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, 2015

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, 4th Floor
Albany, NY 12233

Re: Oneida County Sewer District
Quarterly Progress Report – 1st Quarter 2015

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 – 2015 as required per Section XIII – Reporting Requirements of the Consent Order. This document summarizes the status and progress of work completed between January 1, 2015 and March 31, 2015 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

Steven P. Devan, P.E.
Commissioner

Enclosure: Quarterly Progress Report – 1st Quarter 2015

ecc: Anthony J. Picente, Jr. - Oneida County Executive
Peter M. Rayhill, Esq. – Oneida County Attorney
Karl E. Schrantz, P.E. – O'Brien & Gere Engineers, Inc.
John Lagorga, P.E. – GHD Consulting Services, Inc.
Judy Drabicki, - NYSDEC
Joseph DiMura, P.E. - NYSDEC
Richard Coriale, P.E. – NYSDEC
Steven Botsford, P.E. - NYSDEC
Michael O'Neil, P.E. - NYSEFC

SANITARY SEWER COLLECTION SYSTEM
QUARTERLY PROGRESS REPORT
1ST QUARTER – 2015
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, 2015

GHD
Cazenovia, NY

BROWN AND CALDWELL
Syracuse, NY

O'BRIEN & GERE
Utica, NY

Sanitary Sewer Collection System Quarterly Progress Report 1st Quarter - 2015 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
4th Floor
Utica, NY 13501

April 30, 2015

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1.0 INTRODUCTION

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 Pumping Station (SCPS), the Barnes Avenue Pumping Station, and the Water Pollution Control Plant (WPCP). The District services 15 municipalities, nine (9) of which are within the 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, 2015 and March 31, 2015 (1st Quarter of 2015) in support of the Consent Order compliance requirements.

2.0 ENGINEERING INVESTIGATIONS AND EVALUATIONS

During the 1st Quarter of 2015, 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 2015.

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.

To date, approximately79% of the 216 miles of sewers has been televised. The remaining 47 miles of sewers have not been inspected due to heavy debris in quantities beyond the scope of the contractual cleaning effort, small diameter pipe inhibiting effective CCTV inspections, lack of easement access to manholes and sewer, and buried manholes. These obstacles are primarily maintenance related and will be addressed through the District-wide Capacity, Management, Operations, and Maintenance (CMOM) program currently under development. It is anticipated that another 10-15% of the sewers will be inspected over the next five (5) years as a component of future sewer rehabilitation contracts.

During the 1st Quarter of 2015, approximately one (1) mile of sewer was televised under Contract 7-Sanitary Sewer Mainline Rehabilitation, Phase III. Required rehabilitation that was discovered during televising will be completed under Contract 7.

2.1.3 Dye Testing

There was no dye testing performed during the 1st Quarter of 2015.

2.2 WATER POLLUTION CONTROL PLANT

During the 4th Quarter of 2014, the solids handling design was advanced to approximately 90% completion. The design includes the construction of two (2) new egg-shaped anaerobic primary digesters, a secondary digester, digester gas cleaning, and combined heat and power (CHP) generation with new microturbines. The anaerobic digestion approach to sludge stabilization is a deviation from the original concept submitted in the 2012 "Water Pollution Control Plant and Sauquoit Creek Pump Station Evaluation." The NYSDEC approved the anaerobic digester concept in a letter dated May 30, 2014. The major components of the design include:

- Replacement of existing waste activated sludge pumps
- Refurbishment of all four (4) gravity thickeners. The thickeners, which currently thicken mixed primary and waste activated sludge, will be reconfigured. Two (2) thickeners will be dedicated to primary sludge only. Two (2) new gravity belt thickeners will be installed for waste activated sludge thickening only. The remaining two (2) existing gravity thickeners will be converted to sludge blend tanks, for combining thickened primary and waste activated sludges.
- Two (2) new egg-shaped primary digesters. Egg shaped tanks were chosen due to efficiency and improved O&M (less cleaning and grit accumulation) than traditional tanks.
- One (1) new secondary digester with a gas holding cover.
- A new standby post-lime stabilization system as backup to the anaerobic digesters
- Two (2) new belt filter presses and reconfiguration of two (2) existing belt filter presses
- Refurbishment of the two (2) existing in-service fluidized bed incinerators. The incinerators will be refurbished only to the extent necessary to comply with new federal sewage sludge incinerator (SSI) regulations (40 CFR Part 60, Subpart MMMM). The incinerators will not be upgraded for long-term operations, as anaerobic digesters will eventually replace the incinerators. Incinerator improvements include new mercury scrubbers on Unit Nos. 1 and 3. Bids were received for the procurement of scrubber equipment during the 1st Quarter of 2015. A purchase order for the equipment was issued by the County in April 2015. Early in the 2nd Quarter of 2015, a separate contract for the installation of the scrubbers will be advertised. The County understands that the incinerator upgrades are required to be fully operational by March 2016 per the SSI regulations. It is likely that the digesters would not be operational by that time; which dictates the need to upgrade the incinerators.
- The design of select components of the solids handling upgrades is anticipated to be finalized and made ready for NYSDEC review during the 2nd Quarter of 2015. Specifically, the thickening, dewatering, and lime stabilization components of the design are anticipated to be ready for NYSDEC approval in the 2nd Quarter of 2015. The anaerobic digester and CHP components of the project may be delayed until other components of the WPCP upgrade/expansion are finalized (i.e. screening and grit removal). Delaying the digesters until later in the program may be beneficial from a process standpoint to ensure proper screening and grit removal is provided prior to digesters being placed into service. Delaying the construction of the digestion and CHP facilities would have an additional benefit to the overall construction activities at the WPCP since the planned location of the digesters would be ideal as a contractor ingress/egress and staging area.

During the 1st Quarter of 2015, the Consultant Team advanced the design for the expansion of the WPCP to accept additional flows and loads resulting from SSO mitigation in the SCPS basin, as well as ongoing combined sewer overflow (CSO) mitigation in the City of Utica to 30% completion. The process upgrades at the WPCP are anticipated to include:

- A new screening facility and pump station, dedicated to sanitary flows from the North Utica and Starch Factory Creek Interceptors.
- The existing Raw Waste Building will be repurposed for combined flows from the City of Utica only.
- New grit removal facilities.
- New rectangular primary settling tanks to replace the existing circular primary settling tanks.
- A new high rate disinfection system for wet weather combined sewer flows which exceed the capacity of the existing secondary treatment system. No sanitary flows will be directed to the new high rate disinfection system.
- Replacement of the existing blowers with more efficient units, and replacement of existing aeration tank diffusers.
- Refurbishment of the existing final settling tanks.

The upgrades at the WPCP will also address "physical condition" improvements, not related to SSO and CSO mitigation, to maintain the integrity of the existing facilities and process equipment, such as electrical, HVAC, structural, and hydraulic infrastructure. Planned improvements also include security upgrades and fire protection in select buildings.

On January 29, 2015 the Consultant Team met with the County and Plant Staff to present the 30% Preliminary Design Report for the upgrades and expansion of the WPCP. It is expected that feedback from the County will be received in the 2nd Quarter of 2015. Additionally, the final design phase for the upgrades and expansion of the WPCP is anticipated to begin in the 2nd Quarter of 2015.

The NYSDEC provided a response on December 23, 2014 to the letter from the County dated August 22, 2014. The letter from the County detailed several of the questions and concerns of the Consultant Team with regards to the design of the primary settling tanks, high rate disinfection, solids handling upgrades, and also questions regarding the state pollutant discharge elimination system (SPDES) permit renewal and permit limits during construction. A meeting was held on February 25, 2015 between the NYSDEC, the Consultant Team, and the County to discuss the NYSDEC response letter from the 4th Quarter of 2014.

The County and Consultant Team understand the NYSDEC has not finalized the future phosphorus effluent limit for the WPCP. As part of the final design phase for the upgrades and expansion of the WPCP, the Consultant Team will develop a comparison of appropriate phosphorus removal technologies based on an anticipated effluent phosphorus limit in the range of 0.2 mg/L to 1.0 mg/L.

