# TABLE OF CONTENTS

Capital Improvement Program - Fiscal Year 2020/21 ............................................. 1

**Water CIP by In-House Work Force**
List of Projects and Summary .................................................................................. 2
Project Maps .................................................................................................................. 3

**Pipeline System Improvements**
List of Projects and Summary .................................................................................. 5
Project Maps .................................................................................................................. 6

**Reservoir/Treatment Plant System Improvements**
List of Projects and Summary .................................................................................... 13
Project Maps .................................................................................................................. 14

**Water Supply**
List of Projects and Summary .................................................................................... 27
Project Maps .................................................................................................................. 28

**Water Facility Improvements**
List of Projects Summary .......................................................................................... 43
Project Maps .................................................................................................................. 44

**Water Miscellaneous**
Interest Expense Capitalized – Water Fund .............................................................. 50

**Sewer Pipeline Improvements**
List of Projects and Summary .................................................................................... 51
Project Maps .................................................................................................................. 52

**Sewer Lateral Improvements**
List of Project and Summary ...................................................................................... 58
Project Map .................................................................................................................... 59

**Sewer Lift Station Rehabilitations**
List of Projects and Summary .................................................................................... 60
Project Maps .................................................................................................................. 61

**Sewer Miscellaneous**
Interest Expense Capitalized – Sewer Fund .............................................................. 65
### WATER FUND PROJECT BUDGETS (thousands)

<table>
<thead>
<tr>
<th>Project</th>
<th>Fiscal Year</th>
<th>2020/21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water CIP by In-House Work Force (a)</td>
<td></td>
<td>2,550</td>
</tr>
<tr>
<td>Pipeline System Improvements</td>
<td></td>
<td>7,201</td>
</tr>
<tr>
<td>Reservoir/Treatment Plant System Improvements</td>
<td></td>
<td>3,944</td>
</tr>
<tr>
<td>Water Supply</td>
<td></td>
<td>8,358</td>
</tr>
<tr>
<td>Recycled Water Facility Improvements</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Water Facility Improvements (a)(b)</td>
<td></td>
<td>1,963</td>
</tr>
<tr>
<td>Interest Expense Capitalized - Water Fund (a)</td>
<td></td>
<td>800</td>
</tr>
</tbody>
</table>

Note: (a) Budget numbers for FY 2020/21 provided by Accounting/Finance
(b) Facility Improvement projects for FY 2020/21 to be adminstered by LBWD Support Services

**TOTAL FOR WATER FUND PROJECTS** 24,816

### SEWER FUND PROJECT BUDGETS (thousands)

<table>
<thead>
<tr>
<th>Project</th>
<th>Fiscal Year</th>
<th>2020/21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewer Pipeline Improvements</td>
<td></td>
<td>3,200</td>
</tr>
<tr>
<td>Sewer Lateral Improvements</td>
<td></td>
<td>300</td>
</tr>
<tr>
<td>Sewer Lift Station Rehabilitations</td>
<td></td>
<td>2,637</td>
</tr>
<tr>
<td>Sewer Facility Improvements (a)(b)</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Interest Expense Capitalized - Sewer Fund (a)</td>
<td></td>
<td>150</td>
</tr>
</tbody>
</table>

Note: (a) Budget numbers for FY 2020/21 provided by Accounting/Finance
(b) Facility Improvement projects for FY 2020/21 to be administered by LBWD Support Services

**TOTAL FOR SEWER FUND PROJECTS** 6,287

**TOTAL CIP PROJECTS** 31,103
PROJECT CATEGORY: WATER CIP BY IN-HOUSE WORK FORCE

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Cost Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-House Main Replacements</td>
<td>$2,500,000</td>
</tr>
<tr>
<td>Meter Replacements</td>
<td>$50,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$2,550,000</strong></td>
</tr>
</tbody>
</table>

SUMMARY:

The Long Beach Water Department (LBWD) continues its program of replacing aging cast iron mains with ductile iron pipe. The design and construction of this replacement work is performed by LBWD’s own workforce. The criteria for replacing water mains are based upon their age, flow, pressure and main break history. Additionally, old and malfunctioning meters are replaced on a regular cycle by LBWD’s field personnel.
Long Beach Water Department
Capital Improvement Program
FY 2020/21

Project: IN-HOUSE WATER MAIN REPLACEMENT
Fund: Water
Project Category: Water CIP by In-house Work Force
Project Description: These projects will include removing and replacing cast iron water mains with ductile iron pipe.
Purpose: Improve fire flow protection and preserve water quality to areas throughout the City.

