

San Diego County Water Authority, California

New Issue Summary

Sale Date: On or around July 15.

Series: \$214.2 million water revenue refunding bonds, series 2020A and \$120.7 million water revenue refunding bonds, series 2021A (green bonds).

Purpose: Series 2020A&B bond proceeds will be used to refund certain outstanding series 2013A bonds while series 2021A&B will refund series 2011A&B bonds.

Security: The water revenue bonds and COPs are payable from the authority's water system net revenues. The series 2016S-1 bonds are on parity with the CP program and ECP notes, and have a subordinate lien on net revenues.

The 'AA+' IDR and issue ratings reflect the SDCWA's 'aa' category net leverage in the framework of strong revenue defensibility and low operating risks, both assessed at 'aa'. The SDCWA benefits from very strong purchaser credit quality, unconditional water purchase contracts allowing for full reallocation of costs, and independent rate raising ability. The large and diverse service area includes nearly all of San Diego County (IDR AAA/Stable).

In addition, operating costs are low and the lifecycle ratio is moderate with adequate capital investment. Net leverage (defined as net adjusted debt to funds available for debt service [FADS]) is on the high end of the 'aa' category at over 9.0x primarily because of significant historical capital investment to diversify water supplies. However, given that SDCWA is through the peak of its capital program Fitch expects net leverage will trend downward to levels commensurate with the rating. Preservation of the existing ratings will be highly dependent on net leverage declining to around or below 8.0x over the next few years with expected continuing deleveraging thereafter.

Coronavirus Considerations

The ongoing coronavirus outbreak and related government containment measures worldwide create an uncertain global environment for the water and sewer sector. To date, SDCWA reports no material impact to its revenues or operations as a result of the virus. Fitch's ratings are forward-looking in nature; as such, Fitch will monitor developments in the sector as a result of the outbreak as they relate to severity and duration and incorporate revised expectations for future performance and assessment of key risks as needed.

Key Rating Drivers

Revenue Defensibility: 'aa'; Unconditional Contracts; Very Strong Purchaser Credit Quality : SDCWA's purchaser credit quality is very strong, with its largest member the City of San Diego's water system representing about 38% of revenues. Contracts are unconditional and allow for full cost recovery with the board of directors maintaining independent rate raising ability.

Operating Risks: 'aa'; Low Cost Burden; Manageable Capital Needs: The cost of water production is low at about \$3,300 per million gallons (mg). MWD rates continue to increase, but this is somewhat mitigated by both the overall diversification in water supplies as well as the ability to reduce water purchases in conjunction with demand reductions. The system has completed the peak of its large supply diversification efforts, thus its life-cycle ratio is moderate and capital investment is adequate.

Financial Profile: 'aa'; Net Leverage to Gradually Decline: Net leverage in the 9.0x range is considered high for the rating. However, given that SDCWA is through its significant capital program, net leverage is expected to trend downward to more moderate levels over time.

Ratings

Long Term Issuer Default Rating AA+

New Issue

\$262,695,000 Water Revenue Refunding Bonds, Series 2020A AA+

\$121,830,000 Water Revenue Refunding Bonds, Series 2021A (Green Bonds) AA+

Outstanding Debt

San Diego County Water Authority (CA) Water Revenue Certificates of Participation AA+

San Diego County Water Authority (CA) Financing Agency Water Revenue Bonds AA+

San Diego County Water Authority (CA) Water Revenue Bonds AA+

San Diego County Water Authority (CA) Subordinated Lien Water Revenue Refunding Bonds^a AA+

San Diego County Water Authority (CA) Extendible CP Notes F1+

^aUpgraded from 'AA' on June 24, 2020.

Rating Outlook

Stable

Applicable Criteria

Public Sector, Revenue-Supported Entities Rating Criteria (March 2020)

U.S. Water and Sewer Rating Criteria (April 2020)

Related Research

Fitch Rates San Diego County Water Auth. CA Water Revs 'AA+'; Outlook Stable (June 2020)

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Coverage of full obligations (COFO) and days cash on hand are both considered adequate and are neutral to the rating.

Rating Sensitivities

Factors that could, individually or collectively, lead to positive rating action/upgrade:

- A reduction in net leverage to below 5.0x due to an increase in financial margins or decrease in debt.

Factors that could, individually or collectively, lead to negative rating action/downgrade:

- Failure to reduce net leverage to at or below the 8.0x range by fiscal 2022 followed by continued lower trajectory thereafter.
- Addition of significant new capital projects that materially increase leverage.
- A significant decline in purchaser credit quality.

