CALIFORNIA INFRASTRUCTURE AND ECONOMIC DEVELOPMENT BANK (IBank)

STAFF REPORT

	EXECUTIVE	SUMMARY			
Borrower:	State Water Resources Contro ("State Water Board")	l Board	Par Amount Requested:	Not to exceed \$650,000,000	
Borrower Description:	The State Water Board is a State entity within the California Environmental Protection Agency. Its mission is to preserve, enhance and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses and to ensure proper allocation and efficient use, for the benefit of present and future generations.				
Type of Bonds:	Tax-exempt Revenue Bonds ("	Green Bond	ls")		
Bonds Project:	IBank will issue the California I Water and Drinking Water S ("Green Bonds") (the "2023 B Revolving Fund Program ("CW	tate Revolv onds"), to f	ing Fund Revenue finance the Califorr	e Bonds, Series 2023 nia Clean Water State	
	The State Water Board through its CWSRF Program provides financial assistance to local governments for public water systems for current and near-term clean water infrastructure improvement projects that address water pollution control throughout California.				
Project Sites:	Statewide	Statewide			
Plan of Finance:	The proceeds from the 2023 Bonds would be used to (1) assist the State Water Board in providing financial assistance to local governments and other eligible applicants in the State under the CWSRF Program; and (2) pay costs of issuance.				
	Competitive sale in denominations of \$5,000 or any integral multiple of \$5,000 not exceeding the Amount Requested.				
Term: Credit Enhancement:	Tax-exempt Up to 25 Years (as permitted by Government code Section 63074(c)) None Credit ratings of AAA by Fitch Ratings, Aaa by Moody's Investors Service, and AAA				
erearrangi	by Standard & Poor's.	ratings, ra			
Estimated Sources of F Tax-exempt Series 2023 Amount Premium		Project Fur CWSRF C	Uses of Funds: nd Deposit osts of Issuance r's Discount	\$600,000,000.00 \$3,940,409.20 \$2,811,000.00	
TOTAL SOURCES	\$606,751,409.20	TOTAL US	SES	\$606,751,409.20	
Financing Team: Bond Counsel and Disclosure Counsel - Hawkins, Delafield & Wood LLP Underwriter - To be selected by the State Treasurer (if negotiated sale) or pursuant to a competitive sale Municipal Advisor - Hilltop Securities Inc. Agent for Sale, Trustee - State Treasurer's Office					

Water B		e deposited into the CWSRF, enabling the State al assistance to municipalities and other qualified VSRF Program.			
Date of Board Meeting: December 21, 2022Resolution Number: 22-22Prepared by: Fariba Khoie; November 28, 2022					

Staff Recommendation:

Staff recommends approval of Resolution No. 22-22 authorizing the issuance of tax-exempt revenue bonds in a par amount not to exceed \$650,000,000 for the benefit of the State Water Resources Control Board.

SUMMARY

The State Water Resources Control Board ("State Water Board") is requesting IBank to issue the California Infrastructure and Economic Development Bank Clean Water and Drinking Water State Revolving Fund Revenue Bonds, Series 2023 ("Green Bonds") (the "2023 Bonds"). The 2023 Bonds will be issued in connection with the State Water Pollution Control Revolving Fund ("CWSRF") program, administered by the State Water Board.

CWSRF program

The CWSRF program was created under Title VI of the Federal Water Pollution Act of 1972, as amended (33 U.S.C. Sections 1251 *et seq.*) (the "Federal Clean Water Act"). To implement the Federal Clean Water Act, the State of California ("State") established the CWSRF program under supervision of the State Water Board pursuant to the Clean Water Act.

The Clean Water Program uses CWSRF funds for eligible projects and activities including, but not limited to wastewater and nonpoint source pollution management systems, estuary conservation and management, and decentralized wastewater treatment systems, stormwater or subsurface drainage water systems, security measures for public treatment facilities, subsurface drainage water reuse or recycling.

DWSRF program

The Safe Drinking Water Act ("SDWA"), (42 U.S.C. § 300f et seq., 88 Stat. 1660 (1974)) was established in 1974 to provide a comprehensive federal regulatory framework for administration of the nation's drinking water. The Drinking Water State Revolving Fund ("DWSRF") was established by the 1996 amendments to the SDWA as a federal-state partnership to help finance compliance with the SDWA.

The Drinking Water Program transitioned from the California Department of Public Health to the State Water Board on July 1, 2014. The Drinking Water Program, which includes the DWSRF Program as one of its main funding sources, is responsible for the regulatory oversight of about 7,500 public water systems ("PWS") throughout the state.

The Drinking Water Program uses DWSRF funds for eligible infrastructure projects, but also administers the disbursement of other state funds, including State Bond funds, for various drinking water purposes, including: assisting PWS's with drought preparedness and water conservation measures, promoting water-recycling projects, certifying drinking water treatment and distribution operators, supporting and promoting water system security, providing for small water system technical assistance and mandating minimum standards for PWS technical, managerial and financial capacity from other sources of funds.

