

Manatee County

Lake Manatee WTP Facility Plan

Project Kickoff Meeting

Location: Lake Manatee WTP

November 19, 2025



Introductions and Project Team

Lines of Communication

| Organization | Name |
|----------------|---|
| Manatee County | Paul Haas – Project Manager* |
| | Patrick Shea |
| | Jim Renneberg |
| | Chris Collins |
| | Brent Laudicina |
| | Melissa Dickey |
| | Robert Hartnett |
| | Kathryn Quilty |
| | Mitchell Kersting |
| | Jason Aronin |
| Carollo | Olga Wolanin |
| | Jen Nyfennegger - Project Manager* |
| | Kyle Ward - Assistant PM* |
| | AC Romero - Project Engineer* |
| | Sandeep Sethi – Technical Advisor |
| | Laura Baumberger |

*** Include on all email communications.**

to be included in all email communications as well.

Meeting Agenda

- 1 Introductions & Project Team
- 2 Project Goals and Objectives
- 3 Scope of Services and Deliverables
- 4 Initial Data Request
- 5 Staff Survey
- 6 Schedule
- 7 Next Steps and Action Items

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Project Goals and Objectives

Project Goal

Develop a Comprehensive Facility Plan for Lake Manatee WTP

- Prioritize capital improvements directed at increasing treatment capacity.
- Enhance the reliability of existing treatment and operations.
- Establish a strategic repair and replacement (R&R) Program.

Project Objectives

1. Review flow and process data to assess potential impacts on current capacity and planned expansion.
2. Review projected population growth, level of service requirements, and timing for facility expansion.
3. Recommend process and non-process improvements for the existing facility and new Treatment Train D, with planning-level cost estimates.
4. Develop CIP sheets for recommended improvements to the existing facility and update the project sheet for Treatment Train D.

Project Objectives

5. Evaluate feasibility of phasing the expansion based on capacity needs and budget.
6. Recommend near-term improvements to boost operational flexibility and reliable treatment capacity of all process areas, particularly those with existing hydraulic limitations.
7. Develop the LMWTP Facility Plan Report.

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Scope of Services and Deliverables

Scope of Services

Task 1: Project Management, Meetings, and Communication

- Administration of work assignment and communication
- Kickoff meeting
- Two (2) project progress meetings
- Five (5) workshops
- Meeting deliverables include agenda, presentation, and minutes
- Monthly progress reports

Task 2: Quality Management

- QA/QC of data, workshop materials and reports

Color Key

- Deliverables
- Site Visit
- Workshop/
Meeting

Scope of Services

Task 3: Data Collection and Review

- Data request list
- Summary of water quality regulations and compliance challenges
- Review of initial treatment technologies (further develop in Task 6) to meet regulations
- Compile, review, and summarize Staff Survey
- Workshop No. 1: Regulatory Review and Staff Survey Results

Task 4: Planning Framework

- Establish recent demand projections, LOS standard, resulting required facility capacity, and peaking factors
- Workshop No. 2: Planning Framework

Color Key

- Deliverables
- Site Visit
- Workshop/ Meeting

Scope of Services

Task 5: Existing LMWTP Evaluation

- Hydraulic assessment; includes site visit
- CFD hydraulic assessment
- Process assessment
- Facilities evaluation and condition assessment; includes site visits
- Projected capacity needs
- R&R and CIP project identification
- Cost estimates and schedule
- Workshop No. 3: Existing Facility Evaluation

Color Key

- Deliverables
- Site Visit
- Workshop/ Meeting

Scope of Services

Task 6: Evaluation of Proposed Treatment Train D

- Treatment alternatives analysis and selection
- Cost Estimate and construction schedule
- Implementation plan and constructability
- Workshop No. 4: Treatment Train D Evaluation

Color Key

- Deliverables
- Site Visit
- Workshop/
Meeting

Scope of Services

Task 7: Evaluation of New/expanding Lift Station Evaluation

- Process assessment for expansion or additional lift station
- Project pump capacity and forcemain size/route
- Workshop 5: Lift Station Evaluation

