

Chemung County Sewer Districts WWTP Consolidation Project

Update to the Chemung County Legislature

January 3, 2022







CCSD
Consolidation Program

Program Components



CCSD Consolidation Program

 WWTP Consolidation Project	 Conveyance Project	 Collection Improvements	 Internal Reorganization
Regional WWTP Design & Construction	Outfall Conversion	Combined Sewer Overflow Compliance	District Consolidation
Lake Street Design & Construction	Siphon / River / Levee Crossing	Separate Sewer Flow Minimization	Long term maintenance planning
	New Gravity Sewer	SSO/CSO Long-Term Control	Rate Planning
Improve Treatment Capacity	Connect Systems	Optimize Infrastructure	Sustain Communities

The largest investment in our community, ever.

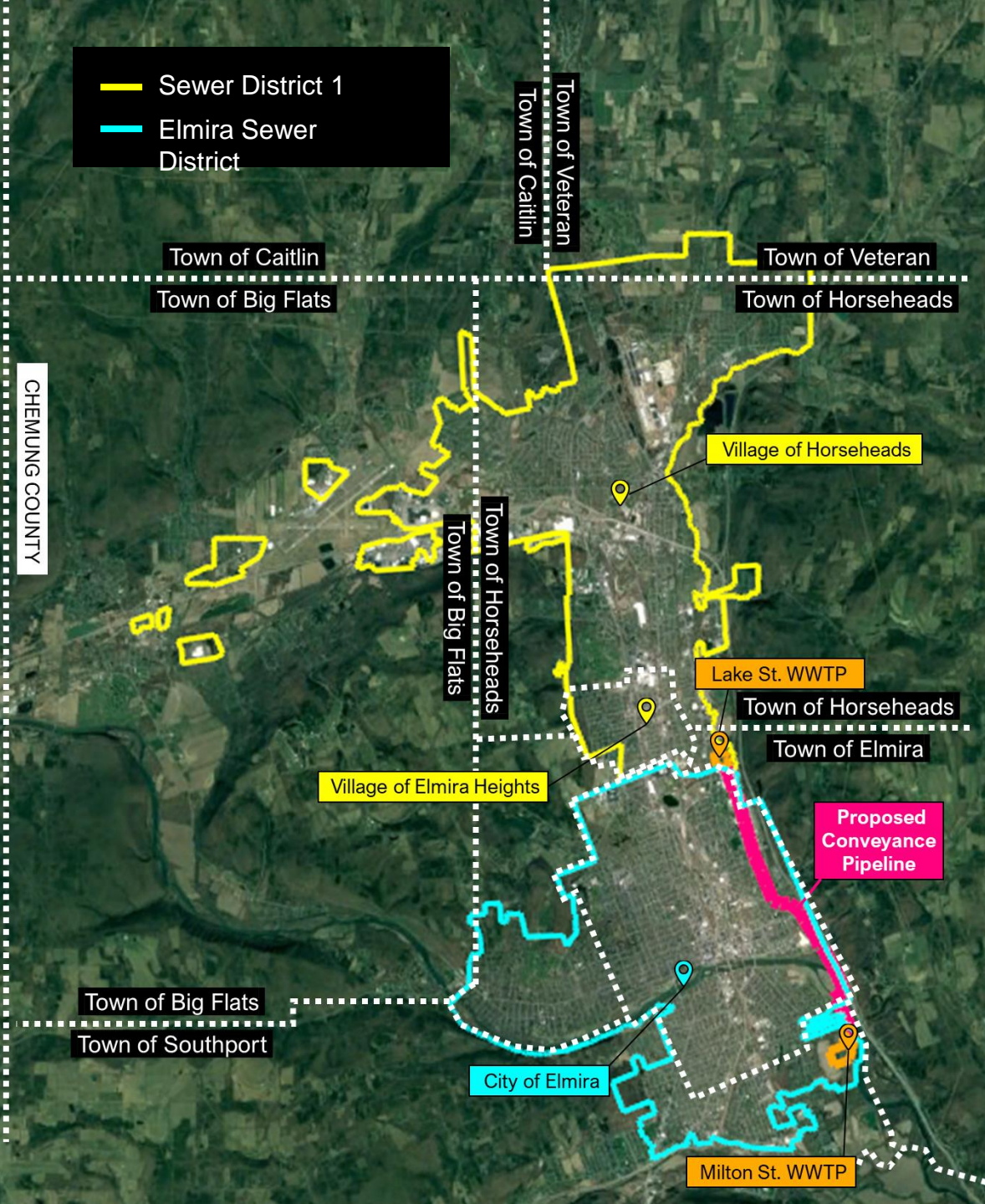
Regional Impact

 2 existing sewer districts

 1 city

 6 towns

 2 villages



Progress to Date

Engineering

- Arcadis and subcontractors using **state-of-the-art digital tools** to advance design
- Full 3D Building Information Modeling, hydraulic modeling, augmented reality usage to **minimize risk**

