

**Report On
The Onondaga County
Department of Water Environment Protection
Sanitary Sewer Operation and Maintenance Service Charges
to Towns and Villages
By Onondaga County Comptroller Martin D. Masterpole
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SECTION I

INTRODUCTION AND EXECUTIVE SUMMARY

Introduction

Onondaga County Department of Water Environment Protection (OCDWEP) entered into inter-municipal wastewater agreements with Onondaga County towns and villages to perform routine maintenance to ensure the public sewers owned by the municipalities remain operational. This service is performed by OCDWEP as the towns and villages do not have the personnel, equipment and materials or expertise to perform the required inspections and maintenance.

Historically, the billing process and the municipalities' budgeting process have resulted in a two year return for services provided.

During the preparation of the 2018 inter-municipal wastewater agreements OCDWEP used 2018 budget figures to develop a current rate, which significantly increased the previous rates in the past agreements. This caused various municipalities refusing to sign their agreements.

This resulted in certain public officials including town supervisors and the Chairman of the Onondaga County Environment Protection Committee to request the Comptroller's Office perform an audit of the annual statements of charges to towns and villages located within the Consolidated Sanitary District for reimbursement of direct costs of sanitary sewer operation and maintenance services provided by the County to these municipalities.

Executive Summary

Blasland, Bouck & Lee, Inc. (BBL) Environmental Consultants performed the analysis of labor, equipment and overhead expenditures and revenues associated with the services provided by OCDWEP to its various municipal clients based on discussions with Flow Control Staff in 2006. We understand OCDWEP Management discussed the Sewer Fee Rates in 2007 proposed by BBL and then put them into effect in 2008. These rates remained the same through 2013. The rates were then increased with an inflationary factor of 2% in 2014 and 2016 and stayed the same in 2017. These stagnated service fee rates have been used to charge towns and villages instead of actual labor, overhead and equipment/vehicle costs per hour.

BBL's initial calculation included an administration charge and then after discussion with OCDWEP personnel it was removed from the fee structure.

OCDWEP's Flow Control Division is responsible for determining the sewer maintenance fees, inputting work orders and preparing the bills.

OCDWEP's Fiscal Office prepares invoices and billing packets to the municipalities and processes all expenses and revenues in the County's financial system.

OCDWEP indicated employees assigned to Flow Control provide the majority of the work to the municipalities, of the estimated 1,350 miles of public sewers, municipalities own 1,058 and the County owns 300 or a respective 78% to 22% ratio.

OCDWEP employees assigned to Flood Control provide the majority of the work on County property and occasionally work on municipality property. OCDWEP indicated roughly 3% of their time is spent on municipal work and 97% should be assigned to County work.

The above percentages were used to allocate other than personal service costs which could not be specifically identified to County or municipal work.

Various other County departments have a direct or indirect relationship with the sewer maintenance fee, such as the Law Department, (prepares the Inter-municipal Wastewater Agreement); Purchasing (supplies & materials) and Comptroller's office (pays the invoices, processes the payroll, etc.).

We followed BBL's methodology in our cost determinations.

We included additional costs such as, administration estimation, indirect cost charges and employee liability Insurance.

Over the course of the audit we found the following:

- * There is a two year lag in services performed and funds received.
- * Administrative, insurance and indirect costs were omitted from the fee calculation.
- * Overhead costs were not allocated between County and municipal services.
- * Hourly rates were determined based on grouping titles at the highest step.
- * One rate was used in estimating a fringe benefit cost.
- * The 2018 sewer unit fee schedule rates were not significantly over stated.
- * 2017 fees were understated as compared to actuals and the billing rate used.
- * United States Environmental Protection Agency (EPA) report addresses issues with OCDWEP's Inter-Municipal Agreements (IMAs).

Our recommendations include:

- * Consideration should be given to implementing a catch up plan and billing on a current basis.
- * Omitted costs should be factored into the rates.
- * Costs classified as overhead should be allocated between County and municipalities.
- * Consideration should be given to using actual salaries and fringes respective of the employee.
- * Consideration should be given to implementing an adjustment to actual in the billing process.
- * Consideration should be given to revising the IMA's to comply with the issues addressed in EPA's report.

SECTION II

BACKGROUND, SCOPE & METHODOLOGY

Background

OCDWEP contracted with BBL Consultants in 2006 to determine a methodology and rates to charge municipalities for sewer maintenance services. The major components of the rate were labor, equipment and overhead. It was our understanding Plumbing Control was being transferred from the Health Department and a new permit fee needed to be determined. Therefore, OCDWEP's administration decided it would be beneficial to revisit the Sewer Maintenance Fee Structure as well. The evaluation would provide an auditable fee structure which would enable the department to equitably recover costs incurred for sewer maintenance, inspection, and pump station maintenance performed by County work forces on non-county owned systems, without generating a profit.

Historically, the County has billed municipalities since 1970 for the above services.

Onondaga County passed the following resolutions regarding maintenance/operation of public sewer systems:

On August 5, 1974 the Onondaga County Legislature by Resolution Nos. 320 and 321 authorized the Onondaga County Executive to enter into contracts with Towns and Villages for the maintenance and/or operation of the Towns' and Villages' sewers or sewage systems.

On April 3, 1989, the Onondaga County Legislature adopted Local Law No. 13, to amend "the Onondaga County Rules and Regulations relating to the Public Sewer System to mandate inspection of properties prior to sale and affidavits attesting that the subject property has no roof drains and /or sump pump connections to the Onondaga County Sanitary Sewer Systems."

On December 21, 2010, the Onondaga County Legislature adopted Local Law No.1 of 2011. It is "A local law establishing a program to promote capacity management, maintenance and operation of the public sewers and related purposes, and to repeal local law no. 13 of 1989."

