



Fitch Rates Great Lakes Water Authority, MI's Water and Sewer Revs 'A' Senior/'A'-Subordinate

Fitch Ratings-Austin-04 September 2018: Fitch Ratings has assigned the following ratings to revenue bonds issued by the Great Lakes Water Authority, MI (GLWA or the authority):

- Approximately \$80 million sewage disposal system revenue senior lien bonds, series 2018A at 'A';
- Approximately \$129 million sewage disposal system revenue refunding senior lien bonds, series 2018B at 'A';
- Approximately \$43 million sewage disposal system revenue refunding senior lien bonds, series 2018C (federally taxable) at 'A';
- Approximately \$156 million water supply system revenue refunding second lien bonds, series 2018A at 'A-'.

The bonds are scheduled to price the week of September 17 via negotiated sale. Proceeds will be used to refund certain GLWA sewer system and water system (the systems) debt for interest savings, fund certain Detroit Water and Sewerage Department (DWSD) sewer system capital expenditures, and pay costs of issuance.

In addition, Fitch has affirmed the following outstanding GLWA bonds, including bonds previously issued by the city of Detroit (the city) and the Michigan Finance Authority, MI on behalf of DWSD and assumed by GLWA:

- \$1.9 billion in senior lien sewer revenue bonds at 'A';
- \$752 million in second lien sewer revenue bonds at 'A-';
- \$1.6 billion in senior lien water revenue bonds at 'A';
- \$668 million in second lien water revenue bonds at 'A-'.

The Rating Outlook has been revised to Positive from Stable.

SECURITY

Senior lien water and sewer bonds are separately secured by a first lien on net revenues of each respective system. Second lien bonds are separately secured by a second lien on the net revenues of each respective system after payment of senior lien bonds.

KEY RATING DRIVERS

POSITIVE OUTLOOK ON SOLID FINANCIALS: The Outlook revision to Positive from Stable reflects solid fiscal 2016 and 2017 financial results related to GLWA's initial operations of the systems, outpacing prior expectations. Changes in rate-setting practices as well as accumulation of reserves under the master bond ordinances have enhanced prospects for achieving forecast expectations and help to adequately insulate GLWA from high city of Detroit retail delinquencies.

LEASE REINFORCES SEPARATE OPERATIONS: All system funds and accounts are separate and distinct from other city funds, including Detroit's general fund. The lease of the systems by GLWA provides further assurance that system operations will remain independent of the city.

HIGHLY LEVERAGED DEBT PROFILE: The systems' debt load is expected to remain elevated for the foreseeable future as a result of legacy issuance and ongoing borrowing. Over the longer term, greater use of pay-as-you-go capital funding is expected to alleviate debt pressures to some degree.

EXPANSIVE SERVICE TERRITORY: The systems provide essential services to a broad area. The water system covers almost 40% of Michigan's population, while the sewer system includes about 30% of Michigan's population. The majority of GLWA's revenues come from suburban customers.

STRONG RATE-ADJUSTMENT HISTORY: The governing bodies have instituted annual rate hikes in support of financial and capital needs. Continued annual adjustments are included in the forecast and will be needed to meet rising debt service and sustain financial performance.

RATING SENSITIVITIES

SUSTAINED FINANCIAL AND OPERATING GAINS: Sustained operating enhancements, improved liquidity and moderating leverage could lead to a rating upgrade over the course of the next couple of years. Alternatively, GLWA's failure to maintain the improved operational and financial performance of its water and sewer utilities due to insufficient revenue recovery or higher than expected costs could result in a change in Outlook back to Stable.

CHANGES TO DEBT PROFILE: Increases in debt issuance levels due to revisions in the capital plan or reductions in operating cash flow would be viewed unfavorably, given the already high leverage of both systems.

CREDIT PROFILE

GLWA entered into 40-year leases of DWSD's water and sewer systems (except for the local city infrastructure), as well as a water and sewer services agreement (combined lease agreements) with the city in June 2015. The lease agreements became effective on Jan. 1, 2016, at which point GLWA assumed operational control of all leased assets of the regional water and sewer systems; the leases also conveyed an interest in all revenues of both the water and sewer systems (including both the regional and local city retail systems). At the same time, GLWA assumed all liabilities of the water and sewer systems, including all outstanding indebtedness of the city related to the respective systems.

