



CAPITAL IMPROVEMENT PROGRAM

Budget Plan for Joint Outfall System Districts

Fiscal Year 2024-25



**LOS ANGELES COUNTY
SANITATION DISTRICTS**

Converting Waste Into Resources



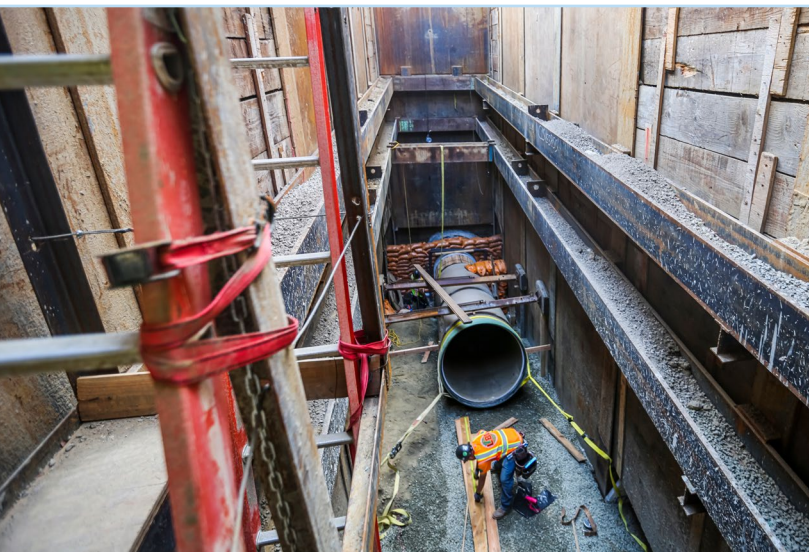
ABOUT THE DISTRICTS' JOINT OUTFALL SYSTEM

The Los Angeles County Sanitation Districts (Districts) are a confederation of 24 independent special districts created under the County Sanitation District Act, California Health & Safety Code Section 4700, et seq., to provide sanitation services. The Districts provide environmentally sound, cost-effective wastewater and solid waste management for approximately 5.5 million people in Los Angeles County. The Districts' service area covers approximately 850 square miles and encompasses 78 cities and unincorporated territory within the County, excluding the majority of the City of Los Angeles.

The Joint Outfall System (JOS) comprises 1,200 miles of sewers, 47 pumping plants, and seven wastewater treatment plants serving 17 Districts in the southeastern portion of the county. This Budget Plan focuses on the upcoming fiscal year's Capital Improvement Program budget for the JOS.



ABOVE FROM LEFT: *The Clearwater Tunnel*; a sewer rehabilitation project in Gardena using the CIPP method
BELOW FROM LEFT: *Sewer rehabilitation work in Carson*; the renaming of the Pure Water Southern California Demo Facility in honor of Congresswoman Grace F. Napolitano



FRONT COVER: *The Clearwater Tunnel*
BACK COVER: *Sewer rehabilitation work in Carson*



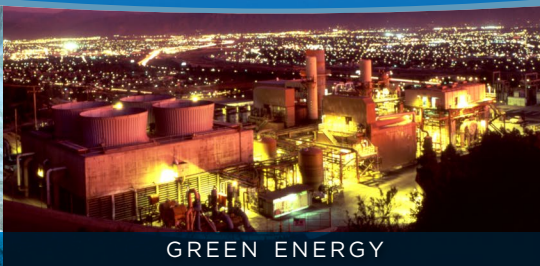
**LOS ANGELES COUNTY
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OUR MISSION

To protect public health and the environment through innovative and cost-effective wastewater and solid waste management and, in doing so, convert waste into resources such as recycled water, energy, and recycled materials.