2.3 SAUQUOIT CREEK PUMP STATION/FORCE MAIN

During the 1st Quarter of 2015, the Consultant Team continued with final design on the SCPS and force main upgrades and advancing the design toward 90% completion. A 90% set of plans and specifications will be provided to the County for review in May 2015.

The major components of the design include:

- Replacement of the existing pump station mechanical screen with two (2) new redundant screens housed in a new screen building. Two (2) screenings washer/ compactors will be provided and a screenings conveyor system will carry screenings to a dumpster area.
- Replacement of the existing standby generator with a new outdoor standby generator capable of operating the station to pump peak flow during a power outage.
- Upgrades to the existing pump station electrical and HVAC systems.
- New 48-inch forcemain and rehabilitation of the existing forcemain. New flow metering and flow control vaults are being provided along the forcemain route.
- New split flow distribution structure at the WPCP to be used to distribute 5 mgd of flow directly to the WPCP aeration tanks.

The County and Consultant Team continue to plan for the acquisition of future construction and permanent easements in conjunction with the new force main construction. A surveyor has been retained in the 1st Quarter of 2015 to prepare maps with legal descriptions for those areas where easements will be required in support of the force main construction work. That work is underway at this time.

The wetland permitting process is also in progress. The Joint Application for Permit along with supporting documentation has been prepared in draft form for review. The application will be submitted to the Army Corps of Engineers and NYSDEC during the early part of the 2nd Quarter of 2015. The Cultural Resources Assessment was completed and submitted to the NYS Office of Parks, Recreation, and Historic Preservation during the 1st Quarter of 2015.

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. The County's geographic information system (GIS) coordinator manages the system.

The County continues to utilize the CMMS for tracking and documenting sewer rehabilitation work, and uploading and managing new PACP data provided by the County's CCTV and sewer rehabilitation contractors on a regular basis.

The Consultant Team utilizes the CMMS in support of the sanitary sewer rehabilitation design efforts as a means to identify defects and develop rehabilitation methodologies.

3.2 FLOW MONITORING PROGRAM

The County worked closely with the Dormitory Authority of the State of New York to secure the $950,000 Economic Development Assistance Program (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 was very tedious but progressed 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 District operating budget.

Funding was allocated in March 2014 and bidding documents for procurement of the flow monitoring equipment were advertised on June 9, 2014. Contract was awarded on September 10, 2014 to ADS Environmental Services, LLC (ADS). ADS completed the installation 59 flow meters and five (5) rain gauges during the 1st Quarter 2015 with flow data starting to be collected. Data assessment and summary reporting will commence during the 2nd Quarter of 2015.

Site commentaries for the meter sites which list minimum, maximum, and average flows as well as meter percent uptime are included in Appendix A of this report.

3.3 PRIVATE PROPERTY INFLOW AND INFILTRATION 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 private property inflow and infiltration (PPII)-oriented community representatives to map out a phased implementation plan.

A joint CMOM Working Group and PPII Working Group meeting was held on March 24, 2015 in order to re-cap the progress of the program during 2014, 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 2015.

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.

A joint CMOM Working Group and PPII Working Group meeting was held on March 24, 2015 in order to re-cap the progress of the program during 2014, 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 2015.

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 2015):

Description	Consent Order, Schedule "A" Date
Engineering Investigations and Evaluations	
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 (extension granted to July 1, 2014)
Management Programs	
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
Remedial Measures	
Semi-Permanent Alternative-Construction	December 31, 2016
SSO Mitigation-Consent Order Compliance	December 31, 2021
Reporting	
Annual Work Plan	January 31, annually
Quarterly Progress Report	Quarterly

Note: I/I – Inflow and Infiltration

4.2 MILESTONES

During the 1st Quarter of 2015, the following milestone dates were met:

- No specific milestones defined/requested during the 1st Quarter of 2015.

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 COMPLETED SEWER REHABILITATION CONTRACTS

Contract No.	Contract Title	Contract Description
2	Sanitary Sewer Manhole Rehabilitation – Phase 2	Rehabilitation of approximately 1,278 sanitary sewer manholes throughout the District.
3	Sanitary Sewer Mainline Rehabilitation – Phase 1	Rehabilitation of approximately 13 miles of sanitary sewers within the villages of New York Mills, Oriskany, New Hartford, Whitesboro, and Yorkville and the towns of New Hartford and Whitestown
4	Sewer Separation – Clinton/Henderson Street, NY Mills	Storm/Sanitary sewer separation
5	Sewer Repairs and Rehabilitation	Storm/Sanitary sewer repairs and rehabilitation; manhole replacement and UV-CIPP lining

5.2 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.

As of the 1st Quarter of 2015, all contractual work under Contract 5 had been completed. However, the County has chosen to keep the contract open and use up remaining project funds on additional minor incidental projects as they are needed.

5.3 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. The City of Utica contracted directly with the Contractor for this work.

During the 1st Quarter of 2015, 105 laterals and 64 pipe joints were sealed, and a total of 167 lineal feet of 8 and 18-inch diameter CIPP were installed. Work on this contract is expected to continue and be completed during the 2nd Quarter of 2015.

5.4 CONTRACT 7 - SANITARY SEWER MAINLINE REHABILITATION – PHASE 3

Contract 7 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. Contact 7 work will be conducted in two areas in the Town of Whitestown and one in the Town of New Hartford. Approximately 3.9 miles of pipe will be rehabilitated in the Glen Haven area, also known as a portion of sewersheds HHI-1 and WHN-31. In addition, approximately 2.8 miles of pipe will be rehabilitated in the sewershed known as WHN-33, which is the area westerly of the Whitesboro Parkway School, and southerly of Clinton Street. Approximately 6.5 miles of pipe will be rehabilitated in sewershed NHD-18 in the Town of New Hartford, in the Kellogg Road/Oxford Road area of New Hartford.

During the 1st Quarter of 2015, approximately 4,800 linear feet of CIPP lining, 30 linear feet of CIPP short liners (5 locations), testing and sealing of 183 laterals, and 4,800 feet of sewer cleaning and televising was completed. Contract 7 work will continue through the 2nd Quarter of 2015.

5.5 CONTRACT 8 - SANITARY SEWER MAINLINE REHABILITATION – PHASE 4

On February 12, 2015, bids for Contract 8 were opened, with the low bid submitted by National Water Main Cleaning Company (NWMC). On March 15, 2015, the County awarded Contract 8 to NWMC. Contract 8 rehabilitation will occur within NHD-23 sewershed in the Town of New Hartford, and will consist of mainly pipe grouting, lateral grouting, open cut, and spot repairs. A small amount of CIPP lining will also be performed. Approximately 13,700 LF of sanitary sewer will be televised and then rehabilitated as necessary. A total of 14 miles of pipe in the Town of New Hartford will be rehabilitated under Contract 8. In addition to New York State Environmental Facilities Corporation (NYSEFC) funding for Contract 8, a portion of the work will be funded directly by the Town of New Hartford through its sewer fund.

As of the end of the 1st Quarter of 2015, NWMC was working on completing their Minority and Women's Business Enterprise (MWBE) Utilization Plan for approval by NYSEFC. It is anticipated that a Notice to Proceed will be issued and work will begin during the 2nd Quarter of 2015.

5.6 CONTRACT 10 - SANITARY SEWER MAINLINE REHABILITATION – PHASE 5

During the 1st Quarter of 2015, design of Contract 10-Sanitary Sewer Mainline Rehabilitation Phase 5 was begun. Contract 10 is similar in scope to Contract 7, consisting of a mix of CIPP lining, pipe joint and lateral grouting, open cut repairs, spot repairs, and supplemental CCTV inspections.

Contract 10 rehabilitation work will occur in the sewershed known as WHN32, and the Village of Whitesboro. WHN32 is generally located west of Henderson Street, north of Mud Creek, south of Clinton Street and east of Clinton Road in the Town of Whitestown and contains approximately 7.1 miles of pipe. It is anticipated that up to an additional 10 miles of pipe will be rehabilitated in areas of the Village of Whitesboro where rehabilitation has not previously been completed.

Contract 10 will be advertised for bid during the 2nd Quarter of 2015, with construction anticipated to begin prior to the 3rd Quarter of 2015.

