

Standard & Poor's Credit Research

Summary:

Great Lakes Water Authority, Michigan; Water/Sewer

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Summary:

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Credit Profile					
US\$103.655 mil swg disp sys rev sr ln bnds ser 2023C due 07/01/2053					
Long Term Rating	AA-/Stable	New			
US\$89.775 mil swg disp sys rev rfdg sr ln bnds ser 2023A due 07/01/2044					
Long Term Rating	AA-/Stable	New			
US\$11.9 mil swg disp sys rev rfdg 2nd ln bnds ser 2023B due 07/01/2036					
Long Term Rating	A+/Stable	New			

Credit Highlights

- S&P Global Ratings assigned its 'AA-' rating to the Great Lakes Water Authority (GLWA), Mich.'s sewage disposal system revenue senior-lien bonds, series 2023A and 2023C; and its 'A+' rating to GLWA's sewage disposal system revenue second-lien bonds, series 2023B.
- At the same time, S&P Global Ratings affirmed its 'AA-' and 'A+' ratings on GLWA's senior- and second-lien bonds outstanding, respectively.
- The outlook is stable.

Security

The bonds are secured by a statutory lien on pledged assets of the system, pursuant to both the bond ordinance and Michigan Act 94 of 1933 (as amended), and prioritized by the lien status. Pledged assets include net revenues of GLWA's sewage disposal system, along with investments credited to the sewage disposal system and earnings on those investments. The net revenue pledge is constituted from gross revenues of the Detroit Water and Sewer Board (DWSD) retail and GLWA regional systems, which cover both systems' operating and maintenance expenses. A rate covenant stipulates that the GLWA board set rates to produce at least 1.2x coverage of senior-lien debt, 1.1x for second-lien bonds, and 1.0x for junior-lien bonds. The ability to issue additional bonds exists if net revenues for the previous fiscal year, or net revenues adjusted by approved rate increases and system expansion for the current or next fiscal year, produce coverage of maximum annual debt service (MADS; including the proposed bonds) of at least those levels indicated in the rate covenant for the particular liens.

There is also a debt service reserve (DSR) for both senior- and second-lien bonds equal to the lesser of MADS or what is permitted by the Internal Revenue Code of 1986. On achieving senior-lien ratings from two credit rating agencies no lower than 'AA-' or the equivalent, GLWA, through amendments to the master bond ordinance, has the option to eliminate this reserve requirement on its outstanding and future bonds on any lien. If the DSRs are eliminated, we view the effects as credit neutral given the significant amounts of unrestricted liquidity GLWA carries. If management decides to liquidate the DSRs, we would seek to understand how it would use other pledged funds to continue

minimizing the potential for debt payment disruptions. At the fiscal year ended June 30, 2022, the senior-lien DSR totaled \$111 million and the second-lien plus junior-lien DSRs totaled \$48.7 million; DSR investments consist of cash, securities, and sureties.

Credit overview

For a utility of its size, serving about 2.8 million people, in our opinion, GLWA's existing financial benchmarks of debt service coverage (DSC) and unrestricted liquidity are consistent with the rating category. However, in our analysis of DSC, our fixed-charge coverage analysis generally follows the presentation in GLWA's master bond ordinance (MBO) calculation for junior-lien DSC, with additional revenue offsets due to pension payments made to Detroit for its frozen general retirement system expenses and additional fixed costs due to pension note payments made to Detroit for its B and C note payments. Our calculation focuses on how net revenues are covering all of GLWA's fixed costs instead of reporting coverage based on MBO definitions of operating and nonoperating expenses. The effect of this treatment lowers fixed-charge coverage by about five-10 basis points compared with MBO junior-lien DSC.

Detroit's recovering employment base still has weak underlying fundamentals, in our view, with median household effective buying income only about 50% of the national average. Still, the rating is supported by a revenue base that is well diversified geographically beyond the city limits (50% from suburban wholesale customers).