Section 3-specifically relates to the municipalities, as follows; "The Onondaga County Sanitary District owns, operates and maintains an extensive network of trunk and interceptor sewers and treatment plants within the territorial jurisdiction of the District. The District's ability to effectively manage the District sewer system is affected by the proper maintenance of tributary sewer systems owned and operated by municipalities within the District that collect sewage and other wastewater and discharge it to the District facilities. The District's ability to effectively manage the District sewer system is also affected by the proper maintenance of sewer laterals, which is the responsibility of the users of the District sewer system, and publicly owned sewers not owned by the District, but that are tributary to the District system."

Section 21 authorizes the County Executive to enter into agreements to assure that maintenance and operation of publicly owned sewers owned by municipalities within the District conform to the provisions of this law.

It is our understanding OCDWEP increased the original rate periodically by 2 percent as compared to using actual costs and started to request municipalities to develop a six year capital improvement plan. Then in 2018 OCDWEP increased the sewer maintenance rates to reflect current costs, which was a significant increase from prior years. These actions caused municipalities to refuse to sign their agreements.

Internal Audit (I/A) with the assistance of OCDWEP's Sewer Maintenance Superintendent applied BBL's methodology to 2017 actual costs to determine an overall hourly rate for each respective direct labor employee.

Scope

The purpose of this audit was to ascertain if sanitary sewer operation and maintenance service charges to towns and villages were reasonable and enough to allow the county to recover actual costs incurred, as well as, determine if bills/receipts of payments from local municipalities has had a negative/positive impact.

The objectives of this audit were to:

- Review costs associated with providing these services.
- Review the work order process and billing methodology.
- Provide OCDWEP Management with information and recommendations related to sanitary sewer operation and maintenance services fees processes and procedures to improve internal controls, effectiveness and efficiency.

Methodology

In order to complete our objectives we:

- Reviewed and obtained an understanding of the BBL's methodology and applied it to 2017 actual costs.
- Obtained an understanding of OCDWEP's working environment respective of Flow and Flood activities to assist us with our cost allocation between the County and municipalities.
- Reviewed and inquired with OCDWEP management on the reasonableness of the various accounts and their inclusion or omission in the rate calculations.

- Reviewed and included accounts as deemed appropriate which were omitted from the rate as calculated by OCDWEP.
- Reviewed numerous claims and specific account charges to ascertain their respective nature and reasonableness of inclusion or omission in the overhead calculation.
- Determined the reasonableness of the rates charged on randomly selected 2017 work orders as compared to rates determined by Internal Audit based on 2017 actuals.
- Determined 2017 actual salaries and fringe benefit costs (union/non-union information, retirement and health/dental information) by utilizing the Genesys Payroll System and the Employee Benefit Calculator.
- Determined 2017 vehicle and equipment costs using the United States Army Core of Engineers (USACE) schedules and purchase orders for supporting documentation to the information provided by OCDWEP.
- Reviewed work order internal and data processing controls.

SECTION III

FINDINGS & RECOMMENDATIONS

- A. The current billing process allows for a two year lag, whereby services provided throughout 2017 will be billed to the municipalities around April 2018. The municipalities will then factor in this cost into their tax charges for 2018 and repay OCDWEP with those tax revenues in 2019. Any changes to the current process, such as implementing a catch up plan or billing on a quarterly basis then adjusting to actual will have an impact on the tax payers of these municipalities. This is a recurring issue addressed in the 2007 Audit Report.

Presented below are five municipalities with the highest 2017 sewer maintenance service bills and the estimated effect on taxpayers for each respective increase using 2018 tax data on \$100,000 of assessed value.

Estimated Tax Increase per \$100,000 of Assessed Taxable Value Using 2018 Tax Data					
Amount of Increase	Camillus	Cicero	Clay	Dewitt	Salina
\$ 100,000	6.47	4.87	3.04	4.21	6.65
\$ 200,000	12.94	9.73	6.08	8.42	13.29
\$ 300,000	19.41	14.60	9.12	12.62	19.94
\$ 400,000	25.88	19.46	12.16	16.83	26.59
\$ 500,000	32.35	24.33	15.19	21.04	33.24
\$ 600,000	38.82	29.19	18.23	25.25	39.88

Recommendation

- We recommend officials from the County Executive's Office, the various municipalities and the OCDWEP discuss any changes prior to altering the current billing process.*

Rate Components

I. Labor

We obtained a listing of over 100 employees providing direct and indirect hours associated with providing maintenance and support services. Utilizing their personal information (retirement

plan, health coverage, etc.) from the Genesys Payroll System and the Employee Benefits Calculator we determined their actual hourly cost to Onondaga County.

II. Vehicles & Equipment

We obtained a listing of various classes of equipment such as a common pick-up truck to a jet/vac truck and utilized the appropriate USACE schedules to determine the hourly ownership and operation & maintenance costs. Certain items did not fit the norm and we had to review purchase orders and other documentation before applying the cost determinations in the USACE schedules.

III. Overhead

Overhead consisted of other non-direct labor employee costs and various other than personal service costs such as materials, utilities, construction supplies and an estimated administrative cost.

Labor Overhead

Indirect labor (salary & fringe) was determined separately for Employees in the Flood and Flow departments.

Flood's Stream Maintenance Supervisor was classified as indirect labor and this cost was spread to the remaining 11 workers based on 250 working days.

Flow Control had various titles, such as, Sanitary Engineer 3, Sewer Maintenance Supervisor, Sewer Maintenance Superintendent, Typist 2, Stock Clerk and Store Keeper classified as indirect and their cost was spread to the remaining 63 workers based on 250 working days plus 3 other employees working 25 days, 150 days and 3 days, respectively.

Other Accounts - Overhead

We reviewed various other than personal service accounts such as construction supplies, automotive, indirect cost and utilities. We also included insurance and administrative costs.

BBL initially had an administrative cost of \$500 for each employee classified. It was later dropped from consideration. On BBL's July 6, 2006 letter, administration included purchasing, payroll, human resources and other administrative services. We included an administrative cost based of \$650 per direct labor worker. This estimation was based on BBL's \$500 inflated 3% for a ten year period ($\$500 \times 1.3 = \650).

Flow Control overhead was allocated based on the estimated 1,350 miles of public sewers, municipalities own 1,058 and the County owns 300 or a respective 78% to 22% ratio. This information was provided by the Sewer Maintenance Superintendent.