WATER RECYCLING



GREEN ENERGY



MATERIALS RECYCLING

CORE VALUES



INTEGRITY

We are committed to ethical standards and accountability in our work

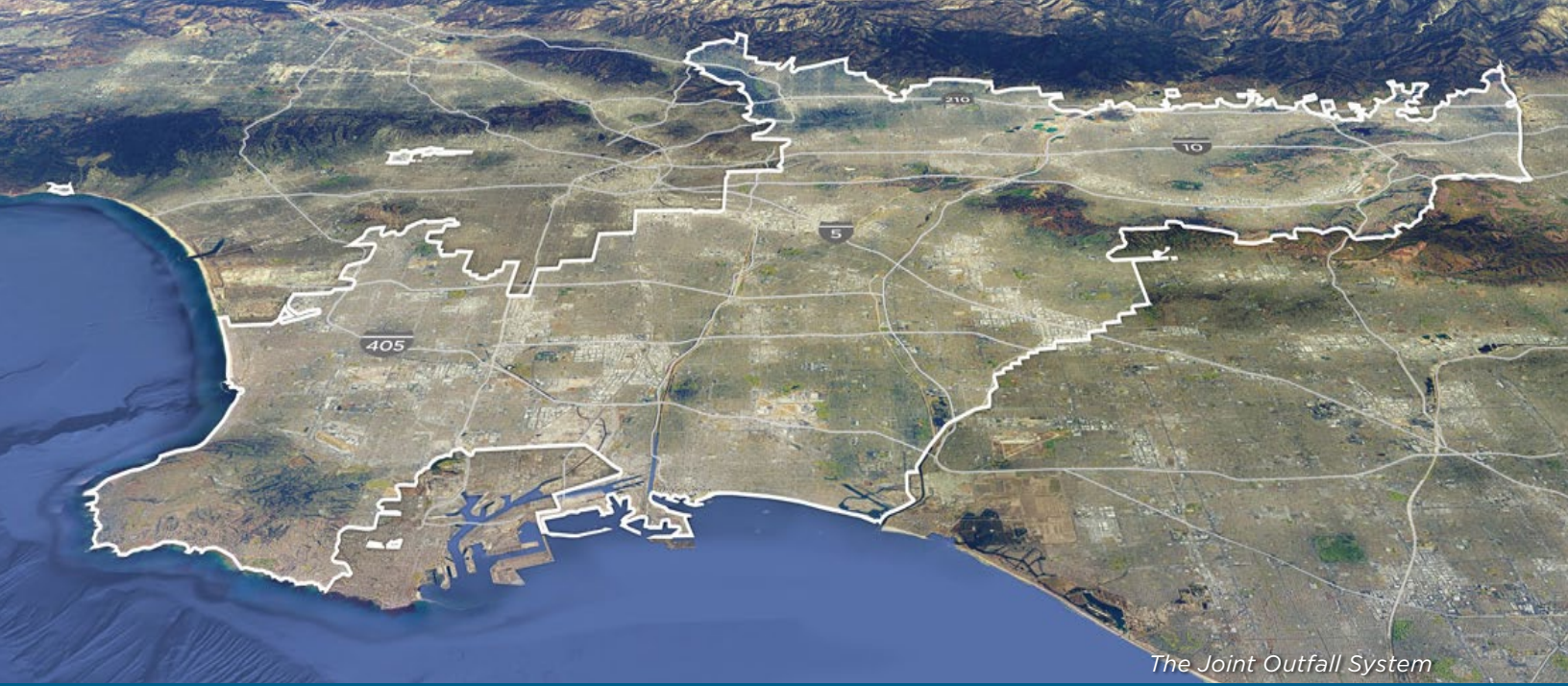
LEADERSHIP

We are committed to the advancement of excellence in wastewater and solid waste management

SERVICE

We are committed to reliable, responsive, and courteous service





BUDGETING OBJECTIVE

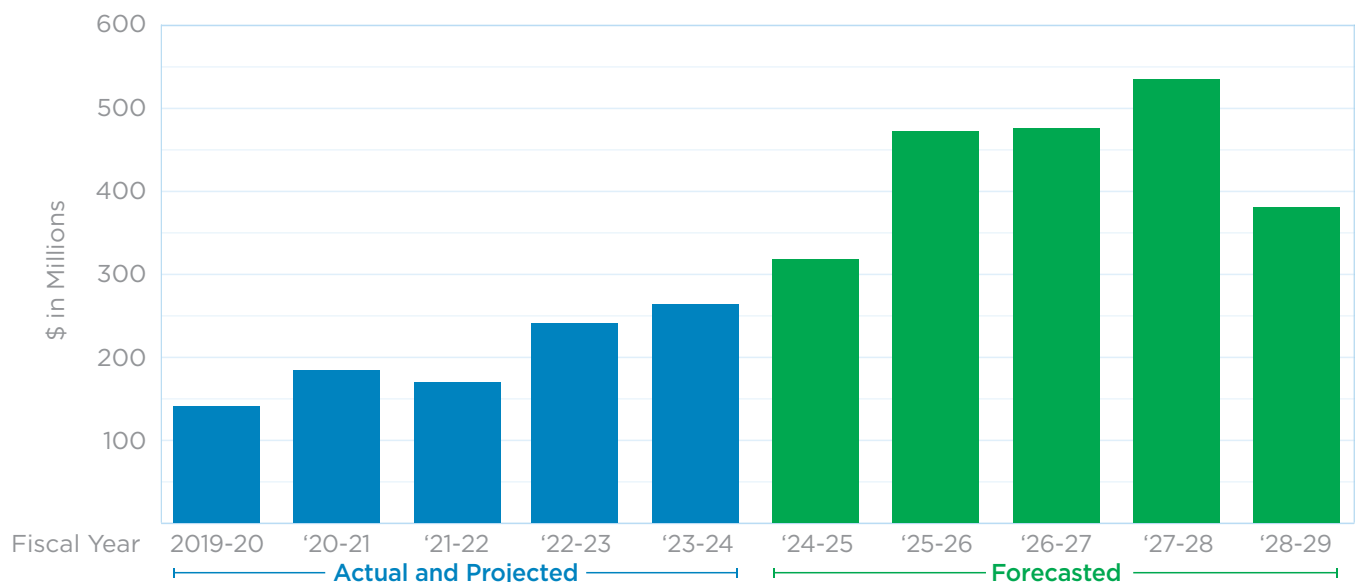
Each year, the JOS Districts adopt annual budgets for the following fiscal year (FY) that outline the major elements of the operating and capital programs. From that, staff allocates the funds necessary for the specific activities and projects. The budget serves as a basis for monitoring financial progress and determining future wastewater user rates.