Fitch believes the leases and supporting documents effectively codify the legal separation between the systems and the city, and insulate the systems from being included in any future city bankruptcy proceedings, if one were to occur. DWSD continues to own and operate the city retail water and sewer systems and serves as GLWA's agent with regards to the rate setting, billing and collection of city retail accounts. However, GLWA can terminate DWSD's agent responsibilities in the event of nonperformance by DWSD as described in a Water and Sewer Service Agreement (the WSSA) between the city and GLWA.

Key terms of the agreements, which are embedded in GLWA's financial projections, include a \$50 million annual lease payment to the city, although such moneys may only be used at the city's option to fund pay-go capital improvements related to Detroit's local water and sewer systems or DWSD-related debt service associated with the local systems and/or GLWA regional systems. An assistance program is also funded and replenished annually as part of GLWA's budget for low-income customers throughout

GLWA's service territory. In addition, a budget stabilization fund is funded from city retail customers to ensure moneys are available to meet the city's portion of GLWA's annual revenue requirement. Deposits required to fund the lease payment and other created accounts like the assistance account occur subsequent to payment of debt service; however, these are added costs that ratepayers must absorb.

STRONGER FINANCIALS DRIVE OUTLOOK CHANGE

Audited fiscal 2017 results yielded Fitch-calculated total debt service coverage (DSC) for the water system of 1.6x, coverage of full obligations of 1.3x (which includes all transfers including the lease payment) and liquidity of 539 days cash, all of which are considered favorable for a wholesale provider under Fitch's criteria. Fitch's calculations include both GLWA and DWSD operating revenues and expenses given the requirements under the trust indenture, leases and related agreements. Water system DSC for the year was higher than previously forecasted in part due to higher than expected bad debt recoveries. Preliminary fiscal 2018 financial results point to continued solid performance for the water system with total DSC of 1.5x and coverage of full obligations of 1.3x (slightly ahead of the prior forecast). The most recent forecast anticipates financial results through fiscal 2023 commensurate with fiscal 2018 results.

For fiscal 2017, Fitch-calculated total sewer DSC was just under 1.5x, coverage of full obligations was 1.2x and days cash was 172, all of which are considered favorable for wholesale utilities. Sewer system DSC was also higher for the year than previously anticipated. Total sewer system DSC for fiscal 2018 is expected to be weaker than the prior year at slightly less than 1.2x (coverage of all obligations at 1.0x) as the system received around \$20 million less than expected from DWSD. GLWA is working with DWSD to formulate a plan that is expected to be completed by fiscal 2019 Q1 whereby this amount will ultimately be paid to GLWA by DWSD. GLWA attributes the lower than expected collections to one-time events associated with a legal settlement over historical drainage charges (including actions to credit various customer accounts) as well as modifications to phase-in newly adopted drainage program charges. GLWA's latest forecast through fiscal 2023 estimate improved results from 2018 levels beginning in fiscal 2019 and continuing thereafter. A trend of sustained favorable DSC, liquidity and stabilizing leverage could lead to a rating upgrade for both systems over the near-term.

Financial results have stabilized and improved over the past several years from previously poor levels, including years where total DSC for each of the systems was below 1.0x. Gains in financial results are attributable to GLWA and DWSD's efforts to both enhance revenues and cut operating costs. On the revenue front, GLWA adopted changes with its suburban water customers beginning in fiscal 2016 to revise purchase estimates and shift to an increasing amount of fixed monthly charge recovery (60% versus 40% the prior year). These changes are similar to the implementation of a rate simplification initiative for suburban sewer customers effective for fiscal 2015 that identifies each customer's proportionate costs based on historical average shares, with such shares billed monthly and locked in for three years before being subject to recalculation.

