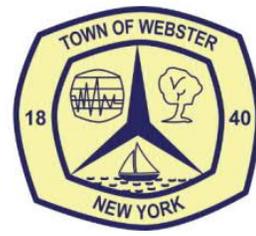


**Barton
& Loguidice**



**Village & Town
of Webster**



Potential Regionalization of Village and Town of Webster Sewer Plants

Joint Public Informational Webinar Presentation

August 19, 2020

7:00 PM

Welcome!



Clem Chung, P.E.
Project Manager

Ken Knutsen, P.E.
Sr. Vice President



Town and Village of Webster Joint Public Information Presentation

Wednesday, August 19, 2020 at 7:00 p.m.

On Wednesday, August 19th, engineering consultants for the Village and Town of Webster will present an informational Zoom webinar for residents: “Potential Regionalization of Village and Town of Webster Sewer Plants”. This presentation will provide residents with an overview of the Village-only, Town-only, and Regional treatment plant improvement project options, including estimated capital, operation and maintenance, and annual user costs.

The Zoom webinar will be limited to the first 500 people to join via the link listed below. There is no registration or reserved “seating”. The webinar will also be live streamed to YouTube via the link below, for residents to use should the Zoom webinar reach capacity. Residents will need to join the Zoom webinar in order to ask questions of the engineering consultants Ken Knutsen, from Barton & Loguidice, and Clem Chung, from Labella Associates, as well as members of the Village and Town Boards. A separate link to the recorded presentation will be made available on the Town and Village media platforms after the live presentation.

Zoom Webinar Link: <https://zoom.us/j/93738168990>
Webinar ID: 937 3816 8990

YouTube Live Stream Link: <https://www.youtube.com/watch?v=hu-q9Az1EPg&feature=youtu.be>



Village of Webster: 28 West Main Street
585-265-3770
www.villageofwebster.com



Town of Webster: 1000 Ridge Road
585-872-1000
www.ci.webster.ny.us



Barry Howard
President and CEO

Zoom Webinar Guidelines



Please Mute

Those with audio access please mute to reduce background noise



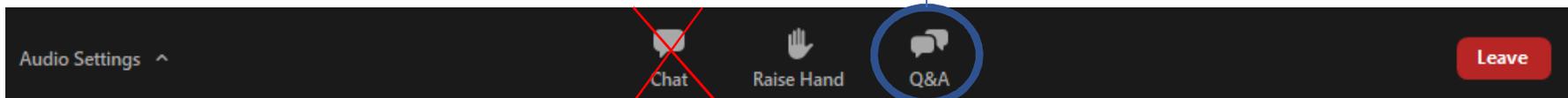
Use Q&A

Questions? Submit at any time using the Q&A box; we'll respond at the end of the presentation



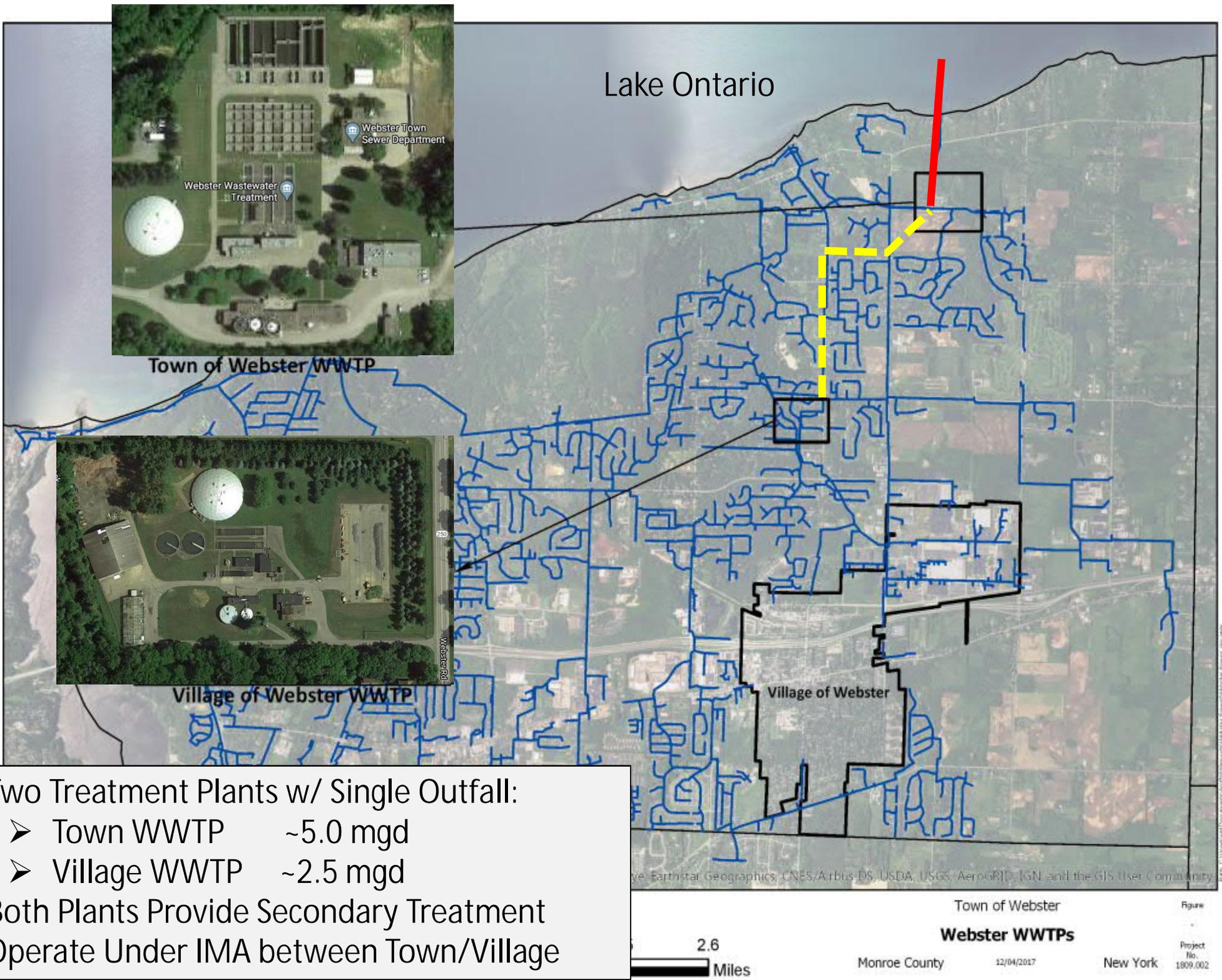
Recording

Presentation is on YouTube Livestream, and will be recorded for website postings



Presentation Objectives

- Project Development History
- Planned Upgrades:
 - ✓ Village WWTP Upgrade
 - ✓ Town WWTP Upgrades - Phases I and II
- Opportunity:
 - ✓ “Regional” WWTP Upgrades
 - ✓ Monetary considerations
 - ✓ Non-Monetary considerations
- Questions – via Zoom Webinar Q&A



Two Treatment Plants w/ Single Outfall:

- Town WWTP ~5.0 mgd
- Village WWTP ~2.5 mgd

Both Plants Provide Secondary Treatment
Operate Under IMA between Town/Village

Project Timelines: Town/Village

2016

2017

2018

2019

2020

Town



Preliminary Engineering Report

Phase I Design (Clarifiers/Generator) \$12 M

Phase I Bidding & Award
Rec'd \$3.0 M NYS WIIA Grant

Phase I Construction Commenced

Phase I Construction Completion (December)

Village



Preliminary Engineering Report

Funding applications

Hardship Financing Award w/ Principal Forgiveness Grant

Regional Vs. Village Only Evaluation

Project Timelines: Town/Village

2016

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2020

Town



Preliminary Engineering Report

Phase I Design (Clarifiers/Generator) \$12 M

Phase I Bidding & Award
Rec'd \$3.0 M NYS WIIA Grant

Phase I Construction Commenced

Phase I Construction Completion (December)

Regional Evaluation



"Informal" Discussions

Joint December Town/Village Board Meeting - Regional Option Evaluation

October Village Workshop - Regional Alternative Overview

August Village Workshop - Village Committee Formed

Monthly JPC Meetings - Alternatives & Costs
Village Board Decision (Pending)