The CWSRF and DWSRF Programs receive Capitalization Grants from the U.S. EPA pursuant to an annual Capitalization Grant Agreement between the U.S. EPA and the State Water Board. Capitalization Grants are an 80/20 split and require the state to provide an amount equal to at least 20% of the total as "State Match" and the federal government to provide the remainder. The State Water Board uses the Capitalization Grants to fund the activities of the CWSRF and DWSRF and provide low-cost loans to eligible PWS's for financing the costs of infrastructure projects. Other than Capitalization Grant Funding awarded as project grants, the CWSRF and DWSRF are intended to "revolve"; the loans' repayables made with these funds revolve back into the CWSRF and DWSRF with additional interest earnings. Capitalization Grants are not part of the Pledged Assets. Since 1989 through June 30, 2022, the State Water Board has received \$5.901 billion in Capitalization Grants from the U.S. EPA (\$3.603 billion for the CWSRF and \$2.298 billion for the DWSRF).

The Table I displays current, aggregate funding demand on the CWSRF Program and Small Community Waster Water ("SCWW") funds. Small Communities mean communities with populations up to 20,000. "SDACs" and "DACs" in the Table I refer to severely disadvantaged and disadvantaged communities with

median household incomes less than %60 or communities with less than %80 of the statewide median household income, respectively.

Table I. Aggregate Funding Demand for Clean Water Projects (as of March 2022)

Description	Number of Applications	Total Funding Request (\$ in millions)
Rollover Projects	24	\$1,809
Small SDAC and Small DAC Projects (Automatically Fundable)	29	\$240
New Projects Subject to Scoring (Requesting Placement on Fundable List)	44	\$1,980
Projects Subject to Suspension or Removal from Consideration (Inactive, Non-Responsive or Withdrawn)	84	\$781
Total	181	\$4,810

Source: https://www.waterboards.ca.gov/water_issues/programs/grants_loans/docs/2022/cwsrf-iup-sfy2022-23-final.pdf

The Table II displays current, aggregate funding demand for drinking water projects from both DWSRF and State Bond Prop. 1.

Table II. Aggregate Funding Demand for Drinking Water Projects (as of June 2022)

Priority Ranking	Description	Number of Applications	Total Funding Request (\$ in millions)
Α	Immediate Health Risk	26	\$52.95
В	Untreated At-Risk Sources	7	\$286.92
С	Compliance or Shortage	109	\$509.11
D	Inadequate Reliability	30	\$77.50
E	Secondary Risks	17	\$92.88
F	Other Projects	139	\$1,869.86
	Total	328	\$2,888.23

Source: https://www.waterboards.ca.gov/water_issues/programs/grants_loans/docs/2022/dwsrf-iup-sfy2022-23-final.pdf

CWSRF and DWSRF Programs Cash Fundable Lists

The State Water Board has authority to commit and spend all available state-sourced loan and grant funds such as Prop. 1, and Prop. 68 to repay financing, as grants or technical assistance, or as Drinking Water Capital Reserve funds.

CWSRF

The State Water Board's CWSRF Fundable List as of October 3, 2022 includes approximately 33 projects requesting approximately \$1.4 billion. These projects, if eligible, can be approved for CWSRF or other available state financing.

DWSRF

The State Water Board's DWSRF Fundable List as of October 3, 2022 includes approximately 15 projects requesting approximately \$308 million. These projects, if eligible, can be approved for DWSRF or other available state financing.

The Infrastructure Investment and Jobs Act, aka "The Bipartisan Infrastructure Law" ("BIL")

The BIL, dated as of November 15, 2021, amended CWSRF requirements in the federal Clean Water Act ("CWA") allowing states to use an additional two percent (2%) of the annual capitalization grant to provide technical assistance to rural, small, and tribal publicly owned treatment works. The BIL appropriated approximately \$850 million over five years to California's CWSRF including approximately \$783 million as supplemental funding for any Eligible Project and approximately \$6.7 million for Emerging Containments funding. 100% of the CWSRF Emerging Containment will be committed as principal forgiveness. The State Water Board is requesting that the full CWSRF Emerging Containment capitalization grant be transferred to the DWSRF to be administered in accordance with the Emerging Containments Supplemental Intended Use Plan.

The BIL allocated \$11.7 billion over five years as CWSRF General Supplemental funding and \$127,290,000 of which will be allocated the State Water Board during FY 2022-23. 49% of the CWSRF General Supplemental Funds will be committed as principal forgiveness. These funds supplement the annual base program CWSRF capitalization grants and have the same eligibility criteria.

The BIL allocated approximately \$2.56 billion over five years to California DWSRF for General Supplemental Funding, Emerging Containment, and Lead Service Line Replacement Funding. 49% of funding for DWSRF General Supplemental, and 25% of funding under the DWSRF Emerging Containment will be provided as non-repayable financing to eligible water systems serving disadvantaged communities or serving fewer than 25,000 people.

The State Water Board Prior Green Bonds

IBank has previously issued Bonds for the SWRCB's CWSRF, which operates separately from DWSRF and is focused on wastewater infrastructure, as follows:

On April 28, 2016, IBank issued the California Infrastructure and Economic Development Bank Clean Water State Revolving Fund Revenue Bonds, Series 2016 (Green Bonds) (the "2016 Bonds") in the par amount of \$410,735,000.

On March 23, 2017, IBank issued the California Infrastructure and Economic Development Bank Clean Water State Revolving Fund Revenue Bonds, Series 2017 (Green Bonds) (the "2017 Bonds") in the par amount of \$450,000,000.

On March 8, 2018, IBank issued the California Infrastructure and Economic Development Bank Clean Water State Revolving Fund Revenue Bonds, Series 2018 (Green Bonds) (the "2018 Bonds") in the par amount of \$449,225,000.