Task 8: CIP Recommendations and Prioritization

Task 9: LMWTP Facility Plan Report

- Draft and Final LMWTP Facility Plan (electronic pdf)
- Draft Report Review Meeting

Color Key

- Deliverables
- Site Visit
- Workshop/ Meeting

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Initial Data Request

Initial Data Request List

| Item No. | Title | Complete? | Format |
|----------|--|-----------|---|
| 1 | Daily Water production data for LMWTP (2016-2025): | | |
| | Flow Data (mgd) <ul style="list-style-type: none"> • Raw Water to each Basin • BTU Flow (and flow path) • Finished Water production • Backwash return flows (and flow path) • Sludge flow and sludge decant return flow (and flow path) | | |
| 2 | Daily Water Quality from Jan 2016 - To Date (10 years) | | County will not be able to provide this |
| | Raw Water Quality <ul style="list-style-type: none"> • Turbidity • pH • Temperature (C) • TOC (mg/L) • Mg and Ca (mg/L as CaCO₃) • Alkalinity (mg/L as CaCO₃) | | |

County will not be able to provide this

Initial Data Request List

| Item No. | Title | Complete? | Format |
|----------|--|-----------|--------|
| 2 | Daily Pretreatment Water Quality (influent and effluent) <ul style="list-style-type: none"> • Turbidity • pH • Temperature (C) • TOC (mg/L) • Mg and Ca (mg/L as CaCO₃) • Alkalinity (mg/L as CaCO₃) | | |
| 3 | Daily Process Operational Data | | |
| | <ul style="list-style-type: none"> • Chemical feed rates for all pretreatment chemicals in all Basins (PAC, alum, lime, polymer, hypo, caustic) – presented in mg/L doses • Hypo Dose for Blend Chamber (mg/L) • Ammonia Dose for Blend Chamber | | |

Only composites are pulled for these parameters.

Initial Data Request List

| Item No. | Title | Complete? | Format |
|----------|--|-----------|--------|
| 4 | Most up to date: 20 Year Water Supply Alternative Evaluation. Note: Carollo currently has a copy of the July 2025 Draft | | |
| 5 | Record Drawings for Trains A and B (dated in the '90s), BTU | | |
| 6 | Design drawings, specifications and design criteria for the new sludge dewatering system currently under construction | | |

7. Record drawings for Train C

8. Bromite data for ozone if not County to test samples

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Staff Survey

Staff Survey

Goal: Gather, compile, and review County staff input via a survey to capture concerns and preferences related to LMWTP deficiencies and improvement needs.

- Present results in a Workshop No. 1 for County review; and
 - Agree on which findings influence the Facility Plan.
- Use agreed survey results to:
 - Compare with assessments from Tasks 5 and 6.
 - Identify R&R and CIP projects
 - Develop cost estimates and construction schedules

Staff Survey Format

Online Surveys

Email Links: Send a survey link via email

Survey Platforms: Microsoft Forms, Google Forms, SurveyMonkey, etc.

Paper Surveys

Printed Questionnaires: Distribute during meetings, events, or in physical locations.

Other A hybrid format between an emailed survey and a printable survey to distribute.

Anonymous or not?

Anonymous but ask what department/part of facility they work.

Staff Survey Timing

- Carollo to Prepare Final Version of Survey by **November 26**
- County Responses due by **December 12**
- Review Responses in Workshop No. 1 on **Jan 12 - 16**