Location: City-wide

Council District: Various
FY 2020/21 Budget: $2,500,000.00
Project: METER REPLACEMENT PROGRAM
Fund: Water
Project Category: Water CIP by In-house Work Force
Project Description: This project will include replacing outdated meters.

Purpose: Maximize water system performance.

Location: City-wide

Council District: Various
FY 2020/21 Budget: $50,000.00
PROJECT CATEGORY: PIPELINE SYSTEM IMPROVEMENTS

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Cost Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port of Long Beach Water System Improvement Study</td>
<td>$242,000</td>
</tr>
<tr>
<td>Cathodic Protection – Phase 6</td>
<td>$100,000</td>
</tr>
<tr>
<td>Alley Water Main Conversion – Daisy Avenue</td>
<td>$1,221,873</td>
</tr>
<tr>
<td>Water Main Replacement – Lakewood Boulevard</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>Alley Water Main Conversion 2020</td>
<td>$123,000</td>
</tr>
<tr>
<td>Cast Iron Main Replacement 2021 – Spinnaker Bay (Phase 1)</td>
<td>$1,212,400</td>
</tr>
<tr>
<td>Cast Iron Main Replacement 2021 – Spinnaker Bay (Phase 2)</td>
<td>$123,700</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$7,200,973</strong></td>
</tr>
</tbody>
</table>

SUMMARY:

The Long Beach Water Department (LBWD) will conduct a study on Port’s water system to determine required improvements in preparation for transfer of ownership to LBWD. LBWD’s cathodic protection program will prevent corrosion and ensure prolonged dependability of the water system. LBWD’s cast iron water main replacement program will generally improve water flow and quality to the affected area. As part of the LBWD’s cast iron main replacement program, old cast iron mains in alleys will be replaced by new ductile iron mains in City streets, and the existing service laterals in the alleys will be reconnected to the new mains as part of the alley service connection conversion.
Project: PORT OF LONG BEACH WATER SYSTEM IMPROVEMENT STUDY
Fund: Water
Project Category: Pipeline System Improvements
Project Description: This project will recommend Capital Improvement Projects for the Port's system based on Long Beach Water Department's standards.
Purpose: Improve the Port's water system for LBWD to take over operations of portion of their system

Location: Port of Long Beach

Council District: Various
FY 2020/21 Budget: $2,420,000.00
Long Beach Water Department
Capital Improvement Program
FY 2020/21

Project: CATHODIC PROTECTION - PHASE 6
Fund: Water
Project Category: 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: TBD

Council District: TBD
FY 2020/21 Budget: $100,000.00
Project: ALLEY MAIN CONVERSION ON DAISY AVE.
Fund: Water
Project Category: Pipeline System Improvements
Project Description: This project includes replacing approximately 3,900 linear feet of 6-inch and 8-inch cast iron main with ductile iron pipes, and constructing water service laterals to new water mains moved from alleys to streets.
Purpose: Improve fire flow protection and preserve water quality to the area.

Location: Area bounded by Daisy Avenue, San Francisco Avenue, W. Hill Street, and W. 20th Street

Council District: 7
FY 2020/21 Budget: $1,221,873.00
Project: WATER MAIN REPL ON LAKEWOOD BLVD.
Fund: Water
Project Category: Pipeline System Improvements
Project Description: This project includes the replacement of approximately 4,700-feet of 8-inch and 6-inch cast iron main with 8-inch ductile iron pipe.
Purpose: Improve fire flow protection and preserve water quality to the area.

Location: Lakewood Boulevard from Del Amo Boulevard to Carson Street

Council District: 5
FY 2020/21 Budget: $2,000,000.00
**Long Beach Water Department**  
**Capital Improvement Program**  
**FY 2020/21**

**Project:** ALLEY WATER MAIN CONVERSION 2020  
**Fund:** Water  
**Project Category:** 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:** TBD  
**Council District:** TBD  
**FY 2020/21 Budget:** $123,000.00
**Project:** CAST IRON MAIN REPLACEMENT 2021 - SPINNAKER BAY PHASE 1  
**Fund:** Water  
**Project Category:** Pipeline System Improvements  
**Project Description:** This project will include replacing approximately 3,300 linear feet of 12-inch, 8-inch and 6-inch water mains, and connecting water service laterals to new water mains.  
**Purpose:** Improve fire flow protection and preserve water quality to the area.  

