

## MEMORANDUM

TO: Brian Helminger  
FROM: Jon Cameron  
DATE: May 10, 2021  
SUBJECT: Interceptor Project Debt Service & Financing Options Analysis

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### Background

The District is in the early design phase for two upcoming projects: a sewer interceptor project with an estimated cost of \$22 million to construct, and a cloth media disk filter project with an estimated cost of \$12 million. The District currently has three outstanding Clean Water Fund Loans through the State of Wisconsin, of which these loans reach final maturity in 2024, 2025, and 2027. The District's largest Clean Water Fund Loan has a final payment in 2025. The two new projects are anticipated to be financed through the Clean Water Fund Loan program and begin repayment prior to the District's existing debt reaching final maturity. The District is anticipating a three-year period from 2023-2025 when the existing and new debt will overlap and potentially cause a spike to sewer user rates to pay debt service. The District engaged Ehlers to help provide options to avoid this and keep user rates as stable as possible in the long term. Our summary of the situation and possible options is described below. The packet of information used to develop our findings was provided to us by the District and is included with this memo as a reference.

### Analysis of Existing Debt

The District's existing loans are issued through the State of Wisconsin's Clean Water Fund Loan program, which is a low interest loan program run through the Department of Natural Resources (DNR) and Department of Administration (DOA) to finance sanitary sewer upgrades. In exchange for the low interest rate offered as part of this program the loans are generally not prepayable throughout their life. The State has allowed in special cases for a municipality or District to prepay a Clean Water Fund Loan if the existence of the loan would create a hardship situation. It is possible in a situation like this the State would allow the District to prepay one or more of its loans due to the fact the overlap of its existing and new debt could create a hardship to the District and its rate payers. This option would need to be discussed further with officials at the DOA to see if this a viable option. The District would also need to have adequate cash on hand to prepay the existing debt if the State would grant a prepayment request.

### Analysis of Available Cash on Hand

One option available to the District would be to use available cash on hand to either prepay the existing Clean Water Fund Loans (if the State would allow), or help pay the debt service on the existing or new loans for the three year period of time. When reviewing this option, the District will want to ensure that remaining cash balances will still be at or ideally above minimum recommended levels.

One method for evaluating a minimum amount of cash on hand is to rely upon the guidance published by Moody's Rating Agency as they rate utility revenue bonds. The District is not currently rated by Moody's, but the metric is still a valid method for measuring cash on hand. Moody's metric for the recommended number of days cash on hand for a Aa rated utility is a minimum of 150 days, which is calculated as follows:

$$\frac{(\text{Unrestricted Cash} + \text{Liquid Investments}) \times 365 \text{ Days}}{\text{Operating Expenses}}$$

In looking at the District's current unrestricted cash on hand, not including the equipment replacement fund and debt service fund, as provided to Ehlers and its 2021 adopted budget we calculate the following:

$$\frac{5,218,937 \times 365}{3,412,986} = 558 \text{ days of cash on hand}$$

A minimum 150 days of cash on hand for the District is \$1,402,597 based on the adopted 2021 budget, which would mean the District has approximately \$3,816,340 million of potential cash to help either pay off existing debt or cover the principal and interest payments on the existing or future debt until the existing debt reaches full maturity and leave itself with 150 days cash on hand.

#### Analysis of Future Debt

The District preliminarily plans to issue Clean Water Fund Loans for both upcoming projects. The Clean Water Fund Loan program currently offers both 20- and 30-year repayment options depending on the nature of the project and projected life of the asset to be financed. The interest rate is slightly higher with a 30-year loan (1.595% for the subsidized rate and 2.900% market rate) than with a 20-year loan (1.485% for the subsidized rate and 2.700% market rate). To qualify for a 30-year term the District would need to demonstrate that the project to be financed has at least a 30-year lifespan. A 30-year loan term will offer the District slightly lower principal and interest payments but will keep the debt outstanding for an additional 10-years generally without a prepayment option. The Clean Water Fund Loan program also is a level principal and interest payment structure which would not allow the District to wrap the payments around the drop off of existing debt.