CAPITAL IMPROVEMENT PROGRAM

This Budget Plan prepared for FY2024-25 includes 224 JOS capital projects for a total of \$317.8 million. The figure below shows the actual expenditure of the last five fiscal years, the budget for FY2024-25, and forecasted budget for the subsequent four years. The rise in spending is associated with the number of significant projects the JOS is undertaking. The forecasted values are reevaluated and revised each year.

Capital Improvement Program Disbursement Plan – Joint Outfall System

Note: FY2023-24 actuals up to 3/31/24





SIGNIFICANT PROJECTS

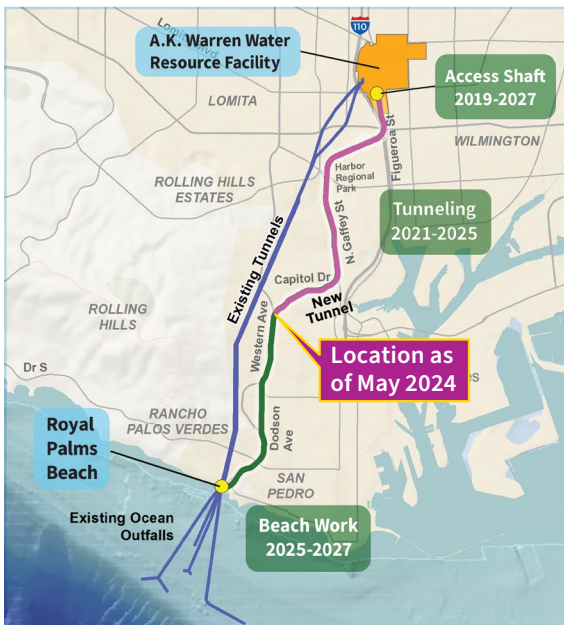
The following sections highlight some of the significant projects happening in the JOS:

THE CLEARWATER PROJECT
SEWER REHABILITATION
PURE WATER SOUTHERN CALIFORNIA
SEISMIC RESILIENCY PROGRAM
EMERGING REGULATORY CONCERNS



THE CLEARWATER PROJECT

ABOVE: The tunnel boring machine, Rachel, being assembled



In keeping with the mission, the Districts will continue to invest heavily in the reliability of our aging infrastructure, preparing for climate change, and building a more sustainable future for the region in the upcoming years.

By year 2028, the Districts aim to complete the construction of the Clearwater Tunnel Project. To date, approximately 4.2 miles out of a total of 7 miles of tunneling have been completed. In this last FY2023-24, approximately 7,000 feet of tunnel and several underground structures were constructed. The project has a remaining projected cost of \$294 million. The project was funded, in part, through a \$441 million low-interest loan from the U.S. Environmental Protection Agency's Water Infrastructure Finance and Innovation Act, and a \$127 million low-interest loan from the State Water Resources Control Board's State Revolving Fund program.

Project Name	Start Date	End Date	Projected Total Cost*	FY 24-25	FY 25-26	FY 26-27	FY 27-28
Clearwater Tunnel	7/1/2004	6/30/2028	\$800M	\$90M	\$70M	\$50M	\$84M

*Includes past, present, and future amounts.