**Location:** Spinnaker Bay Drive between Eliot Street and Parson’s Landing, Casino Point, China Point, Descano Bay, Toyon Bay, Long Point, Moonstone, Isthmus Place, Blue Cavern Point, Parsons Landing.  
**Council District:** 3  
**FY 2020/21 Budget:** $1,212,400.00
Project: CAST IRON MAIN REPLACEMENT 2021 - SPINNAKER BAY PHASE 2
Fund: Water
Project Category: Pipeline System Improvements
Project Description: This project will include replacing approximately 3,000 linear ft of 12-inch, 8-inch and 6-inch water mains, and connecting water service laterals to new water mains.
Purpose: Improve fire flow protection and preserve water quality to the area.

Location: Spinnaker Bay Drive between Parson's Landing and Smuggler's Cove, Whites Landing, Salta Verde Point, Prince Island, King's Fisher Court and Waterfront Place.
Council District: 3
FY 2020/21 Budget: $123,700.00
PROJECT CATEGORY: RESERVOIR/TREATMENT PLANT SYSTEM IMPROVEMENTS

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Cost Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alamitos Tank No. 5 Rehabilitation</td>
<td>$90,680</td>
</tr>
<tr>
<td>Alamitos Tank No. 6 Rehabilitation</td>
<td>$950,500</td>
</tr>
<tr>
<td>Alamitos Tank No. 7 Rehabilitation</td>
<td>$859,000</td>
</tr>
<tr>
<td>Alamitos Tank No. 8 Rehabilitation</td>
<td>$108,350</td>
</tr>
<tr>
<td>Alamitos Tank No. 10 Rehabilitation</td>
<td>$108,350</td>
</tr>
<tr>
<td>SCADA System Improvements</td>
<td>$295,351</td>
</tr>
<tr>
<td>Treatment Plant Filter Beds Rehabilitation</td>
<td>$140,182</td>
</tr>
<tr>
<td>Treatment Plant HVAC System Improvements</td>
<td>$192,300</td>
</tr>
<tr>
<td>Treatment Plant Scrubber Tank Replacement</td>
<td>$131,900</td>
</tr>
<tr>
<td>Treatment Plant Master Plan Study</td>
<td>$355,300</td>
</tr>
<tr>
<td>North Collection Main Control Valve Upgrade</td>
<td>$188,000</td>
</tr>
<tr>
<td>Alamitos Tank 19 Conversion</td>
<td>$103,700</td>
</tr>
<tr>
<td>Alamitos Tank 20 Conversion</td>
<td>$103,700</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$3,944,313</strong></td>
</tr>
</tbody>
</table>

SUMMARY:

The Long Beach Water Department (LBWD) has 24 steel water storage tanks at the Alamitos Reservoir. Each tank has a capacity of 3.5 million gallons of water, and all but one of these tanks was constructed between the 1920’s and 1960’s. 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. Improvement projects at the plant and related infrastructure ensure the City’s high quality drinking water consistently meets or better’s all Federal and State drinking water regulations. LBWD’s Tank Conversion Projects from Potable to Recycled Water involve improvements to the existing tanks and will provide additional storage facilities for the City’s recycled water supply.
Project: ALAMITOS TANK NO. 5 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 2020/21 Budget: $90,680.00
Project: ALAMITOS TANK NO. 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 2020/21 Budget: $950,500.00
Project: ALAMITOS TANK NO. 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 2020/21 Budget: $859,000.00
Long Beach Water Department
Capital Improvement Program
FY 2020/21

Project: ALAMITOS TANK NO. 8 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 2020/21 Budget: $108,350.00
Long Beach Water Department
Capital Improvement Program
FY 2020/21

Project: ALAMITOS TANK NO. 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 2020/21 Budget: $108,350.00
Project: SCADA SYSTEM IMPROVEMENTS
Fund: Water
Project Category: Reservoir/Treatment Plant System Improvements
Project Description: This project will include the design and construction of the necessary improvements to replace out-dated hardware, software, and communication interfaces.
Purpose: Ensure and improve overall SCADA system reliability, accessibility, maintainability, and security.

