

## **CAPITAL IMPROVEMENT PROGRAM**

Fiscal Year 2023



### LONG BEACH WATER DEPARTMENT CAPITAL IMPROVEMENT PROGRAM FISCAL YEAR 2022/23

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### LONG BEACH WATER DEPARTMENT CAPITAL IMPROVEMENT PROGRAM FISCAL YEAR 2022/23

WATER FUND PROJECT BUDGETS (thousands)	
Fiscal Year	2022/23
Water Pipeline System Improvements	14,326
Reservoir/Treatment Plant System Improvements	9,992
Water Supply	15,646
Water Facility Improvements	621
Water Developer Projects	542
TOTAL FOR WATER FUND PROJECTS	41,126
SEWER FUND PROJECT BUDGETS (thousands) Fiscal Year	2022/23
Sewer Pipeline System Improvements	371
Sewer Lift Station Rehabilitations	4,247
Sewer Developer Projects	561
TOTAL FOR SEWER FUND PROJECTS	5,179
TOTAL CIP PROJECTS	46,305

### LONG BEACH WATER DEPARTMENT CAPITAL IMPROVEMENT PROGRAM FY 2022/23 WATER FUND PROJECTS

#### PROJECT CATEGORY: WATER PIPELINE SYSTEM IMPROVEMENTS

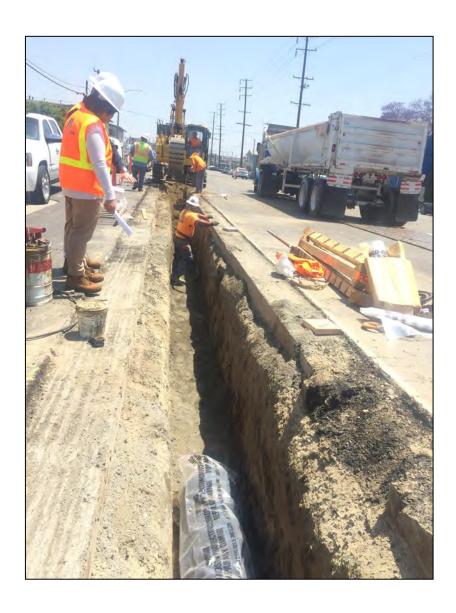
Drainet Depariation	Coat Fatimate
Project Description	Cost Estimate
Large Valve Replacement FY23/24	\$150,000
Large Valve Replacement FY24/25	\$13,100
Port of Long Beach Water System Improvement Study	\$1,473,900
Cathodic Protection - Phase 5	\$620,000
Cathodic Protection - Phase 6	\$620,000
Cathodic Protection - Phase 7	\$100,000
Water Main Improvement Project 2-D and POF-4	\$2,193,174
Water Main Improvement Project 2-C	\$372,500
Water Main Improvement Project 3-B	\$58,000
Water Main Improvement Project 3-A	\$857,280
Water Main Improvement Project 5B	\$50,400
Water Main Improvement Project POF-01	\$140,600
Water Main Bridge Crossing Master Plan	\$212,122
Water Main Bridge Repair FY21/22	\$600,000
Water Main Bridge Repair FY23/24	\$40,435
Water Main Lining Pilot Project	\$20,018
Alley Water Main Conversion - Pacific Ave	\$85,272
Water Main Replacement - Lakewood Boulevard	\$499,310
Golden Avenue Main Replacement	\$1,600,000
Water Main Replacement - Spinnaker Bay, Phase 1	\$4,121,397
Colorado Lagoon Open Channel - Potable Water Main Relocation	\$312,800
Colorado Lagoon Open Channel - Reclaimed Water Main Relocation	\$185,700
TOTAL	\$14,326,008

#### SUMMARY:

The Long Beach Water Department (LBWD) potable water system consists of over 910 miles of transmission and distribution pipeline, and over 93,000 service connections. Additionally, LBWD owns and maintains over 35 miles of recycled water pipeline. LBWD has developed several programs to assess and develop improvements plans for our pipelines and appurtenances. These programs include: water main improvement, large valve replacement, cathodic protection, and water main bridge crossing improvement. The large valve replacement program improves water system reliability and restores operational functionality. LBWD is conducting a study on Port's water system to determine required improvements in preparation for transfer of ownership and maintenance to LBWD. LBWD's cathodic protection program will prevent corrosion and ensure prolonged dependability of the water system. LBWD's bridge crossing improvement program ensures the integrity, dependability, and prolonged life of

### LONG BEACH WATER DEPARTMENT CAPITAL IMPROVEMENT PROGRAM FY 2022/23 WATER FUND PROJECTS

the water system, and the Water Main Bridge Master Plan identifies future projects for LBWD. LBWD's Water Main Lining Pilot Project explores trenchless methods and technologies for pipe rehabilitation and improvements. LBWD's water improvement program enhances water flow and quality, as well as ensuring sufficient fire flow capacity. As part of the LBWD's alley main conversion program, old mains in alleys are replaced with new mains in City streets, and the existing service laterals are relocated as part of the conversion. The Colorado Lagoon Open Channel – Potable and Reclaimed Main Relocations are pipeline relocation projects in conjunction with the City's Colorado Lagoon improvements.





# Capital Improvement Program FY 2022/23

Project: COLORADO LAGOON OPEN CHANNEL - RECLAIMED WATER MAIN RELOCATION

Fund: Water

Project Category: Water Pipeline System Improvements

Project Description: Project is part of larger Public Works Colorado St Utility Crossing, remove and replace

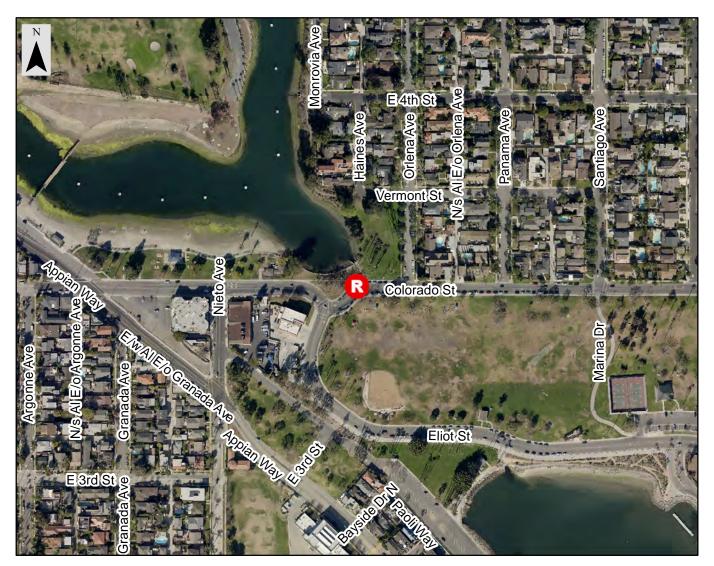
approximately 442 LF of existing 6" AC recycled main at Colorado St and Eliot St

Purpose: Public Works Colorado St Utility Crossing, remove and replace existing 6" AC recycled main.

Location: Colorado Lagoon

**Council District:** 3

FY 2022/23 Budget: \$185,700





# Capital Improvement Program FY 2022/23

Project: WATER MAIN IMPROVEMENT PROJECT 5B

Fund: Water

**Project Category:** Water Pipeline System Improvements

Project Description: This project includes 4,640 linear feet of 8-inch and 12-inch DIP, including associated

services, valves, and fire hydrants.

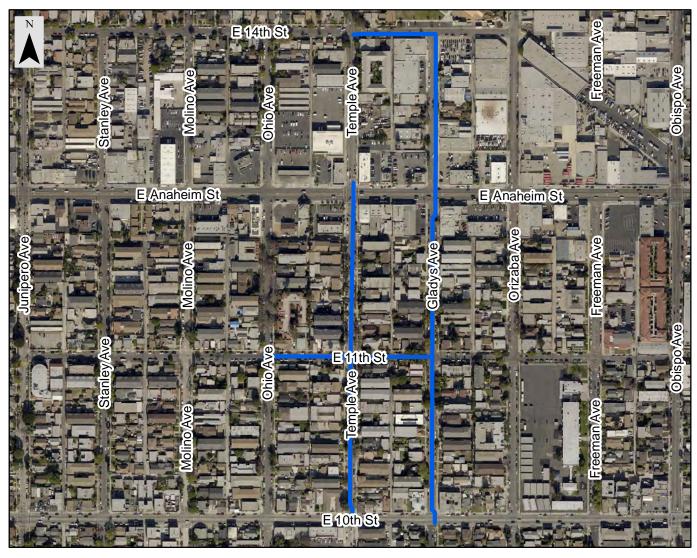
**Purpose:** Improve fire flow protection and preserve water quality to the area.

Location: Bounded by 14th St to the north, Orizaba Ave to the east, 10th St to the south, and Ohio Ave to the

west

**Council District: 2** 

FY 2022/23 Budget: \$50,400





# Capital Improvement Program FY 2022/23

Project: WATER MAIN BRIDGE REPAIR FY 21/22

Fund: Water

Project Category: Water Pipeline System Improvements

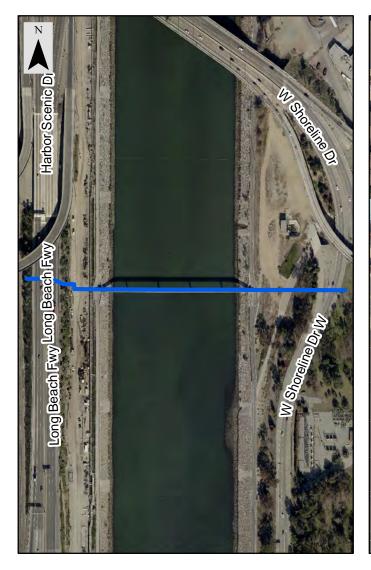
Project Description: This project will include remove and replace coating of water line at bridge crossing

Purpose: Improve corrosion protection of the water main

Location: 6th Street and Los Angeles River, and Anaheim Road and Los Cerritos Channel

Council District: 1 & 7

FY 2022/23 Budget: \$600,000







# Capital Improvement Program FY 2022/23

Project: POLB WATER SYSTEM IMPROVEMENT STUDY

Fund: Water

**Project Category:** Water Pipeline System Improvements

Project Description: This project will assess necessary improvements to the POLB water distribution system in

preparation for the transfer of operations from POLB to LBWD.

Purpose: Determine which portions of the POLB's water distribution system will be transferred to LBWD by

performing a condition assessment of the Port's transferrable assets.

Location: POLB area

Council District: 1 & 7

FY 2022/23 Budget: \$1,473,900





# Capital Improvement Program FY 2022/23

Project: CATHODIC PROTECTION PHASE 6

Fund: Water

Project Category: Water Pipeline System Improvements

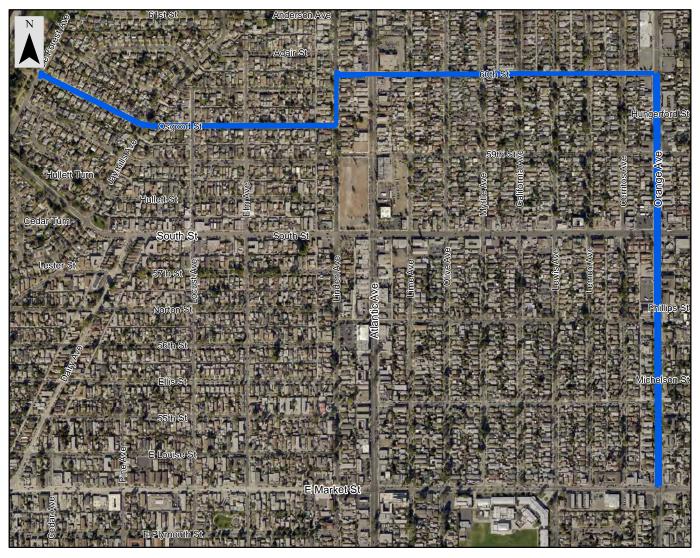
**Project Description:** This project will include installation of cathodic test stations for corrosion protection.

