



CONSTRUCTION NETWORK

Connecting Owners to AEC and CM Industries

Water / Wastewater CIPs

March 8, 2023

MWD of S CA

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Hyperion Water Reclamation Plant

Hyperion 2035 Program



The Hyperion Water Reclamation Plant (HWRP) is located in Playa Del Rey and has been operating since 1894, serving a population of 4 million over 600 square miles with a sewer system of 6,700 miles and an average flow of 260 million gallons per day (mgd). The plant currently discharges about 220 mgd of fully treated wastewater into Santa Monica Bay. The goal of the Hyperion 2035 Program is to make better use of this water by converting it into recycled water for potable reuse applications. This new and local source of water will make Los Angeles more resilient and sustainable with respect to climate change impacts such as droughts.

Overview

Hyperion 2035 is LA Sanitation and Environment's (LASAN's) vision for recycling 100% of the wastewater from HWRP to meet the water sustainability goals in LA's Green New Deal by 2035:

- Recycle 100% of wastewater
- Source 70% of water locally

Hyperion 2035 will help Los Angeles improve its water supply resiliency by sourcing water locally and diversifying its water resources portfolio. HWRP will produce up to about 230 mgd of recycled water which is enough to provide **approximately 50% of the overall potable water consumption**.

Current Projects

Hyperion Membrane Bioreactor (MBR) Pilot Facility: This project will provide scientific, technical, design, and operational data to evaluate MBR as a future wastewater treatment process and to obtain regulatory approval.

Hyperion Advanced Water Purification Facility (HAWPF): The HAWPF will provide recycled water to LAX and HWRP and serve as a proof of concept for the full conversion of HWRP to a 100 percent water recycling facility.

Construction Phasing and Cost

This schedule is tentative pending regional coordination and funding availability. IPR is recycled water for indirect potable reuse. DPR is recycled water for direct potable reuse. Construction estimates are in 2022 dollars.

	Construction Targeted Completion	Product Water – (mgd)	Construction Cost (\$Billion)
Phase 1 (IPR)	2033	50	1.4
Phase 2 (IPR)	2037	90	1.2
Phase 3 (IPR + DPR)	2044	230	2.0

Phase 1 Projects Summary

Construction for Phase 1 is expected to begin in 2026.

- New Construction:
 - Primary and Secondary Effluent Equalization Tanks
 - Intermediate Pump Station
 - Odor Control Facility (for new primary conveyance and storage facilities)
 - Standby Generator Facility
 - Blower Building
 - Fine Screens Facility
 - Sidestream Treatment Facility
 - Battery A Membrane Train 1
 - Battery A Odor Control Facility 1
 - Electrical Substations
 - Chemical Facility
 - Reverse Osmosis System
 - UVAOP System
- Retrofit:
 - Oxygen Bioreactors to MBR Bioreactors
 - Product Water Pump Station
- Demolition:
 - Conventional Digesters (out of service)
 - Employee Parking Lot
 - Secondary Clarifiers
 - Power and Blower Building (out of service)

This list of projects is subject to change.

For more information contact:
sanrecycledwater@lacity.org

(800) 773-2489
24HR Customer Care Center

To learn more visit:
www.lacitysan.org/recycledwater

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities.





The Metropolitan Water District of Southern California

UPCOMING PROJECTS

Spec. No.	Project	Advertise
2056	Furnishing One Brushless Exciter for Gene Pumping Plant	February 2023
2042	CRA Conveyance System Solar Level Sensors Installation	February 2023
2000A	Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings	February 2023
2007	Headquarters Fire Sprinkler Level P1 Replacement	February 2023
2052	Eagle Mountain Pumping Plant Village Paving	March 2023
2049	Inland Feeder Foothill Pump Station Intertie	March 2023
2058	Rialto Pipeline Rehabilitation	March 2023
2033	Mills Plant Fluorosilicic Acid Tanks Replacement	March 2023
M-3058	Jensen Plant Fiber Optic Cable Installation	March 2023
2021	Inland Feeder Rialto Pipeline	March 2023
2040	Badlands Tunnel Surge Tank	March 2023
M-3064	Metropolitan Headquarters Courtyard Improvements	March 2023
1897	Furnishing High Voltage Power Transformers	April 2023
1976	Gene Communication System Upgrade	April 2023
2018	Weymouth Plant Area Paving	April 2023
2006	Right of Way Infrastructure Protection Program – San Bernardino County Pipelines – West – Stage 2	April 2023

