COASTAL WATER AUTHORITY

CAPITAL IMPROVEMENT PLAN SUMMARY

5-YEAR PLAN (2024-2028)

The Coastal Water Authority Capital Improvement Plan (CIP) is the strategy for physical improvements to Coastal Water Authority raw water pumping, storage, conveyance, distribution and treatment infrastructure. The CIP describes all CWA systems and critical components, associated needs, and planned funding sources. CWA currently provides approximately 1-Billion Gallons of Water every day (BGD) to the region which is used for drinking water, industrial processes, and agricultural irrigation. The water is delivered to the customers through a series of reservoirs, pump stations, canals, and transmission pipelines. To meet current and future demands CWA must modernize equipment and facilities, build in increased redundancy, and improve system reliability and resiliency. These approaches are discussed below.

Modernization Approaches

Pumps and Motors - Replace end of life pumps and motors with the most advanced/efficient pumps and motors.

Electrical and Control Equipment – Replace end of life electrical/control equipment (transformers, breakers, motor starters, VFDs, protection relays and SCADA Systems) with the most advanced/efficient electrical/control equipment.

Buildings/Facilities – Renovate and/or replace existing facilities (administration buildings, control rooms, electrical buildings, repair shops and storage buildings). Incorporate ADA and safety standards, energy efficient lighting and HVAC systems, conference/meeting rooms, upgraded kitchens/breakrooms, restrooms, IT/Communications systems.

Redundancy, Reliability and Resiliency Approaches

IT/Cybersecurity – Provide reliable primary and backup systems for pump station SCADA, communications, historical operating data, etc.

Electrical Equipment – Provide backup equipment for breakers, starters, transformers, relays/switches and Remote Terminal Units (RTUs).

Pipelines – Reduce and/or eliminate the risks associated with PCCP by inspection, repair, protection, slip-lining and adding redundant parallel transmission lines and valves/valve stations.

Buildings/Facilities – Harden critical buildings that house electrical equipment, control equipment, and chemical feed systems to protect from floods, hurricanes, tornados, freezes and excessive heat.

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5-YEAR PLAN (2024-2028)

The CIP provides an estimate of delivery by fiscal year for the next five years. The FY 2024-2028 CIP will be financed by a combination of existing CWA funds, COH HPW funds, TWDB Loans, FEMA Grant Programs and other funding sources. Funding status for highlighted projects is provided below.

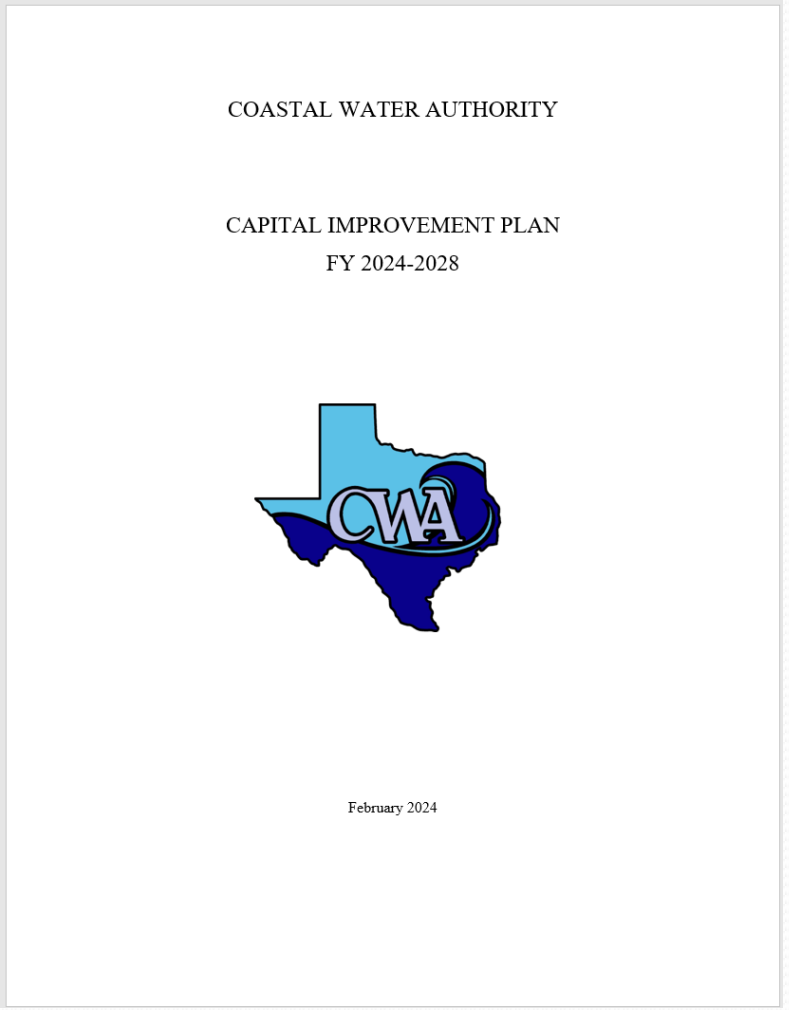
Highlights of the Fiscal Year 2024-2028 CIP:

- Continue work to add additional pump capacity to the Lynchburg Pump Station B-System (Funding Secured)
- Continue work to add the full pump capacity to the Capers Ridge Pump Station (Funding Secured)
- Continue replacement of Bayport System pipelines (Funding Secured)
- Continue work to add discharge capacity to the Lake Houston Dam (Engineering Funded; Construction Funding TBD)
- Continue work to install a fully redundant B-2 Pipeline (Preliminary Engineering Funded; Final Design and Construction Funding TBD)
- Complete SCADA System Upgrades and Replacements (Preliminary Engineering Funded; Final Design and Construction Funding TBD)
- Complete Building and Facility Renovations and Replacements (Preliminary Study Funded; Final Design and Construction Funding TBD)
- Complete Pipeline Cathodic Protection upgrades and replacements (Funding TBD)
- Continue Transmission Pipeline Condition Assessments (Funding TBD)

CIP projects are described on the attached slides.

Five-Year Capital Improvement Plan (Fiscal Years 2024-2028)

- CIP Plan for Infrastructure Improvement at CWA Facilities.
- Projects Include:
  - Pump Station Improvements/Expansions
  - New B-2 Pipeline
  - SCADA Replacement
  - Lake Houston Dam Spillway Improvement
  - Facilities/Building Renovations
  - Existing Pipelines Assessments/Studies
- Plan Identifies:
  - Project Descriptions
  - Estimated Construction Costs
  - Schedules
  - Funding Sources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CAPITAL IMPROVEMENT PLAN
FY 2024-2028

February 2024

LPS B-System Improvements

- Lynchburg PS – B System Improvements
  - 2 new 50,000 GPM Pumps, Motors and VFDs (P201 and P206)
  - Design near Completion
  - Pumps, Motors and VFDs being Procured
  - Construction - 2025
- Benefits
  - Increases B-System capacity to EWPP and Industry
  - Replace P201 (50 years of age)
- Construction Cost - $18M
- Design: 2022-2024
- Construction: 2025

CRPS Pump Capacity

- Add Final 4 Pumps and Motors, Electrical and Piping/Valves
- Benefits
  - Increases LBITP to 500 MGD for the Price of 240 MGD System
  - Drought Mitigation
- Construction Cost - $31M
- Design: 2023-2024
- Construction: 2025-2026

SCADA Upgrades/Replacements

- Replace/Upgrade SCADA Hardware, Software and Cybersecurity at all Pump Stations
- Benefits
  - Standardize and Modernize Hardware, Software, Cybersecurity and Communications across all CWA Facilities
- Final Design - $2M
- Construction Cost - $12M
- SCADA Master Plan: 2024
- Design: 2024-2027
- Construction: 2025-2028

B-2 Pipeline

- B-2 Pipeline and East Lateral
  - 16 Miles of Parallel Redundant Pipeline to B1 (48in to 96in)
  - Existing ROW
- Benefits
  - Increases capacity and provides redundancy to EWPP and Industry
  - Facilitates Inspection and Maintenance of existing B1
- Final Design Cost - $20M
- Construction Cost - $300M
- PER/Design: 2024-2026
- Construction: 2026-2030

