

DeKalb County Department of Watershed Management

Water and Sewer Revenue Sufficiency Study

DRAFT - REPORT UNDER REVIEW

January 24, 2025

Water and Sewer Revenue Sufficiency Study

DRAFT

January 24, 2025

Prepared By:

Arcadis U.S., Inc. 37 N Orange Avenue, Suite 900D Orlando, FL 32801 United States Phone: 407-927-3536

Our Ref:

30173938

Dil d Dall

Robert Ryall Vice President

Prepared For:

DeKalb County Department of Finance 1300 Commerce Drive Decatur, GA 30030

This document is intended only for the use of the individual or entity for which it was prepared and may contain information that is privileged, confidential and exempt from disclosure under applicable law. Any dissemination, distribution or copying of this document is strictly prohibited.

Contents

1	Intro	oduction and Purpose	1
	1.1	Background and Purpose	1
	1.2	Organization of the Report	2
2	Rev	enue Sufficency Analysis	2
	2.1	Overview	2
	2.2	General Methodology	2
	2.3	Data Used in the Analysis	3
	2.3.1	Data Items	3
	2.3.2	Working Capital Reserves and Balances	3
	2.3.3	Sources of Funds	4
	2.3.4	Use of Funds	5
	2.3.5	Capital Improvements Plan (CIP)	6
	2.3.6	Senior Debt Service	7
	2.3.7	Other System Obligations	8
	2.3.8	General Assumptions	8
	2.4	Financial Management and Goals of the Water and Sewer Utility	9
	2.4.1	Debt Service Coverage	9
	2.4.2	WIFIA Loan Term Sheet for the Sewer Assessment and Rehabilitation1	0
	2.4.3	Minimum Working Capital Reserves in the Operating / Renewal & Extension Fund1	0
	2.5	Results of the Water and Sewer Revenue Sufficiency Analysis 1	0
	2.5.1	Summary Pro Forma and Revenue Increases Required1	0
3	Prin 12	cipal Assumptions and Considerations Applied in the Development of the Financial Projections	
	3.1	Assumptions and Considerations 1	2
I	abl	es	
Ta	able 2-1	. Beginning Balances by Source 2024	4
Ta	able 2-2	2. Source of Funds	5
Ta	able 2-3	3. Use of Funds	6

Table 2-4. Capital Improvement Plan and Projected Funding	. 7
Table 2-5. Existing and Projected Senior (Revenue Bond) Debt Service Fiscal Years 2024 through 2034	. 7
Table 2-6. Projected Other System Obligations Fiscal Years 2024 through 2034	. 8
Note: Entries are rounded, and totals and subtotals use formulas that may yield insignificant difference 8	s.
Table 2-7. Summary Pro Forma	11

1 Introduction and Purpose

1.1 Background and Purpose

Arcadis U.S., Inc. (Arcadis) was retained by DeKalb County (County) Department of Watershed Management (DWM) to conduct a Water and Sewer Revenue Sufficiency Study (Study). This Water and Sewer Revenue Sufficiency Study report (Report) details the results of the Study for the eleven-year period Fiscal Year (FY) 2024 through FY2034.

The Study integrates several key assumptions, provided by the County and DWM, which serve as the foundation for the Study results. These key assumptions include:

- 1. Operating expense assumptions:
 - a. FY2024 operating expenses are based on FY2023 preliminary actuals (with additional adjustments incorporated via discussion and input with Budget Staff) and forecasted using a 4.0% inflation adjustment factor for FY2024, and an annual 4.0% inflation adjustment factor each year thereafter.
 - b. Operations and Maintenance (O&M) execution at 100% of the forecasted amount throughout the forecast period.
- 2. Revenue assumptions including:
 - a. Revenue projections are based on preliminary actual FY2023 levels (with additional adjustments incorporated via discussion and input with Budget Staff), adjusted for future revenue increases.
 - b. Rate revenue collections rate of 93% collections throughout the forecast period.
 - c. No growth in the customer base (applied to rate revenues) during the forecast period.
- 3. Capital Improvement Plan (CIP) assumptions:
 - a. Amount of CIP executed in FY2024 is assumed to be \$164M.
 - b. Amount of CIP executed in FY2025 is planned to be \$268M
 - c. The annual CIP from FY2026 through FY2029 is planned to be \$375M.
 - d. The annual CIP from FY2030 through FY2034 is planned to be \$500M.
- 4. Debt assumptions:
 - a. No new GEFA Water loans through forecast period.
 - b. New GEFA Sewer loans of \$10,000,000 each in FY2026, FY2028, FY2030 and annually thereafter for remainder of forecast period (FY2031-2034).
 - c. New revenue bond issuances interest rate: 4.50%.
 - d. All tapping fee revenues applied towards debt service coverage calculation.
 - e. Reported WIFIA 1 reimbursements totaling \$168,072,965.
 - f. Reported WIFIA 2 reimbursements totaling \$281,877,594.
 - g. Planned WIFIA 3 loan with reimbursements totaling \$219,173,078 through FY2034: \$250,000,000 for the total WIFIA3 loan amount.

The results presented herein include a financial plan designed to provide revenues sufficient to fund the ongoing operating and capital costs necessary to operate the Water and Sewer Utility, while meeting the financial requirements and goals set forth by the DWM for the Water and Sewer Utility. The purpose of this report is to provide a financial plan for funding DWM's CIP.

1.2 Organization of the Report

This Report presents an overview of the concepts employed in the development of the analysis contained herein, followed by a discussion of the data, assumptions and results associated with the analysis. The Report is organized as follows:

Section 1 - Introduction and Purpose

Section 2 - Revenue Sufficiency Analysis

Section 3 - Principal Assumptions and Considerations Applied in the Development of the Financial Projections

2 Revenue Sufficency Analysis

2.1 Overview

As part of this Report, Arcadis prepared a Revenue Sufficiency Analysis and forecast for the DWM for the period FY2024 through FY2034. The DWM fiscal year runs from January 1st to December 31st. The purpose of this section is to present the Revenue Sufficiency Analysis and forecast, including the projection of revenues, expenses, and resulting debt service coverage ratios. DWM provided Arcadis with its projected CIP project needs for FY2024 through FY2034. The County is exploring a mix of future borrowing sources, including loans from Georgia Environmental Finance Authority (GEFA), Water Infrastructure Finance and Innovation Act (WIFIA), and traditional Revenue Bonds. Relevant assumptions related to the development of the Revenue Sufficiency Analysis and associated forecast are also included throughout this section.

The financial forecast represents an estimate of the probable results of operations and reflects DWM's judgment as to the most likely set of conditions and course of action based upon present circumstances. Arcadis worked closely with the County and DWM to obtain the various financial and system information necessary to prepare the Revenue Sufficiency Analysis.