6.0 ASSESSMENT OF REHABILITATION EFFECTIVENESS

During the 1st Quarter of 2015, the physical measurement mechanism (flow monitoring) for measuring the effectiveness of sewer rehabilitation was in the process of being implemented. See Section 3.2, above for a discussion of the status of flow monitoring. Based on the completed work, and using estimated values of inflow and infiltration (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, 6, 7, and 8, 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	120,000 gpd
Contract 6 – Sanitary Sewer Mainline Rehabilitation Phase II (partially complete)	1,130,000 gpd (upon completion)
Contract 7 – Sanitary Sewer Mainline Rehabilitation Phase III (partially complete)	630,000 gpd (upon completion)
Contract 8 – Sanitary Sewer Mainline Rehabilitation Phase IV (to begin 2nd Quarter 2015)	249,000 gpd (upon completion)

7.0 COMPLETED CAPITAL PROJECTS/FACILITY UPGRADES

Specific capital projects/facility upgrades were not completed in the 1st Quarter of 2015.

8.0 I/I OFFSET PROJECTS/NEW FLOWS

During the 1st Quarter of 2015, 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(1)	Credits Added	Location	Credits Used	Ending Balance
Town of New Hartford	527,961		53 Clinton Rd. (328.016-1-35) Lot #12 Briarwood Ln. (339.005-3-12) 100 Kingfisher Ln. (340.000-4-25.21) 206 Floral Ct. Whitetail Meadows #17 (349.020-2-17) 111 Stratford Dr. E. (328.006-3-70) 10 Stratford Dr. (328.005-4-17)	240 320 440 320 320 320	526,001
Town of Paris	96,680			0	96,680
Town of Whitestown	138,051		Castlewood Café 1307 Champlin Ave.	2,625	135,426
Village of Clayville	28,829			0	28,829
Village of New Hartford	60,510		22 Campion Rd. (329.014-2-24)	1,000	59,510
Village of New York Mills	166,568			0	166,568
Village of Oriskany	102,360			0	102,360
Village of Whitesboro	161,583			0	161,583
Village of Yorkville	152,380			0	152,380
Oneida County Business Park(2)	0	43,027	Contract 2, Manhole Rehabilitation		43,027
Oneida County Sewer District(2)	0	24,710	Contract 2, Manhole Rehabilitation		24,710
Totals	**1,434,922**	**67,737**		**5,585**	**1,497,074**

(1) Beginning flow credit balance has been changed from the last quarterly report to correct a previous accounting error that occurred when calculating I/I removal for Contract 3.

(2) Flows not previously credited for these areas of sanitary manhole rehabilitation under Contract 2.

9.0 Key Personnel Changes

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 2015, there were no changes of key personnel to report.

9.2 SATELLITE COMMUNITY STAFF

During the 1st Quarter of 2015, there were no changes of key personnel to report.

9.3 CONSULTANT TEAM STAFF

During the 1st Quarter of 2015, there were no changes of key personnel to report.

10.0 ADMINISTRATIVE ITEMS

10.1 WORK AUTHORIZATIONS

During the 1st Quarter of 2015, the following Work Orders were approved by the Board of Legislators:

- Work Order 27 (Amendment No. 2) - CMOM Program Implementation - Phase 3
- Work Order 28 (Amendment No. 2) - Community Outreach - FY 2015
- Work Order 29 (Amendment No. 2) - Private Property I/I Reduction Program Implementation - Phase 3
- Work Order 30 (Amendment No. 2) - Program Administration - FY 2015
- Work Order 34 - Sauquoit Creek Pump Station Force Main - Easement Surveying Services
- Work Order 35 - Flow Monitoring Program Engineering Support Services

10.2 PROJECT FINANCING

The following is a current project listing from the CWSRF 2015 Final Intended Use Plan (IUP) for the County:

CWSRF PROJECT #	PROJECT NAME	TOTAL IUP AMOUNT
C6-6070-08-00	I/I CORR [9 CONTRIBUTING COMMUNITIES] Phase 1 and 2a	$25.8 million
C6-6070-08-01	I/I CORR [SSO - 9 Contributing Communities] Phase 2b-3	$59.5 million
C6-6070-08-02	FM, PS REHAB [DESIGN AND PERMITTING PHASE] Phase 5a	$3 million
C6-6070-08-03	I/I CORR [SSO] Phase 4	$9.52 million
C6-6070-08-04	Wastewater Improvements [CONSTRUCTION PHASE] Phases 5b and 6c	$91.8 million
C6-6070-08-05	STP UP (Phases 6a and 6d)	$94.6 million
C6-6070-08-06	STP UP [SOLIDS HANDLING SYSTEMS DESIGN AND CONSTRUCTION]	$35 million

10.2.1 Construction of the Sauquoit Creek Pump Station and New Forcemain and WPCP Solids Handling Upgrades (CWSRF No. C6-6070-08-04)-$117 Million

The County submitted a CWSRF funding application to the NYSEFC for the construction of upgrades to the SCPS and new dual forcemain. This is an increase in the amount listed in the current Intended Use Plan. Work is a required element of a SSO mitigation program. The funding will also include the costs for construction of additional solids handling upgrades (anaerobic digestion) at the WPCP. The engineering report (map/plan/report) prepared in support of this financing was submitted in December 2014. A public hearing for Bond Authorization was held January 14, 2015 on which day the Bond Authorization was subsequently approved by the Board of Legislators. The CWSRF application for financing was submitted to NYSEFC on February 27, 2015.

ApÐendix A:

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Oneida County Department of Water Quality and Water Pollution Control
Contract 9-Flow Monitoring Program
Meter Locations

Meter ID	Manhole Number	Approximate Street Address	Approximate Manhole Depth	Pipe Orientation	Approximate Pipe Size	Pipe Material
APT-1	623	Airport Road, 300' north of Judd Road, Oriskany NY	10'	South	24"	RCP
CSO-076	715	Leland Ave, 1/2 mile from Wurz Ave., Utica NY	17'		12' x 9' arch	RCP
CSO-142	7508	North of Oriskany Street, 575' east of Schuyler Street, Utica NY	13'	North	10' x 5' box	RCP
DFD-1	322	467 Deland Drive, Utica NY	8'	North	15"	ABS
DFD-2	138	South of Firehouse Road, east bank of Reall's Creek, Deerfield NY	5'	East	12"	CI
DFD-3	17270	South of Firehouse Road, west bank of Reall's Creek, Deerfield NY	9'	Northwest	12"	ACP
HHI-1	134	West of WalMart, Consumer Square, New Hartford NY	8.5'	Northwest	24"	PVC
MAR-1A	10016	Behind 9898 River Road, Marcy NY	16.5'	West	36"	RCP
MAR-2	546	80' from south shoulder of River Road, 185' east of Riverside Center entrance, Utica NY	16'	West	36"	RCP
MCI-2	22	Behind 4744 Commercial Drive, New Hartford NY	20'	South	20"	RCP
MCI-3	44	68 Henderson Street, bank of Mud Creek, New York Mills NY	10'	Southwest	24"	RCP
NHD-1	2864	4317 Middle Settlement Road, south of Mud Creek, New Hartford NY	8'	South	12"	PVC
NHD-2	2868	4310 Middle Settlement Road, New Hartford NY	8.5'	South	8"	ACP
NHD-5	2059	8448 Seneca Turnpike, 260' northerly of Jay-k Cabinet, New Hartford NY	5'	Northwest	10"	ACP
NHD-6	864	8448 Seneca Turnpike, 135' northerly of Jay-k Cabinet, New Hartford NY	13.5'	Southeast	12"	ACP
NHD-9	3008	75' northerly of Sears Auto, New Hartford NY	11'	South	12"	PVC
NHD-11	2736	Sangertown Square Mall exit near Target, Commercial Drive, New Hartford NY	10.5'	North	10"	PVC
NHD-18	992	Kellogg Road at Edgebrook Place, New Hartford NY	8.5'	West	14"	ACP