On May 9, 2019, IBank issued the California Infrastructure and Economic Development Bank Clean Water and Drinking Water State Revolving Fund Revenue Bonds, Series 2019 (Green Bonds) (the "2019 Bonds") in the par amount of \$83,920,000.

The 2016, 2017, 2018, and 2019 Bonds were all issued as Green Bonds. Total outstanding par amount on these Bonds as of December 1, 2022 is \$964,500,000.

BACKGROUND

California State Water Resources Control Board ("State Water Board")

The State Water Board was created in 1967 by merging the State Water Rights Board and the State Water Quality Control Board, thus integrating water rights and water quality decision-making authority. The Drinking Water Program, and related DWSRF, was merged into the State Water Board in 2014. The mission of the State Water Board is to preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations.

The State Water Board and the nine Regional Water Quality Control Boards (Regional Water Boards) work together to protect California's water resources. The State Water Board's role in protecting water quality includes setting statewide policy, coordinating and supporting the Regional Water Boards' efforts, reviewing petitions contesting Regional Water Boards' actions, and administering several financial assistance programs. The State Water Board is also solely responsible for allocating surface water rights throughout the State and regulating drinking water systems.

The State Water Board's Division of Financial Assistance ("DFA") has primary responsibility for managing and administering the CWSRF Program and DWSRF Program. Five full-time salaried board members govern the State Water Board, each filling a different specialty position (See Attachment A, Governance and Management). Board members are appointed to four-year terms by the Governor and confirmed by the State Senate.

The increased number of funding requests and growth of the CWSRF and DWSRF Programs revenue indicate that the CWSRF and DWSRF Programs have significant bonding capacity.

Impacts of COVID-19

The State Water Board monitors its Recipients and regularly evaluates any potential financial impact, both in the near- and long-term, from the COVID-19 pandemic. The State Water Board's operation and financial condition have not been materially impacted by COVID-19. None of the Pledged Project Obligation Recipients submitted any formal requests for financial hardship relief.

CLEAN WATER AND DRINKING WATER STATE REVOLVING FUND PROGRAMS CRITERIA

Recipients

Local governments and other qualified program participants are eligible borrowers ("Recipients") under the CWSRF and DWSRF. The State Water Board may determine the eligibility and priority of applicants by considering a variety of factors, including an applicant's ability to repay, the feasibility of the proposed project and the proposed project's potential to produce a demonstrable improvement in water quality.

Eligible Projects

The CWSRF and DWSRF Programs provide low-cost financing for planning, design, construction and implementation of critical public water systems for clean water and drinking water infrastructure improvements necessary to mitigate clean water and drinking water risks to human health and other types of water quality projects throughout the State eligible under the Federal Clean Water Act, the State Clean Water Act (CWSRF program) and the Federal Safe Drinking Water Act and the Safe Drinking Water Act

(DWSRF program) and the State Water Board's Policy for Implementing the CWSRF and DWSRF ("Eligible Projects").

Financing Terms

The State Water Board enters into loan contracts, installment sale agreements and similar contracts ("Project Obligations") with Recipients to provide financing from the CWSRF Program. CWSRF Project Obligations, in general, are for a term of not to exceed 30 years, with repayments typically commencing one year after the date of completion of construction of the Eligible Project. Recipients, typically, pay Project Obligation repayments in level annual installments throughout the Project Obligation term. Prepayments were historically allowed, but newer obligations require DFA's consent for prepayment. Project Obligation interest rates are fixed and capped at one-half of the true interest rate charged on the most recent issue of State general obligation bonds.

All Project Obligations also identify the revenues dedicated or otherwise expected to be used to repay the Project Obligations, such as the gross or net revenues from the Recipient's drinking water system, and special assessments or capacity charges. Some Project Obligations are secured by a senior lien on dedicated revenues or other pledged assets, but other Project Obligations may be secured on a parity or subordinate basis (or for some older Project Obligations, no provision regarding priority may be provided). Project Obligations allow Recipients to issue additional debt with a parity lien on the pledged revenues or other assets securing or used to pay the Project Obligations, but in no such case is a lien on pledged revenues allowed senior to the Project Obligation.

PLAN OF FINANCE

IBank Term Sheet The State Water Resources Control Board Date: December 21, 2022

Bond Par Amount:	Up to \$650,000,000; in one or more tax-exempt series
Type of Offering:	To be selected by the State Treasurer (if negotiated sale) or pursuant to a competitive sale
Initial Purchaser:	To be determined upon approval of the winning bid.
Credit Enhancement	None
Credit Rating:	Credit ratings of AAA by Fitch Ratings, Aaa by Moody's Investors Service, and AAA by Standard & Poor's
Interest Rate*:	Any combination of fixed interest rates, depending on market conditions on the pricing date of the Bonds.
Maturity*:	Up to 25 years (as permitted by the Government Code Section 63074 (c))
Collateral:	Pledge of Pledged Project Obligations
Transaction:	The Bonds are special, limited obligations payable solely from payments made by the Borrower under the Transaction Documents, and IBank shall not be directly, indirectly, or contingently or morally obligated to use any other moneys or assets of IBank for all or any portion of payment to be made pursuant to the Bonds.

*Interest Rate and Maturity are subject to change.