2.2 General Methodology

The Revenue Sufficiency Analysis is a determination of the annual revenue from rates which, combined with other sources of funds, will provide sufficient funds to meet the fiscal requirements of the system. The Revenue Sufficiency Analysis does not include a determination of the actual rates and charges of the system but provides a forecast of the total system rate revenue needs as well as increases in rate revenue, if any, that are projected for each year of the forecast.

The process employed in the Revenue Sufficiency Analysis results in the identification of revenue requirements of the system, such as operating expenses, capital expenses (minor and major), debt service expenses (including a provision for debt service coverage), transfers out and the maintenance of both restricted and unrestricted reserves at appropriate levels. These revenue requirements are then compared to the total sources of funds during each year of the forecast period to determine the adequacy of projected revenues to meet requirements. To the extent that the existing revenue stream is not forecasted to be sufficient to meet the annual revenue requirements of the system, a series of rate revenue increases are calculated to provide revenue sufficient to meet those needs. The overall goal of the Revenue Sufficiency Analysis is to determine the revenue necessary over the forecast period to:

- 1. Meet the operating and capital revenue requirements of the water and sewer systems, including funding of the CIP.
- 2. Target debt service coverage of 1.40x, as provided by the County.
- 3. Target All-In debt service coverage of 1.20x, as provided by the County (includes WIFIA and GEFA).
- 4. Establish and maintain targeted working capital reserve levels of 6-months of operating expenses.
- 5. Meet Master Bond Resolution Parity Test requirements as presented in Section 2.4.1
- 6. Meet Master Bond Resolution Rate Covenant requirements as presented in Section 2.4.1

The CIP, including the timing of projects and estimated costs, was provided by DWM. In consultation with DWM and the County, adjustments to the CIP are made in order to align spending levels to the rate revenue plan.

2.3 Data Used in the Analysis

This section of the report provides a summary of data used in the analysis as well as general assumptions made as part of the forecast. Where available, the analysis uses data sources from County planning documents such as the Annual Comprehensive Fiscal Report (Annual Report), DWM preliminary actual operating results for FY2023, and the CIP.

2.3.1 Data Items

Key data items reviewed, discussed with the County, and incorporated into the Revenue Sufficiency Analysis include the following:

- Financial management goals of the Water and Sewer Utility
- Ending balances from the preliminary FY2023 Trial Balance have been used as the balances available at the beginning of FY2024.
- Sources of Funds from FY2023 actual operating results
- Uses of Funds from FY2023 actual operating results
- CIP
- General assumptions related to:
 - Customer growth
 - Cost escalation factors
 - New debt terms (provided by the County)

A discussion of the use of each of the above data items is presented below.

2.3.2 Working Capital Reserves and Balances

To better understand the funds the water and sewer utility had on hand at the start of the review period, a detailed review of the Department's reserves and other cash balances associated with the Fiscal Year 2023 Trial Balances of the Annual Audited Comprehensive Financial Report was conducted and reviewed with the Department. These data sources represent funds available at the end of Fiscal Year 2023, and therefore at the beginning of Fiscal Year 2024. A summary of the balances associated with the water and sewer utility for Fiscal Year 2023, as adjusted for use in this analysis, is presented in Table 2-1.

Table 2-1. Beginning Balances by Source 2024

Line No:	Funding Source	Current Assets	Current Liabilities	Adjustments	Net Cash Available
1	Operating / R&E Fund (working capital)	\$315,319,817	\$ (204,919,627)	\$ 27,289,255	\$137,689,445
2	Existing Bond Funds - Series 2022	3,151,986	-	-	3,151,986

Source: FY 2023 Annual Comprehensive Financial Report

Adjustments: \$27,289,255 of Adjustments represent Inventories and current portion of bonds payable.

2.3.3 Sources of Funds

The County provided the Fiscal Year 2023 Trial Balance of the Annual Audited Comprehensive Financial Report and summary of line-item revenues for FY2023. From these documents, line-item revenue detail was obtained and served as the basis for projecting financial performance in Fiscal Year 2024. In addition, line-item projected revenues for Fiscal Years 2025 through 2034 were developed using the Fiscal Year 2023 revenues, provided by the County, as the basis.

Water and Sewer Rate Revenue

The County has experienced minimal annual growth in new water and sewer customers over the past 5-years. Based on this trend and discussions with the County, the projection includes no annual growth in the water and sewer customer base. Sewer system operating revenue from retail customers is tied to metered water use. Therefore, retail customer sewer usage revenues closely track retail customer usage-based water revenue.

Based on information provided by and discussions with the County, the Department's collections rate in Fiscal Year 2024 was approximately 93 percent. The County assumes a collection rate of 93 percent will continue through the review period.

Water and Sewer Tap-On Fees

The Department maintains water and sewer Tap On-Fees, which are charges for new connections to the system for recovering the new connections' portion of existing infrastructure used to provide the service. The Tap On-Fees are also commonly referred to as impact fees or buy-in fees. The Department sets aside these restricted funds to help fund capacity-related projects of the CIP. The Department's current annual water and sewer Tap On-Fee revenues are \$2,090,146 and \$3,658,121, respectively.

Rate Increases

Water and sewer rate revenue increases are forecasted to be necessary to meet the Department's revenue requirements. Included are 10% annual rate revenue increases projected to be implemented during FY2025 through FY2034. The FY2025 rate revenue adjustment is forecasted effective May 1, 2025. Other annual adjustments effective January 1 each year.

A summary of projected Sources of Funds, including the rate revenue increases, for the review period, is presented in Table 2-2.

Table 2-2. Source of Funds

Line No:		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	Operating / R&E Fund											
	Projected Water and Sewer Rate Revenue Increases	0.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
	% of Year Rate Increase Effective	100%	67%	100%	100%	100%	100%	100%	100%	100%	100%	100%
1	Retail Water Rate Revenue	\$ 87,261,701	\$ 87,261,701	\$ 87,261,701	\$ 87,261,701	\$ 87,261,701	\$ 87,261,701	\$ 87,261,701	\$ 87,261,701	\$ 87,261,701	\$ 87,261,701	\$ 87,261,701
2	Retail Sewer Rate Revenue	206,464,518	206,464,518		206,464,518	206,464,518	206,464,518	206,464,518	206,464,518	206,464,518	206,464,518	206,464,518
3	Revenue from Rate Increases	0	19,581,748	61,682,506	97,223,379	136,318,338	179,322,794	226,627,695	278,663,087	335,902,018	398,864,842	468,123,948
4	Other Operating Revenue	15,047,333	15,047,333	15,047,333	15,047,333	15,047,333	15,047,333	15,047,333	15,047,333	15,047,333	15,047,333	15,047,333
5	Interest Income - Operating Fund	1,606,818	164,810	164,810	164,810	164,810	164,810	164,810	164,810	164,810	164,810	164,810
6	Total Operating Revenue - Operating Fund - Water and Sewer	\$ 310,380,370	\$ 328,520,109	\$ 370,620,867	\$ 406,161,740	\$ 445,256,699	\$ 488,261,155	\$ 535,566,056	\$ 587,601,448	\$ 644,840,379	\$ 707,803,203	\$ 777,062,309
	Water Tap-on Fee Fund - Capacity Portion											
7	Sources of Funds	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146
8	Total Restricted Reserves	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146
	Sewer Tap-on Fee Fund - Capacity Portion											
9	Sources of Funds	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121
10	Total Restricted Reserves	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121
11	Total Projected Sources of Funds - Water and Sewer	\$ 316,128,637	\$ 334,268,376	\$ 376,369,134	\$ 411,910,007	\$ 451,004,966	\$ 494,009,422	\$ 541,314,323	\$ 593,349,715	\$ 650,588,646	\$ 713,551,470	\$ 782,810,576

