

Agenda item #4

Executive Summary

September 1, 2026

To: Mayor Dahlquist and City Council

From: Levi Adams, WPC Superintendent

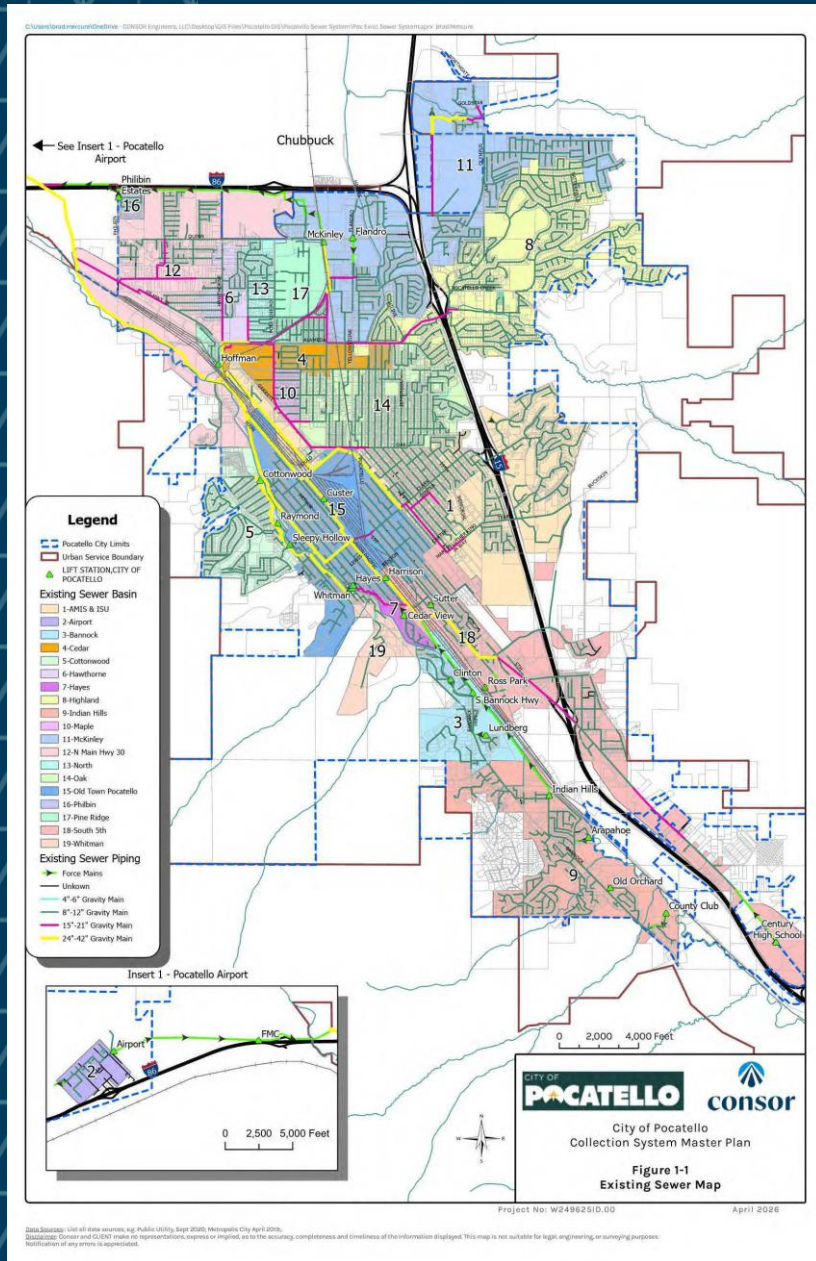
Re: Collection System Master Plan

WPC and Consor Engineering will provide a comprehensive briefing to the Mayor and City Council regarding the most recent updates to the City's Collection System Master Plan. This discussion will outline key findings, recommended improvements, and priority projects aimed at maintaining system reliability, supporting future growth, and ensuring regulatory compliance. The update will also highlight infrastructure needs, anticipated capital investments, and strategies to enhance overall system performance. This presentation is intended to keep City leadership fully informed and prepared to guide future decisions related to the collection system.

