

The slide features a background image of a large, calm body of water, likely a lake or reservoir, under a clear blue sky. The water is a deep blue-grey color, and the sky is a light, clear blue. In the distance, there are low, rolling hills or mountains with some sparse vegetation. A small boat is visible on the water in the middle ground. The text is centered on the slide.

Regional Wastewater Treatment Plant Update

August 20, 2015

Joint Project Committee

Villages

- Two voting representatives each from Watkins Glen and Montour Falls boards
- One non-voting tie breaker from Dix or Reading
- JPC decisions must be ratified by both village boards
- JPC chairmanship rotates every two years

Plant Supervisor

- To be hired and supervised by the JPC
- Ex-office member of JPC

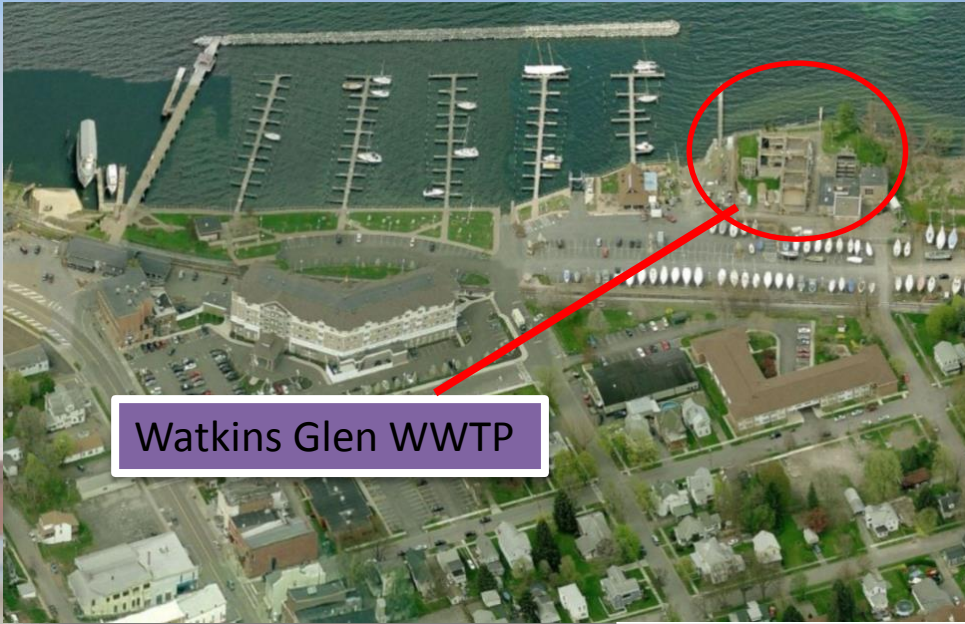
Project Manager

- Hired by the JPC

Sharing of Costs and Grants

- All capital costs, including planning, permitting, design, construction, asset management plan, start-up and testing, legal, accounting, audit and ordinance development fees and related grants shall be shared according to formula based upon EDU's
- Similarly, costs associated with fees to acquire and process grants and any pre-IMA costs shall be shared, where these costs are not covered elsewhere
- Potential reimbursement to SCOPED for economic development purposes in the two Villages, if feasible
- Legal costs incurred independently by the Villages would not be shared

Treatment Plant Situation



Watkins Glen WWTP

In Watkins Glen -

- 50-yr old WWTP is inefficient, unreliable and at the end of its useful life, excessive collection system inflow/infiltration costs
- 118 SPDES Permit Violations resulting in 2012 NYSDEC Consent Order
- Escalating capital and O&M costs
- Outfall in close proximity to beach and water intake