Terms of the 2023 Bonds

IBank will issue the State Water Board's 2023 Bonds for the CWSRF Program pursuant to the Amended and Restated Master Trust Indenture, dated as of March 1, 2022 ("Master Trust Indenture"), and as supplemented by the 2023 Bonds Indenture. The Master Trust Indenture allows financing the CWSRF Program under the CWSRF Act and the DWSRF Program under the DWSRF Act. The Master Trust Indenture has been amended to facilitate the issuance of a Series of Bonds that includes a State Match Portion and to segregate repayments of Bond financed Pledged Project Obligations previously deposited in the Restricted Assets Fund into the Related Bond Proceeds Fund established for a Series of Bonds. The 2023 Bonds will not fund any State Match Portion. Repayments on Pledged Project Obligations that are not Bond financed will continue to be deposited in the Restricted Assets Fund.

The 2023 Bonds will be sold at competitive bid pursuant to the provisions of Treasury Regulation Section 1.148-1(f)(3)(i) and awarded to the bidder whose bid will result in the lowest true interest cost ("TIC") to the State Water Board. The terms and conditions of the competitive bid will be available via the Official Notice Inviting Bids.

The Series 2023 Bonds will be issued in fully registered form in denominations of \$5,000 and any integral multiple thereof. The 2023 Bonds are not required to have debt service reserve fund.

Designation as Green Bonds

The State Water Board has decided to issue the 2023 Bonds as "Green Bonds" since the projects meet the standards of the Federal and the State Clean Water Acts. Identifying the 2023 Bonds as Green Bonds will provide investors the opportunity to invest directly in socially responsible bonds that support environmentally beneficial projects and help local governments and other public entities finance public water systems statewide, assisting communities to comply with the Federal and State Clean Water Act. The 2023 Bonds will not be certified or otherwise approved, audited, or monitored by any third-party service providers. This is consistent with the State Water Board's approach to the 2016, 2017 and 2018 Bonds for the CWSRF and the 2019 Bonds for the DWSRF Program.

Limited Obligations

The 2023 Bonds are special limited obligations of IBank and the State Water Board, payable solely from, and secured by a pledge of State Water Board assets under the Master Trust Indenture, Series Indenture and the Master Payment and Pledge Agreement. The 2023 Bonds do not constitute an indebtedness of the State Water Board, IBank, the State or any instrumentality or political subdivision thereof within the meaning of any constitutional debt limitation or restriction nor are a pledge of the faith and credit or taxing power of the State or any instrumentality or political subdivision thereof. Neither the State Water Board nor IBank has any taxing power.

SECURITY AND SOURCES OF REPAYMENT FOR THE 2023 BONDS

The 2023 Bonds will be secured and repaid from pledged revenue of the Pledged Project Obligations set forth on Attachment B hereto, including any prepayments, the principal and investment earnings on Investment Obligations as defined in the Amended and Restated Master Trust Indenture ("Master Trust Indenture"), payments received from federal or State sources related to Bonds issued under the Master Trust Indenture and any other amounts held under the Master Trust Indenture and designated as Pledged Revenues. Pledged Project Obligations consist of the Project Obligations that have been assigned and pledged as security for the benefit of the Bonds.

PUBLIC BENEFITS

The proceeds of the 2023 Bonds will be deposited into the CWSRF, enabling the State Water Board to provide low-cost financial assistance for eligible projects including, but not limited to, wastewater management systems, nonpoint source pollution management systems, and estuary conservation and management for clean water infrastructure improvement and to improve clean water quality throughout the State.

RECOMMENDATION

Staff recommends approval of Resolution No. 22-22 authorizing the issuance of tax-exempt revenue bonds in a par amount not to exceed \$650,000,000 for the benefit of the State Water Resources Control Board.

ATTACHMENT A - GOVERNANCE AND MANAGEMENT

The State Water Board consists of five full-time salaried members, each filling a different specialty position. Board members are appointed to four-year terms by the Governor and confirmed by the State Senate. The current Board members are:

The State Water Board Members				
Name/Title	Specialty Position	Term Expires (January 15)		
E. Joaquin Esquivel				
Chair	Public Member	2025		
Laurel Firestone				
Board Member	Attorney/Supply	2023		
Nichole Morgan ⁱ ,				
Board Member	Civil Engineer/Supply	2025		
Sean Maguire,				
Board Member	Sanitary Engineer	2024		
Dorene D'Adamo ⁱⁱ ,				
Vice Chair	Public/Water quality expert	2026		

i: Subject to confirmation by the Legislature; anticipated in 2022.

ii: At the expiration of her term, this member may continue to serve at the pleasure of the Governor, pending reappointment within 60 days.

The State Water Board Executive and CWSRF Program and DWSRF Program Management staff includes:

Executive and Division Management				
Eileen Sobeck	Executive Director			
Eric Oppenheimer	Chief Deputy Director			
Jonathan Bishop	Chief Deputy Director			
Joe Karkoski	Deputy Director, DFA			
Christopher Stevens	Assistant Deputy Director, DFA			
Michael A.M. Lauffer	Chief Counsel			

ATTACHMENT B – PLEDGED PROJECT OBLIGATIONS

Combined Revised Schedule I - All Bond Series Outstanding Pledged Loan Balances 11/29/2022