^{1 -} Projected Water and Sewer Rate Revenue Increases have not yet been adopted.

2.3.4 Use of Funds

The County provided the Fiscal Year 2023 actual expenses and Fiscal Year 2024 budget expenses, and associated line-item expense detail, as the basis for the projection of financial performance for Fiscal Year 2024. In addition, line-item projected expenses for Fiscal Years 2025 through 2034 were developed using cost escalation factors for each line-item expense (determined to be 4.0 percent annually). Cost escalation factors were reviewed by staff and are used to project line-item costs beyond 2024.

In addition, expansion of the Snapfinger Wastewater Treatment Plant is anticipated to be completed in FY2025. Additionally, operating costs resulting from this plant expansion are planned to be \$2,000,000 per year in FY20205, adjusted for inflation thereafter.

Uses of funds also include projected Major Capital Funded with Existing Reserves and Current Cash as well as existing and projected debt service. Existing debt service includes principal and interest payments from the Series 2006, Series 2010, Series 2015, Series 2022, and Series 2023 bonds as well as WIFIA and GEFA loans. The debt service amortization schedules were provided by the County. The Series 2025 Bonds debt service amortization is provided by the County's Financial Advisor as preliminary values. Per the Financial Advisor, these values are subject to change. Anticipated future debt service associated with senior debt and Other System Obligations (WIFIA and GEFA) is calculated based on future interest rate projections provided by the County's Financial Advisor and assumes level annual payments. Further details associated with the assumed terms of the calculated future debt obligations are provided in Sections 2.3.6 and 2.3.7.

A summary of the Fiscal Year 2024 results, and subsequent projected budgetary expenses, is presented in Table 2-3.

Table 2-3. Use of Funds

Line No:		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	Operating / R&E Fund		LULJ		2027	2020	LULJ	2000	2002		2033	2031
1	Operating Expenses	\$ 198,084,859	\$ 208,008,253	\$ 216,328,582	\$ 224,981,725	\$ 233,980,995	\$ 243,340,235	\$ 253,073,846	\$ 263,196,800	\$ 273,724,673	\$ 284,673,660	\$ 296,060,608
2	Minor Capital Outlay	-	-	-	-	-	-	-	-	-	-	-
3	Major Capital Funded with Existing Reserves/Current Cash	75,020,520	4,748,808	27,560,035	41,828,994	37,055,301	35,727,185	71,553,649	66,313,125	110,508,974	124,165,856	179,437,183
4	Existing Debt Service - Bonds	78,981,907	78,838,804	76,421,356	76,419,831	76,419,519	68,835,019	68,831,056	68,830,519	68,832,726	68,832,213	68,840,213
5	Transfers Out	5,748,267	5,748,267	5,748,267	5,748,267	5,748,267	5,748,267	5,748,267	5,748,267	5,748,267	5,748,267	5,748,267
6	New Debt Service - Bonds ¹	-	-	28,494,647	28,494,647	62,002,832	103,604,997	103,604,997	148,598,177	148,598,177	184,578,731	184,578,731
7	Existing GEFA Water Loans	195,673	195,673	195,673	195,673	195,673	195,673	195,673	195,673	195,673	195,673	195,673
8	New GEFA Water Loans	-	-	-	-	-	-	-	-	-	-	-
9	Existing GEFA Sewer Loans	229,759	229,759	229,759	229,759	229,759	229,759	229,759	229,759	229,759	229,759	229,759
10	New GEFA Sewer Loans	-	-	508,656	508,656	1,017,312	1,017,312	1,525,968	2,034,624	2,543,280	3,051,936	3,560,592
11	WIFIA Loan 1	2,620,670	3,397,093	3,815,998	10,145,466	10,146,127	10,146,797	10,147,478	10,148,168	10,148,868	10,149,578	10,150,299
12	WIFIA Loan 2	4,467,099	6,070,388	7,157,730	13,282,152	13,282,152	13,282,152	13,282,152	13,282,152	13,282,152	13,282,152	13,282,152
13	WIFIA Loan 3 (New)	-	-	-	-	679,129	1,454,140	2,506,407	3,962,708	5,763,895	7,420,885	9,285,359
14	Total Uses of Funds - Operating / R&E Fund - Water and Sewer	\$ 365,348,753	\$ 307,237,045	\$ 366,460,703	\$ 401,835,169	\$ 440,757,064	\$ 483,581,535	\$ 530,699,251	\$ 582,539,971	\$ 639,576,443	\$ 702,328,710	\$ 771,368,835
	Existing and Series 2025 Bond Funds											
15	Uses of Funds other Than Major Capital	-	-	-	-	-	-	-	-	-		
16	Major Capital Funded with Existing Bond Funds	3,151,986	-	-	-	-	-	-	-	-	-	-
17	Total Uses of Funds - Existing Bond Funds	\$ 3,151,986	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Water Tap-on Fee Fund - Capacity Portion											
18	Uses of Funds other Than Major Capital	-	-	-	-	-	-	-	-	-	-	-
19	Major Capital Funded with Water Impact Fee Funds	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146
20	Total Uses of Funds - Water Impact Fee Fund	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146	\$ 2,090,146
	Sewer Tap-on Fee Fund - Capacity Portion											
21	Uses of Funds other Than Major Capital	-	-	-	-	-	-	-	-	-	-	-
22	Major Capital Funded with Sewer Impact Fee Funds	3,658,121	3,658,121	3,658,121	3,658,121	3,658,121	3,658,121	3,658,121	3,658,121	3,658,121	3,658,121	3,658,121
23	Total Uses of Funds - Sewer Impact Fee Fund	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121	\$ 3,658,121

^{1 -} New Bonds for 2025, 2026, and 2027 assume one year of capitalized interest

2.3.5 Capital Improvements Plan (CIP)

The Department provided a projection of annual funding (cash expenditure) requirements associated with the CIP for Fiscal Years 2025 through 2034. Annual funding and cash expenditure provided in the CIP differs from "appropriated expenditure" in that the financial projection considers the amount of actual costs projected to be expended in each year (whether paid for with cash or debt).