Meter ID	Manhole Number	Approximate Street Address	Approximate Manhole Depth	Pipe Orientation	Approximate Pipe Size	Pipe Material
NHD-20	1993	Behind 3985 Oneida Street, New Hartford NY	12.5'	East	14"	ACP
NHD-21	2229	NYS Route 8, 0.7 miles north of Kellogg Road, 30' east of east shoulder, New Hartford NY	12'	West	12"	ACP
NHD-22	2185	NYS Route 8, 0.7 miles north of Kellogg Road, 200' east of east shoulder, New Hartford NY	12.5'	East	15"	ACP
NHD-23	2124	141 New Hartford Street, just north of Ramada parking lot, New Hartford NY	8'	West	18"	ACP
NHD-24	2671	Approximately 1,500' north of NYSDOT Building, 2436 Chenango Road, Utica NY	4.5'	Southeast	12"	ACP
NHD-46	2093	600' north of 28 Stanhope Court, New Hartford NY	10'	North	10"	ACP
NUI-1	639	220' east of Leland Ave, just south of I-90 on-ramp, Utica NY	20'	East	30"	RCP
NUI-2	663	1,300' north of Leland Ave. near treatment plant, between Mohawk River and Barge Canal, Utica NY	20'	North	42"	RCP
NYM-1	5414	602 Main Street, New York Mills NY	8.5'	East	8"	VCP
NYM-2	467	4874 Commercial Drive, New York Mills, NY behind former AT&T building	16'	West	12"	RCP
NYM-3A	5401	158' north of 5164 Commercial Drive, New York Mills NY, in embankment between ramps	9'	East	18"	VCP
NYM-3B	5401	158' north of 5164 Commercial Drive, New York Mills NY, in embankment between ramps	9'	West	15"	VCP
OKY-1A	1234	8501 State Route 69, Oriskany NY. 50' easterly of Rt. 69 shoulder, 65' southerly of stream bank	6'	West	12"	PVC
OKY-1B	1350	103 Furnace Street, Oriskany NY. 35' westerly of parking lot edge	5'	South	18"	VCP
PRS-4	3735	Pinnacle Road at Rt. 8 southbound on ramp, Sauquoit NY. 10' west of ramp and 30' south of Pinnacle Rd.	8'	East	12"	ACP
PRS-5	3630	2944 Griffith Place, Sauquoit NY	11.5'	East	10"	ACP
PRS-6A	1937	9547 Pinnacle Road, Sauquoit NY, behind car wash	9'	West	8"	ACP
SCI-1	308	2514 Foundry Place, Clayville NY, 300' north of ice company parking lot	11'	South	18"	RCP

Meter ID	Manhole Number	Approximate Street Address	Approximate Manhole Depth	Pipe Orientation	Approximate Pipe Size	Pipe Material
SCI-2	365	Across from 9371 Elm Street, New Hartford NY. 15' south of Elm Street, east bank of Sauquoit Creek	14.5'	South	18"	RCP
SCI-3	369	3921 Oneida Street, New Hartford NY. Behind Tony's Pizza, back side of fence	11'	South	21"	RCP
SCI-4	4889	176 Whitesboro Street, Yorkville NY. 280' northeast of Whitesboro Street, adjacent to pump station road	12'	South	48"	RCP
SCY-1A	16032	428 Tipperary Drive, Schuyler NY.	8'	North	8"	ACP
SFI-1	261	South Park Dr. at Sherman Dr., Utica NY. 25' north of South Park Dr.	20.5'	East	24"	RCP
SFI-2	165	2150 Bleecker Street, Utica NY at Utica/Frankfort line	15'	East	18"	VCP
SFI-3	266	1821 Broad Street, Utica NY. In east parking lot	13'	South	36"	RCP
UCA-2	700	300 Genesee Street, Utica NY. Former Howard Johnson's hotel	9'	North	21"	VCP
UCA-3	3	15' from south shoulder of River Road, 150' east of Riverside Center entrance, Utica NY	16'	North	18"	RCP
VNHD-1	4769	40 Campion Road, New Hartford NY, behind Post Office	8'	West	18"	PVC
WBO-1	1427	18 Redfield Avenue, Whitesboro NY	12.5'	Northwest	15"	RCP
WBO-2A	1448	End of Linwood Place, Whitesboro NY at dead end just southerly of the railroad tracks.	14.5'	South	30"	RCP
WBO-2B	7578	End of Linwood Place, Whitesboro NY at dead end just southerly of the railroad tracks, westerly of WBO-2A	13'	South	18"	RCP
WBO-3	1423	19 Pleasant Street, Whitesboro NY	6'	Southwest	12"	PVC
WHN-1	125	Dunham Manor Park, Whitesboro NY	9'	Southwest	8"	ACP
WHN-2	125	Dunham Manor Park, Whitesboro NY	9'	North	8"	ACP
WHN-8	8028	15 Glendale Ave, New Hartford NY	9'	North	8"	PVC
WHN-31	4522	38 Plymouth Ave, Whitesboro NY	9'	East	10"	ACP
WHN-32	4861	67 Henderson Street, New York Mills NY. On west bank of Mud Creek, 200' southwest of Henderson St.	8.5'	Northwest	10"	PVC

Meter ID	Manhole Number	Approximate Street Address	Approximate Manhole Depth	Pipe Orientation	Approximate Pipe Size	Pipe Material
WOI-1	668	Old Mohawk Street, Whitesboro NY in drive across from Greenscapes Garden Center	12'	Northwest	42"	RCP
YKV-1A	1762	17 Coventry Ave, Yorkville NY. At dead end south of RR tracks	10'	South	15"	PVC
YKV-1B	1757	20 Trinity Ave, Yorkville NY. At dead end south of RR tracks	8'	East	12"	VCP
YKV-2	4890	12 Fairview Ave, Yorkville NY. Behind houst south of RR tracks	11.5'	South	12"	RCP

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Site Commentary

Site Information

Oneida_APT1	
Pipe Dimensions (in.)	Circular (24.00 in H)
Silt (in.)	0.50

Overview

A review of the hydrograph and scattergraph for Oneida_APT1 indicate this location functioned under subcritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	3.71	0.80	0.154
Minimum	3.05	0.59	0.084
Maximum	5.37	1.09	0.345
Time of Minimum	2/28/2015 5:20 AM	2/11/2015 3:35 AM	2/27/2015 1:50 AM
Time of Maximum	2/3/2015 10:45 AM	2/19/2015 4:25 PM	2/3/2015 10:45 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

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Site Commentary

Site Information

Oneida_DFD1	
Pipe Dimensions (in.)	Circular (15.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_DFD1 indicate this location experienced mostly subcritical free-flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.51	1.07	0.093
Minimum	2.23	0.87	0.071
Maximum	3.17	1.28	0.142
Time of Minimum	2/6/2015 3:05 AM	2/22/2015 5:25 AM	2/23/2015 3:30 AM
Time of Maximum	2/28/2015 8:30 AM	2/4/2015 5:50 PM	2/28/2015 8:30 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

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Site Commentary

Site Information

Oneida_DFD2	
Pipe Dimensions (in.)	Circular (12.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_DFD2 indicate this location experienced mostly supercritical free-flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.14	3.29	0.203
Minimum	1.71	2.51	0.129
Maximum	2.78	4.06	0.309
Time of Minimum	2/6/2015 4:00 AM	2/24/2015 3:35 AM	2/11/2015 3:20 AM
Time of Maximum	2/28/2015 11:05 AM	2/1/2015 1:55 PM	2/14/2015 11:10 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

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Site Commentary

Site Information

Oneida_DFD3	
Pipe Dimensions (in.)	Circular (12.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_DFD3 indicate this location functioned under supercritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.50	3.85	0.142
Minimum	1.31	3.02	0.094
Maximum	2.37	4.65	0.305
Time of Minimum	2/25/2015 1:45 AM	2/8/2015 12:05 AM	2/25/2015 1:45 AM
Time of Maximum	2/14/2015 10:35 AM	2/7/2015 8:10 AM	2/14/2015 10:35 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

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Site Commentary

Site Information

Oneida_HHI1	
Pipe Dimensions (in.)	Elliptical (23.50 in H, 23.25 in W)
Silt (in.)	0.00