**Purpose:** Ensure the integrity, dependability, and prolonged life of the water system.

Location: Orange Ave from the intersection of E Market St to 60th St. And turns westerly on 60th St and then

south onto Linden Ave, continuing west on Osgood St until the intersection of De Forest Ave.

**Council District:** 6, 8 and 9 **FY 2022/23 Budget:** \$620,000





# Capital Improvement Program FY 2022/23

Project: WATER MAIN IMPROVEMENT PROJECT 2-D & POF-4

Fund: Water

Project Category: Water Pipeline System Improvements

Project Description: This project will construct a new 12-inch main and replace existing 6-inch 8-inch and 12-

inch within LB Airport property and on Spring St.

**Purpose:** Improve fire flow protection and preserve water quality to the area.

Location: Southerly area of LB Airport and Spring St.

**Council District:** 5

FY 2022/23 Budget: \$2,193,174





# Capital Improvement Program FY 2022/23

Project: WATER MAIN BRIDGE CROSSING MASTER PLAN

Fund: Water

**Project Category:** Water Pipeline System Improvements

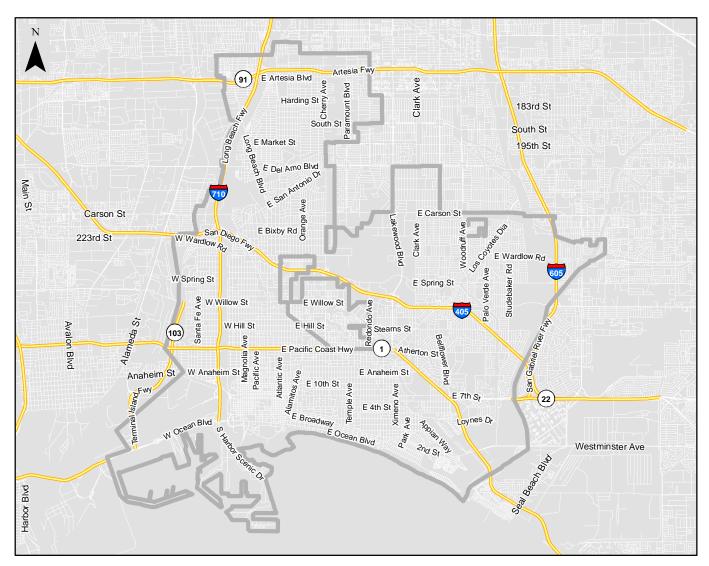
Project Description: Review all water main bridge crossings, perform inspection, testing and analysis, and make

recommendations for continous inspections and omprovements.

**Purpose:** Ensure the integrity, dependability, and prolonged life of the water system.

Location: Various locations of City of Long Beach

Council District: Various FY 2022/23 Budget: \$212,122





# Capital Improvement Program FY 2022/23

Project: WATER MAIN IMPROVEMENT PROJECT 3-A

Fund: Water

Project Category: Water Pipeline System Improvements

**Project Description:** Project will upsize approximately 1,786 LF of existing 6" potable main to 8" in addition to necessary fire hydrant and appurtenances. Existing main to be replaced mainly serves 1613 Ximeno Avenue, as

well as 3 other developments.

**Purpose:** Improve fire flow protection and preserve water quality to the area.

Location: Outer Traffic Circle, Ximeno Way to Ximeno Ave

**Council District:** 3

FY 2022/23 Budget: \$857,280





# Capital Improvement Program FY 2022/23

Project: WATER MAIN IMPROVEMENT PROJECT 2-C: LB AIRPORT

Fund: Water

**Project Category:** Water Pipeline System Improvements

Project Description: This project will upsize the existing 8-inch with a 12-inch (Approximately 6,800-ft) within the

LB Aiport property.

**Purpose:** Improve fire flow protection and preserve water quality to the area.

Location: LB Airport (along tarmac from Spring St to Wardlow Rd).

**Council District:** 5

FY 2022/23 Budget: \$372,500





# Capital Improvement Program FY 2022/23

Project: WATER MAIN REPLACEMENT - LAKEWOOD BLVD

Fund: Water

**Project Category:** Water Pipeline System Improvements

Project Description: This project will include replacing cast iron mains with ductile iron pipes, and replacing

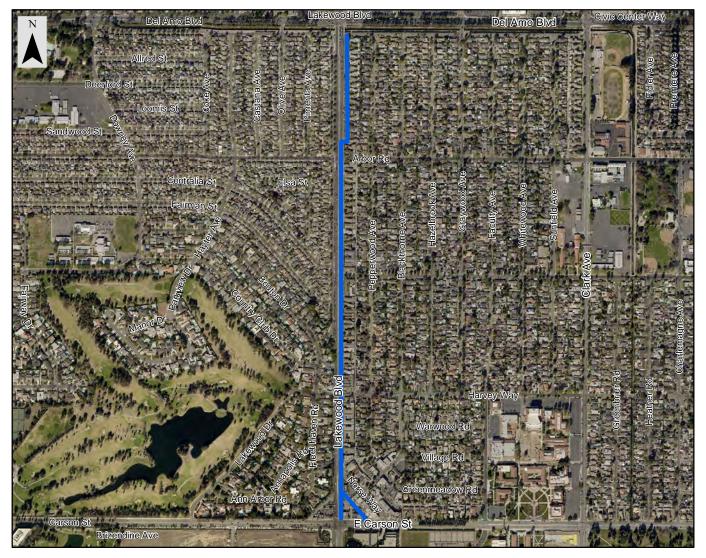
water service laterals to the new water mains moved from the old main.

**Purpose:** Improve fire flow protection and preserve water quality to the area.

Location: Lakewood Blvd - Carson Blvd to Del Amo Blvd

**Council District:** 5

FY 2022/23 Budget: \$499,310





# Capital Improvement Program FY 2022/23

Project: WATER MAIN LINING PILOT PROJECT

Fund: Water

**Project Category:** Water Pipeline System Improvements

**Project Description:** This project will include installing a cured-in-place NSF61 approved pressure pipe liner in an existing 6-inch cast iron water main along the alleys east of Cherry Avenue and Sherman Place between 15th

street and Pacific Coast Highway

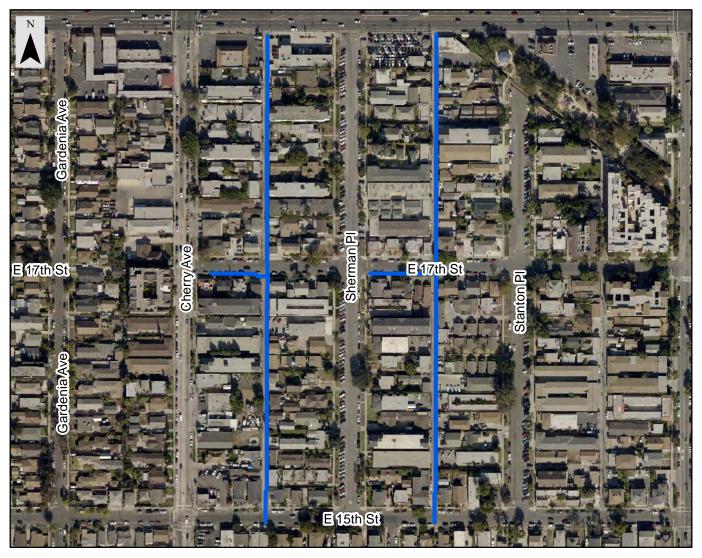
**Purpose:** Improve fire flow protection and preserve water quality to the area.

Location: Alley east of Cherry Avenue and Sherman Plance between 15th street and Pacific Coast Highway,

Including 17th St. between Cherry Ave and alley and Sherman PI and Alley

**Council District:** 6

FY 2022/23 Budget: \$20,018





# Capital Improvement Program FY 2022/23

Project: ALLEY WATER MAIN CONVERSION - PACIFIC AVE

Fund: Water

Project Category: Water Pipeline System Improvements

Project Description: This project will include replacing cast iron mains with ductile iron pipes, and constructing

water service laterals to the new water mains moved from alleys to streets.

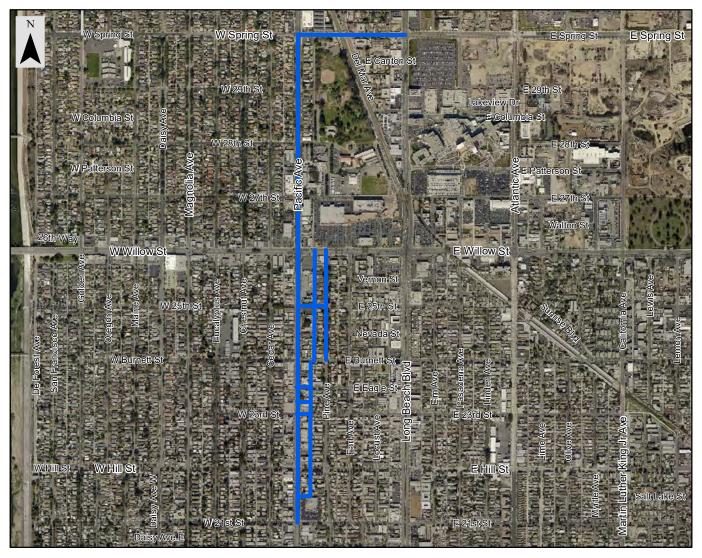
**Purpose:** Improve fire flow protection and preserve water quality to the area.

Location: Spring Street – from Pacific Avenue to Long Beach Boulevard and Pacific Avenue – from Willow Street

to Willard Street

Council District: 7

FY 2022/23 Budget: \$85,272





# Capital Improvement Program FY 2022/23

Project: WATER MAIN REPLACEMENT - SPINNAKER BAY, PHASE 1

Fund: Water

**Project Category:** Water Pipeline System Improvements

Project Description: This project will include replacing approximately 4,000 LF of 6, 8 and 12-inch ductive iron

pipe with C900 PVC pipe

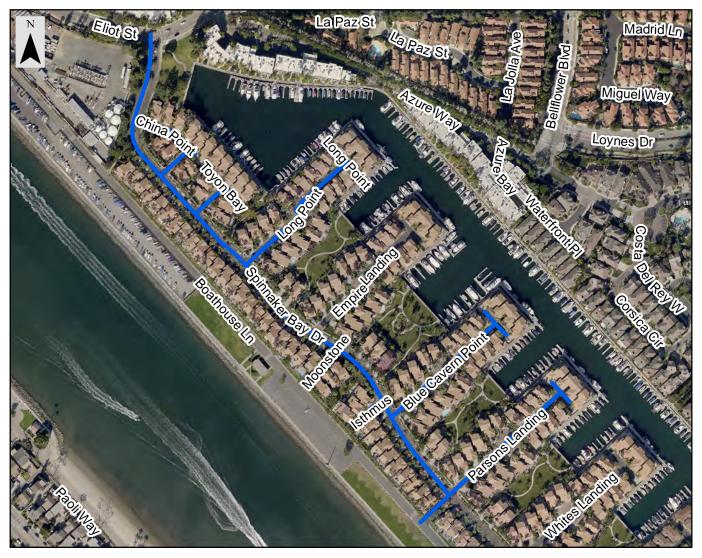
**Purpose:** Improve fire flow protection and preserve water quality to the area.