Loan Balances as of 11/29/2022

Borrower	Contract Number	Principal Obligation Balance as of November 29, 2022	Combined Percent of Recipient Pledged Project Obligations	Final Maturity of Obligation	CWSRF Legacy Project Obligation
Alameda, City of	02823	\$ 99,680	0.00%	5/6/2023	
Alturas, City of	07815	529,690	0.01%	7/10/2028	
Antioch, City of	09801	676,289	0.01%	9/1/2027	
Auburn, City of	D1601002	8,205,723	0.17%	9/13/2048	
Biggs, City of	13810	1,090,012	0.02%	12/31/2035	
Brawley, City of	08848	7,690,296	0.16%	1/1/2032	
Brentwood, City of	99820	2,281,295		1/2/2023	*
Brentwood, City of	8095-110	11,250,973	0.28%	12/30/2054	
Burlingame, City of	02810	2,686,335		8/1/2026	
Burlingame, City of	09851	3,006,062	0.12%	7/29/2031	
Carlsbad Municipal Water District	14820	4,850,437	0.10%	6/30/2054	
Chico Urban Area Joint Powers Financing Authority (JPFA)	07833	22,720,070	0.48%	6/30/2041	
Coachella Sanitary District	04814	7,033,604	0.15%	3/31/2027	
Coachella Valley Water District	8470-110	40,132,117	0.84%	1/31/2054	
Colusa, City of	07828	9,896,412		1/15/2039	
Colusa, City of	D1601015	4,184,608	0.30%	6/30/2048	
Corona, City of	02827	5,554,952		9/30/2025	
Corona, City of	13830	9,527,264	0.32%	8/31/2046	
Davis, City of	14826	44,820,086		10/1/2048	
Davis, City of	D1501007	29,868,956	1.57%	12/30/2048	
Del Mar, City of	09858	2,949,568	0.06%	8/1/2032	
Delta Diablo	08819	2,858,472		12/31/2030	

Delta Diablo	10818	3,087,679		4/3/2033
Delta Diablo	14814	9,824,654		11/1/2046
Delta Diablo	8007-120	11,627,898		12/31/2052
Delta Diablo	8007-140	3,121,309	0.64%	12/1/2050
Dixon, City of	14812	22,289,479	0.47%	12/1/2036
East Bay Municipal Utility District	07825	6,964,879	0.15%	4/1/2028
Eastern Municipal Water District	08845	20,100,239		7/5/2032
Eastern Municipal Water District	09809	24,605,232		3/16/2033
Eastern Municipal Water District	D1501017	6,356,661		6/30/2047
Eastern Municipal Water District	D1601036	39,604,670	1.91%	12/21/2049
El Cajon, City of	13816	6,676,476	0.14%	10/19/2035
El Paso de Robles, City of	12820	31,392,587		9/1/2035
El Paso de Robles, City of	D1601032	9,476,910	0.86%	12/15/2048
Elsinore Valley Municipal Water District	D1601009	1,931,818		12/31/2037
Elsinore Valley Municipal Water District	D1701018	1,351,678		10/31/2029
Elsinore Valley Municipal Water District	D1701019	3,376,007	0.14%	10/31/2030
Escondido, City of	98829	987,722		4/1/2023
Escondido, City of	99803	741,130		4/1/2023
Escondido, City of	D1701010	4,624,233	0.13%	10/23/2049
Fairfield-Suisun Sewer District	09853	5,517,214		5/1/2031
Fairfield-Suisun Sewer District	D1701020	4,839,992	0.22%	10/19/2039
Farmersville, City of	7895-110	11,166,917	0.23%	9/1/2051
Fontana, City of	07811	3,013,444		3/31/2028
Fontana, City of	08805	1,279,061		8/29/2028
Fontana, City of	08807	1,616,407	0.12%	6/30/2028
Fresno, City of	14817	27,333,300		7/12/2046
Fresno, City of	D1501011	54,483,907	1.72%	12/31/2051
Fresno, County of	D1501013	3,789,520	0.08%	11/19/2049
Galt, City of	09856	8,719,217		12/28/2030
Galt, City of	13838	18,450,661	0.57%	9/30/2036
Hayward, City of	05807	16,367,113		9/30/2028
Hayward, City of	D1601028	14,872,117	0.66%	1/31/2050
Heber Public Utility District	11826	3,978,789	0.08%	5/20/2043
Hercules, City of	D1601001	22,144,092	0.47%	7/1/2039