Overall higher inflation and interest rates could weaken GLWA's capital and operating budget, potentially pressuring water rates. Because account delinquencies in the DWSD retail customer class are already high, worsening economic conditions could reduce revenue collections; management reports that about 45% of DWSD's 338,000 active retail accounts are 60 days or more delinquent, but that figure has been slowly declining since at least 2020.

A number of key provisions in the lease agreement, service agreement, and memorandum of understanding (MOU) between GLWA and Detroit support the ability of the GLWA regional system to help make the net revenues originating from Detroit's local system more predictable despite these economic and collection risks:

- GLWA sets revenue requirements for DWSD that are related to the costs for providing services, and, in turn, Detroit sets retail rates in a fashion that meets GLWA's revenue requirement.
- Explicit language requires all revenues collected by Detroit be held in segregated accounts in trust and remitted within five days of receipt to a trustee-held pledged revenue account under the MBO.
- A services agreement between GLWA and Detroit holds the city to performance and administrative standards to maintain its agency relationship with GLWA for rate setting and revenue collection.
- Both GLWA and Detroit retail are required to maintain a biennial budget and a five-year capital improvement plan (CIP).
- DWSD is required to submit periodic budget and operational reporting requirements to GLWA and discuss these results at a reconciliation committee, which is also the initial mechanism to develop a plan for DWSD to cure any budget shortfalls. If there are any, the MOU between the two entities describes a workout mechanism to recover the budget shortfalls over a period no longer than the next three fiscal years.

Additional overall credit strengths that we believe will continue to support the rating include:

A revenue stream that arises from 100% fixed-cost recovery not dependent on volume; and

Active management of governance risks through formal working relationships with both suburban wholesale
customers and DWSD; coordination of all aspects of the utility's operations are managed, including environmental
compliance, asset management, procurement, rate setting, two separate bill assistance programs, and future capital
needs.

Environmental, social, and governance

Minimizing governance risk lies primarily in maintaining collaboration with both suburban wholesale customers and DWSD management. All these efforts require considerable staff resources, but they also are credit supportive as long as GLWA is able to continue providing its services without significant customer discord that disrupts revenue collections. Litigation with Highland Park has been ongoing for decades but has just been resolved with financial assistance for improvements to Highland Park's utility system coming from the State of Michigan.

Many procedures involving DWSD regarding capital and budget planning, management of budget variances, sharing of services to gain efficiencies, and reporting requirements are built into key documents to which GLWA and Detroit are party. The "One Water Partnership" between GLWA and its suburban wholesale customers generally facilitates information sharing, capital project coordination, and technical assistance.

GLWA has significant social risks to manage given the wide diversity in economic and demographic bases the utility serves. We consider social risks credit neutral, but both GLWA and DWSD management will need to continue balancing implementation of assistance programs while also achieving higher collection rates within Detroit. GLWA's Water Residential Assistance Program (WRAP) is designed to both provide bill assistance and for household water audits to all qualified residents within GLWA's service territory. DWSD management also has a dedicated shut-off program implemented by an outside contractor. In 2022, DWSD also launched a lifeline program for residents in Detroit that is funded by WRAP and other state grants and federal resources such as the Low Income Water Assistance Program (LIWAP). WRAP is supported from revenues generated from water and sewer rates.

We view environmental risks to be credit neutral, with the most acute potential risk being exposure to Polyfluoroalkyl Substances (PFAS) regulation that could affect discharge requirements. One positive recent outcome related to environmental risks is that GLWA was released from an administrative consent order with the Michigan Department of Environment, Great Lakes, and Energy for monitoring of sewer treatment facility operations and biosolids handling; the order had been in place prior to Detroit's bankruptcy. Also of note is that GLWA maintains a strong record of discharge permit and combined sewer overflow compliance.

