

Great Lakes Water Authority (Water System), Michigan

The 'A+'/'A' bond ratings on the Great Lakes Water Authority's (GLWA, or the authority) senior and subordinate bonds, respectively, and the 'a' SCP consider the system's strong financial profile within the context of very strong revenue defensibility and operating risk profiles, both assessed at 'aa'. Leverage, measured by Fitch Ratings as net adjusted debt to adjusted funds available for debt service (FADS), was approximately 10.2x in fiscal 2022, a modest increase from 10.0x in fiscal 2021. Moving forward, projected increases in capital spending and associated debt issuances are anticipated to move leverage incrementally higher, but overall it should remain in line with the current rating.

The revenue defensibility assessment considers the authority's ability to reallocate any shortfalls from a non-performing customer to its performing customers via a rate increase and the overall strength of such customers. While the credit quality of city's water system is considered midrange by Fitch, other significant customers have stronger credit profiles, resulting in strong overall purchaser credit quality (PCQ). The operating risk profile considers the authority's very low operating cost burden, coupled with its low, but recently rising life cycle ratio.

The system's leverage is anticipated to rise through fiscal 2027 as it implements a robust capital improvement plan (CIP). Revenue requirements to fund the CIP are likely to be higher than historical but are expected to remain manageable overall. Leverage may reach 12.2x by fiscal 2027 but remains below 12.0x in most years of the five-year horizon ending fiscal 2027.

The notching distinction between the senior- and the second-lien bonds reflects the meaningful protection afforded to senior debt given the sizable balance of subordinated obligations, the latter of which include the second-lien bonds, state revolving fund loans, and the long-term leases payable under the lease agreement between the Detroit Water and Sewerage Department (DWSD) and the authority, as well as the absence of an automatic cross-default or acceleration between the liens. Senior-lien debt comprises just over 50% of GLWA's total obligations.

Security

Senior-lien bonds are secured by a first lien on net revenues of the system. Second-lien bonds are secured by net revenues after payment of the senior-lien bonds.

Assessment

Standalone Credit Profile (SCP) a

Outlook

Stable

New Issue

\$60,000,000 Water Supply System Revenue Refunding Senior Lien Bonds, Series 2023	A+
\$150,000,000 Water Supply System Revenue Senior Lien Bonds, Series 2023B	A+

Sale Date

The bonds are expected to sell via negotiation the week of November 13, 2023.

Outstanding Debt

Great Lakes Water Authority (MI) Water Supply System Revenue Senior Lien Bonds	A+
Great Lakes Water Authority (MI) Water Supply System Revenue 2nd Lien Bonds	A

Applicable Criteria

[Public Sector, Revenue-Supported Entities Rating Criteria \(April 2023\)](#)

[U.S. Water and Sewer Rating Criteria \(March 2023\)](#)

Related Research

[Fitch Rates Great Lakes Water Auth's Series 2023 Water System Rev Bonds 'A+'; Outlook Stable](#)

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Key Rating Drivers

Revenue Defensibility - 'aa'

Strong Purchaser Credit Quality, Very Strong Revenue Source Characteristics

The authority has contract provisions that allow for full cost recovery and the unlimited reallocation of costs across users. Under the water and sewer services agreements (WSSA) in place with the wholesale customers, the authority has the exclusive right to establish rates for the water service it provides. The authority has delegated to the city its right to establish rates with respect to services provided to city of Detroit customers.

Revenue defensibility is supported by purchasers that exhibit strong credit quality. The city of Detroit accounts for approximately 29% of projected fiscal 2023 operating revenues (inclusive of the city's water system operating revenues). Key wholesale customers include Southwest Oakland County Water Authority, Shelby Township, Livonia and Sterling Heights. Although the city's system exhibits midrange credit quality, the strong PCQ incorporates credit quality of suburban members.

