

**Date:** April 27, 2016

**To:** John LaGorga – GHD Consulting Engineers

**From:** Richard N. McCarthy—Environmental Capital LLC  
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**Re:** Restoration and Rehabilitation of the Binghamton-Johnson City Joint Sewage Treatment Plant

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Environmental Capital prepared a Financial Capability Analysis (“FCA”) for each of the cities, towns and villages (“Municipal Users”) serviced by the Binghamton-Johnson City Sewage Treatment Facilities (BJCJSTF) operated by the Binghamton-Johnson City Joint Sewage Board (the “Board”). The Binghamton-Johnson City Joint Sewage Treatment Plant (the “Treatment Plant”) is owned by the City of Binghamton and Village of Johnson City. FCAs were originally prepared in 2011 to evaluate the Board’s proposed initiatives effect on the Municipal Users. They have been updated in response to the DEC’s request for additional information regarding the Restoration and Rehabilitation Plan (“R & R Plan”) of the Treatment Plant to reflect revised costs.

The FCAs were performed using guidelines and methodology set forth by the United States Environmental Protection Agency (EPA) in a February 1997 publication entitled “*Guidance for Financial Capability Assessment and Schedule Development.*” The FCAs may be used to assess whether the additional costs of implementing the R&R Plan imposes significant burdens on the residents of the Municipal Users.

An FCA was prepared for each of the following Municipal Users: City of Binghamton, Village of Johnson City, Town of Vestal, Town of Kirkwood, Town of Dickinson, Town of Union, Town of Binghamton, Village of Port Dickinson, Town of Conklin, and the Town of Fenton. Binghamton University, Vestal Campus, while tributary to the BJCJSTF, does not bill individual residential users as the Municipal Users do; therefore, an FCA was not prepared.

The EPA FCA methodology relies on a combination of two phases to assess the ability of a Municipal User to take on additional wastewater costs: the first phase develops a “Residential Indicator” for the average household within the Municipal User service area and the second phase develops a “Permittee Financial Indicator” for each Municipal User. The two indicators, together, determine the Financial Capability Matrix Category for a given Municipal User.

## Phase I: Residential Indicator

The Residential Indicator is the ratio between the respective projected cost per household (“CPH”) of wastewater costs and the median household income (“MHI”) for residential units within each Municipal User. It is one of the most important indicators of the ability of individual households to pay higher wastewater rates and for the residents to incur additional costs. For each Municipal User an FCA was prepared calculating the Residential Indicator under two scenarios: 1) Residential Indicator reflecting current costs and 2) Residential Indicator reflecting future costs

### Current Wastewater Costs

In order to develop the Residential Indicator, it was necessary to develop an accurate assessment of the current costs to residents for wastewater services. Current wastewater costs for each Municipal User were determined from the 2014 fiscal year end annual billings from the BJCJSTF and the Municipal Users’ operating and maintenance costs and debt service costs for the fiscal year ending 2014. At the time of the analysis, final annual billings from the Board and financial data for the Municipal Users for the fiscal year ending 2015 were not available.

### Future Wastewater Costs

In order to develop a Residential Indicator reflecting future wastewater costs, cost increases due to the R & R Plan of the plant, future capital programs, future debt issuance, and any expected increase in O&M were estimated. These costs were added to current wastewater costs to determine future wastewater costs. The current wastewater costs were not adjusted for inflation.

The additional capital program costs and increases are attributable to:

- 1) Capital and O&M costs for the R&R Plan were estimated (This includes \$200 million of bonds issued through New York State Environmental Facilities Corp. over 30 years at 2.5%);
- 2) Municipal User specific capital projects,

## Phase II: Permittee Indicator

The Permittee Indicator evaluates each Municipal User's financial capability. The six components of the Permittee Financial Capability Indicator specifically evaluate the debt, certain economic statistics (see below) and financial conditions of each Municipal Users' service area. The Permittee Financial capability Indicator characterizes each Municipal User's financial capability as "weak", "mid-range" or "strong". The six components are the following:

1) Bond Rating

Source: The most recent bond rating was used. If no bond rating was available, this component was not factored into the analysis as per the EPA's methodology.

2) Overall Net Debt as a Percentage of Fair Market Value of Property

Source: Recent bond issues, recent continuing disclosure documents and 2014 financial data from the New York State Office of the Comptroller

3) Unemployment Rate

Source: New York State Department of Labor. If the unemployment rate for a Municipal User was not available, Broome County's unemployment rate was used as per the EPA's methodology.

4) Median Household Income

Source: 2009-2014 American Community Survey, U.S. Census Bureau

5) Property Tax Revenues as a Percentage of Fair Market Value of Property

Source: Recent bond issue disclosure, recent continuing disclosure documents and 2014 financial data from the New York State Office of the Comptroller

6) Property Tax Collection Rate

Source: The Municipal Users' tax collection is made whole by the County; 100% collection rate was used.

Conclusions of Analysis

The table below displays the FCA results. The most telling indicator of the increased burden on the Municipal Users is the percentage increase in sewer costs per household. The increases in sewer cost per household range from 54% to 118%. Please note that most of the Municipal User residents billing statements include both the water and sewer charges as a combined bill. The increases below are attributable *only to the sewer portion of the bill.*

	Burden Level with Current Costs	Burden Level with Future Costs	Percent Increase in Cost per Household (Sewer Costs)
<b>Municipal Entity</b>			
City of Binghamton	Medium	Medium	84%
Village of Johnson City	Low	Medium	92%
Village of Port Dickinson	Medium	Medium	62%
Town of Binghamton	Low	Medium	78%
Town of Conklin	Low	Low	78%
Town of Fenton	Low	Low	79%
Town of Dickinson	Low	Medium	62%
Town of Kirkwood	Medium	Medium	77%
Town of Union	Medium	High	118%
Town of Vestal	Low	Medium	54%