Fitch Ratings

Public Finance
Water & Sewer
United States

Great Lakes Water Authority Sewage Disposal System, Michigan

The upgrades to 'AA-' and 'A+' on the Great Lakes Water Authority's (GLWA, or the authority) senior and subordinate bond ratings, respectively, are based on sustained improvements in leverage, measured as net adjusted debt to adjusted funds available for debt service, over the past several years due to amortization of existing debt and savings from bond refinancings. The maintenance of the Positive Rating Outlook is based on the leverage trend, which Fitch Ratings expects will stabilize near current levels of about 8.5x to 9.5x. Yet, Fitch would like greater clarity on upcoming capital spending, as the system's capital improvement plan (CIP) has increased more than 20% yoy, due largely to inflation.

The 'a+' SCP considers the sewer system's financial profile assessment within the context of very strong revenue defensibility and operating risk profiles, both assessed at 'aa'. Leverage was approximately 8.3x at fiscal year-end 2022, down from 9.5x the prior year. 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 Detroit Water and Sewerage Department (DWSD) is considered midrange, the authority's other large wholesale customers have stronger credit profiles, resulting in a strong aggregate purchaser credit quality (PCQ). The operating risk profile considers the authority's very low operating cost burden, coupled with its very favorable life cycle ratio.

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, which include the second lien bonds, state revolving fund loans, and long-term leases payable under the lease agreement between GLWA and DWSD, as well as the absence of an automatic cross-default or acceleration between the liens. Senior lien debt comprises about 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.

Rating

Standalone Credit Profile (SCP)	a+

Outlook

Positive

New Issue

$90,000,000 Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2023A	AA–
$12,000,000 Sewage Disposal System Revenue Refunding Second Lien Bonds, Series 2023B	A+
$100,000,000 Sewage Disposal System Revenue Senior Lien Bonds, Series 2023C	AA–

Sale Date

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

Outstanding Debt

Sewage Disposal System Revenue Senior Lien Bonds	AA–
Sewage Disposal System Revenue Second 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 Ser. 2023 Sewage Revs 'AA-'/'A+'; Outlook Positive (October 2023)

Analysts

Major Parkhurst
+1 512 215-3724
major.parkhurst@fitchratings.com

Kristen Reifsnyder
+1 646 582-3448
kristen.reifsnyder@fitchratings.com

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 (WSSAs) in place with the wholesale customers, the authority has the exclusive right to establish rates for the water and sewer services it provides. The authority has delegated to the city of Detroit its right to establish rates with respect to services provided to city customers.

After the city of Detroit, which accounted for about 52% of the system's operating revenues (inclusive of the local system operating revenues) in fiscal 2022, the largest customers include the Oakland-Macomb Interceptor Drainage District (13%), Wayne County's Rouge Valley (10%) and Oakland County's George Kuhn Drainage District (8%). Although the city exhibits just midrange PCQ alone, the authority's large suburban members contribute to a strong overall PCQ.

Operating Risk - 'aa'

Very Low Operating Cost Burden, Moderate Investment Needs

In fiscal 2022, the system had a very low operating cost burden of $2,804 per million gallons (mg), consistent with the operating risk assessment. The life cycle ratio was also very low at 26% in fiscal 2022. Capital investment has lagged annual depreciation the past few years but is expected to increase, in accordance with the authority's latest CIP.

GLWA's revenues fund the DWSD's 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 systems total approximately $1.2 billion. The CIP focuses on implementation of the authority's sewer master plan; projects include those tied to general repair and maintenance, with a focus on resiliency.

Given inflationary pressure, expected spending has increased over prior years, but costs associated with the CIP appear manageable overall. Funding for the CIP is expected to be provided by approximately 70% new debt proceeds and 30% existing funds on hand.

Financial Profile - 'aa'

Leverage to Stabilize

The authority had very low leverage of 8.3x as of fiscal 2022; this measure has been on a generally downward trend since fiscal 2018, when it measured 10.3x. The liquidity profile is neutral to the overall assessment with a Fitch-calculated liquidity ratio of 282 days and coverage of full obligations (COFO) of 1.7x in fiscal 2022. Fitch-calculated total debt service coverage for fiscal 2022 was also about 1.7x.