Village



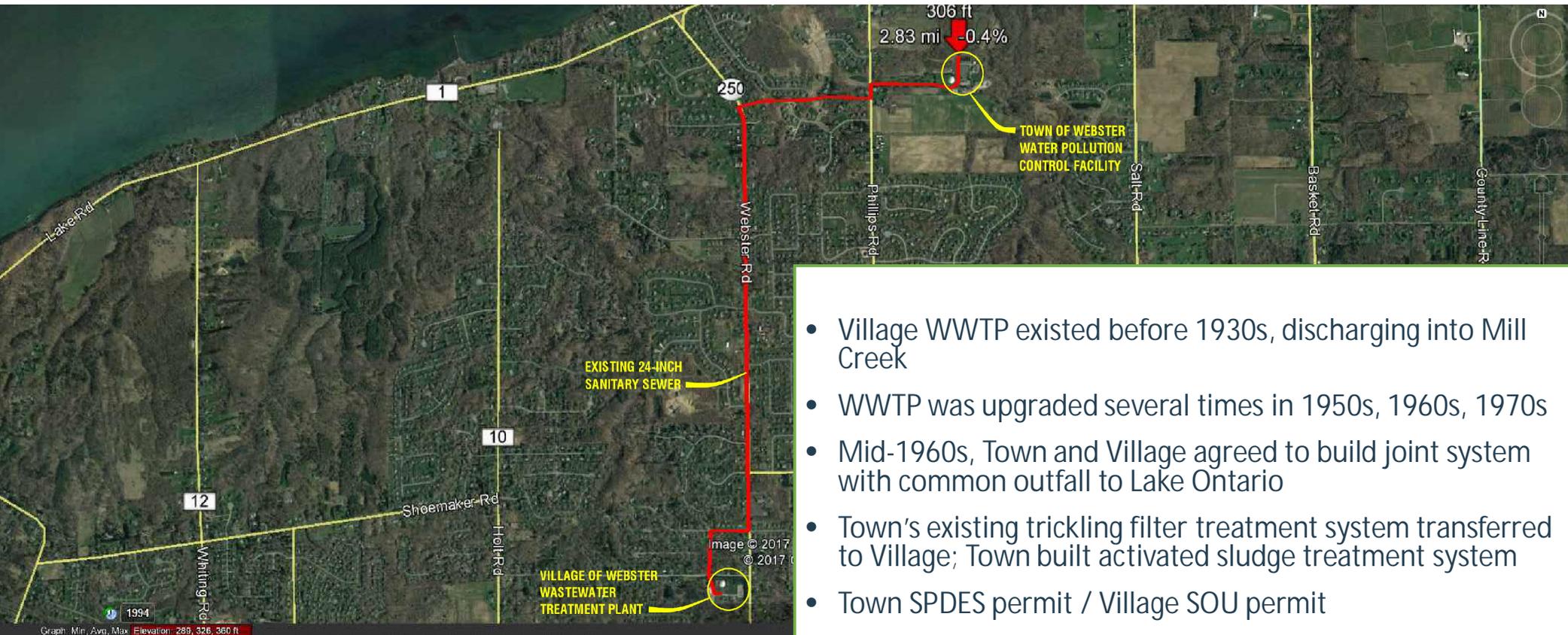
Preliminary Engineering Report

Funding applications

Hardship Financing Award w/ Principal Forgiveness Grant

Regional Vs. Village Only Evaluation

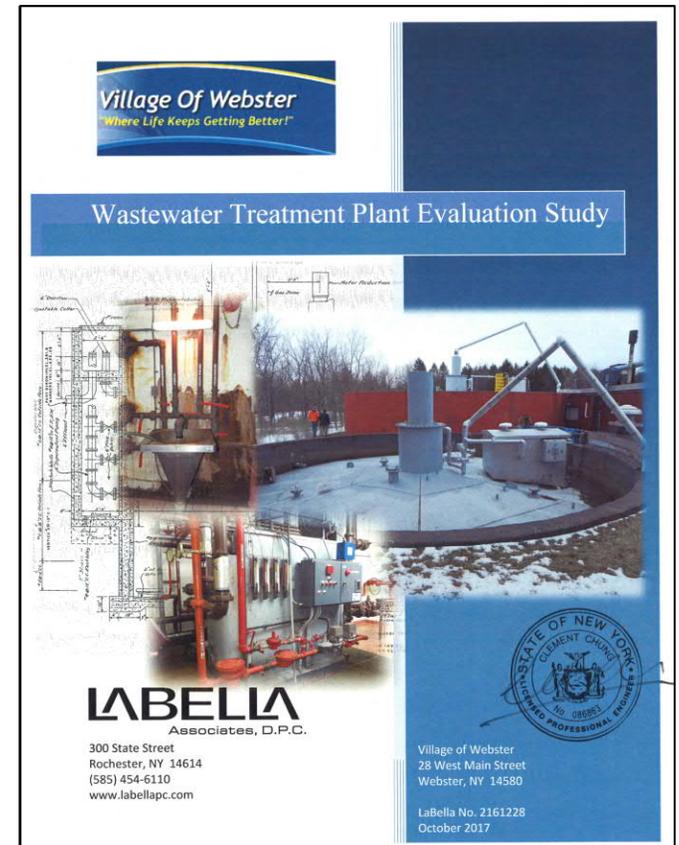
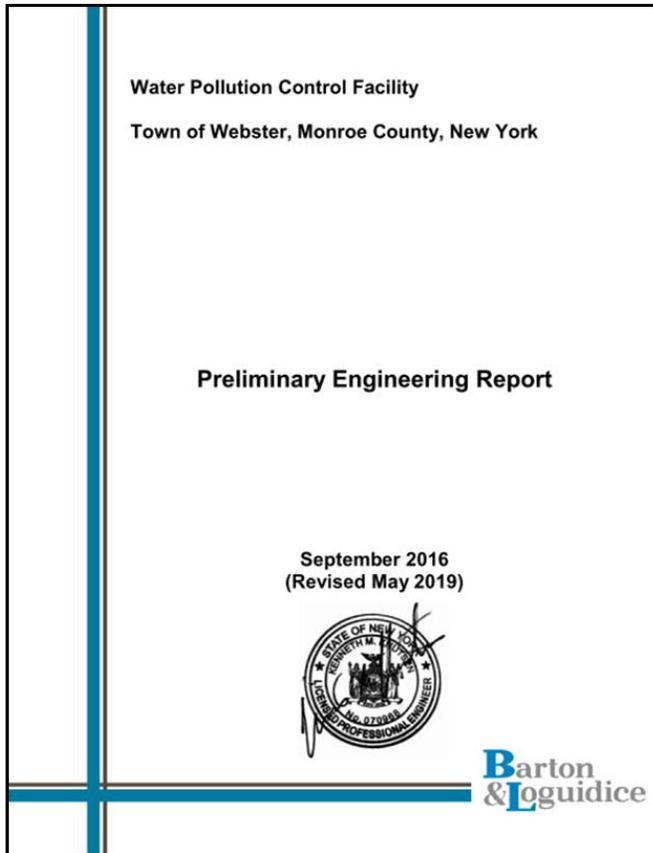
Village & Town WWTP History



- Village WWTP existed before 1930s, discharging into Mill Creek
- WWTP was upgraded several times in 1950s, 1960s, 1970s
- Mid-1960s, Town and Village agreed to build joint system with common outfall to Lake Ontario
- Town's existing trickling filter treatment system transferred to Village; Town built activated sludge treatment system
- Town SPDES permit / Village SOU permit
- 1979 IMA describes division in upgrade costs
- Trickling filter system at Town site never correctly functioned; Village abandoned use

Planned Upgrades

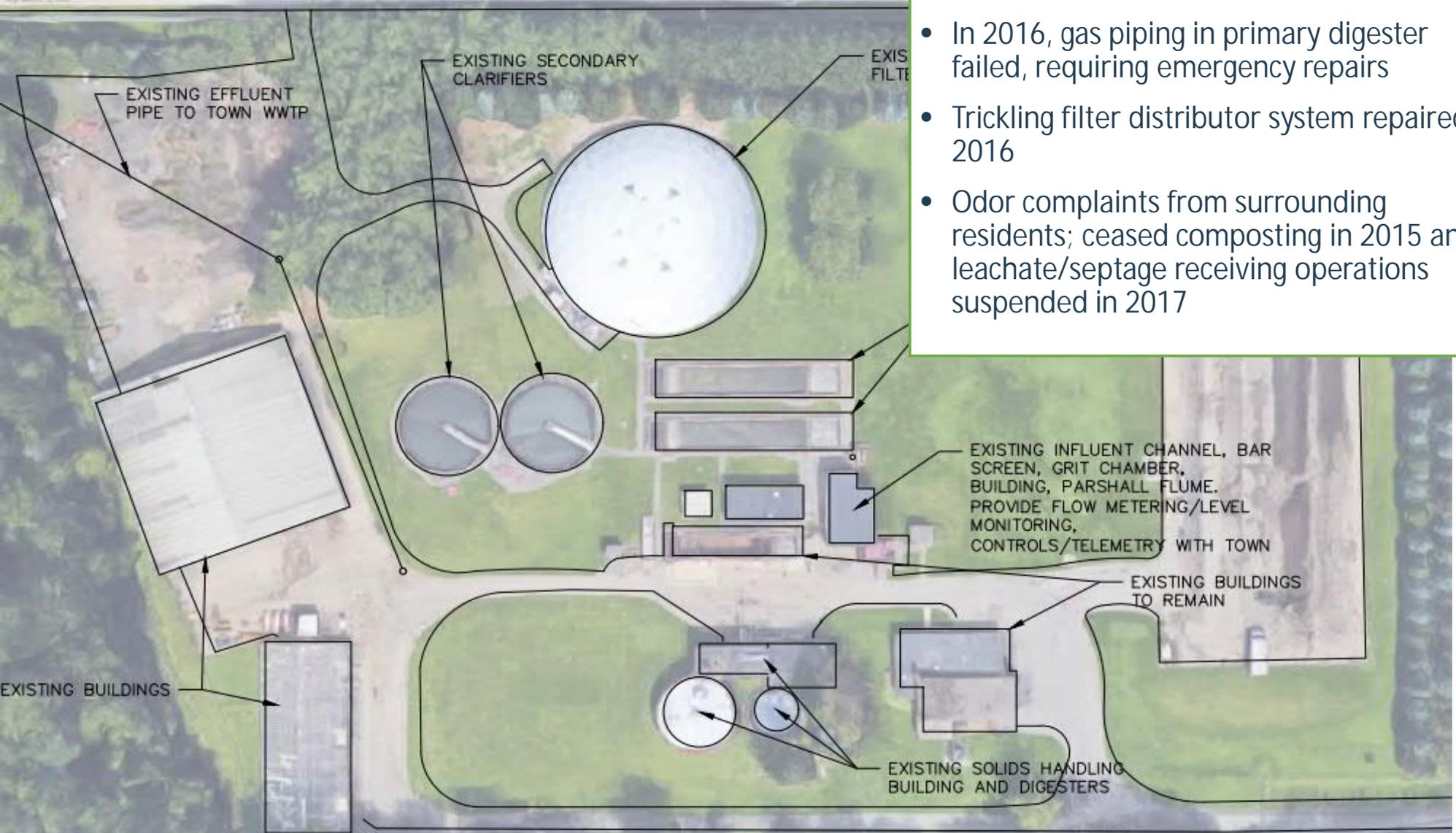
Village WWTP Upgrade – Labella



Town Phase II WWTP Upgrade – B&L

Village WWTP Recent History

- New headworks built in 2007
- Emergency study on anaerobic digester function/condition in 2015
- In 2016, gas piping in primary digester failed, requiring emergency repairs
- Trickling filter distributor system repaired in 2016
- Odor complaints from surrounding residents; ceased composting in 2015 and leachate/septage receiving operations suspended in 2017



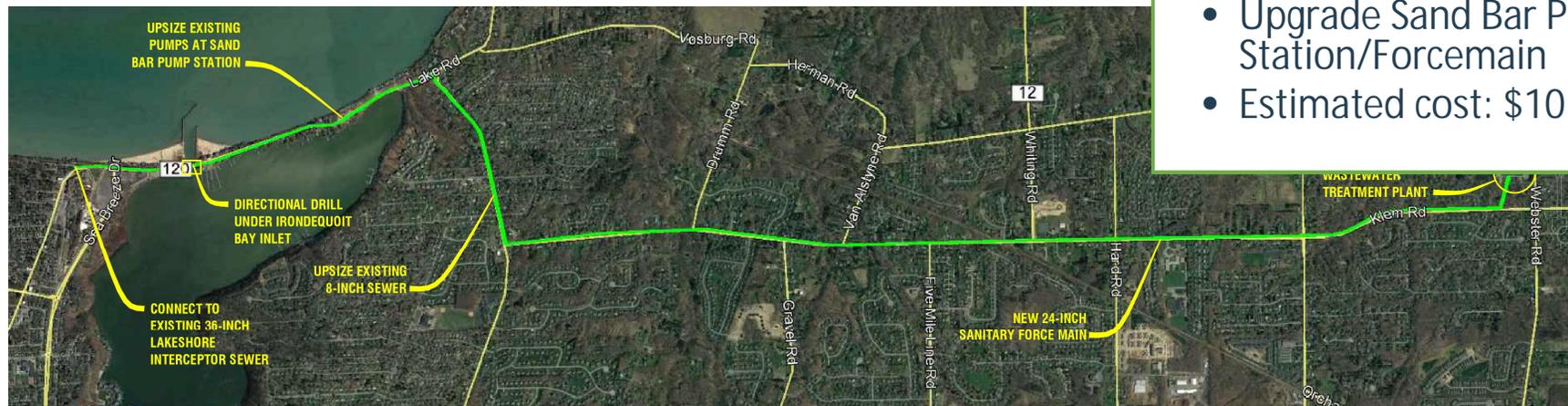
Alternatives to WWTP Upgrades

Conveyance to Town WPCF

- Decommission Village WWTP
- Route all Village sewage to the Town WPCF
- Rehabilitate Village-owned unit processes at Town WWTP
- Estimated cost: \$11.6 million (2017)