Flood Control overhead as indicated by the Sewer Maintenance Superintendent should be allocated 3% to municipal work and 97% to County work.

We reviewed numerous vouchers and line item cost descriptions as detailed from the County financial system with the Sewer Maintenance Superintendent to determine the reasonableness of including or omitting the cost as overhead. Costs were classified as, "All County" "All Town" or "Overhead".

"All County" were costs considered as items which would be placed in inventory and then charged out to a work order and costs having nothing to do with municipalities, such as, repairs to County owned sewer systems or maintenance of green areas in the City of Syracuse or costs associated with work in specific districts (Bloody Brook), etc.

"All Town" is self-explanatory.

"Overhead" were costs which would generally not be charged to a work order and had an impact on both County and municipal work, such as, consumables, utilities, insurance and administration. Cost associated with the Henry Clay Building such as paving, painting, repairs and utilities were first allocated based on square footage and then based on sewer miles. Administration and insurance were first allocated based on employee count and then by sewer miles or Flood's percentages.

Illustrated on the following page are the accounts we included as overhead, approximately \$1,440 out of \$108,733 from Flood and \$581,388 out of \$2,835,750 from Flow was deemed as overhead chargeable to municipalities. Based on the 11 direct employees and 250 working days an estimated Flood daily rate was determined. Based on 63 employees working 250 days plus 3 other employees working 25 days, 150 days and 3 days, respectively, a Flow daily rate was estimated. We used BBL's 250 working days and the Sewer Maintenance Superintendent provided us with the other 3 employee's working days.

Accounts Included as a Component of Overhead

Flood Components

Description	Account #	2017 Amount	Costs Allocation		Rounded amt used in rate calculation
			County	Towns	
Food, Household, Medical & App	650020	\$ 315.20	\$ 305.74	\$ 9.46	\$ 9.00
Construction Supplies	650040	10,319.95	10,154.84	165.11	165.00
Automotive Supplies & Material	650050	27,690.66	27,690.66	-	-
Main & Repairs	663450	5,035.00	5,035.00	-	-
Utilities	663460	3,868.31	3,868.31	-	-
Rents	663470	500.00	500.00	-	-
Program Travel Expense	664050	2,590.50	2,590.50	-	-
Full Cost Portion Of Indirect	664520	8,289.00	8,040.33	248.67	249.00
Reimbursable Indirect Cost A-87	664540	20,930.00	20,302.10	627.90	628.00
All Other Expenses	665000	6,452.05	6,452.05	-	-
Capitalized Furnish & Equip	670100	9,750.00	9,750.00	-	-
Utilities for Henry Clay Building *		1,198.31	1,162.36	35.95	36.00
Insurance - employer's & comprehensive *		4,643.65	4,504.34	139.31	139.00
Administration (11 employees x 650) **		7,150.00	6,935.50	214.50	214.00
Total Flood Control Material Overhead		\$ 108,732.63	\$ 107,291.73	\$ 1,440.90	\$ 1,440.00

Estimated Hourly Material Overhead

\$ 0.52

Flow Components

Description	Account #	2017 Amount	Costs Allocation		Rounded amt used in rate calculation
			County	Towns	
Books, Office Supp & Materials	650010	\$ 1,644.09	\$ 1,239.19	\$ 404.90	\$ 405.00
Food, Household, Medical & App	650020	27,091.65	5,960.16	21,131.49	21,131.00
Construction Supplies	650040	229,729.15	106,839.42	122,889.73	122,890.00
Automotive Supp & Materials	650050	2,019.51	444.29	1,575.22	1,575.00
Other Equipment Replac Parts	650060	58,933.23	57,702.91	1,230.32	1,230.00
All Other Supplies & Materials	650070	9,230.69	2,030.75	7,199.94	7,200.00
Main & Repairs	663450	1,968,554.43	1,904,265.06	64,289.37	64,289.00
Rents	663470	2,000.00	2,000.00	-	-
Program Travel Expense	664050	5,948.25	1,308.62	4,639.63	4,640.00
Full Cost Portion Of Indirect	664520	66,309.46	14,588.08	51,721.38	51,721.00
Reimbursable Indirect Cost A-87	664540	167,444.17	36,837.72	130,606.45	130,606.00
All Other Expenses	665000	39,003.80	26,573.52	12,430.28	12,430.00
Capitalized Furnish & Equip	670100	5,153.00	1,133.66	4,019.34	4,019.00
Utilities for Henry Clay Building *		175,494.01	76,454.21	99,039.80	99,040.00
Insurance - employer's & comprehensive *		30,394.80	6,686.86	23,707.94	23,708.00
Administration (72 employees x 650) **		46,800.00	10,296.00	36,504.00	36,504.00
Total Flow Control Material Overhead		\$2,835,750.24	\$ 2,254,360.45	\$ 581,389.79	\$ 581,388.00

Estimated Hourly Material Overhead

\$ 36.50

* This represents utilities & insurance cost associated with the Henry Clay complex and employee's. These costs are recorded in WEP's administrative department.

** BBL consulting included an administrative cost of \$500 per employee. IA adjusted their amount with a 3% inflationary factor for each of the past ten years (30%) starting with 2007.

The labor and other account overhead amounts were then combined as illustrated below. These rates were added to each direct labor employee respective of Flood & Flow to arrive at an overall employee hourly rate.

Overhead Material & Labor Rate		
Description	Flood	Flow
Material Overhead	\$ 0.52	\$ 36.50
Indirect Labor Overhead	36.66	63.75
Total per Day	<u>\$ 37.18</u>	<u>\$ 100.25</u>
Hourly rate (8 hrs. per day)	<u>\$ 4.65</u>	<u>\$ 12.53</u>
The overhead material & labor rates were added to respective employees hourly and fringe rate to provide an overall hourly rate.		

