S&P Global
Ratings

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Summary:

California Department of Water Resources; Water/Sewer

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Summary:

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Credit Profile		
US$301.485 mil central vy proj wtr sys rev bonds ser BA due 12/01/2035		
Long Term Rating	AAA/Stable	New

Rationale

S&P Global Ratings assigned its 'AAA' long-term to the California Department of Water Resources' (DWR) series BA water system revenue bonds. At the same time, S&P Global Ratings affirmed its 'AAA' long-term rating and underlying rating (SPUR) on DWR's existing Central Valley Project (CVP) water revenue debt and Northern California Power Agency's Lodi Energy Center revenue bonds. Finally, S&P Global Ratings affirmed its 'A-1+' short-term rating on DWR's water revenue commercial paper (CP) notes, series 1 and series 2. The outlook, where applicable, is stable.

DWR is responsible for the construction, planning, and operation of the State Water Project (SWP) and delivers water to 29 public agency water contractors located principally in the San Francisco Bay Area, the Central Valley, the Central Coast, and Southern California.

The 'AAA' rating reflects our view of:

- The credit strength of DWR's 29 public agency water contractors, primarily the Metropolitan Water District of Southern California (MWD, responsible for 50% to 55% of water billings), coupled with very strong bond covenants that require the water contractors to make payments to DWR to cover SWP expenses regardless of the amount of water delivered;
- The essentiality of the SWP, which supplies water to 69% of the state's population, and its critical role in the state economy;
- DWR's strong cash position, which we view as important for providing liquidity during a lag in billings under a two-year "true-up" billing procedure; and
- The agreement in principle to extend the SWP water supply contracts to Dec. 31, 2085 (currently signed by 25 contractors), which will allow DWR to bolster its operating reserves and streamline its revenue bond billing methodology, and does not change any of the water supply allocations among the contractors.

Partly offsetting the above strengths, in our view, are:

- Water supply deliveries that are exposed to extremes in hydrological conditions as California has one of the most variable climates of any state in the U.S., and often experiences wet years followed by very dry ones, although DWR's rate setting autonomy partly offsets this concern;
- The relatively expensive cost of SWP water, which, on average, is the most costly source of water for the public water agencies served, although we recognize the lack of meaningfully cheaper water supply alternatives given

constraints on local groundwater, imported Colorado River water, and the high capital costs associated with recycled water and desalination;

- DWR's projected issuance of additional bonds for increased capacity, environmental purposes, and seismic purposes, with the potential for substantial borrowing to help finance a proposed water conveyance system through the Sacramento-San Joaquin River Delta; and
- Uncertainty related to Federal Emergency Management Agency (FEMA) reimbursements for a portion of the $1.1 billion Oroville Dam spillway repair costs; Lake Oroville has the capacity to store approximately 3.54 million acre-feet of water, and accounts for about two-thirds of DWR's total primary storage capacity, making it, in our view, the single most important reservoir of the SWP.

The approximately $301 million series BA bond proceeds are being issued to repay $340 million of CP notes, which were issued for capital expenditures, including repair costs associated with the emergency response and reconstruction of the main spillways at Oroville Dam, which is estimated to cost $1.1 billion. Following the issuance of the series BA bonds, the department will have $2.8 billion water system revenue bonds and approximately $640 million of CP notes (payable on a subordinate basis) outstanding.

The SWP is a system of dams, water storage facilities, aqueducts, pumping stations, and electric generation facilities that DWR constructed for the purposes of developing a water supply and conveyance system. The project also provides flood control, recreation, hydroelectric power, and environmental benefits. DWR operates 705 miles of aqueducts, including the 443-mile California Aqueduct, which conveys water from Northern California to Southern California. The 29 SWP contractors span 25% of the state's land area and in aggregate serve 69% of the state's population. Twenty-six of the contractors are districts formed for water-related purposes, one is a city, and two are counties.