Operating Risk - 'aa'

Very Low Operating Cost Burden, Moderate Investment Needs

In fiscal 2022, the system's operating cost burden was considered very low at \$2,341 per million gallons (mg), consistent with the operating risk assessment. The life cycle ratio was very low at 32% in fiscal 2022. Capex to depreciation has been weak, despite improving to a five-year average of 60% in fiscal 2022. Planned capital spending for the next five years should generally outpace historical depreciation, supporting a continued very low life cycle ratio.

GLWA's revenues fund the DWSD CIP through the lease payments and debt issued by GLWA for local DWSD projects. Estimated actual spending in fiscal 2023 and planned CIP spending for 2024-2027 for the consolidated GLWA and DWSD system approximate \$1.5 billion. Estimated 2023 spending for the system is in excess of \$195 million, continuing a trend of increasing capital investment. The CIP is anticipated to be primarily funded with debt, including state revolving fund proceeds.

Financial Profile - 'a'

Leverage to Increase Modestly; Neutral Liquidity

The system had moderate leverage of 10.2x as of fiscal 2022, which is in line with historical performance of between 9.7x and 10.5x since fiscal 2018. The liquidity profile is neutral to the overall assessment, with a liquidity cushion of 515 days and coverage of full obligations (COFO) of 1.8x. Fitch-calculated total debt service coverage was also 1.8x in fiscal 2022.

The Fitch Analytical Stress Test (FAST) considers the potential trend of key ratios in a base case and stress case over a five-year period. The stress case is designed to impose capital costs 10% above expected base case levels and evaluate potential variability in projected key ratios. The FAST reflects Fitch's view of a reasonable scenario, which is generally informed by publicly available and/or management provided information with respect to capital expenditures, user charges and rate of revenue and expenditure growth.

In the base case scenario, the leverage ratio is projected to increase to 11.7x in fiscal 2025 and then decrease to 11.6x through fiscal 2027. In the stress case, the leverage ratio is expected to increase to 12.2x over the next five years. Liquidity is expected to remain neutral to the assessment over the five-year horizon.

Sensitivities

Factors that Could, Individually or Collectively, Lead to Negative Rating Action/Downgrade

- Sustained leverage approaching 13.0x through the forward period, assuming stability in the revenue defensibility and operating risk assessments.
- Downward revisions to the system's overall PCQ.
- Material declines in liquidity that expose bondholders to the timing risk of the true-up.
- The senior-lien rating could converge at the SCP assessment if there is a significant erosion of the financial cushion afforded to senior bondholders that results in a lack of meaningful difference in the probability of payment default between the liens.

Factors that Could, Individually or Collectively, Lead to Positive Rating Action/Upgrade

- Sustained improvements in leverage to less than 11.0x, assuming stability in the current revenue defensibility and operating risk assessments.

Profile

GLWA provides wholesale water services to a population of approximately 3.8 million, or 38% of the state's population. In January 2016, the authority assumed operational control of Detroit's system assets (excluding its local distribution infrastructure) via a 40-year lease agreement and authorized GLWA the right to set and collect rates from the customers historically served by the city.

Separately, a security interest in the city's system-related revenues was granted under the Master Bond Ordinance (MBO), while the WSSA assigned the city the right to set and collect rates from its retail customers. The agreement required GLWA to assume all liabilities of the regional water and sewer systems, including outstanding indebtedness related to the respective systems.

System assets include five water treatment plants that collectively can treat around 1.7 billion gallons per day, an extensive conveyance system and many water-storage reservoirs. Water is supplied to the treatment plants via the Detroit River, Lake Huron and Lake St. Clair. Supply and capacity are robust and more than sufficient for the long-term anticipated needs of the service area.

Revenue Defensibility

Revenue Source Characteristics

Revenue source characteristics reflect the strength of legal agreements between the city and the authority's regional municipal customers and the ability to reallocate costs should the need arise. Any bad-debt expense from a wholesale customer may be charged to other customers via a true-up. Payments are an operating expense of each respective system, senior to any debt service. Most contracts last 30 years with an automatic 10-year renewal and a five-year notice requirement for termination. There is no meaningful, feasible alternate supply in the region to which the purchasers could look to replace the authority's supply.

