City of Cooper City Wastewater Treatment Plant New Headworks Facility Plan Presentation

Public Meeting Date: June 9, 2026

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Florida Department of Environmental Protection Clean Water State Revolving Fund (CWSRF) Project No. WW06251

WWTP New Headworks Facility Plan

City Commission Approval

Resolution 26-24 approved, authorizing the City Manager to pursue the CWSRF Loan Program to
assist in funding the WWTP New Headworks Facility Project.

CWSRF Facility Plan Requirement

A Facility Plan must be completed to verify planning requirements of rules 62-503 and 62-552, F.A.C. have been met. To satisfy the requirements of the CWSRF Program, adoption of a Facility Plan is necessary.

Public Participation Requirement

A public meeting is required to present the Project alternatives, capital cost, financial impact, and Facility Plan components. This meeting allows the public to participate in evaluating the project alternatives.

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Background

5,337
Acres served

124+
Miles of gravity/ force mains

2,201
Manholes

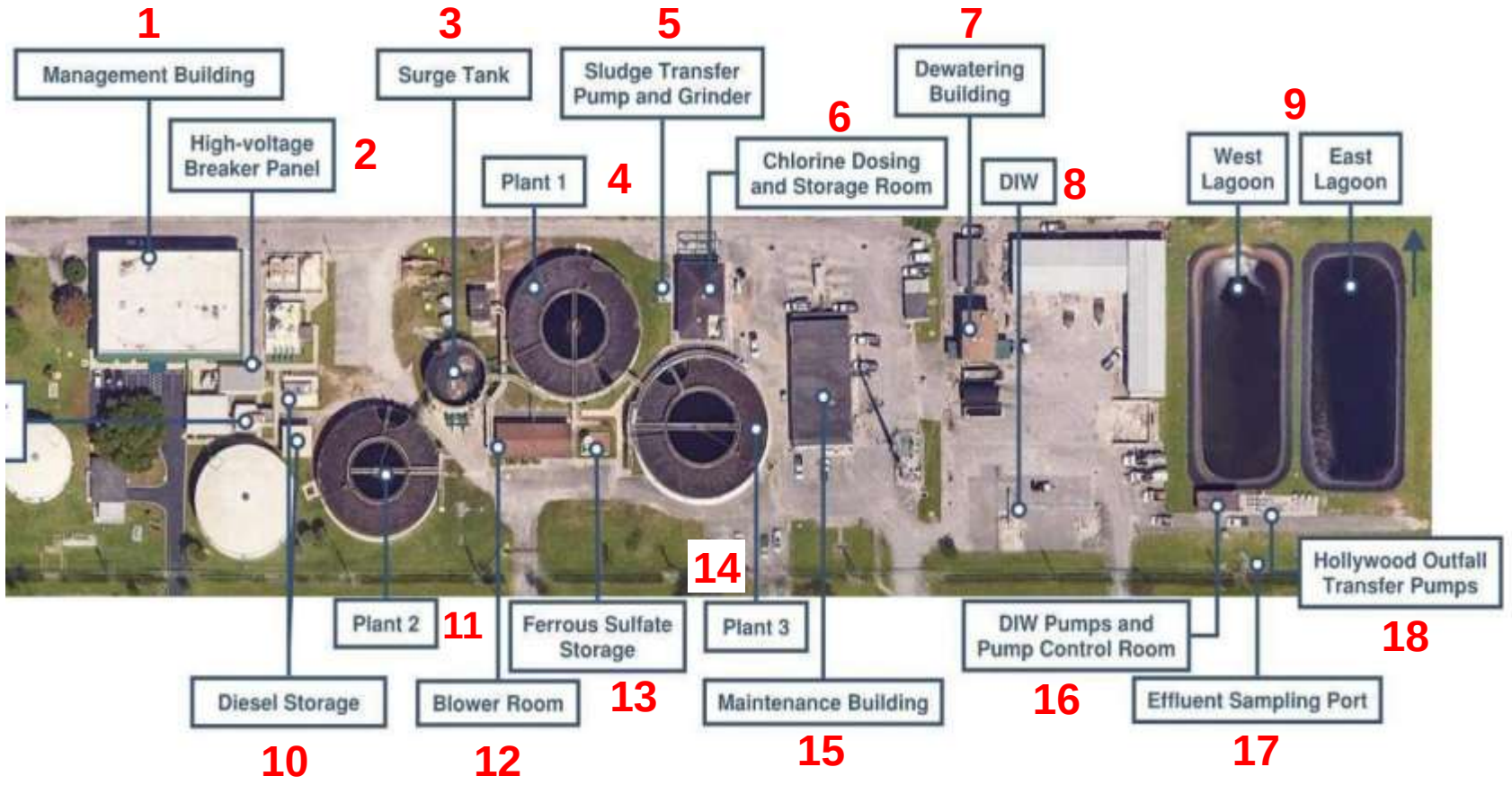
83
Total lift stations

Current plant configuration

Original late-1970s WWTP with three small package plants.

Need

Upgrade functionality, efficiency and treatment quality.



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Existing Conditions

Manual screening

¾-inch bar screen before the surge tank; each package plant has a ½-inch screen.

Labor-intensive disposal

Screenings are collected multiple times per day and sent to on-site dumpsters.

Odor Concerns

Debris and grit continue to increase wear and maintenance downstream, causing build up of odor causing materials.

The process is inefficient and not aligned with current best practice.

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3 Alternatives