Cathodic Protection Upgrades

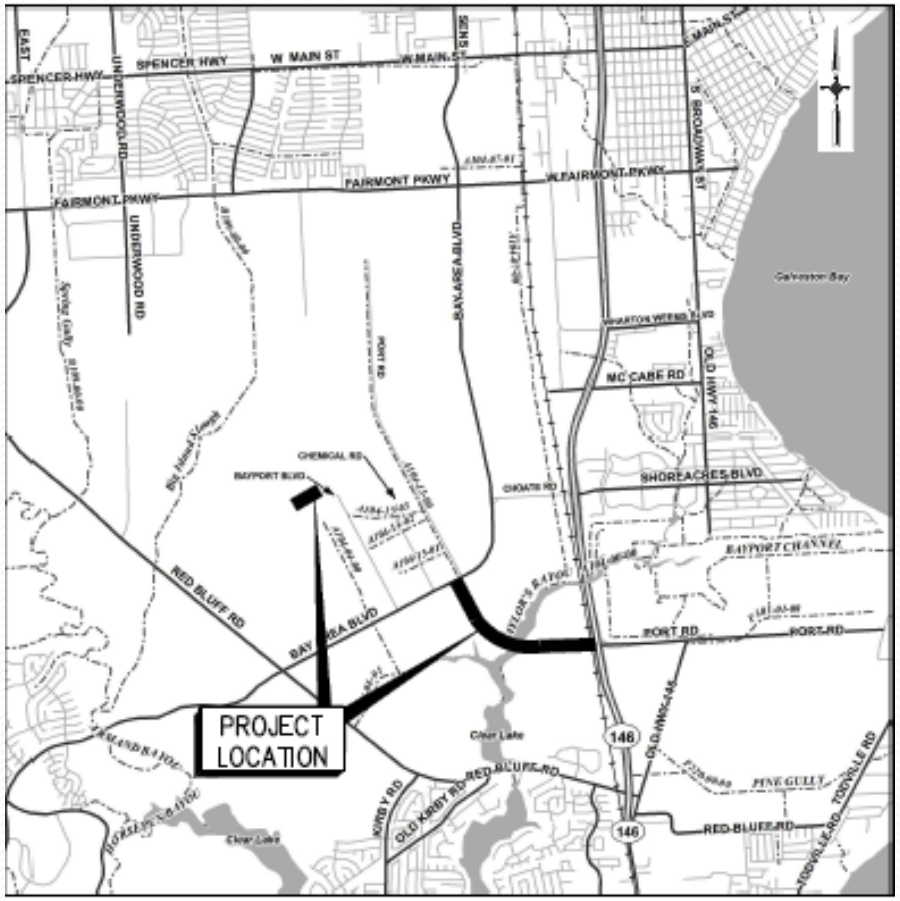
- Cathodic Protection System Evaluation/Upgrade
  - Existing System original to construction of each pipeline (1970-1982)
  - Scope of Evaluation
    - Anodes, Rectifiers, Test Stations, Isolation Flanges
    - Operating Procedures
  - Design and Installation of remote monitoring units
  - Coordination with adjacent utility and pipeline owners
- Master Plan/PER/Design: 2024-2025
- Construction: 2025-2027

Pipeline Condition Assessment

- Pipeline – Condition Assessments
  - PCCP (60in to 108in)
  - Lines Can’t Be Taken Out of Service for Extended Periods
  - Visual and Electromagnetic Inspections Necessary
  - Coordinate with HPW and Industry to allow for inspections
  - Coordinate with B2 Pipeline Project
- Assessments: 2024-2028

Bayport Pipeline Replacements

- Bayport Phase 4 Waterline Replacement
  - Replacement of 3.2 Miles of 18-20 In Steel Cylinder RCP waterlines
  - Original Installed in 1968
- Final Design Cost: 750k
- Construction Cost: $3.5M
- Design: 2024
- Construction: 2025



Lake Houston Dam Spillway Improvement Project

- Construction of a new discharge structure in the East Embankment
- 11 New Gates - provides additional controlled flow release from the reservoir
- Design Cost: $15M
- Construction Cost: $185M
- Design: 2024-2026
- Construction: 2026-2030

Facilities Improvements

- Renovate/Replace Buildings and other Infrastructure at Trinity River Pump Station, Lynchburg Pump Station, Canal Maintenance Station, Lake Houston Pump Station, Bayport Pump Station and Red Bluff Water Treatment Plant
- Master Plan - Space Planning, Building Programs, OPCCs
- Final Design Cost: $4M
- Construction Cost: $25M
- Designs: 2024-2026
- Construction: 2026-2030