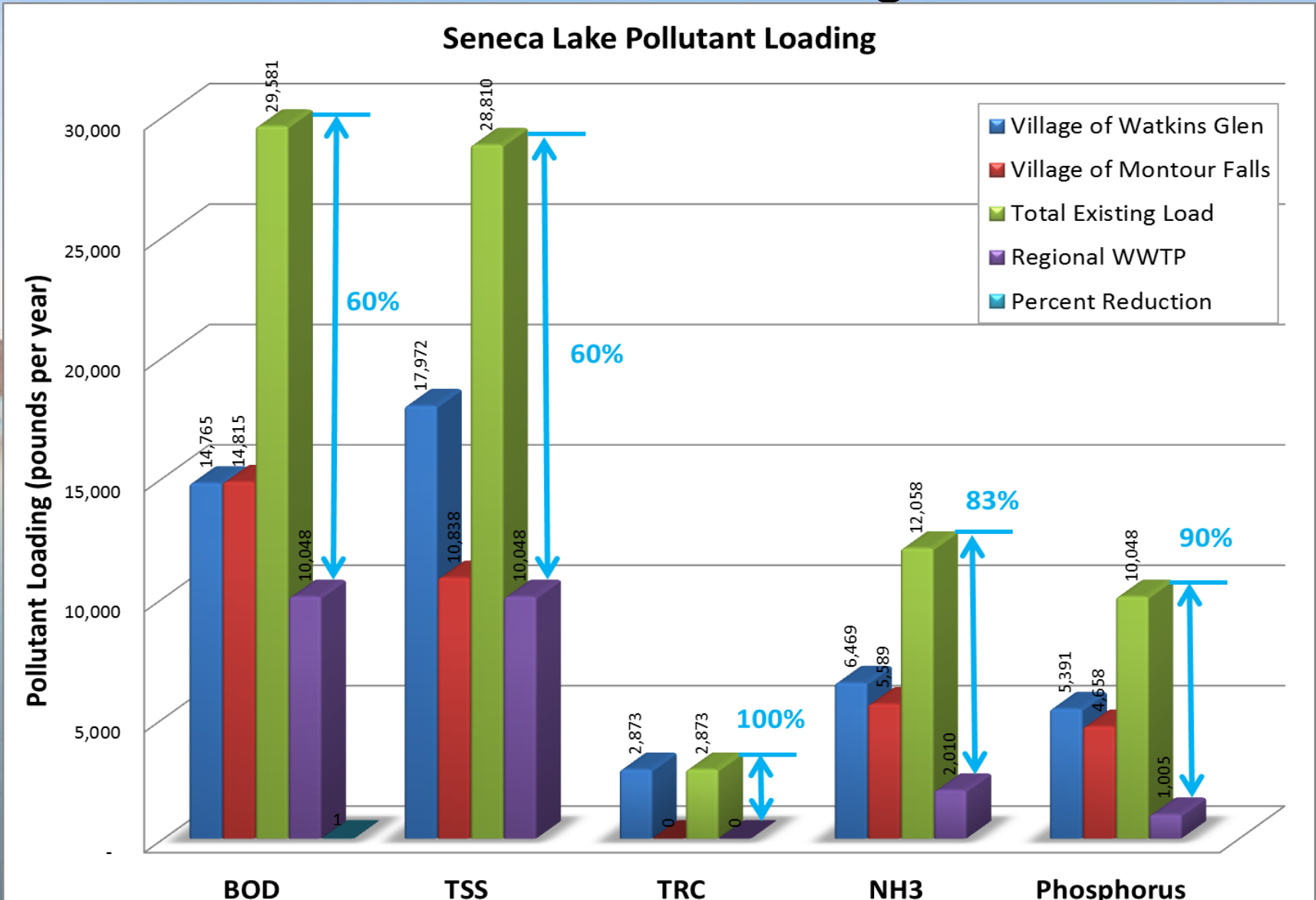
In Montour Falls -

- 50-yr old WWTP - inefficient, unreliable and at the end of its useful life, excessive collection system inflow/infiltration
- 76 SPDES Permit Violations resulting in “marginal compliance” with a Consent Order imminent
- Escalating capital and O&M costs



Montour Falls WWTP

WWTP Loading to Seneca Lake



What are alternatives for Montour Falls?

Alternative A – Upgrade Existing

- Total Capital Cost = \$2.54 million
- Annual O&M = \$167,800

Alternative B – New WWTP

- Total Capital Cost = \$5.87 million
- Annual O&M = \$350,000



Alternative A does not include future replacement costs

What are alternatives for Watkins Glen?