Another option available to the District would be a General Obligation financing in the open market. This option would allow the District to have a debt structure that may better suit its existing debt structure in that the debt could be designed to wrap around the District's existing debt and may not require the District to try to prepay existing debt and preserve its existing cash on hand. An open market financing may come with a slightly higher interest rate and would also come with a maximum term of 20-years. An open market financing would also come with a prepayment feature generally available after year 8 or 9 of the financing. A one-year trend in General Obligation interest rates is attached with this memo.

A final option for the District to consider is the issuance of interim financing for a period of time and then refinance the interim financing with Clean Water Fund Loans. This would allow the

District to pay interest only during the construction period and then refinance after construction is completed with a Clean Water Fund Loan with the intent being to try to delay principal repayment until after two of the three District's Clean Water Fund Loans mature in 2024 and 2025. While this option may allow the District to avoid principal repayment until after the two Clean Water Fund Loans mature, it would subject the District to interest rate risk if interest rates rise between now and the time that the Clean Water Fund Loans are secured. Based on current interest rates, it is estimated that the District may be able to secure interim financing for a range of approximately 2.50% to 3.50%.

### Conclusions

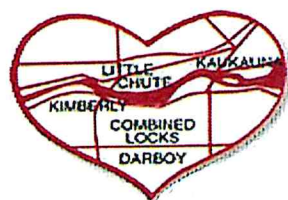
The District has several potential options to mitigate the overlap of principal and interest payments of its existing and potential future debt. Ehlers can further assist the District with this project as follows:

- Contacting the State to see if any existing Clean Water Fund Loans can be prepaid.
- Examining the option of using cash on hand to pay existing or new principal and interest payments until existing debt reaches full maturity.
- Evaluating the District's financing options and helping select an option that will best meet the needs of the District.
- Constructing an long range cash flow analysis and rate study (if needed) to evaluate the impacts of the financing plan and develop user rates that are fair and equitable to all customer classes and fully recover all costs to operate the District.

## **District Debt Service Analysis / Bond Options Report**

**Issue:** The District is in the early design stages for an Interceptor maintenance project that is estimated to cost \$22M to complete. Delaying the project is not a viable option as the concrete is being attacked and destroyed by nitric acid produced by the bacteria culture living in the interceptor system. The projected debt service obligation does not align well with calendar years 2023 thru 2025 resulting in the sewage rate charges spiking for those years before again dropping as old debts are fully extinguished. The District seeks expert analysis on its options related to bonding and debt service obligations with an eye towards providing a level rate structure in future years.

1. Review District documentation of the present and anticipated future debt service burden on the District and provide options/opinion on:
  - Feasibility and pro/cons in refinancing existing debt service presumably at a lower interest rate
  - Pros and cons of utilizing the CWF 30-year payback option versus traditional 20- year for collection system project
  - Feasibility and strategy for preemptively paying back debt and/or adjusting rates and holding excess cash reserves to apply to future obligations. (2023-2025)
  - Any comparable financing options or alternatives that would level debt service and sewage rates for the District
2. Attend a future Commission meeting and present findings and options to the District and answer any finance related questions that arise from the report/presentation. The District is located in the Fox Valley and under the current covid 19 pandemic holds its meetings at the Kaukauna City Hall during evening hours.