Pocatello Collection System Master Plan

City Council Presentation

Brad Mercure, PE | Consor



Plan Acknowledgements

Significant Contributions were made by the following staff:



City of Pocatello

- **Levi Adams**, *Water Pollution Control Superintendent*
- **Austin Suing, PE**, *Senior Engineer*
- **Skyler Allen, PE**, *Senior Engineer*
- **Isaac Gonzalez**, *Collection System Supervisor*
- **Brett Van Brunt**, *WPC Utility Systems Technician*



Conсор

- **David Stangel, PE**, *Project Manager*
- **Brad Mercure, PE**, *Project Engineer*
- **Will Kirby, PE**, *Project Engineer*
- **Dennis Galinato, PE**, *Senior Engineer*
- **Morgan Steinberg**, *Technical Writing Editor*



V&A Consulting Engineers

- **James Fisher, PE**, *Project Manager*
- **Angel Mejia, PE**, *Flow Monitoring*

Overall Agenda

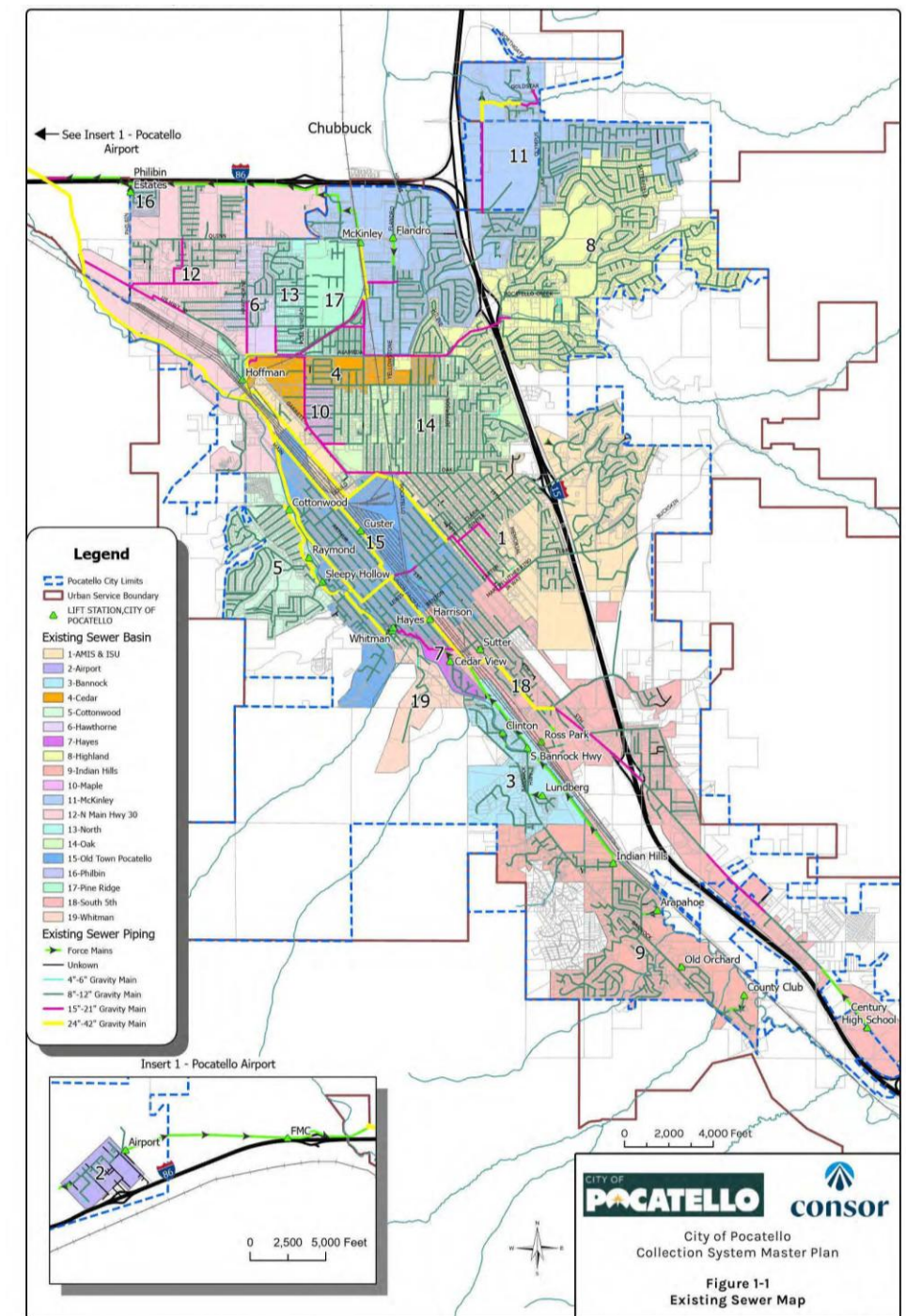
- ▶ Overview
- ▶ Purpose of the Plan
- ▶ Existing System Overview
- ▶ Population Projections