Location: Spinnaker Bay Drive from Casino Point to Parsons Landing, Casino Point, China Point, Descanso Bay,

Long Point, Blue Cavern Point, Parsons Landing

Council District: 3

FY 2022/23 Budget: \$4,121,397





# Capital Improvement Program FY 2022/23

Project: COLORADO LAGOON OPEN CHANNEL - POTABLE WATER MAIN RELOCATION

Fund: Water

Project Category: Water Pipeline System Improvements

Project Description: Project is part of larger Public Works Colorado St Utility Crossing, remove and replace 570

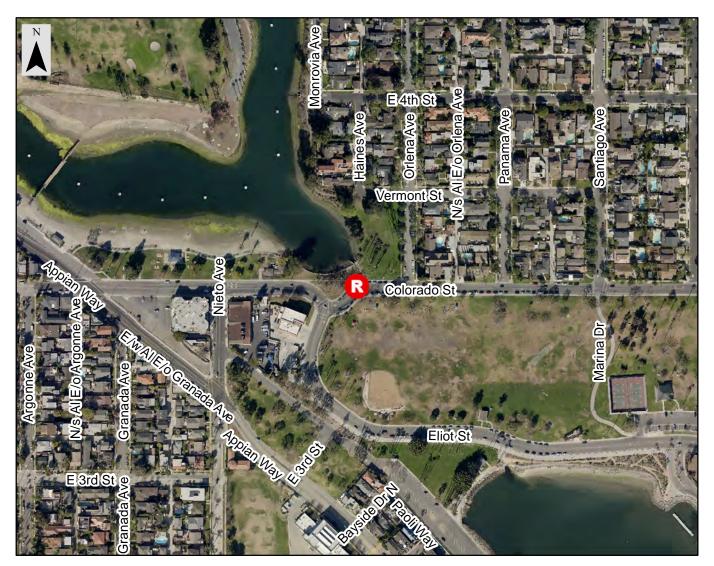
LF of existing AC Potable main at Colorado St, btwn Eliot St and Orlena Ave.

Purpose: Public Works Colorado St Utility Crossing, remove and replace existing 12" AC potable main.

Location: Colorado St & E Eliot St

**Council District:** 3

FY 2022/23 Budget: \$312,800





# Capital Improvement Program FY 2022/23

Project: GOLDEN AVENUE WATER MAIN REPLACEMENT

Fund: Water

Project Category: Water Pipeline System Improvements

Project Description: This project will include replacing existing ductile iron mains with PVC C-900 pipes and

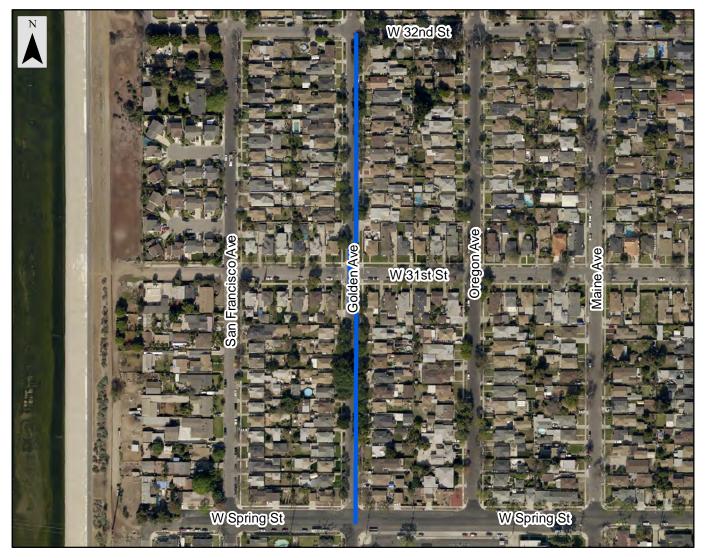
constructing nonmetallic water service laterals to the new water mains moved from the old main.

**Purpose:** Improve fire flow protection and preserve water quality to the area.

Location: Golden Ave - Spring St to 32nd St

**Council District:** 7

FY 2022/23 Budget: \$1,600,000





# Capital Improvement Program FY 2022/23

**Project:** CATHODIC PROTECTION PHASE 5

Fund: Water

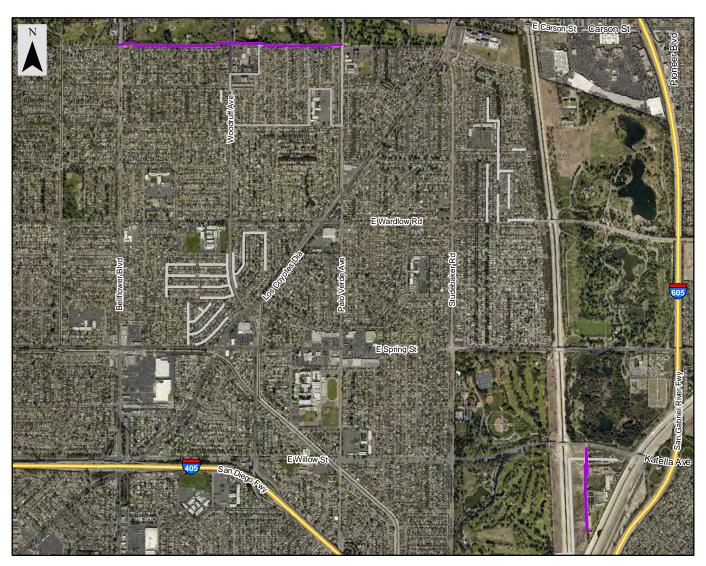
Project Category: Water Pipeline System Improvements

**Project Description:** This project will include repairing and replacing missing cathodic protection test stations.

**Purpose:** Ensure the integrity, dependability, and prolonged life of the water system.

Location: Heartwell Park, between Bellflower St and Palo Verde, and between Willow St and Leo Vander Lans

Advanced Treatment Plant Council District: 4 & 5
FY 2022/23 Budget: \$620,000





# Capital Improvement Program FY 2022/23

Project: WATER MAIN IMPROVMENET PROJECT 3-B

Fund: Water

**Project Category:** Water Pipeline System Improvements

Project Description: This project will incude upsizing existing 6-inch to 8-inch main. (Approximately 1,590-ft)

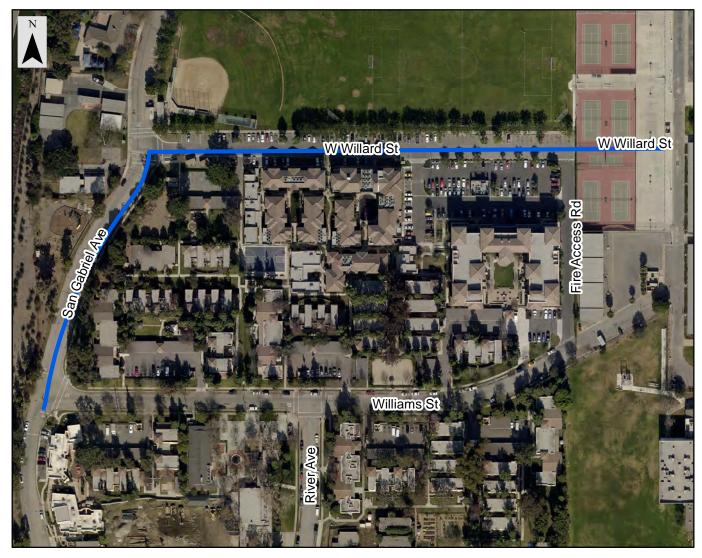
along San Gabriel Ave. and Willard St.

**Purpose:** Improve fire flow protection and preserve water quality to the area.

Location: San Gabriel Ave and Willard St.

**Council District:** 7

FY 2022/23 Budget: \$58,000





# Capital Improvement Program FY 2022/23

Project: WATER MAIN IMPROVEMENT PROJECT POF-01

Fund: Water

**Project Category:** Water Pipeline System Improvements

Project Description: This project will include replacing cast iron and AC mains with ductile iron pipes, and

constructing water service laterals to the new water mains moved from the old mains.

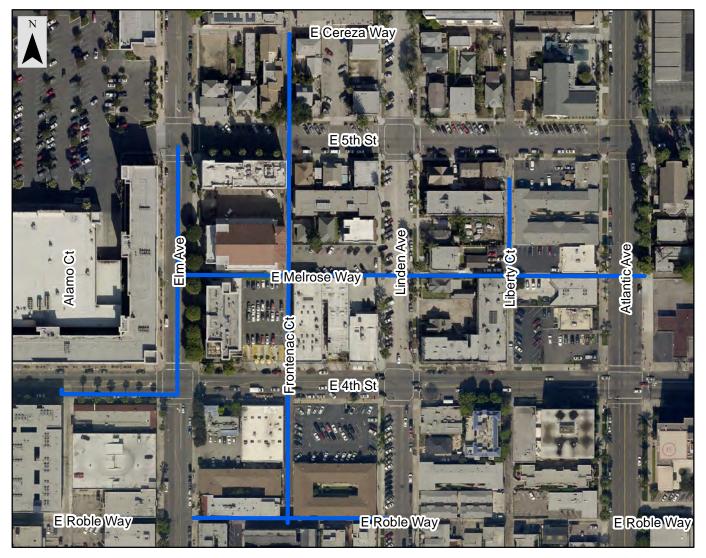
**Purpose:** Improve fire flow protection and preserve water quality to the area.

Location: E Melrose Way between Broadway Ct and Elm Ave, Liberty Ct between 4th St and 5th St. Frontena Ct,

between Cereza Way and Roble Way. Elm Ave, E 5th St and 4th St, between Elm Ave and Alamo Ct.

Council District: 1

FY 2022/23 Budget: \$140,600





# Capital Improvement Program FY 2022/23

Project: CATHODIC PROTECTION PHASE 7 - BUDGET

Fund: Water

Project Category: Water Pipeline System Improvements

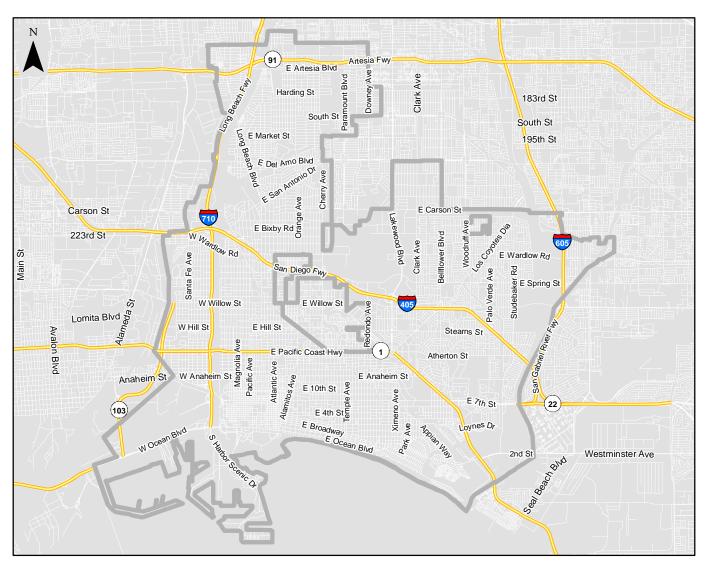
**Project Description:** This project will include cathodic protection test stations for corrosion protection.