Metropolitan Water District of Southern California
Future Construction Contract Opportunities

Specifications No. 2056: Furnishing One Brushless Exciter for Gene Pumping Plant

Cost Range: \$350,000 - \$400,000

Location: San Bernardino County

Description: Furnishing One Brushless Exciter for Gene Pumping Plant and manufacturer field services.

Work Activities: Furnish a brushless exciter and provide manufacturer field services during installation by others.

Estimated Advertise Date: January 31, 2023

Specifications No. 2042: CRA Conveyance System Solar Level Sensors Installation

Cost Range: \$3,500,000– \$4,400,000

Location: San Bernardino and Riverside Counties, CA

Description: The work consists of furnishing and installing equipment buildings, communications, solar, and electrical equipment; level transducers.

Work Activities: Equipment furnishing and installation, electrical, .

Estimated Advertise Date: January 26, 2023

Specifications No. 2000A: Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings

Cost Range: \$12,000,000

Location: San Bernardino and Riverside Counties, CA

Description: This project is subject to a Project Labor Agreement. The project consists of furnishing and construction of six prefabricated buildings, two at each pumping plant.

Work Activities: Demolition, earthwork for foundation and grading, concrete, structural steel, metal panels, electrical, underground fire water, fire sprinklers, asphalt paving, and fencing.

Estimated Advertise Date: February 2023

Specifications No. 2007: Headquarters Fire Sprinkler Level P1 Replacement

Cost Range: \$1,200,000 - \$1,500,000

Location: Los Angeles, CA

Description: This work consists of replacement of existing horizontal fire main piping, ancillary isolation valves, and fire hydrant connections.

Work Activities: Fire protection and plumbing.

Estimated Advertise Date: February 2023

Specifications No. 2052: Eagle Mountain Pumping Plant Village Paving

Cost Range: \$170,000 and \$240,000.

Location: Eagle Mountain Pumping Plant, Desert Center, CA

Description: The work consists of demolishing approximately 30,090 square feet of existing asphalt concrete pavement and replacing with a new 2-inch asphalt concrete overlay, cool seal on top of the asphalt concrete.

Work Activities: demolition, asphalt concrete pavement overlay

Estimated Advertise Date: March 2023

Specifications No. 2049: Inland Feeder-Foothill Pump Station Intertie

Cost Range: \$14,000,000

Location: Highland, CA

Description: This project is subject to a Project Labor Agreement. The work consists of furnishing and installing approximately 1,250 feet of 54-inch pipe, four surge tanks, two valve vaults, one air compressor structure, and installing three Metropolitan-furnished butterfly valves.

Work Activities: Earthwork for excavation and backfill, pipeline, concrete, reinforcing steel, welding, electrical, instrumentation and controls, mechanical for piping and valve testing

Estimated Advertise Date: March 2023

Specifications No. 2058: Rialto Pipeline Rehabilitation

Cost Range: \$2,500,000 - \$3,000,000

Location: Upland and Rancho Cucamonga, CA

Description: The work consists of rehabilitation of approximately 35 linear feet of 120" diameter steel pipe along the Rialto Pipeline including excavating an access portal installation of Metropolitan-furnished 20-inch diameter valve.

Work Activities: Excavation, demolition, pipe installation, welding, cement mortar lining, hazardous material abatement, valve installation, traffic control, concrete, asphalt, site restoration

Estimated Advertise Date: March 2023

Specifications No. 2033: Mills Fluorosilicic Acid Tanks Replacement

Cost Range: \$350,000 – \$400,000

Location: Riverside, CA

Description: The work consists of temporary removal of the fluorosilicic acid tank farm roof system and equipment to facilitate replacement of the existing two tanks with new Metropolitan-furnished equipment, re-installation of the roof system in-place, and disposal of existing two tanks.

