MOODY'S INVESTORS SERVICE

CREDIT OPINION
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Contacts

Coley J Anderson +1.312.706.9961
VP-Senior Analyst
coley.anderson@moodys.com

David Levett +1.312.706.9990
VP-Senior Analyst
david.levett@moodys.com

Rachel Cortez +1.312.706.9956
Associate Managing Director
rachel.cortez@moodys.com

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Metro. Water Reclam. Dist. of Greater Chicago

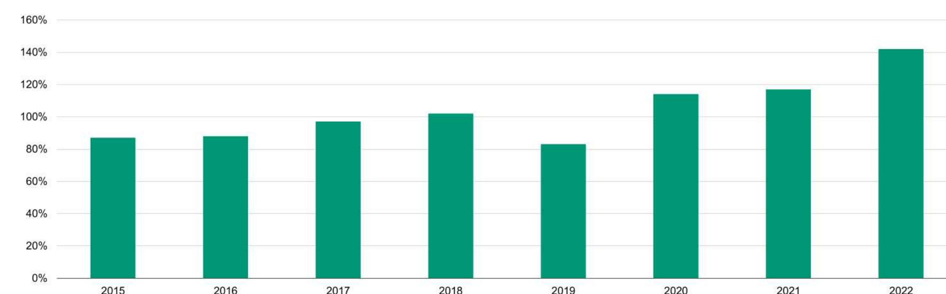
Update to credit analysis following upgrade to Aa1

Summary

The Metropolitan Water Reclamation District of Greater Chicago, IL's (Aa1 stable; MWRD) credit profile has improved, supported by a strengthening of pension contribution practices while maintaining a strong financial position. MWRD's financial profile is supported by its substantial financial position that has benefited from high levels of revenue predictability and strong expenditure control. MWRD is largely coterminous with Cook County (A1 stable), which benefits from a very large tax base and diverse economic composition that serves as the largest regional economic center in the Midwest. The district's primary credit challenge is elevated direct and overlapping leverage and high fixed costs given the capital intensive nature of district operations.

On August 23, Moody's upgraded the rating on the district's general obligation unlimited tax (GOULT) and general obligation limited tax (GOLT) debt to Aa1 stable from Aa2 stable.

Exhibit 1
Pension contributions have improved substantially
Pension contributions as a % of tread water



The district updated the discount rate to 7.25% from 7.5% in 2019, which Moody's uses in its tread water calculation. Lowering the discount rate increases the contribution needed to tread water.
Source: Audited financial statements; Moody's Investors Service

Credit strengths

» Large diverse economy anchored by Chicago (Baa3 stable)

» Healthy financial operations with ample fund balance and liquidity

Credit challenges

» High direct and overlapping leverage

Rating outlook

The stable outlook reflects the expectation that the district will continue to maintain solid pension contributions and strong reserves given a stable revenue base. It also incorporates our expectation the debt burden will not materially increase based on the pace of planned debt issuance relative to amortization and revenue growth.

Factors that could lead to an upgrade

» Moderation of direct and overlapping leverage while maintaining strong capital investments

Factors that could lead to a downgrade

» Declines in operating reserves or liquidity

» Material growth in long-term leverage

Key indicators

Exhibit 2

Metropolitan Water Reclamation of Greater Chicago	2018	2019	2020	2021	2022
Economy/Tax Base					
Total Full Value ($000)	$585,788,374	$609,562,341	$634,846,257	$634,846,257	$634,846,257
Population	5,223,719	5,198,275	5,169,517	5,265,398	5,265,398
Full Value Per Capita	$112,140	$117,262	$122,806	$120,569	$120,569
Median Family Income (% of US Median)	115.8%	113.4%	111.2%	108.9%	108.9%
Finances					
Operating Revenue ($000)	$738,590	$695,845	$763,825	$823,503	$854,343
Fund Balance ($000)	$469,326	$432,908	$447,076	$533,142	$560,184
Cash Balance ($000)	$395,097	$417,152	$435,492	$504,307	$476,896
Fund Balance as a % of Revenues	63.5%	62.2%	58.5%	64.7%	65.6%
Cash Balance as a % of Revenues	53.5%	59.9%	57.0%	61.2%	55.8%
Debt/Pensions					
Net Direct Debt ($000)	$2,956,022	$2,861,314	$2,801,370	$2,834,997	$2,680,585
3-Year Average of Moody's ANPL ($000)	$2,172,533	$2,234,710	$2,374,718	$2,572,965	$2,706,508
Net Direct Debt / Full Value (%)	0.5%	0.5%	0.4%	0.4%	0.4%
Net Direct Debt / Operating Revenues (x)	4.0x	4.1x	3.7x	3.4x	3.1x
Moody's - adjusted Net Pension Liability (3-yr average) to Full Value (%)	0.4%	0.4%	0.4%	0.4%	0.4%
Moody's - adjusted Net Pension Liability (3-yr average) to Revenues (x)	2.9x	3.2x	3.1x	3.1x	3.2x