**Purpose:** Ensure the integrity, dependability, and prolonged life of the water system.

Location:TBD

Council District: TBD

FY 2022/23 Budget: \$100,000





# Capital Improvement Program FY 2022/23

Project: WATER MAIN BRIDGE CROSSING FY23/24

Fund: Water

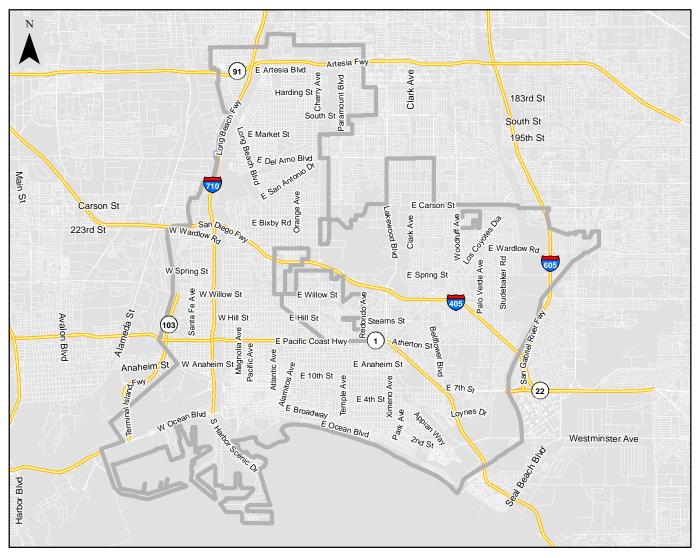
Project Category: Water Pipeline System Improvements

Project Description: TBD

**Purpose:** Ensure the integrity, dependability, and prolonged life of the water system.

Location: TBD

Council District: Various FY 2022/23 Budget: \$40,435





# Capital Improvement Program FY 2022/23

Project: Large Valve Replacement FY23/24

Fund: Water

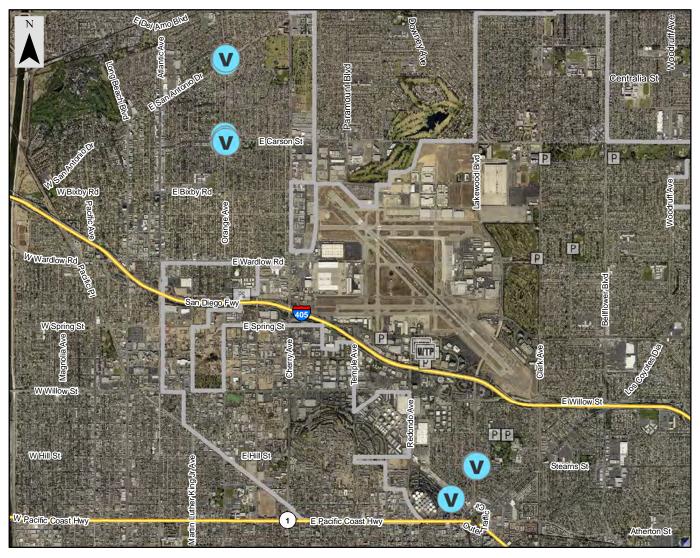
Project Category: Water Pipeline System Improvements

Project Description: Assess condition and repair/replace large valves at multiple locations in Long Beach.

**Purpose:** Ensure the integrity, dependability, and prolonged life of the water system.

Location: Orange & Carson, Orange & San Antonio Dr, Lakewood Blvd & Stearns, Hathaway & Termino

**Council District:** 4,5 and 8 **FY 2022/23 Budget:** \$150,000





# Capital Improvement Program FY 2022/23

Project: LARGE VALVE REPLACEMENT FY24/25

Fund: Water

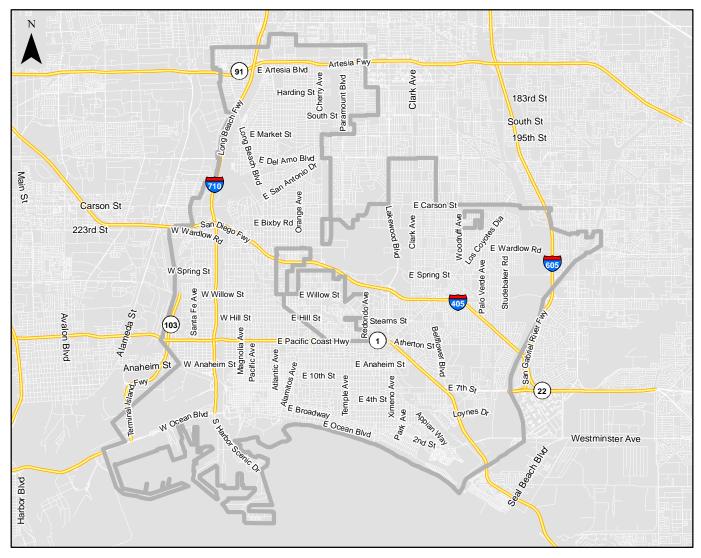
Project Category: Water Pipeline System Improvements

**Project Description:** Assess condition and repair/replace large valves at multiple locations in Long Beach.

**Purpose:** Ensure the integrity, dependability, and prolonged life of the water system.

Location: TBD

Council District: TBD FY 2022/23 Budget: \$13,100



### LONG BEACH WATER DEPARTMENT CAPITAL IMPROVEMENT PROGRAM FY 2022/23 WATER FUND PROJECTS

## PROJECT CATEGORY: RESERVOIR/TREATMENT PLANT SYSTEM IMPROVEMENTS

Project Description	Cost Estimate
Alamitos Tank No. 6 Rehabilitation	\$19,039
Alamitos Tank No. 7 Rehabilitation	\$60,600
Alamitos Tank No. 8 & 10 Rehabilitation	\$2,401,715
Alamitos Tank No. 11 & 13 Rehabilitation	\$19,100
Alamitos Tank No. 22 Rehabilitation	\$73,500
J. Will Johnson Chemical Dosing System	\$26,010
J. Will Johnson Tanks Roof Repair	\$100,000
Treatment Plant Master Plan Study	\$6,054
Treatment Plant HVAC System Improvements	\$3,838,280
Treatment Plant Filter Rehabilitation Design and Phase 1	\$179,200
Treatment Plant Improvement Project 1	\$262,000
Alamitos Tank No.19 & 20 Conversion	\$3,006,000
TOTAL	\$9,991,498

#### **SUMMARY:**

The Long Beach Water Department (LBWD) has a total of 36 steel water storage tanks at the Alamitos Reservoir and J. Will Johnson Reservoir. Each tank has a capacity of 3.3 million gallons of water. LBWD's tank rehabilitation program ensures the integrity, dependability, and prolonged life of these tanks. LBWD also operates the second largest groundwater treatment plant in the United States. The Treatment Plant Master Plan identifies improvement projects at the plant and related infrastructure which will ensure the City's high quality drinking water consistently meets or betters all Federal and State drinking water regulations. LBWD's Tank Conversion Projects from potable to recycled water at the Alamitos Reservoir involve improvements to the existing tanks and will provide additional storage facility for the City's recycled water supply.







# Capital Improvement Program FY 2022/23

Project: ALAMITOS TANK 6 REHABILITATION

Fund: Water

**Project Category:** Reservoir/Treatment Plant System Improvements

Project Description: This project will include recoating the tank and constructing seismic and structural

improvements.

**Purpose:** Ensure the integrity, dependability, and prolonged life of the water system.

Location: Alamitos Reservoir Site

**Council District:** 4

FY 2022/23 Budget: \$19,039





# Capital Improvement Program FY 2022/23

Project: ALAMITOS TANK 7 REHABILITATION

Fund: Water

**Project Category:** Reservoir/Treatment Plant System Improvements

Project Description: This project will include recoating the tank and constructing seismic and structural

improvements.

**Purpose:** Ensure the integrity, dependability, and prolonged life of the water system.

Location: Alamitos Reservoir Site

**Council District:** 4

FY 2022/23 Budget: \$60,600





# Capital Improvement Program FY 2022/23

Project: ALAMITOS TANKS 8 & 10 REHABILITATION

Fund: Water

**Project Category:** Reservoir/Treatment Plant System Improvements

Project Description: This project will include recoating the tank and constructing seismic and structural

improvements.

**Purpose:** Ensure the integrity, dependability, and prolonged life of the water system.

Location: Alamitos Reservoir Site

**Council District:** 4

FY 2022/23 Budget: \$2,401,715





# Capital Improvement Program FY 2022/23

Project: ALAMITOS TANKS 11 & 13 REHABILITATION

Fund: Water

**Project Category:** Reservoir/Treatment Plant System Improvements

Project Description: This project will include recoating the tank and constructing seismic and structural

improvements.

**Purpose:** Ensure the integrity, dependability, and prolonged life of the water system.

Location: Alamitos Reservoir Site

**Council District:** 4

FY 2022/23 Budget: \$19,100





# Capital Improvement Program FY 2022/23

Project: ALAMITOS TANK 22 REHABILITATION

Fund: Water

**Project Category:** Reservoir/Treatment Plant System Improvements

Project Description: This project will include recoating the tank and constructing seismic and structural

improvements.

**Purpose:** Ensure the integrity, dependability, and prolonged life of the water system.

Location: Alamitos Reservoir Site

**Council District:** 4

FY 2022/23 Budget: \$73,500





# Capital Improvement Program FY 2022/23

Project: JWJ CHEMICAL DOSING SYSTEM

Fund: Water

Project Category: Reservoir/Treatment Plant System Improvements

**Project Description:** Evaluation of existing chemical feed systems at the JWJ Reservoir site and optimization and design of permanent chlorine and ammonia injection, including locating equipment and injection locations,

SCADA, and identification of necessary equipment.

Purpose: Optimization and design of permanent chlorine and ammonia injection

Location: JWJ Reservoir Site

**Council District:** 

FY 2022/23 Budget: \$26,010





# Capital Improvement Program FY 2022/23

Project: J. WILL JOHNSON TANKS ROOF REPAIR

Fund: Water

Project Category: Reservoir/Treatment Plant System Improvements

**Project Description:** This project will include replacing roofing material and associated improvements.

**Purpose:** Ensure the integrity, dependability, and prolonged life of the water system.

Location: JWJ Reservoir Site

**Council District:** 

FY 2022/23 Budget: \$100,000





# Capital Improvement Program FY 2022/23

Project: GWTP HVAC IMPROVEMENTS

Fund: Water

Project Category: Reservoir/Treatment Plant System Improvements

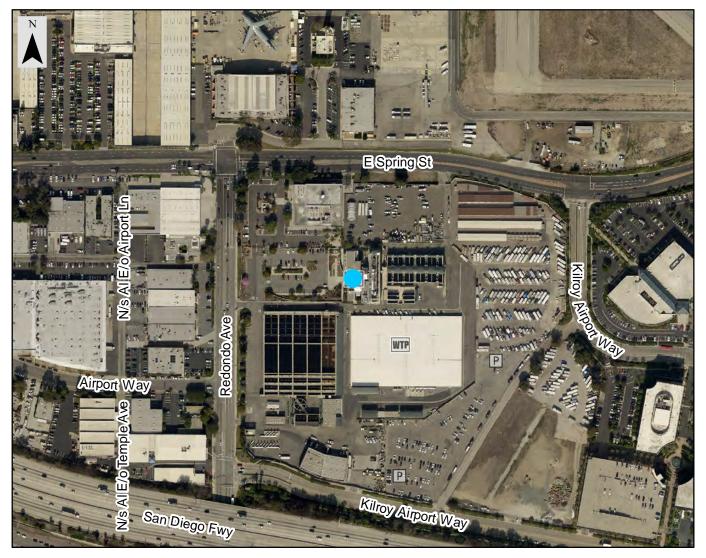
Project Description: This project will include modernizing the existing HVAC systems at the Groundwater

Treatment Plant.

