

**CITY OF SAN DIEGO**  
**REPORT OF RATING CHANGES**

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**PUBLIC FACILITIES FINANCING AUTHORITY**  
**OF THE CITY OF SAN DIEGO, CALIFORNIA (Base CUSIP: 79730A)**

**\$453,775,000 Senior Sewer Revenue Bonds, Series 2009A** (Payable Solely from  
Installment Payments Secured by Wastewater System Net Revenues)

**\$634,940,000 Senior Sewer Revenue Refunding Bonds, Series 2009B** (Payable Solely  
from Installment Payments Secured by Wastewater System Net Revenues)

**\$161,930,000 Senior Sewer Revenue Refunding Bonds, Series 2010A** (Payable Solely  
from Installment Payments Secured by Wastewater System Net Revenues)

NOTICE IS HEREBY GIVEN that on August 17, 2015, Standard & Poor's Rating Services (S&P) raised its long-term rating on the City of San Diego's Senior Sewer Revenue Bonds to "AA" from "AA-". The outlook on the rating is stable.

This is not a recommendation to buy, sell or hold any City indebtedness. Generally, a rating agency bases its ratings on the information and materials furnished to it and on investigations, studies and assumptions of its own. There is no assurance that such ratings will continue for any given period or that such ratings will not be revised downward or withdrawn entirely provided, if in the view of such rating agency, circumstances warrant. Any such downward revision or withdrawal of such ratings may have an adverse effect on the market price or marketability of the City's obligations identified above.

DATED: August 24, 2015

CITY OF SAN DIEGO

By: \_\_\_\_\_

Mary Lewis

Chief Financial Officer

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## Summary:

# San Diego Public Facilities Financing Authority San Diego; Water/Sewer

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**Summary:**

# San Diego Public Facilities Financing Authority

## San Diego; Water/Sewer

### Credit Profile

US\$258.0 mil senior swr rev rfdg bnds ser 2015 due 05/15/2025		
<i>Long Term Rating</i>	AA/Stable	New
<b>San Diego Pub Facs Fincg Auth, California</b>		
San Diego, California		
San Diego Pub Facs Fincg Auth (San Diego) senior swr rev rfdg bnds ser 2009B		
<i>Long Term Rating</i>	AA/Stable	Upgraded
San Diego Pub Facs Fincg Auth (San Diego) senior swr rev rfdg bnds (San Diego) ser 2010A dtd 04/29/2010 due 05/15/2024-2029		
<i>Long Term Rating</i>	AA/Stable	Upgraded
San Diego Pub Facs Fincg Auth (San Diego) sr swr rev bnds ser 2009A		
<i>Long Term Rating</i>	AA/Stable	Upgraded

### Rationale

Standard & Poor's Ratings Services raised its long-term rating to 'AA' from 'AA-' on the San Diego Public Facilities Financing Authority's senior sewer revenue bonds. At the same time, we assigned our 'AA' long-term rating to the authority's \$258 million series 2015 senior sewer revenue refunding bonds. All debt was issued on behalf of San Diego's wastewater system. The outlook is stable.

The rating action is based on our view of the wastewater system's continued strong total debt service coverage (DSC), very strong liquidity position, and continued progress in addressing regulatory issues related to secondary treatment requirements at its largest treatment plant. Although we note that all-in DSC is projected to decline slightly to an annual average of about 1.4x through 2020 from near 1.6x in unaudited fiscal 2015, and although challenges remain, we believe the system is managing challenges and has other noteworthy strengths, such that the overall system credit quality is commensurate with other 'AA' rated large wastewater systems nationally.