# Heart of the Valley

## METROPOLITAN SEWERAGE DISTRICT

### DEBT SERVICE AMORTIZATION - ANNUAL P & I

CWF Loan Year	Current Debt Service Schedule			Projected Future Debt Service		ANNUAL P & I TOTALS
	Marine Manhole & CIPP	Siphon/Subtraction Elimination ICA - Darboy & CL	WWTP Upgrade	Interceptor Rehab	Cloth Media Disk Filters	
2021	\$296,176.85	\$205,888.86	\$2,170,306.95			\$2,672,372.66
2022	\$296,099.60	\$205,835.84	\$2,169,761.19		\$89,100.00	\$2,760,796.63
2023	\$296,020.44	\$205,781.58	\$2,169,202.54	\$326,700.00	\$178,200.00	\$3,175,904.56
2024	\$295,939.33	\$205,726.03	\$2,168,630.68	\$326,700.00	\$760,285.79	\$3,757,281.83
2025	\$295,856.20		\$2,168,045.30	\$1,465,350.43	\$760,221.13	\$4,689,473.06
2026	\$295,771.01			\$1,465,223.94	\$760,155.51	\$2,521,150.46
2027	\$295,683.71			\$1,465,095.57	\$760,088.91	\$2,520,868.19
2028				\$1,464,965.31	\$760,021.32	\$2,224,986.63
2029				\$1,464,833.10	\$759,952.74	\$2,224,785.84
2030				\$1,464,698.93	\$759,883.13	\$2,224,582.06
2031				\$1,464,562.77	\$759,812.49	\$2,224,375.26
2032				\$1,464,424.58	\$759,740.80	\$2,224,165.38
2033				\$1,464,284.34	\$759,668.04	\$2,223,952.38
2034				\$1,464,142.01	\$759,594.20	\$2,223,736.21
2035				\$1,463,997.58	\$759,519.28	\$2,223,516.86
2036				\$1,463,851.01	\$759,443.23	\$2,223,294.24
2037				\$1,463,702.26	\$759,366.05	\$2,223,068.31
2038				\$1,463,551.29	\$759,287.73	\$2,222,839.02
2039				\$1,463,398.09	\$759,208.25	\$2,222,606.34
2040				\$1,463,242.61	\$759,127.60	\$2,222,370.21
2041				\$1,463,084.82	\$759,045.74	\$2,222,130.56
<b>TOTALS:</b>	<b>\$2,071,547.14</b>	<b>\$823,232.31</b>	<b>\$10,845,946.66</b>	<b>\$25,545,808.64</b>	<b>\$13,941,721.94</b>	<b>\$53,228,256.69</b>

# Heart of the Valley

## Metropolitan Sewerage District

### Cash & Investments

<u>Institution</u>	<u>Account Type</u>	<u>Interest Rate</u>	<u>Maturity</u>	<u>Balance on 12/31/2020</u>	<u>Balance on 12/31/2019</u>
Bank of Kaukauna	General Checking/Sweep	0.5	N/A	\$569,898.25	\$423,000.22
Associated	Petty Cash Checkbook	N/A	N/A	\$56.71	\$283.87
Associated	Certificate of Deposit / MM			\$0.00	\$181,850.41
BLC Community Bank	Certificate of Deposit	2	1/19/2021	\$490,907.36	\$479,667.40
Unison Credit Union	Certificate of Deposit	1.7	12/10/2021	\$212,538.24	\$208,988.48
Community First C.U.	Certificate of Deposit	1	11/2/2021	\$261,548.52	\$256,002.17
Fox Communities C.U.	Certificate of Deposit	1.65	6/24/2021	\$214,436.72	\$210,381.61
Capital Credit Union	Certificate of Deposit	2.35	12/19/2021	\$215,143.82	\$210,194.38
East Wisconsin	Certificate of Deposit	2.3	6/18/2021	\$305,149.84	\$0.00
State of Wisconsin - LGIP					
	General	0.5	N/A	\$2,103,379.63	\$1,784,265.99
	Debt Service	0.5	N/A	\$2,834,345.61	\$2,820,427.31
	Replacement	0.5	N/A	\$6,399,089.97	\$6,136,043.13
	Master Plan/Compliance	0.5	N/A	\$845,877.84	\$841,724.09
	<i>LGIP Subtotal:</i>			<u>\$12,182,693.05</u>	<u>\$11,582,460.52</u>
<b>Totals:</b>				<b>\$14,452,372.51</b>	<b>\$13,552,829.06</b>
				<b>↑ \$899,543.45</b>	

# CMD F Project

\*\*\*\*\* , Wisconsin

Exhibit B

Project \*\*\*\*-\*\* Clean Water Fund Program

Loan Closing Date:

June 23, 2021

Payment Date	Principal Payment	Interest Rate	Interest Payment	Principal & Interest	Bond Year Debt Service	Calendar Year Debt Service
1-Nov-21	0.00	1.485%	63,360.00	63,360.00	0.00	63,360.00
1-May-22	0.00	1.485%	89,100.00	89,100.00	152,460.00	0.00
1-Nov-22	0.00	1.485%	89,100.00	89,100.00	0.00	178,200.00
1-May-23	0.00	1.485%	89,100.00	89,100.00	178,200.00	0.00
1-Nov-23	0.00	1.485%	89,100.00	89,100.00	0.00	178,200.00
1-May-24	586,440.11	1.485%	89,100.00	675,540.11	764,640.11	0.00
1-Nov-24	0.00	1.485%	84,745.68	84,745.68	0.00	760,285.79
1-May-25	595,148.75	1.485%	84,745.68	679,894.43	764,640.11	0.00
1-Nov-25	0.00	1.485%	80,326.70	80,326.70	0.00	760,221.13
1-May-26	603,986.71	1.485%	80,326.70	684,313.41	764,640.11	0.00
1-Nov-26	0.00	1.485%	75,842.10	75,842.10	0.00	760,155.51
1-May-27	612,955.91	1.485%	75,842.10	688,798.01	764,640.11	0.00
1-Nov-27	0.00	1.485%	71,290.90	71,290.90	0.00	760,088.91
1-May-28	622,058.30	1.485%	71,290.90	693,349.20	764,640.10	0.00
1-Nov-28	0.00	1.485%	66,672.12	66,672.12	0.00	760,021.32
1-May-29	631,295.87	1.485%	66,672.12	697,967.99	764,640.11	0.00
1-Nov-29	0.00	1.485%	61,984.75	61,984.75	0.00	759,952.74
1-May-30	640,670.61	1.485%	61,984.75	702,655.36	764,640.11	0.00
1-Nov-30	0.00	1.485%	57,227.77	57,227.77	0.00	759,883.13
1-May-31	650,184.57	1.485%	57,227.77	707,412.34	764,640.11	0.00
1-Nov-31	0.00	1.485%	52,400.15	52,400.15	0.00	759,812.49
1-May-32	659,839.81	1.485%	52,400.15	712,239.96	764,640.11	0.00
1-Nov-32	0.00	1.485%	47,500.84	47,500.84	0.00	759,740.80
1-May-33	669,638.43	1.485%	47,500.84	717,139.27	764,640.11	0.00
1-Nov-33	0.00	1.485%	42,528.77	42,528.77	0.00	759,668.04
1-May-34	679,582.56	1.485%	42,528.77	722,111.33	764,640.10	0.00
1-Nov-34	0.00	1.485%	37,482.87	37,482.87	0.00	759,594.20
1-May-35	689,674.37	1.485%	37,482.87	727,157.24	764,640.11	0.00
1-Nov-35	0.00	1.485%	32,362.04	32,362.04	0.00	759,519.28
1-May-36	699,916.03	1.485%	32,362.04	732,278.07	764,640.11	0.00
1-Nov-36	0.00	1.485%	27,165.16	27,165.16	0.00	759,443.23
1-May-37	710,309.78	1.485%	27,165.16	737,474.94	764,640.10	0.00
1-Nov-37	0.00	1.485%	21,891.11	21,891.11	0.00	759,366.05
1-May-38	720,857.88	1.485%	21,891.11	742,748.99	764,640.10	0.00
1-Nov-38	0.00	1.485%	16,538.74	16,538.74	0.00	759,287.73
1-May-39	731,562.62	1.485%	16,538.74	748,101.36	764,640.10	0.00
1-Nov-39	0.00	1.485%	11,106.89	11,106.89	0.00	759,208.25
1-May-40	742,426.33	1.485%	11,106.89	753,533.22	764,640.11	0.00
1-Nov-40	0.00	1.485%	5,594.38	5,594.38	0.00	759,127.60
1-May-41	753,451.36	1.485%	5,594.38	759,045.74	764,640.12	759,045.74
Totals	12,000,000.00		2,094,181.94	14,094,181.94	14,094,181.94	14,094,181.94

Net Interest Rate 1.4850%  
Bond Years 141,022.3613  
Average Life 11.7519

The above schedule assumes full disbursement of the loan on the loan closing date.

01-Jan-01 Wisconsin Department of Administration

# Interceptor Project

\*\*\*\*\*, Wisconsin

Exhibit B

Project \*\*\*\*-\*\* Clean Water Fund Program

Loan Closing Date:

June 23, 2021

Payment Date	Principal Payment	Interest Rate	Interest Payment	Principal & Interest	Bond Year Debt Service	Calendar Year Debt Service
1-Nov-21	0.00	1.485%	116,160.00	116,160.00	0.00	116,160.00
1-May-22	0.00	1.485%	163,350.00	163,350.00	279,510.00	0.00
1-Nov-22	0.00	1.485%	163,350.00	163,350.00	0.00	326,700.00
1-May-23	0.00	1.485%	163,350.00	163,350.00	326,700.00	0.00
1-Nov-23	0.00	1.485%	163,350.00	163,350.00	0.00	326,700.00
1-May-24	0.00	1.485%	163,350.00	163,350.00	326,700.00	0.00
1-Nov-24	0.00	1.485%	163,350.00	163,350.00	0.00	326,700.00
1-May-25	1,147,168.15	1.485%	163,350.00	1,310,518.15	1,473,868.15	0.00
1-Nov-25	0.00	1.485%	154,832.28	154,832.28	0.00	1,465,350.43
1-May-26	1,164,203.60	1.485%	154,832.28	1,319,035.88	1,473,868.16	0.00
1-Nov-26	0.00	1.485%	146,188.06	146,188.06	0.00	1,465,223.94
1-May-27	1,181,492.02	1.485%	146,188.06	1,327,680.08	1,473,868.14	0.00
1-Nov-27	0.00	1.485%	137,415.49	137,415.49	0.00	1,465,095.57
1-May-28	1,199,037.18	1.485%	137,415.49	1,336,452.67	1,473,868.16	0.00
1-Nov-28	0.00	1.485%	128,512.64	128,512.64	0.00	1,464,965.31
1-May-29	1,216,842.88	1.485%	128,512.64	1,345,355.52	1,473,868.16	0.00
1-Nov-29	0.00	1.485%	119,477.58	119,477.58	0.00	1,464,833.10
1-May-30	1,234,913.00	1.485%	119,477.58	1,354,390.58	1,473,868.16	0.00
1-Nov-30	0.00	1.485%	110,308.35	110,308.35	0.00	1,464,698.93
1-May-31	1,253,251.46	1.485%	110,308.35	1,363,559.81	1,473,868.16	0.00
1-Nov-31	0.00	1.485%	101,002.96	101,002.96	0.00	1,464,562.77
1-May-32	1,271,862.24	1.485%	101,002.96	1,372,865.20	1,473,868.16	0.00
1-Nov-32	0.00	1.485%	91,559.38	91,559.38	0.00	1,464,424.58
1-May-33	1,290,749.40	1.485%	91,559.38	1,382,308.78	1,473,868.16	0.00
1-Nov-33	0.00	1.485%	81,975.56	81,975.56	0.00	1,464,284.34
1-May-34	1,309,917.02	1.485%	81,975.56	1,391,892.58	1,473,868.14	0.00
1-Nov-34	0.00	1.485%	72,249.43	72,249.43	0.00	1,464,142.01
1-May-35	1,329,369.29	1.485%	72,249.43	1,401,618.72	1,473,868.15	0.00
1-Nov-35	0.00	1.485%	62,378.86	62,378.86	0.00	1,463,997.58
1-May-36	1,349,110.43	1.485%	62,378.86	1,411,489.29	1,473,868.15	0.00
1-Nov-36	0.00	1.485%	52,361.72	52,361.72	0.00	1,463,851.01
1-May-37	1,369,144.72	1.485%	52,361.72	1,421,506.44	1,473,868.16	0.00
1-Nov-37	0.00	1.485%	42,195.82	42,195.82	0.00	1,463,702.26
1-May-38	1,389,476.51	1.485%	42,195.82	1,431,672.33	1,473,868.15	0.00
1-Nov-38	0.00	1.485%	31,878.96	31,878.96	0.00	1,463,551.29
1-May-39	1,410,110.24	1.485%	31,878.96	1,441,989.20	1,473,868.16	0.00
1-Nov-39	0.00	1.485%	21,408.89	21,408.89	0.00	1,463,398.09
1-May-40	1,431,050.38	1.485%	21,408.89	1,452,459.27	1,473,868.16	0.00
1-Nov-40	0.00	1.485%	10,783.34	10,783.34	0.00	1,463,242.61
1-May-41	1,452,301.48	1.485%	10,783.34	1,463,084.82	1,473,868.16	1,463,084.82
Totals	22,000,000.00		3,988,668.64	25,988,668.64	25,988,668.64	25,988,668.64