Overview

A review of the hydrograph for Oneida_HHI1 indicate this location functioned mostly in free-flow conditions for the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015; although the scattergraph show hydraulic jumps occurring in the line. A hydraulic jump develops when flow transitions between supercritical and subcritical conditions, which can arise in any sewer with near or above critical velocity. The jump may be caused by imperfections in the pipe and/or a fixed downstream condition. Standing waves are also likely in flow near critical velocity. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location. However it is possible that during the transition as the jump moves through the meter location, the flow rate calculation based on measured depth and velocity can have momentary error.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015, along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	3.06	2.74	0.408
Minimum	2.19	2.26	0.232
Maximum	4.45	3.12	0.709
Time of Minimum	2/24/2015 4:55 AM	2/1/2015 1:55 AM	2/24/2015 4:50 AM
Time of Maximum	2/1/2015 12:15 PM	2/12/2015 8:25 AM	2/7/2015 10:55 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in the table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

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Site Commentary

Site Information

Oneida_MAR1A	
Pipe Dimensions (in.)	Elliptical (35.63 in H, 35.38 in W)
Silt (in.)	3.75

Overview

A review of the hydrograph and scattergraph for Oneida_MAR1A indicate this location functioned under subcritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	11.50	1.25	1.264
Minimum	9.21	0.82	0.547
Maximum	13.05	1.51	1.789
Time of Minimum	2/14/2015 6:40 AM	2/22/2015 7:50 AM	2/22/2015 7:50 AM
Time of Maximum	2/11/2015 10:30 AM	2/25/2015 8:45 PM	2/2/2015 2:20 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

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Site Commentary

Site Information

Oneida_MAR2	
Pipe Dimensions (in.)	Elliptical (35.25 in H, 36.00 in W)
Silt (in.)	7.50

Overview

A review of the hydrograph and scattergraph for Oneida_MAR2 indicate this location functioned under subcritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	19.46	0.75	1.400
Minimum	16.93	0.52	0.737
Maximum	21.16	0.88	1.859
Time of Minimum	2/28/2015 8:05 AM	2/28/2015 8:05 AM	2/28/2015 8:05 AM
Time of Maximum	2/10/2015 4:20 PM	2/10/2015 4:20 PM	2/10/2015 4:20 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

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Site Commentary

Site Information

Oneida_MCI2	
Pipe Dimensions (in.)	Circular (21.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_MCI2 indicate this location functioned under typical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	6.35	3.04	1.213
Minimum	4.80	2.42	0.653
Maximum	7.63	3.48	1.705
Time of Minimum	2/24/2015 3:25 AM	2/24/2015 3:45 AM	2/24/2015 3:35 AM
Time of Maximum	2/24/2015 12:50 PM	2/8/2015 12:30 PM	2/24/2015 12:50 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

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Site Commentary

Site Information

Oneida_MCI3	
Pipe Dimensions (in.)	Circular (24.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_MCI3 indicate this location functioned under typical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	8.64	2.56	1.695
Minimum	6.71	1.89	0.905
Maximum	9.90	3.05	2.335
Time of Minimum	2/24/2015 3:45 AM	2/24/2015 5:45 AM	2/24/2015 5:45 AM
Time of Maximum	2/8/2015 2:05 PM	2/14/2015 2:15 PM	2/1/2015 12:35 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

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Site Commentary

Site Information

Oneida_NHD1	
Pipe Dimensions (in.)	Elliptical (11.75 in H, 11.88 in W)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_NHD1 indicate this location functioned under subcritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	4.18	1.05	0.167
Minimum	3.57	0.71	0.092
Maximum	4.95	1.38	0.252
Time of Minimum	2/28/2015 4:05 AM	2/8/2015 4:40 AM	2/20/2015 6:05 AM
Time of Maximum	2/4/2015 3:25 PM	2/6/2015 7:45 PM	2/1/2015 12:45 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

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Site Commentary

Site Information

Oneida_NHD11	
Pipe Dimensions (in.)	Circular (9.88 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_NHD11 indicate this location functioned under supercritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.16	3.66	0.083
Minimum	1.02	3.02	0.058
Maximum	1.51	4.26	0.139
Time of Minimum	2/27/2015 3:35 AM	2/24/2015 11:20 PM	2/24/2015 11:20 PM
Time of Maximum	2/26/2015 6:35 PM	2/6/2015 8:00 PM	2/6/2015 8:00 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

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Site Commentary

Site Information

Oneida_NHD18	
Pipe Dimensions (in.)	Circular (14.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_NHD18 indicate this location functioned under subcritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.86	0.83	0.086
Minimum	2.28	0.41	0.032
Maximum	4.02	1.28	0.209
Time of Minimum	2/28/2015 5:10 AM	2/27/2015 3:40 AM	2/27/2015 3:40 AM
Time of Maximum	2/4/2015 7:35 AM	2/4/2015 7:35 AM	2/4/2015 7:35 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbQKG5#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#P rqlwruqj#Uhsruw

Site Commentary

Site Information

Oneida_NHD2	
Pipe Dimensions (in.)	Circular (8.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_NHD2 indicate this location functioned under subcritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	5.11	1.78	0.272
Minimum	4.16	1.46	0.173
Maximum	6.66	2.03	0.390
Time of Minimum	2/21/2015 4:05 AM	2/21/2015 4:05 AM	2/21/2015 4:05 AM
Time of Maximum	2/11/2015 9:50 AM	2/11/2015 5:25 PM	2/12/2015 12:30 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	80
Velocity (ft/s)	80
Quantity (MGD)	80

RqhlgdbQKG53#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#Prqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_NHD20	
Pipe Dimensions (in.)	Circular (13.88 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_NHD20 indicate this location functioned under supercritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.66	5.50	0.254
Minimum	1.46	4.58	0.177
Maximum	2.22	6.36	0.438
Time of Minimum	2/18/2015 3:55 AM	2/28/2015 5:20 AM	2/28/2015 5:20 AM
Time of Maximum	2/28/2015 12:45 PM	2/1/2015 12:30 PM	2/28/2015 12:45 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbQKG54#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#Prqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_NHD21	
Pipe Dimensions (in.)	Circular (12.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph for Oneida_NHD21 indicate this location functioned mostly in free-flow conditions for the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015; although the scattergraph show hydraulic jumps occurring in the line. A hydraulic jump develops when flow transitions between supercritical and subcritical conditions, which can arise in any sewer with near or above critical velocity. The jump may be caused by imperfections in the pipe and/or a fixed downstream condition. Standing waves are also likely in flow near critical velocity. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location. However it is possible that during the transition as the jump moves through the meter location, the flow rate calculation based on measured depth and velocity can have momentary error.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015, along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	3.23	2.78	0.313
Minimum	2.22	1.54	0.105
Maximum	4.54	3.50	0.582
Time of Minimum	2/28/2015 3:25 AM	2/24/2015 3:10 AM	2/28/2015 3:15 AM
Time of Maximum	2/3/2015 7:50 AM	2/1/2015 9:40 AM	2/3/2015 7:50 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in the table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbQKG56#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#Prqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_NHD23	
Pipe Dimensions (in.)	Circular (17.88 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_NHD23 indicate this location functioned under subcritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	4.38	1.70	0.372
Minimum	3.03	1.07	0.152
Maximum	5.63	2.21	0.609
Time of Minimum	2/26/2015 4:45 AM	2/19/2015 3:50 AM	2/28/2015 5:30 AM
Time of Maximum	2/6/2015 8:55 AM	2/25/2015 8:25 AM	2/23/2015 8:30 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbQKG57#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#Prqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_NHD24	
Pipe Dimensions (in.)	Circular (12.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_NHD24 indicate this location functioned under subcritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	3.52	1.48	0.187
Minimum	2.91	1.03	0.100
Maximum	4.64	2.12	0.369
Time of Minimum	2/25/2015 4:45 AM	2/9/2015 2:05 AM	2/23/2015 3:30 AM
Time of Maximum	2/3/2015 10:35 AM	2/18/2015 4:05 PM	2/3/2015 10:35 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbQKG79#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#Prqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_NHD46	
Pipe Dimensions (in.)	Circular (10.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_NHD46 during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015/#ndicate this location functioned mostly in backwater conditions characterized by increase in depth with a corresponding decrease in velocity resulting in a deeper slower flow. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided1