The rating further reflects our view of the system's:

- Very strong liquidity position of \$451 million, or 816 days of operating expenses on hand, as of audited fiscal 2014, the highest level since at least fiscal 2009, and projected at no less than 495 days through fiscal 2020;
- Strong all-in DSC of 1.69x and senior DSC of 1.79x in fiscal 2014, estimated at 1.73x and 1.64x, respectively, in unaudited fiscal 2015;
- Strong management team, with prudent financial policies and practices;
- Large and diverse local customer base of 1.4 million residents, or 2.2 million when including its 12 regional wholesale treatment participating agencies;
- Strong income levels, with city median household effective buying income (EBI) 14% above the national average;

and

- Financial flexibility given competitive rates near \$51 per month and no base rate increases planned for the next five years, although this could result in thinner DSC over the next five years by about 20 basis points to near 1.4x.

Partly offsetting the above strengths, in our opinion, are the system's:

- Rising operating costs that management projects will outpace revenue growth by a gross 16% versus 6% over the next five years, although management forecasts debt service to increase only a slight 7%;
- Moderately large five-year capital plan totaling \$489 million, although management projects just one-third is projected to be debt financed;
- Uncertainty with regard to wastewater flows given the ongoing drought and mandatory conservation, with per capita flows projected to dip 5% in fiscal 2016 but likely to grow in the medium-to-long term given continued population growth in the service territory; and
- Potentially very large future capital needs if the city is required to implement secondary treatment at its largest treatment facility under future discharge permits, although we now view this as unlikely given various steps made to address regulatory concerns and historical experience.

The bonds are secured by installment payments to be made by the city to the authority, which consist of pledged net revenue of the city's wastewater system. The bonds also have a reserve, funded at the least of 10% of proceeds, 125% of average annual debt service, and maximum annual debt service, although, given various amendments to the indenture, the city anticipates that the reserve requirement will be reduced. A rate covenant requires the city to generate system net revenue that provide at least 1.2x DSC. Rate stabilization fund withdrawals can be included in this calculation. As of June 30, 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.

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 EBI to be strong, at 114% of the national average in 2014. The city's unemployment rate as of June 2015 was a low 4.7% versus the state's 6.2%.

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 Otay Water 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 an additional credit strength. Each participating agency maintains its own collection system. In fiscal 2014, wholesale sewer service

charges represented about 19% of total operating revenue. Participating agencies have ample treatment capacity in the system; no agency's flow is more than 77% of its individual capacity rights as of fiscal 2014, with overall flow at 61% of capacity rights, including San Diego's flow.

The regional treatment system comprises three treatment plants, two ocean outfalls, a biosolids handling center, four pump stations, force mains, and gravity flow interceptors. Combined treatment capacity for the three plants is 255 million gallons per day (mgd), with average daily and peak flow in fiscal 2014 of 155 mgd and 203 mgd, respectively. Peak wet weather flow is 432 mgd. Although the city's North City and South Bay plants provide secondary and tertiary treatment levels, they make up only a small portion of the system's total capacity (18%). Given required mandatory 16% water conservation related to the ongoing drought, the city is forecasting per capita flows to decline 5% in fiscal 2016 and per capita flows to decline an additional 5% in fiscal years 2017 to 2026, but projects that overall flows will increase slightly as a result of continued population growth within the county. Average flow for 2014 of 164 mgd is down 30 mgd, or 15%, from the 2005 level, largely because of conservation but also because of the impact of the recent recession, which decelerated growth.

The system's principal treatment facility and backbone of the system is the 240 mgd Point Loma Plant, with average daily flow in fiscal 2014 of 141 mgd (91% of average daily flow). The plant provides advanced primary treatment before discharge through an ocean outfall. 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. Since its initial modified permit approval in 1995, the Point Loma Plant has been in compliance with regulatory requirements or other requirements for modified permits. Given historical experience and the city's high level of compliance with the Clean Water Act, the city anticipates receiving approval of a new modified permit by the end of 2016. Nonetheless, permits are still subject to a regulatory approval process every five years. And if the city is required to enhance treatment under future permits (such as if its waiver is denied), the capital costs will likely be substantial at an estimated \$2.1 billion through fiscal 2050, with costs measuring \$1.8 billion by fiscal 2030 (and incremental annual operating costs of \$39 million, or nearly 20%). According to management, this is an unlikely scenario.