Work Activities: Removal and re-installation of the roof system, tank replacement, electrical, instrumentation, temporary structural equipment supports, concrete, reinforcing steel, and coating application.

Estimated Advertise Date: March 2023

Specifications No. M-3058: Joseph P. Jensen Water Treatment Plant Fiber Optic Cable Installation

Cost Range: \$150,000

Location: Granada Hills, CA

Description: The work consists of installing and testing 2,000 ft. of new fiber optic cable that will be routed in existing ductbanks, manholes, raceways.

Work Activities: Routing and terminating fiber optic cable.

Estimated Advertise Date: March 2023

Specifications No. 2021: Inland Feeder Rialto Pipeline

Cost Range: \$7,000,000 - \$8,500,000

Location: San Bernardino, CA

Description: This project is subject to a Project Labor Agreement. The work consists of furnishing and installing 96-inch-diameter welded steel pipe bypass line, 136.5 X 136.5 X 96-inch fitting, 145.5 X 145.5 X 96-inch fitting; cast-in-place concrete valve vault; and various electrical upgrades.

Work Activities: Demolition, earthwork, concrete, reinforcing steel, welding, electrical, mechanical, pipeline, and SCADA.

Estimated Advertise Date: March 2023

Specifications No. 2040: Badlands Tunnel Surge Tank

Cost Range: \$17,000,000 - \$19,000,000

Location: Inland Feeder

Description: This project is subject to a Project Labor Agreement. The work consists of constructing a surge tank facility near the south portal of the Badlands Tunnel located on the Inland Feeder.

Work Activities: Surge tank facility construction.

Estimated Advertise Date: March 2023

Specifications No. M-3064: Metropolitan Headquarters Courtyard Improvements

Cost Range: \$140,000

Location: Los Angeles, CA

Description: The work consists of removing and replacing the existing grout and caulking in between the slate and concrete pavers in the courtyard and walkway bollards, replacing damaged decorative stone; and replacing damaged grout.

Work Activities: Tiles and caulking repairs.

Estimated Advertise Date: March 2023

Specifications No. 1897: Furnishing High Voltage Power Transformers

Cost Range: \$35,000,000 to \$40,000,000

Location: San Bernardino and Riverside Counties, CA

Description: Furnish and deliver 35 high-voltage power transformers, all appurtenances, and manufacturer's field services. Only those prequalified under Request for Qualifications No. 1240A will be permitted to submit a bid under Specifications No. 1897. Installation of the transformers will be completed by others.

Work Activities: Furnish transformers and provide manufacturer field services during installation by others.

Estimated Advertise Date: April 2023

Specifications No. 1976: Gene Communication System Upgrade

Cost Range: \$1,900,000 – \$2,500,000

Location: San Bernardino, CA

Description: The work consists of installing a 2-mile-long fiber optic line using existing poles and install approximately 24 new poles.

Work Activities: Trenching, excavation, installation of fiber optic line, and new poles.

Estimated Advertise Date: April 2023

Specifications No. 2018: F.E. Weymouth Water Treatment Plant Area Paving

Cost Range: \$1,400,000 – \$1,700,000

Location: La Verne, CA

Description: The work consists of demolishing approximately 150,000 square feet of existing asphalt concrete pavement, re-compacting existing crushed aggregate base, and replacing with new asphalt concrete pavement; applying asphalt sealcoat on existing pavement.

Work Activities: Demolition, and asphalt concrete pavement.

Estimated Advertise Date: April 2023

Specifications No. 2006: Right of Way Infrastructure Protection Program - San Bernardino County Pipelines - West - Stage 2

Cost Range: \$1,500,000 – \$1,700,000

Location: San Bernardino County, CA

Description: The work consists of access improvements, various drainage and erosion control improvements, and concrete work.

Work Activities: Demolition, grading, concrete, reinforcing steel, cellular concrete, fencing, ladders, railing, manholes, pipeline, hydroseeding.

