



**ONEIDA COUNTY DEPARTMENT OF  
WATER QUALITY & WATER POLLUTION CONTROL**

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**Anthony J. Picente, Jr.**  
County Executive

**Steven P. Devan, P.E.**  
Commissioner

April 30, 2014

Gregg Townsend, P.E.  
Regional Engineer  
NYS Department of Environmental Conservation  
317 Washington Street  
Watertown, NY 13601

**UNITED PARCEL SERVICE**

Koon Tang, P.E., Director  
Bureau of Water Permits  
Division of Water  
NYS Department of Environmental Conservation  
625 Broadway, 4<sup>th</sup> Floor  
Albany, NY 12233

Re: Oneida County Sewer District  
Quarterly Progress Report – 1st Quarter 2014

Consent Order No. R6-20060823-67

Dear Mr. Townsend and Mr. Tang:

On behalf of Oneida County, I am providing for your review and comment Oneida County's Quarterly Progress Report for the 1st Quarter – 2014 as required per Section XIII – Reporting Requirements of the Consent Order. This document summarizes the status and progress of work completed between January 1, 2014 and March 31, 2014 in support of Consent Order compliance requirements.

Please feel free to contact me should you have any questions or need additional information.

Sincerely,

**THE ONEIDA COUNTY DEPARTMENT OF  
WATER QUALITY & WATER POLLUTION CONTROL**

A handwritten signature in black ink, appearing to read "Steven P. Devan", with a long horizontal flourish extending to the right.

Steven P. Devan, P.E.  
Commissioner

Enclosure: Quarterly Progress Report – 1st Quarter 2014

ecc: Anthony J. Picente, Jr. - Oneida County Executive  
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**SANITARY SEWER COLLECTION SYSTEM  
QUARTERLY PROGRESS REPORT  
1ST QUARTER – 2014  
ONEIDA COUNTY SEWER DISTRICT**

NYSDEC Consent Order R620060823-67



Prepared for

Oneida County Department of Water Quality  
& Water Pollution Control

Steven P. Devan, P.E., Commissioner  
51 Leland Avenue  
Utica, NY 13502

April 30, 2014



Cazenovia, NY



Syracuse, NY



Utica, NY

**Sanitary Sewer Collection System  
Quarterly Progress Report  
1<sup>st</sup> Quarter - 2014  
Oneida County Sewer District  
NYSDEC Consent Order R620060823-67**

Prepared for:

**Oneida County Department of Water Quality &  
Water Pollution Control**

Prepared by:

**O'Brien & Gere Engineers, Inc.  
101 First Street  
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April 30, 2014

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## 1.0 INTRODUCTION

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### 1.1 HISTORICAL BACKGROUND

The Oneida County Sewer District (District) was formed in 1965 through an act by the former Oneida County Board of Supervisors. It is administered by Oneida County through the Oneida County Department of Water Quality and Water Pollution Control (WQ&WPC) which is responsible for the operation of the District's facilities and personnel. District facilities include 45 miles of interceptor sewers, the Sauquoit Creek and the Barnes Avenue Pumping Station, and the Water Pollution Control Plant. The District services 15 municipalities, nine of which are within the Sauquoit Creek Pumping Station (SCPS) Basin. These municipalities own and operate their own collection systems.

### 1.2 CONSENT ORDER

The New York State Department of Environmental Conservation (NYSDEC) and Oneida County (County) entered into a Consent Order (No. R620060823-67) due to sanitary sewer overflows (SSO) at the SCPS. In addition to the required mitigation of those SSOs, the Consent Order, with an effective date of December 12, 2011, requires the submission of Quarterly Progress Reports. The intent of this Quarterly Progress Report is to summarize the work that has been undertaken by the County between January 1, 2014 and March 31, 2014 (1st Quarter of 2014) in support of the Consent Order compliance requirements.

## 2.0 ENGINEERING INVESTIGATIONS AND EVALUATIONS

During the 1st Quarter of 2014, the County completed the following tasks related to engineering investigations and evaluations.

### 2.1 COLLECTION SYSTEM

#### 2.1.1 Manhole Inspections

There were no manhole inspections completed during the 1st Quarter of 2014. Post construction manhole re-inspections were anticipated to begin during the 1<sup>st</sup> Quarter of 2014; however due to prolonged winter weather conditions, they will commence in 2<sup>nd</sup> Quarter of 2014.

#### 2.1.2 Sanitary Sewer Televising

There are approximately 216 miles of sanitary sewer within the SCPS basin (30 miles of District interceptor sewer plus 186 miles of municipal sewer). The County has contracted with a firm (National Water Main Cleaning Co.) to perform closed circuit televising (CCTV) of these sanitary sewers. Televising data was collected electronically in the field using the nationally standardized Pipe Assessment and Certification Program (PACP) and incorporated into the County's data management software.

