STANDARD & POOR'S RATINGS SERVICES
McGRAW HILL FINANCIAL

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Summary:

San Diego, California; Water/Sewer

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Table Of Contents

Rationale

Outlook

Related Criteria And Research

Summary:

San Diego, California; Water/Sewer

Credit Profile		
US$401.485 mil swr bnds dtd 03/16/2016 due 05/15/2039		
Long Term Rating	AA+/Stable	New
San Diego senior swr rev rfdg bnds ser 2015 due 05/15/2025		
Long Term Rating	AA+/Stable	Upgraded
San Diego Pub Facs Fincg Auth, California		
San Diego, California		
San Diego Pub Facs Fincg Auth (San Diego) WTRSWR		
Long Term Rating	AA+/Stable	Upgraded

Rationale

Standard & Poor's Ratings Services raised its ratings to 'AA+' from 'AA' on San Diego, Calif.'s existing senior sewer revenue bonds, all of which was issued by the San Diego Public Facilities Financing Authority. At the same time, Standard & Poor's assigned its 'AA+' long-term rating to San Diego's approximately $401.48 million series 2016A senior sewer revenue refunding bonds. All debt was issued on behalf of the city's wastewater system. The outlook is stable.

The raised rating reflects the application of our revised criteria, "Rating Methodology And Assumptions For U.S. Municipal Waterworks And Sanitary Sewer Utility Revenue Bonds," published Jan. 19, 2016, on RatingsDirect. In particular, the raised rating reflects our view of the city's very good transparency and disclosure, prudent formally adopted financial and operating policies, and strong market access. The rating is further derived, in our opinion, from the combination of an extremely strong enterprise risk profile and a very strong financial risk profile.

While regulatory issues related to secondary treatment requirements at its largest treatment plant remain, we believe the system is proactively managing these challenges and has other noteworthy strengths, such that the overall system credit quality is commensurate with other 'AA+' rated large wastewater systems.

We understand that the series 2016A bonds are being issued to refinance the authority's existing series 2009AB and 2010A bonds for annual debt service savings.

The bonds are secured by installment payments to be made by the system to the authority, which consist of pledged net revenue of the city's wastewater system. The series 2016A bonds will not have a reserve fund.A rate covenant requires the city to generate system net revenue that provides at least 1.2x debt service coverage (DSC). Rate stabilization fund withdrawals can be included in this calculation. As of Dec. 31, 2015, the city had $1.07 billion in senior-lien debt outstanding (including senior bonds and senior state revolving fund, or SRF, loans) and $42 million in subordinate-lien SRF loans.

Enterprise risk

Our assessment of the system's enterprise risk profile as extremely strong reflects our view of the system's ample capacity for average and peak demand, stable and predictable revenue from the municipal collection service, comprehensive asset management practices, and a good operational management framework.

San Diego (population: 1.4 million) anchors the large and diverse San Diego County economy. The regional economy consists of various high-tech clusters, including biotech and telecommunications, combined with concentration in the tourism, military, and defense industries. Its economic base is also anchored by higher education and major scientific research institutions, including the University of California-San Diego, San Diego State University, Scripps Research Institute, the Salk Institute for Biological Studies, and the San Diego Supercomputer Center. The U.S. Navy and U.S. Marine Corps also have a significant presence in the region. We consider the city's median household effective buying income to be strong, at 114% of the national average in 2014.

The city's wastewater system comprises a local collection system (the municipal sub-system) and a regional treatment system (the metropolitan sub-system). The collection system provides sewage collection to customers within San Diego. The regional treatment system provides treatment and disposal services within the city and on a wholesale basis to 12 nearby cities and districts. The participating agencies are the cities of Chula Vista, Coronado, Del Mar, El Cajon, Imperial Beach, La Mesa, National City, and Poway; the East Otay Sewer Maintenance District; Lemon Grove Sanitation District; the Padre Dam Municipal Water District; and the Spring Valley Sanitation District. Under the disposal agreement, each participating agency pays San Diego its proportionate operating and capital costs associated with the system, based on wastewater flows and strength. Each agency also makes annual contributions toward the 1.2x DSC requirement and a 45-day operating reserve, which we believe is additional credit strength. Each participating agency maintains its own collection system. In fiscal 2015, wholesale sewer service charges represented about 17% of total operating revenue.

The system's principal treatment facility is the 240 million gallon per day (mgd) Point Loma Plant, which provides advanced primary treatment before discharge through an ocean outfall. In fiscal 2015, total flows were 158 mgd. Presently, the Point Loma Plant is capable of removing 85% to 92% of total suspended solids. The system's two smaller plants are the 30 mgd North City Water Reclamation Plant and the 15 mgd South Bay Water Reclamation Plant. Both can treat wastewater to a tertiary level for recycling.

We believe the sewer system has a strong market position based on a natural monopoly in its service area and affordable service rates that provide management with revenue-raising flexibility. The rate structure includes several fixed components as well as variable components that are based on a customer's average winter water usage. For a residential customer that uses 1,000 cubic feet of water per month, we calculate a monthly-equivalent charge of $51.31. We consider this rate to be affordable in the context of the service area's strong income levels based on the annual bill representing about 1.1% of the city's median household effective buying income. We understand that management is currently working with a rate consultant on an updated cost-of-service study to form the basis for additional rate increases. The city does not anticipate a rate increase through fiscal 2020.