SEWER REHABILITATION

Crews rehabilitating an aging sewer in Gardena using cure-in-place-pipe method

To ensure the continuous protection of public health and the environment, the Districts have embarked on a program to accelerate the rehabilitation of aging sewers. In this past FY2023-24, the Districts implemented an aggressive engineering design process to address the most critical unlined concrete sewers. As a result of the concerted effort, the Districts completed the design of 26 projects and awarded a total value of \$125 million of contracts for rehabilitation of approximately 43 miles of sewers in the JOS. In the upcoming FY2024-25, the budget includes \$120 million for rehabilitation of corroded sewers.

Project Type	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Rehabilitation of Corroded Sewers	\$120M	\$144M	\$138M	\$100M	\$100M

For subsequent years, the Districts plan to continue its aggressive implementation of sewer rehabilitation. In support of this effort, the Districts recently completed a comprehensive risk assessment of all Districts sewers. A specialized software was utilized to evaluate multiple risk factors and assess each sewer pipe’s likelihood and consequence of failure. The results shown in the risk matrix below have allowed the Districts to better plan and prioritize projects with the highest risk levels. For the *Very High* category, plans are underway for the rehabilitation to be completed within the next two years.

Risk Matrix Presenting Risk Levels and Length of Pipelines in Miles that Fall into Each Risk Level

Note: Data queried on May 9, 2024. Miles rounded to the nearest whole number.

Failure Likelihood		1	2	3	4	5	6	7	8	9	10
Consequence of Failure	1	<1	5	10	17	23	26	12	12	5	1
	2	<1	19	52	99	83	40	19	6	1	1
	3	<1	6	4	33	58	51	28	14	6	1
	4	0	7	24	44	39	22	14	6	3	<1
	5	0	11	13	54	70	51	23	12	4	<1
	6	0	5	11	21	34	32	16	11	2	<1
	7	0	1	2	19	30	22	11	7	2	<1
	8	0	0	<1	6	16	12	5	2	1	<1
	9	0	0	0	1	3	2	1	<1	<1	0
	10	0	0	0	0	<1	<1	0	0	0	0
Risk Level		Very Low		Low		Medium		High		Very High	
Total Length		132		634		395		138		3	



The Grace F. Napolitano Pure Water Southern California Program Innovation Center in Carson

Since 1962, the Districts have been producing recycled water that provides a reliable, drought-resistant source of water for the region. Most of the cleaned water from 10 of the 11 wastewater treatment plants is reused mainly for groundwater replenishment, except for the last untapped source produced by the A.K. Warren Water Resource Facility (Warren Facility). To recycle the Warren Facility’s water, advanced treatment is needed to remove salts and nutrients. To that end, the Districts have partnered with the Metropolitan Water District of Southern California on the Pure Water Southern California Program (PWSC). The agencies have been in talks regarding cost sharing and the potential for the Districts to design, construct, own, and operate 1) membrane bioreactors (MBR) that will serve as pretreatment to the advanced water treatment process, and 2) a sidestream centrate treatment (SCT) system to reduce the overall nutrient loading in the Warren Facility’s influent flows. If approved by the Districts’ Boards of Directors, the Districts’ contribution towards PWSC may be as much as \$1.3 billion.

Project Name	Start Date	End Date	Projected Total Cost*	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29
Pure Water Southern California	7/1/2023	6/30/2041	\$1.2B	\$1M	\$10.4M	\$20.4M	\$50M	\$140M
A.K. Warren Water Resource Facility Sidestream Centrate Treatment Facility	7/1/2023	6/30/2028	\$70M	\$3.5M	\$0.8M	\$31.2M	\$34M	-

*Includes past, present, and future amounts.

The agencies are actively pursuing state and federal grants to offset some of the project costs. Metropolitan has been awarded \$80 million from the State of California for general PWSC development, \$5 million from United States Bureau of Reclamation (Bureau) for PWSC planning activities, and \$99 million from the Bureau for PWSC required studies, design activities, and land acquisition for groundwater recharge and conveyance pipeline infrastructure. Metropolitan will share a portion of these grants with the Districts relative to the Districts’ capital contribution to PWSC.

Metropolitan anticipates the release of the Draft Environmental Impact Report (EIR) in December 2024 with a goal of certifying a Final EIR in Fall 2025. Preliminary design will also begin in 2025. Initial site work, such as grading and other site preparation, could begin as early as 2026. Phase 1 of the project will produce a total of 115 million gallons per day of purified water. Metropolitan is targeting an initial water delivery of 30 million gallons per day by 2030 and ultimate completion of Phase 1 by the end of 2032. Phase 2 will produce an additional 35 million gallons per day, however, the timeline of its development will be dependent on the demands by Metropolitan’s member agencies.