The 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 expected to remain within a range of 8.5x and 9.4x over the five-year horizon. In the stress case, the leverage ratio is projected to range incrementally higher, or from 8.8x to 9.5x. These levels support the current ratings and, potentially, additional improvement, depending on the system's future operational performance and capex. 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

- Leverage exceeding 10.0x would likely stabilize the outlook.
- Sustained weakening in the leverage ratio such that it approaches 12.0x would pressure the ratings.
- Downward revisions to the system's overall PCQ and/or revenue defensibility assessment.
- Material declines in liquidity that expose bondholders to 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

- Greater certainty that upcoming planned capital spending has fully accounted for inflationary pressures and keeps leverage within current expectations.
- Sustained leverage below 10.0x, assuming stability in the current revenue defensibility and operating risk assessments.

Profile

GLWA provides wholesale sewer services to a population of approximately 2.8 million, or 28% of the state 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, 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 DWSD's regional water and sewer systems, including outstanding indebtedness related to the respective systems.

System assets include a wastewater treatment plant (the water resource recovery facility, or WRRF), which is one of the largest single-site facilities in the U.S., with capacity of 1,700 mg per day. The treatment plant can accommodate dry-weather flows without further mediation, but also operates eight combined sewer overflow retention treatment basins to accommodate wet-weather flows. Wholesale customers retain ownership in collection system infrastructure, which conveys flows and ultimately discharges such flows into GLWA's interceptors.

Revenue Defensibility

Revenue Source Characteristics

The revenue derived from GLWA's three largest wholesale customers, in addition to Detroit's sewer-system revenue, accounts for about 80% of total revenue. There is no meaningful alternate supply in the region to which the purchasers could look to replace the authority's services.

The wholesale agreements for the majority of the authority's regional sewer customers are based on a 100% fixed-service charge component, which is reviewed and adjusted annually. Any bad-debt expense from a wholesale customer is charged to other wholesale customers via a true-up. Payments from customers 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.

Rate Flexibility

Rates are set by the authority's board and are not subject to external approval. Customer rate increases have averaged below 1% over the past five years. A recent cost of service study completed in fiscal 2023 shows rate increases in the 3%-4% range over the next five years, all within the authority's targeted limit of 4%. Affordability metrics of the underlying customers generally vary based on local income statistics, resulting in some affordability pressure for Detroit, but the other wholesale customers exhibit more rate flexibility, given their much higher income levels.

Purchaser Credit Quality

The purchaser credit index (PCI) score is 2.3, and is based on the authority's largest four customers; it is heavily weighted to the city of Detroit. In the recent past, the city's population experienced annual declines for many years. However, recent estimates indicate that the population has stabilized. Income levels in the city are low (about 54% of the U.S. median), while poverty and unemployment rates are elevated, yet have recently improved. Economic measures for the other regional members are generally in line with or better than state and national levels.

Asymmetric Factor Considerations

No asymmetric risk considerations affected the revenue defensibility assessment.

Operating Risk

Operating Cost Burden

The operating cost burden was just $2,804 per mg in fiscal 2022, which Fitch considers to be very low. The cost burden has operated within a fairly stable range of $2,478 per mg and $3,636 per mg over the past five years, which comfortably supports the operating risk assessment.

Capital Planning and Management

Given the recent conveyance of the system assets from the city to GLWA, at which time the authority began depreciating infrastructure, the authority's life cycle ratio is very favorable at 26%. Capex to depreciation has averaged just 46% over the past five years, but in accordance with the authority's latest CIP, capex is expected to be robust over at least the next five years, which should sustain the very favorable life cycle ratio.

The authority is responsible for its own capital funding as well as the city's via the lease payment and by borrowing on behalf of the city. Debt funding of $1.2 billion in capex is provided both by future revenue bonds and expected state revolving fund loans. Only a small portion of the plan is driven by mandated regulatory requirements, which means that it is largely discretionary.

The authority's water system CIP is said to be moving from a planning to construction phase, while the sewer system projects focus on resiliency. Essentially, this means that water-system spending is expected to accelerate and sewer-system spending, although also accelerating, will generally stabilize first. This fact is recognized somewhat in the lower leverage numbers exhibited by the sewer system vis-à-vis the water system.

Spending outlined in the authority's plan is allocated to the maintenance of the WRRF (41%), collection system upgrades (47%) and combined system overflow mitigation (10%). Much of DWSD's CIP will be funded by existing funds on hand, the lease payment from the authority, and future federal loans and grants to the extent they become available.

Asymmetric Factor Considerations

No asymmetric risk considerations affected the operating risk assessment.