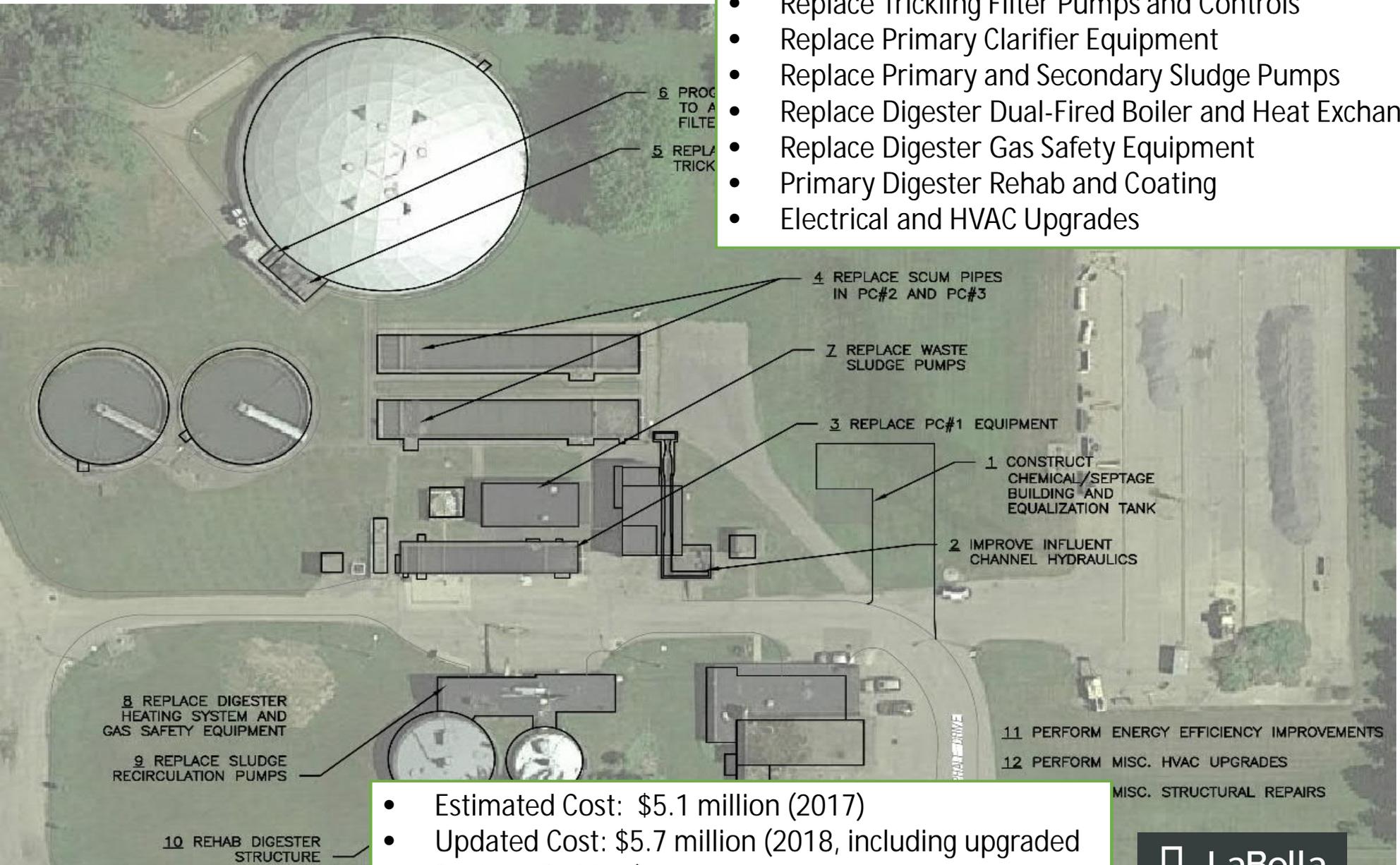
Conveyance to Monroe County Pure Waters VanLare WWTP

- Decommission Village WWTP
- Construct Pump Station
- New force main to Pure Waters connection (Bay and Backus Diversion)
- Upsize sewer to Sand Bar Pump Station
- Upgrade Sand Bar Pump Station/Forcemain
- Estimated cost: \$10.2 million (2017)



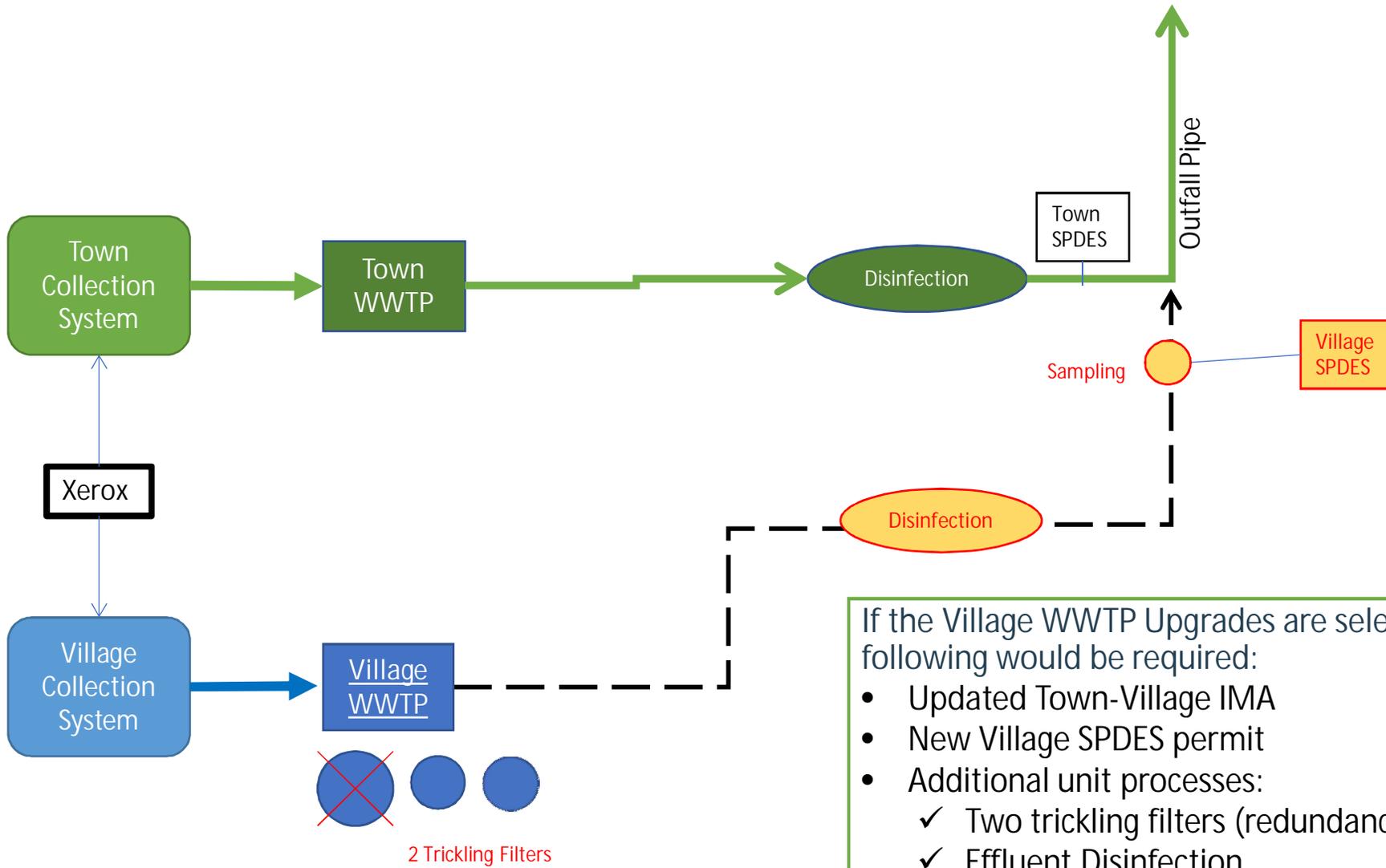
WWTP Upgrade PER Recommendations

- New Chemical/Septage Receiving Building
- Improve Influent Channel
- Replace Trickling Filter Pumps and Controls
- Replace Primary Clarifier Equipment
- Replace Primary and Secondary Sludge Pumps
- Replace Digester Dual-Fired Boiler and Heat Exchanger
- Replace Digester Gas Safety Equipment
- Primary Digester Rehab and Coating
- Electrical and HVAC Upgrades



- Estimated Cost: \$5.1 million (2017)
- Updated Cost: \$5.7 million (2018, including upgraded Septage Building)

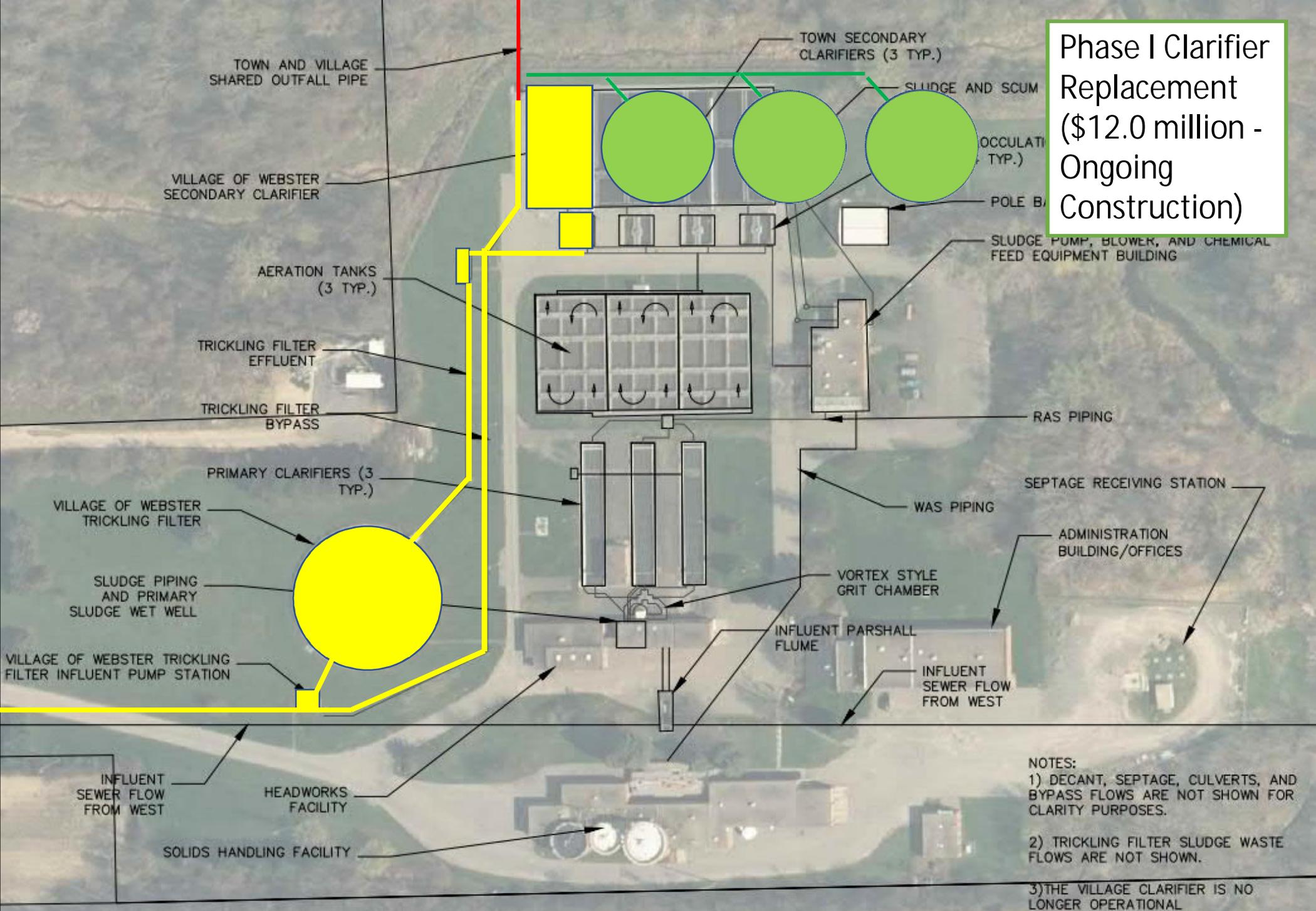
Village WWTP Upgrade – Current 2020



If the Village WWTP Upgrades are selected, the following would be required:

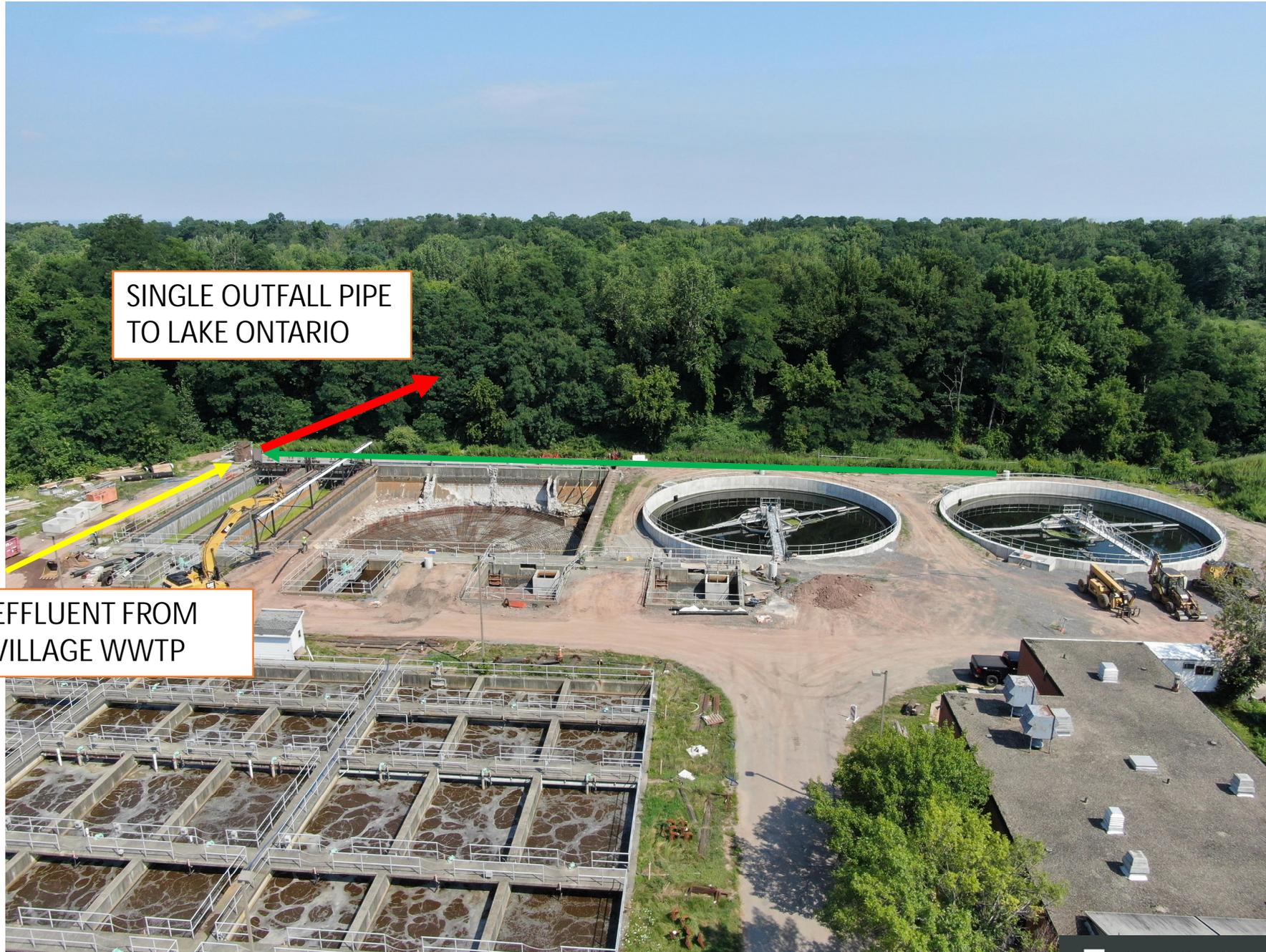
- Updated Town-Village IMA
- New Village SPDES permit
- Additional unit processes:
 - ✓ Two trickling filters (redundancy)
 - ✓ Effluent Disinfection
 - ✓ Separate sampling location
- Estimated Cost: \$10.9 million (2023)

Phase I Clarifier Replacement (\$12.0 million - Ongoing Construction)



- NOTES:
- 1) DECANT, SEPTAGE, CULVERTS, AND BYPASS FLOWS ARE NOT SHOWN FOR CLARITY PURPOSES.
 - 2) TRICKLING FILTER SLUDGE WASTE FLOWS ARE NOT SHOWN.
 - 3) THE VILLAGE CLARIFIER IS NO LONGER OPERATIONAL

Town WWTP – Phase I Clarifier Upgrade



SINGLE OUTFALL PIPE
TO LAKE ONTARIO

EFFLUENT FROM
VILLAGE WWTP

Town WWTP – Phase I Clarifier Upgrade



Town WWTP – Phase I Clarifier Upgrade

FROM VILLAGE
WWTP

TO LAKE
ONTARIO



Town WWTP – Phase I Clarifier Upgrade



Town WWTP – Phase I Generator & Pumps



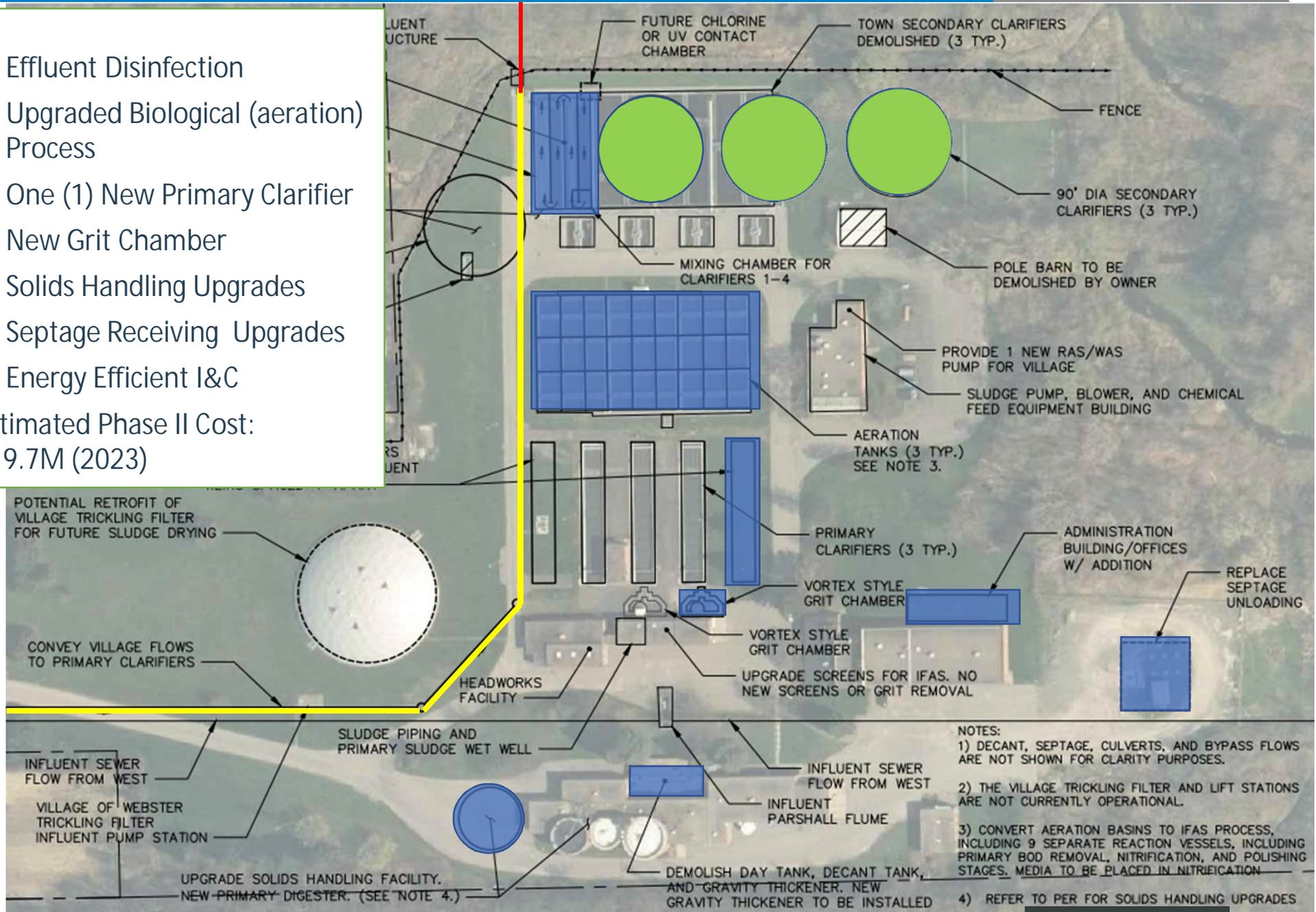
New solids handling pumps, piping, flow meters, instrumentation and controls

New 800 KW Standby Emergency Generator powers entire WWTP

Town PER Recommendations – Phase II

- Effluent Disinfection
- Upgraded Biological (aeration) Process
- One (1) New Primary Clarifier
- New Grit Chamber
- Solids Handling Upgrades
- Septage Receiving Upgrades
- Energy Efficient I&C

Estimated Phase II Cost:
\$19.7M (2023)