- B. We noted BBL's initial fee structure calculation per letter dated July 6, 2006 included an administration charge of \$500 per direct & indirect labor employee. However, a letter dated October 30, 2006, BBL indicated the fee structure was revised based on a meeting held with FLOW Control staff on September 20, 2006. The administration component was not part of the October 30th rate calculation. We have factored in an administrative cost of \$650 per direct employee.

Recommendation

2. *We recommend OCDWEP's management consider including an administration cost in the rate calculation.*
- C. We noted OCDWEP's overhead rate as calculated with 2018 budgeted amounts for Flood was \$67.95 and Flow was \$161.90. The accounts used in this calculation omitted utilities, indirect charges and administration. This calculation also did not allocate costs between the county and municipalities based on sewer miles or the indicated Flood percentages.

We also noted OCDWEP's labor rate is based on titles of employee's salaries at the highest salary step plus a fringe benefit factor of 61%. This seems appropriate if it is intended as a means for budgeting purposes, not actual billing.

Recommendation

3. *We recommend OCDWEP assign the responsibility of reviewing and analyzing the overhead accounts for charges which can be classified as overhead and then apply the respective, square footage and employee count and respective FLOOD and FLOW allocation basis prior to its inclusion in the municipal rate when preparing actual bills based on work order activity.*
 4. *We also recommend OCDWEP consider the feasibility of determining each respective employee's actual hourly cost and use these rates in the municipal rate calculation. I/A has provided OCDWEP management with our spreadsheets for future use.*
- D. We observed a mini crane box type truck (Eagle Pro II 2252 Ford F550) in operation at a municipal pumping station, which was not included on OCDWEP's listing of chargeable equipment. The cost of this equipment was \$110,788 and its hourly rate based on the USACE schedule as determined by OCDWEP is \$23.49.

Recommendation

5. *We recommend OCDWEP revisit its sewer maintenance operations to ensure all significant equipment performing municipal work is being appropriately recorded on the work orders and billed to respective municipalities.*

2017 Billed Services Compared to Actual Work Orders

We randomly selected 129 work orders from seven service type codes based on the dollar value of the rates charged on the Sewer Maintenance Fee Schedule to municipalities for billing comparison purposes to the actual hours worked using our estimated hourly rate based on 2017 actual costs. OCDWEP's 2017 rates were based on BBL's methodology and the department periodically increasing the initial rates by 2%.

The selections were made from the following:

- Bucket machine Crew Maintenance (BPM)
- Jet Vacuum Service (JV)
- Locate & Inspect Manhole/Line Inspection (L&I)
- Manhole Repair Service (MHR)
- Pump Station O&M Electrical/Instrumentation (PSE)
- Pump Station Oper/Mtce Mechanical (PS)
- Televised Sewer Main Inspection (TVI).

We utilized data from the work orders and daily activity sheets to obtain the workers and their hours and equipment to estimate the costs of service which should have been charged using our respective estimated employee's hourly rate.

OCDWEP's methodology has been to determine charges based on a set standard of employees and equipment being used without considering deviations in the actual work force used as detailed on the work orders and daily activity reports. It is our understanding the set standard is two workers for an eight hour day. In many cases in our sample, there were more than 2 and up to 5 or more charged to respective work orders.

Using this standard has resulted in both over and under charges in services as presented in the illustration below which provides a summarized total of the selected work orders, the average difference, as well as, a range of the highest to lowest single difference.

Summary Comparison of 2017 Billing to I/A Estimated Actual

Description	OCDWEP Code	# Performed	# Reviewed	Billing Total of Sample	I/A Estimated Bill	Over (Under) Billed	Average Diff
Bucket Machine Crew - Maint	BPM	4	4	2,808.00	8,909.50	(6,101.50)	(1,525.38)
Jet Vacuum/ Flush JVPM	JV	694	30	12,239.50	28,932.72	(16,693.22)	(556.44)
Locate & Inspect Manhole/Line	L&I	1,902	10	2,795.91	3,761.80	(965.89)	(96.59)
Manhole Repair Service	MHR	50	30	12,319.00	25,334.93	(13,015.93)	(433.86)
Pump Station O&M	PS	1,989	30	15,041.04	17,182.12	(2,141.08)	(71.37)
Pump Station O&M Electrical	PSE	581	15	13,575.65	18,116.73	(4,541.08)	(302.74)
Televised Sewer Main Inspection	TVI	333	10	4,140.50	5,276.32	(1,135.82)	(113.58)

Dollar Range of Differences of OCDWEP Billing vs. I/A Est. Bill

Description	Code	Selected Billed Work Orders		Range	
		Total	Over Billed	Under Billed	Over (Under)
Bucket Machine Crew - Maint	BPM	4	-	4	(2,729.35)
Jet Vacuum/ Flush JVPM	JV	30	1	29	(1,940.91)
Locate & Inspect Manhole/Line	L&I	10	2	8	(217.41)
Manhole Repair Service	MHR	30	-	30	(1,816.49)
Pump Station O&M	PS	30	11	19	(444.63)
Pump Station O&M Electrical	PSE	15	5	10	(3,717.25)
Televised Sewer Main Inspection	TVI	10	-	10	(386.10)
		129	19	110	
Percentage of Selected Total			15%	85%	

The range represents the lowest single numerical difference to the highest single numerical difference. ("-", "0", "+" scale)

These illustrations are based on the selected work orders only.

- E. We determined based on our selections, OCDWEP has under billed a majority of their 2017 services to municipalities and the extent varies by service type.

Recommendation

6. *OCDWEP should implement procedures to accurately reflect the actual cost of services in their billings to municipalities.*

- F. We noted the 2017 annual fee of \$312 per municipal pumping station for performing snow plowing classified as Annual Pump Station Site Maintenance (APSM), is insufficient to

cover OCDWEP's costs resulting in an estimated under charge of approximately \$30,300. This is a flat fee and work orders did not need to provide detailed hours or equipment used. We utilized the information provided on the Daily Tracking forms which provided the workers, their hours and equipment used. For the most part, the forms had a generic notation of "pump stations" (not town specific). Based on this information, we estimated there were approximately 630 hours spent on this service with an average of 7 hours per day for 89 worker days. We used a 1.5 FTE (full time equivalent) since at times, only one worker was listed. We estimated an average hourly rate including fringes and overhead of a Sewer Maintenance Worker I & II of \$48 and a pick-up truck with an hourly cost of \$20. We estimated the cost to be approximately \$57,456 (labor of \$44,856 {89 worker days x 7 hrs. x \$48 per hr. x 1.5 FTE} plus equipment of \$12,600 {\$20 per hr. x 630 hrs.}).