Based on our operational management assessment, we view the city to be a '2' on a six-point scale, where '1' is the strongest. Our assessment reflects the city's long-range water resources planning, progress in reducing treated

wastewater flows to the ocean, including addressing Point Loma Permit renewals and regulatory issues related to secondary treatment requirements at its largest wastewater treatment plant, and oversight of comprehensive water conservation and non-potable recycled water programs. The sewer collection system has adequate capacity for average and peak demand. The city prepares a 10-year internal wastewater system capital improvement program and funding plan in connection with the consideration of longer-term projects. Rates are reviewed and adjusted regularly and management has regularly engaged external consultants to perform in-depth rate analyses. Financial planning and operational information is relatively easy to obtain, as the city's budget, financial statements, and rate studies are readily available on its website.

The city has received a waiver from the U.S. Environmental Protection Agency (EPA) allowing it to avoid secondary treatment, as required by the Clean Water Act, subject to certain operating conditions. The latest waiver or modified permit became effective on Aug. 1, 2010 and expired on July 31, 2015. The city submitted its third waiver renewal application in January 2015 and the existing permit has been administratively extended, pending a decision by the regulatory agencies. The city engaged various consultants to explore whether sufficient wastewater could be offloaded from the Point Loma Plant to make its effluent equivalent to what would be realized through secondary treatment. The diverted sewage would then go through advanced water treatment to create potable water. This concept is now known as the Pure Water program, and management believes this program will allow for continued approval of waiver applications. Under the program, the city plans to offload a total of 83 mgd from Point Loma by 2035, including 15 mgd by 2023 and 30 mgd by 2027. The city has already successfully demonstrated a pilot study of the project for 1 mgd. Pure Water program costs will be shared between the city's water and wastewater systems; the total cost is approximately $3.0 billion through 2035, with $1.8 billion related to the wastewater fund.

Capital costs for the next five years total $92 million for the Pure Water program. Once the Pure Water program is fully implemented, total associated annual operations and maintenance costs are estimated at $124 million at full capacity, with about $28 million related to the sewer system. Annual operating costs as of fiscal 2014 totaled $211 million. The Pure Water program will also benefit the city's water system by reducing its reliance on the San Diego County Water Authority for supplies, especially given the exposure to droughts. In our view, rates would likely have to increase substantially if the city is required to implement secondary treatment at the Point Loma plant, but will likely increase regardless with the pending implementation of the Pure Water Program.

Financial risk

Our assessment of the system's financial risk profile as very strong reflects the robust all-in coverage that we believe will be sustainable going forward, strong liquidity position, moderately low leverage, and a good financial management framework.

The sewer system's financial position continues to be stable and consistent, despite a 4% reduction in system flows in fiscal 2015 and a 3% reduction in fiscal 2014 from the prior year. The sewer system posted senior lien DSC of about 1.8x between 2012 and 2015, and all-in DSC of 1.7x during this period. Based on management's forecast, assuming no additional leverage is utilized until fiscal 2020, we anticipate that operating revenue DSC will remain about 1.6x through 2020.

The system has maintained a strong liquidity position, in our view. As of June 30, 2015, unrestricted cash and

investments totaled $427 million, representing a robust 799 days of operating expenses on hand. This is down slightly from 816 days as of June 30, 2014. According to the city's forecast, total liquidity will remain at no less than 473 days of operations through 2020, which we view to be a credit strength. The city has several reserve designations, including a minimum 70-day operating reserve and a 5% rate stabilization fund.

We view the system's leverage position as moderately low, with debt to capitalization of 32% as of June 30, 2015. During the next five fiscal years, the capital improvement program (CIP) totals $574 million, including $92 million for the Pure Water program, and is manageable in our opinion, as 56% will be funded with cash on a pay-as-you-go basis, 28% with additional bonds and state revolving fund loans, and the remainder from grants and capacity fees. Other projects in the CIP include pipeline replacements and additional funding planned for treatment plant improvements and trunk sewer. The city maintains a detailed formal debt management policy that we view as fairly comprehensive.

Outlook

The stable outlook reflects our anticipation that the system will maintain at least good DSC not materially below forecasts and a very strong liquidity position during the two-year outlook period.

Upside scenario

We could take a positive rating action if median household incomes in the city and DSC improved materially over the next two years. However, given the uncertainty regarding the Point Loma waiver and potential future large capital expenses, we do not anticipate raising the rating over the outlook period.

Downside scenario

If the city is required to implement capital improvements well above forecasts and does not adjust rates to maintain stable financial metrics, we could lower the rating.

Related Criteria And Research

Related Criteria

- USPF Criteria: Rating Methodology And Assumptions For U.S. Municipal Waterworks And Sanitary Sewer Utility Revenue Bonds, Jan. 19, 2016
- USPF Criteria: Methodology: Definitions And Related Analytic Practices For Covenant And Payment Provisions In U.S. Public Finance Revenue Obligations, Nov. 29, 2011
- USPF Criteria: Assigning Issue Credit Ratings Of Operating Entities, May 20, 2015
- Criteria: Use of CreditWatch And Outlooks, Sept. 14, 2009

Ratings Detail (As Of February 24, 2016)

San Diego Pub Facs Fincg Auth, California		
San Diego, California		
San Diego Pub Facs Fincg Auth (San Diego) WTRSWR		
Long Term Rating	AA+/Stable	Upgraded
San Diego Pub Facs Fincg Auth (San Diego) WTRSWR		
Long Term Rating	AA+/Stable	Upgraded

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