During the 1st Quarter of 2014, no new televising of municipal sewers was completed. The focus of the CCTV project during the 1st Quarter was on data cleanup and delivery and QA/QC of previously completed televising. Due to technical difficulties, a portion of previously collected electronic data was defective and not useable. Therefore, segments of previously televised sewers were re-televised.

Including interceptor sewers, approximately 170 cumulative miles of sewer have been televised through the end of 2013. It is anticipated that re-televising will be completed and data delivered in the 2<sup>nd</sup> Quarter of 2014.

#### 2.1.3 Dye Testing

There was no dye testing performed during the 1st Quarter of 2014.

### 2.2 WATER POLLUTION CONTROL PLANT

During the 1<sup>st</sup> Quarter of 2014, the Consultant Team progressed into final design on the solids handling upgrades including confirming that the County will add anaerobic digesters and co-generation operations to their facility.

Two (2) progress meetings were held with the County, WPCP operations staff, and Consultant Team members to discuss final preliminary design elements as they relate to plant operations, and to provide a status update on the project. WPCP operations staff confirmed preference on several new process equipment options presented by the Consultant Team.

### 2.3 SAUQUOIT CREEK PUMP STATION/FORCE MAIN

During the 1<sup>st</sup> Quarter of 2014, the Consultant Team progressed into final design on the pump station and force main upgrades.

Progress meetings were held in conjunction with the solids handling design meetings with the County, SCPS operations staff, and Consultant Team members to discuss design elements of the pump station upgrades and new forcemain and to provide a status update on the project. NYSDEC Joint Application for Permit was received on March 5, 2014, as part of the regulatory approval to advance the geotechnical soil borings along the proposed forcemain route.

### 3.0 MANAGEMENT PROGRAMS

#### 3.1 COMPUTERIZED MANAGEMENT AND MAINTENANCE SYSTEM

The County purchased a Computerized Management and Maintenance System (CMMS) software system (Lucity – formerly GBA Master Series) in 2009. This software is used to manage the sewer system data (mapping, inspections, etc.) obtained to date by the County. At the same time that the software was acquired, the County invested in computer hardware upgrades to support the CMMS system. The County's GIS Coordinator manages the system.

During the 1st Quarter of 2014, the County continued to utilize the CMMS for tracking and documenting sewer rehabilitation work, and uploading and managing new PACP data provided by the County's CCTV contractor.

#### 3.2 FLOW MONITORING PROGRAM

The County continues to work closely with DASNY to secure the \$950,000 EDAP funding allocation that will support the extensive flow monitoring program proposed by the County and approved by NYSDEC on August 24, 2012. The process for acquiring this funding is very tedious but is progressing through the various review processes within the State government in Albany. In the absence of the EDAP funding, the County made the decision in September 2013 to proceed with the finalization of bidding documents for the procurement of the flow monitoring equipment using various sources of interim borrowing within the Oneida County Sewer District operating budget. Bidding document finalization progressed through the 4<sup>th</sup> quarter of 2013.

Funding was allocated in March 2014 and bidding documents for procurement of the flow monitoring equipment are expected to be finalized in May 2014.

#### 3.3 PRIVATE PROPERTY I/I REDUCTION PROGRAM

The document titled "Preliminary Planning Document – Private Property Inflow and Infiltration Reduction Program" was submitted to NYSDEC on June 29, 2012 as required by Schedule A - Section B.2 of the Consent Order. The County, working through the Steering Committee, created a working group of appropriate PPII-oriented community representatives to map out a phased implementation plan. During the 1st Quarter of 2014, progress continued to be made on the development and implementation of the program.

A full steering committee meeting with Chief Elected Officials, CMOM Working Group, PPII Working Group members, and the Consultant Team was held on March 13, 2014 in order to re-cap the progress of the program during 2013, and the roles and responsibilities of the County and the Municipalities as they relate to development and implementation of CMOM and PPII Program goals for 2014.

#### 3.4 CAPACITY, MANAGEMENT, OPERATIONS AND MAINTENANCE PROGRAM

The document titled "Preliminary Planning Document – Proposed CMOM Framework – Sauquoit Creek Pumping Station Basin Communities" was submitted to NYSDEC on June 29, 2012 as required by Schedule A – Section B.3 of the Consent Order. The County, working through the Steering Committee, created a working group of appropriate CMOM-oriented community representatives to map out a phased implementation plan. On January 16, 2014, the County met with the Working Group and Consultant Team members to recap the progress made in 2013 and outline the goals of the program for development and implementation items in 2014:

- Standard Operating Guidelines (SOG) and Design and Construction Standards– additional SOG and design and construction standards will be developed by the Working Group.
- Plan Review Procedures – plan review procedures are in development and are expected to be distributed to the Working Group in the 2<sup>nd</sup> quarter of 2014.
- Fats, Oils, and Grease (FOG) – The Working Group will develop the program following the key elements of the program framework that was developed in 2013.