Experts

- Arcadis national process experts
- **Nasco Construction Services, Inc.**
 - Schedule and estimating
- **Peterson Construction Co.**
 - Contractor for schedule and constructability review

Effort

- Over 150 Arcadis & subcontractor staff working on the project
- Despite market conditions and labor shortages, **pressing on to meet DEC deadlines**



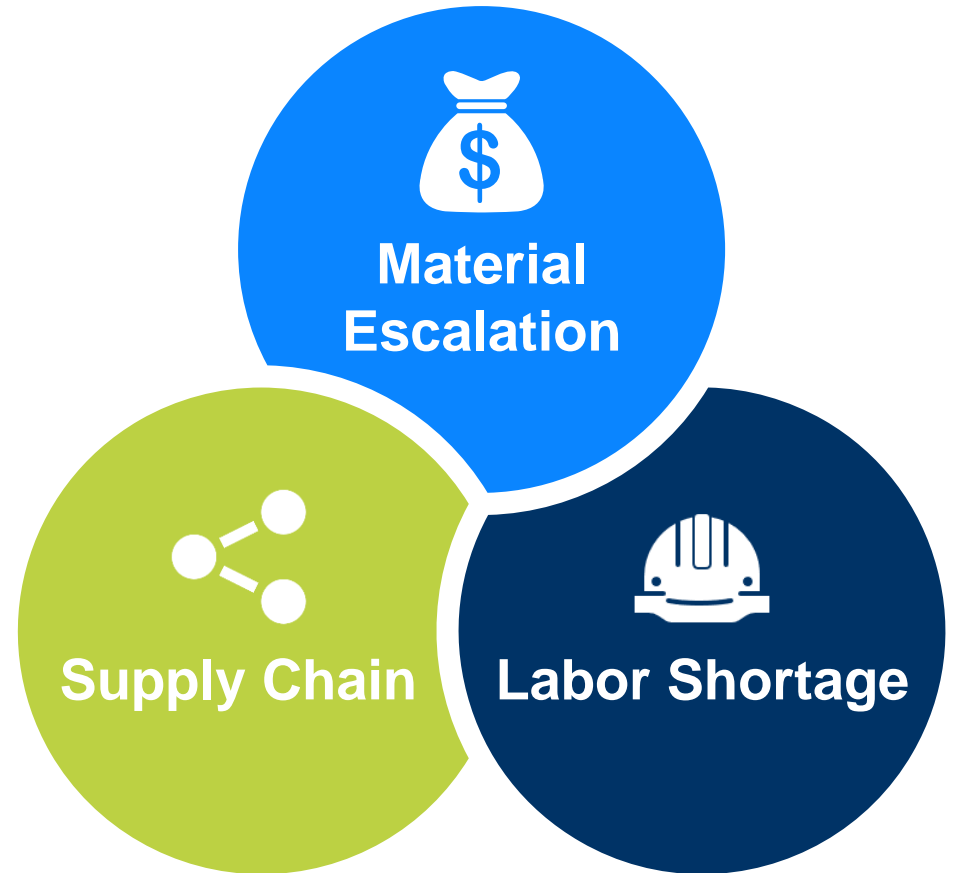
Cost Savings

- 1 Sludge Recuperative Thickening **\$7M – 10M**
- 2 Eliminate Flow Transfer Headworks **\$5M – 7M**
- 3 Eliminate Tertiary Filters **\$8M – 10M**
- 4 Preload Soil for Trickling Filter **\$.5M – .75M**
- 5 Rehabilitation of EQ Tank **\$.5M – 1M**
- 6 Eliminate UV Building **\$.5M – .75M**
- 7 Combine SD1 Lift Station and Stormwater P **\$.4M – .6M**
- 8 Groundwater Monitoring wells and alarm **\$ 4M – 8M**
- 9 HDPE Process Pipe **\$3M – 6M**
- 10 Contracting Strategy | **TBD**