**Purpose:** Ensure the integrity and dependability of water infrastructure. **Location:** Long Beach Water Department Groundwater Treatment Plant

**Council District: 4** 

FY 2022/23 Budget: \$3,838,280





# Capital Improvement Program FY 2022/23

Project: TREATMENT PLANT MASTER PLAN STUDY

Fund: Water

Project Category: Reservoir/Treatment Plant System Improvements

Project Description: This project will include a condition assessment of the Groundwater Treatment Plant to

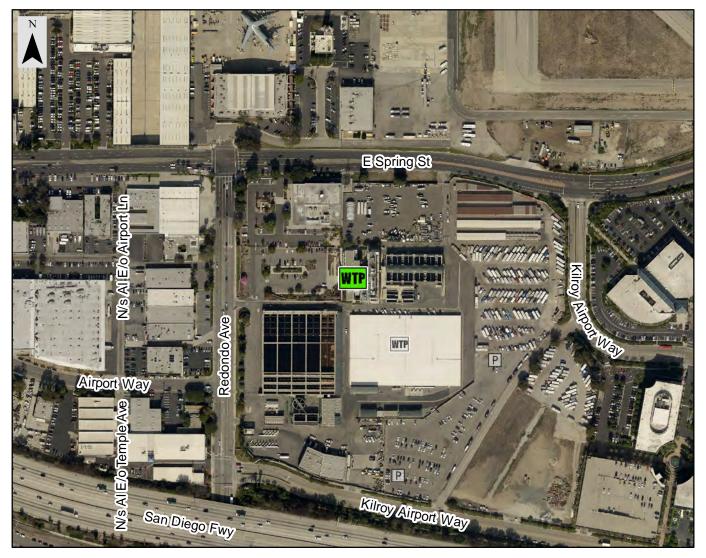
determine needed improvements and maintenance.

**Purpose:** Ensure the integrity, dependability, and prolonged life of the water system.

Location: Long Beach Water Department Groundwater Treatment Plant

**Council District:** 4

FY 2022/23 Budget: \$6,054





# Capital Improvement Program FY 2022/23

Project: ALAMITOS TANKS 19 & 20 CONVERSION

Fund: Water

**Project Category:** Reservoir/Treatment Plant System Improvements

Project Description: This project will include recoating the tank and constructing seismic and structural

improvements. These tanks will also be converted from potable to reclaimed water.

**Purpose:** Ensure the integrity, dependability, and prolonged life of the water system.

Location: Alamitos Reservoir Site

**Council District:** 4

FY 2022/23 Budget: \$3,006,000





## Capital Improvement Program FY 2022/23

Project: TREATMENT PLANT FILTER GALLERY IMPROVEMENT PROJECT DESIGN AND PHASE 1

Fund: Water

Project Category: Reservoir/Treatment Plant System Improvements

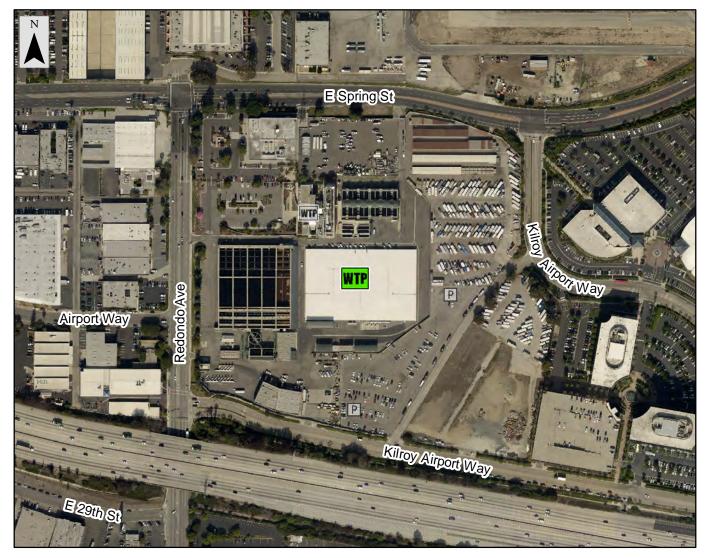
Project Description: This project will replace various filter gallery valves and rehabilitate the filter gallery

Purpose: Rehabilitate valves and appurtenances within the Groundwater Treatment Plant Filter Gallery

Location:Long Beach Water Department Groundwater Treatment Plant

**Council District:** 4

FY 2022/23 Budget: \$179,200





# Capital Improvement Program FY 2022/23

Project: TREATMENT PLANT IMPROVEMENT PROJECT 1

Fund: Water

Project Category: Reservoir/Treatment Plant System Improvements

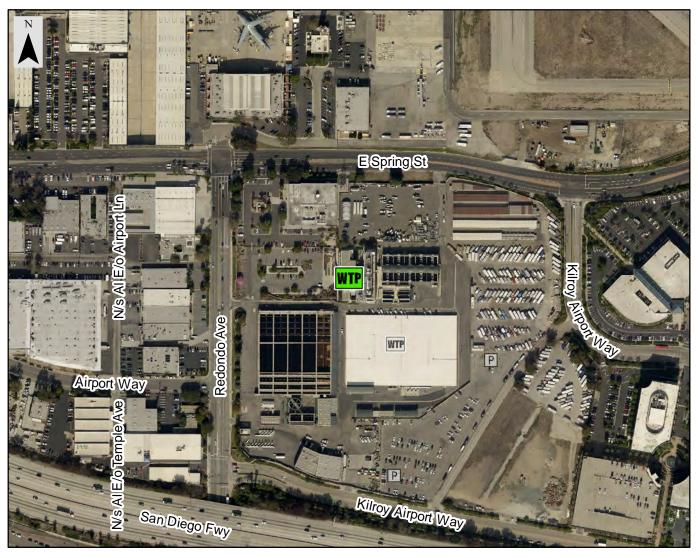
Project Description: TBD

Purpose: TBD

**Location:** Long Beach Water Department Groundwater Treatment Plant

**Council District:** 4

FY 2022/23 Budget: \$262,000



#### LONG BEACH WATER DEPARTMENT CAPITAL IMPROVEMENT PROGRAM FY 2022/23 WATER FUND PROJECTS

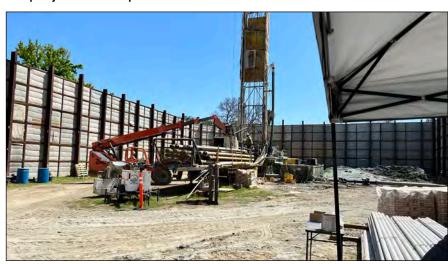
#### PROJECT CATEGORY: WATER SUPPLY PROJECTS

Project Description	Cost Estimate
West Coast Basin Well Equipment	\$1,041,458
New Wells NLB 13 & 14	\$3,142,170
New Wells Alamitos 9A & 14	\$3,670,000
New Wells Commission 23A & El Dorado 2	\$545,290
Commission 15 & 18 Well Rehabilitation	\$1,640,600
Citizens 10 & Commission 14 Well Rehabilitation	\$646,841
Commission 24 & 25 Well Rehabilitation	\$65,746
Commission 21 & Development 9 Well Rehabilitation	\$70,000
Miscellaneous Well Repair/Rehabilitation	\$124,900
32 <sup>nd</sup> Street Booster Station Rehabilitation	\$111,249
Desalination Sub-Ocean Floor Research and Development	\$3,701,775
	* · · · · · · · · · · · · · · · · · · ·

TOTAL \$15,645,989

#### **SUMMARY:**

The Long Beach Water Department (LBWD) currently has 31 groundwater wells it operates and maintains. These wells produce approximately 29,000 Acre-Feet of water each year that is conveyed to LBWD's Ground Water Treatment Plant. LBWD's well rehabilitation and repair program aim to restore wells to their most efficient production condition. LBWD's endeavors includes 12 new well projects as part of a long-term strategy to supplement LBWD's water supply and meet future demands. Improvements to the 32nd Street Booster Station will ensure dependability of the facility for water distribution to the boosted area. The Sub-Ocean Floor Seawater Intake is the removal of demonstration-scale facility after the research project is completed.





# Capital Improvement Program FY 2022/23

Project: WEST COAST BASIN WELL EQUIPMENT

Fund: Water

Project Category: Water Supply

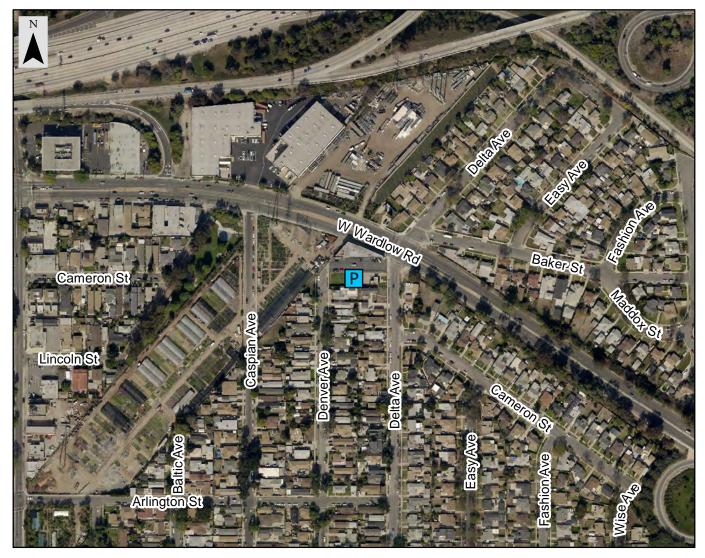
**Project Description:** This project will include equipping new groundwater production wells for water sampling.

**Purpose:** Ensure future groundwater production.

Location:3665 Delta Ave.

**Council District:** 7

FY 2022/23 Budget: \$50,000





# Capital Improvement Program FY 2022/23

Project: NEW WELLS NORTH LONG BEACH 13 & 14

Fund: Water

Project Category: Water Supply

Project Description: This project will include drilling, developing and equipping new groundwater production

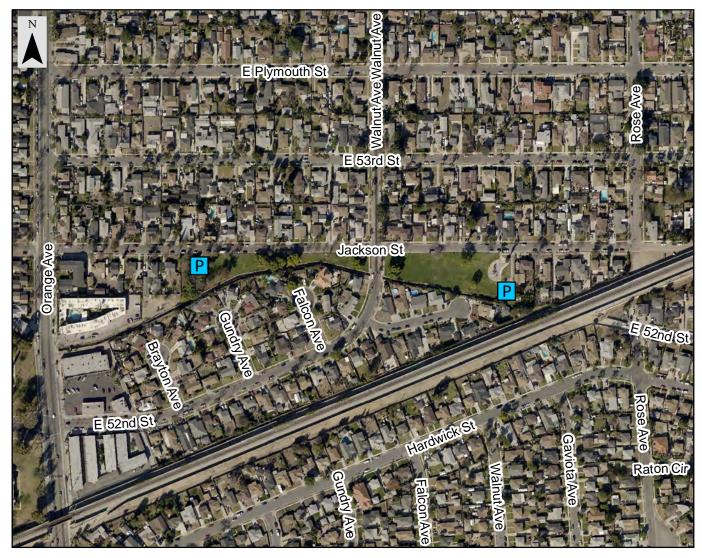
wells.