The CIP provided by the Department identifies funding eligibility, such as WIFIA and GEFA, for each project. The Consultant relied on this information to project funding of the CIP. In the event a portion of a project is projected to utilize WIFIA and/or GEFA funding, no bond funding is projected for that portion of the project.

The total CIP expenditures show on Line 1 are incorporated into the forecast in place of the provided CIP expenditures, in order to develop a CIP expenditure plan within the rate revenue requirements of the forecast. A summary of the planned CIP expenditures, and associated funding sources, from Fiscal Years 2024 through 2034 is presented in Table 2-4. The Fiscal Year 2024 CIP expenditure shown in Table 2-4 is an estimate based on information received from the County prior to the close of the fiscal year.

Table 2-4. Capital Improvement Plan and Projected Funding

Line No:		2024	2025	2026		2027	2028	2029	2030	2031	2032	2033	2034	Total
1	Total Capital Projects - Water and Sewer	\$ 164,000,000	\$ 268,449,447	\$ 375,000,000	\$	375,000,000	\$ 375,000,000	\$ 375,000,000	\$ 500,000,000	\$ 500,000,000	\$ 500,000,000	\$ 500,000,000	\$ 500,000,000	\$ 4,432,449,447
	Funding Source:													
2	WIFIA 1	\$ 52,465,399	\$ 54,263,611	\$ 35,596,887	\$	25,747,068	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 168,072,965
3	WIFIA 2	27,613,828	16,698,318	50,930,150)	45,584,052	42,411,716	34,062,957	6,180,379	17,561,106	10,621,092	10,833,514	19,380,480	\$ 281,877,594
4	WIFIA 3	-	-	10,946,066	5	12,491,478	16,960,239	23,472,373	29,031,189	26,707,037	30,051,232	34,606,454	34,907,009	\$ 219,173,078
5	GEFA - Water Loans (New)	-	-			-	-	-	-	-	-	-	-	\$ -
8	GEFA - Sewer Loans (New)	-	-	10,000,000)	-	10,000,000	-	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	\$ 70,000,000
9	Sewer Tap-on Fee Fund - Capacity Portion	3,658,121	3,658,121	3,658,121		3,658,121	3,658,121	3,658,121	3,658,121	3,658,121	3,658,121	3,658,121	3,658,121	\$ 40,239,328
10	Water Tap-on Fee Fund - Capacity Portion	2,090,146	2,090,146	2,090,146	;	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146	\$ 22,991,607
11	Existing Bond Funds / 2022 New Money Proceeds	3,151,986	-		-	-	-	-	-	-	-	-	-	\$ 3,151,986
12	Operating / R&E Fund	75,020,520	4,748,808	27,560,035		41,828,994	37,055,301	35,727,185	71,553,649	66,313,125	110,508,974	124,165,856	179,437,183	\$ 773,919,630
13	New Bonds	-	186,990,443	234,218,596	5	243,600,141	262,824,477	275,989,217	377,486,515	373,670,465	333,070,435	314,645,908	250,527,060	\$ 2,853,023,259
14	Total Capital Projects Funded	\$ 164,000,000	\$ 268,449,447	\$ 375,000,000	\$	375,000,000	\$ 375,000,000	\$ 375,000,000	\$ 500,000,000	\$ 500,000,000	\$ 500,000,000	\$ 500,000,000	\$ 500,000,000	\$ 4,432,449,447
15	Variance	\$ -	\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Note: from discussions with DWM, a WIFIA 3 loan is anticipated in 2026

2.3.6 Senior Debt Service

The projection presented herein is based on the debt service figures shown in Table 2-5. The table shows the debt service schedule for the Department's outstanding bonds through Fiscal Year 2034, the estimated debt service for the Senior Series 2025 Bonds (preliminary), and the estimated debt service associated with any projected additional future senior debt issuances. The following new senior debt terms were provided by the County:

- · Revenue Bonds issued every two years
- Projected at a 4.50% interest rate with a 30-year term

Table 2-5. Existing and Projected Senior (Revenue Bond) Debt Service Fiscal Years 2024 through 2034

Line No:	Bonds	2024	2025		2026	2027	2028	2029	2030	2031	2032	2033	2034
	Existing Senior Debt Service ¹												
1	Series 2006	\$ 29,210,088	\$ 29,205,250	\$	29,212,650	\$ 29,208,875	\$ 29,206,563	\$ 14,752,563	\$ 14,757,350	\$ 14,748,263	\$ 14,749,513	\$ 14,754,000	\$ 14,756,750
2	Series 2010	2,481,432	2,419,848		-	-	-	-	-	-		-	-
3	Series 2015	5,584,206	5,586,456		5,585,456	5,580,956	5,582,706	5,579,956	5,582,456	5,585,756	5,583,713	5,580,963	5,581,713
4	Series 2022	38,832,000	38,830,750		38,826,750	38,833,500	38,833,750	38,831,000	38,828,500	38,834,250	38,835,750	38,831,000	38,833,000
5	Refunding Bonds Series 2023	2,874,181	2,796,500		2,796,500	2,796,500	2,796,500	9,671,500	9,662,750	9,662,250	9,663,750	9,666,250	9,668,750
6	Total Existing Senior Debt Service	\$ 78,981,907	\$ 78,838,804	\$	76,421,356	\$ 76,419,831	\$ 76,419,519	\$ 68,835,019	\$ 68,831,056	\$ 68,830,519	\$ 68,832,726	\$ 68,832,213	\$ 68,840,213
	Bonds Issue ²												
7	Series 2025 (New Money)	\$ -	\$ -	\$	28,494,647	\$ 28,494,647							
1 ×	Maximum Annual Debt Service for Existing and Series 2025 Bonds	\$ 78,981,907	\$ 78,838,804	\$	104,916,003	\$ 104,914,478	\$ 104,914,166	\$ 97,334,860	\$ 97,334,860	\$ 97,334,860	\$ 97,334,860	\$ 97,334,860	\$ 97,334,860
	Bonds Issues ³												
9	2027 Bonds	\$ -	\$ -	\$	-	\$ -	\$ 33,508,185						
10	2029 Bonds	-	-		-	-	-	41,602,165	41,602,165	41,602,165	41,602,165	41,602,165	41,602,165
11	2031 Bonds	-	-		-	-	-	-	-	44,993,180	44,993,180	44,993,180	44,993,180
12	2033 Bonds	-	-		-	-	-	-	-	-	-	35,980,554	35,980,554
13	Total Senior Debt Service	\$ 78,981,907	\$ 78,838,804	\$:	104,916,003	\$ 104,914,478	\$ 138,422,351	\$ 172,440,016	\$ 172,436,053	\$ 217,428,696	\$ 217,430,903	\$ 253,410,944	\$ 253,418,944

¹ The debt service amounts for existing bond issues were provided by the County.