Collection System

- ▶ Analysis
- ▶ Recommended Improvements (CIP)
- ▶ Cost Summary

Feedback & Next Steps

Collection System Master Plan



Plan Chapters Overview

1	Executive Summary
2	Existing System Description
3	Population and Load Projections
4	System Analysis and Condition Assessment
5	Operations and Maintenance
6	Capital Improvement Program

High Level Takeaways

- The collection system has no existing capacity issues.
- Growth (particularly Northgate) is the primary driver for future improvements.
- Aging lift stations need continued rehabilitation and replacement.
- The City's O&M program is strong but needs continued investment.
- Flow-based triggers at specific locations in the system will guide project timing
- The Plan meets regulatory requirements.

Purpose of Plan

- Updates the prior 2012 CSMP and 2019 CSMP Amendment, which focused on addressing growth in the Northgate Area
- Provides an assessment of the current capacity and condition of the wastewater collection system
- Develops 10 and 20-year flow projections to assess future infrastructure needs
- Identifies a structured and implementable 20-year Capital Improvement Plan (CIP).
- Addresses Idaho DEQ's regulatory requirements for collection system planning - approved without any required changes



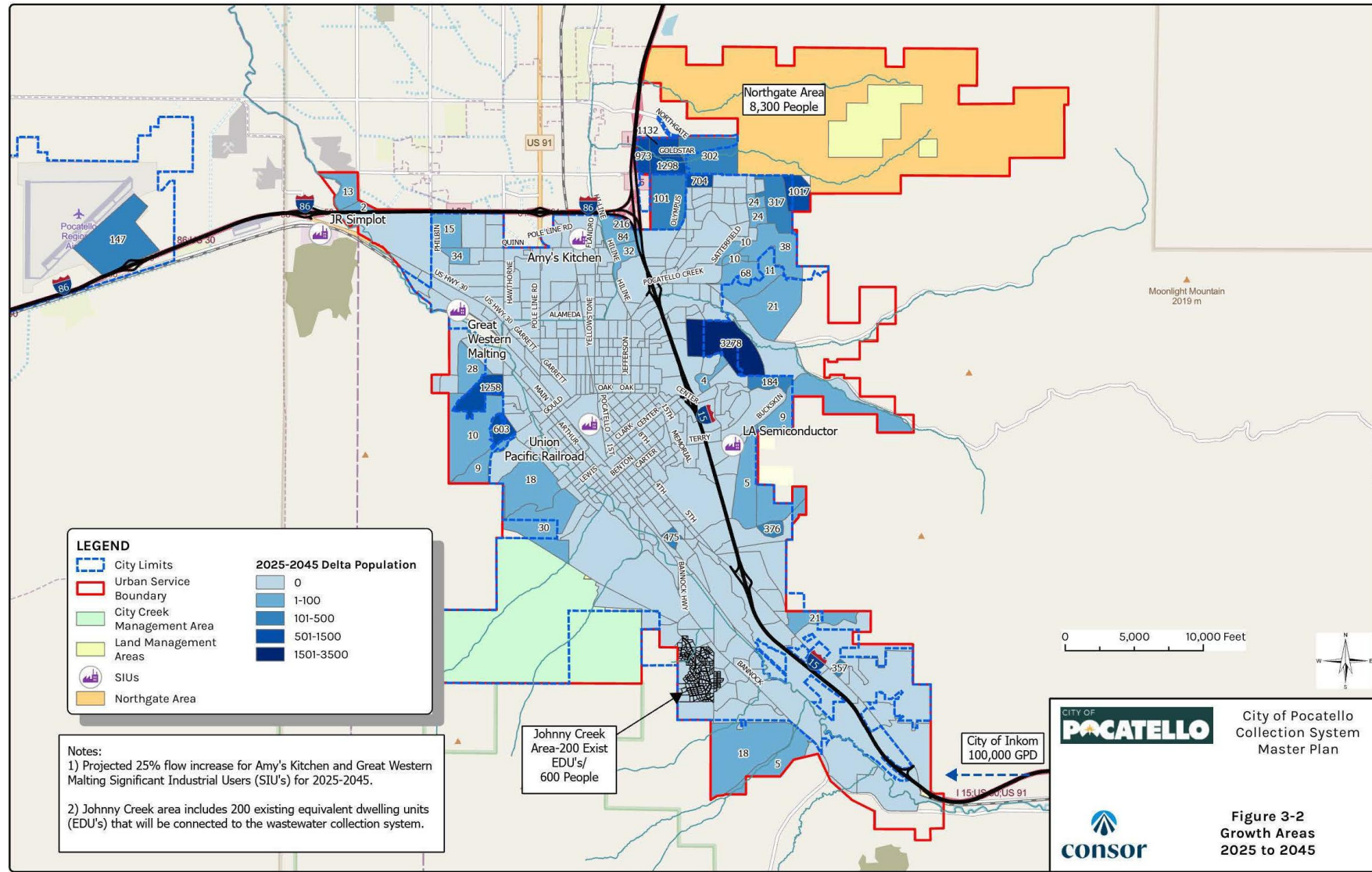
Service Area and System Description