**Purpose:** Ensure future groundwater production.

Location: Jackson Park

**Council District:** 8

FY 2022/23 Budget: \$3,142,170





# Capital Improvement Program FY 2022/23

Project: NEW WELLS ALAMITOS 9A & 14

Fund: Water

Project Category: Water Supply

Project Description: This project will include drilling, developing and equipping new groundwater production

wells.

**Purpose:** Ensure future groundwater production.

Location: Stearns Champions Park

**Council District:** 4

FY 2022/23 Budget: \$3,670,000





# Capital Improvement Program FY 2022/23

Project: NEW WELLS COMMISSION 23A & EL DORADO 2

Fund: Water

Project Category: Water Supply

Project Description: This project will include drilling, developing and equipping new groundwater production

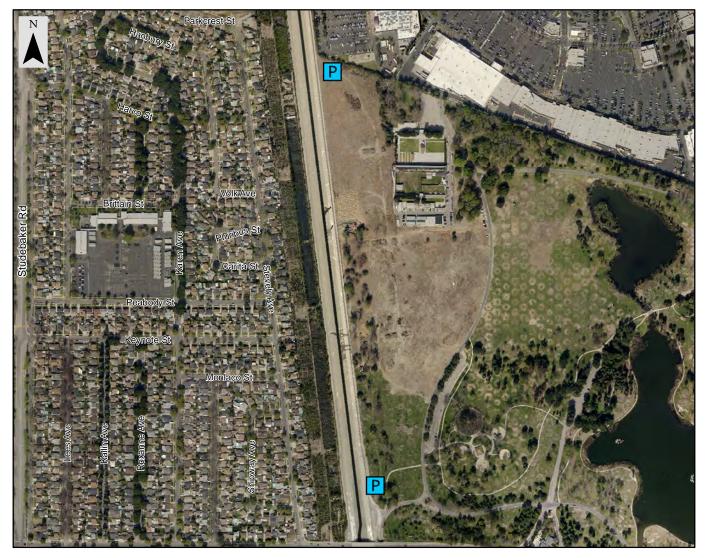
wells.

**Purpose:** Ensure future groundwater production.

Location: Commission 23A - 7325 E Wardlow Rd & El Dorado 2 - 7335 E Wardlow Rd

**Council District:** 4

FY 2022/23 Budget: \$545,290





## Capital Improvement Program FY 2022/23

Project: NEW WELLS CITIZENS 8A & EL DORADO 1

Fund: Water

Project Category: Water Supply

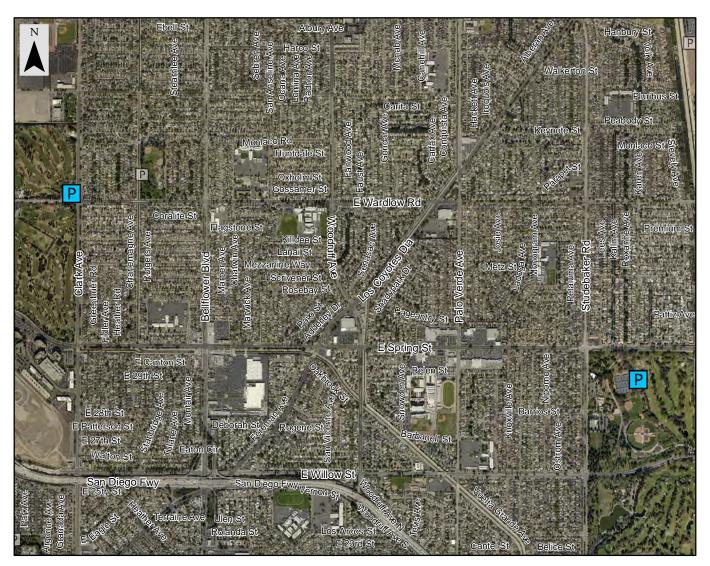
Project Description: This project will include drilling, developing and equipping new groundwater production

wells.

**Purpose:** Ensure future groundwater production.

Location:Citizens 8A - 5091 E. Wardlow Rd & El Dorado 1 - 2890 Studebaker Rd

**Council District:** 4 & 5 **FY 2022/23 Budget:** \$508,958





# Capital Improvement Program FY 2022/23

Project: NEW WELLS GROUND WATER TREATMENT PLANT 1 & 2

Fund: Water

Project Category: Water Supply

Project Description: This project will include drilling, developing and equipping new groundwater production

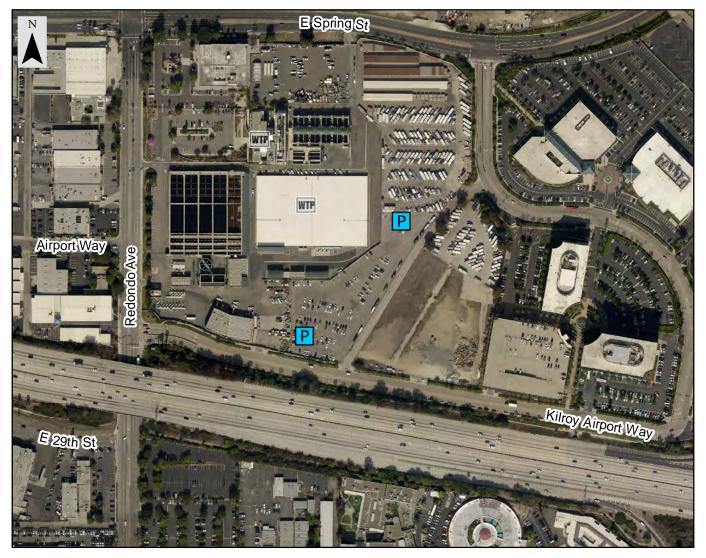
wells.

**Purpose:** Ensure future groundwater production.

Location:Long Beach Water Department Groundwater Treatment Plant

**Council District:** 4

FY 2022/23 Budget: \$377,000





## Capital Improvement Program FY 2022/23

Project: DESALINATION SUBOCEAN FLOOR RESEARCH AND DEV

Fund: Water

Project Category: Water Supply

Project Description: This project is for the demolition and removal of the seawater intake and discharge system

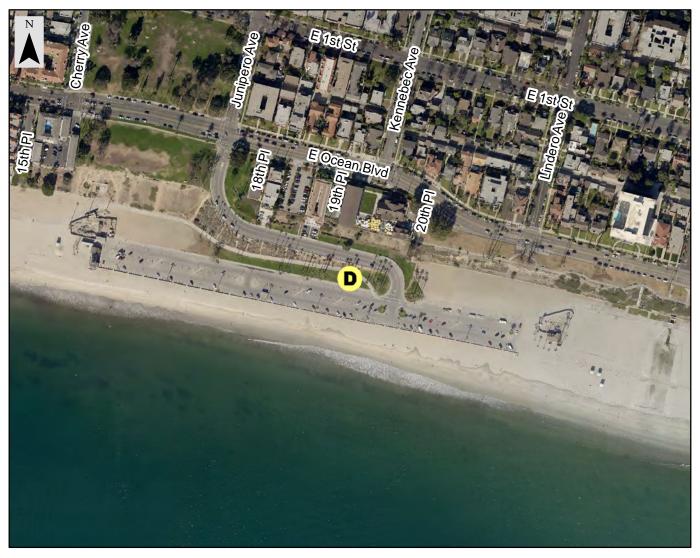
(built in 2008) on Junipero Beach.

**Purpose:** The original permit from the California Coastal Commission requires the removal of these facilities. **Location:** Juniper Beach off E Ocean Blvd and Junipero Ave. The address for the Junipero Beach parking lot is

2100 E Ocean Blvd, Long Beach, CA 90803.

Council District: 2

FY 2022/23 Budget: \$3,701,775





# Capital Improvement Program FY 2022/23

Project: 32ND ST BOOSTER STATION REHABILITATION

Fund: Water

Project Category: Water Supply

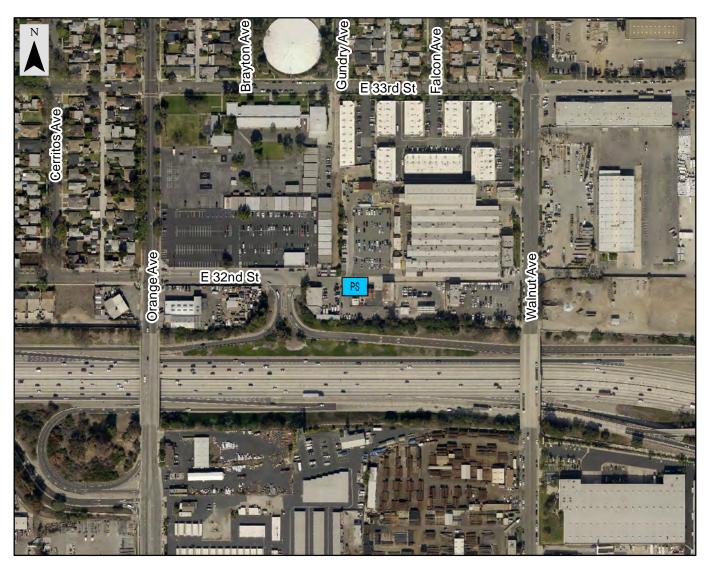
**Project Description:** This project will include assessing and rehabilitating the existing 32nd Street Booster Pump Station.

**Purpose:** Ensure the integrity and dependability of water infrastructure.

Location:1420 E 32nd Street

**Council District:** 7

FY 2022/23 Budget: \$111,249





# Capital Improvement Program FY 2022/23

Project: WELL REHABILITATION - COMMISSION 15 & 18

Fund: Water

Project Category: Water Supply

**Project Description:** This project will include rehabilitating groundwater production well.

Purpose: Restore a well to its most efficient condition.

Location:COM 15-Heartwell Park, COM 18-Heartwell Golf Course

**Council District:** 5

FY 2022/23 Budget: \$1,640,600





# Capital Improvement Program FY 2022/23

Project: WELL REHABILITATION - CITIZENS 10 & COMMISSION 14

Fund: Water

Project Category: Water Supply

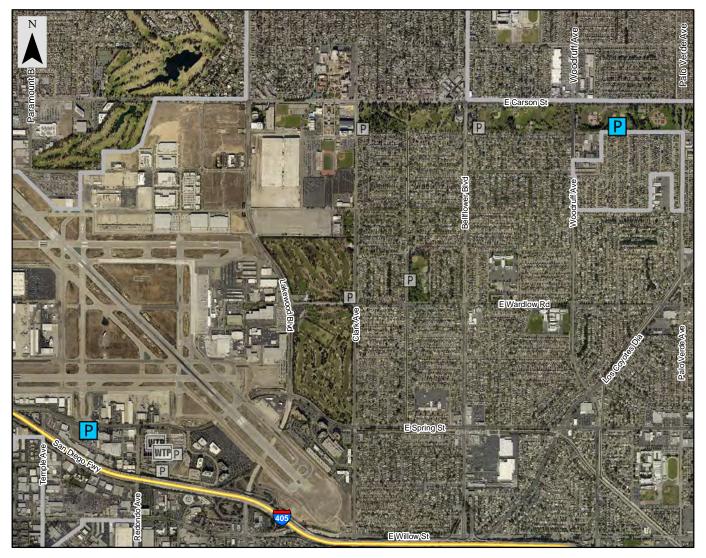
**Project Description:** This project will include rehabilitating groundwater production well.