Under the water supply contracts with DWR, water contractors are permitted to request as much as 4.17 million acre-feet of water a year in aggregate. However, in most years total deliveries made available are below this amount. In 2018, DWR provided 35% of contractor requests, down from 85% in 2017 but much stronger than in the most acute years during the recent drought (20% in fiscal 2015 and 5% in 2014). As of March 20, 2019, DWR expected to be able to provide 70% of requests for the current water year, as a result of well-above-average precipitation over the past few months.

The water system revenue bonds are secured by the portion of revenue received from the contractors attributable to water system projects financed by revenue bonds. DWR has covenanted to charge amounts under the contracts sufficient to repay all water system project costs and to produce net revenue at least equal to 1.25x annual debt service on the bonds. The bonds are further secured by a reserve account, with a funding requirement of 50% of maximum annual debt service (MADS). Revenue received by DWR in excess of operations and maintenance costs and debt service are held by DWR and credited back to the contractors approximately one year after receipt. Under the CVP Act, payment of debt service has priority over operating expenses.

In the immediate aftermath of the damage to the main Oroville Dam spillway following heavy flooding in early 2017, and as reflected in our commentary on Feb. 17, 2017, we believed that the credit impact of the event was manageable. We noted the expected political support for DWR, which is important to its credit quality. FEMA's Public Assistance program reimburses applicants for up to 75% of eligible costs associated with a federally declared disaster. (President Donald Trump approved an emergency declaration on Feb. 14, 2017.) However, we understand that on March 7, 2019, FEMA concluded that the eligibility of the upper chute was not damaged as a result of the incident and was therefore not eligible for disaster assistance. As a result, FEMA declined that portion of DWR's request for $306 million in funding. Although DWR is appealing the decision, we believe the SWP water contractor could bear a greater portion of the costs than previously anticipated. This decision also highlights the importance of preventative maintenance and comprehensive asset management, particularly related to aging infrastructure and event risk associated with extreme weather in the future.

We understand that under California law, courts can apply the principle of "inverse condemnation" to investor-owned and municipal utilities alike. This principle provides that if a state actor or a company providing services to the public, like a utility, contributes to the destruction of property, whether or not through negligence, it can be held liable for damages to affected properties. Consequently, we believe that any downstream flood damage caused by dam (or spillway) failure could expose DWR and the member agencies to liability for damage to properties in the flood path, and the damages might be significant. To date, however, we have not seen manifestations of this exposure.

DWR is adopting process improvements to bolster its long-range capital planning and improve work order efficiencies, which we view to be important as DWR's future long-term capital expenditures are sizable and could affect the department's credit quality, especially as we believe this figure could rise depending on FEMA reimbursement for Oroville Dam spillway repairs. DWR's identified capital needs total $2.4 billion. Moreover, while Governor Gavin Newsom has expressed his support for a revised project in lieu of the proposed $16.7 billion California WaterFix (consisting of a single tunnel), and while significant hurdles remain before the project becomes reality, we believe substantial new debt related to Delta conveyance backed by SWP revenue is possible. In our view, rising SWP costs are a credit challenge particularly as member contractors also bring on additional debt for their own capital needs, which, on balance, could pressure water supply affordability for portions of the state over time.

For balance-sheet reporting, DWR combines its water operations, including those for non-CVP water facilities, into one operating fund. DWR has historically maintained a liquidity position we consider strong. At fiscal year-end 2017, the unrestricted cash equaled 94% of DWR's total operating expenditures less depreciation, including certain non-CVP expenditures.

For purposes of the annual coverage calculation on the CVP bonds alone, DWR recorded net revenue of $271.2 million in fiscal 2017, providing 1.36x debt service coverage on $200 million in debt service, and held $809 million of unrestricted cash on June 30, 2017. GASB Statement No. 45 was replaced by GASB Statement No. 75, effective for DWR's fiscal 2018. This accounting change resulted in a delay by the state controller's office in providing DWR with the related other postemployment benefit information, thereby causing DWR to not issue its audited financial statements within the required 270 days. Absent this accounting change and delay, DWR was expected to complete its audit within this timeframe. Based on unaudited financial results, we expect fiscal 2018 coverage to exceed 1.25x and understand unrestricted cash totaled $731 million as of June 30, 2018.