Estimated Advertise Date: April 2023



OC SAN

Capital Improvement Program

GETTING TO KNOW OC SAN



About Us

The Orange County Sanitation District (OC San) is one of the largest regional wastewater agencies on the west coast. We provide wastewater collection, treatment, and recycling services for 2.6 million people in central and northern Orange County, California.



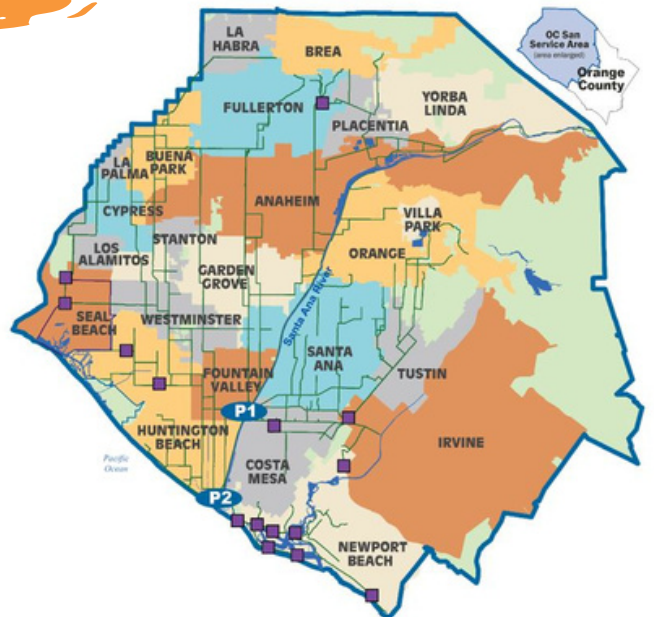
Our Infrastructure

OC San maintains and operates two facilities located in Fountain Valley and Huntington Beach and treat more than 180 million gallons per day from residential, commercial, and industrial sources. OC San owns and maintains 388 miles of pipe and 15 pump stations throughout our 479 square miles of service area.



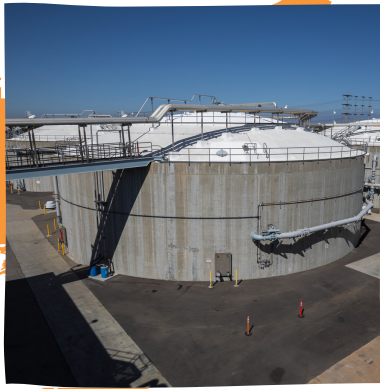
Doing Business with Us

Scan the QR code or visit the website www.ocsan.gov/doingbusiness for general information and to view current and upcoming design proposal and construction bid opportunities.



714.962.2411
forinformation@ocsan.gov
www.OCSan.gov





Capital Improvement Program

The Capital Improvements Program (CIP) supports OC San's commitment to provide a reliable service to our ratepayers, expand resource recovery, and repair and replace aging infrastructure. The ten-year CIP budget for Fiscal Years 2022-23 through 2031-32 is currently valued at \$3.08 billion.



Upcoming Proposal Opportunities

Project No.	Project Title	Advertise Date	Construction Estimate
P2-136	Activated Sludge Aeration Basin Rehabilitation at Plant No. 2	Mar 2023	\$39.4M
3-60	Knott-Miller Holder Artesia Branch Rehabilitation (Buena Park)	Apr 2023	\$7.2M
P2-139	Emergency Overflow Pipes and Wingwalls Rehabilitation at Plant No. 2	Apr 2023	\$2.3M
P1-141	Administrative Facilities and Power Building 3A Demolition	Jul 2023	\$5.4M
J-137	120-inch Ocean Outfall Rehabilitation	Dec 2023	\$54.9M