Presented below are the municipalities, their number of pumping stations and their respective 2017 fee and the estimated under charge.

2017 Snow Plowing Fee Charged to Municipalities Based on Number of Pump Stations			
Town	# of Pumping Stations	Amount Billed	
Dewitt	18	\$	5,616
Cicero	11		3,432
Lysander	11		3,432
Clay	10		3,120
Manlius	9		2,808
Van Buren	7		2,184
Camillus	6		1,872
Onondaga	6		1,872
Salina	6		1,872
Geddes	1		312
Pompey	1		312
Village of E. Syracuse	1		312
Total	87	\$	27,144
Estimated Actual Cost			57,456
Estimated Under Charge		\$	(30,312)

We were informed detailed hours of performing mowing and other APSM services for municipalities were unavailable. Therefore this cost could not be determined.

We noted the 2018 sewer maintenance fee schedule has changed from the flat fee to an hourly rate.

We were informed House Calls (HC) for clearing blocked sewer lateral lines is a flat rate charge of \$103 per call. Employee hours and equipment usage time, (for example a pick-up truck) are not tracked on work orders, therefore, we were unable to determine the reasonableness of 2017's fee of \$103 per call as compared to an estimated cost using the labor rate we determined as applied to actual hours.

Recommendation

7. *OCDWEP should implement procedures to accurately track respective employee hours and chargeable equipment to reflect the actual cost for all services provided to appropriately determine municipalities' respective costs.*

2018 Sewer Maintenance Rate Schedule

OCDWEP's current methodology in estimating the 2018 sewer maintenance rates was to apply the same principals as BB&L Consulting Services. These hourly rates were based on a status quo of the same number of employees in respective titles and equipment being used on each respective service code. These rates were then charged to the municipalities in either full day or partial day increments. Charges were not adjusted if additional labor or equipment was needed.

OCDWEP's 2018 estimated service rates were based on titles of employee's salaries at the highest salary step plus a fringe benefit factor of 61%. We verified salaries to the union contract. The overhead accounts included were based on budgeted figures. We reviewed and determined the equipment rates were reasonable as calculated.

We estimated 2018 rates using the same labor concept and equipment as OCDWEP. However, we used our estimated overhead based on 2017 actuals as the amounts to factor into the overall hourly rate. We did not apply an inflationary factor. This is presented in the illustration on the next page.

- G. We determined based on our review, OCDWEP's 2018 rates as calculated were not significantly different and represents a fair budgeting tool for municipalities.

Recommendation

8. *OCDWEP should determine the feasibility of providing municipalities with a historical average of their respective service calls as applied to the estimated rates for budgeting purposes. However, going forward it should bill for actual hours based on the number of workers and equipment detailed on the work orders, not on a flat rate schedule.*

**Comparison of Internal Audit's Estimated 2018 Rate
to OCDWEP's
2018 Sewer Maintenance Rate**

Service Code	Unit	2017 Rates	WEP Estimated Rates	Audit's Estimated Rates	Diff.	%
Bucket Machine Service	Day	936.00	1,669.15	1,691.22	(22.07)	-1%
Pump Station O&M Mechanical	Hr	86.00	139.45	126.09	13.36	10%
Pump Station O&M Mechanical After Hours and Weekends	Hr	na	180.58	167.22	13.36	7%
Byass Pumping Service	Hr	98.00	169.27	155.91	13.36	8%
Jet/Vacuum Service	Day	728.00	1,698.94	1,543.49	155.45	9%
Televiser Sewer Main	Day	728.00	1,187.62	1,080.74	106.88	9%
Televiser Sewer Lateral	Hr	86.00	148.45	135.09	13.36	9%
Manhole and Sewer Main location & Inspection	Day	688.00	1,110.39	1,003.52	106.87	10%
Sewer Main Location UFPO	per ticket	15.30	26.47	24.95	1.52	6%
Manhole Repair Service	Day	776.00	1,626.03	1,470.58	155.45	10%
Clear Blocked Sewer Lateral	per call	103.00	169.53	156.18	13.35	8%
Pump Station O&M Mechanical/ Electrical	Hr	93.00	149.70	134.91	14.79	10%
Pump Station service after Hours and Weekends	Hr	na	193.81	180.45	13.36	7%
Tanker Truck service	Hr	69.00	104.26	98.19	6.07	6%
Portable Standby Generator	Day	808.00	1,358.80	1,240.50	118.30	9%
Crane Service	Hr	57.00	126.94	119.85	7.09	6%
Sanitary engineer Service	Hr	51.00	169.68	156.89	12.79	8%
Grounds Maintenance (2 hours or less)	Hr	na	116.57	109.48	7.09	6%
Snow Removal (1 hour or Less)	Hr	na	62.97	59.43	3.54	6%
Standby generator Maintenance	Hr	87.00	139.67	126.22	13.45	10%
Plan Review (Gravity Sewers and One Pump Station)	ea	378.00	385.32	371.88	13.44	3%
Plan Review (Each Additional Pump Station)	ea	230.00	260.20	246.76	13.44	5%
Plan Review (Gravity Sewers Only)	ea	196.00	217.12	217.12	-	0%

Provided on the next two pages for information purposes only is the listing and count of services performed by OCDWEP in 2017, as well as, each municipality's total charge.