Credit Profile

SDCWA provides wholesale water service to an estimated population of 3.3 million. It sells water to 24 member agencies that provide retail service to the region. The largest member, the City of San Diego, represents about 42% of the total population of the SDCWA's service area. Water sales have varied significantly over the years due to mandatory state-wide conservation related to the five-year drought that ended in 2016 and the resulting 'new normal' levels of water consumption, as well as variable weather conditions.

A majority of SDCWA's water supply is imported, including 35% from the Colorado River via imports from the Imperial Irrigation District (IID), 15% via the all American & Coachella Canal linings, and 11% from the Metropolitan Water District of Southern California (MWD). In addition, 10% is generated by the Carlsbad desalination plant. Local supplies include recycled water, groundwater and local surface water.

In an effort to reduce its reliance on imported water from MWD, SDCWA has pursued water supply investment and diversification over the last 25 years. Following the drought in California in the late 1980s, SDCWA's governing board laid out a plan to improve water supply diversification and reduce risk related to a sole supplier (at the time MWD accounted for 95% of SDCWA's water supply). As a result, SDCWA now has water supply sources that include purchases of Colorado River water via IID resulting from a Quantification Settlement Agreement (QSA) for up to 75 years and via the All-American and Coachella canal lining projects for 110 years. Supply sources also include recycled water and conservation programs, increased local storage capacity and desalination. Significant investments in supply diversification have allowed SDCWA to continue to meet water demands in its service area but have also resulted in increases in water rates and leverage. SDCWA projects that MWD water as a proportion of its total supply will decrease from 11% to 2% by 2035 given a projected increase in potable reuse and desalinated water, as well as the IID transfers.

Revenue Defensibility

SDCWA's customers have strong purchaser credit quality, scoring a '1' on the purchaser credit index (a weighted average score of purchaser credit quality relative to proportion of sales based on credit ratings). The largest member, the City of San Diego water system (AA-/Stable), accounts for 38% of revenues. Other customers representing between 3% and 10% of revenues include Otay Water District, Helix Water District (AA+/Stable), City of Oceanside water system, Carlsbad Municipal Water District, Vallecitos Water District (AA+/Stable), Valley Center Municipal Water District, Olivenhain Municipal Water District (AAA/Stable), Rainbow Municipal Water District, and the City of Escondido water system (AA-/Stable). The remaining 19% of revenues are generated by Vista Irrigation District, Padre Dam Municipal Water District (AA+/Stable); City of Poway water system, and Fallbrook Public Utility District, among others.

The SDCWA's contracts with its members are unconditional take-and-pay agreements with full cost recovery, i.e. the SDCWA can reallocate costs among the members in the event of a failure to pay of one or more members. It has independent rate setting authority with water

Rating History (IDR)

Rating	Action	Outlook/Watch	Date
AA+	Assigned	Stable	6/24/20

Rating History (Senior Lien)

Rating	Action	Outlook/Watch	Date
AA+	Affirmed	Stable	6/24/20
AA+	Revised	Stable	4/30/10
AA	Upgraded	Stable	9/10/04
AA-	Assigned	Stable	9/02/92

Rating History (Subordinate Lien)

Rating	Action	Outlook/Watch	Date
AA+	Upgraded	Stable	6/24/20
AA	Assigned	Stable	7/01/11

rates established by the board of directors. The board is made up of 36 members with each member agency having at least one voting representative. SDCWA bills its members for water deliveries by the tenth business day of every month for water purchased during the prior month. Rates include fixed storage, customer service, and supply reliability charges and variable transportation, treatment, and supply rates. After a series of double-digit rate increases about a decade ago to support the debt associated with the supply diversification program, water rates have increased more moderately in recent years. Untreated water rates increased 2.9% and 48%, respectively, in calendar years 2019 and 2020. Rates are expected to increase 4.8% in 2021.

Approximately 2% of total revenues are generated by SDCWA's portion of the 1% ad valorem property tax levied and collected by the county. Other non-operating revenues include infrastructure access charges (IACs) comprising about 5.0% of total revenues and the Build America Bonds subsidy on the SDCWA's series 2010B bonds accounting for about 1.5%. IACs are fixed charges adjusted annually and levied on each member based on the number and size of retail water meters within the agencies and the SDCWA's service area.

The contracts between the CWA and its members are generally unconditional take and pay contracts, under which member agencies are not contractually or otherwise required to order and pay for any set amounts of water from the Water Authority apart from certain charges. However, the Carlsbad Municipal Water District and Vallecitos Water District have entered into contracts with the Water Authority to purchase 2,500 and 3,500 acre-feet per year, respectively, of treated water from the Claude "Bud" Lewis Carlsbad Desalination Plant. The CWA does not have the unlimited ability to reallocate costs among its members.