Hesperia Water District	D1501029	5,705,509	0.12%	1/28/2050
Hi-Desert Water District	D1501019	130,045,172	2.73%	7/1/2050
Hillsborough, Town of	14831	8,549,535	0.18%	9/15/2046
Hilmar County Water District	00805	163,082	0.00%	6/26/2023
Holtville, City of	13817	2,959,300	0.06%	4/21/2037
Hughson, City of	08838	10,182,916	0.21%	5/1/2041
Inland Empire Utilities Agency	07821	1,195,580		3/31/2029
Inland Empire Utilities Agency	07822	2,188,348		3/31/2029
Inland Empire Utilities Agency	08835	1,267,681		8/15/2030
Inland Empire Utilities Agency	08837	14,115,220		2/28/2032
Inland Empire Utilities Agency	08849	2,103,322		8/15/2030
Inland Empire Utilities Agency	08850	2,132,841		8/15/2030
Inland Empire Utilities Agency	08851	577,171		7/30/2030
Inland Empire Utilities Agency	13815	21,398,464		2/28/2049
Inland Empire Utilities Agency	13835	21,049,759		8/31/2049
Inland Empire Utilities Agency	8235-110	3,224,800		8/1/2050
Inland Empire Utilities Agency	8235-150	3,244,227	1.52%	10/31/2050
Ironhouse Sanitary District	08820	26,439,305	0.56%	10/18/2031
Jackson, City of	D1601020	10,977,704	0.23%	1/28/2049
Jamestown Sanitary District	8000-210	11,544,317	0.24%	10/6/2051
Kerman, City of	08847	2,370,579	0.05%	9/30/2031
La Canada Flintridge, City of	02804	2,542,117		3/31/2025
La Canada Flintridge, City of	04815	7,934,950	0.22%	10/31/2027
La Mesa, City of	05811	1,683,230		2/1/2028
La Mesa, City of	07818	1,047,141		7/31/2028
La Mesa, City of	08804	1,126,384		7/15/2029
La Mesa, City of	08854	1,415,493		1/21/2030
La Mesa, City of	D1501014	2,784,740	0.17%	5/31/2037
Laguna County Sanitation District	01802	581,423	0.01%	7/1/2023
Las Gallinas Valley Sanitary District	09863	2,472,780	0.05%	6/1/2032
Linda County Water District	09800	18,723,979	0.39%	4/1/2042
Live Oak, City of	09802	4,222,159	0.09%	6/30/2042
Lompoc, City of	06811	32,062,459	0.67%	8/31/2029
Los Angeles County Sanitation District	00820	4,655,472		11/30/2023

Los Angeles County Sanitation District	00832	178,260	0.10%	7/31/2024
Los Angeles, City of	00817	27,210,965	0.57%	8/9/2024
Los Carneros Water District	14827	2,483,850	0.05%	9/30/2030
Malibu, City of	D1501033	44,434,607	0.93%	11/30/2047
Mariposa Public Utility District	8089-110	2,895,696	0.06%	5/1/2050
McKinleyville Community Services District	D1501012	13,573,683	0.29%	9/8/2047
Merced, City of	08843	15,331,626	0.32%	9/30/2031
Mission Springs Water District	12802	3,160,201	0.07%	1/31/2034
Modesto, City of	D1601005	26,313,088	0.55%	6/30/2048
Monterey, City of	13831	2,432,868		8/30/2035
Monterey, City of	13832	9,033,273	0.24%	3/12/2038
Morro Bay, City of	8185-210	19,786,962	0.42%	8/31/2053
Napa County Department of Public Works	13844	2,351,327	0.05%	12/31/2028
Napa Sanitation District	08802	578,260		4/1/2029
Napa Sanitation District	8244-110	22,730,516	0.49%	7/1/2053
Nevada County Sanitation District #1	06806	3,571,829		11/23/2027
Nevada County Sanitation District #1	06807	5,693,747	0.19%	1/12/2028
North Marin Water District	05808	1,273,680		6/19/2027
North Marin Water District	11811	1,011,136		9/30/2032
North Marin Water District	11814	256,106		11/30/2031
North Marin Water District	11816	349,991		12/15/2031
North Marin Water District	11820	837,207		6/30/2032
North Marin Water District	11841	634,762		12/31/2032
North Marin Water District	11842	1,611,853		12/31/2032
North Marin Water District	11843	969,895		8/4/2033
North Marin Water District	D1501034	6,286,299	0.28%	12/31/2047
North San Mateo County Sanitation District	02816	825,043	0.02%	12/1/2024
Oakdale, City of	09850	9,286,731	0.20%	8/31/2031
Oceanside, City of	00829	11,705,565	0.25%	1/26/2026
Orange County Water District	02814	962,163		6/1/2024
Orange County Water District	03813	823,044		4/1/2026
Orange County Water District	03814	726,853		5/5/2026
Orange County Water District	03815	1,118,082		6/1/2026
Orange County Water District	03816	41,040,443		12/31/2027

Orange County Water District	03817	879,120		6/1/2026
Orange County Water District	13807	2,141,707		3/31/2036
Orange County Water District	13808	10,375,995		6/30/2039
Orange County Water District	D1501016	4,488,037		10/1/2046
Orange County Water District	D1701017	13,115,579		12/31/2049
Orange County Water District	8290-110	47,706,189		8/31/2053
Orange County Water District	8307-110	45,397,521	3.55%	8/31/2053
Oro Loma Sanitary District	8524-110	381,270	0.01%	12/31/2054
Pacific Grove, City of	D1501021	4,706,030	0.10%	2/1/2048
Palm Springs, City of	D1601023	23,259,941	0.49%	9/27/2048
Palo Alto, City of	07814	3,150,000		6/30/2029
Palo Alto, City of	09814	4,408,795		11/30/2030
Palo Alto, City of	D1601034	23,187,134	0.65%	5/31/2049
Piedmont, City of	02817	273,269		12/5/2023
Piedmont, City of	03811	461,285		5/30/2025
Piedmont, City of	09815	910,811		9/30/2031
Piedmont, City of	D1601021	3,440,026	0.11%	7/31/2038
Pinole, City of	D1501036	23,426,566	0.49%	7/1/2049
Pismo Beach, City of	03810	2,437,038	0.05%	2/25/2026
Placer County Sewer Maintenance District #3	13805	8,110,945	0.17%	2/15/2045
Placer, County of	13809	63,504,082	1.33%	3/31/2047
Planada Community Services District	12830	3,107,687	0.07%	11/30/2046
Pleasanton, City of	D1501003	9,238,640	0.19%	10/31/2046
Redlands, City of	01821	1,042,560	0.02%	11/30/2024
Richmond, City of	D2001014	12,061,446		9/25/2053
Richmond, City of	8258-110	11,992,567	0.51%	9/25/2053
Rio Alto Water District	12822	932,681	0.02%	3/17/2036
Rodeo Sanitary District	14822	1,310,044		7/18/2035
Rodeo Sanitary District	D1501006	3,687,855		10/15/2037
Rodeo Sanitary District	D1501008	1,607,591		3/1/2038
Rodeo Sanitary District	D1501020	1,469,103		12/23/2037
Rodeo Sanitary District	D1501032	5,070,899	0.28%	9/30/2039
Rosamond Community Services District	08817	3,381,094	0.07%	3/31/2029
Roseville, City of	8215-210	1,950,118		1/31/2053

