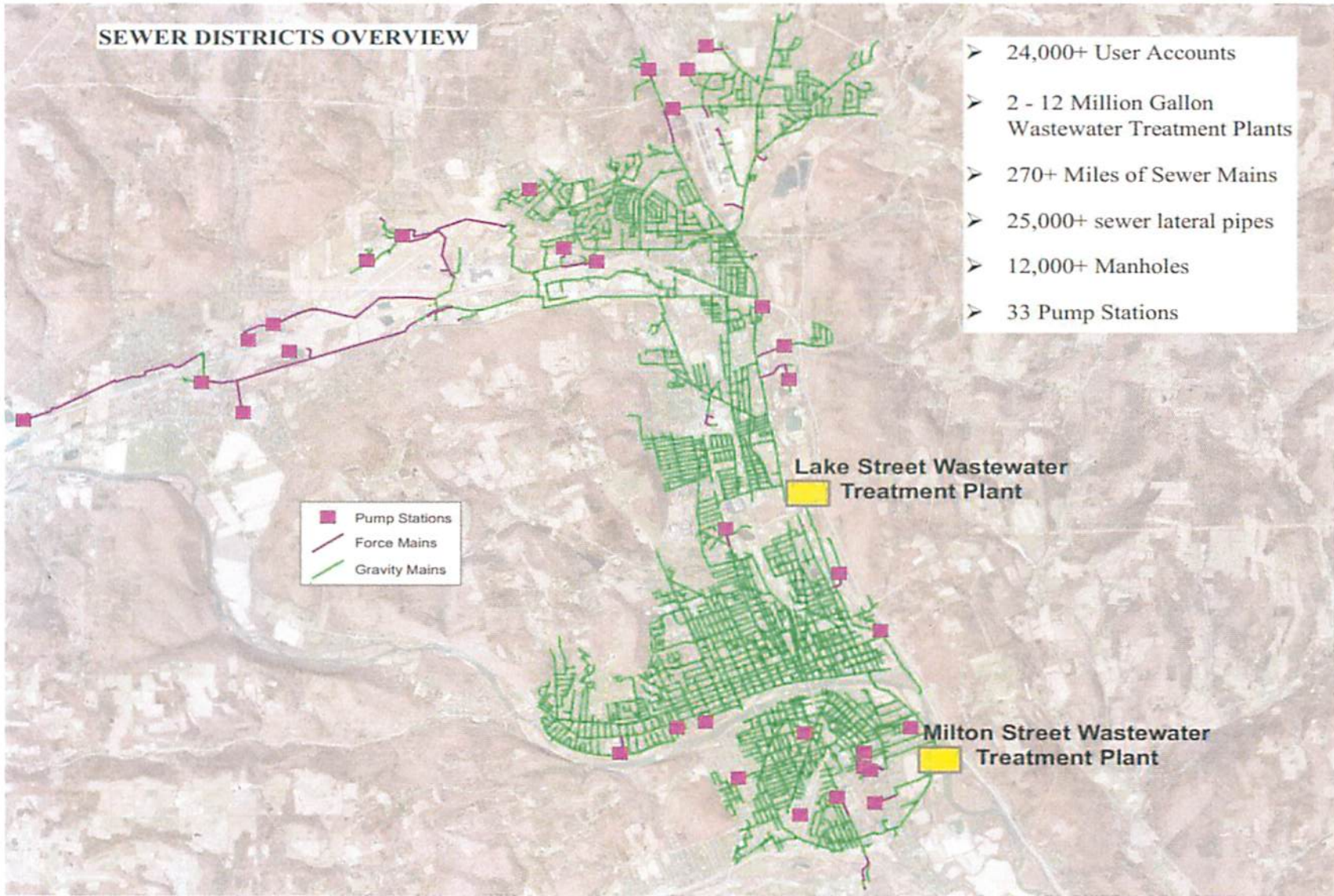


Chemung County Wastewater Treatment Plant Consolidation

Chemung County Sewer District No. 1 - Lake Street WWTP

Chemung County Elmira Sewer District - Milton Street WWTP

SEWER DISTRICTS OVERVIEW



- 24,000+ User Accounts
- 2 - 12 Million Gallon Wastewater Treatment Plants
- 270+ Miles of Sewer Mains
- 25,000+ sewer lateral pipes
- 12,000+ Manholes
- 33 Pump Stations