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015, along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	6.05	0.67	0.146
Minimum	3.80	0.23	0.080
Maximum	9.86	1.00	0.221
Time of Minimum	2/24/2015 2:40 AM	2/24/2015 12:00 PM	2/24/2015 12:00 PM
Time of Maximum	2/24/2015 12:00 PM	2/24/2015 1:35 AM	2/3/2015 12:30 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in the table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbQKG8#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#P rqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_NHD5	
Pipe Dimensions (in.)	Circular (10.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_NHD5 indicate this location experienced mostly supercritical free-flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.87	3.35	0.155
Minimum	1.44	2.05	0.068
Maximum	2.70	4.69	0.312
Time of Minimum	2/10/2015 4:50 AM	2/9/2015 5:25 AM	2/9/2015 5:25 AM
Time of Maximum	2/7/2015 10:25 AM	2/12/2015 2:20 PM	2/7/2015 10:25 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbQKG9#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#P rqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_NHD6	
Pipe Dimensions (in.)	Circular (12.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_NHD6 indicate this location functioned under typical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.35	1.80	0.127
Minimum	2.00	1.42	0.082
Maximum	2.97	2.26	0.218
Time of Minimum	2/22/2015 6:10 AM	2/21/2015 4:40 AM	2/21/2015 4:40 AM
Time of Maximum	2/1/2015 11:55 AM	2/1/2015 11:50 AM	2/1/2015 11:55 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbQKG<#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#P rqlwruqj#Uhsruw

Site Commentary

Site Information

Oneida_NHD9	
Pipe Dimensions (in.)	Elliptical (12.00 in H, 11.75 in W)
Silt (in.)	0.25

Overview

A review of the hydrograph and scattergraph for Oneida_NHD9 indicate this location functioned under subcritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	5.66	0.85	0.194
Minimum	5.10	0.53	0.109
Maximum	6.82	1.16	0.305
Time of Minimum	2/28/2015 2:50 AM	2/18/2015 4:15 AM	2/18/2015 4:15 AM
Time of Maximum	2/6/2015 9:45 PM	2/5/2015 7:45 PM	2/5/2015 7:45 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

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Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbQXL4#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#Prqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_NUI1	
Pipe Dimensions (in.)	Elliptical (30.12 in H, 30.00 in W)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_NUI1 indicate this location functioned under subcritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	8.58	2.41	2.024
Minimum	6.49	2.04	1.146
Maximum	10.19	2.63	2.711
Time of Minimum	2/28/2015 7:15 AM	2/28/2015 7:20 AM	2/28/2015 7:20 AM
Time of Maximum	2/1/2015 4:25 PM	2/28/2015 4:25 PM	2/1/2015 2:50 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbQXL5#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#Prqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_NUI2	
Pipe Dimensions (in.)	Circular (42.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_NUI2 indicate this location functioned under subcritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	11.00	2.04	2.518
Minimum	8.65	1.75	1.576
Maximum	12.83	2.30	3.477
Time of Minimum	2/28/2015 6:50 AM	2/14/2015 5:35 AM	2/28/2015 6:45 AM
Time of Maximum	2/1/2015 4:05 PM	2/1/2015 3:10 PM	2/1/2015 3:15 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbQ\P4#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#Prqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_NYM1	
Pipe Dimensions (in.)	Circular (7.75 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_NYM1 indicate this location experienced mostly subcritical free-flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.75	4.93	0.177
Minimum	1.52	4.37	0.135
Maximum	2.08	5.27	0.234
Time of Minimum	2/27/2015 3:50 AM	2/23/2015 1:35 AM	2/26/2015 3:35 AM
Time of Maximum	2/9/2015 11:00 AM	2/19/2015 8:25 PM	2/17/2015 9:55 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbQ\P5#Frpphqwdu| RqhlgdFrxqw|/#Q\ Iheuxdu|#5348#Iorz#Prqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_NYM2	
Pipe Dimensions (in.)	Circular (12.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_NYM2 indicate this location functioned under supercritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.97	5.00	0.272
Minimum	1.70	4.72	0.214
Maximum	3.24	5.42	0.599
Time of Minimum	2/28/2015 5:05 AM	2/14/2015 5:20 AM	2/28/2015 5:05 AM
Time of Maximum	2/20/2015 11:05 PM	2/20/2015 11:10 PM	2/20/2015 11:05 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbQ\P6D#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#Prqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_NYM3A	
Pipe Dimensions (in.)	Circular (18.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_NYM3A indicate this location functioned under subcritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	6.98	0.50	0.206
Minimum	6.42	0.22	0.085
Maximum	7.58	0.73	0.333
Time of Minimum	2/12/2015 5:00 AM	2/14/2015 6:50 AM	2/14/2015 6:50 AM
Time of Maximum	2/21/2015 11:30 AM	2/7/2015 9:10 AM	2/7/2015 9:10 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	98
Velocity (ft/s)	98
Quantity (MGD)	98

RqhlgdbQ\P6E#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#Prqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_NYM3B	
Pipe Dimensions (in.)	Circular (14.38 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_NYM3B indicate this location functioned under subcritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	4.83	0.85	0.185
Minimum	3.72	0.61	0.098
Maximum	5.87	1.12	0.301
Time of Minimum	2/28/2015 4:40 AM	2/24/2015 5:40 AM	2/24/2015 5:40 AM
Time of Maximum	2/5/2015 4:20 PM	2/1/2015 2:00 PM	2/15/2015 9:20 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbRN\4D#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#P rqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_OKY1A	
Pipe Dimensions (in.)	Circular (12.25 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_OKY1A indicate this location functioned under subcritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.84	1.14	0.058
Minimum	1.35	0.70	0.022
Maximum	2.42	1.63	0.121
Time of Minimum	2/27/2015 2:00 AM	2/28/2015 3:40 AM	2/26/2015 2:20 AM
Time of Maximum	2/1/2015 12:00 PM	2/1/2015 11:05 AM	2/1/2015 11:05 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbRN\4E#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#Prqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_OKY1B	
Pipe Dimensions (in.)	Circular (18.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_OKY1B during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015/#ndicate this location functioned mostly in backwater conditions characterized by increase in depth with a corresponding decrease in velocity resulting in a deeper slower flow. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided1

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015, along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.93	1.50	0.183
Minimum	2.07	1.14	0.109
Maximum	5.00	2.00	0.412
Time of Minimum	2/4/2015 4:05 AM	2/18/2015 2:45 AM	2/23/2015 4:00 AM
Time of Maximum	2/11/2015 7:55 AM	2/4/2015 6:35 AM	2/11/2015 8:05 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in the table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbSUV7#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#P rqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_PRS4	
Pipe Dimensions (in.)	Circular (12.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_PRS4 indicate this location functioned under supercritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.60	2.65	0.107
Minimum	1.41	2.22	0.075
Maximum	2.12	2.98	0.181
Time of Minimum	2/28/2015 5:25 AM	2/28/2015 5:05 AM	2/28/2015 5:00 AM
Time of Maximum	2/24/2015 2:05 PM	2/24/2015 2:05 PM	2/24/2015 2:05 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbSUV8#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#Prqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_PRS5	
Pipe Dimensions (in.)	Circular (10.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph for Oneida_PRS5 during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015, indicate this location functioned both in free-flow and backwater conditions (increase in depth with a corresponding decrease in velocity resulting in a deeper slower flow); although the scattergraph show hydraulic jumps occurring in the line. A hydraulic jump develops when flow transitions between supercritical and subcritical conditions, which can arise in any sewer with near or above critical velocity. The jump may be caused by imperfections in the pipe and/or a fixed downstream condition. Standing waves are also likely in flow near critical velocity. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location. However it is possible that during the transition as the jump moves through the meter location, the flow rate calculation based on measured depth and velocity can have momentary error.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015, along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.34	3.87	0.110
Minimum	1.20	1.45	0.039
Maximum	4.87	5.31	0.243
Time of Minimum	2/7/2015 10:35 AM	2/28/2015 5:25 AM	2/28/2015 5:25 AM
Time of Maximum	2/12/2015 3:45 PM	2/11/2015 9:10 AM	2/13/2015 5:55 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in the table below.