Full valuation is not available for the current year and is carried forward from the prior year. Full valuation is presented on an estimated fiscal year basis.
Source: Moody's, US Census, Audited Financial Statements

Profile

The Metropolitan Water Reclamation District of Greater Chicago is the sanitary district for nearly all of Cook County. The district is governed by an independently elected board. It provides collection and treatment services for approximately 5.2 million people over 882 square miles, including residents of the City of Chicago and 128 suburban communities.

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Detailed credit considerations

Economy and tax base: large, diverse tax base with substantial tax rate headroom

The district's tax base, which is largely coterminous with Cook County, is expected to continue to benefit from recent tax base investment and its role as a regional economic center. Chicago comprises about half of the population and tax base of the county. The district's tax base has grown steadily, driven by appreciation of existing property and substantial construction activity in and around Chicago.

The district sets its annual levy at a dollar amount. The tax rate is later calculated by the Cook County Clerk's Office to offset fluctuations in equalized assessed values (EAV) up to statutory limits. The district's tax rate is less than half of the statutory rate limit providing ample headroom to support stability in property tax receipts if there were to be a decline in EAV. Concerns about the tax burden on residents can influence the willingness of the district's board to increase the levy. The district typically increases to near the maximum levy permitted under the property tax extension limitation law (PTELL), which limits levy growth to the lesser of CPI or 5% plus new construction. The PTELL maximum in the last two years was 5%, which was the highest it had ever been since the inception of PTELL in early 1990s. The district increased its levy less than permitted at about 2% for fiscal 2023.

Financial operations and reserves: strong financial profile expected to remain stable

The district's financial performance will remain stable supported by steady growth in its primary revenue source and sound expenditure control. Over the last several years, the district's fund balance and liquidity have remained strong, despite materially increasing pension contributions, due to steady revenue growth including personal property replacement taxes (PPRT) and ongoing expenditure control. The district expects to use a portion of the fund balance built in the last several years on capital improvements or other one-time expenditures. Despite the planned use of reserves, fund balance is expected to remain robust and in line with similarly-rated credits as well as the district's own fund balance policy, which calls for the district to maintain 95% of annual Corporate Fund expenditures within the Corporate Working Cash Fund.

For fiscal 2022, the district closed the year with an increase in operating reserves of about $26 million despite pandemic-related property tax delays of more than $100 million. The district is on track to finish the year with another operating surplus in fiscal 2023, despite a strong probability of another year of similarly sized property tax delays. The district's sizeable reserves will again provide sufficient cushion to offset the delay, without the need for short-term borrowing.

The district is in the planning stages for its fiscal 2024 budget. Officials expect revenue growth to be sufficient to absorb inflationary costs growth on certain items, such as chemicals used to treat wastewater which have increased as a result of inflation. The district has a history of strong budget to actual performance and reserves are expected to remain robust compared to peers. The district was not eligible for federal relief aid as a result of the pandemic.

Liquidity

The district's cash position is strong and expected to remain so, despite aforementioned property tax delays. As of fiscal 2022, the net cash across operating fund totaled $476 million and 55.8% of revenue.

Debt, pensions and OPEB: above average long-term leverage and fixed costs

Debt and pension burdens are elevated compared with revenue, but are unlikely to grow materially given improved pension contributions, healthy debt amortization and steady revenue and tax base growth. As of fiscal 2022, the district's direct debt burden was low relative to tax base valuation at 0.4%. However, the direct debt burden was elevated when compared to operating revenue at 3.1x. About a third of operating expenditures are dedicated to debt service, which is attributable to the capital intensive nature of district operations. The capital program calls for about $1 billion in debt financed improvements through the end of the decade, but the current rate of amortization and ongoing revenue and tax base growth are expected to hold leverage at least level and potentially decline.

