

FITCH RATES PHILADELPHIA (PA) WATER & WASTEWATER REVS 'A+'; OUTLOOK STABLE

Fitch Ratings-New York-13 July 2017: Fitch Ratings has assigned an 'A+' rating to the following Philadelphia, PA (the city) revenue bonds:

--Approximately \$152 million water and wastewater revenue refunding bonds, series 2017B.

The city expects to sell the bonds in a negotiated sale the week of July 24. Proceeds will be used to current-refund all or a portion of the city's outstanding series 2007B and advance-refund all or a portion of the outstanding series 2010C and 2012 bonds for savings and pay issuance costs. The majority of the savings, which will be taken annually, are expected to occur at the end of the scheduled amortization through 2032.

The Rating Outlook is Stable.

SECURITY

The bonds are secured by a senior lien on combined net revenues of the Philadelphia Water Department's (PWD) water and sewer system.

KEY RATING DRIVERS

SATISFACTORY FINANCIAL PERFORMANCE: PWD generates narrow but consistent financial margins. Fitch-calculated all-in debt service coverage (DSC) has averaged 1.3x over the past five years and was just 1.2x in fiscal 2016. While below Fitch's median for the rating category, PWD's consistency in setting rates annually to achieve 1.3x DSC and healthy liquidity levels support the 'A+' rating.

SIGNIFICANT LONG-TERM CAPITAL NEEDS: PWD's capital improvement program (CIP) totals \$2.2 billion through 2023. Longer-term capital needs are substantial, a result of required consent order projects and long-term maintenance needs associated with the city's aging infrastructure. Terms and conditions under the consent order provide the city with some flexibility as to its affordability and projected timeline.

DEBT BURDEN TO RISE: Debt levels are currently manageable but will increase significantly with sizeable additional borrowing expected to fund 80% of PWD's long-term capital needs.

CONSISTENT ANNUAL RATE INCREASES: PWD regularly raises water and sewer rates to support the increased capital spending and to achieve 1.3x DSC. Rates have risen by around 5% on average over the past decade. Rates are affordable but expected to continue trending higher to fund long-term capital improvements.

ECONOMIC CHARACTERISTICS REMAIN MIXED: The service area is highly diverse and well anchored by a broad and stable economy. However, low income levels and high unaccounted-for water persist, contributing to historically below-average collection rates. However, implementation of automatic meters and other programs have led to improvement in both areas over the past few years.

RATING SENSITIVITIES

INSUFFICIENT RATE RECOVERY: The Stable Outlook reflects Fitch's expectation that consistent rate action will be taken to support planned capital spending. However, if Philadelphia Water Department experiences any difficulty in achieving timely and sufficient rate recovery, financial margins could decline, which would likely prompt negative rating action.

CREDIT PROFILE

LARGE, DIVERSE CUSTOMER BASE

PWD provides water to all of the nearly 1.6 million residents of the city as well as a small wholesale customer that serves accounts in neighboring Montgomery and Delaware Counties. The wastewater service area, which serves greater portions of the surrounding counties, includes a larger population estimated at nearly 2.3 million. The retail customer base is highly diverse, comprising predominantly residential users with the 10 largest customers accounting for just 9.9% of fiscal 2016 total revenue.

Operations are stable and system capacity is robust. Average daily water demand is comfortably below permitted water supply, and capacity at all treatment facilities remains well within existing permit limits. Available water supplies from the Delaware and Schuylkill rivers are sufficient for the foreseeable future.

SOUND FINANCIAL MANAGEMENT, CONSISTENT OPERATING RESULTS

Fitch considers the system's financial operations to be well managed, despite historically narrow DSC levels. Management budgets to meet a 1.3x DSC target, which in some years requires transfers from the department's rate stabilization fund (RSF) to balance lower projected cash flow amounts.

Operating results for fiscal 2016 were in line with prior projections, continuing a consistent trend of satisfactory financial performance. DSC declined slightly to 1.2x from fiscal 2015's 1.3x, leaving the RSF largely unchanged at \$205.7 million, or 265 days cash on hand. Fitch's DSC calculation incorporates below-the-line transfers out of the water and sewer fund related to various contractual obligations.

Updated projected financial results provided by PWD's rate consultant show a continued trend of low but stable coverage, and acceptable liquidity levels through fiscal 2022. DSC net of RSF transfers, but including one-time moneys released from the debt service reserve as a result of this refunding, is forecast to remain in the relatively weak range of 1.14x-1.25x in fiscals 2017 and 2018. In fiscals 2019-2022, the city's forecast shows DSC remaining steadily in the range of 1.2x-1.3x (not including RSF transfers). With sizeable long-term capital spending needs and cost recovery expected to remain steady, stronger financial results are not anticipated.