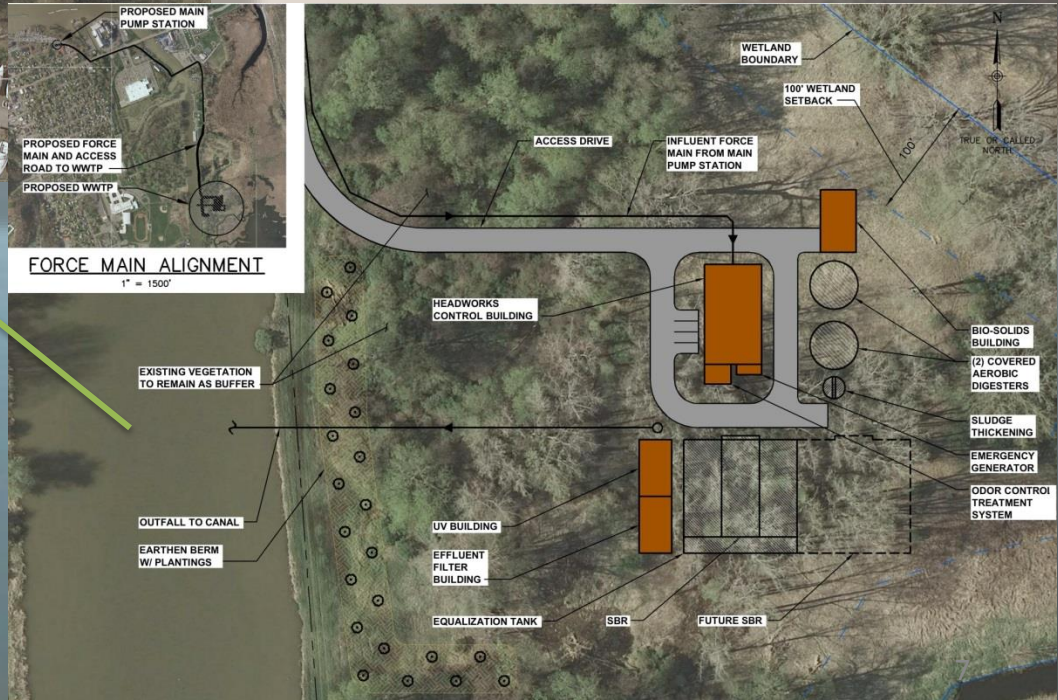
Alternative A – New WWTP on Lake

- Total Capital Cost = \$8.72 million
- Annual O&M = \$537,300



Alternative B – New WWTP on Canal

- Total Capital Cost = \$16.7 million
- Annual O&M = \$573,300



Proposed Regional WWTP at Historic UDS Site



Alternative C – Regional WWTP

- Total Capital Cost = \$24.7million
- Annual O&M = \$674,300
- Includes decommissioning existing WWTPs, construction of new pump stations & force mains

What are the overall costs per EDU?

	Projected User Fee for Individual Alternatives	
	Annual	Monthly
Village of Montour Falls <i>Alternative A</i>	\$452	\$38
<i>Alternative B</i>	\$779	\$65
Village of Watkins Glen <i>Alternative A</i>	\$514	\$43
<i>Alternative B</i>	\$651	\$54
Regional Approach	\$660 (\$575)*	\$55 (\$48)*

