Ilion Water System Long -Range Planning

September 24, 2018 - Public Information Meeting #2

By: Chris Lawton, P.E. and Ilion Board
Ilion Water District

- 3 reservoirs (capacity = 240 MG)
- 4 sand filters
- ~50,000 feet of raw water main
- 200,000 feet of distribution main
- 2 groundwater wells
- Average Demand = 1.1 MGD
- Unaccounted for water is 33%
Reservoir #1
15 Million Gallons

Reservoir #2
65 Million Gallons

Reservoir #3
160 Million Gallons
Well Site (2014)
1. Village Board progress since June PIM
2. Water System issues since June PIM
3. Source Alternatives Comparison
4. Distribution Improvement Project Options
5. Funding
6. Next Steps/Timeline
Our Mission:

The mission of the Board and Water Committee is to provide both short and long-term solutions to an aged 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:

- To provide safe, clean, reliable water to all users
- To deliver timely results
- To reduce the complexity of the system
- To maximize all funding opportunities
- To reduce risks for the future water system

Our Objectives:

- To be proactive
- To be fiscally responsible
- To increase operational efficiencies
Ilion Board Progress

- Tour the Ilion Sources July 25th:
Ilion Board Progress

• Meet in Albany with Senator Seward and 8 State Agencies (July 20th):
  1. NYS Department of Conservation (DEC)
  2. NYS Housing and Community Renewal (HCR)
  3. US Department of Agriculture (USDA)
  4. NYS Environmental Facilities Corporation (EFC)
  5. NYS Department of Health (DOH)
  6. Department of State (DOS)
  7. Senator Seward
  8. Assemblyman Miller
Ilion Board Progress

• Tour the Mohawk Valley Water Authority facility (August 9th):
Well Transmission

- From Well to WTP
- Will provide reduction in colored well water in system
- 14,000 linear feet
- 16-inch diameter
- Will be utilized by either source alternative
- Construction 2019
Ilion Board Progress

- Submit Engineering Report to Agencies
  - Presents 10 water system projects
    - Source Water Alternatives
    - Distribution Improvements Program
  - $39M at 2018 costs
  - 379 pages (being reviewed by NYSDOH)
Form a Regional Funding Committee (date TBD):

- Barton & Loguidice
- NYS Assemblyman Brian Miller
- NYS Congresswoman Claudia Tenney
- Herkimer County Legislators
- Village of Frankfort, Rick Adams
- Town of Frankfort
- Town of German Flatts, Pete Rovazzi
- Herkimer County IDA, John Piseck
- MVWA, Pat Becher
- Mohawk Valley Edge, Steve MiMeo
- Others....
Water System Issues: Why? & What?

Well Water

Surface Water
Source Water Alternatives

New Village Treatment Plant and Source Water Improvements

VS

MVWA Partnership and Pipeline

- FUNDABILITY
- RISK
- COMPLEXITY
- COST

Improved Water Quality
Source Alternatives: COST

New Village Treatment Plant and Source Water Improvements

- **$26 million** (2018 dollars)
  - Village transmission main
  - Improve Res#3
  - Source Water Intakes
- O&M = $2.36 million (first year)
  - $772,000 increase
- Sole ownership

MVWA Partnership and pipeline

- **$19.4 million** (2018 dollars)
  - Village transmission main
  - Improve Res#3
  - Decommission WTP
- O&M = $2.2 million (first year)
  - $607,000 increase
- Options for cost sharing
Rate History’s Compared

Annual Water Cost Based on Changing Water Rates and 48,000 Gallon Annual Consumption

Assumes rates will continue to increase 3% per year after 2018
### Source Alternatives: COMPLEXITY

#### New Village Treatment Plant and Source Water Improvements
- Complete new process
- Source Water Assessment Program
- Blending of 6 water sources
- Seasonal/environmental changes
- Reliance on Consultants
- Unfunded Mandates (increased monitoring)
- DEC restrictions (SPDES permits)

#### MVWA Partnership and pipeline
- It’s a pipeline
- Maintain a backup source with well
- Unfunded Mandates
- Change is scary
  - The idea as “Loss of Local Control”
Source Alternatives: FUNDABILITY

New Village Treatment Plant and Source Water Improvements

- Fundability Score = 70
  - Funding line for 0% hardship loan is 110 points
  - Alone on the funding mission

MVWA Partnership and pipeline

Fundability Score = 155

1. Replacement with alternate source or interconnection with an adjacent water system (20 points)
2. Extending water to systems with contaminated private wells (40 points)
3. Consolidation of water systems (25 points)

1. Multiple entities able to request funding to help lower the overall cost of the transmission main
Source Alternatives: RISK

New Village Treatment Plant and Source Water Improvements

- Unfunded Mandates/Future Regs
- Operator shortage in the industry
- Difficult sources to treat
- Future Environmental Effects on Sources
- Sole Ownership

MVWA Partnership and pipeline

- Unfunded Mandates
- Reservoir users
  - Canal Corporation
  - Power plants

Risk Reducers

- 18 communities/130,000 people strong
- Not-for-Profit Organization to control rates
- Only Water Focused
- Winner of the GFOA Award
- Created under the NYS Public Authorities Law
Water Improvement Program

Source Projects

Distribution Projects
Water Distribution System Improvement Options

1. Russell Park Tank Improvements
2. 4" Water Main Replacement
3. Looping/Dead-End Improvements
4. Valve Replacements (50%)
5. Replace Village Water Meters
6. Replace ~25% of Village Water Services (Lead and/or Leaking)

Total Construction Costs: $16,900,000 (2018 dollars)
Funding Options...

- **Best Funding (Scenario 4)**
  - Financing: Hardship through EFC (0%) for the first $14,000,000 and subsidized (1.99%) for remaining cost
  - WIIA grant for up to $3,000,000
  - CDBG grant for up to $750,000
  - USDA RD grant for up to $500,000
  - Contribution from MVWA
  - Contributions from other users

- Every $1,000,000 will reduce user costs by $13 per year
Funding Steps...

- **Future User Costs**
  - Annual O&M increase ~$200-300/year
  - Annual Debt Payment increase ~$345/year

- **Goal is $20,000,000 in Grants**

- **Critical Funding Strategy Dates/Milestones:**
  - DWSRF Hardship Deadline: March 2019
  - 2019 CFA: late July 2019
  - Round 5 WIG: ~late August 2019
Timeline for Process

Agreement Discussions with MVWA Board
- Ongoing Communications
- Formalize Request for Partnership...ASAP

SEQR
- Full Environmental Assessment (3 months)
- Negative Declaration (1 months)

Bonding/Funding
- WIG summer 2019
- CFA summer 2019

Design/Bid/Construction
- Design ~2019‡ 2020
- Construction ~2020‡ 2022
The experience to listen
The power to solve™
BartonandLoguidice.com