The design and construction standards and plan review procedures are considered to be living documents that will continually be added to and revised.



## 4.0 SCHEDULE/MILESTONE DATES

### 4.1 APPROVED SCHEDULE

The following table represents the approved schedule as defined by the Consent Order (note that there were no changes to this schedule during the 1st Quarter of 2014):

Description	Consent Order, Schedule "A" Date
<u>Engineering Investigations, and Evaluations</u>	
Dye Testing and Storm Sewer Report	June 30, 2012
Manhole Evaluation Report – Phase II	June 30, 2012
SCPS Evaluation Report	August 31, 2012
WPCP Evaluation Report	August 31, 2012
Treatment System Supplement (Report)	60 days after approval of WPCP Evaluation Report
Sewer CCTV Inspection Report – Phase II	April 30, 2013
Sewer CCTV Inspection Report – Phase III	April 30, 2014
Collection System Supplement (Report)	May 31, 2014
<u>Management Programs</u>	
Flow Monitoring Program	March 31, 2012
Private Property I/I Reduction Program	June 30, 2012
CMOM Program	June 30, 2012
PPII Reduction Program Implementation	May 31, 2013
CMOM Implementation	May 31, 2013
Asset Management Plan	December 31, 2021
<u>Remedial Measures</u>	
Semi-Permanent Alternative-Construction	December 31, 2016
SSO Mitigation-Consent Order Compliance	December 31, 2021
<u>Reporting</u>	
Annual Work Plan	January 31, annually
Quarterly Progress Report	Quarterly

### 4.2 MILESTONES

During the 1st Quarter of 2014, the following milestone dates were met:

- The Annual Work Plan was submitted on January 30, 2014 in accordance with the above schedule.

## 5.0 SEWER REHABILITATION

Design and construction for initial projects is being financed under CWSRF Project No. C6-6070-08-00. Projects are tracked by contract number. The following is a status update of the current sewer rehabilitation contracts.

### 5.1 CONTRACT 2 – SANITARY SEWER MANHOLE REHABILITATION – PHASE 2

Contract 2 rehabilitated approximately 1,278 sanitary sewer manholes. This project was closed out this quarter.

### 5.2 CONTRACT 3 – SANITARY SEWER MAINLINE REHABILITATION – PHASE 1

Contract 3 rehabilitated approximately 13 miles of sanitary sewers. Only project closeout items remain to be completed.

### 5.3 CONTRACT 4 – SEWER SEPARATION – CLINTON/HENDERSON STREET, NY MILLS

Contract 4 resulted in the removal of approximately 264,000 gallons per day (measured) of wet weather flow from the sanitary sewer system at a final contract cost of \$162,938. Final closeout documents were received in March 2014.

### 5.4 CONTRACT 5 – SEWER REPAIRS AND REHABILITATION – PHASE 1

Work under Contract 5 generally includes storm sewer and sanitary sewer repairs for the purpose of removing inflow (both direct and indirect) sources from the sanitary sewer system in locations determined from the results of prior dye testing. This includes repairs at approximately 15 separate locations all within the Villages of Yorkville, Whitesboro, New York Mills, and New Hartford. Work also includes the replacement of four sanitary sewer manholes and the lining of four pipe segments utilizing an ultra-violet light cured-in-place pipe (UV-CIPP) process. No work on Contract 5 was completed during the 1st quarter of 2014, due to the winter shutdown and protracted cold and snowy weather through March 31, 2014.

### 5.5 CONTRACT 6 - SANITARY SEWER MAINLINE REHABILITATION – PHASE 2

The work under Contract 6, awarded to Green Mountain Pipeline Services, Inc. (GMPS) includes approximately 15 miles of sewer rehabilitation using cured in place pipe (CIPP) lining, open cut repairs, sewer joint grouting, CIPP short liners, and lateral grouting.

In addition to the work referenced above, GMPS' bid also included comprehensive sewer rehabilitation in flow basin NHD-22 at an estimated cost of \$248,152 which the Town of New Hartford has agreed to contract and pay for.

Similarly, GMPS' bid included 3,500 feet of 18-inch and 24-inch CIPP lining for the City of Utica in order to structurally rehabilitate a sanitary sewer under Genesee Street at an estimated cost of \$498,733. Utica will contract directly with the Contractor for this work.

GMPS began mobilization to the area on January 8, 2014 and began work on January 13, 2014. Through March 31, 2014, approximately 3 miles of CIPP lining and associated work was completed, 12 lateral connection liners were installed, and sewer rehabilitation preparation work was completed. Work on this Contract is expected to continue through and be completed by the 3rd Quarter 2014.

