CR-65-2017
Exhibit A

Washington Suburban Sanitary Commission

Interoffice Memorandum

TO:	THE COMMISSION
THRU:	CARLA A. REID GENERAL MANAGER/CEO
THRU:	THOMAS J. STREET DEPUTY GENERAL MANAGER FOR ADMINISTRATION
THRU:	JOSEPH F. BEACH CHIEF FINANCIAL OFFICER
FROM:	J.D. NOELL DISBURSEMENTS DIVISION MANAGER
DATE:	JULY 19, 2017
SUBJECT:	BOND REFUNDING PLAN

Every year our financial advisor reviews WSSC's debt portfolio to identify potential refunding opportunities. Based on their analysis, utilizing current market conditions, they prepared a Refunding Plan and Analysis (the Plan) which is attached. The Plan identifies four (4) bond issues; the Build America Bonds, 2009B, the Build America Bonds, 2010B, the Consolidated Public Improvement Bonds of 2011, and the Consolidated Public Improvement Bonds of 2013. (Issues 1-3 and 5 on the chart) that would result in debt service savings of approximately $22.3 million or a net present value percent savings of greater than 3% on each issue. The Plan identifies additional outstanding bond issues which currently exhibit less than favorable or negative savings. However, if economic conditions continue to improve and interest rates decline, these issues could be considered for refunding.

It is recommended that the Commission approve the Plan and its transmittal to the County Executives and County Councils in accordance with the WSSD Code.

Attachments

Washington Suburban Sanitary Commission

Washington Suburban Sanitary Commission

July 3, 2017

WyeRiver

INDEPENDENT FINANCIAL ADVISORS

Washington Suburban Sanitary Commission

Debt Refunding Plan

1. Executive Summary

The Washington Suburban Sanitary Commission ("WSSC") has 18 outstanding series of long term fixed rate bonds (not including MWQFA loans). As financial advisor to WSSC, Wye River Group monitors market conditions and WSSC's outstanding debt obligations for opportunities to refinance such debt for interest cost savings.

Interest rates in the tax-exempt bond market have improved appreciably since the time of WSSC's last bond sale on November 15, 2016. At that time, the 15 year MMD yield was 2.62%. Erosion in rates over the preceding three weeks prompted a decision shortly before the sale date to cancel the refunding of WSSC's Consolidated Public Improvement (CPI) Bonds of 2011 ("2011 CPI Bonds") and proceed only with a new money issue (CPI Bonds of 2016, Second Series).

Since November 15, the 15 year MMD yield has declined by approximately 30 basis points to 2.33% (as of June 27). In addition to lower yields, selling conditions for bonds have improved as new issue volume has been relatively light and significant bond redemption activity has created strong market demand for new issues.

Under current market conditions, a refunding of the callable maturities of the following series of bonds would produce 3% net present value (NPV) savings or better:

Series	NPV Savings ($)	NPV Savings (%)
Build America Bonds, 2009B	4,983,174	5.54%
Build America Bonds, 2010B	3,708,241	3.09%
CPI Bonds of 2011	10,336,939	6.89%
CPI Bonds of 2013	3,268,184	4.84%

We recommend that WSSC proceed with the sale of refunding bonds to refinance those series.

In the sections that follow, we provide additional commentary on WSSC's refunding opportunity and key variables impacting the feasibility of refunding each candidate series.

2. Refunding Feasibility Assessment by Series

Under Federal tax law, tax-exempt bonds may be advance refunded only once. Consequently, as a general rule, outstanding advance refunding issues may not be refunded again with the proceeds of a tax-exempt issue until within 90 days of the earliest optional redemption date of such series. Due to that limitation WSSC currently has only 10 series of outstanding bonds that are legally feasible refunding candidates ("Refunding Eligible Bonds"). We analyzed each of those series for refunding feasibility and summarized the results of our analysis in **Exhibit A**. As noted above, the refunding analysis of each of four of the series of Refunding Eligible Bonds indicate net present value savings opportunity in excess of 3% of refunded principal. **Exhibit A** also presents the effects of a 25 basis point improvement or deterioration in interest rates from current market levels. A 25 basis point improvement would result in the addition of the CPI Bonds of 2014 (First & Second Series), CPI Bonds of 2015 and CPI Bonds of 2016 (Second Series) as potential refunding candidates (applying the minimum 3% NPV standard). Were rates to rise by 25 basis points, three of the four refunding candidates identified in the table above would continue to be viable, but the savings from refinancing the Series 2010B Build America Bonds would be inadequate.

A significant impediment to the feasibility of advance refunding the more recently issued series of bonds is negative arbitrage. Negative arbitrage results from inadequate yields on short term U.S. Treasury securities relative to the highest yield permitted by Federal law for a bond defeasance escrow. The level of negative arbitrage is exacerbated by relatively long call protection on certain of the outstanding series. In essence, negative arbitrage represents additional savings that could have been achieved but for such call protection and inadequately low short term Treasury yields.