Outlook

The stable outlook reflects our expectation that GLWA will continue its steady financial performance while funding all its needed capital projects without being impaired by economic headwinds or inflationary pressures. Because the authority's CIP is not currently regulatory driven, we believe that flexibility to shift capital spend targets and/or revenue requirements due to economic or inflationary pressures will help minimize downside risks to meeting or outperforming projected financial projections. However, if compliance costs associated with PFAS remediation or other discharge requirements accelerate, it could influence our view of GLWA's credit quality.

We would also expect management to continue its collaborative efforts with both suburban customers and DWSD to minimize environmental, social, and governance risks that could have a negative effect on credit quality.

Downside scenario

Continuing to implement the provisions of the lease agreement, service agreement, and MOU that help make the budget for both DWSD and GLWA more predictable while minimizing revenue fluctuations are key factors in maintaining the current rating; if these become less robust, we would likely lower the rating.

But even if these practices continue, we could lower the rating or revise the outlook to negative if actual financial performance falls below current projections. Significant deferral of capital projects, considering the current inflationary environment, that artificially increases liquidity but causes deferred maintenance could also lead to a lower rating or negative outlook.

Upside scenario

If economic recovery in Detroit continues and starts to have meaningful positive effects on its economic fundamentals and utility collection rates, we could raise the rating. We also would consider an upgrade if GLWA meaningfully outperforms its current forecast while still funding its CIP generally as planned. We would also need to consider these improvements as sustainable over a long-term horizon for us to consider a positive rating action.

Related Research

 Through The ESG Lens 3.0: The Intersection Of ESG Credit Factors And U.S. Public Finance Credit Factors, March 2, 2022

Ratings Detail (As Of October 26, 202	23)			
Great Lakes Wtr Auth swg disp sys rev bnds ser 2001-SRF1 due 10/01/2024				
Long Term Rating	A+/Stable	Affirmed		
Great Lakes Wtr Auth swg disp sys rev bnds	ser 2001-SRF2 due 10/01/2024			
Long Term Rating	A+/Stable	Affirmed		
Great Lakes Wtr Auth swg disp sys rev bnds ser 2002-SRF3 due 10/01/2024				
Long Term Rating	A+/Stable	Affirmed		
Great Lakes Wtr Auth swg disp sys rev bnds ser 2003-SRF1 due 10/01/2025				
Long Term Rating	A+/Stable	Affirmed		
Great Lakes Wtr Auth swg disp sys rev bnds ser 2003-SRF2 due 04/01/2025				
Long Term Rating	A+/Stable	Affirmed		
Great Lakes Wtr Auth swg disp sys rev bnds ser 2004-SRF1 due 10/01/2024				
Long Term Rating	A+/Stable	Affirmed		
Great Lakes Wtr Auth swg disp sys rev bnds ser 2004-SRF2 due 04/01/2024				
Long Term Rating	A+/Stable	Affirmed		
Great Lakes Wtr Auth swg disp sys rev bnds ser 2004-SRF3 due 04/01/2025				
Long Term Rating	A+/Stable	Affirmed		

Ratings Detail (As Of October 26, 2023) (cont.)		
Great Lakes Wtr Auth swg disp sys rev bnds ser 2007-SRI	F1 due 10/01/2029	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2009-SRI	F1 due 04/01/2030	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2010-SRI	F1 due 04/01/2031	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2012-SRI	F1 due 10/01/2034	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2015A-Si	RF due 04/01/2036	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2015B-Sl	RF due 10/01/2035	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2015D-S	RF due 10/01/2035	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2016-SA	W due 10/01/2038	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2016-SRI	F1 due 04/01/2038	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2016-SR	F2 due 04/01/2039	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2017-SRI	F1 due 10/01/2038	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2018-SRI	F1 due 10/01/2042	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2018-SRI	F2 due 10/01/2039	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg (wrap of insured) (MBIA, National Control of the Control	onal & ASSURED GTY) (SEC MKT)	
Unenhanced Rating	A+(SPUR)/Stable	Affirmed
Great Lakes Wtr Auth swg (AGM)		
Unenhanced Rating	A+(SPUR)/Stable	Affirmed
Great Lakes Wtr Auth swg (Sr lien)		
Long Term Rating	AA-/Stable	Affirmed
Great Lakes Wtr Auth swg (Sr lien) (AGM)		
Unenhanced Rating	AA-(SPUR)/Stable	Affirmed
Great Lakes Wtr Auth swg (Sr lien) (AGM) (SECMKT)		
Unenhanced Rating	AA-(SPUR)/Stable	Affirmed
Great Lakes Wtr Auth swg (2nd lien)		
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg (2nd lien) (wrap of insured) (Fo	GIC & AGM) (SEC MKT)	
Unenhanced Rating	A+(SPUR)/Stable	Affirmed