Roseville, City of	8215-110	29,906,814	0.67%	7/3/2053
Running Springs Water District	14813	2,091,360	0.04%	10/29/2036
Russian River County Sanitation District	03807	470,203	0.0470	11/10/2024
Russian River County Sanitation District	10819	1,080,633	0.03%	4/16/2032
Sacramento Regional County Sanitation District	14832	35,118,610	0.0070	9/15/2046
Sacramento Regional County Sanitation District	14833	121,499,568		6/30/2049
Sacramento Regional County Sanitation District	14834	2,478,173		11/30/2046
Sacramento Regional County Sanitation District	D1501005	18,816,853		8/15/2047
Sacramento Regional County Sanitation District	D1501015	5,936,117		12/31/2037
Sacramento Regional County Sanitation District	D1501018	48,948,165		5/31/2049
Sacramento Regional County Sanitation District	D1501030	449,683,128		5/14/2051
Sacramento Regional County Sanitation District	D1501035	30,726,427		12/27/2049
Sacramento Regional County Sanitation District	D1601008	142,181,246	17.97%	5/1/2053
San Andreas Sanitary District	08842	2,410,448	0.05%	11/13/2040
San Clemente, City of	12809	10,086,928	0.21%	12/31/2034
San Diego, City of	00826	484,056	0.2170	1/31/2023
San Diego, City of	01809	1,274,863		1/21/2024
San Diego, City of	02806	514,436		6/30/2024
San Diego, City of	06804	2,796,112		3/30/2026
San Diego, City of	09861	22,294,283		9/30/2035
San Diego, City of	11832	9,652,835		6/20/2033
San Diego, City of	12800	1,458,466		11/25/2033
San Diego, City of	12811	5,316,632		3/10/2034
San Diego, City of	12814	1,577,612		10/14/2035
San Diego, City of	12815	9,528,422		2/28/2039
San Diego, City of	12816	4,954,774		4/30/2035
San Diego, City of	12817	3,837,581		11/3/2036
San Diego, City of	12818	4,930,690		4/29/2035
San Diego, City of	D1701008	65,151,679	2.81%	3/30/2054
San Francisco, Public Utilities Commission of the		, - ,		
City and County of	D1701001	115,109,003		10/7/2054
San Francisco, Public Utilities Commission of the City and County of	D1701002	15,710,485		2/28/2048
San Francisco, Public Utilities Commission of the				
City and County of	D1701003	26,048,304		3/30/2048

Son Ero	noisee Bublic Litilities Commission of the				
	ncisco, Public Utilities Commission of the I County of	D1701004	36,409,144		7/18/2049
	ncisco, Public Utilities Commission of the I County of	8064-110	6,112,084		7/31/2050
	ncisco, Public Utilities Commission of the I County of	8371-110	18,544,155		3/31/2054
	ncisco, Public Utilities Commission of the I County of	8372-110	132,000,000		5/1/2056
	ncisco, Public Utilities Commission of the I County of	8286-110	112,036,181	9.71%	3/1/2054
San Lea	andro, City of	11806	30,181,703	0.63%	7/31/2035
San Lui	s Obispo, City of	8029-110	74,057,224	1.56%	12/31/2053
San Luis	s Obispo, County of	10846	40,616,359	0.85%	10/15/2046
	teo County Crystal Springs County on District	13826	1,253,204	0.03%	10/31/2034
Santa A	na Watershed Project Authority	11822	9,879,895		12/29/2032
Santa A	na Watershed Project Authority	13845	13,548,594	0.49%	3/31/2048
Santa B	arbara, City of	11801	3,235,491		7/31/2033
Santa B	arbara, City of	11847	1,280,375		12/31/2036
Santa B	arbara, City of	14809	28,148,839	0.69%	3/1/2039
Santa C	larita Valley Sanitation District	12812	2,807,694		3/12/2034
Santa C	larita Valley Sanitation District	8035-110	13,962,810		3/31/2053
Santa C	larita Valley Sanitation District	8156-110	83,352,680	2.10%	7/1/2054
Santa C	ruz County Sanitation District	09848	6,916,868		3/30/2032
Santa C	ruz County Sanitation District	D1701046	4,918,745	0.25%	6/30/2051
Santa M	largarita Water District	D1601026	80,574,632	1.69%	12/4/2050
Santa M	Ionica, City of	8211-110	49,610,064	1.04%	12/31/2052
Santa N	lella County Water District	11823	1,265,707	0.03%	4/15/2033
Santa R	osa Regional Resources Authority	D1701024	31,861,874	0.67%	9/30/2051
Sausalit	o, City of	11824	686,932	0.01%	6/29/2034
Seal Be	ach, City of	10838	1,478,278		12/9/2031
Seal Be	ach, City of	10842	1,009,707	0.05%	9/21/2033
Selma-h District	Kingsburg-Fowler County Sanitation	D1701040	5,763,175	0.12%	12/28/2049
Shasta	Lake, City of	8041-110	13,889,801	0.29%	3/30/2050
Silicon \	/alley Clean Water	11845	23,182,829		10/31/2036

