

**Barton
&Loguidice**



K. Teter Consulting

32 Clinton Street , Homer, NY 13077

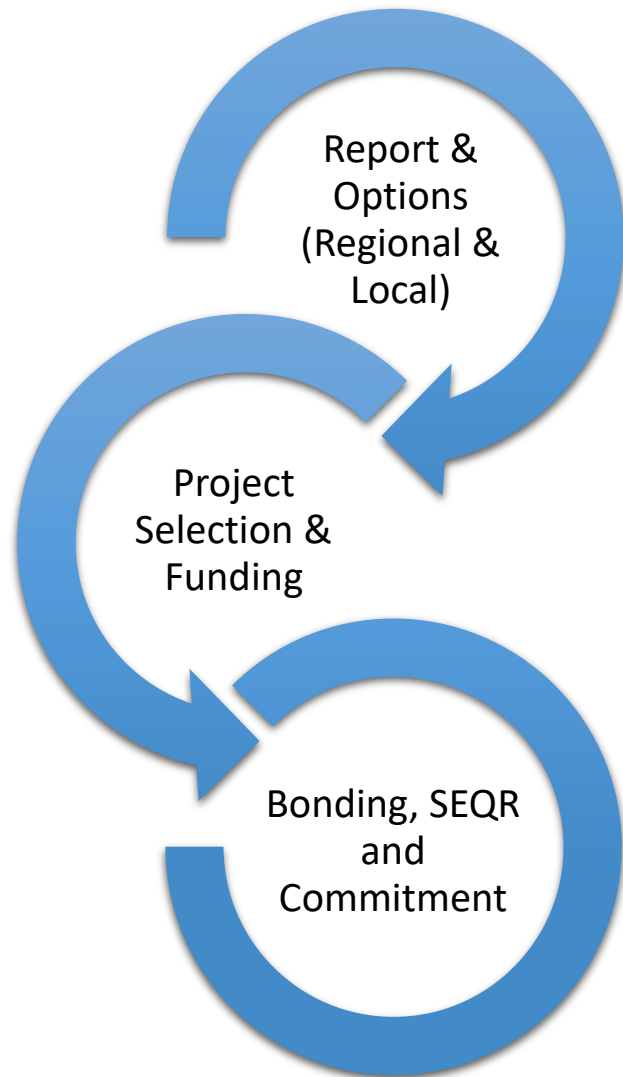
Aurora Water System: Village Only - Plan

Public information Meeting: March 3, 2020

Presentation Outline

1. Pathway, Backdrop, Mission & Goals, Project Description
2. Key Decision Factors to Prioritize
3. Existing Water System and Cayuga Lake Info
4. Surface Water Source Options (Alt #1)
5. Water Purchase Options (Alt #2)
6. Project Costs and Comparisons
7. Uncertainties & Variables and Advantages & Disadvantages
8. Financing
9. Schedule and What's Ahead
10. Project Description & Rationale

Project Pathway & Backdrop



Critical Backdrop:

Two concurrent projects being developed

1. CCWSA developing a central County Water District to include Aurora area source (Update)
2. Village of Aurora independently solving their water supply needs (Focus of this meeting)

Our Mission:

The mission of the Village Board is to provide both short and long-term solutions to an aged and soon to be abandoned water system that will secure safe, reliable water for generations. We intend to make well informed decisions, based on all available information, for a comprehensive water system master plan.

Our Goals & Objectives:

- To provide safe, clean, reliable water to all Village users
- To deliver timely results and yet be mindful of the CCWSA schedule
- To be proactive and forward thinking
- To be fiscally responsible by maximizing all funding opportunities
- To provide design flexibility keeping long-term options in mind
- To minimize all risks for the future water system
- To fully involve and inform all levels of political leadership as to the circumstances surrounding the project and the funding challenges
- To think locally, but consider the current regional water goals
- To be mindful of the reality that Wells College's future is uncertain
- To be aware that seeking funding requires a project to be selected
- To proceed towards the most fundable project until circumstances change and the Board will then consider other project options
- To be a project leader for the Village and the surrounding communities/businesses who also seek reliable drinking water

PROJECT DESCRIPTION AND RATIONALE

Our Selected Project:

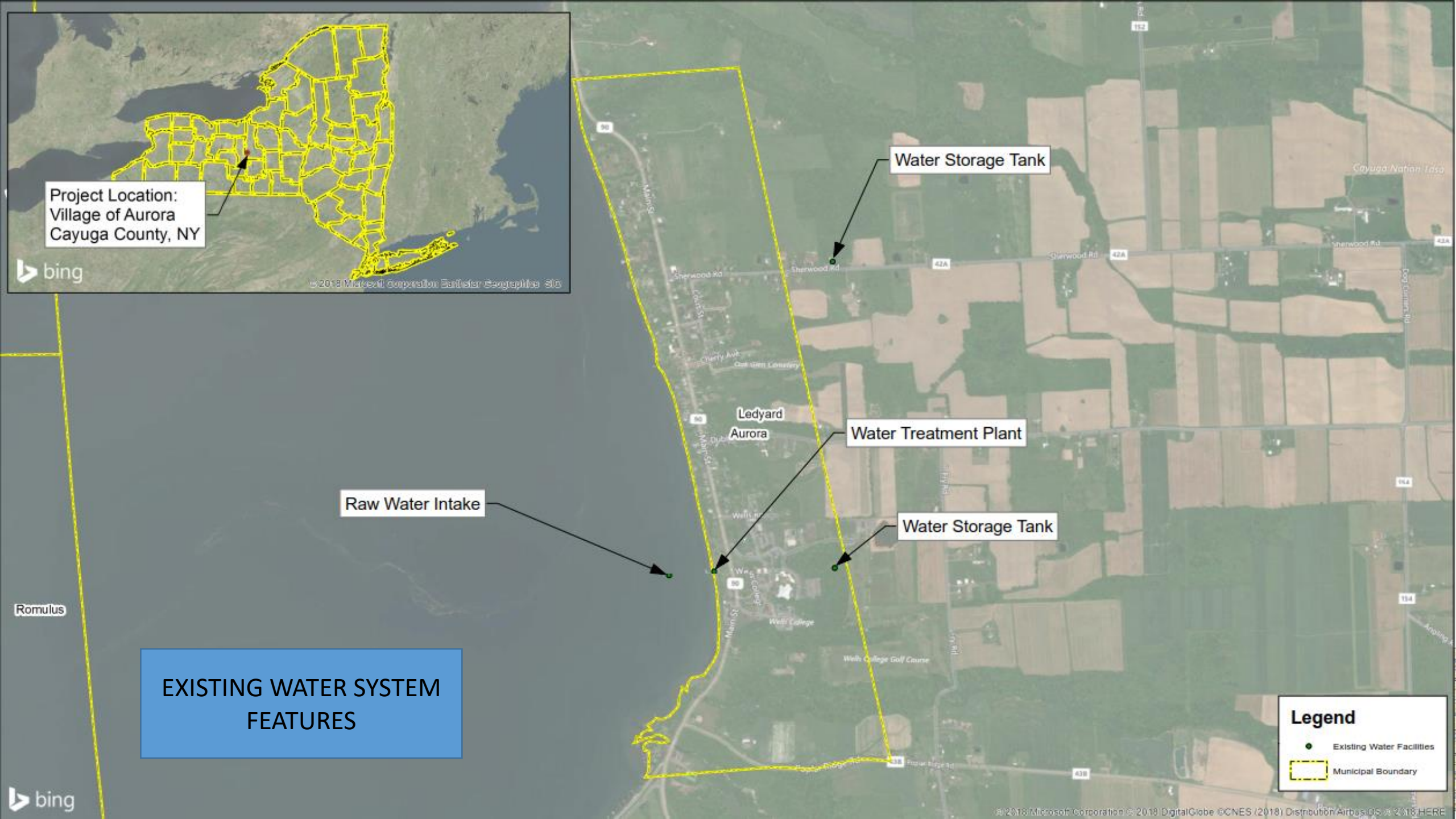
- To construct and operate a new Water Treatment Plant for Village users
- Select the most environmentally sound, feasible and cost effective location for the water intake and plant facility
- To construct all of the required pumping facilities and transmission mains to connect and provide safe water to the existing Village storage and distribution system

Our Reasons:

- To maintain control of our water system source and quality
- To maintain control of all aspects of the costs to operate and maintain the system
- To serve as a source of water to other nearby users in the future which will serve as a revenue stream
- To provide the impetus and leadership to assist the CCWSA in developing the larger County district project
- To move ahead with a forward thinking project that has greater potential for securing more grant money despite it's greater capital cost compared to a pipeline connection
- If the success of the project is uncertain or cannot secure the necessary funding to make it viable, we can revise our project plan to the less costly option of constructing a connecting pipeline to an existing source

Key Decision Factors - Prioritize

1. Cost to Village Residents for Capital Project
2. Cost to Village Residents for Operation & Maintenance
3. Control: Purchase or Produce Water
4. Requirement to Hire Additional Staff
5. Long-term Solution – Village Decision Pushing the County
6. Financing Opportunities and Flexibility
7. Timeline to Implement





CAYUGA LAKE WATER
DEPTHS



LONG POINT STATE PARK INTAKE LOCATION

Legend

- Wetwell and Pump Station
- WTP
- Intake Option 9
- Intake Option 10
- Cayuga County Parcels
- Cayuga Lake Contours
- Distribution
- Intake Option 9
- Intake Option 10
- Transmission
- 2-Ft Contours
- 10-Ft Contours

Option 7
New intake pipe 500 LF
Location of new intake
at 100' depth, El. 284'

Option 8
New intake pipe 700 LF
Location of new intake
at 150' depth, El. 234'

New wetwell and
pump station
Ground El. 385'

Location of new water treatment
plant approximate ground El. 386'