Two of the CWA's members, Rainbow Municipal Water District and Fallbrook Public Utilities District, accounting for 3.9% and 2.1% of revenues, respectively, or a total of \$35 million, have begun the process of separating from the Authority. If the separation eventually occurs, the authority estimates the negative net financial impact at about \$13 million. Rates could be increased on the remaining members to make up for the loss.

No asymmetric rating factor considerations affect the revenue defensibility assessment.

Operating Risk

SDCWA's operating risks are low and include a very low, but increasing, operating cost burden as well as moderate lifecycle investment needs that are supported by adequate capital investment. The operating cost burden, measured as total operating costs (including an adjustment for SDCWA's portion of capital related expenses associated with purchased water) relative to water production, is low at \$3,303 per mg at fiscal year-end 2019. This metric has increased each of the last four years as spending has increased and water production has been on a downward trend. Given expected flat to declining water sales and rising imported water costs, the operating cost burden is likely to increase at a gradual pace, but should remain well under Fitch's \$6,500 per mg threshold for the 'aa' subfactor assessment.

The largest cost to SDCWA is imported water. This includes the IID transfers, desalination, and MWD costs. IID water rates are set to increase based on inflationary factors through 2034, while MWD water rates are set biannually and are currently expected to increase moderately over the next several years. This exposure is somewhat mitigated as the authority recovers its share of the MWD readiness-to-serve and capacity charges through a direct pass through to members. The combined rates (including the supply rate, system access rate, system power rate, water stewardship rate, and treatment surcharge) for untreated and treated Tier 1 MWD water were \$755 per acre-foot (AF) and \$1,078 per AF, respectively, as of Jan. 1, 2020. While MWD rate increases were already adopted for calendar years 2021 and 2022, MWD has indicated it may revisit them in light of the coronavirus impacts.

As noted, SDCWA also purchases untreated IID water at a cost of \$1,154 per AF including the MWD wheeling charge. Under a 2009 agreement with IID, the price per AF for IID water through 2034 (not including the MWD wheeling charge), is based on the annual increase in the gross domestic product implicit price deflator. In 2019, the combined supply price paid to IID for QSA water transfers and canal lining water was \$667 per AF for 190,000 AF of water. In 2020, SDCWA will receive an additional 2,500 AF of early transfer water charged at a

different rate (\$211 per AF). Starting in 2035, the SDCWA or IID can choose a market rate price through a formula contained in the Water Transfer Agreement. MWD's wheeling rate for calendar 2020 is \$482 per AF.

Desalinated water is produced by Carlsbad under a 30 -year agreement with Poseidon. The minimum annual purchase commitment is 48,000 AF per year (AFY) and maximum is 56,000 AFY. The price for this water source is approximately \$2,800 per AF including debt service on plant and pipeline bonds used to fund related facilities.

As noted, water sales have varied year-to-year, but the general trend over the last decade has been downward due to conservation-related declines, particularly as a result of a severe state wide drought that ended in 2016 and which has significantly impacted ongoing usage patterns thereafter. The peak sales in 2008 of 619,000 AF declined to 374,000 AF in fiscal 2019. SDCWA has conservatively forecasted even lower sales over the next three years in the range of 344,000-355,000 AF.

SDCWA is in a downward phase of its capital cycle after having completed a variety of significant water diversification projects over the last couple of decades. Management is working on an update to its five-year capital improvement plan (CIP), the most recent of which estimates \$322 million in spending for fiscal 2019 -2023 with annual spending around \$65 million and \$120 million of additional debt. The focus of the CIP is on asset management and SDCWA is planning to complete several studies, including the Urban Water Management Plan and Water Facilities Master Plan, by 2023 to identify infrastructure needs.

The peak of the capital cycle was reached in 2007 with annual spending of \$290 million. Significant projects completed over the last decade include the San Vicente Dam Raise, which increased regional capacity of emergency and carryover storage by 157,000 AF, and the Carlsbad Desalination Project. The Carlsbad facility is in the process of transitioning from an original water intake associated with a facility that stopped generating in 2018 to a standalone intake by the end of 2023. The plant operator, Poseidon Resources (BBB/Stable), is responsible for the construction of the new intake and discharge facilities, with SDCWA financing some improvements. Poseidon will pass along capital and operating costs associated with the facilities through water price adjustments to SDCWA subject to certain price increase caps.

No asymmetric rating factor considerations affect the operating risks assessment.