- The collection system serves about 60,000 people within the Urban Service Boundary.
- The system is divided into 19 sewer basins, plus future service areas such as Johnny Creek, Northgate, and the City of Inkom.
- Approximately 250 miles of sewer pipe, 24 lift stations, and multiple major interceptors.
- The City also serves a number of large industrial dischargers, such as Amy's Kitchen, and Great Western Malting.

Service Area Population Projections

	Existing (2025)	2035	2045	Buildout
City Population (UGB) @ 1% AAGR	57,004	62,133	66,916	-
Northgate Population	3,000	9,000	15,000	29,511
Population Outside City Limits	0	206	412	-
Total	60,004	71,339	82,328	-

2045 Growth Areas Map



Collection System Analysis Approach

Background and Data Collection

- Builds upon the 2012 CSMP and the 2019 CSMP amendment.
- Incorporates updated GIS mapping, flow monitoring, hydraulic modeling, and condition assessments.

Model Update and Calibration

- Capacity evaluation using hydraulic model.
- Refined model network with updated GIS and as-built data.
- Calibrated model using Spring 2025 flow monitoring.
- Model scenarios include Existing (2025), 10-year (2035), 20-year (2045), and Buildout conditions for Northgate.

Collection System Analysis Approach (cont.)

Flow Projections

- Future flows based on population and forecasts from large industrial users.
- Accounted for infiltration and inflow (I&I) contributions.