Evaluation of Preliminary Treatment Improvement Options

Alternative 1
No Action

- Manual screening remains
- Maintenance & odor issues continue
- No long-term operational improvements

No Cost

Alternative 2
Headworks with Coarse and Fine Screen and Grit Removal

- Mechanical coarse screening
- Mechanical fine screening
- Odor control & redundancy
- Includes grit removal system

Total Project Cost:
$12,285,200.00

Alternative 3
Headworks with Future Expansion Provisions

- Mechanical fine screening
- Odor control & redundancy
- Supports future WWTF upgrades

Total Project Cost:
$8,904,000.00

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Alternatives Comparison

Alt. 1 | No Action

Inefficiencies, maintenance needs, and labor reliance continue to worsen.

Alt. 2 | Headworks with Coarse Screens, Fine Screens & Grit Removal

Provides screening, grit removal, odor control, and operational redundancy, provides longer life expectancy to downstream processes. But requires a significantly higher capital investment for benefits that can be incorporated in future phases.

Alt. 3 | Headworks with Future Expansion Provisions

Provides screening, odor control, operational redundancy, provision for future grit removal addition, provides longer life expectancy to downstream processes, requires less manual intervention and requires a lesser capital investment upfront.

Recommended path: Alternative 3 provides the best balance of operational improvements, future expandability, and cost-effectiveness while establishing the foundation for future WWTP upgrades.

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Selected Plan - Alternative 3: Headworks with Future Expansion Provisions

1. Centralized treatment front end

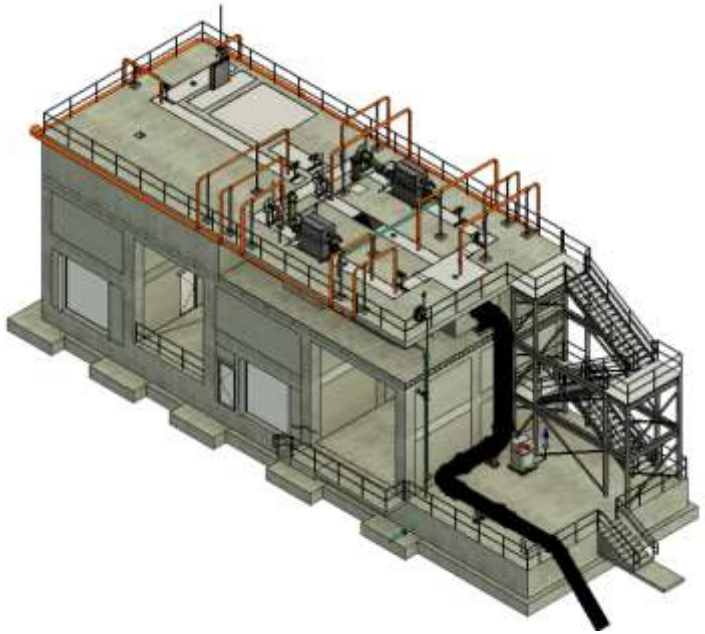
Supports projected flows and creates a maintainable, resilient solution to large debris.