² The debt service on the Series 2025 New Money Bonds is based on preliminary estimates, recognizing that actual debt service will be determined through market pricing, principal and interest scheduling, and other factors. Preliminary estimates based on an anticipated par amount of \$448,587,626 at a True Interest Cost of 4.50%.

³ The financial model used in the analysis calculates a need for future senior debt issuances (aside from the 2025 Bonds) every two years. The new debt terms for the future bond issues use an interest rate of 4.50 percent with a 30-year term.

2.3.7 Other System Obligations

Table 2-6 provides the Department's existing and projected Other System Obligations, which includes WIFIA and GEFA loans. Based on discussions with the County, these loans are general obligations of the County and are classified as Other System Obligations. Future debt service associated with WIFIA and GEFA loans is calculated based on the following assumptions as reviewed with the County:

- WIFIA 1 Loans \$265,000,000; August 10, 2020, Loan Amortization Schedule provided by the County
- WIFIA 2 Loans \$284,000,000; Loan Amortization Schedule provided by the County
- WIFIA 3 Loans \$250,000,000; projected at 4.60 percent Interest Rate with 30-year term
- GEFA Water Loans; no new GEFA Water Lonas are projected during the forecast period.
- GEFA Sewer Loans; projected at 3.91 percent Interest Rate with 30-year term
 - Maximum annual GEFA Sewer Loans allowable is \$10,000,000 in Fiscal Years 2026, 2028, 2030, 2031, 2032, 2033, and 2034, for a total of \$70,000,000 during the forecast period.

Table 2-6. Projected Other System Obligations Fiscal Years 2024 through 2034

Line No:	Loans	2024	2025	25 2026		2028	2028 2029		2031	2032	2033	2034
	Projected Subordinate Debt Service											
1	WIFIA 1 Loans	\$ 2,620,670	\$ 3,397,093	\$ 3,815,998	\$ 10,145,466	\$ 10,146,127	\$ 10,146,797	\$ 10,147,478	\$ 10,148,168	\$ 10,148,868	\$ 10,149,578	\$ 10,150,299
2	WIFIA 2 Loans	4,467,099	6,070,388	7,157,730	13,282,152	13,282,152	13,282,152	13,282,152	13,282,152	13,282,152	13,282,152	13,282,152
3	WIFIA 3 Loans	-	-	-	-	679,129	1,454,140	2,506,407	3,962,708	5,763,895	7,420,885	9,285,359
4	GEFA Water Loans	195,673	195,673	195,673	195,673	195,673	195,673	195,673	195,673	195,673	195,673	195,673
5	GEFA Sewer Loans	229,759	229,759	738,415	738,415	1,247,071	1,247,071	1,755,727	2,264,383	2,773,039	3,281,695	3,790,351
6	Total Subordinate Debt Service	\$ 7,513,201	\$ 9,892,913	\$ 11,907,816	\$ 24,361,705	\$ 25,550,151	\$ 26,325,833	\$ 27,887,436	\$ 29,853,083	\$ 32,163,626	\$ 34,329,983	\$ 36,703,833

Note: Entries are rounded, and totals and subtotals use formulas that may yield insignificant differences.

2.3.8 General Assumptions

To develop the financial and rate projections, certain assumptions were made regarding elements of the Revenue Sufficiency Analysis. A summary of those assumptions is presented below.

Growth

- Based on discussion with DWM, it was determined that no annual growth in the utility customer base would be projected during the forecast period.
- Billed customer usage is anticipated to remain stable through the forecast period.

Cost Escalation Factors

- Based on discussion with DWM, it was determined to assume annual operating costs escalated at 4.0% for FY2024 and each year thereafter.
- As part of this analysis, DWM updated the CIP to include inflationary and other cost changes. As such, no escalation is applied to planned CIP spending over the forecast period.

2.4 Financial Management and Goals of the Water and Sewer Utility

2.4.1 Debt Service Coverage

The County provided a copy of the Official Statement related to the "Series 2011A Bonds" which includes a summary of the County's Rate Covenant. The Rate Covenant contains specific debt service coverage requirements that must be met by DWM. Specifically, the Rate Covenant requires a minimum level of coverage equal to or greater than 120 percent of the Debt Service Requirement on all Prior Lien Bonds and Senior Bonds.

The specific provisions associated with the debt service requirements under the Rate Covenant included in the Indenture include the following:

Rate Covenant:

The County has covenanted in the Master Resolution that it will continuously own, control, operate, and maintain the System in an efficient and economical manner and on a revenue producing basis and will prescribe, fix, maintain, and collect rates, fees, and other charges for the services, facilities, and commodities furnished by the System fully sufficient to:

- (a) provide for 100% of the Expenses of Operation and Maintenance and for the accumulation in the Revenue Fund of a reasonable reserve therefore; and
- (b) produce Net Operating Revenues in each Fiscal Year that (together with Investment Earnings, other than Investment Earnings on the Project Fund):
 - (i) will equal at least 120% of the Debt Service Requirement on all Prior Lien Bonds and Senior Bonds then Outstanding for the year of computation and 100% of the Debt Service Requirement on all Subordinate Bonds then Outstanding for the year of computation;
 - (ii) will enable the County to make all required payments, if any, into each Debt Service Reserve Account and the Rebate Fund and to any Financial Facility Issuer, any Reserve Account Credit Facility Provider, and any Qualified Hedge Provider;
 - (iii) will enable the County to accumulate an amount to be held in the Renewal and Extension Fund, which in the judgment of the County is adequate to meet the costs of major renewals, replacements, repairs, additions, betterments, and improvements to the System, necessary to keep the same in good operating condition or as is required by any governmental agency having jurisdiction over the System; and
 - (iv) will remedy all deficiencies in required payments into any of the funds and accounts established in the Bond Resolution from prior Fiscal Years.

Beyond the minimum level of coverage required by the Rate Convenient, the County had established a target for the senior debt service coverage ratio of 1.75. In FY2024, the County decreased the coverage ratio target to 1.40 to mitigate inflationary pressures and limit the required rate increases. The senior debt service coverage ratio target of 1.40 is reflected in the financial projections and revenue sufficiency analysis.