■ Pump Stations
— Force Mains
— Gravity Mains

Lake Street Wastewater Treatment Plant

Milton Street Wastewater Treatment Plant

Chemung County Elmira Sewer District

- Milton St WWTP
- Constructed 1987 with no major capital improvement projects
- 12.0 MGD Trickling Filter Plant
- Combined sanitary/storm sewer system
- Existing Treatment Components in Poor to Fair Condition
- Facility Historically Met Permit Limits
- Facility Designed for Future Expansion



Chemung County Sewer District No.1

- Lake St WWTP
- Constructed 1962, Upgraded 1986
- 12.2 MGD Trickling Filter Plant
- Sanitary-only Collection System
- Existing Treatment Components in Poor to Very Poor Condition
- Facility Does Not Consistently Meet Permit Limits
- Existing Site Constraints for Future Expansion



Primary Drivers for Treatment Infrastructure Improvements

- Aging Infrastructure
 - 32 to 57 years old
- Nitrogen and Phosphorous ('Nutrient') Limits associated with the Chesapeake Bay
 - Interim limits in effect September 1, 2015
 - Final limits in effect January 1, 2025
- Disinfection Requirements
 - Milton Street compliance July 1, 2020
 - Lake Street compliance May 1, 2019; Extension being negotiated with NYSDEC

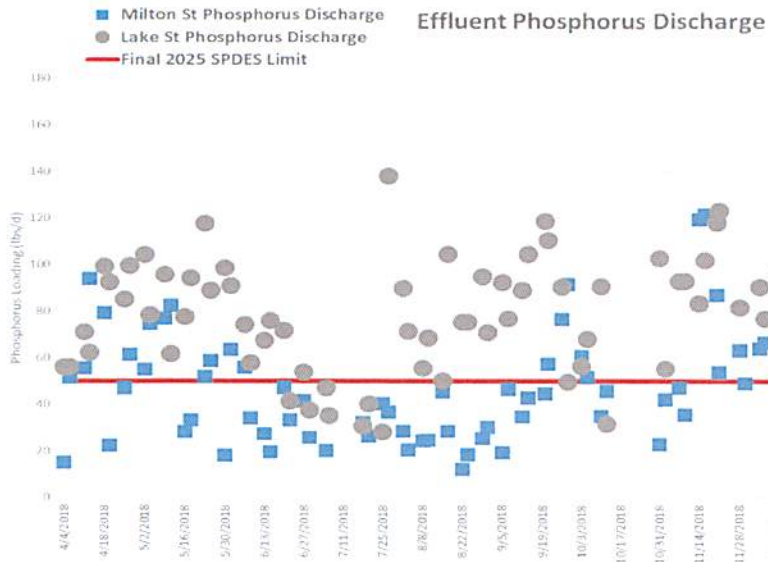


Nutrient Limits

CCSD Treatment Facilities are 2 of the top 3 largest dischargers in the Chesapeake Bay