Asymmetric Additional Risk Considerations

No asymmetric additive risk considerations affect this rating determination.

ESG Considerations

The highest level of ESG credit relevance, if present, is a score of 3. This means ESG issues are credit-neutral or have only a minimal credit impact on the entity, either due to their nature or to the way in which they are being managed by the entity. For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/esg.

Financial Summary

(\$000, Audited Years Ended June 30)	2015	2016	2017	2018	2019
Operating Risks					
Operating Cost Burden					
Operating Cost Burden (\$/mg)	2,339	2,765	2,809	3,137	3,303
Capital Planning and Management					
Life Cycle Ratio (%)	15	14	16	18	19
CapEx / Depreciation (%)	161	91	150	98	131
5-Year Average Capital Expenditures / Depreciation (%)	242	184	164	137	126
Financial Profile (\$000)					
Current Unrestricted Cash / Investments	111,130	75,807	56,840	104,682	118,300
Current Restricted Cash / Invest (Available Liquidity)	–	–	–	–	–
Current Cash Available	111,130	75,807	56,840	104,682	118,300
Noncurrent Unrestricted Cash / Investments	–	–	–	–	–
Noncurrent Restricted Cash / Invest (Available Liquidity)	115,405	125,313	135,073	107,746	118,941
Available Cash	226,536	201,120	191,913	212,428	237,241
Current Restricted Cash / Invest (Debt Service or Debt Service Reserve)	114	158	235	–	–
Noncurrent Restricted Cash / Invest (Debt Service or Debt Service Reserve)	–	–	–	22,666	22,038
Funds Restricted for Debt Service	114	158	235	22,666	22,038
Total Debt	2,312,367	2,480,555	2,441,512	2,371,574	2,303,670
Capitalized Fixed Charges	1,007,043	948,452	1,054,874	1,083,804	1,102,952
Adjusted Net Pension Liability	n/a	n/a	125,326	111,256	102,185
Available Cash	226,536	201,120	191,913	212,428	237,241
Funds Restricted for Debt Service	114	158	235	22,666	22,038
Net Adjusted Debt	3,092,761	3,227,728	3,429,564	3,331,541	3,249,528
Total Operating Revs	588,740	528,175	582,784	595,863	584,171
Purchased Water / Sewer Services	411,038	387,123	430,561	442,369	450,184
Other Operating Expenses	44,897	41,123	42,626	50,314	47,386
EBITDA	132,805	99,928	109,598	103,179	86,601
Investment Income/(Loss)	2,906	5,985	2,238	4,342	13,755
Non-Operating Revenues from Taxes	11,476	12,067	12,913	13,754	14,666
Other Cash Revenues/(Expenses)	27,445	35,212	26,335	1,867	31,870
BAB Subsidy	10,476	10,544	10,527	10,546	10,587
Capital Contributions	36,651	27,719	29,796	38,585	32,141
FADS	221,759	191,455	191,407	172,274	189,620
Fixed Services Expense	143,863	135,493	150,696	154,829	157,565
Net Transfers In/(Out)	–	–	–	–	–
Pension Expense	n/a	n/a	7,014	10,932	8,102
Adjusted FADS	365,622	326,948	349,117	338,035	355,287
Net Adjusted Debt to Adjusted FADS (x)	8.5	9.9	9.8	9.9	9.2
FADS	221,759	191,455	191,407	172,274	189,620
Fixed Services Expense	143,863	135,493	150,696	154,829	157,565

Financial Summary

(\$000, Audited Years Ended June 30)	2015	2016	2017	2018	2019
Net Transfers In/(Out)	-	-	-	-	-
Adjusted FADS for COFO	365,622	326,948	342,103	327,103	347,185
Total Annual Debt Service (automatic calculation)	146,984	139,125	158,537	160,634	158,435
Fixed Services Expense	143,863	135,493	150,696	154,829	157,565
Adjusted Debt Service (including fixed services expense)	290,847	274,618	309,234	315,463	315,999
Coverage of Full Obligations (COFO) (x)	1.26	1.19	1.11	1.04	1.10
COFO exc. connection Fees (x)	1.13	1.09	1.01	0.91	1.00
Current Days Cash on Hand	89	65	44	78	87
Liquidity Cushion Ratio (days)	89	65	44	78	87
All-in DSC (x)	1.51	1.38	1.21	1.07	1.20

Notes: Fitch may have reclassified certain financial statement items for analytical purposes. N.A. - Not Available.
Sources: Fitch Ratings, Fitch Solutions, San Diego County Water Authority (CA)

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