RSF balances are anticipated to decline with a projected ending balance in 2022 of \$160 million. While liquidity will fluctuate somewhat over the next few years, Fitch expects PWD to sustain cash at levels generally consistent with the current rating.

Assumptions built into the forecast appear reasonable, although anticipated future rate increases will depend on rate board approval for rates beyond 2018. The rate board's approval of increases for fiscals 2017 and 2018 are viewed positively by Fitch and its role in rate approval is largely viewed to be neutral to the rating at this time. Modest declines in consumption are incorporated into the projections, and no additional growth in customer accounts is assumed.

ENVIRONMENTAL REGULATIONS, R&R DRIVE LARGE CAPITAL PROGRAM

The city continues to operate under a consent order and agreement (COA) that was signed in 2011 with the Pennsylvania Department of Environmental Protection. The COA requires the department to address combined sewer overflows over a 25-year term ending in 2036. Terms of the agreement, including total cost and timeline are considered by Fitch to be generally favorable for the city when compared to alternative, likely more costly strategies.

Typical of most large, older urban utilities facing combined sewer overflow mitigation and long-term renewal and replacement issues, PWD's CIP is substantial. Projected capital spending spanning fiscal years 2018-2023 totals \$2.2 billion, or \$366 million on average per year, and is over 20% higher than the CIP two years earlier. As only roughly 22% of the current CIP addresses CAO projects, and infrastructure renewal and replacement (R&R) needs are expected to be ongoing, Fitch expects capital spending will further increase over the intermediate term.

DEBT BURDEN TO RISE

Prior to this 2017 issuance, PWD has roughly \$2 billion of mostly fixed-rate long-term revenue bonds and \$220 million in Pennsylvania Infrastructure Investment Authority (PENNVEST) loans outstanding. The utility's ratio of debt to net plant totaled 88% in fiscal 2016 and is just above Fitch's rating category median of 76%.

Debt to funds available for debt service (FADS) was 7.5x as compared to the Fitch rating category median of 9.1x. Debt per customer, which includes an approximation of the number of retail customers served through wholesale contract, remains below the median for 'A' category at approximately \$1,549 in 2016. However, Fitch expects all debt metrics to rise over time.

PWD relies heavily on long-term debt as a funding source, primarily the result of narrow DSC margins that yield modest amounts of excess cash flow. Approximately 83% of project costs over the next six years will be financed with debt with annual bond issuances projected to average roughly \$316 million annually through 2023.

With long-term capital needs escalating, Fitch anticipates the amount of future debt will continue to outpace the rate of amortization of bonds outstanding, leading to a steady rise in leverage over time. Fitch believes the continued escalation in the size of the CIP coupled with a strategy of funding capital costs almost entirely with long-term debt could further pressure financial margins.

CONSISTENT RATE ACTION

Financial margins have remained consistent as a result of regular annual rate action. The five-member rate board, established in 2014 with members appointed by the mayor and approved by the city council, has full rate-setting authority. In 2016, the rate board approved 5.1% and 4.5% increases for fiscals 2017 and 2018, respectively. Management reports that the rate approval process with the new rate board was timely and smooth.

The city expects to begin the process for the next rate approval later this year with the expectation for new rates to be adopted by the start of fiscal 2019. Fitch believes PWD's ability to continue to enact needed rate increases to support planned capital spending is unchanged under the new process.

ECONOMIC IMPORTANCE OFFSETS WEAK SOCIOECONOMIC INDICATORS

Philadelphia's large population, sound economic underpinnings and distinct role as the economic driver for the broader metropolitan statistical area ensure the continued stability of PWD's service area. Weak income levels persist, as the city's 26.7% poverty rate remains nearly twice the

national rate and median household income approximates just 70% of state and national averages. Consequently, PWD's accounts receivable balances and annual write-offs are consistently high relative to most utilities.

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Applicable Criteria

Revenue-Supported Rating Criteria — Effective June 16, 2014 to June 5, 2017 (pub. 16 Jun 2014)

<https://www.fitchratings.com/site/re/750012>

U.S. Water and Sewer Revenue Bond Rating Criteria (pub. 30 Nov 2016)

<https://www.fitchratings.com/site/re/890402>

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