Capacity Evaluation

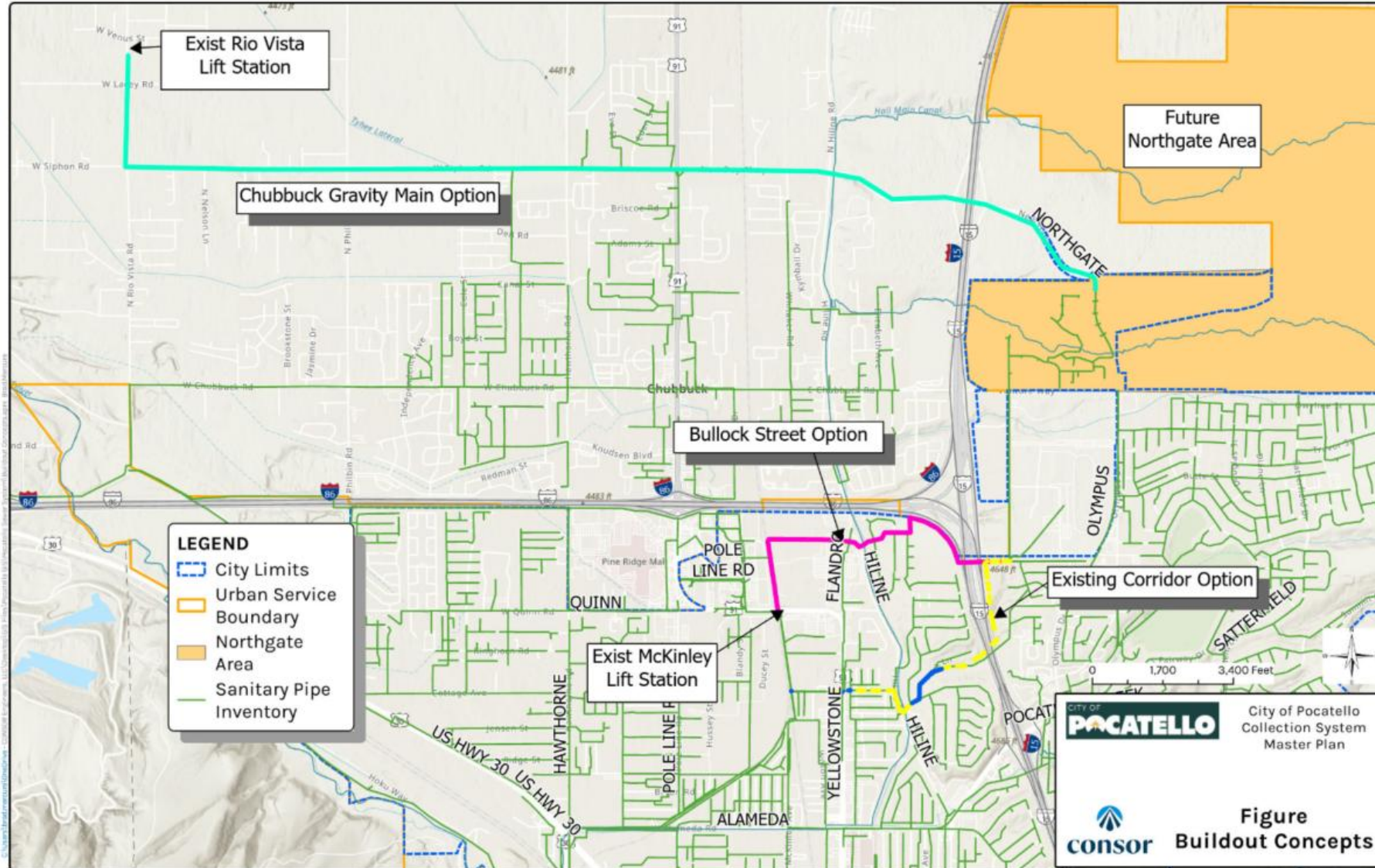
- Assessed hydraulic capacity of gravity pipes, lift stations, and force mains.
- Identified capacity deficiencies where:
 - Pipe capacity approached 80% for dry-weather flows.
 - Hydraulic grade line approaches manhole rim for wet-weather flows.
- Pump stations evaluated for firm capacity and force main velocities.

Collection System Analysis Approach (cont.)

Buildout Concepts – Long-Range Wastewater Conveyance

- Multiple long-range conveyance options were evaluated for Northgate buildout:
 - Westward trunk crossing I-15 toward Bullock Street
 - Regional gravity option routed through Chubbuck
 - Upsizing within the existing East Griffith / Scardino Park / Saratoga corridor
 - Incremental improvements in sections of the corridor through 2045 with additional improvements beyond 2045 for buildout.