Total Savings = \$29,000,000 to \$44,000,000

Construction Impacts

Due to the COVID-19 Pandemic



Cost Increases

The construction industry needs a 'staggering' 2.2 million more workers to keep up with booming demand for houses amid the labor shortage

America desperately needs 1 million more construction workers



By Van
Update
July 11, 2021



Business
July 11, 2021

Construction Workforce Shortages Reach Pre-pandemic Levels Even as Coronavirus Continues to



2021 3Q Cost Report: No End in Sight to Year of Supply Chain Chaos and Materials Challenges

Market Conditions > Cost Savings

Builders Report 26 Percent Increase in Material Prices

BY PAUL EMRATH on JUNE 2, 2021 • (2)



according to the U.S. Bureau of Labor Statistics Producer Price Index. Non-residential construction rose 23.4% in the same time period, with steel mill products soaring 108.6%. Energy prices also rose sharply, with natural gas up 146.7% and crude prude petroleum up 102.9%, year over year.

problems plague construction firms

Construction and building materials are in short supply and have seen double-digit price spikes since the COVID-19 pandemic took hold last year, driving up project and rebuilding costs and affecting companies ranging from contractors to insurers.

Consolidation Project Cost Update



Lake Street

\$15,000,000



Regional WWTP

\$139,000,000



Admin HVAC

\$2,700,000



Conveyances

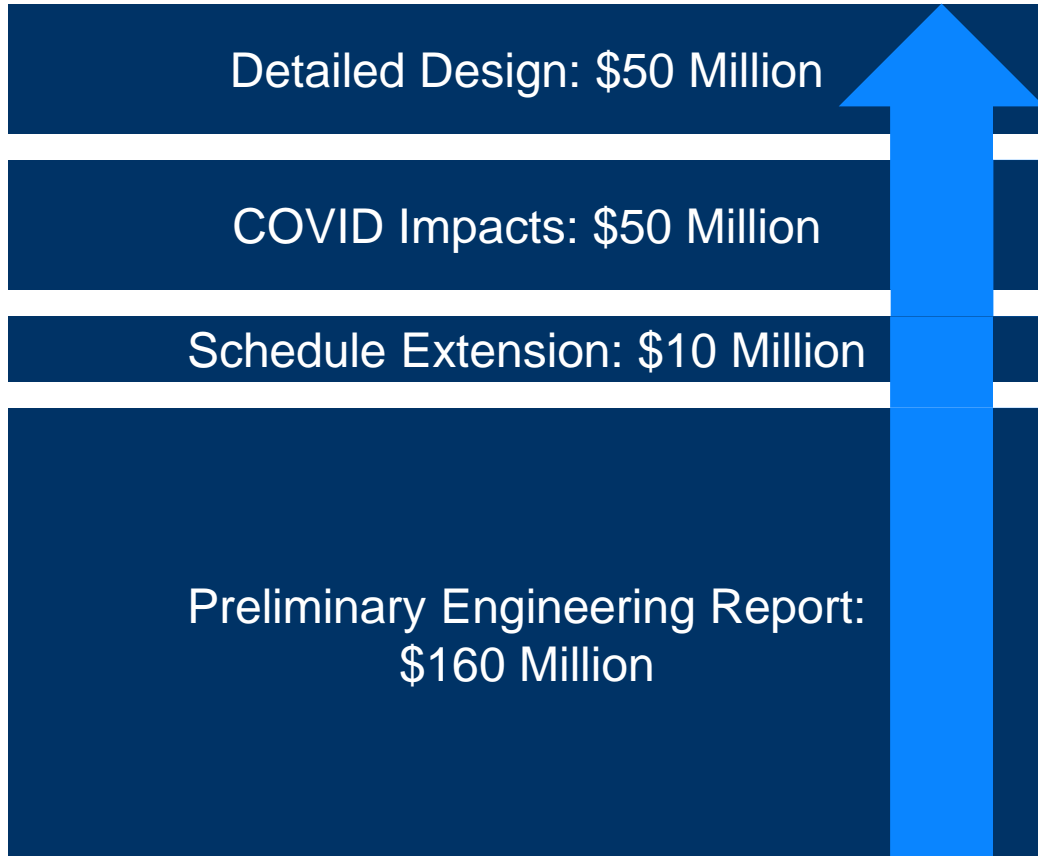
\$27,000,000

+ contingency, escalation, engineering

Total Project Cost Range:

\$224,000,000 - \$234,000,000

How Did We Get Here?