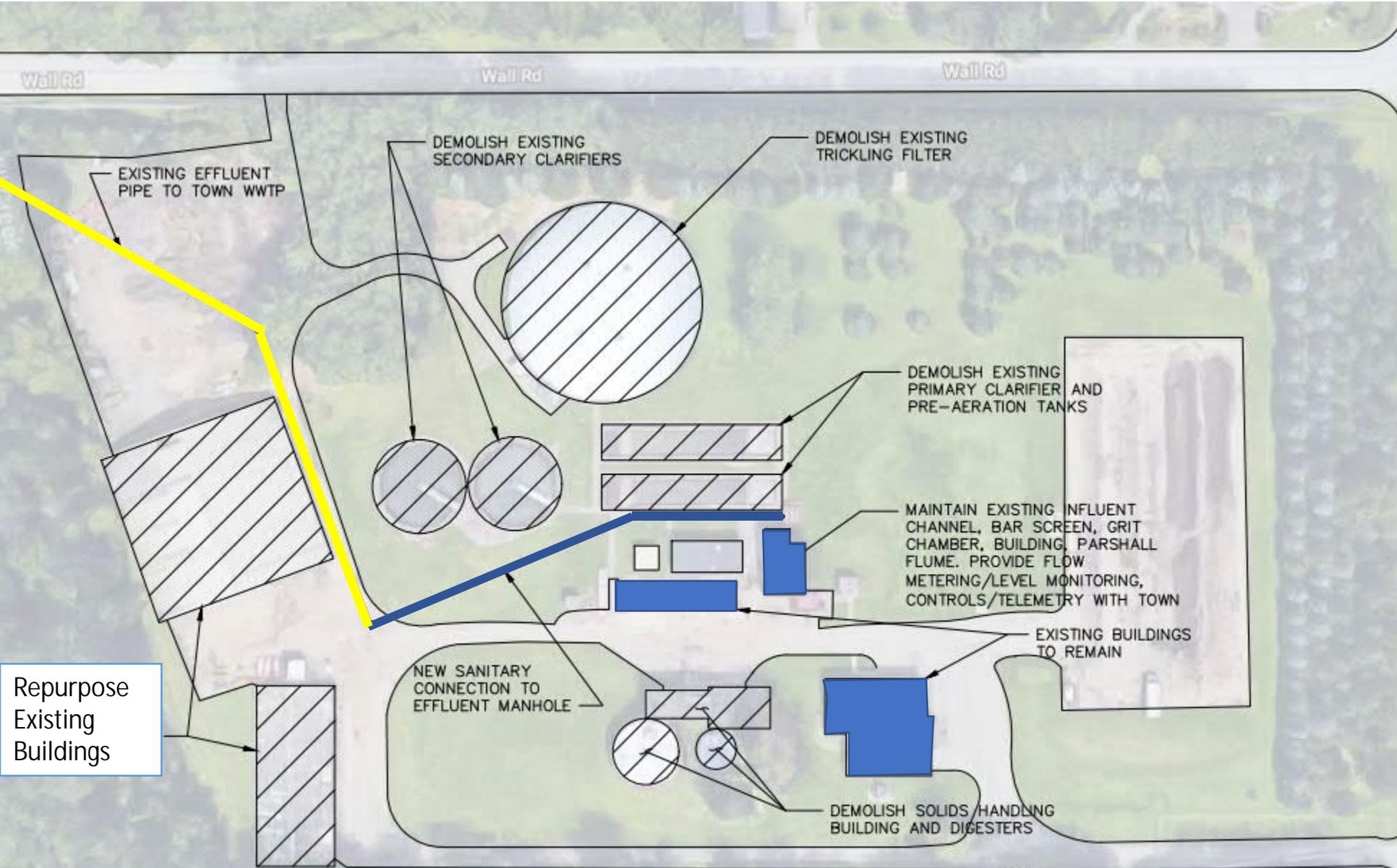


“Regional” WWTP

- ✓ Overview of Additional Upgrades
- ✓ Monetary considerations
- ✓ Non-Monetary considerations



Regional Alternative - Village WWTP CIP

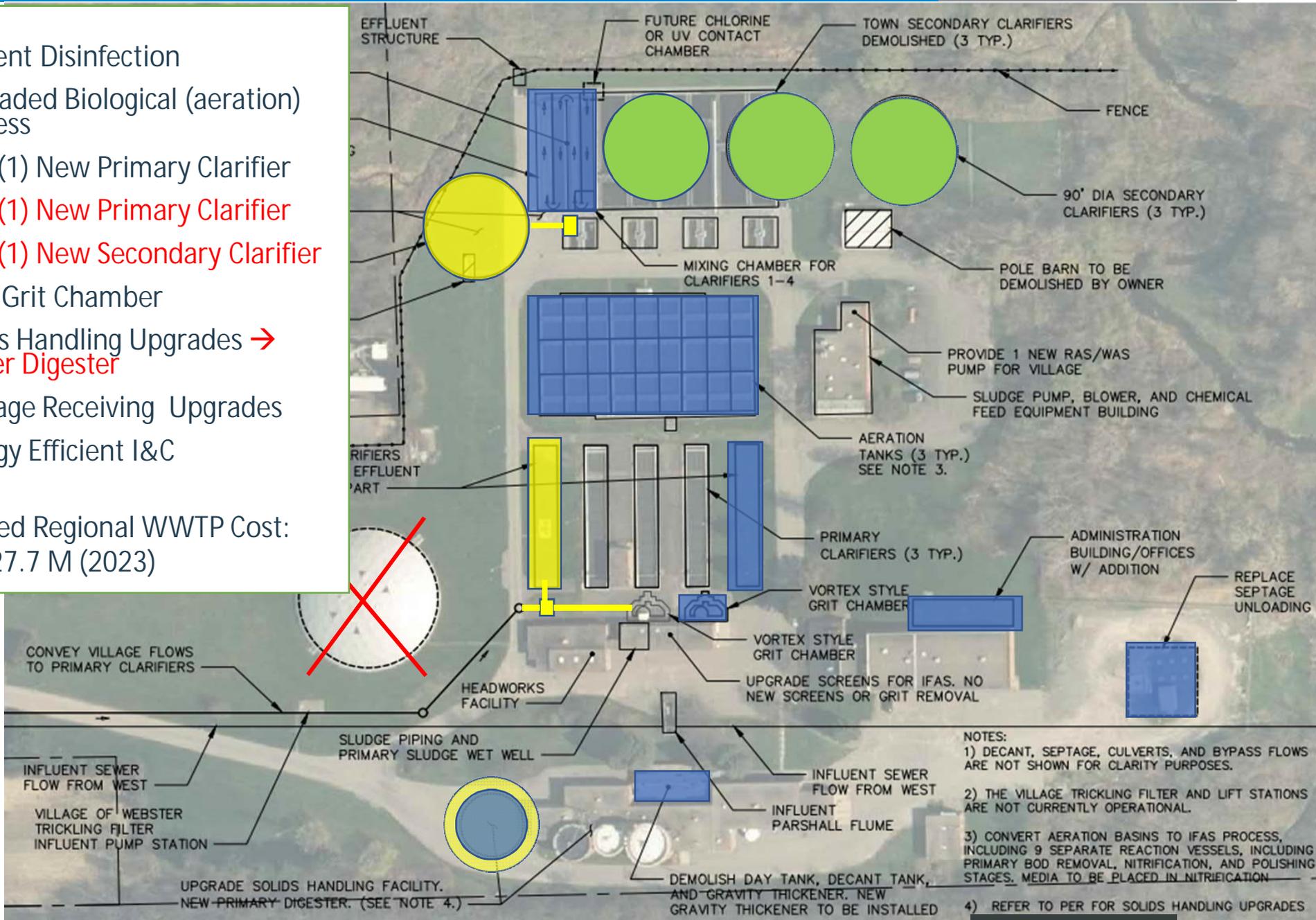


NOTES:
 PIPING NOT SHOW FOR CLARITY. ALL EXISTING PIPING TO BE ABANDONED IN PLACE EXCEPT SHOW

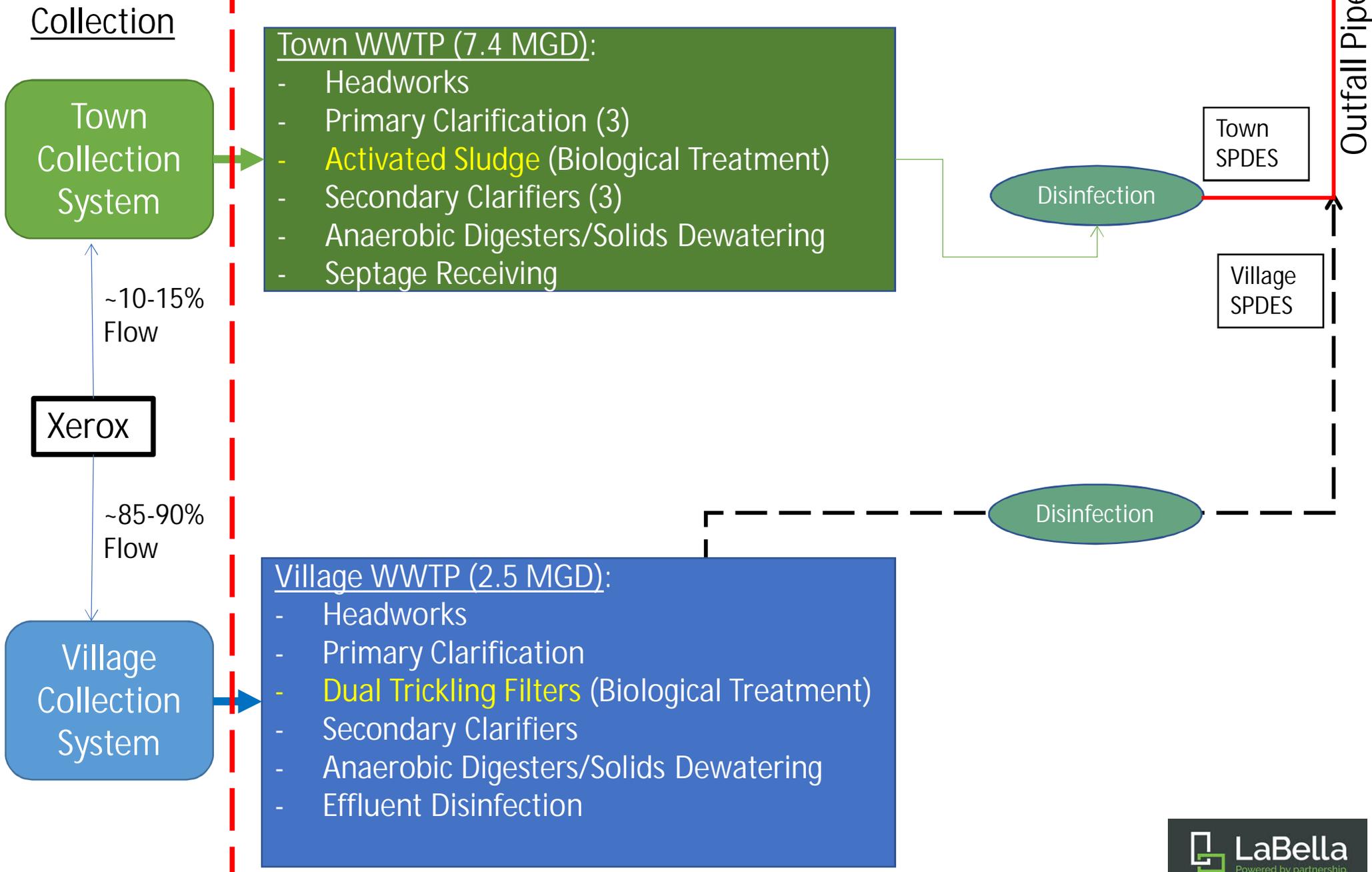
"Regional" WWTP Upgrade

- Effluent Disinfection
- Upgraded Biological (aeration) Process
- One (1) New Primary Clarifier
- **One (1) New Primary Clarifier**
- **One (1) New Secondary Clarifier**
- New Grit Chamber
- Solids Handling Upgrades → **Larger Digester**
- Septage Receiving Upgrades
- Energy Efficient I&C

Estimated Regional WWTP Cost:
\$27.7 M (2023)