Upcoming Construction Bid Opportunities

Project No.	Project Title	Advertise Date	Construction Estimate
7-68	MacArthur Force Main Improvements (Newport Beach)	Mar 2023	\$4.6M
P2-127	Collections Yard Relocation and Warehouse Demolition at Plant No. 2	Mar 2023	\$4.5M
FE19-02	CenGen Plant Water Pipe Replacement at Plant No. 1	Mar 2023	\$3.4M
J-98	Electrical Power Distribution System Improvements	Mar 2023	\$13.2M
FE20-02	Digester C, D, F, and G Mechanical Rehabilitation at Plant No. 2	May 2023	\$4.3M
3-67	Seal Beach Pump Station Replacement (Seal Beach)	Jun 2023	\$74M
7-65	Gisler-Red Hill Interceptor and Baker Force Main Rehabilitation (Irvine, Santa Ana, Costa Mesa)	Jun 2023	\$44.7M
P2-128A	TPAD Perimeter Wall	Aug 2023	\$22.7M
3-64C	Los Alamitos Sub-Trunk and Westside Relief Interceptor Rehabilitation (Los Alamitos, Cypress, La Palma)	Sep 2023	\$35M
5-67	Bay Bridge Pump Station Replacement (Newport Beach)	Oct 2023	\$68.2M
2-49	Taft Branch Improvements (Orange)	Nov 2023	\$15.4M

Reclamation Plant No. 1 and Administrative Offices
10844 Ellis Avenue, Fountain Valley, CA 92708

Treatment Plant No. 2
22212 Brookhurst Street, Huntington Beach, CA 92646

Operation NEXT & Hyperion 2035

Increasing L.A.'s Local Water Supply

Operation NEXT is a new water supply initiative being developed by LADWP in partnership with LA Sanitation and Environment (LASAN) that aims to improve the overall water supply resiliency and reliability for Los Angeles. The goal of Operation NEXT is to maximize purified recycled water from LASAN's Hyperion Water Reclamation Plant in Playa del Rey, creating a new sustainable water supply for L.A. and the region.

This new local supply will offset purchased imported supplies through an advanced treatment process that will deliver indirect potable water to replenish our groundwater basins. Concurrently, LADWP is working with regulators to allow integrating purified recycled water directly into the drinking water system. This process would further expand the use of purified recycled water from Hyperion and other city water reclamation plants as a supplemental water source.

Water Supply Challenges and Opportunities

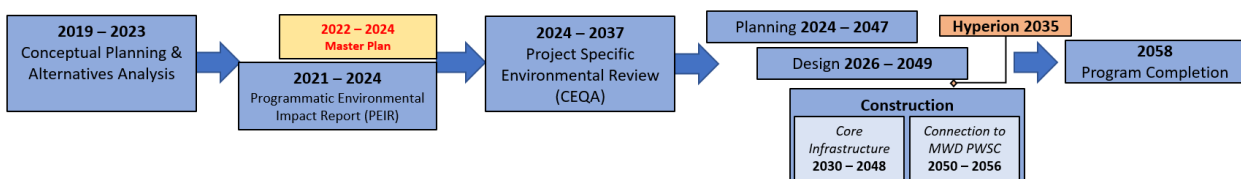
Los Angeles' water supply from the Los Angeles Aqueduct (LAA) has been impacted by significant swings in hydrological conditions, including 15 years of extreme dry periods combined with increased environmental restoration obligations. As a result, LADWP has had to purchase more imported water to meet our city's water needs, even with increased conservation and water use efficiency. Operation NEXT is a transformational initiative that aims to reduce our dependence on purchased imported water and create a more resilient and sustainable local water supply.

The Hyperion plant will be retrofitted with advanced treatment processes (membrane bioreactors, reverse osmosis, and ultraviolet advanced oxidation), to produce purified recycled water. Working with regional partners — the Water Replenishment District of Southern California (WRD) and the Metropolitan Water District of Southern California (MWD) — LADWP will use the purified recycled water as a sustainable and reliable source of local water supply for the city.