Purpose: Restore a well to its most efficient condition.

Location: Heartwell Park, between Woodruff Ave and Palo Verde Ave and 2939 Airport Way

**Council District:** 5

FY 2022/23 Budget: \$646,841





# Capital Improvement Program FY 2022/23

Project: WELL REHABILITATION - COMMISSION 24 & 25

Fund: Water

Project Category: Water Supply

**Project Description:** This project will include rehabilitating groundwater production well.

Purpose: Restore a well to its most efficient condition.

Location: Heartwell Park, between Clark Ave and Bellflower Blvd. Wardlow Park, on Stanbridge Ave between

Wardlow and Monlaco Rd **Council District:** 5

FY 2022/23 Budget: \$65,747





## Capital Improvement Program FY 2022/23

Project: MISCELLANEOUS WELL REPAIR AND REHABILITATION

Fund: Water

Project Category: Water Supply

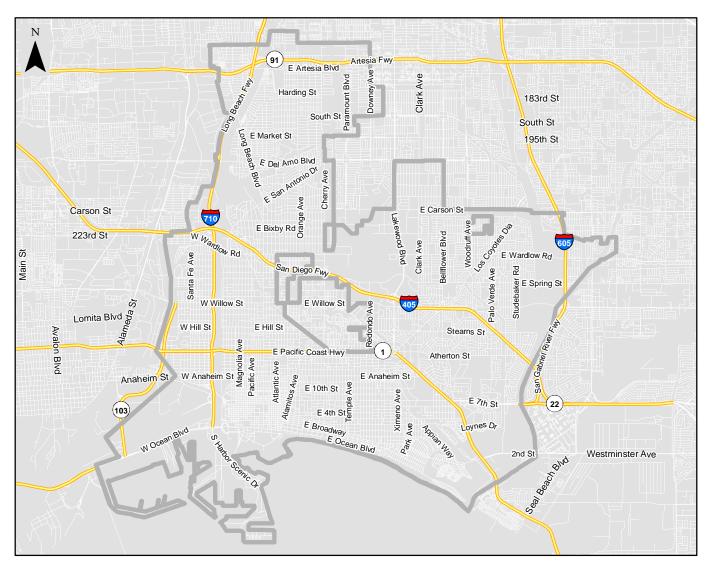
Project Description: This is an on-call services to assist with well permit and miscellaneous well related

technical support

Purpose: This is an on-call services to assist with well permit and miscellaneous well related technical support.

Location:City-Wide

Council District: TBD FY 2022/23 Budget: \$54,900



#### LONG BEACH WATER DEPARTMENT CAPITAL IMPROVEMENT PROGRAM FY 2022/23 WATER FUND PROJECTS

#### PROJECT CATEGORY: WATER FACILITY IMPROVEMENTS

Project Description	Cost Estimate
1 <sup>st</sup> to 4 <sup>th</sup> Floor Administration Building Renovation	\$521,207
Facilities Roofing	\$100,000
TOTAL	\$621 207

#### SUMMARY:

Water facility or building improvement projects ensure the integrity, dependability, and prolonged life of vital building structures. Space planning helps LBWD make strategic design decisions and necessary improvements to accommodate employees and workplace needs. Assessment and performing necessary improvements to replace existing roofing system will help address ongoing water damage to facilities and improve building life span.





# Capital Improvement Program FY 2022/23

Project: ADMINISTRATION BUILDING RENOVATION

Fund: Water

**Project Category:** Water Facility Improvements

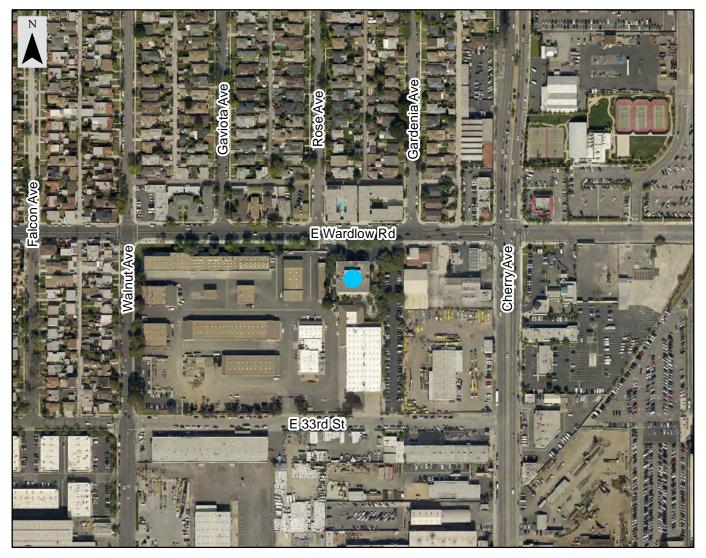
**Project Description:** This project will include reorganization of existing work space.

**Purpose:** Accommodate staffing and workflow efficiencies.

Location:Long Beach Water Department Administration Building and Operations Service Center

**Council District:** 7

FY 2022/23 Budget: \$168,250





# Capital Improvement Program FY 2022/23

Project: FACILITIES ROOFING - ADMINISTRATION & TREATMENT PLANT

Fund: Water

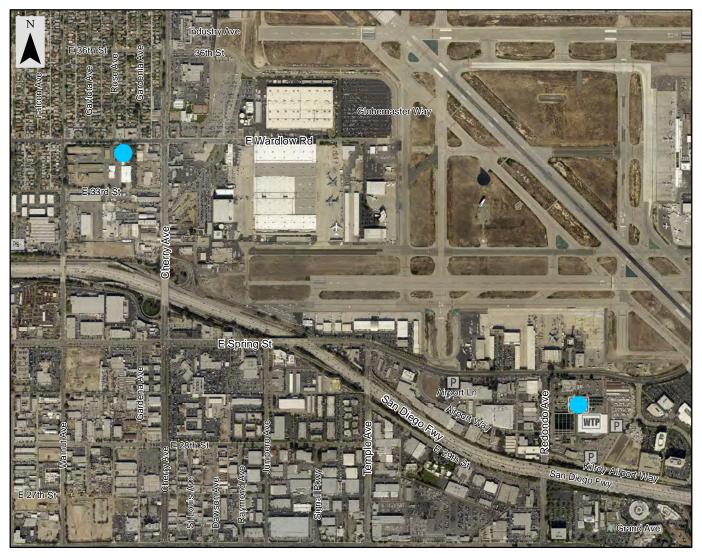
**Project Category:** Water Facility Improvements

Project Description: Replacing roofing system that has reached its useful life.

**Purpose:** Replacing roofing system that has reached its useful life. **Location:**LBWD Administration Building and Treatment Plant

**Council District:** 4

FY 2022/23 Budget: \$100,000



#### LONG BEACH WATER DEPARTMENT CAPITAL IMPROVEMENT PROGRAM FY 2022/23 WATER FUND PROJECTS

#### PROJECT CATEGORY: WATER DEVELOPER PROJECTS

Project Description	Cost Estimate
Recycled Water Main Installation (LADWP Haynes)	\$542,300
ΤΟΤΔΙ	\$542 300

#### **SUMMARY:**

In partnership with private developers, other City Departments, and other local agencies, LBWD performs water facility-related improvements based on the needs of the proposed Developments throughout the City. LBWD works directly with private developers' design consultants to determine required improvements to the existing water system to properly served the proposed project. For the Haynes Plant Recycled Water Main Installation Project, LBWD is working with Los Angeles Department of Water and Power (LADWP) and has conducted a study on the expansion of LBWD water and sewer systems. The study identified two separate projects: recycled water pipeline and sewer pipeline constructions which will serve the future needs of the power generating station.





## Capital Improvement Program FY 2022/23

Project: RECYCLED WATER MAIN INSTALLATION ALONG STUDEBAKER ROAD (LADWP HAYNES)

Fund: Water

Project Category: Water Developers Project

**Project Description:** This project will include extending our recycled water system from Atherton Street south along Studebaker Road with a new 21-inch main to install a new large recycled water service for LADWP Haynes

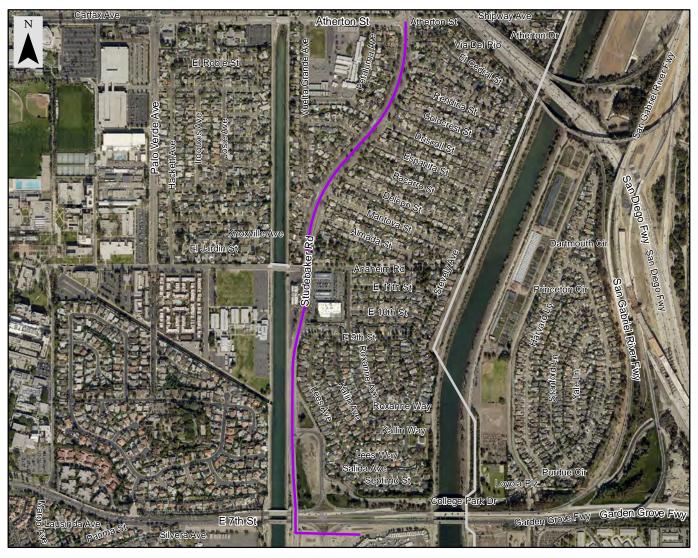
Generating Station.

Purpose: Extend LBWD's recycled water infrastructure.

Location: South along Studebaker Road from Atherton Street to SR-22, then east across the San Gabriel River to

a connection north of Haynes Generating Station.

**Council District:** 3 & 4 **FY 2022/23 Budget:** \$542,300



#### LONG BEACH WATER DEPARTMENT CAPITAL IMPROVEMENT PROGRAM FY 2022/23 SEWER FUND PROJECTS

#### PROJECT CATEGORY: SEWER PIPELINE IMPROVEMENTS

Project Description	Cost Estimate
Sanitary Sewer Rehabilitation/Replacement Project – SSRRP 9	\$274,178
Sanitary Sewer Rehabilitation/Replacement Project – SSRRP 11	\$50,000
Sewer Improvements – Arbor Street and Locust Avenue	\$47,619
TOTAL	\$371.797

#### **SUMMARY:**

To maintain sanitary sewer system reliability and capacity and stay in compliance with the State of California's Waste Discharge Requirements, it is the Long Beach Water Department's (LBWD) priority to overhaul deficient and aging sewer infrastructure to ensure the swift removal of sanitary sewage from Long Beach residences and businesses. LBWD's Sewer Master Plan identifies projects that will address any required improvements and additions to the existing sewer system. Pipes that are capacity deficient will be upsized and those that are structurally deficient and cannot be rehabilitated will replaced.