We note that the proposed structure in our analysis for a refinancing of the two series of Build America Bonds ("BABs") is a "cross-over" refunding not an advance refunding. The advance refunding approach is not feasible for BABs because (1) immediate defeasance of the BABs would eliminate the Federal subsidy and (2) the cost of defeasing BABs (and their taxable interest cost) to the earliest call date would be prohibitively expensive and negate the interest cost savings opportunity. Under a cross-over refunding, the proceeds of the tax-exempt refunding issue are invested in an escrow containing U.S. Treasury securities until the respective series of BABs become callable (in 2019 and 2020). Until the BABs become callable, the interest income generated by the portfolio funds the interest cost of the refunding bonds. At the earliest optional call date for each series of BABs, the applicable portfolio is liquidated automatically and the proceeds are used to repay the BABs. Pending the redemption of the BABs, WSSC would continue to make interest payments on the BABs and receive the Federal subsidy and such bonds (as well as the associated refunding bonds) would continue to be balance sheet liabilities of WSSC.

3. Key Refunding Assumptions

The following are the key assumptions in our refunding analysis of the Refunding Eligible Bonds:

- Interest rates and bond market conditions as of June 27, 2017
- All eligible maturities of Refunding Eligible Bonds are called on the earliest optional redemption date. (Bonds that are call-protected to maturity are not included in the analysis because they will not produce debt service savings)
- Costs of issuance estimated at the lesser of (A) 2% of the principal amount of the refunding bond issue, and (B) $300,000 plus $4.00/bond for underwriters discount
- The term of the refunding series matches the term of the bonds being refunded and the refunding bond amortization is structured to produce uniform annual savings
- Bond proceeds are invested in short term open market Treasuries at yields based on June 27 market conditions

4. Summary

At current market rate levels, the outstanding series of WSSC bonds that represent viable refunding candidates (i.e. over 3% NPV savings) are the CPI Bonds of 2011, CPI Bonds of 2013 and the Series 2009B and Series 2010B Build America Bonds. In the event of a continued decline in interest rates, additional potential refunding candidates would include the CPI Bonds of 2014 (First and Second Series), the CPI Bonds of 2015 and the CPI Bonds of 2016 (Second Series).

Due to the high degree of sensitivity of the current projected levels of % NPV savings to changes in interest rates, we encourage the implementation of the proposed refunding plan at the earliest time practicable.

We will continue to monitor the market and other outstanding WSSC bonds for refunding feasibility and apprise WSSC as and when viable financing opportunities arise.

Exhibit A

Washington Suburban Sanitary Commission
Summary of Refunding Savings Opportunities
27-Jun-17

Issue Description	Dated Date	First Call Date	Final Maturity	Original Principal Amount	Outstanding Principal Amount	Refunded Principal Amount[1]	Gross Savings	NPV Savings	NPV Savings as % of Refunded Principal	% NPV Savings w/ .25% Decrease in Tax-Exempt Yields	% NPV Savings w/ .25% Increase in Tax-Exempt Yields
Build America Bonds, Series 2009B	10/8/2009	6/1/2019	6/1/2029	90,000,000	90,000,000	90,000,000	5,952,525	4,983,174	5.54%	7.31%	3.80%
Build America Bonds, Series 2010B	9/29/2010	6/1/2020	6/1/2030	120,000,000	120,000,000	120,000,000	4,701,350	3,708,241	3.09%	5.01%	1.21%
CPI Bonds of 2011	11/16/2011	6/1/2021	6/1/2031	225,000,000	210,000,000	150,000,000	12,779,225	10,336,939	6.89%	8.23%	5.60%
CPI Bonds of 2012	11/15/2012	6/1/2022	6/1/2032	250,000,000	187,500,000	125,000,000	2,991,725	1,618,893	1.30%	2.49%	0.15%
CPI Bonds of 2013	4/23/2013	6/1/2023	6/1/2032	150,000,000	112,500,000	67,500,000	4,151,204	3,268,184	4.84%	6.00%	3.74%
CPI Bonds of 2014	4/29/2014	6/1/2024	6/1/2044	150,000,000	135,000,000	100,000,000	2,491,450	1,733,417	1.73%	3.68%	-0.09%
CPI Bonds of 2014 (Second Series)	12/2/2014	6/1/2024	6/1/1944	250,000,000	231,520,000	231,520,000	3,728,695	2,595,118	1.35%	3.47%	-0.64%
CPI Bonds of 2015	10/28/2015	6/1/2024	6/1/2045	390,000,000	376,820,000	318,715,000	3,631,133	2,518,118	0.79%	2.99%	-1.26%
CPI Bonds of 2016	5/26/2016	6/1/2026	6/1/2046	145,000,000	142,445,000	112,760,000	(12,133,746)	(7,853,938)	-6.97%	-5.33%	-8.47%
CPI Bonds of 2016 (Second Series)	12/1/2016	6/1/2026	6/1/2046	381,810,000	375,385,000	305,260,000	5,579,199	3,843,268	1.26%	3.27%	-0.61%

[1] Callable maturities only