All SWP debt is scheduled to mature by the end of 2035 based on the expiration of DWR's water contracts, which remain in effect through 2035 or 2042, or until all bonds are repaid, whichever is later. Therefore, any revenue bonds sold to finance capital projects would likely be sold with a relatively short final maturity (17 years; until 2035), which, in our view, could pressure short- and mid-range SWP costs, depending on the total dollar amount of bonds sold for this purpose.

The DWR long-term ratings are above that on the U.S. DWR has a predominantly locally derived revenue base. Contractor payments under long-term water supply contracts, utilizing a cost-recovery methodology, represent virtually all of the entity's revenue. This, coupled with operating expense flexibility, limits DWR's exposure to federal revenue, in our view. The long-term rating on Northern California Power Agency's Lodi Energy Center revenue bonds, 2010 series A and B, reflects our view of the unconditional, take-or-pay obligation of DWR to make payments sufficient to cover all debt service on the bonds.

The short-term ratings on DWR's series 1 and series 2 CP notes are based on our view of the long-term credit quality of the SWP and the additional liquidity provided by two separate revolving lines of credits provided by Bank of America N.A. and Wells Fargo N.A., with respective principal commitments of $600 million and $800 million. The Bank of America revolving line of credit extends through May 1, 2020 unless extended or terminated, while the Wells Fargo N.A., revolving line of credit extends through Oct. 15, 2021. We consider the lines of credit strong, with limited immediate termination events, including an issuer default at a downgrade to less than 'BBB-'. The notes have a maturity not to exceed 270 days.

Outlook

The stable outlook reflects S&P Global Ratings' expectation that the DWR water system will maintain its strong liquidity position, that the credit quality of its principal water contractors will remain strong, and that SWP water will remain a vital source of supply for much of the state's population. If credit quality of the principal water contractors, particularly MWD, were to deteriorate, if evidence points to deferred maintenance or lack of timely repairs to mitigate against weather and climate-related risks, or if DWR's liquidity were to decline substantially, we could lower the DWR ratings. Any impediments or resistance to the department's covering all of its expenses through its billing process (such as a delay to the contract extension negotiations) could also negatively affect the rating. While unexpected, further delays to DWR's completion of its fiscal 2018 financial statements would also pressure the rating.

Ratings Detail (As Of March 29, 2019)		
California Dept of Wtr Resources wtr		
Long Term Rating	AAA/Stable	Affirmed
California Dept of Wtr Resources wtr CP ser 1		
Short Term Rating	A-1+	Affirmed
California Dept of Wtr Resources wtr CP ser 2		
Short Term Rating	A-1+	Affirmed
California Dept of Wtr Resources (Cent Vy Proj) wtr		
Long Term Rating	AAA/Stable	Affirmed
California Dept of Wtr Resources (Cent Vy Proj) wtr		
Long Term Rating	AAA/Stable	Affirmed

Ratings Detail (As Of March 29, 2019) (cont.)		
California Dept of Wtr Resources (Cent Vy Proj) wtr		
Long Term Rating	AAA/Stable	Affirmed
California Dept of Wtr Resources (Cent Vy Proj) wtr		
Long Term Rating	AAA/Stable	Affirmed
Northern California Pwr Agy WTRSWR		
Long Term Rating	AAA/Stable	Affirmed
California Dept of Wtr Resources wtr		
Unenhanced Rating	AAA(SPUR)/Stable	Affirmed

Many issues are enhanced by bond insurance.

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.standardandpoors.com for further information. Complete ratings information is available to subscribers of RatingsDirect at www.capitaliq.com. All ratings affected by this rating action can be found on S&P Global Ratings' public website at www.standardandpoors.com. Use the Ratings search box located in the left column.

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