December 2021



January 2021





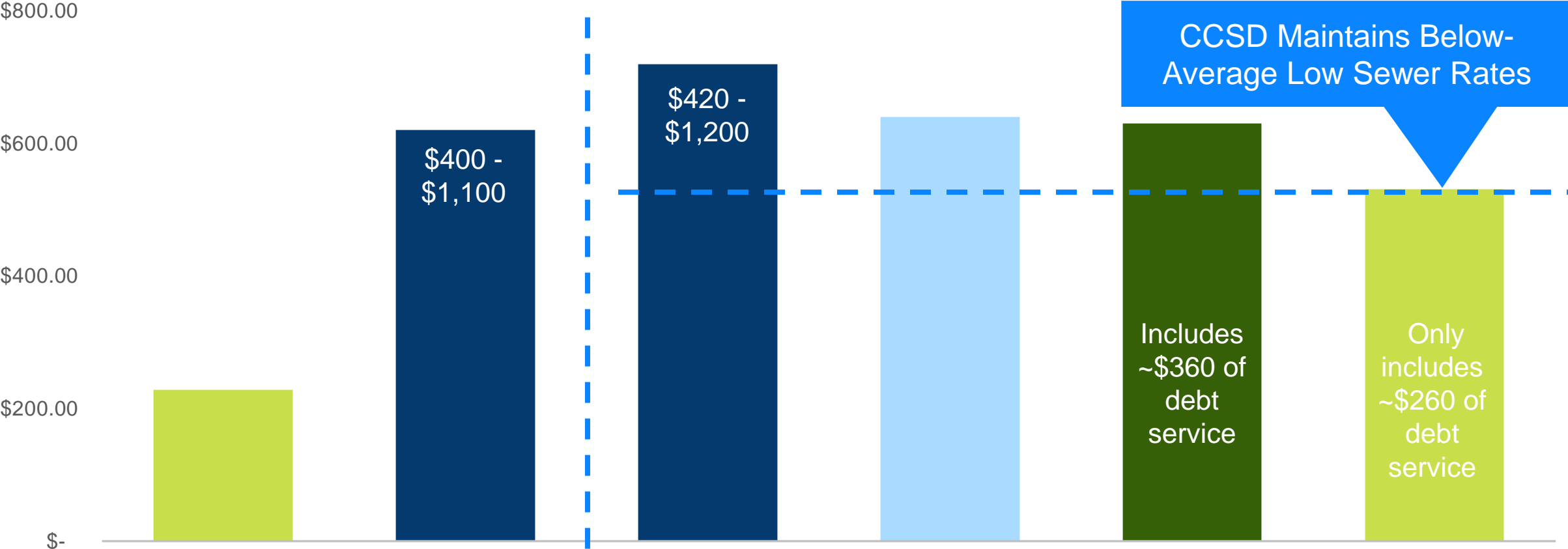
**Now is *still*
the time**

- Need and directive to repair/upgrade
- Federal infrastructure money
- Low interest rates
- Existing momentum
- Optimized construction schedule

10M WQIP grant awarded December 2021

The Real Impact - Sewer Rates

Sewer Rate Comparison (60,000 GPY User)



CCSD Maintains Below-Average Low Sewer Rates

2021 dollars | 2025-2026 dollars



What's Next?

CCSD Consolidation Program

ARCADIS WWTP Consolidation Project		LDG Conveyance Project		CCSD Consolidation Program Collection Improvements		CCSD Consolidation Program Internal Reorganization	
Submit design to meet Regulatory deadline				Combined Sewer Overflow Compliance		District Consolidation	
Renegotiate and optimize compliance schedule				Separate Sewer Flow Minimization		Long term maintenance planning	
Restructure Program for additional financing opportunities				SSO/CSO Long-Term Control		Update Rate Planning	
Improve Treatment Capacity	Connect Systems			Optimize Infrastructure	Sustain Communities		

The largest investment in our community, ever.

Thank you

We look forward to our continued collaboration.

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