Ratings Detail (As Of October 26, 2023) (cont.)				
Great Lakes Wtr Auth swg (2nd lien) (wrap of insured) (Fo	GIC) (MBIA) (SEC MKT) (National)			
Unenhanced Rating	A+(SPUR)/Stable	Affirmed		
Great Lakes Wtr Auth swg (2nd lien) (wrap of insured) (FGIC, AGM & BHAC) (SEC MKT)				
Unenhanced Rating	A+(SPUR)/Stable	Affirmed		
Great Lakes Wtr Auth swg (2nd lien) (AGM)				
Unenhanced Rating	A+(SPUR)/Stable	Affirmed		
Great Lakes Wtr Auth swg (2nd lien) (BAM) (SECMKT)				
Unenhanced Rating	A+(SPUR)/Stable	Affirmed		
Great Lakes Wtr Auth swg (2nd lien) (BAM) (SECMKT)				
Unenhanced Rating	A+(SPUR)/Stable	Affirmed		
Great Lakes Wtr Auth swg (2nd lien) (MBIA) (National)				
Unenhanced Rating	A+(SPUR)/Stable	Affirmed		
Great Lakes Wtr Auth swg (2nd lien) (MBIA) (National)	•			
Unenhanced Rating	A+(SPUR)/Stable	Affirmed		
Great Lakes Wtr Auth swr (wrap of insured) (FGIC) (ASSU	JRED GTY - SEC MKT)			
Unenhanced Rating	A+(SPUR)/Stable	Affirmed		
Michigan Finance Authority, Michigan	•			
Great Lakes Water Authority, Michigan				
Michigan Fin Auth (Great Lakes Wtr Auth) swg disposal (AGM)			
Unenhanced Rating	A+(SPUR)/Stable	Affirmed		
Michigan Fin Auth (Great Lakes Wtr Auth) swg disposal (BAM)			
Unenhanced Rating	A+(SPUR)/Stable	Affirmed		
Michigan Fin Auth (Great Lakes Wtr Auth) swg (BAM) (Sl	ECMKT)			
Unenhanced Rating	A+(SPUR)/Stable	Affirmed		
Michigan Fin Auth (Great Lakes Wtr Auth) swg (National)				
Unenhanced Rating	A+(SPUR)/Stable	Affirmed		
Michigan Fin Auth (Great Lakes Wtr Auth) WTRSWR		A 00		
Long Term Rating	AA-/Stable	Affirmed		
Michigan Fin Auth (Great Lakes Wtr Auth) WTRSWR Long Term Rating	AA-/Stable	Affirmed		
Michigan Fin Auth (Great Lakes Wtr Auth) WTRSWR	AA-7 Stable	Ammeu		
Long Term Rating	AA-/Stable	Affirmed		
Michigan Fin Auth (Great Lakes Wtr Auth) WTRSWR	/ 3440.0			
Unenhanced Rating	AA-(SPUR)/Stable	Affirmed		
Michigan Fin Auth (Great Lakes Wtr Auth) WTRSWR	,			
Long Term Rating	A+/Stable	Affirmed		

Many issues are enhanced by bond insurance.

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