DWSD also has been working extensively to reduce retail delinquencies through outreach and aggressively pursuing shut-offs, although 60-day and greater past due accounts from active customers remain abnormally high (44% excluding customers not on payment plans). GLWA's budgeting and accumulation of \$7.5 million in the budget stabilization fund as of fiscal 2017 help to mitigate GLWA's exposure to delinquent city customers.

SYSTEM LEVERAGE REMAINS HIGH

Fitch expects leverage for both systems to remain high for the foreseeable future but that it will decline in time given increased use of pay-go sources and principal amortization that exceeds planned annual

issuances. For fiscal 2017, GLWA's long-term debt per capita totaled \$697 for water and \$1,381 for sewer (excluding the lease obligations), both of which are considered high per Fitch's criteria. For the same period, debt to net plant assets was also elevated for both systems at 130% and 116% for water and sewer, respectively, while debt to funds available for debt service was 9.5x for water and 9.8x for sewer (all excluding the lease obligations). Principal payout is relatively typical for sector credits at about 80% over 20 years for both water and sewer, including debt and contractual pension obligations.

The consolidated GLWA regional and DWSD local 2019-2023 capital improvement plans (CIPs), including regional budgeted capital outlays, total \$979 million for water (down 11% from the fiscal 2017-2021 CIP) and \$748 million for sewer (down 9%). While GLWA's CIPs for the regional water and sewer systems total just \$659 million and \$562 million, respectively, GLWA's revenues fund the DWSD CIPs through the lease payments and debt issued by GLWA for the local projects (including the new money portion related to this sale). Funding for the consolidated CIPs is expected to be provided by approximately 40% debt proceeds and 60% pay-go for the water system and 60% debt/40% pay-go for the sewer system, with the amount of pay-go representing a significant amount of current resources for a wholesale entity.

Projected capital costs have risen from prior CIPs before the system leases were executed as a result of the updated water master plan approved by GLWA's board in August 2016, the first update since 2004. An outcome of the plan includes decommissioning one of the water treatment plants (accounting for over 15% of system capacity) along with other system optimization. The updated water master plan results in significant near-term investment; however, these costs are expected to moderate over time and ultimately result in over \$400 million in capital cost avoidance as well as reduced operating costs by \$2.4 million per year.

Sewer CIP costs have also increased in recent years as GLWA has been going through an update to the sewer master plan, which is expected to be finalized in the 2019-2020 timeframe. While the sewer costs are less refined than the water costs, certain initial estimates from the planning levels have been added to the CIP at this point.

BROAD SERVICE AREA ENHANCES SYSTEM STABILITY

The water system is a regional provider serving around 3.8 million people or almost 40% of Michigan's population, including the city's population of around 675,000. The system serves the city via DWSD on a retail basis and 127 communities through 87 wholesale contracts and provides service to Genesee County Drain Commissioner through a reciprocal backup contract. The service territory consists of 1,760 square miles covering all or a portion of eight counties in southeast Michigan.

The sewer system is a regional provider serving around 2.8 million people or around 30% of Michigan's population, including the city. The system serves the city via DWSD on a retail basis and 76 communities through 18 wholesale contracts. The service territory consists of 944 square miles covering three counties in the Detroit-Warren-Dearborn metropolitan statistical area.

Population and customer growth for both systems have experienced modest annual declines for a number of years. Detroit's population in particular has experienced continuous decline, but suburban areas have picked up most of the migration. Wealth levels in the city are low (less than 50% of the U.S. average) while poverty (39%) and unemployment levels (9.3% as of June 2018) are high, although figures for the metropolitan area overall, which includes the city as well as the suburban customers, are generally in line with state and national averages.

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In addition to the sources of information identified in the Revenue-Supported Rating Criteria, this action was additionally informed by information from Lumesis and Citibank (underwriter).

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Applicable Criteria

Rating Criteria for Public-Sector, Revenue-Supported Debt (pub. 26 Feb 2018)

(<https://www.fitchratings.com/site/re/10020113>)

U.S. Water and Sewer Rating Criteria (pub. 30 Nov 2017)

(<https://www.fitchratings.com/site/re/10010508>)

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