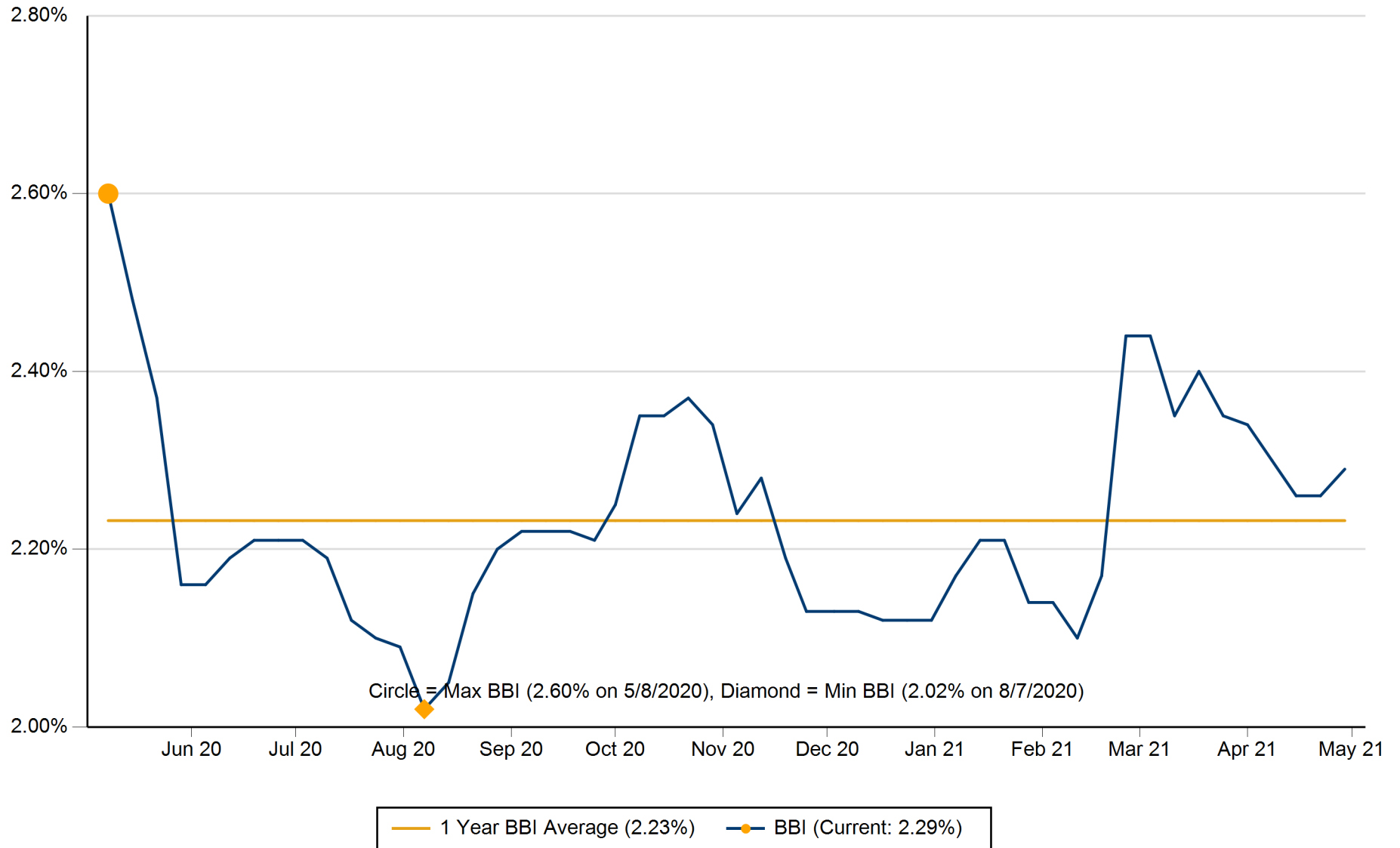
Net Interest Rate 1.4850%  
Bond Years 268,597.2215  
Average Life 12.2090

The above schedule assumes full disbursement of the loan on the loan closing date.

01-Jan-01 Wisconsin Department of Administration

# 1 YEAR TREND IN MUNICIPAL BOND INDICES

Weekly Rates May, 2020 - May, 2021



The Bond Buyer "20 Bond Index" (BBI) shows average yields on a group of municipal bonds that mature in 20 years and have an average rating equivalent to Moody's Aa2 and S&P's AA.

Source: The Bond Buyer