*Cryogenic oxygen towers at
the Warren Facility*



SEISMIC RESILIENCY PROGRAM

The Districts have initiated a Seismic Resiliency Program aimed at identifying structural deficiencies and prioritizing seismic mitigation work to maintain the level of service expected of the Districts following a major seismic event. In this past FY2023-24, the Districts awarded an approximately \$2 million contract for the creation of standardized evaluation criteria and procedures for the Districts' structural assets and the completion of an initial seismic evaluation of the Warren Facility. In the coming years, seismic evaluations will be performed for eleven other facilities, including nine water reclamation plants, the Joint Administration Office, and the San Gabriel Valley Field Office. The ensuing mitigation work is anticipated to cost an average of \$15-20 million per year. In the longer term, individual capital projects with clearly defined scope will be added to the Capital Improvement Program.

EMERGING REGULATORY CONCERNS

The Districts have budgeted potential multi-year projects at Whittier Narrows, San Jose Creek-West, Los Coyotes, Long Beach, and Pomona Water Reclamation Plants in anticipation of more stringent discharge limitations that will require effluent temperature control and treatment of PFAS, which stands for per- and polyfluoroalkyl substances. To address these concerns, \$12 million is budgeted for the next five fiscal years while the longer-term budgets will continue to be refined.



Long Beach Water Reclamation Plant

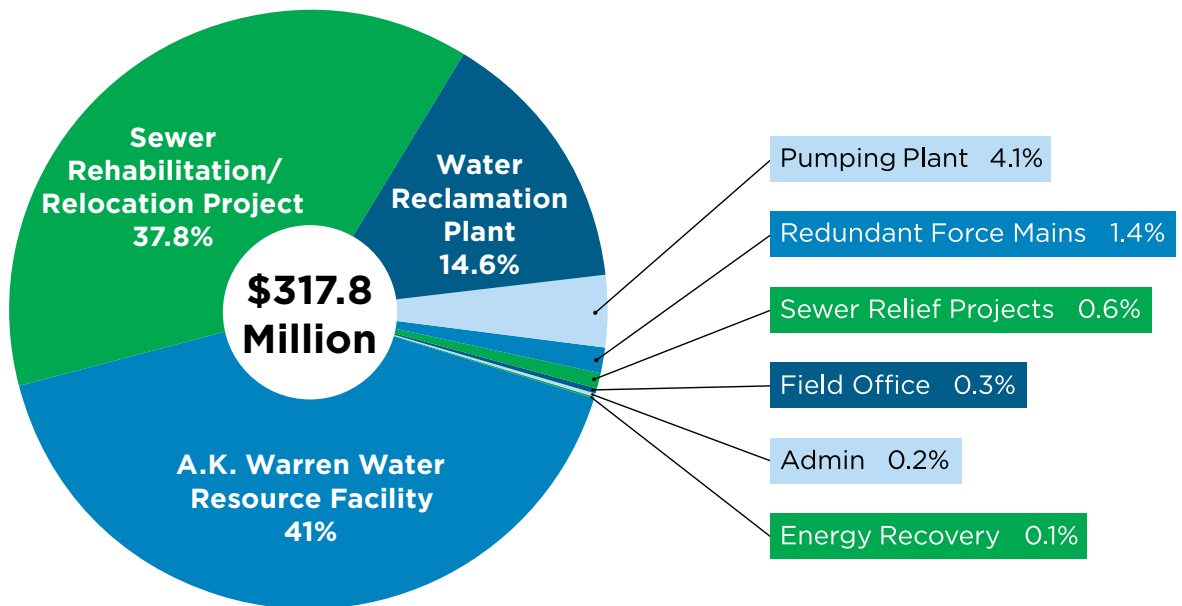
FY2024-25 JOS CIP BUDGET SUMMARY

CIP Projects by Status

Total Budget	\$317.8M
No. of Active Projects	224
No. of Projects in Design	98
No. of Projects in Construction	39
No. of New Projects	23

CIP Projects by Facility Type

Facility Type	No. of Projects	FY2024-25 Budget
AK Warren Water Resource Facility	30	\$130.2M
Sewer Rehabilitation	85	\$120.1M
Water Reclamation Plants	70	\$46.3M
Pumping Plants	18	\$13.0M
Redundant Force Mains	11	\$4.5M
Sewer Relief	4	\$1.9M
Field Office	1	\$1.0M
Admin	4	\$0.6M
Energy Recovery	1	\$0.2M
Grand Total	224	\$317.8M



LONG-TERM JOS CIP BUDGET SUMMARY

Total No. of Projects in 20-Year Planning Period	312
Total Budget in 20-Year Planning Period	\$5.6B
Total Budget for Next 5 Years	\$2B





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