## Capital Improvement Program FY 2022/23

Project: SSRRP PROJECT NO. 9

Fund: Sewer

**Project Category:** Sewer Pipeline Improvements

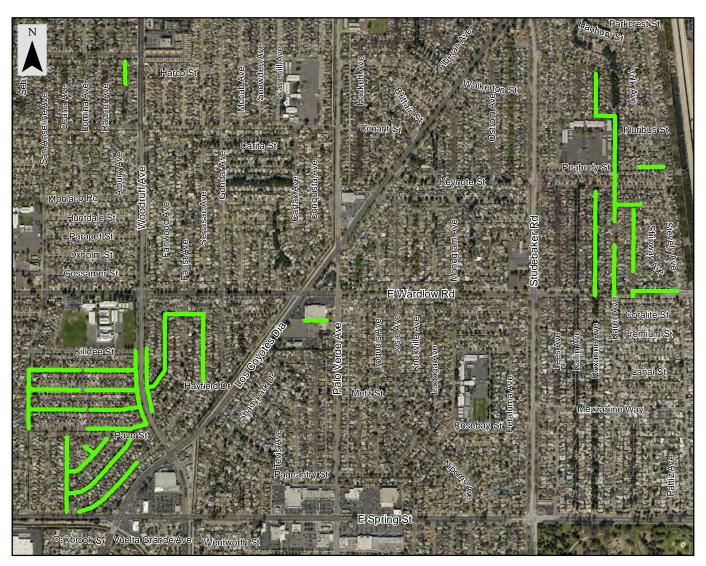
Project Description: This project will include cleaning, CCTV inspecting and potential repairing, replacing and/or

rehabilitating of approximately 9,000 linear feet of sewer mains.

**Purpose:** Improve the reliability and capacity of the existing sanitary sewer system.

Location: Various locations in Long Beach

**Council District:** 5,8,9 **FY 2022/23 Budget:** \$274,178





## Capital Improvement Program FY 2022/23

Project: ARBOR AND LOCUST SEWER IMPROVEMENTS

Fund: Sewer

**Project Category:** Sewer Pipeline Improvements

Project Description: This project will include evaluating existing sewer pipeline deficiencies within the project

area and providing recommended improvements.

**Purpose:** Improve the reliability and capacity of the existing sanitary sewer system.

Location: Area bounded by Del Amo Boulevard, 46th Street, Atlantic Avenue, and Long Beach Boulevard

**Council District:** 8

FY 2022/23 Budget: \$47,619





## Capital Improvement Program FY 2022/23

Project: SSRRP PROJECT NO. 11

Fund: Sewer

**Project Category:** Sewer Pipeline Improvements

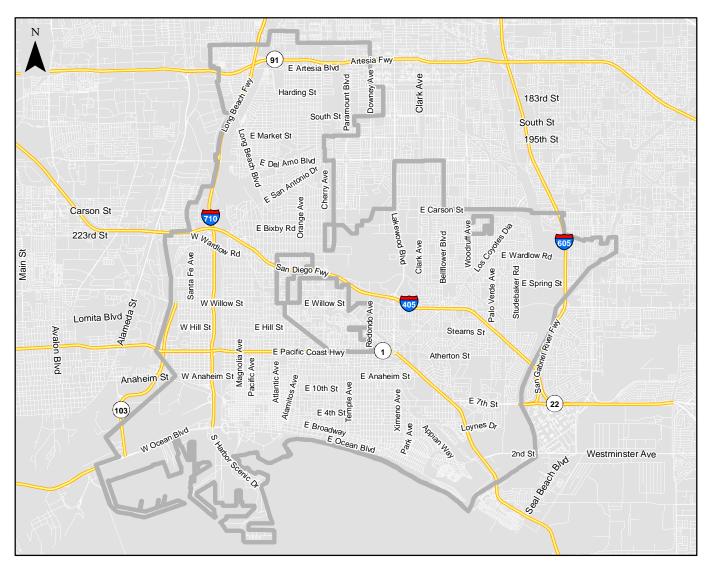
Project Description: This project will include cleaning, CCTV inspecting and potential repairing, replacing and/or

rehabilitating of approximately 9,000 linear feet of sewer mains.

**Purpose:** Improve the reliability and capacity of the existing sanitary sewer system.

Location: Various locations in Long Beach

Council District: Various FY 2022/23 Budget: \$50,000



#### LONG BEACH WATER DEPARTMENT CAPITAL IMPROVEMENT PROGRAM FY 2022/23 SEWER FUND PROJECTS

#### PROJECT CATEGORY: SEWER LIFT STATION REHABILITATIONS

Project Description	Cost Estimate
S-7 Sewer Lift Station Rehabilitation	\$530,798
S-8 Sewer Lift Station Rehabilitation	\$176,000
S-25 Sewer Lift Station Rehabilitation	\$3,539,705
TOTAL	¢4 246 502

TOTAL \$4,246,503

#### **SUMMARY:**

In order to maintain sanitary sewer system reliability and capacity and stay in compliance with the State of California's Waste Discharge Requirements, it is the Long Beach Water Department's (LBWD) priority to overhaul deficient and aging sewer infrastructure to ensure the swift removal of sanitary sewage from Long Beach residences and businesses. Sewer lift stations are rehabilitated to ensure the integrity, dependability, and prolonged life of critical sewer facilities.







## Capital Improvement Program FY 2022/23

Project: S-8 SEWER LIFT STATION REHABILITATION

Fund: Sewer

Project Category: Sewer Lift Station Rehabilitations

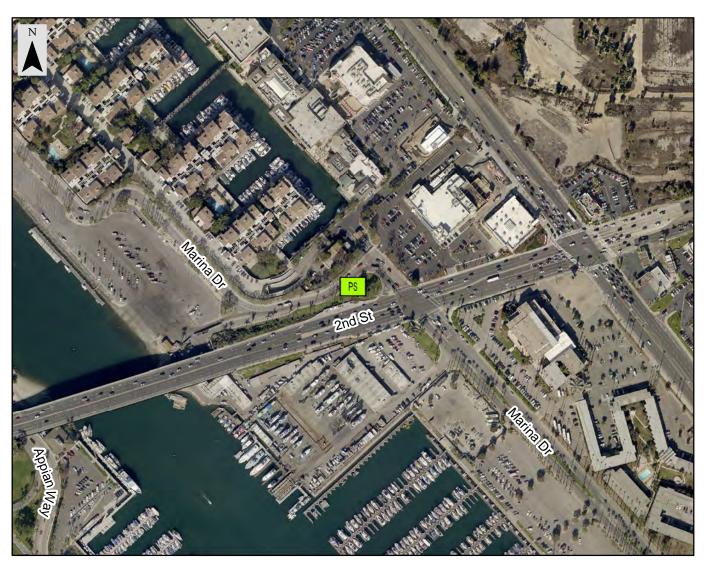
Project Description: This project will include interior wet well repairs, electrical and mechanical system

upgrades, ventilation and odor control system upgrades, and structural and seismic improvements.

**Purpose:** Improve the station's overall reliability. **Location:**Dennis Williams Greenway Park

**Council District:** 3

FY 2022/23 Budget: \$176,000





## Capital Improvement Program FY 2022/23

Project: S-7 SEWER LIFT STATION REHABILITATION

Fund: Sewer

Project Category: Sewer Lift Station Rehabilitations

Project Description: This project will include interior wet well repairs, electrical and mechanical system

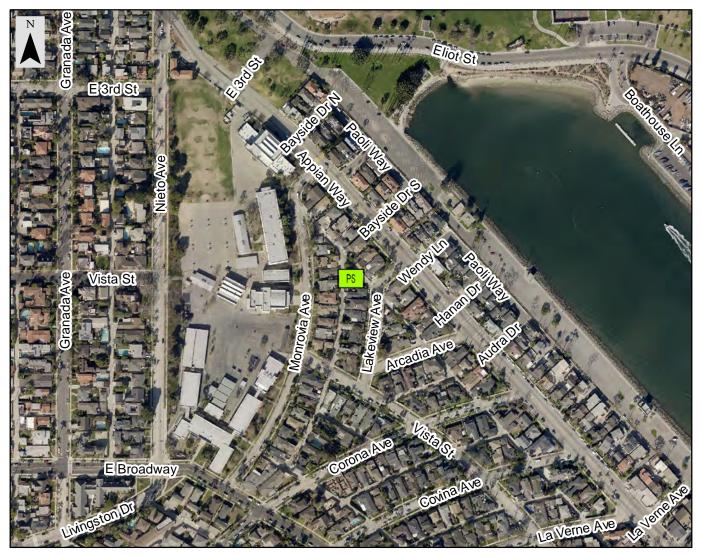
upgrades, ventilation and odor control system upgrades, and structural and seismic improvements.

**Purpose:** Improve the station's overall reliability.

Location:349 Lakeview St

**Council District:** 3

FY 2022/23 Budget: \$530,798





# Capital Improvement Program FY 2022/23

Project: S-25 SEWER LIFT STATION REHABILITATION

Fund: Sewer

Project Category: Sewer Lift Station Rehabilitations

Project Description: This project will include interior wet well repairs, electrical and mechanical system

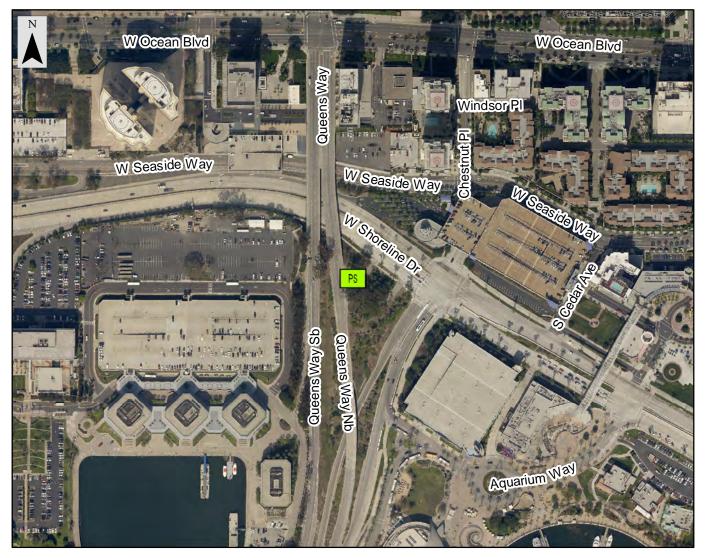
upgrades, ventilation and odor control system upgrades, and structural and seismic improvements.

Purpose: Improve the station's overall reliability.

Location:S-25 Sewer Lift Station, 420 Shoreline Dr, Long Beach,

Council District: 1

FY 2022/23 Budget: \$3,539,705



#### LONG BEACH WATER DEPARTMENT CAPITAL IMPROVEMENT PROGRAM FY 2022/23 SEWER FUND PROJECTS

#### PROJECT CATEGORY: SEWER DEVELOPER PROJECTS

Project Description	Cost Estimate
Sewer Main Installation (LADWP Haynes)	\$560,700
TOTAL	\$560,700

#### **SUMMARY:**

In partnership with private developers, other City Departments, and other local agencies, LBWD performs water facility-related improvements based on the needs of the proposed Developments throughout the City. LBWD works directly with private developers' design consultants to determine required improvements to the existing water system to properly served the proposed project. For the Haynes Plant Recycled Water Main Installation Project, LBWD is working with Los Angeles Department of Water and Power (LADWP) and has conducted a study on the expansion of LBWD water and sewer systems. The study identified two separate projects: recycled water pipeline and sewer pipeline constructions which will serve the future needs of the power generating station.





## Capital Improvement Program FY 2022/23

Project: SEWER FORCE MAIN INSTALLATION FOR LADWP HAYNES GENERATING STATION

Fund: Sewer

Project Category: Sewer Developers Project

Project Description: This project will include construction of a new sewer force main from LADWP Haynes

Generating Station to the Long Beach Water Reclamation Plant.

**Purpose:** Augment our recycled water supply with increased industrial discharge.

Location: From Haynes Generating Station to Long Beach Water Reclamation Plant, along the western or

eastern banks of the San Gabriel River.

Council District: 4

FY 2022/23 Budget: \$560,700