Location: City-wide

Council District: Various
FY 2020/21 Budget: $295,351.00
Project: TREATMENT PLANT FILTER BEDS REHABILITATION
Fund: Water
Project Category: Reservoir/Treatment Plant System Improvements
Project Description: This project will include replacing aging valves within the Groundwater Treatment Plant filter gallery.
Purpose: Ensure the integrity, dependability, and prolonged life of the water system.

Location: Long Beach Water Department Groundwater Treatment Plant
Council District: 5
FY 2020/21 Budget: $140,182.00
Project: TREATMENT PLANT 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: 5  
FY 2020/21 Budget: $192,300.00
Project: TREATMENT PLANT SCRUBBER TANK REPLACEMENT
Fund: Water
Project Category: Reservoir/Treatment Plant System Improvements
Project Description: This project included a condition assessment and emergency repair of the scrubber tank for the chlorination system at the Groundwater Treatment Plant.
Purpose: Ensure the integrity, dependability, and prolonged life of the water system.

Location: Long Beach Water Department Groundwater Treatment Plant

Council District: 5
FY 2020/21 Budget: $131,900.00
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: 5
FY 2020/21 Budget: $355,300.00
Project: NORTH LONG BEACH COLLECTION MAIN CONTROL VALVE UPGRADE
Fund: Water
Project Category: Reservoir/Treatment Plant System Improvements
Project Description: This project will include replacing an inoperable valve and pressure sensor/transmitter in the collection main system.
Purpose: Improve water system reliability and restore operations functionality

Location: E. Wardlow Road east of Cherry Avenue

Council District: 5
FY 2020/21 Budget: $505,000.00
Project: ALAMITOS TANK NO. 19 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. It will also convert from potable to recycled water storage.
Purpose: Ensure the integrity and dependability of water infrastructure.

Location: Alamitos Reservoir Site

Council District: 4
FY 2020/21 Budget: $103,700.00
Project: ALAMITOS TANK NO. 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. It will also convert from potable to recycled water storage.
Purpose: Ensure the integrity and dependability of water infrastructure.

Location: Alamitos Reservoir Site

Council District: 4
FY 2020/21 Budget: $103,700.00
## PROJECT CATEGORY: WATER SUPPLY PROJECTS

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Cost Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Coast Basin Groundwater Well Equipping</td>
<td>$1,500,000</td>
</tr>
<tr>
<td>New Well NLB 13</td>
<td>$1,176,035</td>
</tr>
<tr>
<td>New Well NLB 14</td>
<td>$1,176,035</td>
</tr>
<tr>
<td>New Well Alamitos 9A</td>
<td>$310,000</td>
</tr>
<tr>
<td>New Well Alamitos 14</td>
<td>$310,000</td>
</tr>
<tr>
<td>New Well 3</td>
<td>$450,000</td>
</tr>
<tr>
<td>New Well 4</td>
<td>$450,000</td>
</tr>
<tr>
<td>32nd Street Booster Pump Station Improvements</td>
<td>$145,900</td>
</tr>
<tr>
<td>Commission 22A Well Equipping</td>
<td>$1,559,763</td>
</tr>
<tr>
<td>Commission 15 Well Rehabilitation</td>
<td>$482,500</td>
</tr>
<tr>
<td>Commission 18 Well Rehabilitation</td>
<td>$482,500</td>
</tr>
<tr>
<td>Citizens 10 Well Rehabilitation</td>
<td>$112,500</td>
</tr>
<tr>
<td>Commission 14 Well Rehabilitation</td>
<td>$112,500</td>
</tr>
<tr>
<td>Commission 24 Well Rehabilitation</td>
<td>$45,000</td>
</tr>
<tr>
<td>Commission 25 Well Rehabilitation</td>
<td>$45,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$8,357,733</strong></td>
</tr>
</tbody>
</table>

### SUMMARY:

The Long Beach Water Department (LBWD) currently has 31 groundwater wells it operates and maintains. LBWD’s well rehabilitation program aims to restore wells to their most efficient production condition. LBWD’s endeavors also include projects such as the West Coast Basin and Commission 22A wells, as well as an additional 6 new wells, that are part of a long-term strategy to supplement LBWD’s water supply and meet future demands.
Project: WEST COAST BASIN GROUNDWATER WELL EQUIPPING
Fund: Water
Project Category: Water Supply
Project Description: This project will include equipping a new groundwater production well within the West Coast Basin.
Purpose: Ensure future groundwater production.