Percent Uptime	
Depth (in)	99
Velocity (ft/s)	99
Quantity (MGD)	99

RqhlgdbSUV9D#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#P rqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_PRS6A	
Pipe Dimensions (in.)	Circular (8.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_PRS6A during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015, indicate this location experienced both open channel flow and backwater conditions (increase in depth with a corresponding decrease in velocity resulting in a deeper slower flow). Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided1

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015, along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.61	1.48	0.096
Minimum	2.10	0.85	0.049
Maximum	3.29	2.19	0.173
Time of Minimum	2/26/2015 2:35 AM	2/15/2015 4:30 AM	2/26/2015 1:30 AM
Time of Maximum	2/28/2015 10:30 AM	2/1/2015 9:35 AM	2/4/2015 6:55 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in the table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbVFL4#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#Prqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_SCI1	
Pipe Dimensions (in.)	Circular (18.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph for Oneida_SCI1 indicate this location functioned mostly in free-flow conditions for the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015; although the scattergraph show hydraulic jumps occurring in the line. A hydraulic jump develops when flow transitions between supercritical and subcritical conditions, which can arise in any sewer with near or above critical velocity. The jump may be caused by imperfections in the pipe and/or a fixed downstream condition. Standing waves are also likely in flow near critical velocity. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location. However it is possible that during the transition as the jump moves through the meter location, the flow rate calculation based on measured depth and velocity can have momentary error.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015, along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.81	1.76	0.107
Minimum	1.47	0.79	0.038
Maximum	4.13	3.51	0.683
Time of Minimum	2/4/2015 2:53 AM	2/27/2015 4:45 AM	2/27/2015 4:45 AM
Time of Maximum	2/23/2015 7:40 PM	2/23/2015 7:35 PM	2/23/2015 7:40 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in the table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbVFL5#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#P rqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_SCI2	
Pipe Dimensions (in.)	Circular (18.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_SCI2 indicate this location functioned under subcritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	3.89	1.71	0.314
Minimum	3.17	1.44	0.197
Maximum	5.38	2.10	0.603
Time of Minimum	2/26/2015 4:55 AM	2/28/2015 4:45 AM	2/28/2015 5:35 AM
Time of Maximum	2/23/2015 8:45 PM	2/23/2015 8:50 PM	2/23/2015 8:50 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	99
Velocity (ft/s)	99
Quantity (MGD)	99

RqhlgdbVFL6#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#P rqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_SCI3	
Pipe Dimensions (in.)	Circular (24.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_SCI3 indicate this location functioned under typical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	4.35	3.59	0.907
Minimum	3.58	3.20	0.637
Maximum	5.40	4.00	1.353
Time of Minimum	2/26/2015 5:00 AM	2/15/2015 8:55 AM	2/28/2015 5:45 AM
Time of Maximum	2/7/2015 11:55 AM	2/1/2015 12:40 PM	2/7/2015 11:50 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbVFL7#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#P rqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_SCI4	
Pipe Dimensions (in.)	Circular (48.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_SCI4 indicate this location functioned under typical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	10.74	3.25	4.449
Minimum	8.88	2.71	2.855
Maximum	12.31	3.76	6.110
Time of Minimum	2/24/2015 4:30 AM	2/28/2015 5:15 AM	2/28/2015 5:55 AM
Time of Maximum	2/1/2015 1:55 PM	2/1/2015 12:05 PM	2/1/2015 1:55 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbVF\4D#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#Prqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_SCY1A	
Pipe Dimensions (in.)	Circular (8.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_SCY1A indicate this location functioned under subcritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	3.03	1.06	0.084
Minimum	2.44	0.75	0.044
Maximum	3.78	1.51	0.159
Time of Minimum	2/27/2015 3:10 AM	2/27/2015 3:10 AM	2/27/2015 3:10 AM
Time of Maximum	2/16/2015 4:30 PM	2/1/2015 11:25 AM	2/1/2015 11:25 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbVII4#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#Prqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_SFI1	
Pipe Dimensions (in.)	Circular (24.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_SFI1 indicate this location functioned under subcritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.82	1.49	0.205
Minimum	2.23	0.93	0.089
Maximum	4.10	2.19	0.505
Time of Minimum	2/22/2015 5:30 AM	2/28/2015 5:35 AM	2/28/2015 5:35 AM
Time of Maximum	2/10/2015 8:20 AM	2/10/2015 8:20 AM	2/10/2015 8:20 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbVIL5#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#P rqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_SFI2	
Pipe Dimensions (in.)	Circular (17.88 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_SFI2 indicate this location experienced mostly subcritical free-flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.90	0.71	0.089
Minimum	1.96	0.36	0.025
Maximum	5.41	1.29	0.363
Time of Minimum	2/14/2015 7:55 PM	2/28/2015 10:45 PM	2/28/2015 11:15 PM
Time of Maximum	2/27/2015 1:20 AM	2/27/2015 1:10 AM	2/27/2015 1:15 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbVIL6#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#P rqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_SFI3	
Pipe Dimensions (in.)	Circular (36.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_SFI3 indicate this location functioned under subcritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	11.02	0.68	0.811
Minimum	10.00	0.50	0.528
Maximum	12.08	0.86	1.151
Time of Minimum	2/23/2015 5:55 AM	2/12/2015 6:15 AM	2/23/2015 4:20 AM
Time of Maximum	2/1/2015 12:25 PM	2/4/2015 9:30 AM	2/4/2015 9:30 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbXFD5#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#Prqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_UCA2	
Pipe Dimensions (in.)	Circular (21.50 in H)
Silt (in.)	1.50

Overview

A review of the hydrograph and scattergraph for Oneida_UCA2 show hydraulic jumps occurring in the line during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. A hydraulic jump develops when flow transitions between supercritical and subcritical conditions, which can arise in any sewer with near or above critical velocity. The jump may be caused by imperfections in the pipe and/or a fixed downstream condition. Standing waves are also likely in flow near critical velocity. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location. However it is possible that during the transition as the jump moves through the meter location, the flow rate calculation based on measured depth and velocity can have momentary error.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015, along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	7.74	1.26	0.606
Minimum	6.96	1.03	0.421
Maximum	8.77	1.55	0.883
Time of Minimum	2/28/2015 4:35 AM	2/26/2015 5:35 AM	2/28/2015 5:10 AM
Time of Maximum	2/1/2015 11:20 AM	2/1/2015 1:20 PM	2/1/2015 1:20 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in the table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbXFD6#Frpphqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#Prqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_UCA3	
Pipe Dimensions (in.)	Circular (18.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_UCA3 during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015, indicate this location experienced both open channel flow and backwater conditions (increase in depth with a corresponding decrease in velocity resulting in a deeper slower flow). Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided1