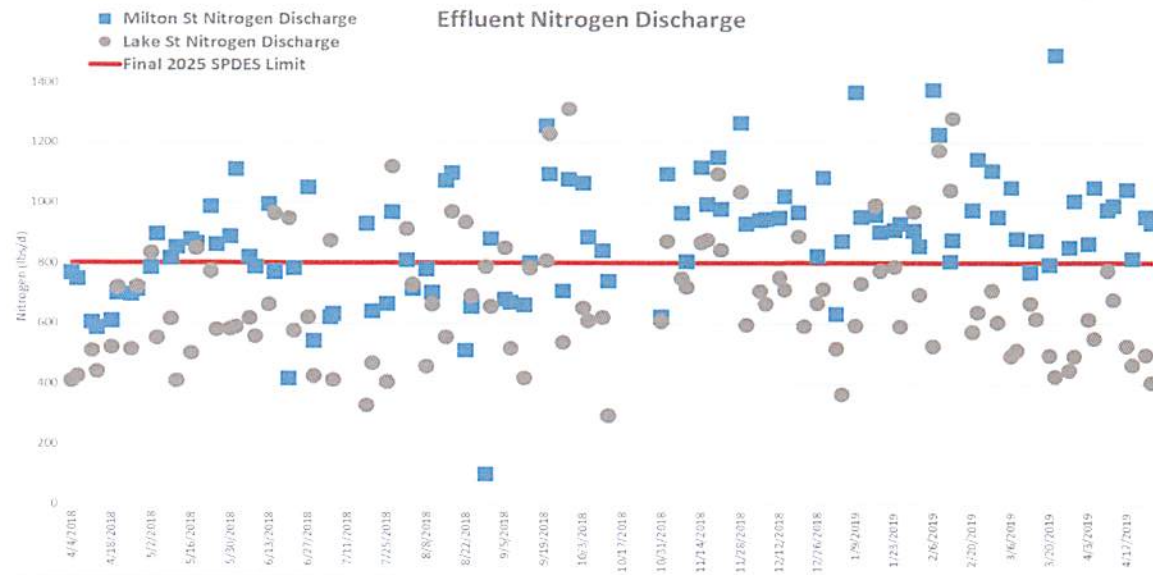
Effective January 1, 2025 both facilities will be required to meet more stringent phosphorus and nitrogen limits

Facility	Design Flow
Binghamton-Johnson City	35 MGD
Chemung Co SD #1	12 MGD
Chemung Co Elmira SD	12 MGD
Endicott	10 MGD
Cortland	9 MGD
Hornell	4 MGD
Oneonta	4 MGD
Corning	3.08 MGD



Nutrient Data Over Previous 12 Months

**ALL GRAY AND BLUE
SAMPLE POINTS MUST BE
BELOW THE RED SPDES
LIMIT ON JANUARY 1, 2025**



Alternative #1: Continue to Operate 2 Districts

Lake Street:

- Replace or significantly rehabilitate most treatment processes
- New septic receiving station
- New denitrification + filtration process
- New disinfection system

Milton Street:

- Rehabilitate various treatment components
- New denitrification + filtration process
- New disinfection system

Estimated \$36.8 M Project Cost + Estimated \$59.8 M Project Cost = \$96.6 M Total Cost

Alternative #2: Consolidate Sewer Districts

Lake Street:

- New septic receiving station
- Rehabilitate Headworks and Pump Station
- Extend Outfall approximately 4,500 ft and install siphon under Chemung River

Milton Street:

- Rehabilitate various existing treatment components
- Additional primary and secondary treatment capacity
- New denitrification + filtration process
- New disinfection system