New transmission
main 750 LF

New Main to
Aurora

Parcel owned by
New York State Parks

24,000 LF
Distribution Pipe for
Honoco Rd. Parcels

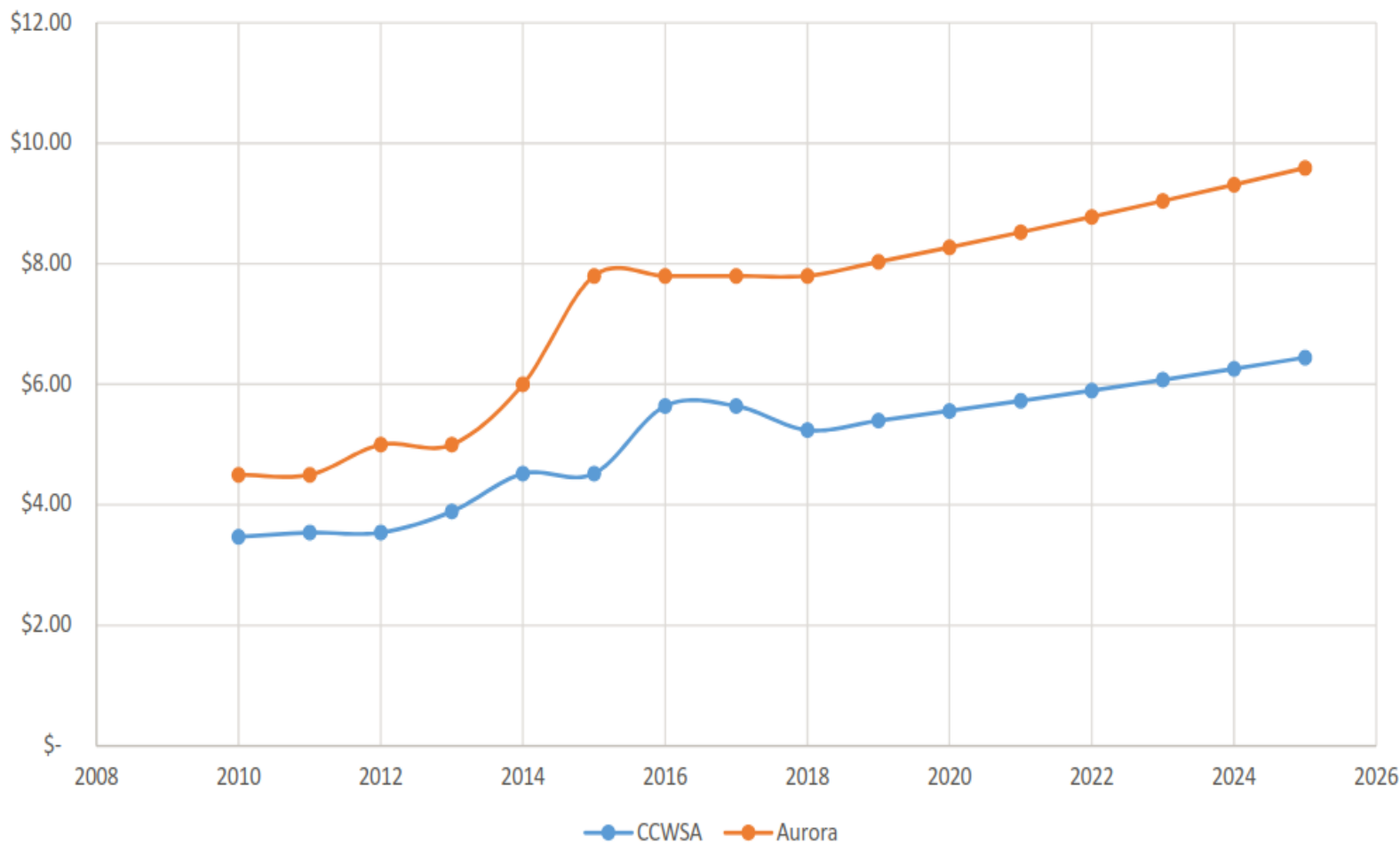




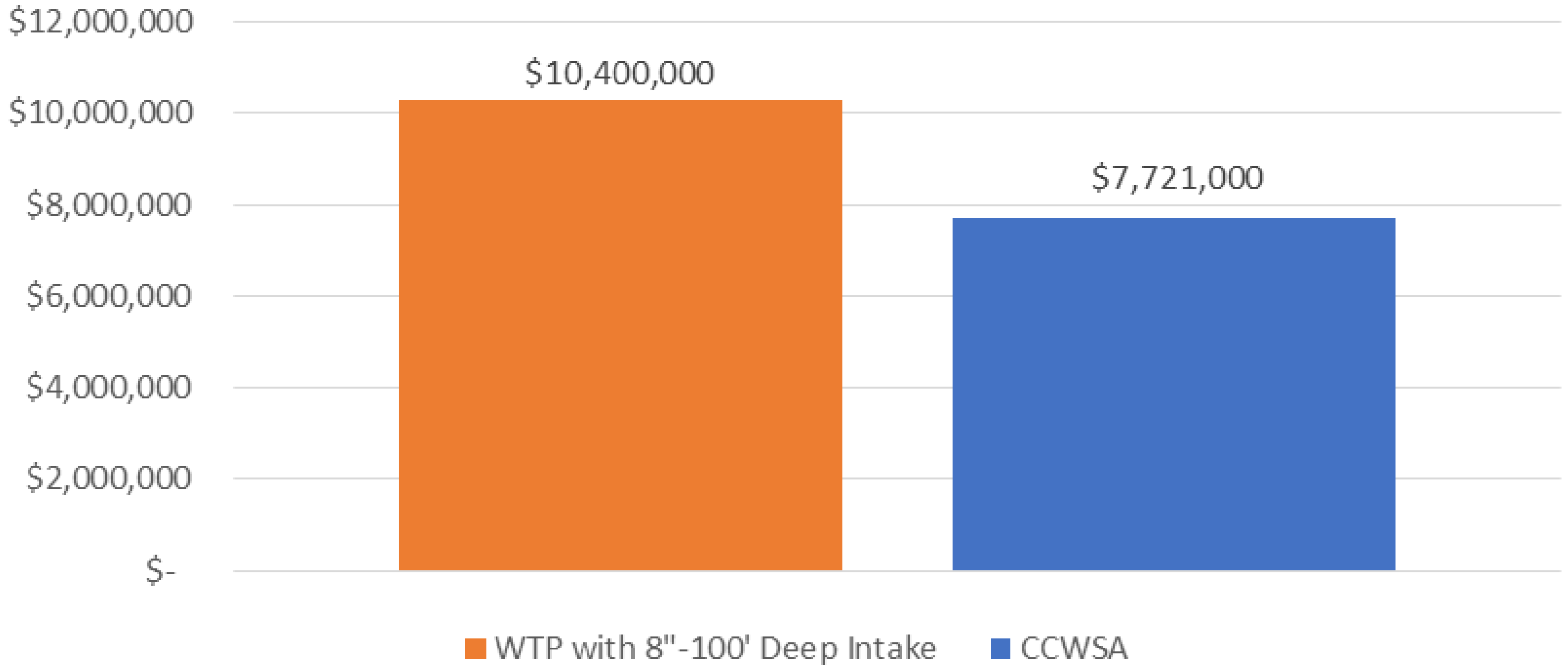
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Water Rates Comparison