Collection System Analysis Approach (cont.)



Collection System Analysis Approach (cont.)

Lift Station Condition Assessment

- A condition assessment was completed for all 24 wastewater lift stations, reviewing:
 - Structural and site conditions
 - Equipment age and reliability
 - Corrosion and safety
 - Accessibility and ease of maintenance
 - Electrical code variances
 - City-noted operational deficiencies

Collection System Analysis Findings

- No existing (2025) capacity deficiencies in gravity mains.
- Growth-driven capacity issues are projected in several key areas by 2045, including:
 - East Griffith → Churchill Downs / Saratoga corridor
 - Scardino Park / I-15 crossing
 - Monte Vista Drive
- Only two lift stations—McKinley (2035) and Indian Hills (currently being improved)—show capacity constraints.

Collection System Analysis Findings

Buildout Concepts

- Bullock Street and Chubbuck routes require deeper excavation, longer pipelines, and higher cost/complexity.
- Current analysis indicates the existing system corridor with targeted upsizing is the most practical and cost-effective long-term solution.
- These alternatives—especially the gravity main through Chubbuck—should be revisited after the 20-year planning period as Northgate continues to develop.
- The McKinley force main is a key constraint: it will be near capacity limits at 20-year flows.

Lift Station Condition Assessment

- Several older stations are nearing end of life and will require strategic replacement.
- Newer stations are generally in good condition and need only routine maintenance.
- The assessment provides a clear, prioritized roadmap for repairs, upgrades, and replacements to maintain long-term system reliability.

Improvement Projects

General Overview

- The CIP addresses deficiencies identified in the collection system.
- Prioritized based on capacity issues, condition, pipe age, maintenance needs, and anticipated development.
- Implementation: near-term (0–10 years), long-term (11–20 years).
- Cost estimates are preliminary with a 30% contingency and include engineering, legal, and administrative fees.

Recommended Alternatives/ Improvements

Collection System:

(0-10 years)

- Indian Hills Force Main Replacement (currently under design)
- Lift Station and Land Acquisition Studies
 - McKinley Lift Station structural study and land acquisition study
 - Philibin Lift Station hydraulic study related to McKinley Lift Station Upgrade
 - Hoffman and Bannock Highway lift station land acquisition study
 - Parallel gravity main easement acquisition study to serve Northgate area
- McKinley Lift Station Capacity Upgrade – to accommodate future Northgate growth in particular