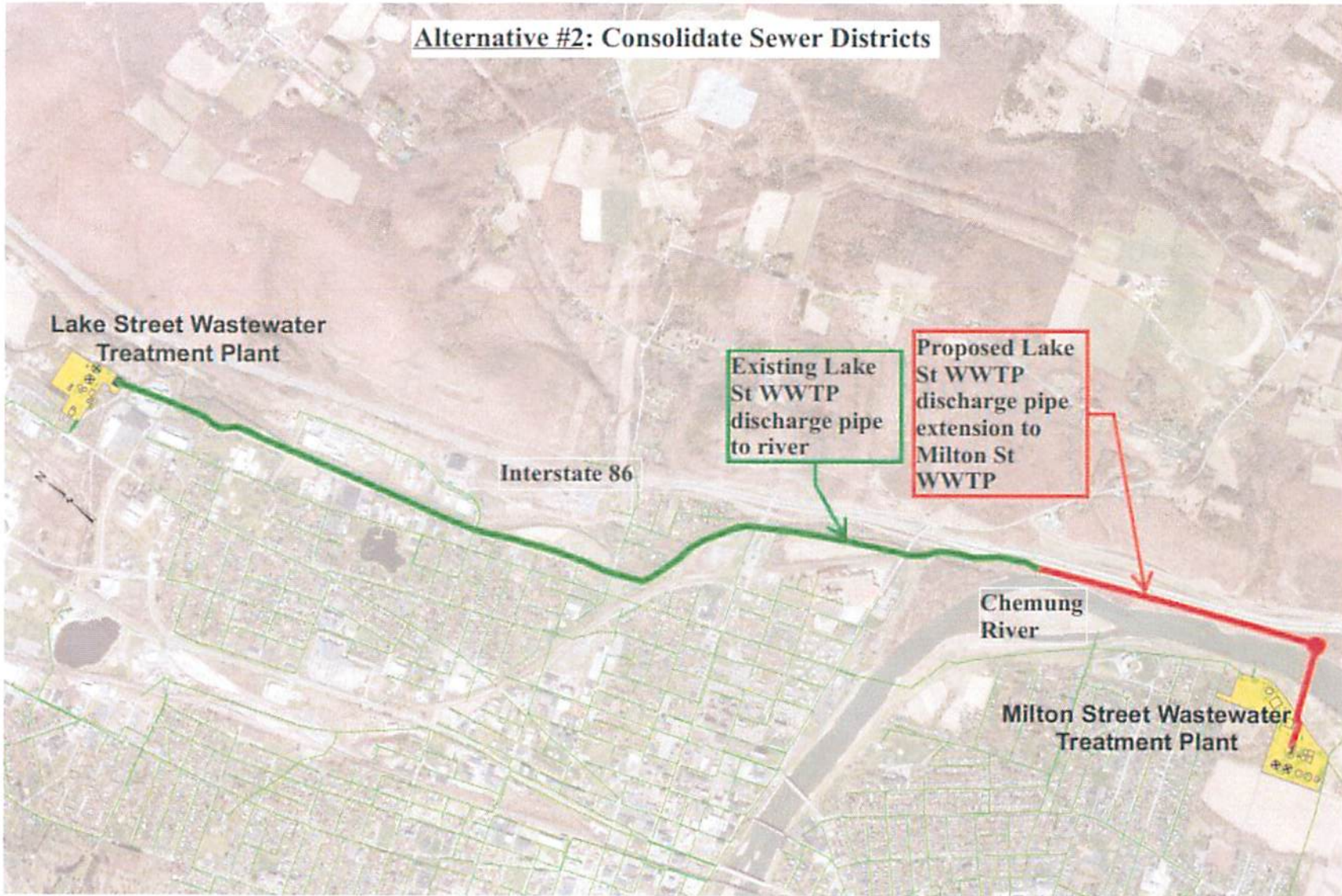
Estimated \$17.6 M Project Cost + Estimated \$63.2 M Project Cost = \$80.8 M Total Cost

Other Benefits to Consolidation

- Consolidate facilities and staff (operational savings)
- Consolidate regulatory sampling and permitting
- Consolidate administrative tasks and duties
- Digester gas to energy opportunity with combined solids handling
- Improved process redundancy and flexibility



Alternative #2: Consolidate Sewer Districts



Progress to Date

Recent Capital Improvements Align with Consolidation Approach

- UV Disinfection system currently being installed at Milton St WWTF (designed for consolidation expansion)
- CCSD has prioritized capital improvements at the Milton St WWTF (e.g., influent screw pumps, primary and secondary clarifier launders)

DEC supports consolidation approach, project is listed in Draft Phase III Watershed Implementation Plan for the NY Chesapeake Bay Watershed



Potential Project Funding Sources

- NYS Water Quality Improvement Program (WQIP)
- NYS Water Infrastructure Improvement Act Grant (WIIA)
- NYS Regional Economic Development Council Grant (REDC)
- NYSDOS Local Government Efficiency Program (LGE)
- NYSEFC State Revolving Fund Program (SRF)



Project Schedule

- Target: Operational by July 1, 2024
- Regulatory Compliance Deadline: January 1, 2025
- Preliminary Engineering needed for implementation of selected alternative including O&M cost analysis, present worth analysis, and funding strategy
- Phased construction approach to maximize grant funding

2018	2019	2020	2021	2022	2023	2024
Consolidation Study/Report (completed)	Preliminary Engineering					
		Design				
	Pursue Funding					
				Construction		