Capital Cost Comparison

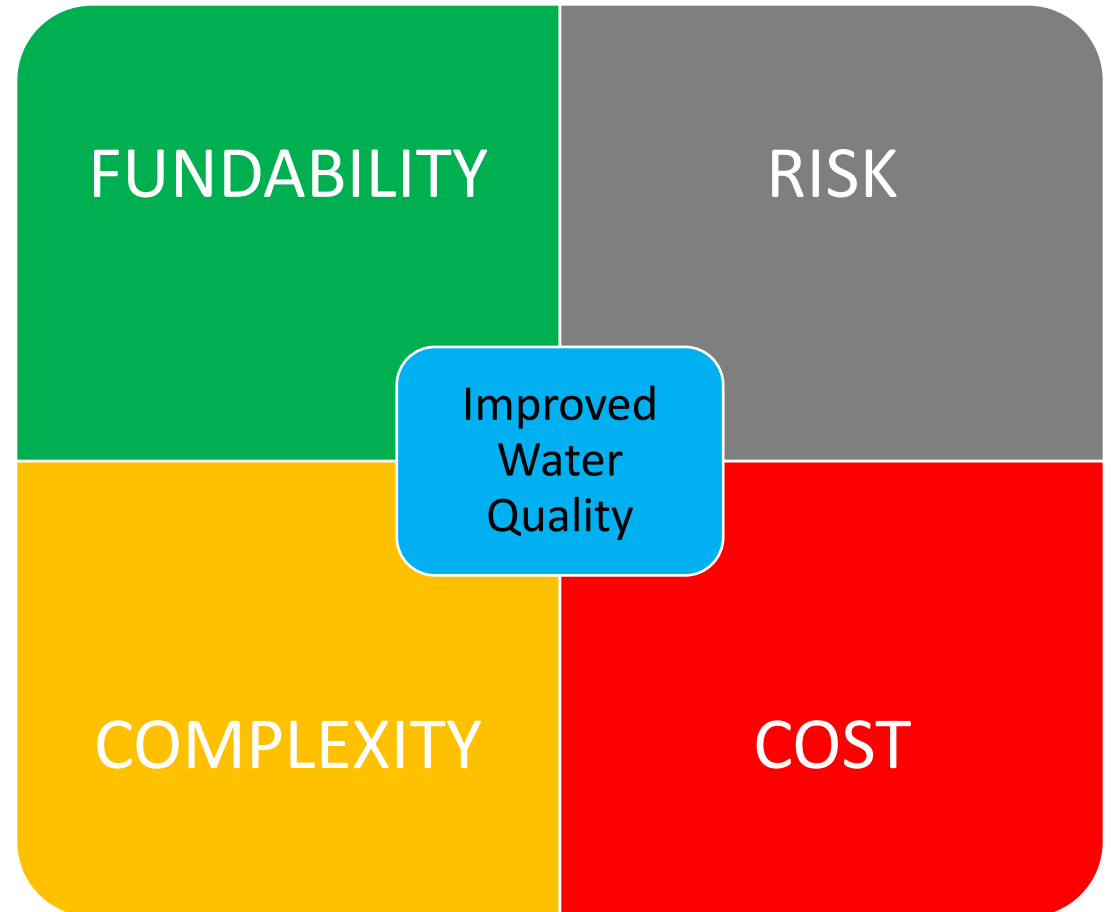


Source Water Alternatives

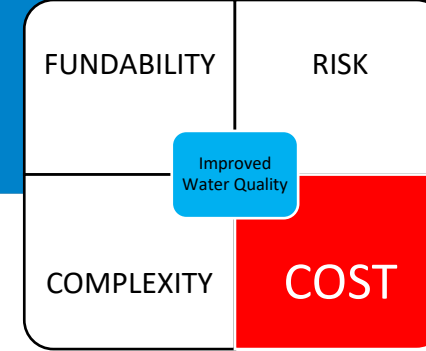
New Village Treatment Plant

VS

CCWSA Partnership and New
Connecting Pipeline



Source Alternatives: COST



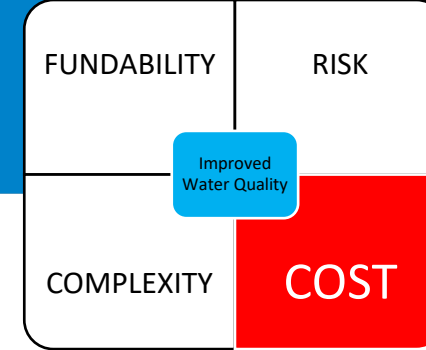
New Village Treatment Plant

- **\$10.4 million**
 - New Village WTP
 - New Cayuga Lake intake
 - New pumping and mains to connect
- O&M = \$445,000 (first year)
 - **\$313,000 increase**
 - **Includes all costs to provide water**
- Sole ownership initially with potential sharing with CCWSA

CCWSA Partnership and New Pipeline

- **\$7.72 million**
 - New Village transmission main
 - New pumping and mains to connect
 - Decommission/abandon Wells WTP
- O&M = \$358,000(first year)
 - **\$226,000 increase**
 - **Includes the purchase price as well**
- Options for cost sharing with CCWSA

Source Alternatives: COST



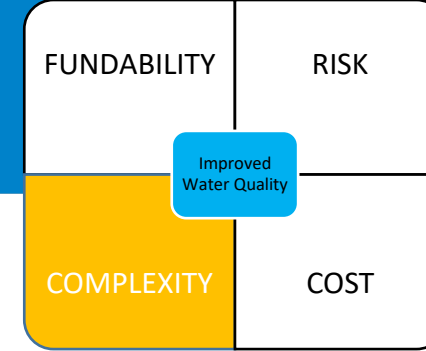
New Village WTP and O&M

- Debt \$10.4M with \$3.0M Grant
 - Existing Cost = \$402 per EDU
 - New Debt = \$905 per EDU
 - New O&M = \$1,040 per EDU (Includes ALL costs to provide water)
 - Total User Cost = \$1,945 per EDU
 - Increase of \$1,543

CCWSA Partnership - New Pipeline

- Debt \$7.72M with \$3.0M Grant
 - Existing Cost = \$402 per EDU
 - New Debt = \$580 per EDU
 - New O&M = \$836 per EDU (Includes ALL costs including the purchase price)
 - Total User Cost = \$1,416 per EDU
 - Increase of \$1,014

Source Alternatives: COMPLEXITY



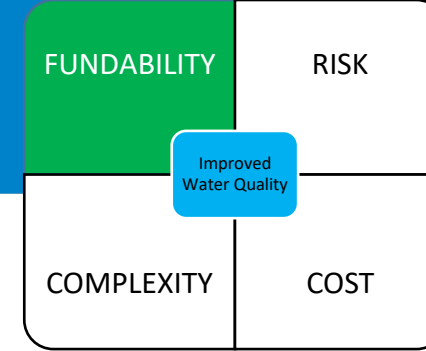
New Village Treatment Plant

- Completely new WTP operation
- Source Water Assessment Program
- Seasonal/environmental changes
- Reliance on consultants, vendors, etc.
- Unfunded mandates (increased monitoring)
- DEC/DOH compliance (permits, regs, etc.)