### 5.6 CONTRACT 7 - SANITARY SEWER MAINLINE REHABILITATION – PHASE 3

Final design was completed on Contract 7, and is similar in scope to Contracts 3 and 6. Contract 7 will consist of CIPP lining, pipe grouting, lateral grouting, lateral lining, and spot repairs in selected areas. Contract 7 work will be conducted in two areas in the Town of Whitestown. The plan calls for approximately 5.4 miles of pipe to be rehabilitated in the Glen Haven area, also known as portion of sewer sheds HHI-1 and WHN-31. In addition, approximately 3.0 miles of pipe will be rehabilitated in the sewer shed known as WHN-33, which is the area

westerly of the Whitesboro Parkway School, and southerly of Clinton Street. Final approval was received from NYSEFC on February 24, 2014 and project will be advertised for bid in April 2014.

## 6.0 ASSESSMENT OF REHABILITATION EFFECTIVENESS

During the 1st Quarter of 2014, there was no physical measurement mechanism (flow monitoring) in place to measure the effectiveness of sewer rehabilitation. See Section 3.2, above for a discussion of the status of flow monitoring. However, visual observations of the construction activities associated with Construction Contracts 2, 3, 4, 5, and 6 note obvious removals of I/I sources. Based on the completed work, and using estimated values of I/I removals provided in the Offset Plan and/or the approved Basis of Design engineering reports for the respective projects for Contracts 2, 3, 4, 5, and 6, the reductions in I/I are estimated to be:

Contract 2 – Sanitary Sewer Manhole Rehabilitation, Phase 2	5,411,910 gpd
Contract 3 – Sanitary Sewer Mainline Rehabilitation, Phase 1	1,503,360 gpd
Contract 4 – Sewer Separation – Clinton/Henderson St (NY Mills)	264,000 gpd
Contract 5 – Sewer Repairs and Rehabilitation (partially complete)	28,800 gpd (upon completion)
Contract 6 – Sanitary Sewer Mainline Rehabilitation Phase II (partially complete)	1,130,000 gpd (upon completion)

## 7.0 COMPLETED CAPITAL PROJECTS/FACILITY UPGRADES

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Specific capital projects/facility upgrades were not completed in the 1st Quarter of 2014.

## 8.0 I/I OFFSET PROJECTS/NEW FLOWS

During the 1st Quarter of 2014, the following additions and subtractions to the I/I Offset Credit Bank were recorded by the County. All amounts are reported in gallons per day (gpd), after the application of the 5:1 offset ratio.

Community	Starting Balance	Credits Added	Location	Credits Used	Ending Balance
Town of New Hartford	11,030	0		0	11,030
Town of Paris	1,927	0		0	1,927
Town of Whitestown	4,657	0	End of Green Acres Drive (304.000-3-48)	440	4,217
Village of Clayville	0	0		0	0
Village of New Hartford	17,434	0		0	17,434
Village of New York Mills	62,166	0		0	62,166
Village of Oriskany	1,243	0		0	1,243
Village of Whitesboro	16,345	0		0	16,345
Village of Yorkville	316	0		0	316
<b>Totals</b>	<b>115,118</b>	<b>0</b>		<b>440</b>	<b>114,678</b>

## 9.0 KEY PERSONNEL CHANGES

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Key personnel changes, as they relate to the SSO Mitigation/Consent Order compliance project, is interpreted to be those staff members, whose addition to or deletion from the project would be viewed by the County to either add resources, or be a detriment to progress. Project staff includes County, satellite community, and consultant team personnel. The following is a summary of changes.

### 9.1 COUNTY STAFF

During the 1st Quarter of 2014, there were no changes of key personnel to report.

### 9.2 SATELLITE COMMUNITY STAFF

During the 1<sup>st</sup> Quarter of 2014, there were no changes of key personnel to report.

### 9.3 CONSULTANT TEAM STAFF

During the 1<sup>st</sup> Quarter of 2014, there were no changes of key personnel to report.

## 10.0 ADMINISTRATIVE ITEMS

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### 10.1 WORK AUTHORIZATIONS

During the 1<sup>st</sup> Quarter of 2014, the following Work Orders were submitted to the County for review and were subsequently approved:

- WO 27.1 – CMOM Program Implementation – Phase 2
- WO 28.1 – Community Outreach
- WO 29.1 – Private Property I/I Reduction Program Implementation – Phase 2
- WO 30.1 – Program Administration – FY 2014

### 10.2 FUNDING APPLICATIONS

The following is a status summary of current funding activities:

#### **10.2.1 WPCP Upgrade and Expansion, Solids Handling Upgrades-Preliminary Design (CWSRF No. C6-6070-08-06)-\$35 Million**

Oneida County closed on Short-Term financing in March 2014.

#### **10.2.2 DASNY-Economic Development Assistance Program**

Oneida County received and executed the grant disbursement agreement from DASNY for the \$950,000 grant for the acquisition and installation of District-wide flow metering equipment.