2.4.2 WIFIA Loan Term Sheet for the Sewer Assessment and Rehabilitation

Based on the October 13, 2020, WIFIA Loan Term Sheet for the Sewer Assessment provided by the County, the current and planned WIFIA loans are to be secured by a pledge of the County's full faith and credit and revenue-raising power (including its taxing power). Security and Lien Priority; General Obligation Covenants from the Loan Term Sheet include the following:

"Payment and performance obligations of the Borrower with respect to the WIFIA Loan shall be secured by a pledge of the Borrower's full faith and credit and revenue-raising power (including its taxing power). The obligation of the Borrower to make any payments required under the WIFIA Loan Agreement shall constitute a general obligation of the Borrower and a pledge of the full faith and credit of the Borrower to provide the funds required to fulfill any such obligation."

2.4.3 Minimum Working Capital Reserves in the Operating / Renewal & Extension Fund

In order to maintain a certain level of liquidity, utilities typically establish some form of working capital target. This target typically ranges from an amount equal to 3 to 12 months of operating expenses, depending on the unique operating/financial characteristics of the utility.

While maintaining sufficient levels of unrestricted reserves, or working capital, is critical to maintaining financial flexibility, it is also an important factor used by rating agencies to determine creditworthiness of utilities. While no singular criterion determines a utility's credit rating, liquidity is one of several important factors.

Utilities which keep too much cash on hand, while borrowing at the same time, can be viewed as building excessive cash reserves and paying interest expense in lieu of spending existing cash. However, the buildup of cash reserves beyond the 3 to 12-month level does not necessarily indicate excessive reserves so long as there is a plan to spend those funds in the near future on capital projects in lieu of additional borrowing.

The beginning of the forecast presented herein, FY2024, targets a working capital reserve of 5-months of operating expenses with years beyond FY2024 targeting a working capital reserve of 6-months of operating expenses.

2.5 Results of the Water and Sewer Revenue Sufficiency Analysis

After a thorough review of the above-mentioned data elements, Arcadis worked with DWM in the development of a plan which provides for the continued financial strength of DWM's water and sewer utilities, while minimizing significant revenue/rate increases on DWM's customers. The resulting financial plan is presented and described in the following sections, and reflects the analysis and assumptions noted above.

2.5.1 Summary Pro Forma and Revenue Increases Required

The revenue requirements and financial goals of DWM during the forecast period necessitate the need for additional revenue. The financial plan includes 10% annual rate revenue increases projected to be implemented

during FY2025 through FY2034. The FY2025 rate revenue adjustment is forecasted effective May 1, 2025. Other annual adjustments effective January 1 each year.

Table 2-7 below presents a summary water and sewer pro forma financial forecast, including necessary revenue increases to 1) meet water and sewer revenue requirements (including funding of the CIP); 2) provide sufficient debt service coverage according to the Rate Covenant and established targets; and 3) establish unrestricted cash reserves at targeted levels.