**Onondaga County
Water Environment Protection
2017 Count by Billing Code**

Description	Code	2017
Bucket Machine Crew - Maint	BPM	4
Bypass Pump - Portable Pump Inst.	BYP	0
Grease Control - in conj w/ L&I	GC	0
Jet Vacuum/ Flush JVPM	JV	694
Locate & Inspect Manhole/Line	L&I	1,902
Manhole Repair Service	MHR	50
Pump Station O&M	PS	1,989
Pump Station O&M Electrical	PSE	581
Standby Generator Maintenance	SGM	55
Televised Sewer Main Inspection	TVI	333
Televised Lateral Service Inspection	TVL	92
Underground Utilities Location	UFPO	8,732
Grout	GRC	0
House Call	HC	3,102
Tanker Truck Service	TT	0
Standby Generator (portable) Service	SG	0
Engineering & Technical Support Services	ETSS	365
Annual Pump Station Maint.	APSM	87
Crane Service > Five (5) ton	C	0

Unaudited information provided by OCDWEP.

2017
Sewer Maintenance Fees

Municipality	Amount
Clay	\$ 281,798
Dewitt	277,934
Salina	260,045
Cicero	187,364
Camillus	167,500
Lysander	150,795
Manlius	115,708
Geddes	103,888
Onondaga	83,637
Van Buren	79,131
Village of Liverpool	30,201
Village of Solway	17,644
Pompey	13,207
Village of E. Syracuse	12,144
Village Manlius	10,083
Village of Camillus	3,168
Village Marcellus	2,275
Village of Fayetteville	910
Total	<u>\$1,797,432</u>

Provided below and on the next two pages for information purposes only is a three year average of work orders for 2015, 2016 and 2017 by billing code per municipality of OCDWEP's services.

Three Year Average of Work Orders for Services Performed in 2015, 2016 & 2017								
Description	Code	Town of Dewitt	Town of Salina	Town of Clay	Town of Cicero	Town of Camillus	Town of Manlius	Town of Geddes
Bucket Machine Crew - Maint	BPM	4	0	0	0	2	0	0
Bypass Pump - Portable Pump Inst.	BYP	0	0	0	0	0	0	0
Grease Control - in conj w/ L&I	GC	0	0	0	0	0	0	0
Jet Flush	JF	1	3	2	1	1	0	1
Jet Vacuum	JV	89	73	196	92	82	13	18
Locate & Inspect Manhole/Line	L&I	115	189	125	133	121	72	45
Manhole Repair Service	MHR	7	5	7	6	4	4	6
Pump Station O&M	PS	383	124	245	235	134	159	12
Pump Station O&M Electrical	PSE	73	21	67	58	33	33	2
Standby Generator Maintenance	SGM	4	0	9	0	27	0	0
Televised Sewer Main Inspection	TVI	79	48	34	10	44	19	22
Televised Lateral Service Inspection	TVL	20	23	14	10	1	5	17
Underground Utilities Location (DSNY)	UFPO	422	322	0	147	0	281	88
Grout	GRC	0	0	0	0	0	0	0
House Call-work type 97	HC (97)	98	164	128	74	46	24	69
House Call-work type 98	HC (98)	366	557	333	193	248	91	397
Tanker Truck Service	TT	0	0	0	0	0	0	0
Standby Generator (portable) Service	SG	0	0	1	3	0	0	0
Engineering & Technical Support Services	ETSS	32	22	53	19	16	20	10
Annual Pump Station Maint.	APSM	18	5	9	11	5	9	1
Crane Service > Five (5) ton	C	0	0	0	0	0	0	0
Total		1,711	1,557	1,223	993	763	731	689
Information derived from OCDWEP's Sewer Maintenance Billing System for 2015, 2016 & 2017								

**Three Year Average of Work Orders
for Services Performed in
2015, 2016 & 2017**

Description	Code	Town of	Town of	Town of	Village of	Village of	Town of	Village of
		Lysander	Onondaga	Van Buren	Liverpool	Solvay	Pompey	Manlius
Bucket Machine Crew - Maint	BPM	0	0	0	0	0	0	0
Bypass Pump - Portable Pump Inst.	BYP	0	0	0	0	0	0	0
Grease Control - in conj w/ L&I	GC	0	0	0	0	0	0	0
Jet Flush	JF	0	0	0	0	0	0	0
Jet Vacuum	JV	3	7	3	7	4	2	5
Locate & Inspect Manhole/Line	L&I	45	41	21	4	1	4	3
Manhole Repair Service	MHR	2	5	0	0	0	0	2
Pump Station O&M	PS	224	106	132	0	0	21	0
Pump Station O&M Electrical	PSE	67	15	47	0	0	4	0
Standby Generator Maintenance	SGM	18	0	0	0	0	0	0
Televised Sewer Main Inspection	TVI	5	11	3	11	8	0	7
Televised Lateral Service Inspection	TVL	3	6	3	8	0	0	1
Underground Utilities Location (DSNY)	UFPO	129	171	71	0	0	34	0
Grout	GRC	0	0	0	0	0	0	0
House Call-work type 97	HC (97)	9	27	13	21	38	1	13
House Call-work type 98	HC (98)	19	95	34	96	57	15	44
Tanker Truck Service	TT	0	0	0	0	0	0	0
Standby Generator (portable) Service	SG	0	0	0	0	0	0	0
Engineering & Technical Support Services	ETSS	12	17	5	4	2	1	6
Annual Pump Station Maint.	APSM	11	6	6	0	0	1	0
Crane Service > Five (5) ton	C	0	0	0	0	0	0	0
Total		545	507	339	152	110	84	80

Information derived from OCDWEP's Sewer Maintenance Billing System for 2015, 2016 & 2017