CCWSA Partnership and New Connecting Pipeline

- It's a pipeline
- Unfunded mandates ("others")
- Change is scary
 - The idea as "Loss of Local Control"

Source Alternatives: FUNDABILITY



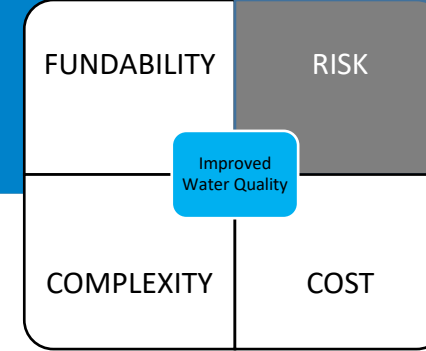
New Village Treatment Plant

- Scores very well because of the regional approach
- Opportunity for **both** County and Village funding sources
- Shared responsibility
- Shared story to sell to funding sources.

CCWSA Partnership and New Connecting Pipeline

- Scores very well because interconnection with an adjacent source
- **Sole funding applicant**
- A pipeline is not a unique project or story to sell to funding sources.

Source Alternatives: RISK



New Village Treatment Plant

- Unfunded mandates/future regs
- Operator shortage in the industry
- Relatively easy source to treat
- Future environmental effects on source (HAB's, etc.)
- Sole ownership initially with potential sharing with CCWSA

CCWSA Partnership and New Connecting Pipeline

- Unfunded mandates for source
- Rate change increases
- Loss of control

Risk Reducers

- CCWSA only water and sewer focused

Uncertainties and Variables

Category Description

- Wells College System Failure
- Wells College closes and/or will not purchase water from the Village
- County District Project Succeeds
- County District Project Fails
- Ledyard Users Served
- Ledyard Users Not Served
- Timing of final decision of County
- Funding Opportunities

Impacts and Implications

Emergency Operation by NYS DOH/Wells
Village EDU Cost Increases, Village or
NYS DOH Operates System?

Village Becomes Participant
Village Fully Responsible For Their Water
Village EDU Cost Decreases
Village EDU Cost Remains High
Set a deadline for the Village decision
May vary depending on the project

Advantages (Y) and Disadvantages (N)

Categories	1-WTP	2-CCWSA	
• Water Quality	Y	Y	
• Capital Cost	N	Y	
• O&M Cost	N	Y	
• Maintain System Control	Y	N	
• Control of the Cost of Water	Y	N	
• Project Debt Cost Sharing	Y&N	Y&N	
• Required to be WTP Operator	N	Y	
• Best Timeline	N	Y	
			These assertions are not black and white answers but indicate the most likely outcome if that particular option is selected

WTP Village Production Advantages Are Primarily “CONTROL” Driven
CCWSA Village Purchase Advantages Are Primarily “COST” Driven

Financing Landscape

Grant Funding Opportunities

- EFC WIIA Grant: Up to a maximum of 60% of the costs or \$3 million, whichever is less
 - EFC IM Grant: Working with another municipality and up to 40% or \$10 million, whichever is less
 - CDBG: Maximum grant is \$750,000
-
- EFC: Environmental Facilities Corporation
 - WIIA: Water Infrastructure Improvement Act
 - IM: Inter-municipal Water Infrastructure
 - CDBG: Community Development Block Grant

Loan Funding Opportunities

- NYS DWSRF: Loan opportunity at the market rate of 3.23%
 - USDA Rural Development: Loan opportunity for a 38 year loan at the market category interest rate of 3.875%
-
- DWSRF: Drinking Water State Revolving Fund
 - USDA: United States Department of Agriculture

Funding Options...

- Best Funding
 - WIIA grant for up to \$3,000,000
 - CDBG grant for up to \$750,000
 - EFC IM Grant for up to 40% of the cost
 - MRF grant for variable amount
 - LGE grant for variable amount
 - DOS grant via state political process
 - Contribution from CCWSA
 - Contributions from other users
- **Every additional \$1,000,000 grant will reduce user costs by \$122 per year**



Tentative Schedule.....

Activity

- Village Board Decision/Public Input
- Pursue all funding opportunities
- Optimize project scoring for funding
- Pursue all levels of political support
- Select final project for implementation
- Conduct SEQR/SERP & Bond Resolution
- Submit all funding applications
- Complete permitting, design, etc.
- Secure all approvals and construct

Schedule

- March 2020
- March 2020 - Ongoing
- March – June 2020
- February 2020 - Ongoing
- March 2020
- March - June 2020
- WIIA in June/July 2020
- 2021
- 2021 – December 2022 [this will be longer for the WTP alternate]

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