Silicon Valley Clean Water	D1501025	14,000,000		10/15/2033
Silicon Valley Clean Water	8264-110	43,786,041		10/15/2053
Silicon Valley Clean Water	8264-210	24,815,212		10/15/2053
Silicon Valley Clean Water	8264-710	14,982,105	2.54%	10/15/2053
Sonoma Valley County Sanitation District	06801	2,069,872		11/5/2027
Sonoma Valley County Sanitation District	10814	1,167,159		11/15/2031
Sonoma Valley County Sanitation District	10815	2,060,719	0.11%	8/29/2034
South Coast Water District	D1501004	74,029,259	1.56%	7/31/2053
South Pasadena, City of	13813	8,216,473	0.17%	7/31/2047
South San Francisco, City of	02824	5,274,482		4/30/2026
South San Francisco, City of	07816	3,207,842		7/15/2028
South San Francisco, City of	D1801004	46,258,453	1.15%	10/3/2042
South Tahoe Public Utility District	14835	6,915,741		12/31/2047
South Tahoe Public Utility District	D1501010	3,890,806		8/30/2047
South Tahoe Public Utility District	8220-110	9,560,731	0.43%	4/15/2051
Stockton, City of	8447-110	46,800,000	0.98%	12/31/2053
Sunnyvale, City of	D1601024	116,731,775	2.45%	12/31/2052
Tahoe City Public Utility District	07830	838,221	0.02%	9/30/2028
Tehachapi, City of	11807	1,188,266	0.02%	7/1/2032
Thermalito Water and Sewer District	13825	1,912,884	0.04%	7/17/2035
Thousand Oaks, City of	99811	1,981,626	0.04%	12/22/2022
Turlock, City of	11833	9,794,207		4/1/2034
Turlock, City of	11836	17,274,970		12/1/2034
Turlock, City of	8237-110	9,571,922	0.77%	5/18/2050
Ukiah, City of	8076-110	17,713,180	0.37%	7/30/2050
Upper San Gabriel Valley Municipal Water District	09803	5,274,092		5/31/2032
Upper San Gabriel Valley Municipal Water District	09804	913,490		8/31/2031
Upper San Gabriel Valley Municipal Water District	09805	867,825	0.15%	11/21/2032
Vacaville, City of	00801	13,665,517		7/1/2025
Vacaville, City of	11812	20,296,884		8/31/2033
Vacaville, City of	11817	3,669,193		9/30/2036
Vacaville, City of	11818	50,679,264	1.86%	6/30/2035
Vallejo Flood and Wastewater District	01825	884,948		5/1/2023

Total		\$ 4,759,408,475	100.00%	
				12,01/2004
Yuba City, City of	12804	4,437,440	0.14%	12/31/2034
Yuba City, City of	11830	2,188,520	0.0170	4/30/2035
Yountville, Town of	13802	597,596	0.01%	11/14/2026
Woodland-Davis Clean Water Agency	14819	77,417,726	1.63%	12/31/2046
Woodland, City of	14805	15,008,793	0.32%	12/31/2041
Williams, City of	09860	7,279,295	0.15%	12/31/2037
Western Riverside County Regional WW Authority	14810	61,402,215	1.29%	12/31/2037
West County Wastewater District Western Municipal Water District	14829	32,814,088	0.69%	7/1/2050
West County Wastewater District	13642	16,337,849	0.77%	6/3/2037
West County Wastewater District	13842	11,374,902		8/30/2037
West County Wastewater District	13841	7,934,414		8/6/2041
West County Wastewater District	13840	1,094,526	0.0470	5/6/2036
West Bay Sanitary District	8163-110	16,119,635	0.34%	3/31/2050
Water Replenishment District of Southern California	D1601014	73,537,011	1.55%	12/31/2048
Vista, City of	13843	19,422,266	0.52%	4/30/2039
Vista, City of	12819	1,789,349		5/15/2034
Vista, City of	11838	1,575,082		1/25/2033
Vista, City of	11815	1,875,862		10/11/2032
Visalia, City of	13818	84,232,241	1.77%	9/13/2047
Victor Valley Wastewater Rec Authority	13847	23,363,963	1.38%	2/28/2048
Victor Valley Wastewater Rec Authority	13839	33,345,971		2/28/2048
Victor Valley Wastewater Rec Authority	10810	8,901,467		6/30/2032
Ventura, County of (Waterworks District 16)	08841	3,445,087	0.07%	7/1/2040
Ventura, County of	09842	2,296,080	0.15%	6/23/2041
Ventura, County of	08815	4,607,168	0.2.175	6/30/2040
Valley Sanitary District	D1601003	11,550,856	0.24%	6/1/2048
Valley Center Municipal Water District	12826	3,517,753	0.40%	10/20/2036
Valley Center Municipal Water District	12825	13,725,726		12/15/2036
Valley Center Municipal Water District	12824	1,947,775	0.0470	8/15/2036
Vallejo Flood and Wastewater District	07820	908,402	0.04%	1/24/2025