Location: Delta Avenue and W. Wardlow Road

Council District: 7
FY 2020/21 Budget: $1,500,000.00
Project: NEW WELL NLB13
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 2020/21 Budget: $1,176,035.00
Long Beach Water Department
Capital Improvement Program
FY 2020/21

Project: NEW WELL NLB14
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 2020/21 Budget: $1,176,035.00
Project: NEW WELL ALAMITOS 9A
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 Champion Park

Council District: 4
FY 2020/21 Budget: $310,000.00
**Long Beach Water Department**

**Capital Improvement Program**

**FY 2020/21**

**Project:** NEW WELL ALAMITOS 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 Champion Park  

**Council District:** 4  
**FY 2020/21 Budget:** $310,000.00
Project: NEW WELL 3
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: TBD

Council District: Various
FY 2020/21 Budget: $450,000.00
Project:  NEW WELL 4
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:  TBD
Council District:  Various
FY 2020/21 Budget:  $450,000.00
Project: 32ND STREET BOOSTER STATION REHABILITATION
Fund: Water
Project Category: Water Supply
Project Description: This project will include assessing and performing necessary improvement to 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 2020/21 Budget: $145,900.00
Project: COMMISSION 22A WELL EQUIPPING
Fund: Water
Project Category: Water Supply
Project Description: This project will include equipping a new groundwater production well.

Purpose: Ensure the integrity and dependability of water infrastructure.

Location: El Dorado Park

Council District: 5
FY 2020/21 Budget: $1,559,763.00
Project: COMMISSION 15 WELL REHABILITATION
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: Located east of Bellflower Boulevard and north of Parkcrest Street in Heartwell Park.

Council District: 5
FY 2020/21 Budget: $482,500.00
Long Beach Water Department
Capital Improvement Program
FY 2020/21

Project: COMMISSION 18 WELL REHABILITATION
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

Council District: 5
FY 2020/21 Budget: $482,500.00
Project: CITIZENS 10 WELL REHABILITATION
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: 2939 Airport Way. Corner of Spring Street and Airport Way

Council District: 5
FY 2020/21 Budget: $112,500.00
Project: COMMISSION 14 WELL REHABILITATION

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

Council District: 5

FY 2020/21 Budget: $112,500.00
Urban Community Heritage Foundation
Capital Improvement Program
FY 2020/21

Project:  COMMISSION 24 WELL REHABILITATION
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:  3942 Clark Avenue, south of Carson Street

Council District:  5
FY 2020/21 Budget:  $45,000.00
Project: COMMISSION 25 WELL REHABILITATION
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: 3457 Stanbridge Ave., east on Spring Street, north on Clark Avenue, and east on Wardlow Road. The well is located at the west end of Wardlow Park.
Council District: 5
FY 2020/21 Budget: $45,000.00
### PROJECT CATEGORY: WATER FACILITY IMPROVEMENTS

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Cost Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Beach Water Department Fiber Optic Installation</td>
<td>$39,600</td>
</tr>
<tr>
<td>Administration Building Renovation – 2nd Floor</td>
<td>$68,250</td>
</tr>
<tr>
<td>Administration Building Renovation – 3rd Floor</td>
<td>$218,250</td>
</tr>
<tr>
<td>Administration Building Renovation – 4th Floor</td>
<td>$218,250</td>
</tr>
<tr>
<td>Administration Building Renovation – 1st Floor</td>
<td>$168,250</td>
</tr>
<tr>
<td>Maintenance Yard Fuel Tanks</td>
<td>$1,250,215</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$1,962,815</strong></td>
</tr>
</tbody>
</table>

### SUMMARY:

Water facility improvement projects ensure the integrity, dependability, and prolonged life of vital infrastructures. Improvements and renovations to LBWD’s Administration Building including upgrade to the telecommunication system will provide space efficiency and more reliable infrastructure for communication. LBWD’s Maintenance Yard Fuel Tanks Project will convert the underground tanks into above ground storage for safer and more reliable facilities and to be in compliance with the Clean Water Act.
Project: LONG BEACH WATER DEPARTMENT FIBER OPTIC INSTALLATION
Fund: Water
Project Category: Water Facility Improvements
Project Description: This project will include replacement and installation of new state-of-the-art telecommunications infrastructure.
Purpose: Improve telecommunications infrastructure to support voice, data, security, and wireless services on a single backbone solution.
Location: Long Beach Water Department Wardlow Campus and Groundwater Treatment Plant Campus