Financial Profile and FAST Analysis

The system's overall financial profile is very strong, and is assessed at 'aa'. As noted, leverage has been on a generally downward trend for the last several years and measured a low of 8.3x in fiscal 2022. Senior and all-in debt service coverage finished at 2.6x and 1.7x, respectively, in fiscal 2022. Liquidity has remained sound over the past five years; the liquidity cushion most recently finished at 282 days. The system's sound COFO of around 1.7x and cash balances result in a liquidity profile that is considered neutral to the overall financial profile assessment.

Fitch Analytical Stress Test (FAST)

The FAST base case assumptions used by Fitch were informed by the authority's latest forecasts and projected capex. Revenues and expenses are projected at about 3%-4% annually beginning in 2023. The expansion of the capital plan plus the authority's higher-planned execution rate, which increased to 100% from 75% at Fitch's review of the system in 2022, are expected to be supported by higher revenues. Thus, leverage over the next five years is expected to remain between a stable bandwidth of 8.5x and 9.4x in Fitch's base case, and from 8.8x to 9.5x in the stress case. Longer-term projections provided in the authority's CIP show spending peaking around 2027, before lowering to a still-robust level in years six through 10, further supporting the trend of lower leverage and the maintenance of the Positive Rating Outlook. 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 https://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)	2,742	2,478	2,966	3,636	2,804
Capital planning and management					
Life cycle ratio (%)	13	17	24	27	26
Annual capex/depreciation (%)	34	49	50	54	44
5-year average capex/depreciation (%)	59	48	35	43	46
Financial profile					
Current unrestricted cash/investments	288,313	294,805	330,873	358,755	348,601
Current restricted cash/invest (available liquidity)	16,837	21,227	21,078	25,397	21,749
Current cash available	305,150	316,032	351,950	384,152	370,349
Available cash	305,150	316,032	351,950	384,152	370,349
Current restricted cash/invest (debt service or debt service reserve)	69,786	108,089	92,049	91,791	98,966
Noncurrent restricted cash/invest (debt service or debt service reserve)	73,609	53,902	21,813	12,444	17,673
Funds restricted for debt service	143,394	161,992	113,863	104,235	116,640
Total debt	3,789,625	3,805,363	3,651,203	3,544,442	3,411,201
Adjusted net pension liability	144,258	120,070	115,616	113,444	47,428
Available cash	305,150	316,032	351,950	384,152	370,349
Funds restricted for debt service	143,394	161,992	113,863	104,235	116,640
Net adjusted debt	**3,485,339**	**3,447,409**	**3,301,005**	**3,169,499**	**2,971,639**
Total operating revs	764,713	767,824	798,331	807,544	833,832
Other operating expenses	445,349	437,829	469,162	491,238	479,394
EBITDA	319,365	329,996	329,169	316,306	354,438
Investment income/(loss)	5,266	11,763	8,960	2,825	-3,023
Other cash revenues/(expenses)	-710	-6,221	366	-299	-235
Capital contributions	—	—	11,920	—	—
Funds available for debt service	323,921	335,538	350,415	318,832	351,180
Net transfers in/(out)	—	—	—	—	—
Pension expense	15,988	10,764	12,923	14,453	8,927
Adjusted funds available for debt service	**339,910**	**346,302**	**363,337**	**333,285**	**360,107**
Net adjusted debt/adjusted funds available for debt service (x)	**10.3**	**10.0**	**9.1**	**9.5**	**8.3**
Funds available for debt service	323,921	335,538	350,415	318,832	351,180
Net transfers in/(out)	—	—	—	—	—
Adjusted FADS for coverage of full obligations	323,921	335,538	350,415	318,832	351,180
Total annual debt service	230,235	208,340	229,535	203,294	207,113
Adjusted debt service (includes fixed services expense)	230,235	208,340	229,535	203,294	207,113
Coverage of full obligations (x)	**1.41**	**1.61**	**1.53**	**1.57**	**1.70**
Coverage of full obligations excluding connection fees (x)	1.41	1.61	1.47	1.57	1.70
Current days cash on hand	250	263	274	285	282
Liquidity cushion ratio (days)	**250**	**263**	**274**	**285**	**282**
All-in debt service coverage (x)	1.41	1.61	1.53	1.57	1.70

Note: Fitch may have reclassified certain financial statement items for analytical purposes.
Source: Fitch Ratings, Fitch Solutions, Great Lakes Water Authority (MI)

SOLICITATION & PARTICIPATION STATUS

For information on the solicitation status of the ratings included within this report, please refer to the solicitation status shown in the relevant entity's summary page of the Fitch Ratings website.

For information on the participation status in the rating process of an issuer listed in this report, please refer to the most recent rating action commentary for the relevant issuer, available on the Fitch Ratings website.