**Three Year Average of Work Orders
for Services Performed in
2015, 2016 & 2017**

Description	Code	Village of				Village of	
		East Syracuse	Village of Marcellus	Village of Camillus	Village of Fayetteville	North Syracuse	Village of Baldwinsville
Bucket Machine Crew - Maint	BPM	0	0	0	0	0	0
Bypass Pump - Portable Pump Inst.	BYP	0	0	0	0	0	0
Grease Control - in conj w/ L&I	GC	0	0	0	0	0	0
Jet Flush	JF	0	0	0	0	0	0
Jet Vacuum	JV	6	6	3	0	0	0
Locate & Inspect Manhole/Line	L&I	0	0	0	0	0	0
Manhole Repair Service	MHR	0	0	0	0	0	0
Pump Station O&M	PS	28	3	10	0	0	0
Pump Station O&M Electrical	PSE	4	0	1	0	0	0
Standby Generator Maintenance	SGM	0	0	0	0	0	0
Televised Sewer Main Inspection	TVI	1	4	1	1	4	1
Televised Lateral Service Inspection	TVL	0	0	0	0	0	0
Underground Utilities Location (DSNY)	UFPO	0	0	0	0	0	0
Grout	GRC	0	0	0	0	0	0
House Call-work type 97	HC (97)	0	0	0	0	0	0
House Call-work type 98	HC (98)	1	0	0	0	0	0
Tanker Truck Service	TT	0	0	0	0	0	0
Standby Generator (portable) Service	SG	0	0	0	0	0	0
Engineering & Technical Support Services	ETSS	0	0	1	5	0	0
Annual Pump Station Maint.	APSM	0	0	0	0	0	0
Crane Service > Five (5) ton	C	0	0	0	0	0	0
Total		42	12	19	7	4	1

Information derived from OCDWEP's Sewer Maintenance Billing System for 2015, 2016 & 2017

EPA's Administrative Compliance Order

The United States Environmental Protection Agency (EPA) issued an Administrative Compliance Order in July 2018 to the Commissioner of OCDWEP and the Onondaga County Executive pertaining to the Clean Water Act, Admin. Docket No. CWA-02-2018-3035. It stated, "The EPA is issuing the Order because the Respondent or Permittee (County) has violated Sections 301 and 402 of the CWA, 33 U.S.C. §§ 1311 and 1342, by failing to comply with the conditions and limitations of its New York Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) Permits.

OCDWEP is responsible for operations and maintenance of the sanitary sewer system that it owns and through Inter-municipal Agreements (IMAs).

The order requires that "within 120 calendar days of receipt of the Order, Respondent shall develop and/or submit to EPA and to Region 7 NYSDEC Office, written O & M Procedures for its SSS (Sanitary Sewer System) that it owns and for portions of the SSS that it operates. Within

120 calendar days of receipt of this Order, Respondent shall submit a plan to the EPA and Region 7 DEC Office that includes a schedule for issuing IMAs to all Satellite Systems which control flow into the Onondaga County Sanitary Sewer System in accordance with 6 NYCRR Part 750-2.9(a)(4).”

We are addressing only those issue identified in the report which relate to the County’s IMA’s.

- H. The EPA’s Administrative Compliance Order indicated the current IMAs fail to control or limit the flow volume into the Onondaga County Sanitary Sewer System (SSS) and is requiring stronger IMA’s to address flow limits and I&I (infiltration and inflow) removal.

Some municipalities have not signed the most recent IMA’s and one is still operating on an IMA from 1984.

Section B. Findings of Fact and Conclusion of Law

Item 8. “6NYCRR Part 750-2.9(a) (4)”, Additional conditions applicable to a publicly owned treatment works (POTW), states, “the permittee shall enact, maintain and enforce, or cause to be enacted, maintained and enforced, up-to-date and effective sewer use laws in all parts of the POTW service area. Such enactment and enforcement shall include inter-municipal agreements and/or other enforceable legal instruments that allow the permittee to control discharges, either directly or through jurisdictions contributing flow to the POTW, flow and loads to the POTW, as well as discharges to the POTW.”

Item 8.a & b. the IMAs fail to limit flow into the Onondaga County SSS in violation of the Permit and 6 NYCRR Part 750-2.9(a)(4).

Item 8.c. “Onondaga County’s Rules and Regulation Relating to the Use of the Public Sewer system (1983), Section 3.02, does prohibit storm water, surface water, ground water, roof run-off, etc. from being discharged into the SSS, but this has not translated into the IMAs which limit flow from the tributary municipalities into the SSS.

Recommendation

- 9. *We recommend the OCDWEP Management revise the IMAs to comply with the EPA Administrative Compliance Order.*
- I. We noted 1 municipality has never formally executed an IMA with Onondaga County, 5 are operating on IMAs executed in the 1980’s, 13 IMAs will expire at the end of 2018 and 1 will expire at the end of 2019. As noted above these IMAs fail to control or limit the flow volume into the Onondaga County Sanitary Sewer System (SSS). This listing is illustrated on the following page.

OCDWEP
Sewer Maintenance
Inter-Municipal Agreements

Municipality	Agreement Date
Town of Manlius	not executed
Village of Marcellus	1984
Town of Camillus	1985
Town of Onondaga	1985
Town of Clay	1986
Town of Pompey	1988
Town of Dewitt	2013
Town of Geddes	2013
Town of Lysander	2013
Town of Cicero	2013
Town of Salina	2013
Town of Van Buren	2013
Village of Camillus	2013
Village of East Syracuse	2013
Village of Fayetteville	2013
Village of Liverpool	2013
Village of Manlius	2013
Village of North Syracuse	2013
Village of Solvay	2013
Village of Baldwinsville	2014

The above is based on information obtained from Lotus Notes and OCDWEP.

Recommendation

10. We recommend the OCDWEP Management revise the IMAs to comply with the EPA Administrative Compliance Order to address flow limits and I & I (infiltration and inflow) removal.

Control Testing

We randomly tested 15 work orders from 5 service codes: House Call (HC), Bucket Machine Crew Maintenance (BPM), Jet Vacuum Service (JV), Televiser Lateral/Service Connection (TVL) and Pump Station O & M Electrical/Instrumentation (PSE). We noted the following findings:

- J. We noted documenting an important control step of the Supervisor or Crew Leader signing off on their review of the Motor Equipment Dispatcher's entries into Maximo is lacking.

Recommendation

11. We recommend procedures are implemented to have the Supervisor or Crew Leader initial the paperwork to document the review and approval process has in fact been completed.