Rate Flexibility

GLWA has very strong rate flexibility; no external approval is required to adjust rates. The wholesale agreements for the majority of the authority's regional water municipal customers are based on a 60% fixed-service charge component and a 40% commodity charge, which is reviewed and adjusted annually. Rates for customers within the city of Detroit are currently established by the city, and there is no external approval required to establish these rates. Further, should the city fail to perform its duties or meet its obligations under the WSSA, the authority may terminate the agency relationship.

Purchaser Credit Quality

Detroit is projected to comprise about 29% of operating revenues in fiscal 2023. Other large municipal customers include the Southeast Oakland County Water Authority (6%), North Oakland County Water Authority (5%), and Sterling Heights (4%).

The PCQ reflects a Purchaser Credit Index (PCI) score of 2.1, including a midrange assessment for the city of Detroit system. The PCI also includes the city of Livonia, Southeast Oakland County Water Authority, Sterling Heights and Shelby Township. Fitch made an additional assumption that 5% of revenues from other suburban wholesale customers are assessed as very strong.

Asymmetric Factor Considerations

No asymmetric factor considerations affected the revenue defensibility assessment.

Operating Risk

Operating Cost Burden

The system's operating cost burden is very low, approximating \$2,340 per mg in fiscal 2022, which is up just modestly from fiscal 2018 when it measured about \$2,080 per mg. System operating costs are anticipated to rise over time, reflecting in part recent inflationary pressures with respect to chemicals and power. However, given the economies of scale, Fitch expects the operating cost burden to remain very low over the near to intermediate term, supporting the overall operating risk assessment.

The system's pension obligations and associated expenses should continue to trend downward. Detroit's General Retirement System Plan was frozen in 2014. Under an agreement between GLWA and DWSD, payments to fund the pension liability were made over the nine years ended June 30, 2023. Remaining payments will reflect updated actuarial valuations, which will be made over a time frame as yet to be finalized.

Capital Planning and Management

The system's operating risk assessment is supported by a very low life cycle ratio. In fiscal 2022, the life cycle ratio was 32%, increasing from 14% in 2018. The current life cycle ratio, while still low, reflects capital investment that has lagged reported depreciation over the past several years. Capex-to-depreciation has averaged 62% over the past five fiscal years.

More recently, capital investment has increased, with fiscal 2022 capex of almost \$160 million, or 109% of depreciation; estimated fiscal 2023 capex was \$195 million. The system's capital plan for the near to intermediate term is robust and is anticipated to support a continued low life cycle ratio.

Asymmetric Factor Considerations

No asymmetric factor considerations affected the operating risk assessment.

Financial Profile and FAST Analysis

The system's overall financial profile is strong and is assessed at 'a'. The system's leverage ratio finished 2022 at about 10.2x, generally in line with results since 2018. Senior and all-in debt service coverage finished at 2.0x and 1.8x, respectively, in fiscal 2022. Liquidity has remained very robust, with a liquidity cushion averaging 737 days over the past five years. COFO has been above 1.5x since 2018.

FAST

The FAST base-case assumptions used by Fitch include the authority's latest forecasts and projected capex. Revenues and operating expenses are projected to average 4% to 5% annually through 2027, together leading to FADS improvement through the five-year horizon. However, the increasing capital plan and higher capital execution rate result in increasing leverage in the FAST, with the base case peaking in fiscal 2027 at 11.6x and the stress case peaking at 12.2x in the same year. This leverage remains consistent with the financial profile and current ratings. The liquidity profile is expected to remain neutral to the assessment with COFO of at least 1.2x and sound days cash annually.

Asymmetric Additive Risk Considerations

No asymmetric additive considerations affected this rating determination.

