CR-78-2021 (DR-1)
EXHIBIT A

Debt Refunding Plan

June 1, 2021

Washington Suburban Sanitary Commission

Debt Refunding Plan

1. Executive Summary

The Washington Suburban Sanitary Commission (WSSC) has 20 outstanding series of long-term fixed rate bonds (not including Maryland Water Quality Financing Administration (MWQFA) loans and pre-refunded Consolidated Public Improvement (CPI) bonds). As financial advisor to WSSC Water, Wye River Group monitors market conditions and outstanding debt obligations routinely for opportunities to refinance such debt for interest cost savings.

Based on current market conditions, the outstanding Series of WSSC Bonds which represent potential candidates for refinancing for interest cost savings are as follows:

- Series 2012 CPI Bonds
- Series 2014 CPI Bonds
- Series 2014 CPI Bonds (Second Series)
- Series 2015 CPI Bonds

Historically, WSSC refinanced outstanding bonds for interest cost savings either through a tax-exempt advance refunding or a tax-exempt current refunding. However, in 2017, Federal tax law was changed to abolish tax-exempt advance refundings (The "current" tax exempt refunding approach continues to be permissible.) Earlier this year, legislation was introduced in Congress, with considerable bipartisan support, for the reinstatement of tax-exempt advance refundings. Although the prognosis for the passage of such legislation appears to be good, the timing and ultimate prospects of such passage remains uncertain. Media reports suggest the possibility of passage before year end.

When tax-exempt advance refundings were abolished in 2017, many bond issuers such as WSSC began to resort to refinancing alternatives including the following:

- taxable advance refunding,
- tax-exempt forward refunding, and
- convertible refunding.

A profile of each refunding structuring alternative is provided below. In addition, summaries of savings are provided for both such alternatives as well as the potentially reinstated tax-exempt advance refunding approach. Such analysis indicates that while the level of debt service savings achievable through alternatives to tax-exempt advance refunding are substantial, the savings from tax-exempt advance refunding are considerably higher.

Consequently, it is recommended that WSSC position itself to deploy the tax-exempt advance refunding approach expeditiously if, and when, the authorizing legislation is adopted. It should also continue to monitor market conditions for risks and opportunities with respect to the alternative approaches. The general prognosis for interest rates over the next 12 months appears to be for a relatively moderate increase. Under such circumstances, WSSC's interests may be best addressed by waiting for the outcome of the legislation as long as prospects for its passage on a near term basis continue to be positive and there is no meaningful deterioration in interest rates in the meantime. In addition, as the time for the issuance of new money bonds in 2021 draws closer, WSSC should evaluate the selective use of the currently feasible alternative refunding structures (in particular, a forward refunding of the Series 2012 Bonds) at or about the same time as the issuance of the new money bonds.

2. **Refunding Structuring Alternatives**

WSSC management has monitored regularly the feasibility and benefits of the application of the various refunding structures to its outstanding bonds. The following is a summary of such alternatives:

a. Tax-Exempt Advance Refunding. In a tax-exempt advance refunding, the proceeds of the bonds are invested in a portfolio of US Treasury securities which fund the payment of interest on the refunded bonds until their earliest optional redemption date and repay the bonds on that date. This was the most common refunding approach used until 2017. This alternative would not be legally permissible unless and until legislation currently under consideration is passed.

b. Taxable Advance Refunding. A taxable advance refunding is structured identically to a tax-exempt advance refunding. The only difference is that the bonds have higher "taxable" interest rates. In recent times as interest rates have declined, the spread between tax-exempt and taxable interest rates has narrowed appreciably. Consequently, at current market rate levels, a taxable advance refunding of each of the identified refunding candidates would be feasible.

c. Tax-Exempt Forward Refunding. In a forward refunding, WSSC would enter into a contract with either an investment banking firm or a commercial bank to purchase tax-exempt bonds at a fixed date in the future at interest rates based on current market levels plus a rate "premium" based on the number of months in the future by which the bonds will be issued. Such "forward delivery" bonds would be issued on a date within 90 days of the earliest optional redemption date of the refunding candidate. Upon issuance, the bonds would constitute tax-exempt current refunding bonds whose proceeds would be used to repay the outstanding principal amount of the refunding candidate.