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015, along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.62	1.15	0.063
Minimum	1.06	0.27	0.010
Maximum	3.40	4.02	0.439
Time of Minimum	2/28/2015 6:10 AM	2/6/2015 5:05 AM	2/6/2015 5:05 AM
Time of Maximum	2/10/2015 10:20 AM	2/13/2015 5:30 PM	2/13/2015 5:30 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in the table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbYQKG4#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#Prqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_VNHD1	
Pipe Dimensions (in.)	Elliptical (17.50 in H, 17.75 in W)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_VNHD1 indicate this location functioned under typical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	3.90	1.89	0.346
Minimum	3.22	1.54	0.217
Maximum	4.58	2.14	0.488
Time of Minimum	2/27/2015 4:45 AM	2/25/2015 8:40 PM	2/25/2015 8:40 PM
Time of Maximum	2/6/2015 7:30 AM	2/6/2015 7:25 AM	2/6/2015 7:30 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbZ ER4#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#Prqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_WBO1	
Pipe Dimensions (in.)	Circular (15.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_WBO1 indicate this location functioned under supercritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.44	2.62	0.222
Minimum	1.93	2.16	0.133
Maximum	3.13	3.00	0.338
Time of Minimum	2/27/2015 3:00 AM	2/25/2015 5:25 AM	2/27/2015 3:00 AM
Time of Maximum	2/25/2015 7:15 AM	2/28/2015 12:05 PM	2/25/2015 7:15 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbZ ER5D#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#Prqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_WBO2A	
Pipe Dimensions (in.)	Elliptical (30.50 in H, 30.75 in W)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_WBO2A indicate this location functioned under subcritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.99	0.83	0.141
Minimum	2.47	0.61	0.077
Maximum	3.57	1.11	0.239
Time of Minimum	2/27/2015 4:40 AM	2/27/2015 4:45 AM	2/27/2015 4:45 AM
Time of Maximum	2/1/2015 2:35 PM	2/1/2015 1:40 PM	2/1/2015 1:40 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbZ ER5E#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#P rqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_WBO2B	
Pipe Dimensions (in.)	Elliptical (17.75 in H, 18.25 in W)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_WBO2B indicate this location experienced mostly subcritical free-flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	5.26	1.22	0.345
Minimum	4.64	1.12	0.273
Maximum	5.87	1.28	0.411
Time of Minimum	2/28/2015 4:50 AM	2/28/2015 1:20 PM	2/27/2015 5:15 AM
Time of Maximum	2/1/2015 12:55 PM	2/6/2015 3:45 PM	2/15/2015 11:55 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbZ ER6#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#Prqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_WBO3	
Pipe Dimensions (in.)	Circular (12.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_WBO3 indicate this location experienced mostly subcritical free-flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	0.49	2.16	0.016
Minimum	0.32	1.11	0.007
Maximum	1.20	4.38	0.203
Time of Minimum	2/11/2015 10:50 AM	2/1/2015 8:45 AM	2/13/2015 3:00 AM
Time of Maximum	2/17/2015 9:35 AM	2/13/2015 11:00 AM	2/17/2015 9:40 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbZ KQ4#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#P rqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_WHN1	
Pipe Dimensions (in.)	Circular (8.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_WHN1 indicate this location experienced mostly subcritical free-flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.37	3.63	0.094
Minimum	1.19	2.89	0.068
Maximum	1.73	4.50	0.157
Time of Minimum	2/28/2015 3:25 AM	2/28/2015 10:40 PM	2/28/2015 10:40 PM
Time of Maximum	2/19/2015 8:25 PM	2/27/2015 4:00 PM	2/19/2015 8:25 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbZ KQ5#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#P rqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_WHN2	
Pipe Dimensions (in.)	Circular (8.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_WHN2 show hydraulic jumps occurring in the line during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. A hydraulic jump develops when flow transitions between supercritical and subcritical conditions, which can arise in any sewer with near or above critical velocity. The jump may be caused by imperfections in the pipe and/or a fixed downstream condition. Standing waves are also likely in flow near critical velocity. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location. However it is possible that during the transition as the jump moves through the meter location, the flow rate calculation based on measured depth and velocity can have momentary error.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015, along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.51	3.00	0.090
Minimum	1.23	1.10	0.032
Maximum	2.22	4.95	0.233
Time of Minimum	2/4/2015 5:15 PM	2/21/2015 4:45 AM	2/7/2015 2:30 AM
Time of Maximum	2/25/2015 7:50 AM	2/28/2015 11:40 AM	2/25/2015 7:05 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in the table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbZ KQ64#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#P rqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_WHN31	
Pipe Dimensions (in.)	Circular (8.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_WHN31 indicate this location functioned under typical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	3.16	2.00	0.166
Minimum	2.55	1.76	0.109
Maximum	4.70	2.63	0.361
Time of Minimum	2/27/2015 3:05 PM	2/27/2015 3:05 PM	2/27/2015 3:05 PM
Time of Maximum	2/2/2015 9:55 AM	2/2/2015 9:55 AM	2/2/2015 9:55 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbZ KQ65#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#Prqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_WHN32	
Pipe Dimensions (in.)	Circular (8.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_WHN32 indicate this location functioned under subcritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.40	1.03	0.061
Minimum	1.60	0.61	0.020
Maximum	3.48	1.49	0.133
Time of Minimum	2/28/2015 5:10 AM	2/24/2015 5:05 AM	2/24/2015 4:00 AM
Time of Maximum	2/22/2015 10:40 AM	2/15/2015 10:05 AM	2/14/2015 10:40 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	66
Velocity (ft/s)	66
Quantity (MGD)	66

RqhlgdbZ KQ;#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#P rqlwruqj#Uhsruw

Site Commentary

Site Information

Oneida_WHN8	
Pipe Dimensions (in.)	Circular (8.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_WHN8 show hydraulic jumps occurring in the line during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. A hydraulic jump develops when flow transitions between supercritical and subcritical conditions, which can arise in any sewer with near or above critical velocity. The jump may be caused by imperfections in the pipe and/or a fixed downstream condition. Standing waves are also likely in flow near critical velocity. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location. However it is possible that during the transition as the jump moves through the meter location, the flow rate calculation based on measured depth and velocity can have momentary error.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015, along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.14	1.71	0.035
Minimum	0.70	0.27	0.006
Maximum	2.78	4.64	0.182
Time of Minimum	2/3/2015 1:20 AM	2/18/2015 3:15 AM	2/8/2015 4:40 AM
Time of Maximum	2/18/2015 10:40 AM	2/12/2015 10:05 AM	2/17/2015 6:35 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in the table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

RqhlgdbZ RL4#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#Prqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_WOI1	
Pipe Dimensions (in.)	Circular (42.00 in H)
Silt (in.)	7.50

Overview

A review of the hydrograph and scattergraph for Oneida_WOI1 indicate this location functioned under subcritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	13.97	1.14	1.221
Minimum	12.65	0.80	0.677
Maximum	15.19	1.46	1.837
Time of Minimum	2/15/2015 6:15 AM	2/24/2015 5:05 AM	2/24/2015 5:05 AM
Time of Maximum	2/1/2015 1:40 PM	2/8/2015 8:20 PM	2/8/2015 8:45 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

Site Commentary

Site Information

Oneida_YKV1A	
Pipe Dimensions (in.)	Circular (15.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_YKV1A indicate this location functioned under supercritical open channel flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.36	2.68	0.216
Minimum	1.84	2.39	0.137
Maximum	3.00	3.00	0.335
Time of Minimum	2/20/2015 4:25 AM	2/26/2015 4:35 AM	2/18/2015 4:35 AM
Time of Maximum	2/1/2015 11:10 AM	2/14/2015 11:50 AM	2/1/2015 11:10 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

Rqhlgdb\NY4E#Frp p hqwdu| Rqhlgd#Frxqw|/#Q\ Iheuxdu|#5348#Iorz#P rqlwrulqj#Uhsruw

Site Commentary

Site Information

Oneida_YKV1B	
Pipe Dimensions (in.)	Circular (10.00 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_YKV1B indicate this location experienced mostly subcritical free-flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.63	1.04	0.039
Minimum	1.20	0.70	0.018
Maximum	2.05	1.36	0.068
Time of Minimum	2/16/2015 6:25 AM	2/28/2015 11:50 PM	2/28/2015 11:45 PM
Time of Maximum	2/5/2015 7:05 PM	2/18/2015 10:15 AM	2/5/2015 7:05 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

Site Commentary

Site Information

Oneida_YKV2	
Pipe Dimensions (in.)	Circular (11.75 in H)
Silt (in.)	0.00

Overview

A review of the hydrograph and scattergraph for Oneida_YKV2 indicate this location experienced mostly subcritical free-flow conditions during the monitoring period of Sunday, February 01, 2015 to Saturday, February 28, 2015. Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Daily longtables displaying final quantities are also provided.

Observations

Average flow depth, velocity, and quantity data observed during Sunday, February 01, 2015 to Saturday, February 28, 2015 , along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	5.29	0.59	0.128
Minimum	4.47	0.26	0.046
Maximum	6.66	1.14	0.314
Time of Minimum	2/19/2015 5:00 AM	2/25/2015 4:05 AM	2/25/2015 4:15 AM
Time of Maximum	2/17/2015 7:45 AM	2/14/2015 12:15 PM	2/14/2015 12:15 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Graphical data reports are based on an hourly average.

Data Quality

Data uptime observed during the Sunday, February 01, 2015 to the Saturday, February 28, 2015 monitoring period is provided in table below.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100