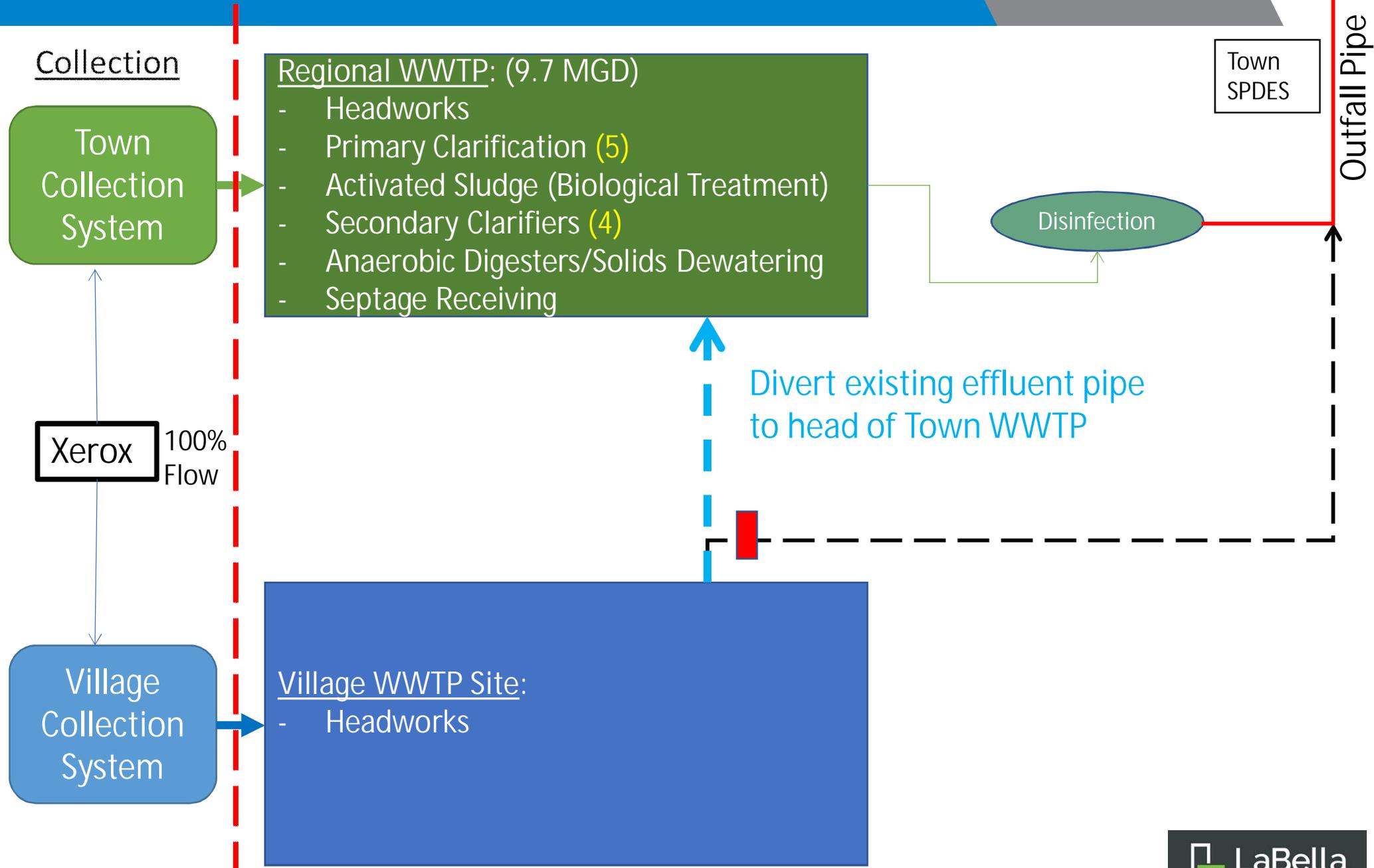


Upgraded System Configuration



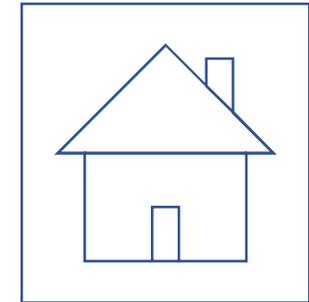
The two plants have a lot in common

Regional Treatment Configuration



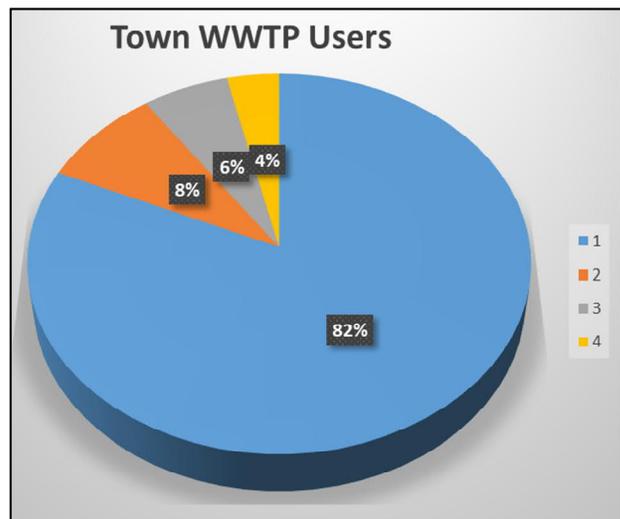
Monetary Considerations - User Bases

Type	Town	Village	Regional
Residential	14,635	1,344	18,975
Comm/Ind.	1,540	1,441	
(T) Penfield	1,076	-	1,076
Xerox	650	4,126	4,761
Total	17,901	6,911	24,812
% Contribution	73%	27%	100%

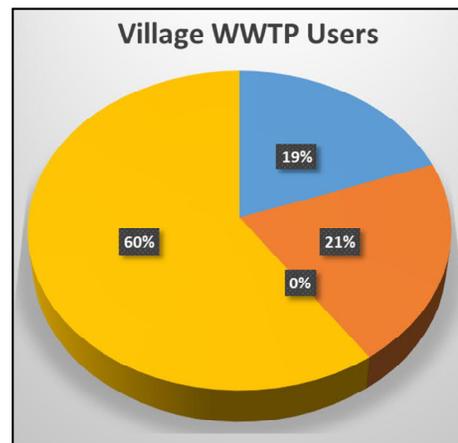


Single Family Home = 1 Equivalent Dwelling Unit

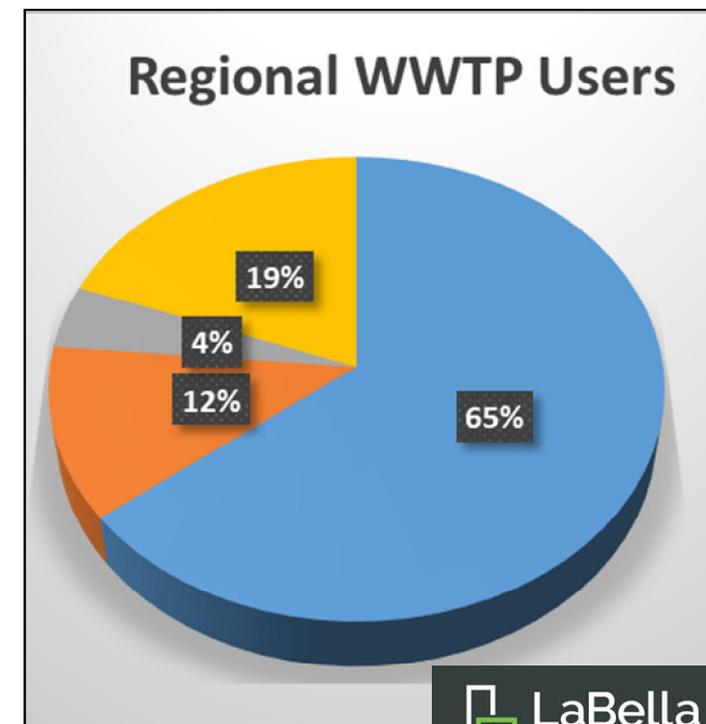
1 EDU ~ 60,000 gal/year
1 EDU ~ 2.2 Residents/Household



Current Town Sewer Rate:
\$173/EDU



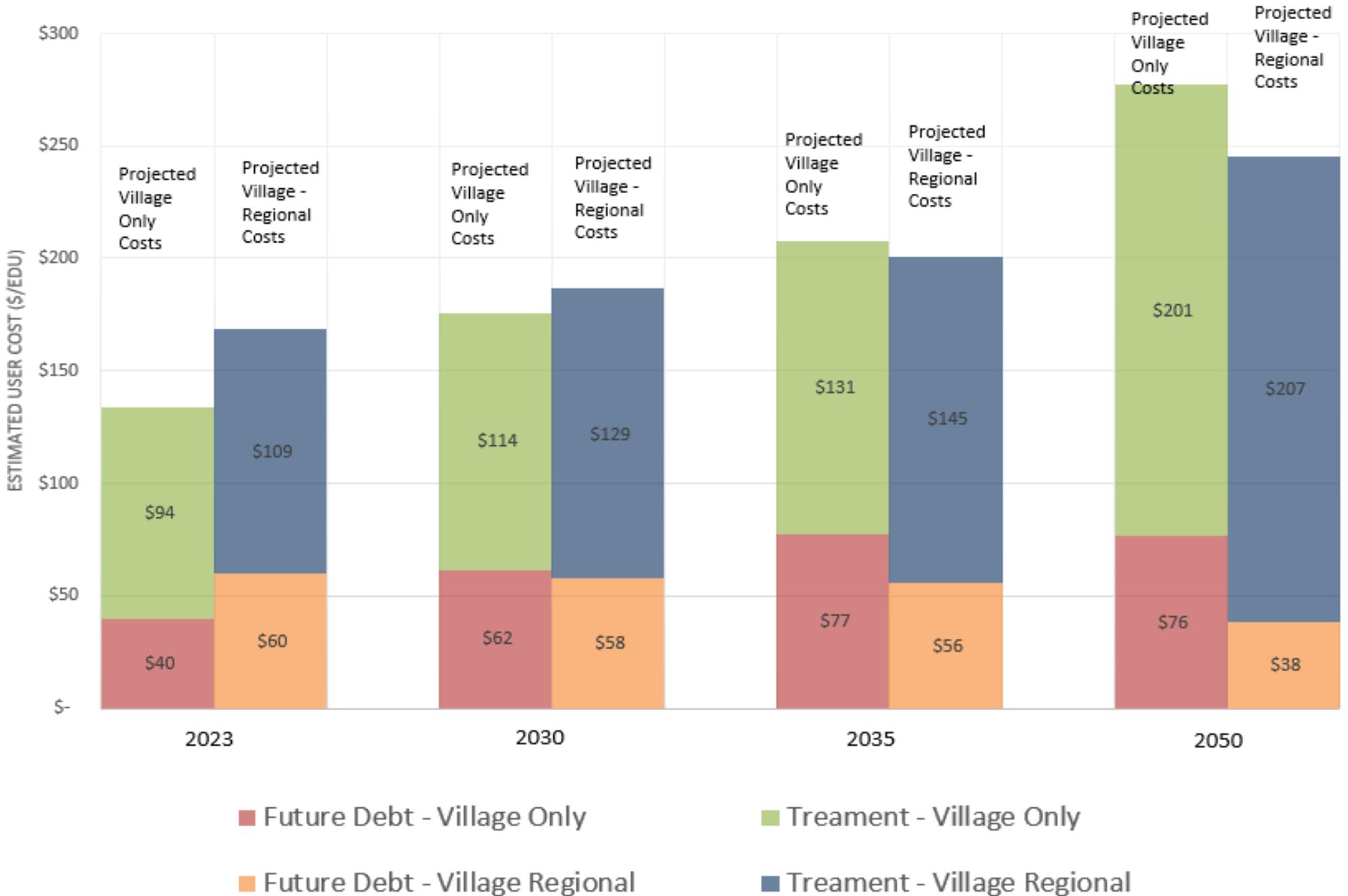
Current Village Sewer Rate:
\$150/EDU



Estimated Capital & User Costs

	Regional WWTP		Village WWTP
	Town Share	Village Share	
Estimated Project Costs	\$22.9M	\$8.8M	\$10.9M
Estimated Annual O&M	\$1.9M	\$0.7M	\$0.65M
Estimated EDUs	17,901	6,911	6,911
Estimated Annual Debt \$/EDU (Year 2023)	\$60	\$60	\$40
Estimated O&M \$/EDU (Year 2023)	\$109	\$109	\$94
Total Estimated Annual Treatment Charge (Year 2023)	\$169	\$169	\$134
Estimated (Approximate) Sewer Rate Increase (Year 2023)	~50%	~50%	~27%