   For instance, in the case of the Series 2012 Bonds, WSSC could enter into a contract to deliver forward delivery bonds at any time under current market conditions, with delivery on or after March 1, 2022. (i.e., no more than 90 days before that Series' earliest optional redemption date). The forward refunding approach has the advantage of capturing current tax-exempt rates (usually with a 3-4 basis point premium for each month between execution of the Bond Purchase Agreement and delivery date). Even with such premium, the forward delivery bond tax-exempt rate tends to be lower than the rate of taxable advance refunding bonds.

   There are several limitations to the forward refunding approach. The first is that the cash flow benefit of the transaction does not commence until the future delivery date. Second, underwriters and banks tend to be unwilling to forward commit rates beyond 24 months. Consequently, the only potentially viable forward refunding candidate in FY 2021 is the Series 2012 Bonds. The third limitation is that although forward delivery bonds can be issued through a public offering, such sale cannot be through a competitive sale. It can only be accomplished through a negotiated sale which means that WSSC would have to pick the underwriting team in advance for such a transaction.

d. Convertible Refunding. A convertible refunding functions in the same fashion as a taxable or tax-exempt advance refunding in terms of the timing and function of the refunding escrow. However, under the transaction structure, the interest rate on the refunding bonds is initially set at a taxable level which remains in effect until the earliest redemption date of the refunded bonds. On that date, the taxable rate bonds are effectively replaced with tax-exempt bonds. The interest rates on both the taxable and tax-exempt bonds are committed at the same time at the outset of the transaction. This alternative offers a slight advantage over the forward refunding alternative of immediate cash flow savings if desired. However, its application is limited to commercial banks as they are the only type of institutions to date that have been willing to commit simultaneously to both the initial taxable rate and the future tax-exempt rate in such transactions.

3. Refunding Feasibility Assessment

As interest rates have declined, WSSC has routinely refinanced outstanding series of bonds to achieve interest cost savings, primarily through tax-exempt advance refundings. In light of the potential reinstatement of tax-exempt advance refundings and the feasibility of certain of the alternative refunding structures profiled above, Wye River Group has monitored WSSC's outstanding debt for interest cost savings opportunities using each such refunding approach. Attached as Exhibit A is a chart that summarizes WSSC's outstanding bonds with relevant details including coupon rates and earliest optional redemption dates. Wye River has examined all these outstanding issues for refinancing opportunities. The series which present potential refinancing opportunities over the next 12 months are the Series 2012, 2014, 2014 (Second Series) and 2015 CPI Bond issues.

The following chart summarizes the potential debt service savings opportunity under current market conditions in refinancing each of the foregoing series of bonds alternatively through a (1) taxable advance refunding and (2) a tax-exempt advance refunding. The next following chart summarizes the relative savings opportunity under current market conditions of refinancing the Series 2012 Bonds through either a tax-exempt forward refunding or a convertible refunding.

a. Advance Refunding Alternatives

	Taxable Advance Refunding		**Tax-Exempt Advance Refunding**	
	NPV Savings ($)	NPV Savings (%)	NPV Savings ($)	NPV Savings (%)
Series 2012	$ 8,183,571	5.95%	$12,506,027	9.10%
Series 2014	$10,128,237	8.81%	$13,996,755	12.17%
Series 2014 2nd Series	$20,796,558	9.87%	$28,137,560	13.36%
Series 2015	$32,984,282	9.54%	$45,252,733	13.08%
Total Net Present Value (NPV)Savings	**$72,217,091**	**8.93%**	**$100,034,557**	**12.37%**
Total Refunded Bonds	**$809,000,000**		**$809,000,000**	
True Interest Cost (TIC)	**2.18%**		**1.89%**	

b. **Other Refunding Alternatives (2012 Bonds Only)**

Issue Description	NPV Savings	NPV Savings as % o Refunded Principal
Convertible Refunding	$8,623,735	6.27%
Tax-Exempt Forward Refunding	$11,248,013	8.18%

The following are the key assumptions in our analysis of each refunding alternative:

- Refunding bonds issued (or in the case of forward refunding, committed) on September 1, 2021
- Interest rates and bond market conditions as of May 18, 2021
- Refunded bonds are called on their earliest optional redemption dates
- Costs of issuance estimated at the lesser of (A) 2% of the principal amount of the refunding bond issue, and (B) $350,000, prorated to each series of refunding bonds, plus $2.50/bond for underwriter's discount
- Term of refunding matches the term of the bonds being refunded and the refunding bond amortization is structured to produce uniform annual savings
- Bond proceeds invested until the first applicable call date in U.S. Treasuries at yields based on market conditions as of May 18, 2021

Under current market conditions, each of the refunding candidates could be refinanced on a taxable or (subject to a change in law) tax-exempt advance refunding basis to produce adequate savings were the minimum acceptable standard of 3% net present value savings applied. Additionally, adequate savings could be achieved with a convertible or forward refunding of the Series 2012 Bonds.

4. Summary

At current market interest rate levels, WSSC's outstanding Series 2012, 2014, 2014 (2nd Series) and 2015 Bonds represent viable refunding candidates, each with net present value savings in excess of 3% of the refunded bond principal. Each series of bonds can be legally defeased with the proceeds of taxable refunding bonds. Due to short remaining length of time to the earliest redemption date of the Series 2012 Bonds, alternative refinancing structures (i.e., convertible and forward refundings) may offer WSSC an opportunity to achieve a higher level of savings than available through a taxable advance refunding, but in each case would have to be implemented through an alternative approach to a competitive public sale process.

Wye River Group will continue to monitor the market and other outstanding WSSC bonds for refunding feasibility and apprise WSSC as and when viable refinancing opportunities arise.

Exhibit A

Washington Suburban Sanitary Commission
Summary of Outstanding CPI Bonds
As of June 30, 2021

Bond Series	Original Principal	Final Maturity	Outstanding Principal as of 6/30/21	Interest Rate Range	Earliest Optional Call Date
2012	$250,000,000	6/1/2032	$ 137,500,000	3.00% – 5.00%	6/1/2022
2013 Refunding	101,560,000	6/1/2026	24,870,000	2.00% – 4.00%	6/1/2023
2014	150,000,000	6/1/2044	115,000,000	4.00% – 5.00%	6/1/2024
2014 Refunding	47,395,000	6/1/2022	1,990,000	5.00%	Non-Callable
2014 (2nd Series)	250,000,000	6/1/2044	210,640,000	4.00% – 5.00%	6/1/2024
2015	390,000,000	6/1/2045	345,860,000	3.00% – 5.00%	6/1/2024
2015 Refunding	145,325,000	6/1/2028	92,245,000	2.65% – 5.00%	6/1/2024
2016	145,000,000	6/1/2046	130,795,000	3.00% – 5.00%	6/1/2026
2016 Refunding	36,440,000	6/1/2025	13,850,000	4.00% – 5.00%	Non-Callable
2016 (2nd Series)	381,810,000	6/1/2046	347,975,000	3.00% – 5.00%	6/1/2026
2017	459,250,000	6/15/2047	428,795,000	3.00% – 5.00%	6/15/2027
2017 Refunding	220,180,000	6/1/2032	216,455,000	3.00% – 5.00%	6/1/2027
2017 Refunding (2nd Series)	79,075,000	6/1/2029	64,120,000	5.00%	6/1/2027
2018	390,000,000	6/1/2048	369,745,000	4.00% - 5.00%	6/1/2028
2019 Refunding	39,340,000	6/1/2029	22,460,000	2.00% – 5.00%	Non-Callable
2019 (Green Bonds)	53,880,000	6/1/2049	50,990,000	3.00% – 5.00%	6/1/2029
2019	179,685,000	6/1/2049	170,050,000	3.00% – 5.00%	6/1/2029
2020 Refunding	99,210,000	6/1/2030	90,015,000	5.00%	Non-Callable
2020	278,350,000	12/1/2049	278,350,000	2.00% – 5.00%	12/1/2030
2020 (2nd Series) (Green Bonds)	47,545,000	12/1/2049	47,545,000	2.00% – 5.00%	12/1/2030
TOTAL	**$3,641,685,000**		**$3,159,250,000**		