Council District: 7
FY 2020/21 Budget: $39,600.00
Project: ADMINISTRATION BUILDING RENOVATION - 2ND FLOOR
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 2020/21 Budget: $68,250.00
Project: ADMINISTRATION BUILDING RENOVATION - 3RD FLOOR
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 2020/21 Budget: $218,250.00
Project: ADMINISTRATION BUILDING RENOVATION - 4TH FLOOR  
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 2020/21 Budget: $218,250.00
Project: ADMINISTRATION BUILDING RENOVATION - 1ST FLOOR
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 2020/21 Budget: $168,250.00
Long Beach Water Department
Capital Improvement Program
FY 2020/21

Project: MAINTENANCE YARD FUEL TANKS
Fund: Water
Project Category: Water Facility Improvements
Project Description: Removal of the underground fuel storage tanks and replace with new aboveground fuel tanks.
Purpose: The existing underground fuel storage tanks at the Operations Service Yard are at the end of their safe and useful service life and need to be replaced to protect against catastrophic tank failure.
Location: Long Beach Water Department's Operations Services Yard

Council District: 7
FY 2020/21 Budget: $1,250,215.00
Project: INTEREST EXPENSE CAPITALIZED - WATER FUND
Fund: Water
Project Category: Water Miscellaneous
Project Description: Interest on debt used to finance water capital improvements.

Purpose: Finance requirement to account for total cost of water capital improvements.

Location: N/A

Council District: N/A
FY 2020/21 Budget: $800,000.00
LONG BEACH WATER DEPARTMENT
CAPITAL IMPROVEMENT PROGRAM
FY 2020/21 SEWER FUND PROJECTS

PROJECT CATEGORY: SEWER PIPELINE IMPROVEMENTS

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Cost Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanitary Sewer Rehabilitation/Replacement Project – SSRRP 5</td>
<td>$450,000</td>
</tr>
<tr>
<td>Sanitary Sewer Rehabilitation/Replacement Project – SSRRP 6</td>
<td>$450,000</td>
</tr>
<tr>
<td>Sanitary Sewer Rehabilitation/Replacement Project – SSRRP 7</td>
<td>$650,000</td>
</tr>
<tr>
<td>Sanitary Sewer Rehabilitation/Replacement Project – SSRRP 7</td>
<td>$600,000</td>
</tr>
<tr>
<td>Long Beach Water Department Sewer System Master Plan</td>
<td>$800,000</td>
</tr>
<tr>
<td>Sewer Improvements – Arbor Street and Locust Avenue</td>
<td>$250,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$3,200,000</strong></td>
</tr>
</tbody>
</table>

SUMMARY:

In order to maintain sanitary sewer system reliability and capacity, and be 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. Pipes that are capacity deficient are upsized and those that are structurally deficient and cannot be rehabilitated are replaced. LBWD’s Sewer Master Plan Update will evaluate and determine any required improvements and additions to the existing sewer system and will ultimately assist with development of new capital improvement program.
Project: SANITARY SEWER REHABILITATION/REPLACEMENT PROGRAM - SSRRP 5
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: City-wide

Council District: Various
FY 2020/21 Budget: $450,000.00
Long Beach Water Department  
Capital Improvement Program  
FY 2020/21

Project: SANITARY SEWER REHABILITATION/REPLACEMENT PROGRAM -SSRRP 6  
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: City-wide  
Council District: Various  
FY 2020/21 Budget: $450,000.00
Project: SANITARY SEWER REHABILITATION/REPLACEMENT PROGRAM - SSRRP 7
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: City-wide

Council District: Various
FY 2020/21 Budget: $650,000.00
Long Beach Water Department
Capital Improvement Program
FY 2020/21

Project: SANITARY SEWER REHABILITATION/REPLACEMENT PROGRAM - SSRRP 8
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: City-wide

Council District: Various
FY 2020/21 Budget: $600,000.00
Long Beach Water Department
Capital Improvement Program
FY 2020/21

Project:  LONG BEACH WATER DEPARTMENT SEWER SYSTEM MASTER PLAN
Fund:    Sewer
Project Category: Sewer Pipeline Improvements
Project Description: This project includes an expansion of the existing sanitary sewer system hydraulic model, evaluation of the existing sanitary sewer system, and development of a phased capital improvement program.