**USDA/EFC Guidance Based Upon Median Household Incomes - \$575 annual or \$48/month (target with grant funds)*

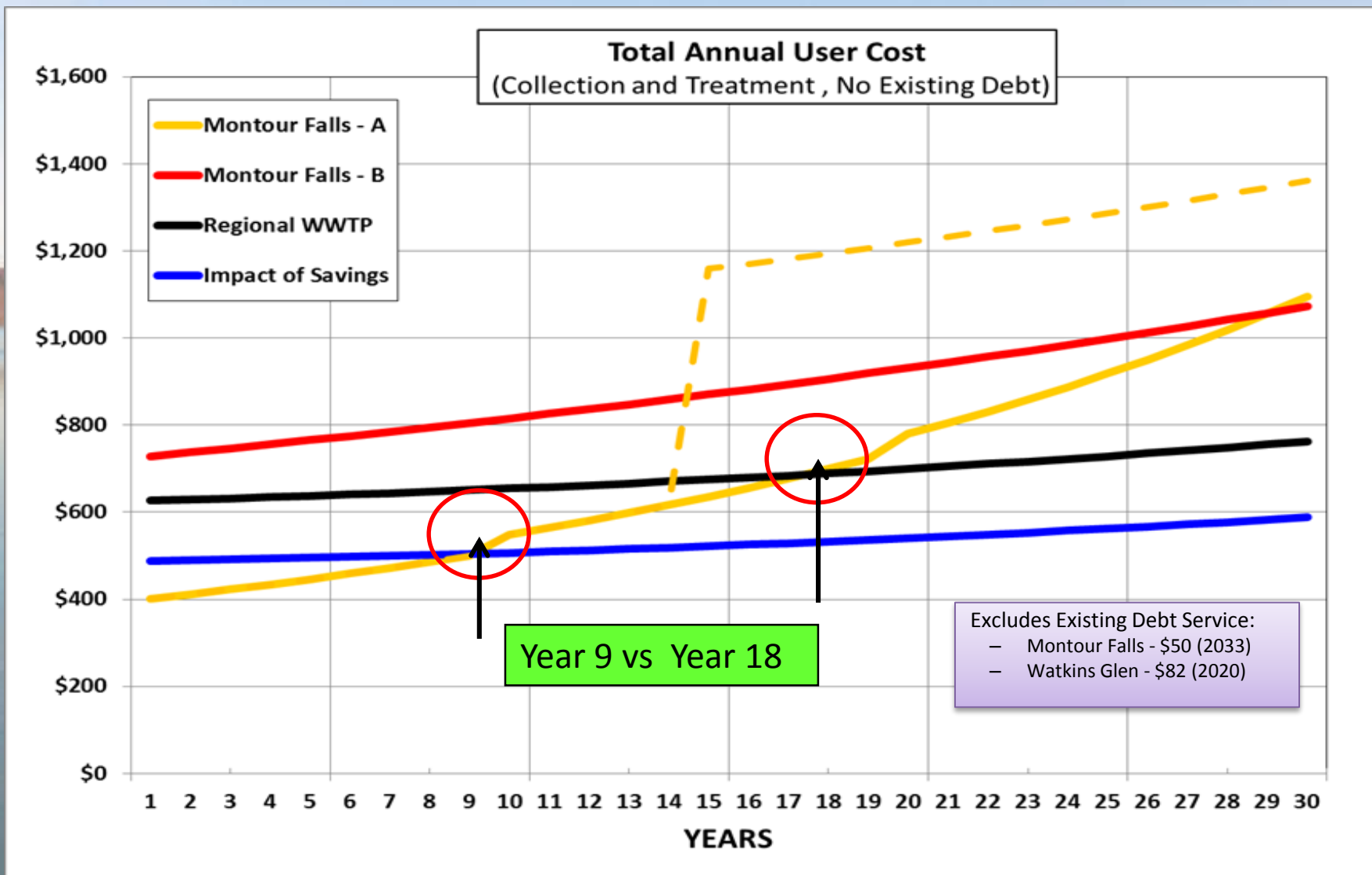
Existing User Charges (WG):	\$389	\$33
Existing User Charges (MF):	\$260	\$22

Includes Existing Debt Service:

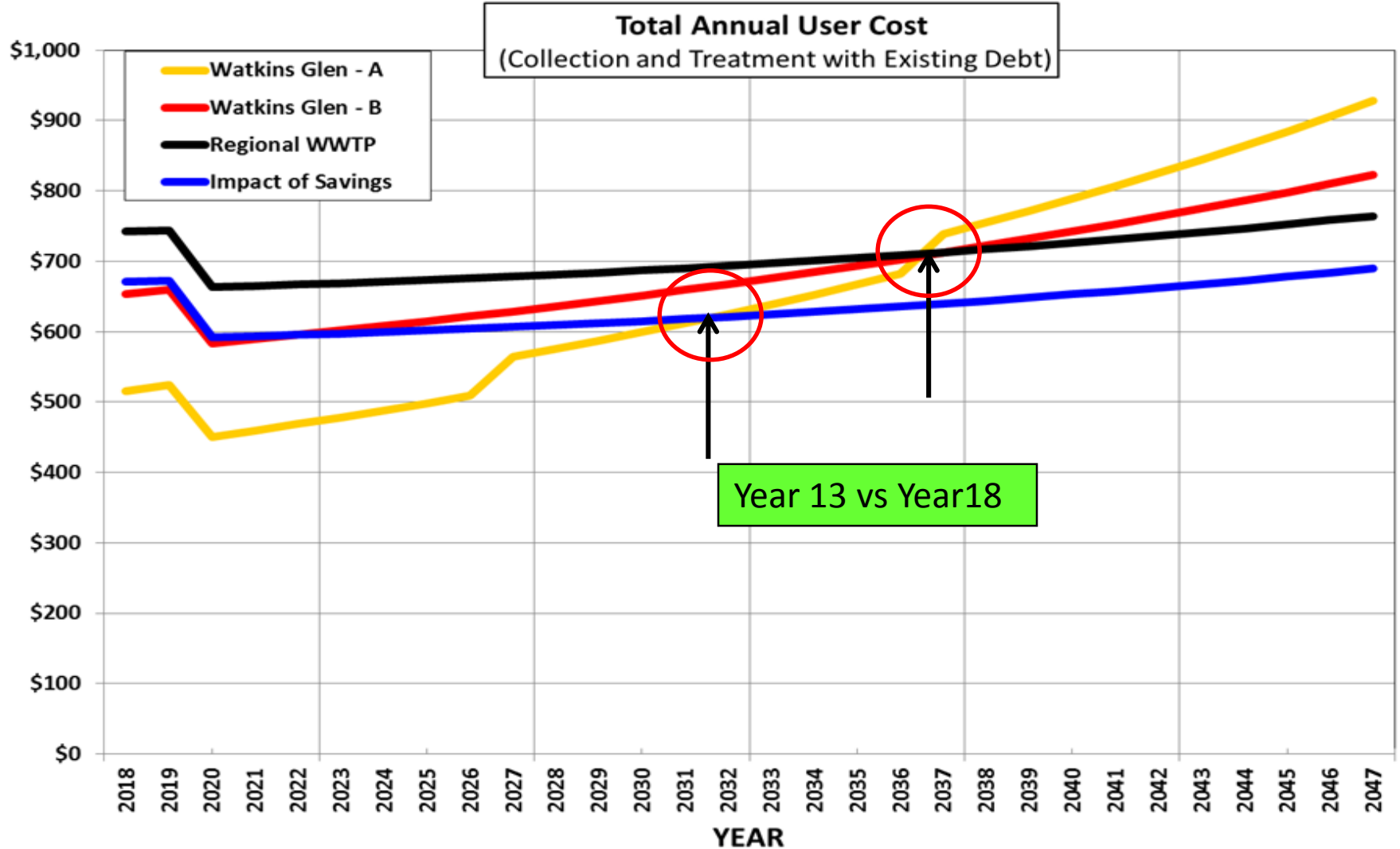
Montour Falls - \$50 (2033)

Watkins Glen - \$82 (2020)

Stabilizing costs over the long-term – Montour Falls



Long-term view – Watkins Glen



Regional WWTP Site Alternatives Analysis: *Site Criteria*

Environmental

- Wetland Impacts
- Critical Environmental Areas/Wildlife Management Area
- Air Quality/Odor impacts
- Accessibility/Traffic Impacts
- Receiving Waterbody/SPDES Limits
- Flood Plain/Flood Way Impacts
- Noise & Visual Impacts

Economic

- Capital/O&M Costs -Funding
- Land Use Compatibility
- Site Acquisition
- Site Area - Future Plant Expansion
- Constructability
- NYS Canals UDS Impacts
- Canal Crossing - Influent Force Mains
- Outfall Distance