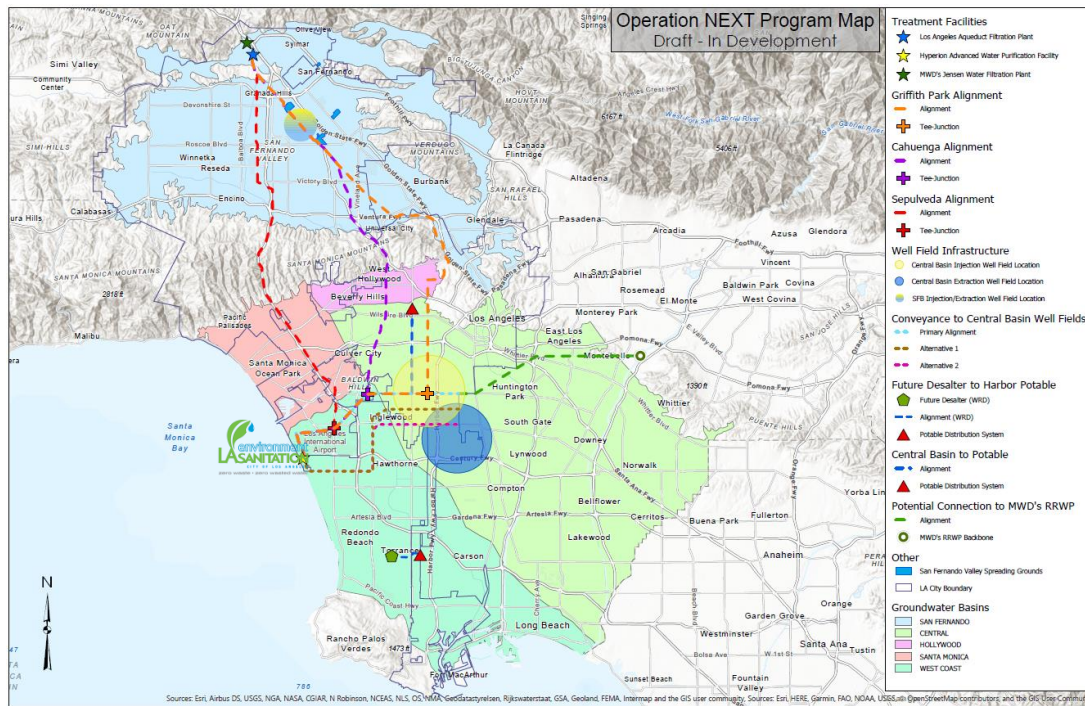
Conveyance and Storage

In partnership with WRD, LADWP has determined optimal locations to convey the purified recycled water from Hyperion for injection into the underlying aquifers within the West Coast and Central Groundwater Basins. LADWP will also convey purified recycled water to replenish the San Fernando Groundwater Basin and potentially use it to supplement water sources that are treated at the Los Angeles Aqueduct Filtration Plant.

Timeline



Program Map



Benefits

- Increase local water supplies to offset purchased imported water.
- Build a resilient storage supply in local groundwater basins.
- Mitigate potential impacts of earthquakes, climate change, and drought.

Master Plan

LADWP is currently developing a Master Plan to independently evaluate the Operation NEXT planning efforts to date as well as the long-term planning strategy to ensure the program's success. The Master Plan kicked off in January 2022 and will continue through early 2024, with support and feedback from community stakeholders and technical advisors.

Overarching goals include:

- Developing additional scenarios that have yet to be explored, using metrics to compare scenarios against one another.
- Identifying implementation strategies, a range of costs, financing options, potential partnerships, major milestones, and other project management needs.
- Ensuring that this new water supply provides equitable resilience, sustainability, and reliability benefits to all LADWP customers, including those in disadvantaged communities.

Environmental Process

Work on the Programmatic Environmental Impact Report (PEIR) was paused during the Master Plan process, and will resume once the plan is completed in early 2024. The PEIR will include outreach efforts developed through the Master Plan to inform the public of significant environmental effects of proposed projects, identify possible ways to minimize those effects, and describe reasonable alternatives to those projects. Estimated for completion in late 2024, the PEIR will serve as an umbrella document that covers all related components of the Operation NEXT Program. This document will help to outline a pragmatic approach to facilitate property acquisition, public outreach, and the ability to apply for grant funding.