Table 2-7. Summary Pro Forma

Line No:		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	Operating / R&E Fund											
	Beginning Working Capital Balance	\$ 137,689,445	\$ 82,721,062	\$ 104,004,127	\$ 108,164,291	\$ 112,490,863	\$ 116,990,498	\$ 121,670,118	\$ 126,536,923	\$ 131,598,400	\$ 136,862,337	\$ 142,336,830
	Water and Sewer Rate Revenue Increases	0.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
	% of Year Rate Increase Effective	100%	67%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2	Total Rate Revenue	\$ 293,726,219	\$ 313,307,967	\$ 355,408,725	\$ 390,949,598	\$ 430,044,557	\$ 473,049,013	\$ 520,353,914	\$ 572,389,306	\$ 629,628,237	\$ 692,591,061	\$ 761,850,167
3	Other Operating Revenue	15,047,333	15,047,333	15,047,333	15,047,333	15,047,333	15,047,333	15,047,333	15,047,333	15,047,333	15,047,333	15,047,333
4	Interest Income - Operating Fund	1,606,818	164,810	164,810	164,810	164,810	164,810	164,810	164,810	164,810	164,810	164,810
5	Total Revenue	\$ 310,380,370	\$ 328,520,109	\$ 370,620,867	\$ 406,161,740	\$ 445,256,699	\$ 488,261,155	\$ 535,566,056	\$ 587,601,448	\$ 644,840,379	\$ 707,803,203	\$ 777,062,309
6	Operating Expense	\$ 198,084,859	\$ 208,008,253	\$ 216,328,582	\$ 224,981,725	\$ 233,980,995	\$ 243,340,235	\$ 253,073,846	\$ 263,196,800	\$ 273,724,673	\$ 284,673,660	\$ 296,060,608
7	Minor Capital Major Capital Funded with Existing	-	-	-	-	-	-	-	-	-	-	
8	Reserves/Current Cash	75,020,520	4,748,808	27,560,035	41,828,994	37,055,301	35,727,185	71,553,649	66,313,125	110,508,974	124,165,856	179,437,183
9	Transfers Out	5,748,267	5,748,267	5,748,267	5,748,267	5,748,267	5,748,267	5,748,267	5,748,267	5,748,267	5,748,267	5,748,267
	Senior Debt Service											
10	Existing Debt Service - Bonds	78,981,907	78,838,804	76,421,356	76,419,831	76,419,519	68,835,019	68,831,056	68,830,519	68,832,726	68,832,213	68,840,213
11	New Debt Service			20 404 547	20 404 547	52,002,022	402 504 007	402 504 007	440 500 477	440 500 477	404 570 704	404 570 774
- 11	New Debt Service - Bonds	-	-	28,494,647	28,494,647	62,002,832	103,604,997	103,604,997	148,598,177	148,598,177	184,578,731	184,578,731
12	Other System Obligations Existing GEFA Water Loans	195,673	195,673	195,673	195,673	195,673	195,673	195,673	195,673	195,673	195,673	195,673
13	New GEFA Water Loans New GEFA Water Loans	193,0/3	193,0/3	193,0/3	193,073	193,0/3	193,073	193,073	190,0/3	193,0/3	193,0/3	193,0/3
14	Existing GEFA Sewer Loans	229,759	229,759	229,759	229,759	229,759	229,759	229,759	229,759	229,759	229,759	229,759
15	New GEFA Sewer Loans			508,656	508,656	1,017,312	1,017,312	1,525,968	2,034,624	2,543,280	3,051,936	3,560,592
16	WIFIA Loan 1	2,620,670	3,397,093	3,815,998	10,145,466	10,146,127	10,146,797	10,147,478	10,148,168	10,148,868	10,149,578	10,150,299
17	WIFIA Loan 2	4,467,099	6,070,388	7,157,730	13,282,152		13,282,152	13,282,152	13,282,152	13,282,152	13,282,152	13,282,152
	WIFIA Loan 3 (New)	_	-	-		679,129	1,454,140	2,506,407	3,962,708	5,763,895	7,420,885	9,285,359
19	Use of Funds	\$ 365,348,753	\$ 307,237,045	\$ 366,460,703	\$ 401,835,169	\$ 440,757,064	\$ 483,581,535	\$ 530,699,251	\$ 582,539,971	\$ 639,576,443	\$ 702,328,710	\$ 771,368,835
20	Ending Unrestricted Fund Balance - Operating / R&E Fund	\$ 82,721,062	\$ 104,004,127	\$ 108,164,291	\$ 112,490,863	\$ 116,990,498	\$ 121,670,118	\$ 126,536,923	\$ 131,598,400	\$ 136,862,337	\$ 142,336,830	\$ 148,030,304
	Existing Bond Funds											
21	Beginning Balance	\$ 3,151,986	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
22	Sources of Funds Uses of Funds	3.151.986	-	-	-	-	-	-	-	-	-	-
_	Ending Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Water Tap-on Fee Fund - Capacity Portion											
25	Beginning Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
26	Sources of Funds	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146
27	Uses of Funds	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146	2,090,146
28	Ending Balance]\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-	\$ -	-	\$ -
29	Sewer Tap-on Fee Fund - Capacity Portion	La		^	^		^	^		^	^	^
30	Beginning Balance Sources of Funds	3,658,121	3,658,121	3,658,121	3,658,121	3,658,121	3,658,121	3,658,121	3,658,121	3,658,121	3,658,121	3,658,121
31	Uses of Funds	3,658,121	3,658,121	3,658,121	3,658,121		3,658,121	3,658,121	3,658,121	3,658,121	3,658,121	3,658,121
32	Ending Balance	\$ -	\$ -	\$ -	\$ -			\$ -	\$ -	\$ -	\$ -	\$ -
	Summary of Key Metrics: Target											
	Working Capital Reserve: 6	months of O&M	(minimum)									
==	1			A 400 :-:-	A 440		A 424 :	A 425		4 425		A 440
33 34	Ending Unrestricted Fund Balance - Operating / R&E Fund Operating Expense	\$ 82,721,062 198,084,859	\$ 104,004,127 208,008,253	\$ 108,164,291	\$ 112,490,863 224,981,725	\$ 116,990,498	\$ 121,670,118 243,340,235	\$ 126,536,923 253,073,846	\$ 131,598,400 263,196,800	\$ 136,862,337 273,724,673	\$ 142,336,830 284,673,660	\$ 148,030,304 296,060,608
35	Unrestricted Operating Funds (Months)	5.0	6.0	6.0	6.0		6.0	253,073,846	6.0	6.0	6.0	6.0
	Rate Covenant Test (Section 6.1):	•				•			•			
36		\$ 310.380.370	¢ 230 F30 400	¢ 270 C20 0C7	¢ 406 464 740	¢ 445.350.000	¢ 400 304 455	¢ =2= =00 0=0	¢ 507 C01 440	¢ 644 040 370	¢ 707 002 202	\$ 777.062.309
36	Operating Revenues Expenses of Operation and Maintenance	(198,084,859)	\$ 328,520,109 (208,008,253)	(216,328,582)	\$ 406,161,740	\$ 445,256,699 (233,980,995)	\$ 488,261,155 (243,340,235)	\$ 535,566,056 (253,073,846)		\$ 644,840,379 (273,724,673)	\$ 707,803,203 (284,673,660)	(296,060,608)
38	Net Operating Revenues	\$ 112,295,511	\$ 120,511,856	\$ 154,292,285	\$ 181,180,015		\$ 244,920,920	\$ 282,492,210		\$ 371,115,706	\$ 423,129,543	\$ 481,001,701
39	Less: 100% Annual Subordinate Bond Debt Service	, ,	,	,	, ,			,	7 . 7	, ,,	,	,
40				-			-					-
40	Net Operating Revenue Available for Senior Debt Service Coverage Test	\$ 112,295,511	\$ 120,511,856	\$ 154,292,285	\$ 181,180,015	\$ 211,275,704	\$ 244,920,920	\$ 282,492,210	\$ 324,404,648	\$ 371,115,706	\$ 423,129,543	\$ 481,001,701
41	Annual Senior Bond Debt Service	78,981,907	78,838,804	104,916,003	104,914,478	138,422,351	172,440,016	172,436,053	217,428,696	217,430,903	253,410,944	253,418,944
42	Debt Service Coverage (1.20 required)	1.42	1.53	1.47	1.73	1.53	1.42	1.64	1.49	1.71	1.67	1.90
	ALL-IN Debt Service Coverage:											
43	Total Operating Revenue	\$ 310,380,370	\$ 328,520,109	\$ 370,620,867	\$ 406,161,740	\$ 445,256,699	\$ 488,261,155	\$ 535,566,056	\$ 587,601,448	\$ 644,840,379	\$ 707,803,203	\$ 777,062,309
44	Total Operating Expense	(198,084,859)	(208,008,253)	(216,328,582)	(224,981,725)	(233,980,995)	(243,340,235)	(253,073,846)	(263,196,800)	(273,724,673)	(284,673,660)	(296,060,608)
45	Net Operating Revenue	\$ 112,295,511	\$ 120,511,856	\$ 154,292,285	\$ 181,180,015		\$ 244,920,920	\$ 282,492,210	\$ 324,404,648	\$ 371,115,706	\$ 423,129,543	\$ 481,001,701
46	Annual Senior Bond Debt Service	78,981,907	78,838,804	104,916,003	104,914,478	138,422,351	172,440,016	172,436,053	217,428,696	217,430,903	253,410,944	253,418,944
47	Annual WIFIA + GEFA Sewer Loans Total All In Debt Service	7,513,201 \$ 86,495,108	9,892,913 \$ 88,731,717	11,907,816 \$ 116,823,819	24,361,705 \$ 129,276,183	25,550,151 \$ 163,972,502	26,325,833 \$ 198,765,849	27,887,436 \$ 200,323,489	29,853,083 \$ 247,281,779	32,163,626 \$ 249,594,529	34,329,983 \$ 287,740,927	36,703,833 \$ 290,122,777
49	Debt Service Coverage (not required)	3 80,493,108		1.32	3 125,270,183		1.23	3 200,323,463		3 245,354,325		3 250,122,777
	1	1 2150		1.01	21-10		1120	****		2170		2100

3 Principal Assumptions and Considerations Applied in the Development of the Financial Projections

3.1 Assumptions and Considerations

In conducting the analyses and in forming an opinion of the projection of future financial results summarized in this report, several important assumptions were made with respect to conditions, events, and circumstances that may occur in the future. The methodology utilized in performing the analysis follows generally accepted practices for such projections. While the assumptions are considered reasonable and appropriate, and the projection methodology valid, actual results may differ materially from those projected, as influenced by the conditions, events, and circumstances that actually occur that are unknown at this time.