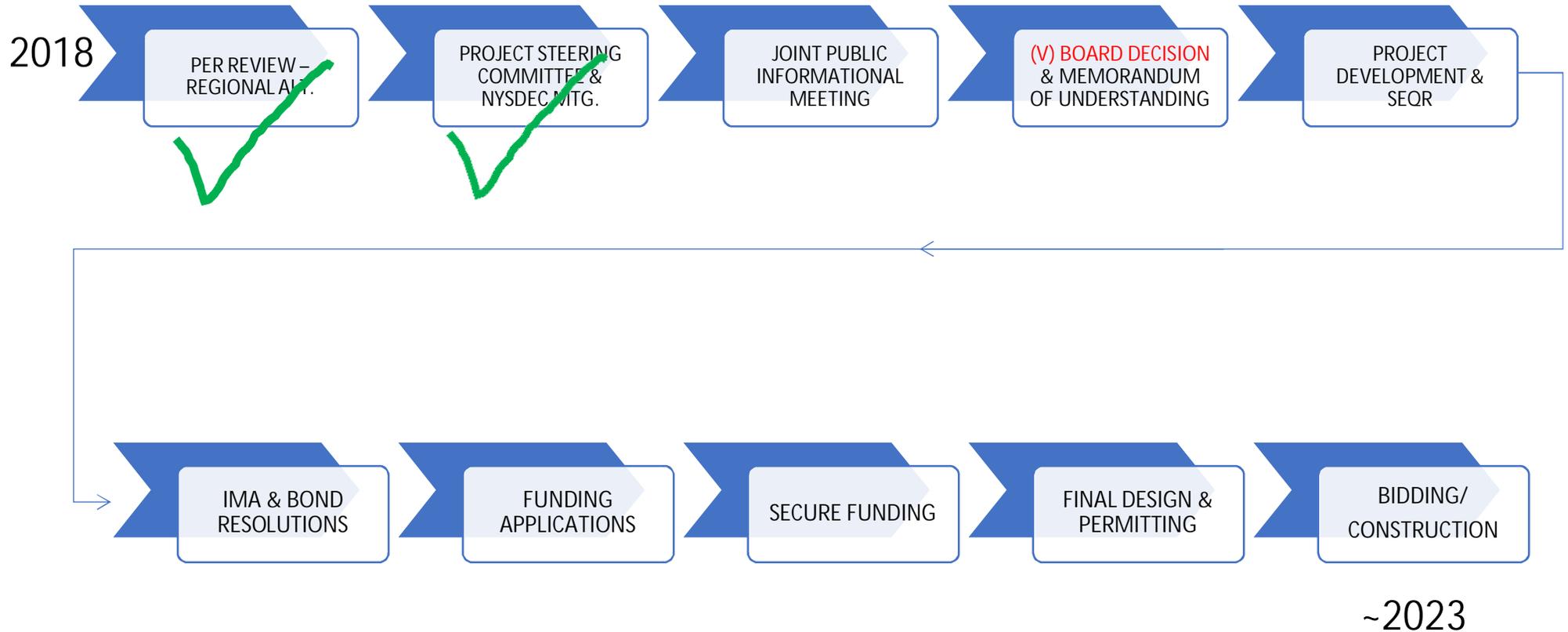
ESTIMATED SEWER USER COSTS - VILLAGE ONLY VS. REGIONAL ALTERNATIVES



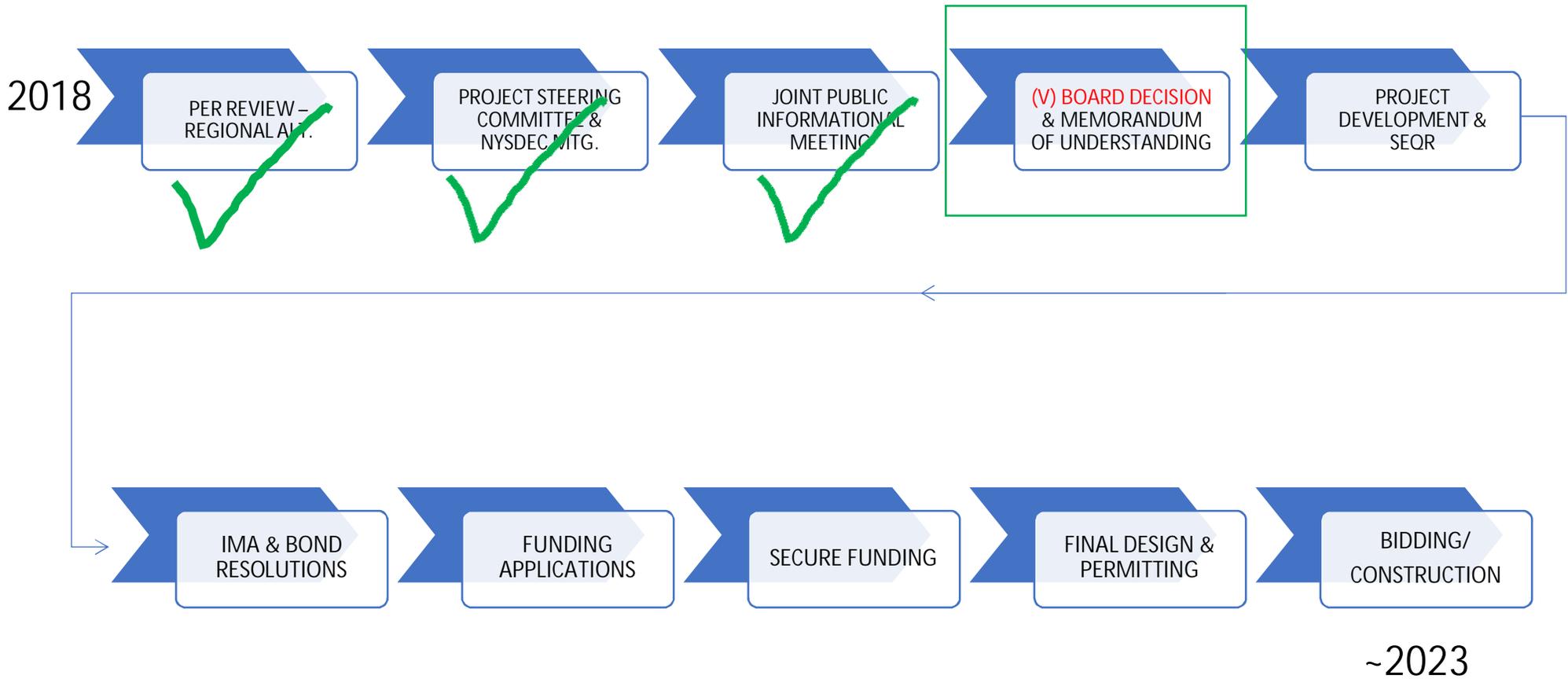
Non-Monetary Considerations: Regional v. Village Only

- Less redundant WWTP infrastructure assets
- Regulatory & Funding Agency support of “Regionalization”
- Capacity for Growth → increase in EDUs
- Reduced risk/liability → SPDES compliance
- Future revenue opportunities – Septage, Waste gas-to-energy
- IMA Defines Project Cost Structure
- Operator Availability
- Unknown fate of Xerox

Next Steps – Regional WWTP



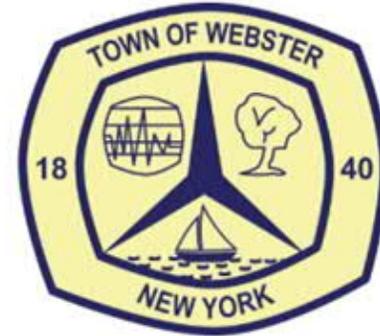
Next Steps – Regional WWTP



Thank you!