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

Location: City-wide
Council District: Various
FY 2020/21 Budget: $800,000.00
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 2020/21 Budget: $250,000.00
LONG BEACH WATER DEPARTMENT
CAPITAL IMPROVEMENT PROGRAM
FY 2020/21 SEWER FUND PROJECTS

PROJECT CATEGORY: SEWER LATERAL IMPROVEMENTS

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Cost Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewer Lateral Pilot Project</td>
<td>$300,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$300,000</td>
</tr>
</tbody>
</table>

SUMMARY:

LBWD owns, operates, and maintains over 710 miles of sanitary sewer mains, and there are approximately 93,000 active sewer connections providing service to City residents. LBWD’s Sewer Lateral Improvement Program will evaluate conditions of the existing sewer service connections in the public right-of-way and will identify required improvements for continuous reliability which may include line repair, replacement, or lateral lining.
Project: SEWER LATERAL PILOT PROJECT
Fund: Sewer
Project Category: Sewer Lateral Improvements
Project Description: This project will include cleaning, CCTV inspecting and potential repairing, replacing and/or rehabilitating of approximately 1300 linear feet of sewer laterals.
Purpose: Improve the reliability and capacity of the existing sanitary sewer laterals.

Location: Area bounded by Cherry Avenue, San Antonio Drive, Atlantic Avenue, and Wardlow Road

Council District: 7, 8
FY 2020/21 Budget: $300,000.00
LONG BEACH WATER DEPARTMENT
CAPITAL IMPROVEMENT PROGRAM
FY 2020/21 SEWER FUND PROJECTS

PROJECT CATEGORY: SEWER LIFT STATION REHABILITATIONS

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Cost Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-18 Sewer Lift Station Rehabilitation</td>
<td>$550,314</td>
</tr>
<tr>
<td>S-12 Sewer Lift Station Force Main Assessment</td>
<td>$5,617</td>
</tr>
<tr>
<td>S-8 Sewer Lift Station Rehabilitation</td>
<td>$339,848</td>
</tr>
<tr>
<td>S-25 Sewer Lift Station Rehabilitation</td>
<td>$1,741,315</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$2,637,094</strong></td>
</tr>
</tbody>
</table>

SUMMARY:

In order to maintain sanitary sewer system reliability and capacity, and be 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. Assessment of force mains connected to the lift stations will evaluate condition of the facility and will identify require improvements.
Project: S-18 SEWER LIFT STATION REHABILITATION
Fund: Sewer
Project Category: Sewer Lift Station Rehabilitations
Project Description: This project will include interior wet well repairs, ventilation and odor control system upgrades, and structural and seismic improvements.
Purpose: Improve the station’s overall reliability.

Location: Hart Place and E. Seaside Way

Council District: 2
FY 2020/21 Budget: $550,314.00
Project: S-12 SEWER LIFT STATION FORCE MAIN ASSESSMENT
Fund: Sewer
Project Category: Sewer Lift Station Rehabilitations
Project Description: This project will include inspecting and condition assessment of the S-12 sewer lift station bypass force mains.
Purpose: Improve the reliability of the existing sanitary sewer system.

Location: S-12 Belmont Shore Pump Station at Bennett Avenue and Division Street, west along Livingston Avenue and west on 2nd Street
Council District: 3
FY 2020/21 Budget: $5,617.00
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, ventilation and odor control system upgrades, and structural and seismic improvements.
Purpose: Improve the station’s overall reliability.

Location: 6391 Marina Drive, north side of E. 2nd Street

Council District: 3
FY 2020/21 Budget: $339,848.00
Long Beach Water Department
Capital Improvement Program
FY 2020/21

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, ventilation and odor control system upgrades, and structural and seismic improvements.
Purpose: Improve the station’s overall reliability.

Location: Queens Way and W. Shoreline Drive

Council District: 2
FY 2020/21 Budget: $1,741,315.00
Project: INTEREST EXPENSE CAPITALIZED - SEWER FUND
Fund: Sewer
Project Category: Sewer Miscellaneous
Project Description: Interest on debt used to finance sewer capital improvements.

Purpose: Finance requirement to account for total cost of sewer capital improvements.

Location: N/A

Council District: N/A
FY 2020/21 Budget: $150,000.00