The following are the principal assumptions and considerations applied in developing the projections of operating revenues and expenses, debt service, Net Operating Revenue Available for Debt Service Coverage, and debt service coverage:

- The County's cash basis operating revenues for FY2023 serve as an acceptable starting point for the revenue projections.
- Projected operating revenues after FY2024 include revenue increases needed to meet required operation and financial requirements. These revenue increases have not been adopted by the County.
- The WIFIA Loan Amortization Schedule dated August 10, 2020, and the WIFIA Loan Term Sheet dated October 13, 2020, serve as the basis for WIFIA loan projections. The documents indicate the WIFIA Loan shall be secured by a pledge of the County's full faith and credit and revenue-raising power (including its taxing power).
- Target debt service levels and the requirement to maintain a working capital reserve of six months of
 operating expenses served as the basis for calculating the additional revenues needed for DWM to meet its
 debt service coverage requirements.
- The projections of water and sewer customers and the associated water and sewer billed volumes are assumed to remain flat through FY2034, consistent with recent trends.
- Projected debt service is based on the debt service schedules for outstanding debt and the estimated debt service for future debt. The estimated debt service for the future debt was based on securing funding for capital projects as provided in DWM's CIP.
- Projected debt reimbursement for WIFIA and GEFA is based on the debt reimbursement schedules provided by DWM. It is important the County and DWM maintain and monitor these reimbursements.
- The projected debt service coverage ratios are based on the projected Net Operating Revenue values, including revenue increases required to generate the additional revenue needed to achieve the target debt service coverage ratios. The County should regularly review DWM Net Operating Revenues to monitor compliance with debt service coverage ratios and the Rate Covenant.
- Per the Master Ordinance, for the purpose of calculating the Parity Test required for the issuance of future bonds, the report by the Independent Consulting Engineer that is required by Section 5.3.1(b)(2) may not take into consideration any rate schedule to be imposed in the future, unless such rate schedule has been adopted by resolution of the Governing Body. Such rate schedule adopted by resolution may contain, however, future

effective dates. It is important to note that without adoption of the forecasted increases, which could consist of adoption of only part of the forecasted increases, the County is not forecasted to achieve Parity Test requirements for the issuance of future bonds.

 Rate revenue increases included in the forecast are necessary to meet the requirements of the County's Rate Covenant. The rate revenue increases included in the forecast have not been adopted by the County.

Arcadis is required to make disclosures stating the limitations of the work contained within the document and its use. In accordance with the Securities Exchange Act of 1934, the following disclosure statements are incorporated into this Report prepared by Arcadis:

In the performance of its services on behalf of the County, Arcadis is (a) not recommending any action on behalf of the County to municipal financial products or the issuance of municipal securities; (b) is not acting as a municipal advisor to the County, and does not owe a fiduciary duty to the County pursuant to Section 15B of the Securities Exchange Act of 1934, as amended by the Dodd-Frank Wall Street Reform and Consumer Protection Act, with respect to the information and material prepared in connection with this scope of work; and (c) acting for its own interests. The County shall engage a registered municipal advisor and shall discuss any information and material prepared in connection with this Report with any and all internal and external registered municipal advisors and other financial advisors and experts whom the County deems appropriate before acting on this information and material.

Arcadis' effort in the construction and preparation of this Report is consistent with (i) the degree of care and skill ordinarily exercised by members of the same profession currently practicing under same or similar circumstances and (ii) the time and budget available for its work in its endeavor to ensure that the data contained in the Report is accurate as of the date of its preparation. This analysis was based on estimates, assumptions and other information developed by Arcadis from its independent research effort, general knowledge of the industry, and information provided by, and consultations with, the County and its agents, representatives, and consultants. Arcadis assumes no responsibility or liability for inaccuracies in Reporting and data provided by the County and its agents, representatives and consultants, or in any third-party data source used in preparing or presenting this study.

Arcadis did not independently verify the accuracy of the information provided by the County and others in creating this Report; however, Arcadis' opinion is based upon the supposition that such sources are reliable and the information obtained therefrom is appropriate for the analysis undertaken and the conclusions reached. While we believe such sources are reliable, and the information obtained to be accurate and appropriate for the analysis undertaken and the conclusions reached herein, as is often the case, there may be differences between actual and projected results. Accordingly, some of the estimates used in this Report will not be realized, and unanticipated events and circumstances may occur. To the extent the information provided to Arcadis by the County and others is not accurate, or not inclusive of all details, the conclusions and recommendations contained in this Report may vary and are subject to change. Moreover, there are likely to be differences between the data and results projected in this Report and actual results achieved, and those differences may be material. Accordingly, Arcadis assumes no responsibility for inaccuracies in Reporting by the County or any third-party data source used in preparing such opinion.

Additionally, Arcadis relied on assumptions, forecasts, data and statistics provided by the County and others. Forward-looking statements included in this Report, which may be identified by the use of words like "anticipate", "believe", "estimate", "expect", "intend", "may", "plan", "project", "will", "should", "seek", and similar expressions,

refer to Arcadis' views and assumptions with respect to future events as of the date of this document, and are subject to future economic conditions, results, and other risks and uncertainties. Actual and future results and trends could differ materially from those set forth in such statements due to various factors, including, without limitation, those mentioned in this Report. These factors are beyond Arcadis' ability to control or predict. Accordingly, Arcadis makes no warranty or representation that any of the projected values or results contained in this Report will actually be achieved.

Arcadis' findings represent its professional judgment. Neither Arcadis, nor its parent corporation, or their respective subsidiaries and affiliates, makes any warranty, expressed or implied, with respect to any information or methods disclosed in this Report. No recipient of the Report shall have any claim against Arcadis, its parent corporation, and/or its and their subsidiaries and affiliates, for any liability for direct, indirect, consequential, or special loss or damage arising out of its receipt and use of this document whether arising in contract, warranty (express or implied), tort or otherwise, and irrespective of fault, negligence and strict liability.

Any distribution of this Report to third parties is only for informational purposes. Use of this document should not, and does not, absolve the third party from using due diligence in verifying the Report's contents. No recipient of this Report may abstract, excerpt, or summarize this document without the prior written consent of Arcadis. Any changes made to this Report, or any use of this document not specifically identified or otherwise expressly approved in writing by Arcadis, shall be at the sole risk of the party making such changes or adopting such use.

This Report is qualified in its entirety by, and should be considered in light of these limitations, conditions and considerations.



Arcadis U.S., Inc.
37 N Orange Avenue, Suite 900D
Orlando, FL 32801
United States

Phone: 407-927-3536

Fax: NA

www.arcadis.com