Staff Survey Questionnaires

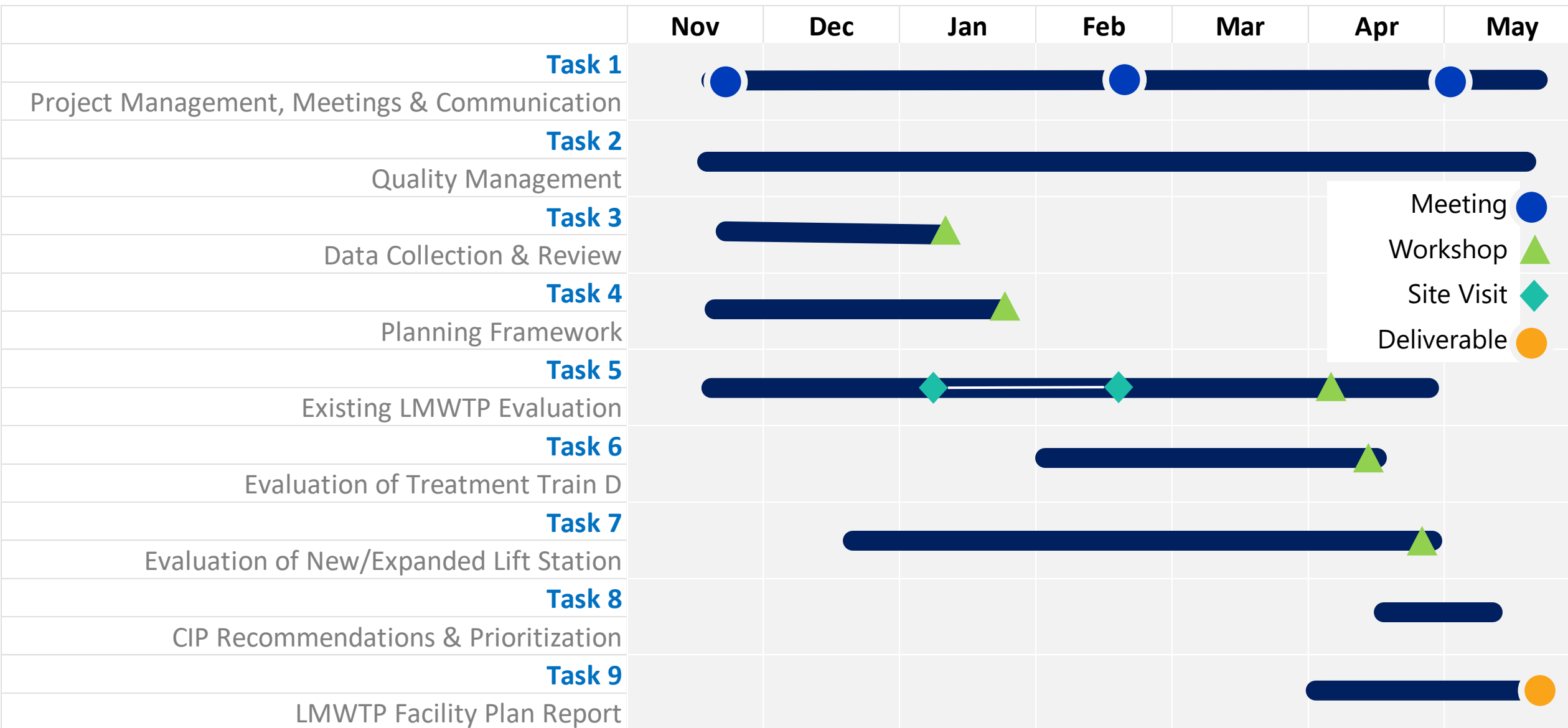
Six Sections:

1. General Perception and Awareness
2. Operations and Process Improvements
3. Maintenance and Facility Support
4. Safety and Employee Experience
5. Innovation and Future-Readiness
6. Final Thoughts

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Schedule

Schedule



- Meeting ●
- Workshop ▲
- Site Visit ◆
- Deliverable ●

Scheduling Meetings & Workshops

Meetings: Duration 2 hrs

Meeting No. 1: Alternatives and Selection for Treatment Train D; **Feb 23 – Feb 27, 2026**

Meeting No. 2: Draft LMWTP Facility Plan Report Review Meeting; **May 11 – May 15, 2026**

Workshops: Duration 2 hrs; and 4 hrs for Wkshp No. 3 & 4

Workshop No. 1: Regulatory Review and Staff Survey Results; **Jan 12 – Jan 16, 2026**

Workshop No. 2: Planning Framework; **Jan 26 – Jan 30, 2026**

Workshop No. 3: Existing Facility Evaluation; **April 13 – April 17, 2026**

Workshop No. 4: Treatment Train D Evaluation; **April 20 – April 24, 2026**

Workshop No. 5: Lift Station Evaluation; **April 27 – May 1, 2026**

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Next Steps and Action Items