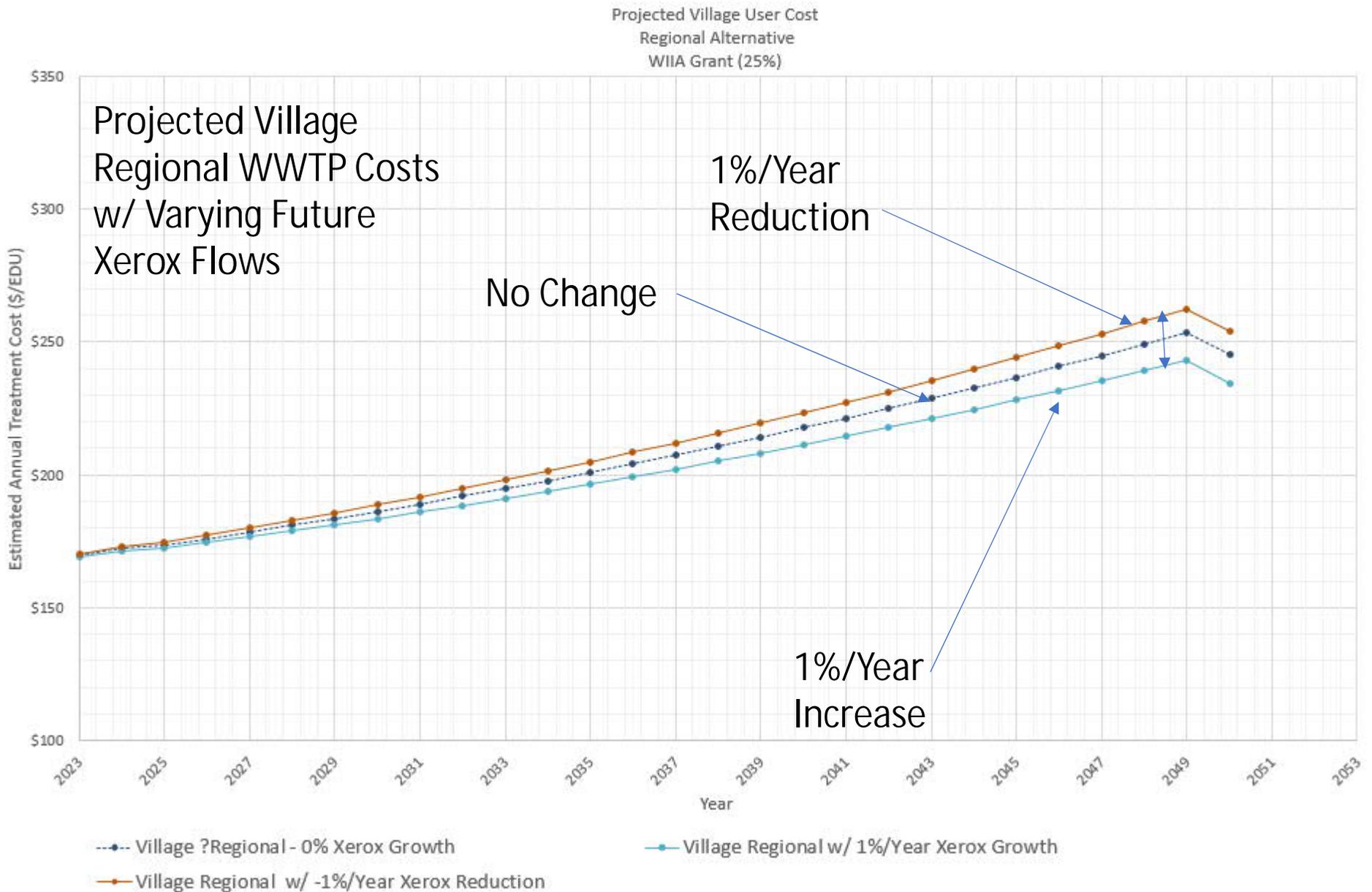


Village & Town of Webster



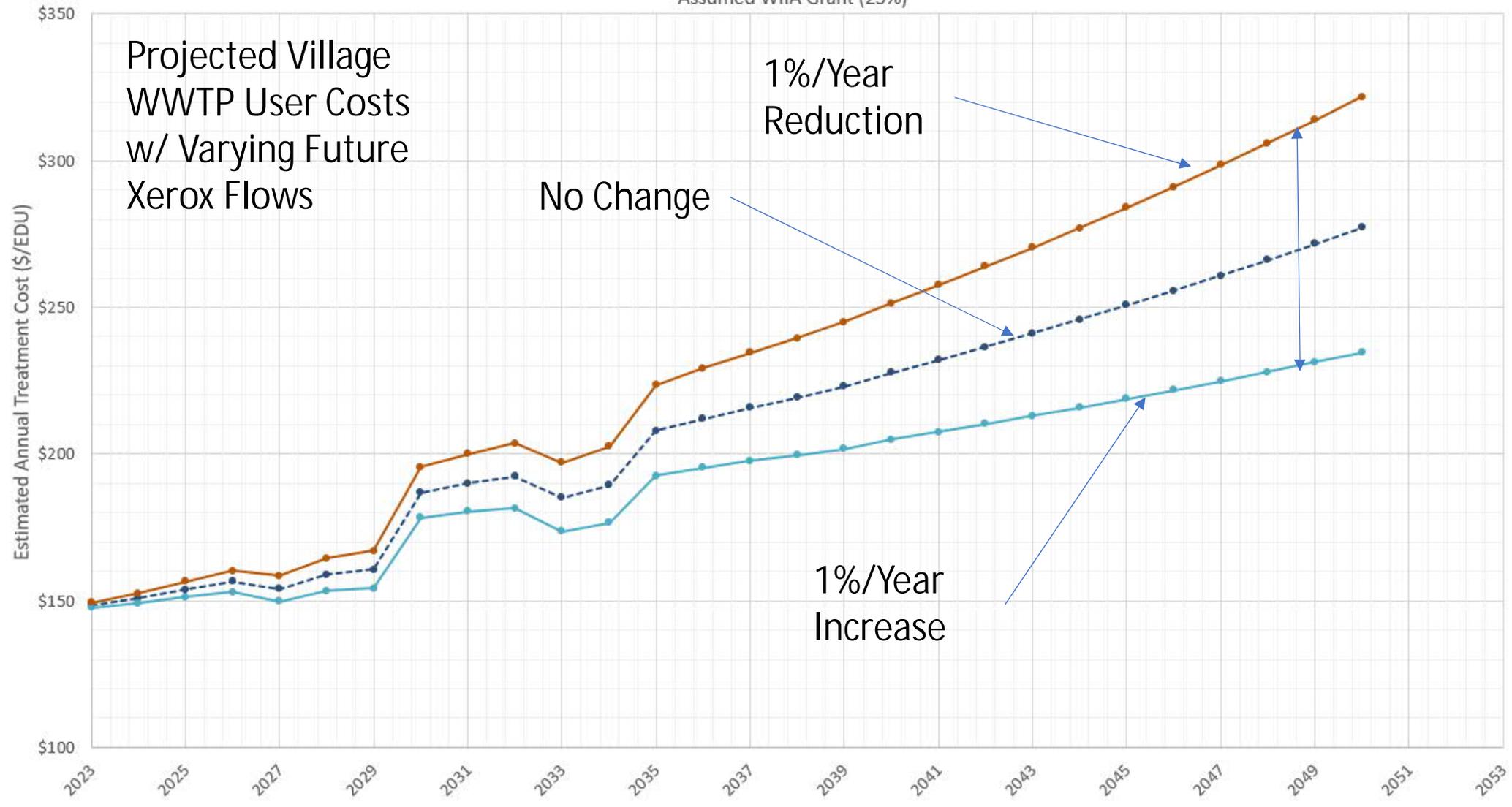
Q&A

Long-Range Treatment Cost Projections - Regional

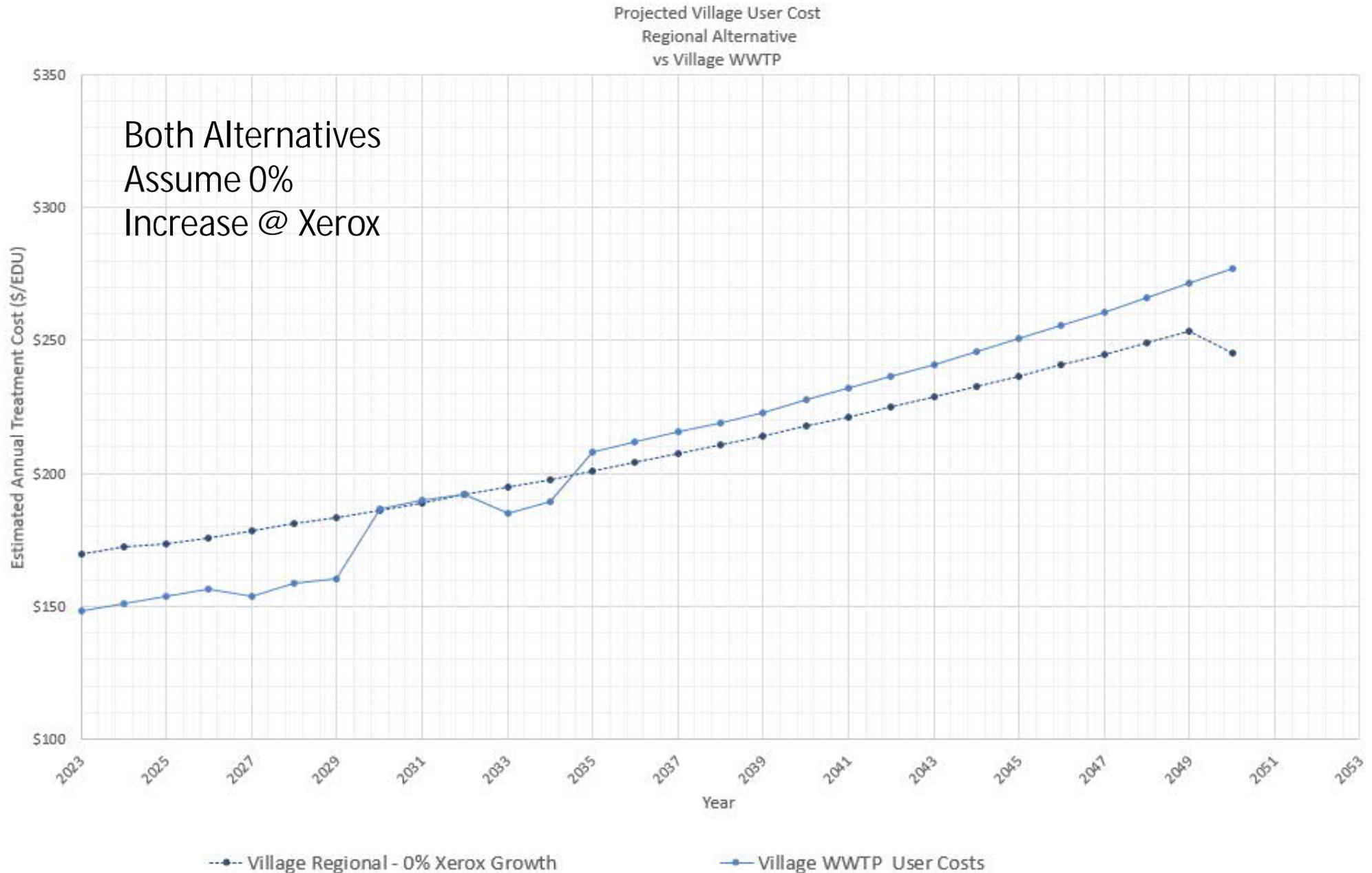


Long-Range Treatment Cost Projections- Village WWTP

Projected Village User Cost
Village WWTP Option
Assumed WIIA Grant (25%)



Long-Range Treatment Cost Projections: Village vs Regional



Monetary Considerations

	Regional WWTP			Village Only
	Total	Town Share	Village Share	
Estimated Capital Cost (Phase I Town) (Less WIIA Grant/Town Contribution) ⁽¹⁾	\$9M	\$6.5M	\$2.5M	
Estimated Capital Cost (2023) Less WIIA Grant ⁽²⁾	\$22.7M	\$16.4M	\$6.3M	\$10.2M (2023) \$4.2M (2030) \$3.0M (2035)
Total, Regional Upgrade ^(3,4)	\$31.7M	\$22.9M	\$8.8M	\$17.4M
Estimated Annual O&M	\$2.6M	\$1.9M	\$0.7M	\$0.65M
Estimated EDUs	24,812	17,901	6,911	6,911
Estimated Annual Debt \$/EDU	\$73	\$73	\$73	\$40 (2023) \$62 (2030) \$77 (2035)
Estimated O&M \$/EDU (Year 2023)	\$109	\$109	\$109	\$94

- (1) Includes \$3M WIIA Grant for Phase I Project
- (2) Assumes Regional WWTP receives \$5.0 M (max. 25%) WIIA Grant
- (3) Includes above referenced grants.
- (4) Regional Project can leverage larger grants and co-funding:
 - IMG – 40%
 - NYSDEC WOIP (up to \$1,000,000)
- (5) Costs do NOT include:
 - Current Sewer Debt
 - Collection System Operations

Monetary Considerations

	Regional WWTP		
	Total	Town Share	Village Share
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Estimated Annual Debt \$/EDU	\$73	\$73	\$73
Estimated O&M \$/EDU (Year 1)	\$109	\$109	\$109

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Regional WWTP Funding Opportunities

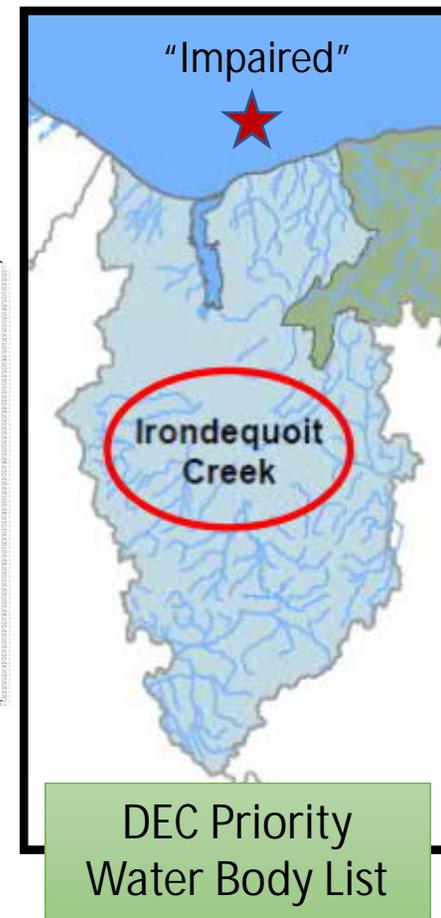
Municipality		Demographics					
Census Name	County	2010 MHI Census	2015 MHI ACS 5 Year	2017 MHI ACS 5 Year	2010 Population	2017 ACS 5-Year Population	2017 Families Below Poverty Rate
Webster town, Monroe County, New York	Monroe	\$ 66,727	\$ 69,987	\$ 75,552	42,641	44,224	3.7%
Webster village, New York	Monroe	\$ 37,252	\$ 35,708	\$ 43,750	5,399	5,558	14.9%

- Key Items: MHI, population, DEC PWL
- Focus on improving Lake impairments – nutrient reduction
- Shared Services
- Hardening & resiliency

IMG Grant Award Overview



- Grant amount is limited to the lesser of **\$10 million** or **40%** of total net project costs
- One municipality must be the **“lead municipality”** and apply on behalf of all cooperating municipalities
- IMG grant awardees seeking CWSRF and DWSRF financing may only apply for market-rate financing



(T) Webster



(V) Webster