Wastewater charges are included on the same bill as water and stormwater. The city can shut off water for prolonged delinquencies. A residential customer pays a base rate plus a flow rate based on winter water use. A residential customer with 1,000 cubic feet of water use would pay about \$51 per month. Rates were last raised in 2010, when the city completed four consecutive years of 7% to 9% increases. The city commissions cost-of-service studies regularly, which detail ongoing costs and capital needs over the next several years. The city anticipates completing the next study in 2016, but anticipates no base rate increases to result through at least 2020. In our view, rate increases could be needed in the future to maintain stable financial metrics, especially if the drought continues and/or if mandatory conservation increases. 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.

The system's financial performance has been strong during the past three years. In fiscal 2014, operating revenue totaled \$365 million, up 0.8%. Operating expenses including operating transfers were up 2.8% in fiscal 2014, totaling \$211 million. Net revenue including net operating income and nonoperating revenue totaled \$185 million in fiscal 2014, providing senior-lien DSC of 1.79x and total DSC of 1.69x, per our calculations. This is up from 1.75x and 1.66x, respectively, in fiscal 2013. Unaudited fiscal 2015 results indicate senior-lien and total DSC of 1.73x and 1.64x, respectively. According to the city's five-year financial forecast through 2020, senior-lien and total DSC are projected to average 1.50x and 1.42x, respectively, as a result of the lack of rate increases, relatively unchanged flow volumes, and increasing operating expenses. Although these coverage levels are lower, we still view them as good.

The system has maintained a strong liquidity position, in our view. As of June 30, 2014 -- the latest date for which audited figures are available -- unrestricted cash and investments totaled \$451 million, representing about 816 days of operating expenses on hand. This is up from 783 days as of June 30, 2013. According to the city's forecast, total liquidity will remain at no less than 473 days of operations through 2020. The city has several reserve designations, including a minimum 70-day operating reserve and a 5% rate stabilization fund.

According to the city's capital improvement plan, the city is planning \$489 million in capital projects in fiscal years 2016 to 2020, with 33% of funding from debt. The plan is largely focused on pipeline replacements and the Pure Water program, with additional funding planned for treatment plant improvements and trunk sewer. The city had been rehabilitating pipeline under a court-approved consent decree executed with the Environmental Protection Agency in 2007. We understand that the city is in compliance with the consent decree and has fulfilled all requirements; on Aug. 4, 2015, the consent decree was terminated by all parties. The city anticipates annual SRF program borrowings over the next five years but no additional senior-lien revenue debt until fiscal 2020, when \$39 million is programmed. Total system debt to plant as of fiscal 2014 was a moderately low 38%. The city maintains a detailed formal debt management policy that we view as fairly comprehensive.

## **Pure Water Program**

The latest Point Loma Plant permit and waiver that expired in July 2015 required that the city do a study on a recycled water program. 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. 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.

## 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. 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. Given the uncertainty of future large capital expense, the drought, and the anticipation of rising costs without commensurate revenue increases, we do not anticipate raising the rating during the next two years.

## Related Criteria And Research

### Related Criteria

- USPF Criteria: Key Water And Sewer Utility Credit Ratio Ranges, Sept. 15, 2008
- USPF Criteria: Standard & Poor's Revises Criteria For Rating Water, Sewer, And Drainage Utility Revenue Bonds, Sept. 15, 2008
- 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

### Related Research

- U.S. State And Local Government Credit Conditions Forecast, July 22, 2015
- U.S. Municipal Water And Sewer Utilities 2014 Sector Outlook: Learning To Do More With Less, Jan. 9, 2014
- 2014 Review Of U.S. Municipal Water And Sewer Ratings: How They Correlate With Key Economic And Financial Ratios, May 12, 2014

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