SECTION V

MANAGEMENT RESPONSE



J. Ryan McMahon II, County Executive
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January 9, 2019

Mr. Matthew Beadnell, Comptroller
Office of the Onondaga County Comptroller
421 Montgomery Street - 14th Floor
Syracuse, New York 13202

Re: Report on Sanitary Sewer Operation and Maintenance Service Charges to Towns and Villages

Dear Mr. Beadnell:

This letter is in response to the above-referenced report produced by your office in response to a request from the County Legislature regarding WEP's sewer maintenance fees. We provide the following response:

Recommendation:

1. We recommend officials from the County Executive's Office, the various municipalities and the OCDWEP discuss any changes prior to altering the current billing process.

WEP agrees with the Comptroller's recommendation and will coordinate with the County Executive, DMB and affected municipalities to review any proposed modifications to the fee schedule and billing practices prior to implementation.

2. We recommend OCDWEP's management consider including an administration cost in the rate calculation.

WEP previously evaluated the utility of including administrative expenses in the rate development process and found the task to be onerous. As administrative costs for supplies, computer time, furnishings, etc. vary and are consumed at different rates, attempting to appropriately allocate them proved to be impractical.

3. We recommend OCDWEP assign the responsibility of reviewing and analyzing the overhead accounts for charges which can be classified as overhead and then apply the respective square footage and employee count and respective FLOOD and FLOW allocation basis prior to its inclusion in the municipal rate when preparing actual bills based on work order activity.

Review of overhead accounts to assign designations of "County" overhead and "Town" overhead is too burdensome a task for WEP to undertake and will provide little value. We will review and take under advisement adding building square footage and employee counts to the overhead rate.

4. We also recommend OCDWEP consider the feasibility of determining each respective employee's actual hourly cost and use these rates in the municipal rate calculation. I/A has provided OCDWEP management with our spreadsheet for future use.

While this is a sound recommendation, there is difficulty in assigning actual employee wage rates due to the number of employees (over 100) at various salary steps throughout the course of the year. Not to mention the difficulty of accounting for retroactive salaries, changes in benefit costs at the individual level, and shift differentials. For consistency and ease of tracking, it is much more advantageous to use the budgeted rate. As noted in the Audit, the basic rates developed by WEP and the Comptroller represent a fair budgeting tool for the municipalities.

5. We recommend OCDWEP revisit its sewer maintenance operations to ensure all significant equipment performing municipal work is being recorded on the work orders and billed to respective municipalities.

WEP agrees with this recommendation and WEP's established procedures do include a periodic review of all equipment used for sewer and pump station maintenance.

6. OCDWEP should implement procedures to accurately reflect the actual cost of services in their billings to municipalities.

WEP's procedures do include actual costs of services – labor, equipment, supplies and labor overhead. As not every expense is billable, administrative overhead allocation can be imprecise and not easy to generically allocate among the many maintenance tasks performed under the LMA. WEP's goal is to provide services at a reasonable cost to municipalities – ultimately the taxpayer and ratepayer. What is reasonable is to establish a cost recovery price, with the expectation that not every iota or minute of time be billed back to the municipalities.

7. OCDWEP should implement procedures to accurately track respective employee hours and chargeable equipment to reflect the actual cost for all services provided to appropriately determine municipalities' respective costs.

While the allocation of service time for individual house calls may be more precise, in the aggregate it is of little consequence if one house call is 14 minutes and another is 17

minutes. In fairness, the use of a fifteen minute average for each housecall is generous to the Towns, and further splitting hairs on the actual time in response becomes much more complicated and administratively burdensome than useful. Further, the value of providing high quality service to the homeowner after a service call should not be compromised by spending a minute or two less in the follow-up communication on the status of the issue and how to avoid future backups.

8. OCDWEP should determine the feasibility of providing municipalities with a historical average of their respective service calls as applied to the estimated rates for budgeting purposes. However, going forward it should bill for actual hours based on the number of workers and equipment detailed on the work orders, not on a flat rate schedule.

Upon request WEP provides historical data to any municipality. The municipalities are generally very familiar with WEP's services and historic service utilization. As stated previously, a flat rate, or activity based charge, is the most cost-efficient method of billing. The multiple variables and uniqueness of each service call can potentially create large discrepancies in the cost per service. Transit time between housecalls or UFPO calls would also be highly variable, since such calls are often dispatched from the 'last' work order location rather than the base of operations. For this reason, an average rate was considered to be the most fair and appropriate.

9. We recommend the OCDWEP Management revise the IMAs to comply with the EPA Administrative Compliance Order.

WEP has been waiting for the completion of this audit to provide a deeper discussion of cost allocation methodology in development of IMAs with the municipalities. The municipalities are also able to self-perform the maintenance work, or contract services and to other providers, as such there are several points of disagreement with the EPA ACO which were part of the County's response to same, which are beyond the scope of this audit and response.

10. We recommend the OCDWEP Management revise the IMAs to comply with the EPA Administrative Compliance Order to address flow limits and I&I (infiltration and inflow) removal.

Recommendation is noted.

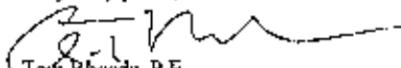
11. We recommend procedures are implemented to have the Supervisor or Crew Leader initial the paperwork to document the review and approval process has in fact been completed.

Work Orders are processed differently according to the division. Sewer Maintenance Division work orders are reviewed and initialed by the Supervisor/Crew Leader. Pump

Station Maintenance and I&E work orders are reviewed and approved on-line before finalizing.

In closing, we would like to thank the Comptroller's Office for their professionalism in conducting this review. Your determination on page 16, under Item G is the complete summation, "...based upon our review, OCFWEP's 2018 rates as calculated were not significantly different and represents a fair budgeting tool for municipalities".

Very truly yours,


Terri Rhoads, P.E.
Commissioner

cc: David Knapp, Chairman, Onondaga County Legislature
Mary Beth Primo, Deputy County Executive
Nick Capozza, Sewer Maintenance Engineer, WHP
Julius Perrotta, Auditor III, Comptroller's Office