Recommended Alternatives/ Improvements

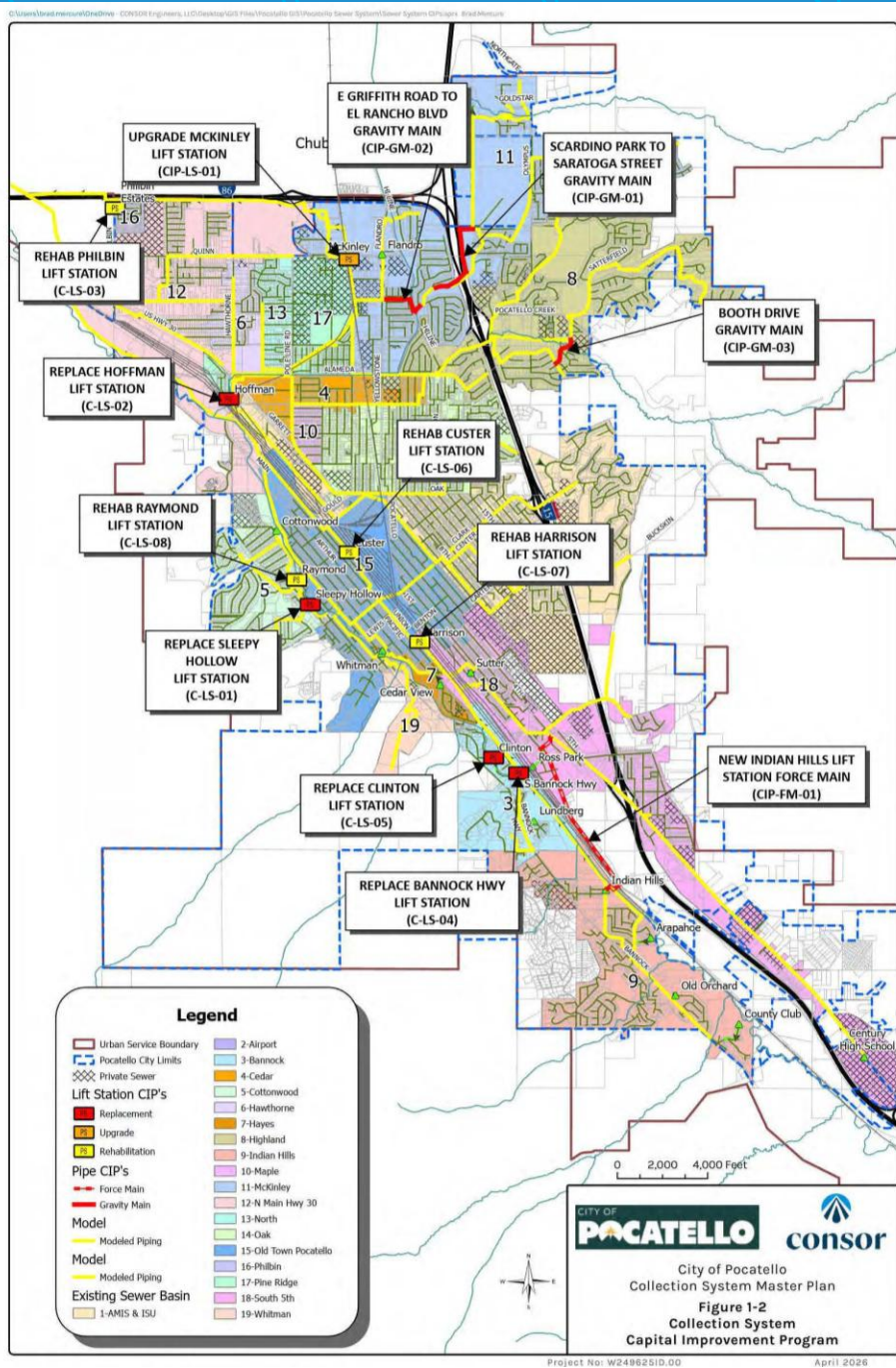
Collection System:

(11-20 years)

- Gravity main upsizing and parallel main in Northgate drainage path
- Monte Vista Drive diversion

(Additional projects prior to 2045)

- Lift station replacements at Sleepy Hollow, Hoffman, Bannock Highway, and Clinton
- Miscellaneous lift station condition-based projects
- Contractor led 24-inch and larger CCTV inspection to be completed twice in the 20-year planning period
- Annual pipe rehabilitation funding (currently \$750k per year, increasing to \$1M per year in year 11)
- Two CSMP updates at approximately 10-year intervals



Collection System Capital Improvement Map



Sewer Operations and Maintenance



Recommendations include:

- Increase City led CCTV to complete inspection of piping less than 24-inch.
- Complete a contractor led CCTV inspection of 24-inch and larger pipes (included in CIP).
- Install permanent influent flow meter at WPC Facility and McKinley force main.
- Update lift station SOPs and spare parts inventory.
- Expand sewer pipe lining program as older clay and concrete pipes age out.

Collection System Improvement Project Costs Summary

- Collection System Improvements and Maintenance Projects Totaling \$49,248,000
 - Addresses capacity restrictions and critical areas that need to be replaced.

Improvement Category	Estimated Project Costs, 2025 Dollars
Near-Term (2025-2035) Improvements	\$25,233,000
Long-Term (2035-2045) Improvements	\$24,015,000
TOTAL	\$49,248,000

Next Steps



- City Adoption of CSMP
- Questions?