WWTP Site Alternatives Analysis: *Selected Site*



~~Site No. 3 – Village
Rec. Center/Ballfield~~

Not available for acquisition

~~Site No. 6 – Lusk
Property~~

Proximity to Residential Use

~~Site No. 1 – Cargill
Property~~

Not available for acquisition

Site is too small

~~Site No. 4 – Rock
Cabin Road~~

~~Site No. 2 – Active
UDS 6-25~~

Exceeds funding threshold

Site No. 5 – Historic
UDS 6-25H

~~Site No. 7 – Gates
Farm Site~~

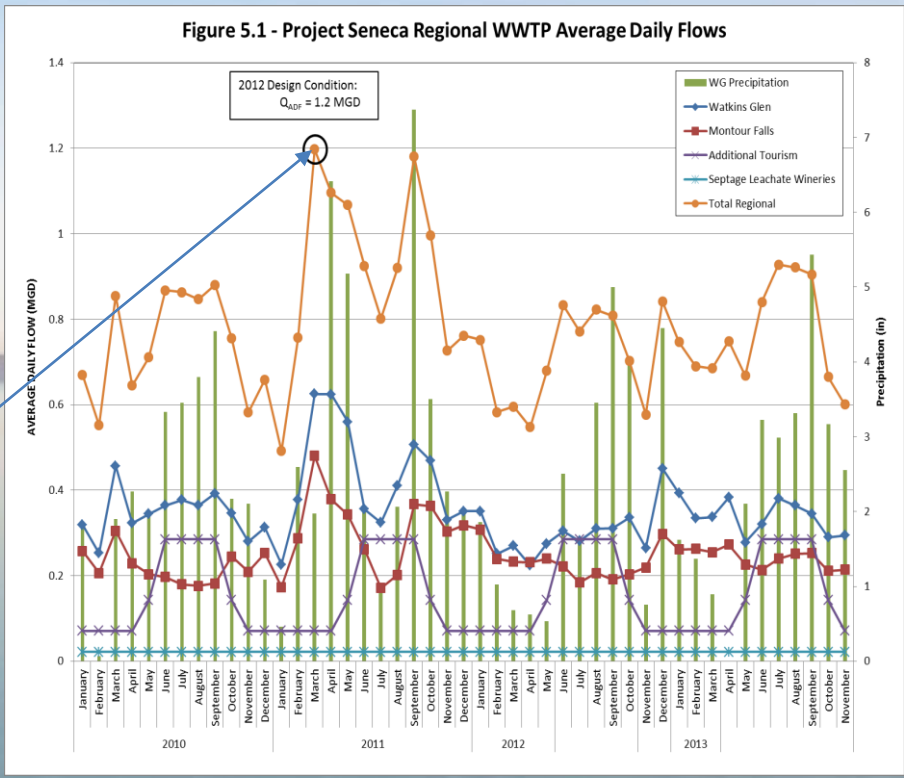
**Exceeds funding threshold/
Trout breeding stream**

Regional WWTP Capacity Analysis

Source	Design (MGD)	
	Annual Average	Max Month
Montour Falls	0.249	0.367
Watkins Glen (incl. WGI)	0.354	0.507
Projected Growth	0.197	0.326
Totals	0.8	1.2

“Max Month” provides 33% growth opportunity for future and is used to size treatment process.

Peak Hourly Flow (5.1MGD) reflects impact of wet weather and is used to size hydraulic throughput (pipes, pumps, etc.)



Average Daily Flows measure impacts of demand from Watkins Glen and Montour Falls; precipitation; future growth; and septage leachate and process waste from area wineries