The district supplements debt issuance with pay as you go capital financing. Overall fixed costs (combined debt service, pension and other post-employment benefits) were equivalent to a little less than half of district revenue in fiscal 2022. Pension liabilities are above average. As of fiscal 2022, the district's three year average Moody's adjusted net pension liability (ANPL) totaled $2.7 billion, equal to a significant 3.2x operating revenue.

The leverage of overlapping taxing bodies, including the City of Chicago and the Chicago Board of Education (Ba2 positive), is among the highest in the nation. The expenses and the debt and pension burdens of overlapping entities can elevate total tax rates or bills, and influence the willingness to generate additional revenue, even where legally permitted to do so.

Legal security

The district’s GOULT debt is supported by a dedicated property tax levy, unlimited as to rate or amount.

The district’s GOLT DSEB debt is secured by a dedicated property tax levy unlimited as to rate but limited as to the amount of the district’s DSEB.

Debt structure

All of the district's debt is fixed rate. Amortization of debt is moderate, with 57% of principal set to be retired over the next ten years. The district's $2.6 billion in debt includes state revolving fund (SRF) loans, general obligation unlimited tax (GOULT) bonds, general obligation limited tax (GOLT) debt service extension base (DSEB) bonds, bond anticipation notes (BANs) and capital leases. GOLT DSEB debt is paid from the district's DSEB, which totaled $184 million in tax levy year 2022 compared to maximum annual debt service of about $158 million.

Debt-related derivatives

The district has no derivative exposure.

Pensions and OPEB

Eligible district employees participate in the Metropolitan Water Reclamation district Retirement Fund, a single-employer defined benefit pension plan. Employee and employer contribution levels are defined by state statute. The district's contributions exceed the state minimum with a funding policy that directs it to contribute an annual amount to the fund that will result in a funded ratio of 100% by 2050. As of January 1, 2022, the district is allowed to make contributions from a wider swath of operating revenue than before, providing additional flexibility.

Due to these changes, the district's pension contributions have increased significantly in recent years. In fiscal 2022, district contributions were $118 million or 14% of operating fund revenues, up from $30 million and 6% revenues in fiscal 2010. Fiscal 2022 contributions were equivalent to a strong 142% of tread water. The district has budgeted for an additional one-time $30 million pension contribution from the corporate fund in fiscal 2023 and similar additional contributions are expected for 2024.

In April 2022, the governor signed a bill that grants the district the ability to issue up to $600 million in pension obligation bonds. The board notes it will only consider issuing bonds if the market conditions change and a lower interest cost can be achieved. We view the issuance of pension obligation bonds as neutral at best and usually negative for a government's credit quality.

The district's OPEB burden is not material and is equal to less than 0.1x revenue as of December 31, 2022. The district recently amended its funding policy to achieve a 100% funding level by 2027, using an assumed discount rate of 6.5%.

ESG considerations

Environmental

The district’s E-3 reflects moderately negative exposure to water management considerations given the risk of potential regulatory violations associated with wastewater disposal, similar to other wastewater treatment facilities across the country. Wastewater operations face risks of increased operating costs or capital requirements in addressing any future violations. Environmental considerations are partially driving the system's extensive capital needs and above average debt burden. According to data of Moody's ESG Solutions, Cook County is at high risk for extreme rainfall events relative to counties nationally. The system's Tunnel and Reservoir Plan (TARP, deep tunnel) aims to reduce flooding and protect waterways by substantially increasing reservoir capacity but aerial flooding continues in certain service areas. MWRD is currently in phase two, which is expected to be completed in 2029. TARP is one of the country's largest public works projects for pollution and flood control.

Social

The district's S-2 reflects a social profile that is in line with peers including labor and income trends, demographics and access to housing and basic services. The district has strong educational attainment including an above median percentage of the population with a post-secondary degree.

Governance

The district's G-1 reflects sound budget management demonstrated by strong budget to actual performance and maintenance of robust reserves. The district's policy credibility and effectiveness is also strength given its improved pension funding strategy and robust fund balance policies. The district's institutional structure is sound, with the district able to achieve steady revenue growth within property tax caps.

The district has legal separation of management and governance from other overlapping units of local government. Cook County residents elect the district's Board of Commissioners, a board of nine members who serve six-year terms. The executive director, who is appointed by the Board of Commissioners, manages and controls district operations. Management has demonstrated a willingness to control operating expenditures. The district adheres to robust fund balance policies including a requirement to maintain 95% of annual Corporate Fund expenditures within the Corporate Working Cash Fund.

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