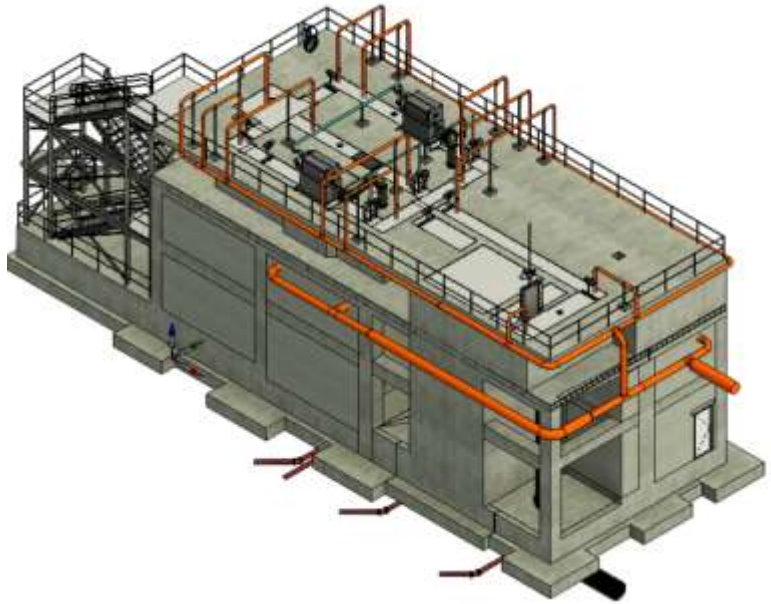
2. Protects downstream processes

Removes debris and grit that shortens the life expectancy of the plant before wastewater reaches the treatment phases.

3. Most practicable option

Provides immediate operational benefits, supports future grit removal improvements, and establishes the foundation for future WWTP upgrades.





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Environmental Impact

No significant adverse impacts expected

Improvements occur at the existing WWTP and strengthen treatment reliability over the long term.

Existing site footprint

Construction stays within the current wastewater facility and does not expand into undisturbed areas.

Resources protected

No significant adverse effects are expected for wetlands, surface waters, prime agricultural lands, protected species, or nearby communities.

Short-term construction

Temporary air-quality impacts may occur during construction, but no long-term air impacts are anticipated.

Long-term environmental benefit: centralized headworks removes debris, rags, and grit before biological treatment, helping reduce process upsets, equipment wear, and risk of pollutant releases.

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Floodplain Management

EXECUTIVE ORDER 11988 REVIEW

ZONE X

Lower mapped flood risk

FEMA FIRM 12011C0545J places the WWTP outside the mapped high-risk flood area.

What the map means

Zone X generally means FEMA does not identify the site as a high-risk Special Flood Hazard Area.

What it does not mean

It does not mean flooding is impossible. The project still follows local floodplain and building requirements.

Project footprint

Work occurs within the existing developed WWTP site and does not expand plant boundaries.

Neighbor impact

The improvements are not expected to increase flood risk, push water onto nearby properties, or affect floodplain functions.

Bottom line: Relocating the facility is not practicable; using the existing site is consistent with federal floodplain objectives and avoids adverse floodplain impacts.

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Monetary Cost to the Public/User

Utility revenues repay the SRF loan

The Headworks project is proposed to be funded through an SRF loan repaid from the City's Water & Sewer utility revenues.

Capital cost

$8.904M

Total cost financed

$9.355M

Annual SRF debt service

$622,561

City awarded FY2026 Community Project Funding – EPA Grant of $1.092M towards this Project to offset cost.

Utility fee increases in plan

8% annually
FY 2028–FY 2032

What this means
Adds an estimated $622,561 annual repayment obligation to the utility system.

The financial plan accounts for repayment through projected utility revenues and planned rate increases, while maintaining positive Water & Sewer Fund capacity after debt service.

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Implementation & Compliance

Phase	Duration	Start	Finish
Design Phase	9 months	September 2025	June 2026
Permitting	3 months	April 2026	June 2026
Bidding & Award	3 months	July 2026	October 2026
Construction	24 months	October 2026	September 2028

Agency approvals

Required review step for SRF loan eligibility.

Capital financing plan

Documents user-rate impact for the public and state agencies.

Construction readiness

Schedule defines design, permitting, bidding, award, and construction phases.

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Thank you

Questions?

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