Inflow/Infiltration Reduction Watkins Glen & Montour Falls SSES

ERIE COUNTY SEWER DISTRICTS (ECSD) Inflow & Infiltration (I&I) Sources

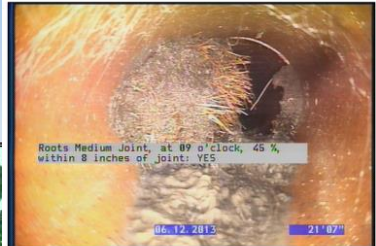
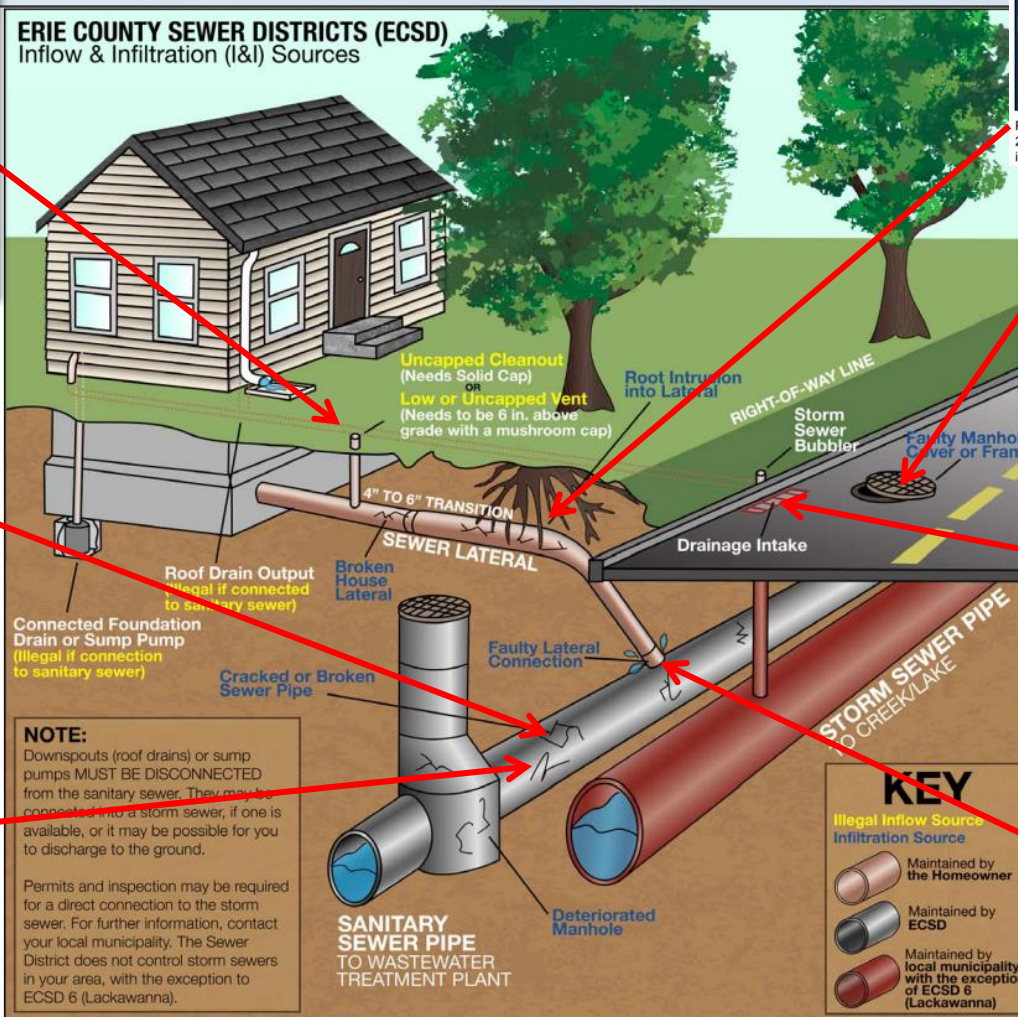


Photo: 3_3_18_A.JPG, Media No.: 120613_1, 00:03:50
21.6FT, Roots Medium Joint, at 09 o'clock, 45 %, within 8 inches of joint: YES



Photo: 20_20_172_A.JPG, Media No.: 120613_1, 00:04:37
114.65FT, Tap Break-Intruding, at 02 o'clock, 4", 2", within 8 inches of joint: YES

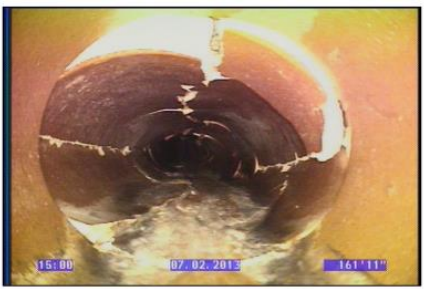


Photo: 47_47_677_A.JPG, Media No.: 120613_1, 00:13:23
161.9FT, Collapse Pipe Sewer, 40 %

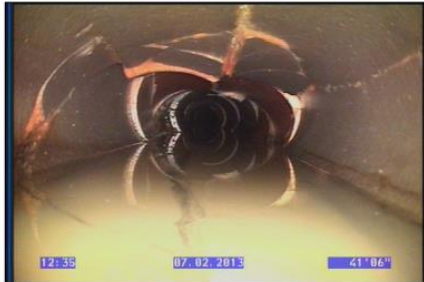


Photo: 45_45_605_A.JPG, Media No.: 120613_1, 00:05:16
41.5FT, Collapse Pipe Sewer, 50 %

I & I Reduction Economic Challenge

- Cost to address initial priorities is ~\$1.8 million for each Village
- This cost is spread over 2,183 equivalent discharge units (EDU's) in Watkins Glen, and 896 EDU's in Montour Falls
- This results in a \$60 annual cost per Watkins Glen EDU, while the Montour Falls annual cost will be \$140 per EDU
- We are trying to address this gap by positioning Montour Falls for a higher Rural Development grant and a CDBG grant