ESG Considerations

The highest level of ESG credit relevance is a score of '3', unless otherwise disclosed in this section. A score of '3' means ESG issues are credit-neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. Fitch's ESG Relevance Scores are not inputs in the rating process; they are an observation on the relevance and materiality of ESG factors in the rating decision. For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/topics/esg/products#esg-relevance-scores.

Financial Summary

(\$000, Audited Fiscal Years Ended June 30)	2018	2019	2020	2021	2022
Operating Risk					
Operating Cost Burden					
Operating Cost Burden (\$/mg)	2,077	2,207	2,371	2,327	2,341
Capital Planning and Management					
Life Cycle Ratio (%)	14	20	25	28	32
Annual CapEx/Depreciation (%)	24	40	51	88	109
5-Year Average Capex/Depreciation (%)	36	35	32	46	62
Financial Profile					
Current Unrestricted Cash/Investments	384,417	419,944	463,296	415,754	294,240
Current Restricted Cash/Invest (Available Liquidity)	15,652	16,474	17,264	6,612	7,187
Current Cash Available	400,069	436,418	480,560	422,366	301,426
Available Cash	400,069	436,418	480,560	422,366	301,426
Current Restricted Cash/Invest (Debt Service or Debt Service Reserve)	36,681	53,559	39,621	50,347	61,146
Noncurrent Restricted Cash/Invest (Debt Service or Debt Service Reserve)	26,067	16,898	11,100	11,171	5,094
Funds Restricted for Debt Service	62,747	70,457	50,721	61,518	66,240
Total Debt	3,115,909	3,038,250	3,026,901	2,965,961	2,917,015
Adjusted Net Pension Liability	81,597	67,090	64,601	63,388	26,501
Available Cash	400,069	436,418	480,560	422,366	301,426
Funds Restricted for Debt Service	62,747	70,457	50,721	61,518	66,240
Net Adjusted Debt	2,734,689	2,598,465	2,560,221	2,545,465	2,575,849
Total Operating Revs	453,332	433,125	449,087	456,421	462,181
Other Operating Expenses	199,004	185,003	206,337	213,307	213,715
EBITDA	254,328	248,122	242,750	243,114	248,466
Investment Income/(Loss)	6,130	14,754	10,485	4,215	-2,361
Other Cash Revenues/(Expenses)	-545	114	2,186	-177	389
Capital Contributions	—	—	—	—	—
Funds Available for Debt Service	259,913	262,991	255,422	247,152	246,493
Net Transfers In/(Out)	—	—	—	—	—
Pension Expense	—	6,014	7,221	8,075	4,988
Adjusted Funds Available for Debt Service	259,913	269,005	262,642	255,228	251,482
Net Adjusted Debt/Adjusted Funds Available for Debt Service (x)	10.5	9.7	9.8	10.0	10.2
Funds Available for Debt Service	259,913	262,991	255,422	247,152	246,493
Net Transfers In/(Out)	—	—	—	—	—
Adjusted FADS for Coverage of Full Obligations	259,913	262,991	255,422	247,152	246,493
Total Annual Debt Service	164,296	136,695	145,633	134,265	135,962
Adjusted Debt Service (Includes Fixed Services Expense)	164,296	136,695	145,633	134,265	135,962
Coverage of Full Obligations (x)	1.58	1.92	1.75	1.84	1.81
Coverage of Full Obligations Excluding Connection Fees (x)	1.58	1.92	1.75	1.84	1.81
Current Days Cash on Hand	734	861	850	723	515
Liquidity Cushion Ratio (Days)	734	861	850	723	515
All-In Debt Service Coverage (x)	1.58	1.92	1.75	1.84	1.81

Note: Fitch may have reclassified certain financial statement items for analytical purposes. N.A. – Not available.

Source: Fitch Ratings, Fitch Solutions, Great Lakes Water Authority (MI)

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