Currently, the Government Finance Officers Association (GFOA) for the US and Canada is striving to teach municipal finance directors about infrastructure asset management practices and principles. Consider adding this as a requirement of budget and financial reporting excellence awards. Expand this training to credit agencies in order to properly review long-term infrastructure underfunding risks.**

You Did Your Due Diligence, But Did You Do Your Condition Assessment?

The unfunded liability of the Aging Water Infrastructure (AWI)

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Gregory M. Baird

Water and wastewater utilities spend 3-4 months assembling a bond team of financial experts, reviewing financial ratios and developing the operating statement (OS) prior to issuing millions in debt as part of their due diligence process, but many have failed to assess the financial risks associated with the replacement costs of the underground infrastructure.

Water main breaks, sink holes, and flooding are creating disruptions in drinking water services, property damage and business losses all across the nation. For the past decade organizations like the American Water Works Association (AWWA) have declared the age of renewal and replacement is upon us. The United States installed underground water infrastructure in three main time periods in the 1800s, 1900–1945, and post 1945 to keep up with population growth. Pipes constructed in each of these three eras will all start to fail at nearly the same time over the next couple of decades for a number of reasons ranging from age, soil conditions, inadequate

design and poor installation. Additionally, the life span of the materials used has become shorter with each new investment cycle. The main hot spots for these failures are in the industrialized population growth centers established after World War II.

Under the 1996 amendments to the Safe Drinking Water Act, the US Environmental Protection Agency (USEPA) is required to conduct an infrastructure needs assessment every four years. In 2001, the Water Infrastructure Network (WIN)—a consortium of industry, municipal, and non-profit associations—estimated that up to \$1 trillion over a 20-year period would be needed to sustain the country's water and wastewater systems, when both capital investments needs and the cost of financing were considered. In the past decade, the required investments have not been made. In 2009, the American Society of Civil Engineers gave the US drinking water infrastructure a rating of D-.

The issue is more about a funding problem than an engineering one. However, there must exist a high degree of collaboration between a number of professional disciplines including the financial institutions. The implementation of GASB 34 fell short of identifying the liability of long term assets and their replacement costs. An above ground asset can be inspected, but the underground network of pipes which make up nearly 60% of the total replacement costs of our aging water infrastructure remains largely out of sight and out of the capital improvement plan (CIP) of a utility which is truly the main driver of understanding how much debt funding is required in the future.

If a utility chooses to ignore the problem or continue to defer capital replacement projects to avoid basic rate increases, the investment gap will significantly rise and the costs of the projects will increase, creating a larger future liability for the rate payers and weaken the overall financial strength of the utility.

Finance professionals spend a great deal of time looking for safe investments that offer a good rate of return. Making capital investments in infrastructure should be viewed in the same light. An examination of existing research on aging infrastructure reveals that there is a lack of data on the condition of the underground assets required to help finance professionals make the capital investment decisions. Typically, public works engineers and their consultants approach a finance officer and say they have tested 20% of a pipeline and it all needs to be replaced. A finance officer should be able to check the accounting for the asset and would likely discover that it has been fully depreciated and is at the end of its useful life. Based on this common scenario the entire pipeline would require funding for replacement. However, if a piece of pipe that still has some useful life is replaced, money has been wasted. If an asset is replaced too late and fails, the

emergency replacement cost may actually be double. The true need is to find the sweet spot where the capital investment actually reduces the risk and the funding is allocated efficiently.

Condition assessment as part of an overall asset management plan provides the information needed to replace only those pipes and assets that need to be replaced. In fact, condition assessment helps bridge the gap of investment and risk. Historically, utilities have had funds budgeted on an annual basis for system repairs and rehabilitation. Current funding levels are typically inadequate for the aging water infrastructure issue as a whole, but a portion of the funding should be diverted to a new capital budget line item called condition assessment. As a financial issue, there are various factors that can lead to a decrease in the inevitable replacement costs. Factors to decrease the estimate include condition assessment and other asset management strategies to help extend an asset's life.

Condition assessment technology has been developed and improved in recent years. The application of this technology as part of a systematic condition assessment plan and asset management program can offer utilities the ability to address some of the most high-cost/high risk issues when dealing with underground assets. Condition assessment will help prioritize repair and replacement programs.

Many utilities turn to these types of services only when an emergency or crisis occurs. According to condition assessment experts, there are potential cost savings for utilities by doing planned periodic inspections versus an emergency mobilization effort.

The water, wastewater and storm drain industries has the accountability to address the issue of aging infrastructure sustainability. The financial industry has the fiduciary duty to address all of the financial risks to and protect investors and bond holders. Bonds should not be issued based solely on an "end of lifespan" decision. The actual, real-time condition of a pipeline should be a major consideration. Municipalities with general fund assets supported by tax payer dollars should demonstrate the ongoing cost of maintenance, repair and replacement of all major assets.

Gregory M. Baird, greg.m.baird@agingwaterinfrastructure.org , Managing Director/CFO of AWI Consulting LLC; served as the chief financial officer of Colorado's third largest utility with financial oversight on the Prairie Waters Project (\$754.8 m re-use water project which came in under \$100 m under budget) and as a California municipal finance officer for several years. Mr. Baird has a Masters of Public Administration from BYU's Marriott School of Management and has participated in the issuance of more than \$1 billion of municipal bonds and has consulted at the city, county, and state levels of government. Mr. Baird is an advisor to the Economic Development and Capital Planning Committee with the Government Finance Officers Association (GFOA) for the US and Canada and promotes asset management practices and

utility financial management for the municipal finance community. He is an active member of American Water Works Association (AWWA) and Water Environment Federation (WEF) and serves on the AWWA Rates and Charges Committee working on the national Affordability and Conservation subcommittees.