SEQRA: Minor Impacts on Wetlands, Critical Environmental Area and Bird Sanctuary

No wetland impacts at WWTP



Watkins Glen Force Main
directional drilled under Canal

0.22 acres of permanent,
unavoidable impacts

Implications of Eagle Nest

- No direct impacts to nest
- Staging of site preparation activities to occur in non-breeding season (September to December) through 2016
- Geotechnical and survey work, plus construction of alternative nesting platform completed in Fall 2014
- Site preparation will include screening of the WWTP site from the nest
- Eagle expert (Peter Nye) retained to develop and assist with implementation of this plan
- Impacts on the nesting pair will be monitored and other eagle habitat conservation activities will be considered as the project proceeds

Project Plan: Two Critical Paths Going Forward

Funding:

Close on EFC hardship financing (up to \$25 million); secure \$6 million in grants to make projects economically feasible

Permitting:

Must be able to accomplish water quality benefits at a feasible cost level (\$29.9M*)

* Includes funding for regional WWTP, Watkins Glen plant demolition and I&I work in both Villages

Milestones	Timing
Secured CFA grants for total of \$1.8M	Completed
Submit app. for EFC 0% financing; close	2/15;9/15
Submit app. for CWRSF grant totaling up to \$5M	September 2015
Obtain PFE's for up to \$1.25M in RD USDA grants for sewer rehabilitation	Early 2016

Milestones	Timing
Interim Permits– Installation of Platforms/Geotech Work; Site work in Fall 2016	Completed for Fall 2014; Oct.-Dec. 2016
Joint Application for Permit: <ul style="list-style-type: none"> • Wetland • SPDES • Eagle Permit 	1/2015-6/2016
Begin Year Around Construction	January 2017
End Construction	December 2018

Current Project Status

Milestone	Timing
Public/Private Partnership Established (Project Seneca)	2/2012
Preliminary Engineering Report Completed	8/2012
Watkins Glen Collection System Study Completed	8/2013
EFC Funding Hardship Determination Obtained	10/2013
Public Information Meetings #1 and 2	12/2013
Memorandum of Understanding Completed (WG and MF)	1/2014
Public Information Meeting #3	2/2014
Inter-Municipal Agreement Completed (WG and MF)	6/2014
Montour Falls Collection System Study Completed	8/2014
County Adopts Long-term Plan for Sales Tax Sharing	11/2014
\$1.8 Million in Grants Awarded to Support Design Process	12/2014
Public Information Meeting #4	1/2015
SEQRA Negative Declaration Completed	1/2015
Bond Resolutions Approved for Entire Project Financing	1/2015
Application to Environmental Facilities Corporation Submitted	2/2015
BAN's approved and funded by each Village to initiate Design	8/2015

Benefits of Proposed Plan

Environmental

- Soft start minimizes or avoids impacts to eagles
- Eliminates 2.5 years of loading to Seneca Lake:
 - 50,000 lbs of BOD/TSS
 - 7,250 lbs of Chlorine
 - 25,000 pounds of Ammonia
 - 22,500 pounds of Phosphorus
- Mitigates all other environmental impacts

Economics

- Eliminates continued operation of aging WWTPs
- Saves \$1.5 M by eliminating repeat mobilization and inflation of construction costs.
- Stays within EFC hardship financing limit (\$25 million max.)
- Maintains momentum related to grant support
- Achieves targeted cost per EDU



Funding Outlook

- EFC application for \$24.7 million submitted (hardship eligibility for up to \$18 million in 0% interest financing with remainder at market)
- CFA grants totaling \$1.8 million awarded to support design and permitting costs
- Rural Development grants of \$500,000 for each Village for collection system rehab in process, plus potential additional RD grant of \$250,000 and \$600,000 CDBG grant for Montour Falls to close gap on I&I driven user fees
- Leaves need to secure an additional \$3.2 million or more to achieve per EDU target for both Villages
- Recent announcements related to Clean Water grant funding, shovel ready status of project, and support from EFC officials suggest that this is feasible
- However, we are experiencing problems getting grant funding awarded in place